

WORKFORCE DEVELOPMENT INSTITUTE



GROWING & KEEPING GOOD JOBS IN NEW YORK STATE



The NYC apparel and garment manufacturing industry remains vital for the identity and jobs it brings to the City. Photo credit: Elisa Deljanin Padula

The Workforce Development Institute (WDI) is a statewide non-profit that works to grow and keep good jobs in New York State (NYS). We use a range of tools – including ground level information, workforce expertise, and funding – to facilitate projects that build skills and strengthen employers' ability to hire and promote workers.

Each of our 10 Regional Directors covers large territories of NYS, and spends a significant amount of time traveling those regions to identify workforce trends, opportunities, and challenges. **We see our niche as filling gaps not covered by other workforce development or economic development entities with an end goal of facilitating the growth of good jobs.** We are a collaborative organization and our role on a given project may vary.

Common roles include:

- identification of a problem/challenge (for one organization or many)
- connection of organizations with needs to resources
- facilitation of projects
- funding for projects

Our statewide presence is a strength in that **if a program works** well in one part of the state, we can help move that project to other regions.

The majority of financial support for WDI comes from the NYS Legislature. We work across all sectors, but a significant portion of our budget has been targeted by the legislature to help the manufacturing sector rebound. Numbers and projects identified in this report will reflect this emphasis.

Our roots are in labor, so we are interested in seeing an improved distribution of wealth – a move away from the 99:1 ratio and the growth of the middle class. Although the types of projects we facilitate and support vary, they must all have a positive and measurable impact to the workforce.

BOOTS ON THE GROUND

During 2017, our Regional Staff visited/toured 979 organizations across the state, including 576 businesses, 292 non-profits/community groups, and 111 unions.

Some of the trends identified are as follows:

- Unemployment is low and while this is great news in general, it poses real problems in certain sectors. Manufacturing, hospitality/tourism, and information technology (IT) are three (3) sectors where employers are struggling to fill open jobs across a spectrum of types of jobs.
- Employers continue to cite "soft skills", or skills such as communications, drive for results, customer service, adaptability, and teamwork, as lacking in entry level employees.
- In manufacturing, we see opportunities for growth or stabilization via an increase in the number of companies looking to diversify their product lines and serve more than one sector.
- In general, the quality of U.S. products is better than those shipped in from overseas; this gives U.S. manufacturers a competitive edge.
- We've seen an increase in the number of changes in ownership and/or leadership at manufacturers that have breathed new life into older companies. This has translated into more attention to training and development and an improved understanding of the workforce as an asset.
- Changes in technology are occurring so quickly that regardless of education, virtually all employers must provide significant On Job Training (OJT) to employees. This is sometimes a challenge because many companies are too small to have full-time HR or Trainers on-staff. Making arrangements for OJT reduces productivity temporarily, but must be done. Finding time to train is cited routinely as a challenge to employers.
- We've seen an increase in the number of start-ups shaped by either technology and/or "buy local" (including food) movements. Many are still small, but have real growth potential.
- There is a critical disconnect between the jobs that are available and the public's (parent, teacher, child) understanding of those jobs and the education/experience they require. As such, students graduate from high school and college without the skills needed to fill open positions.

- Employers report that retirements are looming, so the skills gap problem is at all levels – entry, middle, and more advanced positions. As a result, we have seen an increase in the number of requests for help with leadership or supervisory training. Employers are trying to move existing employees up the ladder to take the place of those retiring.
- Wages are not keeping pace with the cost of living. We see this situation particularly in entry level manufacturing, service, and health care jobs. As such, the turnover in these jobs is sometimes high. However, employers continue to innovate and we see many coming up with mechanisms to engage and retain their workforce based on solid wages, flexible benefits, and opportunities to gain skills for additional development.
- Interest in apprenticeships is growing. This training model has been extremely effective for the NYS Building and Construction trades and is seeing increased interest from manufacturers, which corresponds with growth in this sector. Other sectors-such as health care and IT-are looking for ways to capitalize on this successful model as well.
- We are starting to see automation creep in, but this isn't necessarily a negative. Employers are looking for mechanisms to automate the jobs that require low skill and have high turnover, but also provide development and more interesting jobs to employees who have potential.



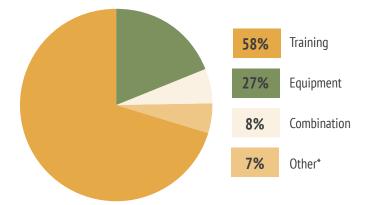
Christina Nieves, Iron Workers Local 40. Photo credit: Mark McCarty

FUNDING What did we fund this past year?

