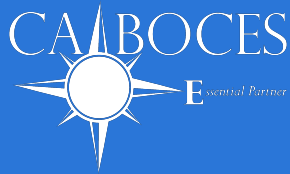


October, 2019

Dream It. Do It. WNY

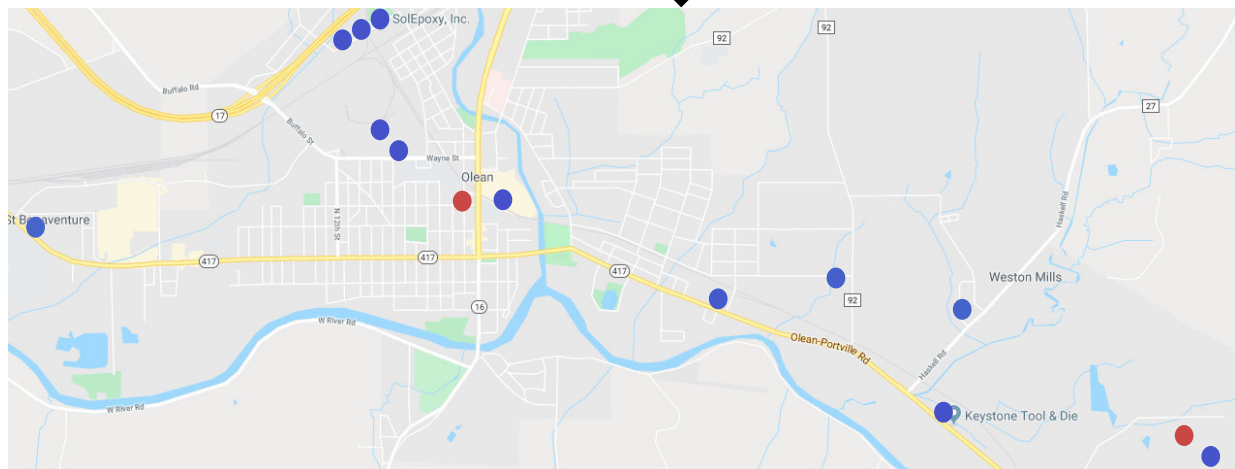
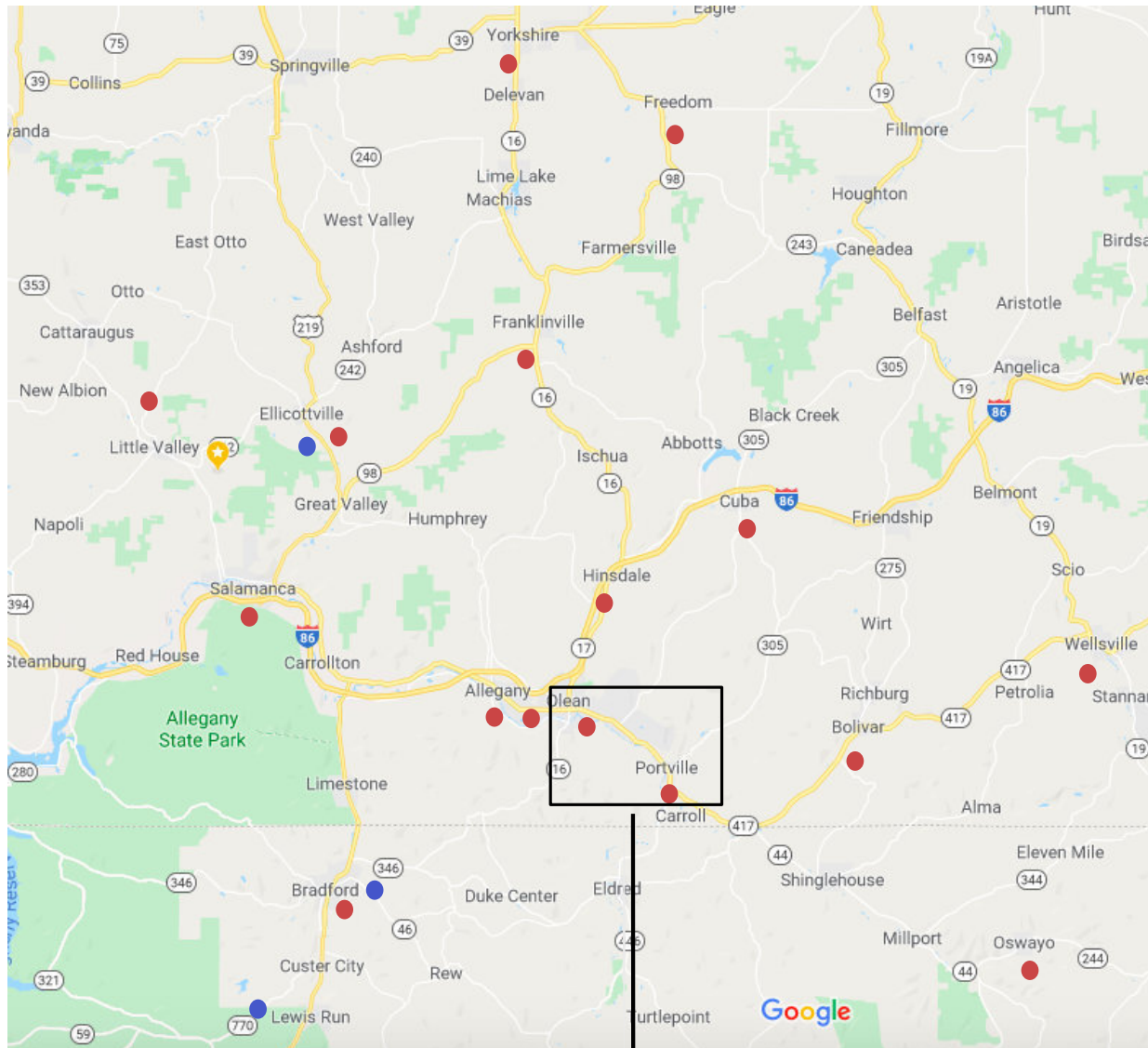
# Manufacturing Month





