



# IMPACT REPORT

*TRANSFORMATION THROUGH A PANDEMIC*

2021

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# TRANSFORMATION THROUGH A PANDEMIC – YEAR TWO

**Who could have predicted that the year 2021 would be one of such remarkable transformation for New Century Careers?**

New Century Careers (NCC) responsibly reentered a world forever altered by the COVID 19 pandemic with the adaptability of the NCC staff and trainees who performed admirably as our daily routine eased back to a new normal.

Our core program Manufacturing 2000 (M2K) is stronger than ever, made stronger still by new programs that connect trainees to rapidly developing career pathways.

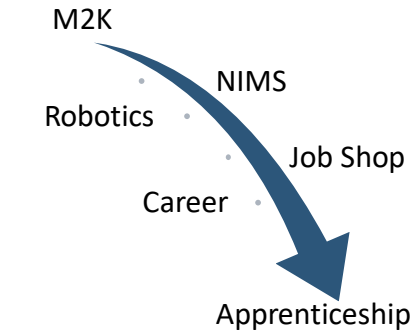
It is especially important to us to introduce students at an early age to the ever-evolving manufacturing industry that not only produces everything a consumer uses but also supports growing robotics, biomedical and other advanced manufacturing fields that are transforming the region into a recognized technology hub.

NCC is responding to this movement. We are proud to have introduced our new Certified Robotics Technician Apprenticeship Program in 2021, along with the acquisition of cutting-edge equipment that introduces trainees to this promising career. The New Century Job Shop processed orders for seven major companies, with repeat orders for hundreds of parts.

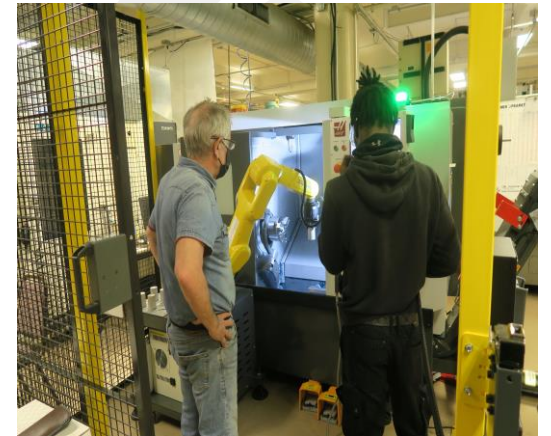
This progress is fully supported by an engaged Board of Directors that extends our mission through broad industry expertise, referrals to important partners and funders, and donations of valuable equipment and materials.

Neil A. Ashbaugh  
President and CEO

# TRANSFORMING THE WORKFORCE: FROM M2K TO CAREER



NCC trainees begin a career path with Manufacturing 2000 (M2K), complete National Institute for Metalworking Skills (NIMS) credentials, are exposed to robotics, work on actual parts orders in Job Shop, and secure a job through resume and placement assistance in months, not years.



Incumbent workers, including a group from CertainTeed in West Virginia (right), came to NCC to build skills in machining and advanced manufacturing technology. NCC also offers apprenticeships.





# TRANSFORMATION FROM M2K TRAINING TO CAREERS

***Dominick Rucker's story is a prime example of the New Century Careers pathway to a promising career in the manufacturing industry.***

Dominick was introduced to NCC as a participant in the BotsIQ program at Chartiers Valley High School.

Following graduation he completed a semester at Community College of Allegheny County but preferred working with his hands as he did during Bots IQ.

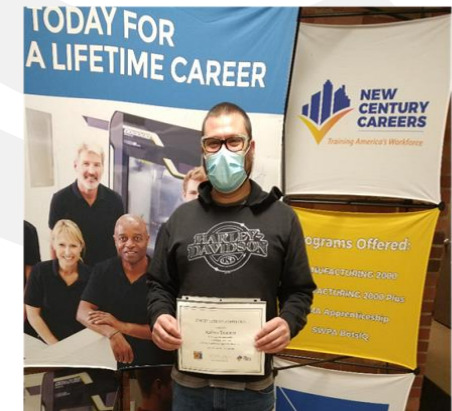
Dominick enrolled in NCC's Manufacturing 2000 and never looked back! Upon completion of the program he was hired as a machinist at Santucci Process Development, Inc. in McKees Rocks, and started his apprenticeship there. Two years later, he moved to CP Industries in McKeesport as a maintenance machinist working in the metallurgical heat treatment area.