Last year we supported **<u>338</u>** projects with the following characteristics:

TYPES OF PROJECTS FUNDED

Although the majority of projects are training-related, job impacts can result through a variety of mechanisms.



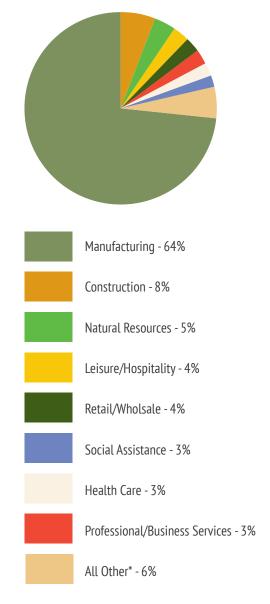
* Examples include assistance with the development of a strategic plan or marketing plan, product testing before launch, review of plant layout to streamline production processes.

PROJECTS FUNDED BY ORGANIZATION SIZE

Employee Count	# Projects
0-50	176
51-100	43
101-150	20
151-200	13
201+	86
TOTAL	338

SECTORS SERVED

While we serve all sectors, a significant portion of our budget is targeted specifically to help manufacturing grow and thrive in NYS.



* Includes Utilities/Energy, Education, Information, Transportation/Warehousing

PROJECT FOCUS

Organizations are asked to identify how a project will impact the workforce. Last year, organizations supported via WDI stated anticipated results as follows:

PRIMARY FOCUS OF PROJECT

PROJECTED IMPACT IN # JOBS

Skill Development*	12,566
Job Retention	1,340
Job Growth	669
Job Promotion**	319
Job Placement***	213
TOTALS	15,107

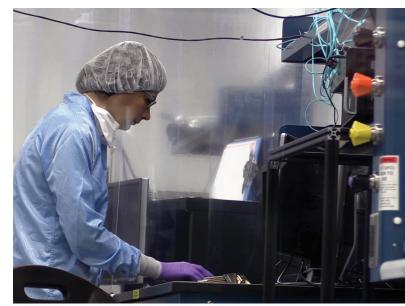
* Strengthening an organization's current workforce

** Moving individuals up a career ladder within an organization

*** Working with non-profits or educational partners to train/place the underemployed/unemployed

COMMON PROJECTS/REQUESTS FOR ASSISTANCE

- LEAN Training
- Sales Training
- ISO Certification Training to Enter a New Market or Maintain Current Markets
- Middle Skills Machining, Welding, Programmable Logic, Shop Math, GD&T, Blueprint Reading
- Training on New Equipment/Software
- Culture Training
- Supervisory Training
- Leadership Training
- Safety Training various
- Equipment both to aid quicker growth AND to enter new markets



Justine Haupt, Brookhaven National Labs, featured in Long Island Makers 2017 – Women in Manufacturing video. Photo credit: Jason Groden, Switch Media

WORKFORCE EXPERTISE

Regional Highlights

WESTERN NEW YORK (WNY) A Push for Manufacturing Training in WNY Leads to Apprenticeships and Shorter-Term Certifications

The skills gap and the need for qualified workers continue to be a struggle faced by manufacturers throughout the state. In its mission to alleviate these types of workforce issues, WDI has put significant resources into funding programs that teach technical skills, oftentimes partnering with regional training centers and others to grow these programs from pilots into established curricula.

In WNY, WDI's work this past year to close the skills gap has taken a few forms.



The Mechatronics program fills an important niche for many manufacturers in Western New York and in the Rochester/ Genesee Valley. Photo credit: CNC Technical Solutions

First, WDI partnered with the Buffalo based United Way to push the idea of apprenticeship out to manufacturers across the region. The United Way had previously won a five-year federal grant to serve as an intermediary to companies, providing technical and administrative support in the development of apprenticeships. WDI has been working with the United Way to provide both leads for companies that are good candidates for apprenticeships and also financial support for items not covered by the grant. Seven (7) companies have signed up thus far and committed to putting employees through various apprentice programs, and a total of 16 apprentices are enrolled. This is only the start of the program; the goal is to enroll up to 300 new apprentices in a variety of registered apprenticeships, including electricians, welders, pipefitters, machinists, and maintenance technicians. WDI intends to continue working to highlight the benefits of apprenticeship and help enroll as many companies as possible.

Second, WDI partnered with the University of Buffalo Center for Industrial Effectiveness to bring Certified Production Technician (CPT) training to area companies. CPT training provides the core skills required for frontline manufacturing jobs and prepares candidates for baseline to supervisory level production roles. Participants earn a nationally recognized certification after passing exams associated with four (4) competency areas. For the pilot program, WDI helped 14 employees at four (4) WNY manufacturers-Multisorb Technologies, Inc., International Imaging Materials, Inc., Xylem, Inc., and Zehnder Rittling, Inc. – complete the program. Subsequently, 15 employees from Cummins, Inc. received the training with assistance from WDI. These companies have responded positively to the training, reporting improvements in the skill sets of employees as well as forecasting future promotions and continued growth as a result of increased efficiencies. Other

companies have since enrolled their staff in the CPT program via WDI.