Each year, many local manufacturers and colleges open their doors to area schools, welcoming students and teachers to tour their facilities. This year, over 600 students from 16 area schools visited 16 manufacturers as well as Jamestown Community College and St. Bonaventure University. Students learned about the skills and education required to have a lucrative career right here in the Southern Tier. Activities included drafting, design, chemistry, measurement, welding, duct fabrication, using a press brake, fundamentals of electricity, and discovering the importance of essential non-technical skills. Below is a map showing the area of outreach for this year's Mfg Day.

● represents schools and ● represents manufacturers.



Olean High School students along with a group of students from CA-BOCES (Ellicottville and Cuba) visited Fitzpatrick & Weller on the morning of October 4, 2019. Students learned about the exciting jobs available in the lumber industry, from out in the forest to sorting in the yard to administration in the office. Using three senses - sight, touch, and smell - students were able to distinguish between the various types of wood found in our area. They also observed the process of drying, grading, and stacking.

Students then ventured up to Holiday Valley, where they learned about the mechanics, engineering, and maintenance of the snow-making machines and chair lifts. Students learned about making and grooming the snow and were invited to an upcoming career fair at Holiday Valley.



Archbishop Walsh and Allegany - Limestone split into three groups and rotated between Scott Rotary Seals, SolEpoxy, and Napoleon Engineering Services. While at SolEpoxy, students toured the facilities and met with working professionals. The SolEpoxy team talked about the job search process, job opportunities, and employer expectations. The students also had an opportunity to work in the lab - mixing and creating bouncy balls!

At Scott Rotary Seals, students read the blueprints of a standard SRS part, measured the part using digital calipers, then recorded the measurements.

At Napoleon Engineering Services, students were tasked with designing a bearing, shaft, and housing arrangement to help power Elon Musk's new SpaceX Starship rocket. The students accomplished this by specifying the appropriate components and calculating their required dimensions. They worked with Chris Napoleon (NES President and Chief Engineer) and NES Engineers Alex Harris, Lukas Zink, and Andrew Hvizdzak.







Each year, Cutco offers tours for over 100 area students on National Mfg Day. Oswayo Valley, Bolivar-Richburg, and Salamanca City Schools visited Cutco this year. Students were broken into two groups and received personal tours and valuable presentations during their visit.

While touring the facilities, students walked through the steps of designing, creating, assembling, and packaging Cutco knives. They also managed to observe the building of Cutco wood blocks.