His new employer established a Group Sponsored Apprenticeship Program with NCC so that he could continue his apprenticeship. CP Industries was very engaged and, though not required, even credited Dominick with the 4,000 hours of on-the-job training from his previous employer. He aims to earn his journey worker papers and possibly explore drafting and engineering in the future.



Dominick encourages anyone who is seeking a solid career opportunity to contact New Century Careers!

"This program is a great opportunity. If you are interested in machining this is the program to join. It is in-depth training and they have very knowledgeable instructors," Andy says.



***Andy Trimmer originally went to culinary school and worked in the industry for several years but was tired of holiday shifts and missing important family events.***

He switched to warehouse work but was laid off. Andy saw an ad for the M2K program on Craigslist and decided to enroll because he enjoys working with his hands and gets satisfaction when completing a job. Andy accepted a job with a local company and hopes to start the NTMA apprenticeship program to earn his journey worker papers.

# TRANSFORMATIONAL TRAINING (CONTINUED)



## BY THE NUMBERS

- 19 job placements
- were made
- 81 NIMS credentials were earned
- 55 trainees were enrolled

### ***Thelisa Underwood is a managing machinist at Veka Inc.***

She heard about NCC through her employer and was interested in getting a better understanding of what machinists do. So she enrolled in the M2K program.

“My intention was to be able to perform the tasks that my machinists do,” explained Thelisa.

She found the hands-on portion of the program to be most beneficial. “I enjoyed the hands-on because you start understanding more of machining when you start learning the programming of it,” Thelisa said. She finished the M2K program in February of 2021.

## EMPLOYER INSIGHT

*Anyone new to the industry can face a lot of barriers to entry when it comes to the basic knowledge that builds the foundation of what it is to be a machinist.*

*Manufacturing 2000 (M2K) can be a boot camp for new workers. It helps to self-select candidates when it comes to the decision to tackle this trade. They learn about themselves at NCC rather than testing the waters on the job where it can be costly for both employee and employer.*

*Terry Cousins, the employee we were lucky to hire from NCC’s M2K program, made an immediate impact and continues to be a vital part of our business. We are growing strategically around his skill set. He runs a Fryer CNC with Siemens control, the only employee familiar with that control. We plan to purchase another machine with the same control. So soon, Terry will be solely in charge of \$750,000 of equipment.*

*Terry came in on Day 1 with well-rounded skills and an understanding of the trade. He continues to show an enthusiasm for machining and a desire to grow and learn. This is the biggest benefit of the program, in my mind.*

*NCC’s M2K program is absolutely worth the effort for both parties. The best thing to invest in is your employees. If treated properly, they’ll last longer than any piece of equipment.*

*Jason P. Spudic, True Position, Inc., Gibsonia, PA*

# TRANSFORMING THE REGION THROUGH COLLABORATION



## OPERATION NEXT

In partnership with Catalyst Connection, New Century Careers continued its participation in Operation Next, an initiative created for small and mid-sized manufacturers impacted by the COVID 19 pandemic. NCC offered trainees CNC Machine Operations. A continuation of the tuition-free training is expected into 2022.



Initial cohort of Operation Next trainees with instructor John Alexander (right)



## SCHOOLS-TO-WORK

New Century Careers shared more than \$2.8 million through the Schools-to-Work Program, two-year grants to support new partnerships between schools, employers, organizations, or associations to create employment and training career paths for students. Governor Tom Wolf said the grants provide hands-on learning opportunities including apprenticeships, workplace visits and internships to help build career paths to employment, industry-recognized credentials or college credits to meet labor market demands.



## PITTSBURGH PUBLIC SCHOOLS CAREER AND TECHNICAL EDUCATION

The Pittsburgh Public Schools Career and Technical Education program and New Century Careers announced an agreement to support setting criteria to determine eligibility for Advanced Standing in the NCC PA State registered pre-apprenticeship machinist training program, Manufacturing 2000. Upon successful completion of 50 required modules of Tooling U-SME online training and two National Institute for Metalworking Skills (NIMS) credentials, eligible high school students, beginning in 10th grade, will be admitted to the hands-on portion of the M2K pre-apprenticeship machinist program.