The CPT is a component of a larger Industrial Manufacturing Technician apprenticeship program that can be accessed through the United Way grant. We envision the CPT serving as a springboard for companies to access longer, more comprehensive training for their employees.

ROCHESTER-GENESEE VALLEY (RGV) Creating a Much Needed Workforce Pipeline in the RGV

Machining – New Employees

In RGV the WDI Regional Director has been instrumental in the development and maintenance of several training programs focused on creating a pipeline of workers for manufacturing. Machining programs are run with Finger Lakes Community College but based at GW Lisk in Clifton Springs and also at ITT Gould Pumps in Seneca Falls for hands-on work experience. A third machining program sees classwork at the Southern Tier BOCES in Elmira but hands-on work experience at a number of employers. All three programs have graduation rates, employment/placement rates, and retention rates of 88-95%. This past year WDI worked on identifying, documenting, and disseminating some "best practices" associated with these programs. Critical elements of the programs that have proven important to the employers who accept the graduates include a combination of classroom hours and exposure to real work environments, national certifications embedded into the programs, and inclusion of instruction on workplace soft skills and drug awareness and prevention.

Mechatronics – Facilitating Movement Up the Ladder

In addition to these machining programs, the WDI Rochester/Genesee Valley Regional Director and the Western New York Regional Director have each been working with companies throughout both regions to facilitate access to a unique mechatronics training program in Orleans County. CNC Technical Solutions is a private training facility that offers three (3) phases of mechatronics training on graduated levels of difficulty based on a patented training platform.

The skills taught in the program hinge on understanding and troubleshooting complicated equipment. Employers noted that significant cost savings have resulted from "repairing" versus "scrapping" equipment when their employees have completed the program. WDI has been working with CNC Technical Solutions to make the program available more widely to **NYS employers.** This past year 10 employers from five (5) Counties (Orleans, Genesee, Monroe, Wyoming, Wayne) sent incumbent workers to access the program via support from WDI. From an employee point of view, the program has resulted in movement up the career ladder within the participating companies.

WDI's plans for the coming year include strategizing around how to make the program's instructors and content available more widely.

CENTRAL NEW YORK (CNY) Strengthening Positions through "Business Process" Training in CNY

Often when our Regional Directors visit a company there will be a number of training needs for soft skills (customer service, teamwork, etc), hard skills/technical skills, and also what we refer to as "business process" skills. **Business process training typically engages a number of employees** (or all employees) at a company around working together to identify operations improvements that, in turn, lead to efficiencies, reduced costs, improved use of resources or improved quality of product. Examples include LEAN Training, Value Stream Mapping, ISO Certification Training, and Training within Industry (TWI).

In CNY this year WDI supported a total of 46 projects, several that were focused on business processes. Companies that received assistance accessing these types of trainings included Welch Allyn (Skaneateles), Byrne Dairy (Lafayette), Buckingham Manufacturing (Binghamton), Marquadt Switches (E. Cazenovia) and Falk Precision (E. Syracuse).

The impact of a training in business processes is often profound. We initially began supporting these trainings with the goal of stabilizing a company (job retention), enabling a company to go after new contracts and add staff (job growth), or allowing a company to devote more resources to staff pay (job retention/ promotion). However, the impact to employee morale cannot be understated either. Employers who have implemented these programs - typically offered through the local Manufacturing Extension Partner (MEP) – have noted the following results: communication among employees improves dramatically; employees understand the full picture of the organization, not just their small piece; employees feel valued from being asked to help think through business process problems; and company cultures begin to shift from negative to positive.

The impact of business process trainings typically take several months to a year to identify; our outcome surveys continue to indicate that employers and employees alike find them invaluable.

MOHAWK VALLEY (MV) Addressing Cybersecurity in Manufacturing in MV and Beyond

Cybersecurity has long been an area on which certain sectors, such as healthcare and financial services, have focused attention. Manufacturing as an industry, however, has been slower to recognize cybersecurity threats and gain knowledge, train staff, and implement appropriate protections. The threats to this sector are very real, however, and range from foreign competition trying to access U.S. company plans, to attempted hacks on companies that serve as part of the supply chain to defense contractors, to theft of data and systems for ransom.

This past year WDI partnered with the Advanced Institute for Manufacturing (AIM), the MV MEP, to bring cybersecurity workshops to manufacturers in both the MV and CNY.