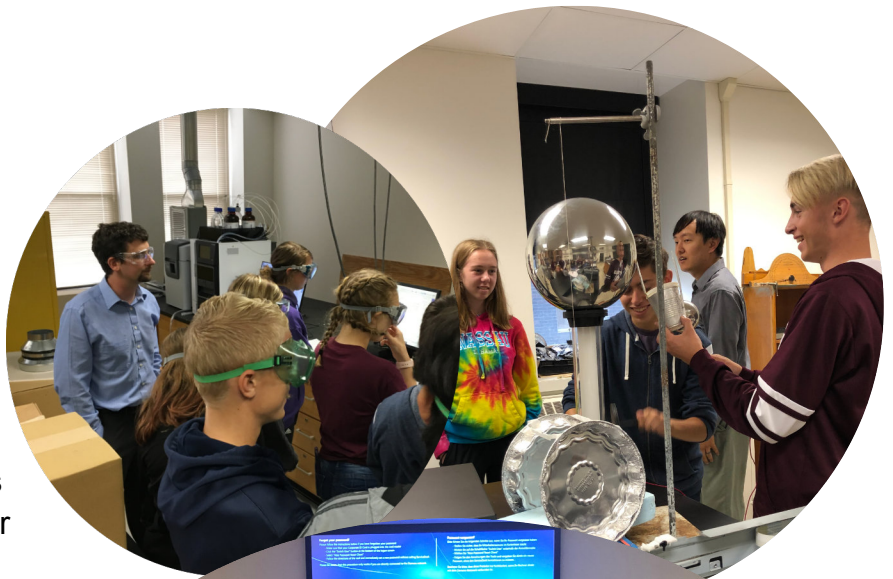


Presentations by David Koebelin, Jill Slawiak, Chantal Cook, and Jason Moses opened the students' eyes to opportunities at Cutco as well as the technical and soft skills required to gain a rewarding career right here in the Southern Tier.

Physics and Chemistry students from Portville High School visited Siemens Energy and St. Bonaventure University during Mfg Day.

Nick Martel and Kevin Volz, both graduates of Olean High, are now engineers at Siemens. Nick and Kevin took the students on a tour of the facilities and later spoke to the students about their pathway from Olean High to their exciting new job. The Portville students had some great questions, which led to a valuable discussion about the importance of their decisions about STEM courses as well as the value of good communication skills.

Students then visited Dr. Scott Simpson (a graduate of Allegany-Limestone) and Prof. Tae Cooke at St. Bonaventure University, learning about the academic opportunities at SBU through a series of fun, hands-on activities.





Bradford High School students visited Allegheny Bradford Corporation (ABC) for a tour of the Bradford facilities. Students met with employees (graduates of Bradford High), and discovered how ABC's Heat Exchanger and Filter Housing are used primarily in pharmaceutical and beverage production.

Here is a quote from Celine Penman, Human Resources Recruiter from Allegheny Bradford Corporation:

*As part of National Manufacturing Month, seventeen Machine Shop students and teacher Matt DeGolier from Bradford Central School toured ABC's South Avenue facility. Jeff Bryant, Manufacturing Engineering Technician and Dan Hervatin, Certified Welding Inspector did an amazing job explaining our processes to these potential future employees!*

*It was great to see several of our current employees, who had Mr. DeGolier as their teacher, stop and acknowledge him.*



The students of Pioneer Central School traveled throughout the county, starting with a trip to Fitzpatrick & Weller in Ellicottville, NY. There they met with Joe Snyder and learned about the process of drying wood and humidity control. They also learned about grading, sorting, stacking, and processing wood for different products - including Cutco knife blocks.

After lunch, the students went to Gutches Lumber in Freedom, NY. In the yard, they saw how to grade logs when they come off of the truck and how the logs are fed into the debarker for processing. In the maintenance shop students learned how Gutches sharpens blades for the machines, watched how the sawyer cuts the logs, and how the logs are sent to be graded and stacked. During the tour, technology teacher Larry Cook was pleasantly surprised to see some of his former students, working at Gutches: Head Sawyer, Head Grader, Plant Manager (Matt Sawicki) and Shift Manager (Brandon Conroy). See top photo. Both companies pointed out all of the career possibilities and were ready to hand out applications and hire some of the students! The students left with a very positive feeling about the future!