## AIM HIGHER CONSORTIUM

The Aim Higher Consortium, funded by the US Department of Defense to strengthen the defense supply chain in the greater Pittsburgh region and West Virginia, was announced in July. AIM Higher is led by Catalyst Connection with over 30 academic, economic development, technology institute, and manufacturing partners, New Century Careers among them. It supports small and medium-sized manufacturers in the defense industry to expand business and operational capabilities, strengthen the supply chain, and create and retain defense manufacturing jobs. Companies can find defense industry resources and grants and training options to help offset project costs at [www.aimhigherconsortium.org](http://www.aimhigherconsortium.org).



# TRANSFORMING WITH THE INDUSTRY: ROBOTICS

***As more and more companies in the Pittsburgh region invest in and deploy robotics and automation solutions to meet their customers' demands, the need for highly skilled technicians to operate and maintain these systems is critical to the long-term success of both existing companies and recent startups. Candidates trained to fill these advanced manufacturing positions can secure jobs with significant growth and earning potential.***

New Century Careers launched its two-year Certified Robotics Technician Apprenticeship Program in June to focus on automation and robotics for the job role of robotics technician.

The program offers related theory and instruction courses provided by Community College of Allegheny County, including safety, hydraulics, programmable logic controllers, robotics, electrical and mechanical training. At the employer's site, apprentices use Tooling-U online training modules and work to achieve proficiency in 80-plus on-the-job competencies monitored by the apprentice and the apprentice's supervisor.

The installation of a Haas ST-10Y with FANUC robotic arm at NCC's Anselmo Training Innovation Center in November is transforming NCC's already robust capabilities to prepare trainees for the increasing demands of advanced manufacturing to fill robotics positions regionally. The ST-10Y adds high performance lathe capacity and programming for mill and lathe on a single machine, creating versatile done-in-one machining solutions. NCC is said to be one of just a few nonprofit training centers in the country to have these capabilities.

NCC's Certified Robotics Technician Apprenticeship Program prepares trainees to complete journey worker training in as little as two years, a transferrable credential recognized and valued by employers.



AIM Higher Consortium representative (right) checks out the Haas ST-10Y with FANUC robotic arm.

# TRANSFORMING SKILLS AND CAPACITY THROUGH INDUSTRY RELATIONSHIPS

***In 2021, its first full year of operation, TRAK Machine Tools Pittsburgh Showroom at New Century Careers Anselmo Innovation Training Center continued to add significant value for the region's manufacturers and NCC trainees. This unique strategic public-nonprofit partnership helps to reframe NCC for a larger role in the advanced manufacturing industry.***

With trade shows suspended during the pandemic, TRAK hosted spring and fall open houses for regional manufacturers offering them a feel for how technology can transform a shop. From this location, featuring TRAK TMC 5, the world's first TMC toolroom machining center, TRAK offers manufacturers, prospects and customers in central and western Pennsylvania, West Virginia, and eastern Ohio demonstrations of TRAK machines and comprehensive support for TRAK® and ProtoTRAK® products performed by factory direct personnel.

Companies visiting the showroom (right) also are introduced to NCC training programs and the New Century Job Shop, which provides parts for prototype to small batch production runs. NCC trainees gain a distinct advantage when applying for industry positions with their experience on TRAK's cutting-edge machines. In 2021, TRAK added a donation of an EVO-T 3D printer.



Eric Pferdekamper, NCC sales and project manager, has been accepted into the RA Navigator Apprenticeship Program, a registered apprenticeship under the Commonwealth of Pennsylvania.

Keystone Development Partnership serves as the group sponsor for the program. Employers like New Century Careers are signed on as partners to increase their organizational capacity for promoting, developing, registering, coordinating, and funding apprenticeship programs within their local networks.

Enrollees will gain valuable insight and technical skills to help lead and contribute expertise toward an organization's long-term apprenticeship expansion goals, timely as NCC transforms by broadening its advanced manufacturing curriculum.