Whether manufacturers are unaware of these threats or do not yet understand the severity of them, AIM offers the workshops to present an overview of this emerging issue and steps necessary to safeguard against potential threats.



The cybersecurity presentation in the Mohawk Valley. Photo credit: Mohawk Valley, Advanced Institute for Manufacturing (AIM)

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Attendees of the workshops learned

strategies to assess, evaluate, and train staff. Successful programs similar to these workshops, aimed at job retention, can be replicated across NYS to help prepare manufacturing companies for what is vital in the 21st century.

HUDSON VALLEY (HV) WDI Supports Growth of Jobs Associated with the Buy Local Movement

With close proximity to the New York City market and with increasing interest in the "Buy Local" movement, HV has seen an increase in the number of companies looking to launch food products, and other companies looking for ways to make it easier for both farmers and small product makers to bottle/package/pack and distribute their products. There are potential jobs associated with both types of initiatives.



A Good Reasons employee prepares dog biscuits for baking. Photo credit: Good Reasons

This past year the WDI Hudson Valley Regional Director assisted two breweries, a cidery, and a coffee roaster with specialty equipment purchases that would allow for quick expansions and the addition of jobs. **Together the four (4) companies – in Dutchess, Orange, and Greene Counties – are projecting the addition of roughly 55 new jobs in the next few years.** Projected job types include those in production, sales/ marketing, tasting room, packaging, and management.

The Buy Local movement has also seen an increase in innovative ideas around co-packing and transportation of goods. WDI worked with Field Goods, (Greene County), the Farm Bridge (Ulster County), and Farms2You LLC (Dutchess County) on projects ranging from easing access to critical consulting services to installation of safety measures, all designed to help the companies respond to demand.

These projects all have an economic development aspect in that they provided support to companies for either equipment or expertise that would position the companies for quick growth.

LOWER HUDSON VALLEY (LHV) Creating Opportunity in Westchester County

A 2014 federal ruling gave all non-profits and other agencies that serve individuals with developmental disabilities three (3) years to phase-out settings that allowed individuals to be compensated at less than minimum wage. With the deadline looming for the phase-out, WDI has seen a number of requests from across the state from these organizations for help in launching new lines of business. The assistance requested is often equipment or training that allows the organization to streamline the way they do business and/or secure new contracts. These efforts result in reduced costs and/or increased revenues, either of which enables the organization to increase wages.

Community Based Services (CBS) LLC, located in Westchester County, is a nonprofit organization providing high level, individualized care in both home and community based environments. Good Reasons LLC is a division of CBS that provides employment opportunities for individuals with autism and other developmental disabilities, as well as those without, in an integrated work environment manufacturing pet treats. Good Reasons is an example of an organization with which WDI worked, to help strengthen their manufacturing arm and ensure ongoing employment for those they serve. Specifically, WDI assisted Good Reasons with the purchase of commercial kitchen equipment, which led to increased efficiency, a decrease in outsourcing, additional sales, the retention of 15 jobs, and the planning of several additional jobs. In addition to producing their own products, Good Reasons now also has the capability of co-packing for other companies.

The success of this company and these individuals underscores the idea that individuals with special needs can contribute and succeed.

LONG ISLAND (LI) WDI Plays Significant Role in Efforts to Foster Job Retention and Growth in Pharma

Long Island's pharmaceutical manufacturers were complaining of open positions going unfilled. When deciding how best to support this important manufacturing sector, the Suffolk County Industrial Development Agency (SCIDA) knew that it needed current, practical, industry-validated information. To gather and make sense of this information, SCIDA turned to WDI's Long Island Regional Office for help. WDI's Regional Director convened partners from local educational institutions and arranged visits with LI pharmaceutical companies. The group met with pharmaceutical professionals from the executive level as well as departments of human resources and operations. Together, they discussed Island-wide efforts to develop a sustainable pipeline of qualified employees to meet regional workforce needs of the industry.

The WDI-led group collected valuable information that is already having an

impact. The employers visited have agreed to serve as the LI Pharma Industry Advisors on *new* curriculum and workforce development. To that end, new courses targeted specifically for this manufacturing sector will be offered at Suffolk County Community College's Advanced Manufacturing Center. In addition, employers across LI have learned about *existing* programs in soft skills, language and technical skills available on LI.

The group of workforce stakeholders and pharmaceutical manufacturers is continuing its work with longer-term goals in mind, such as further industry promotion, summer internships for teachers, and a 10-year industry workforce development plan for the region.

CAPITAL REGION (CR) Finding IT Talent and Nurturing It in the Capital Region

By 2020, it is projected that there will be one million more computer programming jobs in the U.S. than workers to fill them. Over the past six (6) months, CR companies in NYS have posted over 1,300 jobs for application software and web developers with many reporting difficulty in filling these positions.