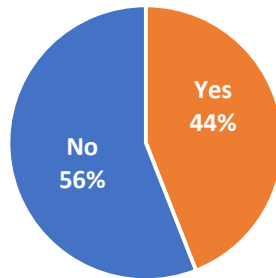




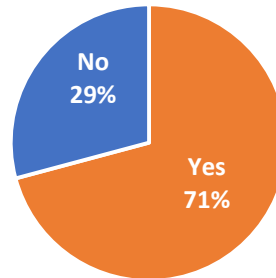
**Students were asked the following questions, before and after their Mfg Day tours:**

**Would you consider a career in manufacturing?**

Before

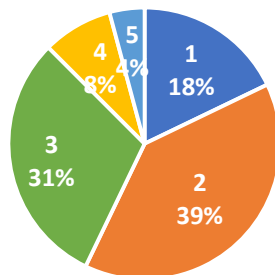


After

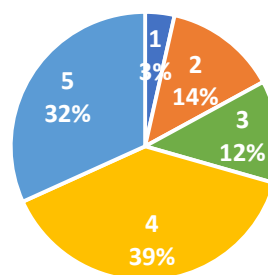


**On a scale of 1 (low) to 5 (high), how much do you know about manufacturing?**

Before

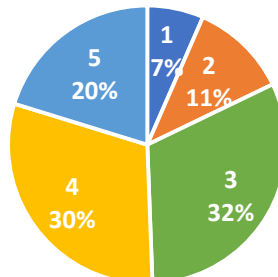


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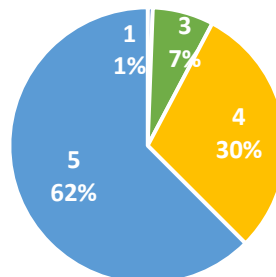


**On a scale of 1 (low) to 5 (high), how important is manufacturing to our local economy?**

Before

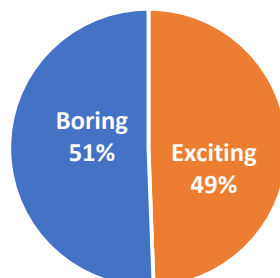


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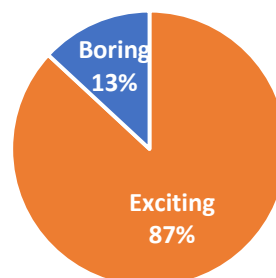


**Is manufacturing boring and dangerous or is manufacturing exciting and safe?**

Before



After





## **Following the tours, presentations, and activities on Mfg Day, students completed a survey and provided these helpful comments:**

Thanks to Sol Epoxy for having us. I thought the tour was very interesting. I liked the factory and thought it was cool all the big machines filled with colorful material. I didn't really know what Sol Epoxy did, but now I do and it's interesting all the things that go on. Bonuses were the zero-degree freezer and the little experiment at the end.

Everyone at Cutco was extremely professional and knowledgeable. The tour guide took the time to explain things and answer questions. Mr. Freeborn was our host - he was a terrific presenter.

Thank you to all of the staff of Mazza and Pierce who took the time out of their day to stop and present what they do and the importance of manufacturing in all of our lives.

Thank you for showing us around and teaching us about everything. I appreciate you putting your time into this.

Thank you for teaching me the five important aspects of how to be not just a good worker, but a fabulous worker.

Thank you for showing us what the manufacturing business was like and it was very interesting and I'm glad we got to go.

I thought this was an amazing field trip. Thank you for giving us this experience in the workplace.

Thank you Mrs. Ayres for taking me on your bus and showing me more job opportunities after high school. I might apply to TPS.

Thank you so much for taking the time out of your day to enlighten me about this necessary line of work to our world and for showing me a whole new world and possibilities for me in the future.

I would like to say thank you to my group's tour guide. He was very nice, fun and he knew what he was teaching.

Thank you to the guy from Cutco who showed us around. I forgot his name haha but he was cool!

Thank you, Eaton for having us over. I never heard of your company until now and I will see about getting a job there. I would like to thank you for the amazing tour throughout your factory and showing us how things are made. I really do appreciate it.

Thank you, Keystone, for helping me out. Now I plan to do something with manufacturing

Thank you. I learned a lot about manufacturing and what it does for our community.

Thank you to Napoleon Engineering and Scott Rotary Seals for providing new information and insight on engineering.