# TRANSFORMATION THROUGH IN-KIND DONATIONS

*Significant in-kind donations from local manufacturers throughout the year are resources that stretch the NCC budget and enhance the Manufacturing 2000 pre-apprenticeship program's competitive edge for current and future participants to work with the same equipment used by regional manufacturers seeking skilled workers.*

- New Century Careers started 2021 with additional precision training capability thanks to the generous donation of **YG-1**. The donation includes 11,000 tools, which are critical to the training efforts of NCC, including carbide inserts, drills, end mills, taps, screws, collets and holders. YG-1 is a global supplier to the precision manufacturing sector with exports of cutting tools and accessories to more than 75 countries.
- **Miller Fabrication Solutions**, a heavy metal fabrication partner to global equipment manufacturers across construction and forestry, mining, transportation and other industrial equipment industries, donated four tool cribs. These industrial-built “vending machines” organize and store the hundreds of consumable parts used on manufacturing floors like that of the NCC training center. Miller officials said the donation is part of its commitment to strengthen the resources of regional non-profits such as New Century Careers in the development of the workforce of tomorrow.

- Donations from **Oberg Industries, Inc.** included four Parker Majestic Surface Grinders and a number of indicators, micrometers and true position locators.
- A donation from **L.S. Starrett Company** provided 100 Tools and Rules, 200 Memo Pads, and 150 Decimal Equivalent Cards (Bulletin 1317).



Left: The Urban League of Greater Pittsburgh donated tool kits and safety glasses for M2K trainees.

Below: Unloading the tool cribs

**BY THE NUMBERS:**  
Estimated value of  
in-kind materials  
and services in  
2021 was in excess  
of \$150,000.



# TRANSFORMING MARKET PRESENCE TO REACH TRAINEES

*Now in its third decade, New Century Careers is coming of age as a leader in regional advanced manufacturing and is frequently called upon for insight into key industry issues by regional and national trade associations and media. This visibility builds interest in the manufacturing industry and related careers in general along with NCC's own programs. Prominent media and industry placements in 2021 included:*

- **“Future of Work,”** a series produced by PBS, explores monumental changes in the workplace and the long-term impact on workers, employers, educators and communities. It provides insights on employment as part of the American dream and opportunities for jobs that sustain families and the nation into the future. The series aired locally on *WQED* in September.
- **“Making Your Future: Machining,”** part of a video series presented by Catalyst Connection and Allegheny Regional Alliance, focused on NCC's training programs that create a pathway to family-wage careers in advanced manufacturing. The series, part of the Making Your Future (MYF) Program, addresses the skilled worker shortage and social and income disparities in Pittsburgh.
- NCC was one of four organizations profiled in the 2021 ToolingU/SME white paper **“SPIRIT OF COLLABORATION: How Pittsburgh Develops Manufacturing's Next Generation.”** Tooling U-SME works with manufacturing communities across the country to help solve workforce development challenges.

**BY THE NUMBERS:** This year, 27 NCC trainees completed a combined total of 1,216 Tooling-U modules.

Filming “Making Your Future” at NCC



Neil Ashbaugh, NCC president and CEO, was invited to be a presenter at the NTMA's May national virtual Advanced Manufacturing Practices and Education Development's AMPED MFG Career Summit for students, promoting career advantages in advanced manufacturing.

Marking Manufacturing Month in the fall, Neil joined a panel of industry executives for a Miller Fabrication Solutions webinar series depicting "The Lifecycle of a Weldment." He related NCC training to the various manufacturing processes producing job-ready workforce candidates.

Throughout the year, Neil was called upon by local reporters from the *Pittsburgh Business Times*, the *Pittsburgh Post-Gazette*, *NEXT Pittsburgh* and KDKA-TV to weigh in on the presidential election and its impact on the industry, the American Jobs Act, the future of non-profits and job opportunities post-pandemic, and NCC training programs.

These placements supported an ambitious trainee recruitment effort with an emphasis on diversity as well as those unemployed due to the pandemic. Monthly social media campaigns, including Black History Month, Women's History Month, Manufacturing Month and Apprenticeship Week enhanced NCC's online presence. Montez King, executive director of NIMS, the nationally recognized organization responsible for developing national standards and competency-based credentials in manufacturing trades, was among those featured in posts.



NCC extended its promotion of Manufacturing 2000 in Westmoreland County with billboards along prominent traffic corridors and radio ads in partnership with Eastern Westmoreland Career and Technology Center. Pittsburgh market radio ads continued also. A virtual tour of NCC's Anselmo Training Innovation Center is in production to further engage candidates online.