With critical assistance from WDI, AlbanyCanCode was launched in 2016 as a non-profit to meet that demand and build a talent-fueled software sector in the CR. AlbanyCanCode serves two key stakeholder groups: the 100+ local employers of software and IT professionals, and local residents who have the aptitude to work in software but lack local options for training.

WDI provided financial and consultation support for the first year of the non-profit's operations, helping to launch two (2) successful coding classes with Schenectady County Community College that provided Front End and Back End Web Development Courses. Results from the first full year of operation (2017) are as follows:

- Nearly 200 adult students applied to the program and 25 have been accepted, funded, and enrolled in workforce classes
- 30 mentors from 20 companies led coding labs, bringing front-line needs to the classroom
- 25 public school teachers and student teachers piloted and supported K-12 coding-for-all programs
- Nearly 300 third graders participated in a program to introduce them to coding
- 40 employer, educator and community allies engage on a regular basis to assess and refine the program

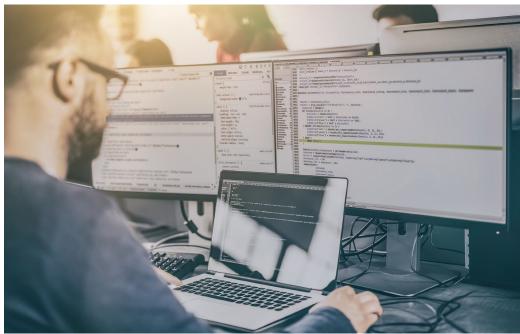
The Capital Region's IT sector is on its way.

NEW YORK CITY (NYC) NYC's Apparel Manufacturing Industry

For many years, apparel manufacturing was NYC's largest manufacturing sector, encompassing twelve square city blocks and generating 165,000 jobs with a 5.7% representation of the city's workforce (Pratt Center, 2012). The offshoring of manufacturing and a decrease in domestically produced apparel have now placed it second to food manufacturing.

Despite this offshoring, the sector is important both for the identity it brings to NYC and for the jobs. **WDI's NYC Regional Director made it a priority this past year to actively learn about the current state of apparel manufacturing, industry events, challenges, and opportunities in the sector.**

Challenges facing the industry include unstable rents and potential zoning changes that could lead to even more instability, high labor costs, worker shortages, and skills gaps. Due to the expensive and unstable real estate, many companies are unable to focus on human resources issues such as training, salary structures, benefits, and best practices.



The Capital Region in NYS saw over 1,300 job postings for application software and web developers in the past six months. Photo credit: iStock

Although the industry is facing challenges, opportunities continue to exist:

- The highly visible Fashion Week continues its legacy with two events per year, bringing in a vast amount of business for manufacturers
- Large numbers of emerging designers want to manufacture locally
- Some established brands already produce here or are anticipating moving smaller scale production back to the U.S.
- Several factories in the region have niche businesses in producing samples and small run production
- With proper planning, some new space proposed in Sunset Park, Brooklyn could be beneficial for new companies and emerging designers not already rooted in the Garment District.

WDI is helping the industry on a number of fronts:

- Identification of training and equipment needs and support to individual companies. This past year WDI visited/ toured and interviewed over 30 companies and assisted several.
- Partnerships to promote the industry.
 A "City Source Symposium" coordinated by WDI and the Fashion Institute of Technology brought technology advances and business resources to manufacturers.

- A collaboration with the Pratt Center for Community Development to research and document the economic impact of the city's plan to end zoning protections.
- Partnerships with several organizationsincluding the Council of Fashion Designers, NYC Fashion Made, Workers United, and others-to identify and develop training that addresses skills shortages.

WDI will continue to facilitate discussions and foster relationships that lead to positive outcomes for the NYC apparel manufacturing community.

NORTH COUNTRY (NC) The NC Works on Strengthening a Growing Transportation Cluster

The NC has become known for its cluster of over 30 transportation companies that employ 8,100 in the manufacturing of parts for the rail, ground transit, and aerospace sectors. The WDI North Country Regional Director played an integral role this past year working with other local economic development and workforce entities to help boost the presence and strength of this cluster. Norsk Titanium, a manufacturer of high value aerospace grade titanium products, has set up shop in Plattsburgh and has plans to grow to over 250 staff members over the next few years. The WDI North Country Regional Director worked with CITEC (the local MEP) to identify and support a series of safety training programs designed to establish safety processes, reduce potential incident rates and lost time, and build the concept of "safety first" into the culture of the organization. We anticipate additional projects with Norsk as the company grows.