The trip was amazing and I thoroughly enjoyed the hands-on activity and the cool things we received. Thank you SolEpoxy people!

Thank you NES for helping me understand more about engineering.

I believe the tour was set up and executed very well. I want to thank all of the speakers, the workers, and the guides for the opportunity to have a more in-depth look into the manufacturing process.

Thank you, Steve, for the tour at Holiday Valley.

My tour guide at Fitzpatrick & Weller explained everything to make sure we understood what was going on and even told us how long he was there for and how long some of the machines were there for.

Manufacturing is a good thing and is an essential part of life and will further America.

The tours are great and so informative for students. It might help to also tell them about skills for the job, how to get the job, how to stay employed....the soft skills. Telling us about the company is great but getting kids interested in manufacturing careers is important. Thanks for the tours.

It was ace!

I liked the trip to Dresser-Rand because I am thinking about becoming a mechanical engineer.

Thank you for giving us a tour and showing us what manufacturing really is!

We visited ARG before going to St. Bonaventure, and it was much more interesting than I thought it would be!

Thank you for the fun time at your JCC campus.

I appreciated everything they did for us at SBU. Thank you for allowing us to explore their facilities

I would like to thank all of our hosts for providing us with valuable information.

Everyone was nice and friendly and I enjoyed being able to see parts of Bradford I never have seen before.

The excitement of the students and professors giving the presentation shows true enjoyment in their work and showing others their creations.

I just wanted to say thank you for taking us on the field trip. I don't think all of us knew as much about manufacturing before the field trip than as much as we learned during/after the trip, thank you.





The entire 9th grade class of Olean High School had a busy day on Friday, October 18. The OHS students broke into two groups (almost 80 students in each group). One group walked over to MTI@JCC at Jamestown Community College and the other walked over to Siemens Energy. After a welcome and presentation by Chris Scott, students rotated through the following buildings: Machine Shop and Weld Shop (Plant 1), Rotor Cell, and Development Lab. Students had some great hands-on experiences and heard personal career stories from the engineers and professionals giving the tours, as well as many of the machinists and welders.



Meanwhile, at MTI@JCC, students broke into four groups and rotated through the following stations: Welding using a Spot Welder provided by Mike Higgins of AirGas; CNC Machining and plotting coordinates with Mike Smith of OSM; Fundamentals of Electricity with Tim Griffin, JCC Instructor; Soft Skills presentation by Melissa Riehle, JCC Admissions.

Between tours, students were provided lunch by Siemens Energy and Dream It. Do It. Thanks to Hinsdale Central School for bussing between locations!







Cattaraugus-Little Valley High School had a busy day! The 60+ Catt-LV students arrived in three buses and managed to visit four companies and one college.

The tours included the following: Eaton, FiberCel, Total Piping Solutions, and Keystone Tool & Die.

After each bus visited two of the manufacturers, everyone went over to MTI@JCC for lunch, a presentation and a quick tour of the Manufacturing and Technology Institute.

During the day, students met with engineers, welders, sales managers, CNC operators, electricians, HR personnel, and college professors.



Both Franklinville and Portville students had a great tour and activity at Mazza Mechanical Services and Pierce Steel. Students learned about skills and training necessary for careers in HVAC then broke into smaller groups. Each group walked through activities that included metal duct fabrication, forming steel with a press brake, and a guided welding lesson at Pierce Steel.

After a quick lunch at JCC, students then worked with Xavier Smith of OSM in the Manufacturing Technology Institute, working on the CNC machines. The Portville and Franklinville students finished the day with an informative tour of the JCC campus.