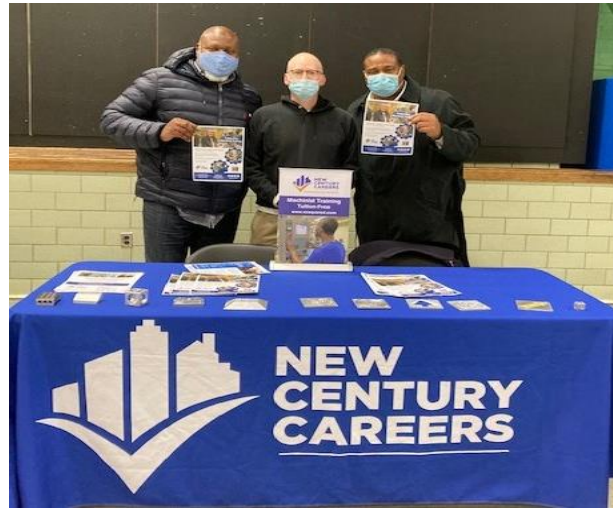


Above, trainees took to the streets to place recruitment signs to attract applicants.



# TRANSFORMATION THROUGH OUTREACH EFFORTS

Mayor-elect Ed Gainey (right) and State Rep. Jake Wheatley (left) visit with NCC's Patrick Bendel at an outreach event.



***Creatively and safely managing pandemic guidelines, New Century Careers maintained extensive outreach through virtual and in-person presence among its key constituents.***

As restrictions lifted, onsite tours resumed, unleashing a steady flow of interested groups visiting the NCC Anselmo Training Innovation Center to assess ways their constituents could benefit from NCC programs.

**BY THE NUMBERS: NCC reached a total of 74 schools, community based organizations and companies through tours, in-person visits, virtual presentations and career events, including an estimated 700 students at 26 schools, and welcomed Pennsylvania congressmen Nick Pisciottano and Dan Deasy.**



# OUTREACH AND TOURS (CONTINUED)

## EDUCATION GROUPS

- Brashear High School
- Equus Works - Bridge Career Center
- Jasmine Nyree Campus
- New Academy Charter
- Environmental Charter
- Phase 4 Learning
- Pittsburgh Promise
- Remake Learning
- Robert Morris University
- Spectrum School
- Sto-Rox High School

## COMMUNITY BASED ORGANIZATIONS

- Community Empowerment Association
- Brashear Association
- National Center for Urban Solutions
- North Side/North Shore Chamber of Commerce
- Hispanic Development Corporation
- Somali Bantu Community Association/Pittsburgh
- South Hills Interfaith Movement
- Mon Valley Initiative
- Mon Valley Providers Council
- Pittsburgh Community Services, Inc.
- Industrial Arts Workforce
- Urban League of Greater Pittsburgh



Somali Bantu Community Association of Pittsburgh (top) and American Foundry Institute, Pittsburgh Chapter, (bottom) tour NCC.

# OUTREACH AND TOURS (CONTINUED)

## CAREER AND HUMAN SERVICES ORGANIZATIONS

- All for All Coalition
- Amachi Pittsburgh
- Auberle
- BotsIQ
- Careerlink
- Carnegie Library of Pittsburgh
- Center of Life
- Crossroads
- Dress for Success
- Focus on Renewal
- Foundation of Hope
- Front Door - Allegheny Health Network
- Goodwill – Fatherhood Program
- Goodwill - Youthworks
- GROW
- VA Gear Up
- Veterans Place

- Homeless Children's Education Fund
- Homewood Children's Village
- Light of Life Ministries
- Office of Vocational Rehabilitation
- Partner4Work

## BUSINESS AND INDUSTRY

- Aerotech, Inc.
- ARM Institute
- Delaware Resource Group
- Department of Human Services
- Hanco, Ltd.
- KLOVE Radio
- O'Neal Steel
- RIDC
- TAP Industrial Services
- Wilkinsburg Borough





# TRANSFORMATION WITH A DYNAMIC BOARD

## **Chair**

Greg Chambers, Director of Corporate Compliance  
Oberg Industries, Inc.

## **Secretary**

Carol Wooten, Ed.D., Senior Consultant  
Schools That Can Pittsburgh

## **Treasurer**

John Dransart, Controller  
Penn State Tool & Die Corporation

Afshan R. Khan, Portfolio Executive – Hardware Sector  
Innovation Works, Inc.