WDI also provided critical matching support to a grant pursued by the North Country Chamber of Commerce to establish the North American Transportation Center of Excellence (NAmTrans). The grant application was successful and the funding will be used to support an Executive Director who will coordinate services for cluster companies, including workforce development and recruitment assistance, technical support, and supply chain support.

Lastly, WDI has been working with Clinton Community College to enhance the services brought to local manufacturers by the newly established Institute for Advanced Manufacturing (IAM). IAM is a new stateof-the-art facility that will provide flexible teaching, learning space, and courses for manufacturers to advance their workforce. The WDI NC Regional Director is in discussion with several companies regarding custom training programs to address specific skills gaps.



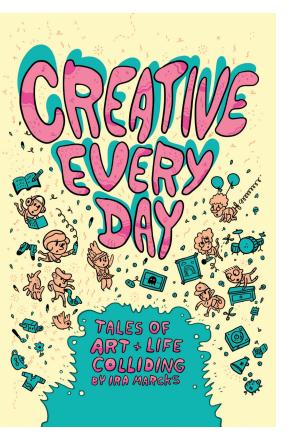
Wine, beer, and cider production are growing in NYS and all require a range of jobs from production to sales to chemists. Photo credit: Jason Groden, Switch Media

WORKFORCE EXPERTISE

Statewide Highlights

ARTS AND CULTURE

WDI's Arts and Culture Program looks to build stronger communities by integrating arts, culture, and thought leadership into our workforce development efforts. A focus this past year was to strengthen the creative jobs sector in the Capital Region via a number of measures, including an initiative to raise the profile of these jobs. This initiative included the development of a comic book, Creative Every Day – Tales of Art + Life Colliding created by Troy, NY comic book artist and educator Ira Marcks. Creative Every Day includes a variety of Capital Region creative professionals describing their career choices in language and pictures appealing to young people.



Creative Every Day was inspired by a 2014 study, Leveraging Regional Assets for a Brilliant Future, commissioned by Upstate Alliance for the Creative Economy (ACE). The study revealed that the Capital Region has more than 30,000 creative sector jobs. The comic book has been distributed to more than 15,000 students in area middle schools, high schools, and colleges to ensure young people and their parents are aware of the wide spectrum of viable creative career opportunities that exist in the region.

ENERGY A Growing Focus on the Potential for Job Growth in Energy

WIND - This past year WDI released a yearlong study about the jobs available in the emerging offshore wind industry. "New York State and the Jobs of Offshore Wind Energy" explores the skills and occupations required to take an offshore wind power plant from an idea through development and construction to spinning turbines generating electricity. The report contains: 1) an overview of the industry and technology; 2) a description of the skills and occupations in the industry; 3) an analysis of New York's workforce, the skills and occupations already in New York and the existing workforce gaps; 4) potential training programs for New York's workforce to capitalize on this emerging industry; and 5) a detailed case study of the only currently operating offshore wind power plant in the United States.

This report is being used by the New York State Energy Research and Development Authority (NYSERDA) to inform the jobs and supply chain study that NYSERDA is conducting as part of the Offshore Wind Master Plan.

NATURAL GAS – WDI funded and helped shape a successful pre-employment energy program on Long Island that we recommend be replicated in other parts of the state. The Utilities Readiness for Gainful Employment for Non-Traditionals (URGENT) Program was launched to address a critical need for the utility industry on Long Island. Over the past 12 months, there were more than 800 jobs open in the utilities sector in this region.

The URGENT program saw 23 women participating in 130 hours of classroom instruction, "employability workshops", and field trips to the offices of American Water, PSEG LI and National Grid. During the program the women learned about electricity and natural gas distribution systems, energy generation, and careers in the industry. In total, 21 women earned the industry recognized Energy in Fundamentals Certificate. Ten (10) women received job offers after completing the program; additional placements are anticipated.

LABOR Support to Labor

Our roots are in labor and therefore we believe strongly in the ideas that are represented by labor, including a living wage, the ability to gain skills and move ahead, and the ability to have a voice at work.

To that end, we work closely with the various labor organizations across the state on training and other initiatives that enable their members to gain skills in a wide range of settings. In addition to training programs run through several unionized companies, examples of projects run directly with the unions this past year include the following:

• Pre-apprentice programs in Long Island, Rochester, and Buffalo to prepare individuals from underserved communities for entry into the unionized Building and Construction Trades. The tradespeople from each region are involved in these programs, which range from six to eight weeks and include direct entry into the trades for those that complete the programs. The programs all have high success rates. A similar program for women entering the carpenters union was supported across several regions of the state. Given increases in workloads, most of the unionized building and construction trades are growing.