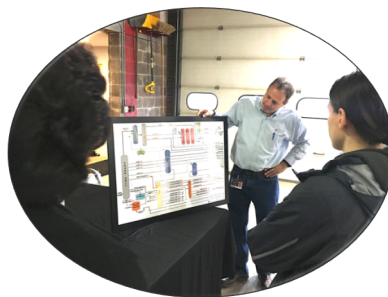




# Dream It. Do It. Brings BAHS students to ARG

By Joellen Wankel

## The Bradford Era



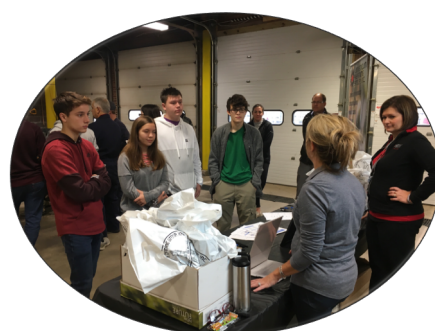
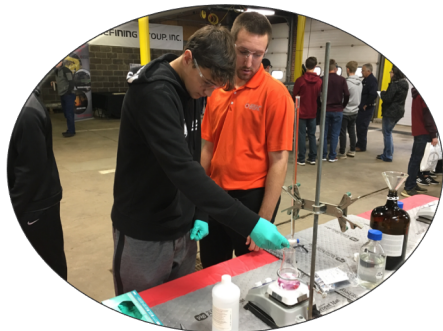
American Refining Group Inc. welcomed 40 students from Bradford Area High School as part of an extended celebration of National Manufacturing Day, organized through Dream It, Do It of WNY. The two-part visit involved presentations from various departments of the facility to small groups of students and also a tour of the facility. "It's great to see the local kids come in and meet with people. We hope to keep developing kids from the area, help them see us as a really good job opportunity," noted ARG President Jon Giberson. "We love to hire kids from the area." Giberson, who is a graduate of Portville, N.Y. high school, noted he first attended a Dream It, Do It event at his alma mater, where he heard of students who attended previous events and were hired at another local facility as a result.

ARG employees representing the Electrical and Instrumentation, the ARG Quality Lab and Human Resources departments were on hand to discuss work at the refinery. Other stations explained computer monitoring of the units within the refinery, safety and equipment and provided a breakdown of the processes used and the various products made at ARG. David Krantz provided a detailed explanation of the various products the refinery produces and the process to extract or refine each product. Students spent 10 minutes at each station and were given a chance to ask questions at the end of each presentation.

When asked what stood out to him of the information he had heard already, one student explained, "At the electric station, we learned about how they code how all the motors work. It's interesting to learn about such a large-scale operation."

"We are thrilled to be working with Dream It, Do It (of WNY), who focuses on getting young people interested in science and technology careers, especially young women. This is the third event we have been part of, and there are 40 kids from Bradford High visiting to see what we do, what careers we offer," said David Krantz, Vice-President of Research & Development for ARG. "We see this as priming the pump, creating a pipeline for potential future talent. It is a great opportunity."

Students travelled to the Hickey Dining Hall at St. Bonaventure University for lunch, followed by a chemistry/physics activity in DeLaRoche with Dr. Simpson and Dr. Pientka then a brief campus tour.





Twenty students from Wellsville High School toured SolEpoxy and learned about opportunities for students interested in chemistry, physics, math, business, computers, and sales. After touring the facilities, students went to the lab, put on their gloves and safety glasses and created bouncy balls using the secret recipe.... glue, corn starch, food coloring, and a borax/water solution.

During a visit to Jamestown Community College, Wellsville students met with Melissa Riehle and Xavier Smith for a tour of campus and a CNC activity in the Manufacturing Technology Institute. While with Xavier, students worked the bed shear as well as the HAAS TM1 mill.

Thank you to the following schools and manufacturers for participating in this year's

## **Dream It. Do It. Mfg Day**

Jamestown Community College

St. Bonaventure University

Olean City Schools

Allegany-Limestone Central School

Portville Central School

Hinsdale Central School

Archbishop Walsh Academy

Salamanca City Schools

Cattaraugus-Little Valley Central School

CA-BOCES

Cuba-Rushford Central School

Ellicottville Central School

Wellsville Central School

Franklinville Central School

Pioneer Central School

Oswayo Central School

Bolivar-Richburg Central School

Bradford City Schools

Siemens

Napoleon Engineering Services

SolEpoxy

Cutco

Eaton

Scott Rotary Seals

Mazza Mechanical Services

Pierce Steel

FiberCel

Keystone Tool & Die

Total Piping Solutions

Fitzpatrick & Weller

Holiday Valley

American Refining Group

Allegheny Bradford Corporation

Gutchess Lumber



**Join us for upcoming Dream It. Do It. WNY Events**

**DIDI 500 - Saturday, November 23, 2019**

**Eaton Young Manufacturers Academy - February 17-21, 2020**

**Girls in Mfg Day - March 2020**

**Mfg STEM Fair - April 2020**

Any questions, please contact  
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