- English as a Second Language for the Retail, Wholesale and Department Store Union in a number of hospitality/ tourism settings.
- Safe Patient Handling training for the New York State Nurses Association, CSEA employees, and 1199SEIU employees.
- Certified Nursing Assistant and LPN training to help 1199SEIU members move up the career ladder.
- A variety of skills trainings including communication, writing, problem solving, test prep, and more for CSEA members across the state.
- Training equipment to enable the Building and Construction Trades to train apprentices and journey workers on the most current technologies used at construction sites.



Members of 1199SEIU participated in training to move up the career ladder. Photo credit: iStock

Highlighting the Impact of Low Wages on Health

For the last three years, WDI has also worked with the Occupational Health Clinical Center of Central New York (OHCC) to survey and document the link between low wages/ precarious work conditions and negative health outcomes, and to begin to formulate a strategy to reverse a growing trend.

Issues raised in the study include the prevalence of individuals working multiple part-time jobs, working temporary jobs, working jobs with significant shifts in schedules from week to week, working in unsafe conditions, and having little say in schedules or working conditions. Both union and non-union workers were surveyed extensively. Work continues by OHCC with a focus on helping workers understand the impact of work on health, recognizing risks and hazards, and seeking solutions for workplace challenges. The end goal is to stimulate workplace change to reduce risks to occupational health and to develop tools and resources that could be used by lowwage workers in all regions of NYS.

TRANSPORTATION Recognizing Transportation Manufacturing as an Economic Driver

The Metropolitan Transportation Authority (MTA) provides public transport to the greater New York City area. It is the largest transit system in the U.S. To move an estimated daily ridership of close to six (6) million people, the MTA relies on a statewide network of manufacturers to produce subway cars, rail cars, and buses as well as their many components. **The companies that make up the MTA's supply chain are found in every region of New York State.** These companies range from major Original Equipment Manufacturers employing hundreds of workers to small machine shops with fewer than ten (10) employees. Whatever their size or location, the relationship these companies have with the MTA and with the transportation manufacturing market at large represents both a major economic driver and perhaps the most compelling example of the interdependence between Upstate and Downstate New York.

Over the past year, WDI has focused our manufacturing efforts on learning more about New York's transportation manufacturing sector and its workforce dynamics. We have identified over 200 companies in every region that contribute not just to the MTA supply chain but to other transit systems such as BART (San Francisco), AMTRAK, and SEPTA (Philadelphia). Our goal is to improve our understanding of these companies and their markets in order to provide effective workforce supports, and to ensure that NYS remains the dominant manufacturing force in this sector.

LOGGING Providing Critical Support to the Industries of Logging and Forestry

Logging and forest products industries are vital economic engines that supply an impressive range of businesses all over the state, the country, and overseas. **These** industries, however, are not without their workforce challenges. Logging is tough work that requires a high degree of safety training, skill in operating heavy equipment, and physical stamina. This past year, with the support of the NYS Legislature, WDI worked with New York Logger Training (NYLT) and Paul Smith's College (PSC) to develop new training programs for the incumbent logging workforce as well as for workers new to the field.

Partnering with NYLT, WDI helped to develop a series of new training courses on topics such as invasive species, geographic information systems for harvesters, timber measurements, and smartphone apps for logging professionals. Online courses are forthcoming. Partnering with PSC, WDI facilitated a process to get a summer 2017 School of Logging training program up and running, and to arrange for School of Logging students to be placed as interns with employers around NYS.

With the support of these training and internship programs, both incumbent and new logging and forest products workers will have access to resources that will serve them well in the coming years.



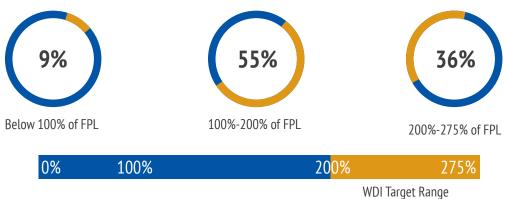
NYLT and PSC training programs support both the incumbent and new logging and forest products workforce. Photo credit: Steve Bicks

WDI'S CHILD CARE SUBSIDY PROGRAM

Employers regularly identify access to high-quality, affordable child care as a persistent challenge to their workforce. Public investments in child care offer benefits on two levels: support for the current workforce because it enables parents to work, and support for the future workforce because it enables access to developmentally appropriate child care with quality learning opportunities.

During 2017, WDI's Child Care Subsidy Program served 1,464 families and 2,061 children in eight (8) counties of the state, while simultaneously supporting 927 small business child care providers. The WDI program is intended to serve families at 200-275% of the Federal Poverty Level (FPL), however funding constraints at the county level in all eight (8) counties resulted in the program serving families at reduced income levels. Currently, child care subsidy funding for families served by the counties directly (low income families) and by WDI (more median income families in the eight counties) together serve less than 20% of eligible families in the state. **We believe investments in child care offer a promising strategy for addressing NYS workforce needs and an opportunity to deliver a prosperous future for our children.**

FPL LEVELS FOR FAMILIES SERVED BY WDI



The WDI Child Care Subsidy Program is intended to serve families at 200-275% of the Federal Poverty Level (FPL). Information from July 1, 2016 – June 30, 2017

ON THE HORIZON

A Focus on Competencies to Help Close the Skills Gap

As many NYS employers struggle to find skilled workers, WDI has been exploring new ways to open up talent pools and increase hiring/selection "Return on Investment" for the nearly 1,000 businesses, unions and community based organizations with which we work annually.

WDI regularly encounters stumbling blocks in the hiring process for manufacturing and other sectors that has led to the oft-referenced "skills gap". These include the need for clear, concise communication of a job's competencies and skills from employers, challenges associated with education and training institutions keeping pace with changing requirements, and the lack of transparency for job seekers about what it takes for success.

WDI is looking to help vet and then get new technologies and tools into the field that can provide greater clarity to the education/hiring/advancement ecosystem that is so critical to New York's growth. **Over the next year, we will focus on identifying, piloting and evaluating industry-driven, competency-based assessments, educational pathways, and hiring processes.** We see these steps as a critical move to reduce labor shortages and create pathways to employment for the many workers struggling or left behind in the current system.

An Anticipation of More Job Opportunities in Energy, Specifically *Renewable Energy*

According to the U.S. Department of Energy, there are over 137,000 New Yorkers working in the energy sector. This figure is anticipated to grow as costs for renewable energy sources decrease, consumer demand for renewables increases, and new technologies emerge. These changes are aided by New York State's energy policy goals, which aim to achieve the following results by 2030:

- Generate 50% of the state's electricity from renewable energy
- Reduce energy consumption by 23%
- Reduce 40% of greenhouse gas emissions

A report from The Worker Institute at Cornell concludes that New York could create 40,000 new energy sector jobs by taking a set of actions that would move New York toward its' energy and climate goals.

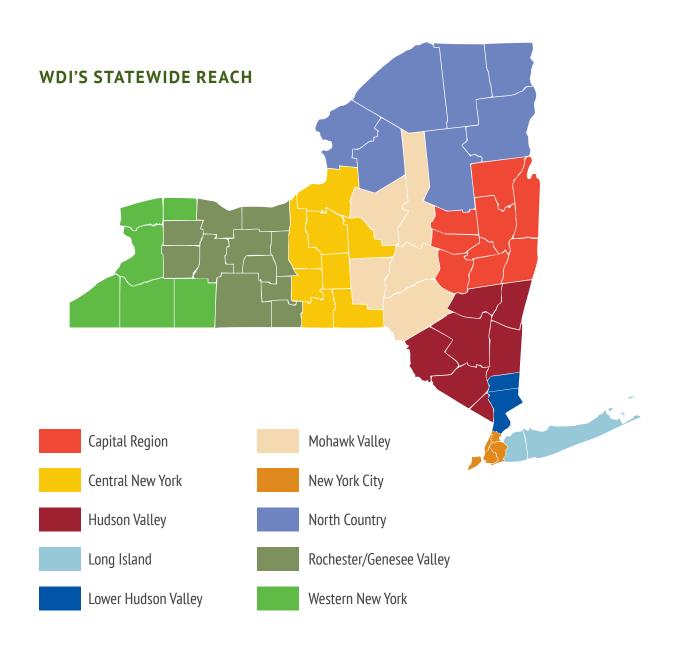
However, we must plan ahead in order for New York's workforce to fully benefit from these energy job opportunities. New skills will be required by incumbent workers. Some occupations will be stressed by the number of new workers required. New occupations – such as wind energy technician – will be created that will require new workforce programs and strategies. WDI is and will be working with partners to prepare New York State's workforce to compete in the changing energy landscape.



The nation's first offshore wind farm is located off Block Island, Rhode Island. Photo credit: WDI, Lisa Futterman

ADDITIONAL INFORMATION ABOUT US

WDI is supported primarily through two NYS agencies – the NYS Department of Labor and the NYS Office of Children and Family Services. Program expenses this past year included those for our interactive grants program as well as for program staff for the regional workforce development and child care programs. Administrative expenses included an investment in a new online platform that allows regional staff to collect workforce intelligence in a common language/framework, and integrates this data collection with our interactive grants program and the related outcome surveys. Last year WDI had a total of 32 staff members.





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For more information about WDI's **regional offices** and latest projects, visit **wdiny.org**