Terri Campbell, Senior Business Advisor  
Catalyst Connection

Chris Merlin, Americas Sales Director, Factory Applications  
CeramTec

Sandy Madden, Senior Director of Data, Reporting and  
Compliance  
Propel Schools

Patrick Jardini, President  
American Gas Lamp Works

Aaron Reighard, Marketing Manager  
Formerly with West Penn Wire, a division of Belden Inc.

Charles Hancock, Operations Manager  
Allegheny Machine Tool Systems, Inc.

Janet Ward, Executive Director  
Westmoreland-Fayette Workforce Investment Board

Brett Fulesday, CVA, CFE  
Senior Manager, Valuations and Litigation Support Services  
Cohen and Co.

# TRANSFORMATION THROUGH ESSENTIAL FUNDING

*New Century Careers gratefully acknowledges generous financial support from grants and major gifts, local companies and individuals. This commitment to the region's advanced manufacturing workforce changes lives and helps produce a vibrant technology hub.*

## MAJOR GIFTS

Catholic Charities of the Diocese of Greensburg

G.C. Murphy Company Foundation

Gene Haas Foundation

Hillman Foundation

Howard and Nell E. Miller Foundation through  
PNC Charitable Trusts

Jack Buncher Foundation

Laurel Foundation

John and Sue Jackson through PNC Charitable Trusts

Fairbanks-Horix Foundation through PNC Charitable Trusts

Mendel and Sylvia Solomon Charities through  
PNC Charitable Trusts

Roy A. Hunt Foundation

Sylvia and Martin Snow Charitable  
Foundation Fund of The Pittsburgh  
Foundation

The Pittsburgh Foundation

Richard King Mellon Foundation

W I Patterson Charitable Fund

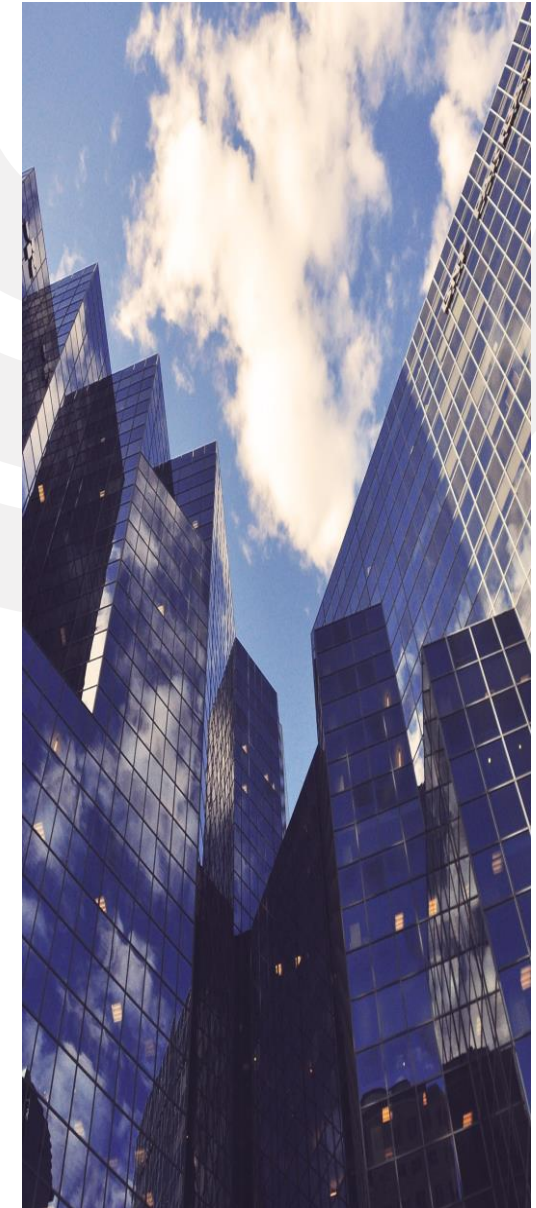
United Way of Southwestern PA

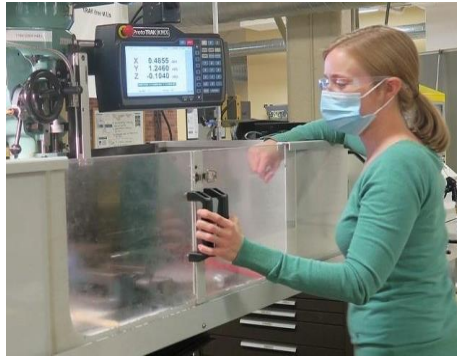
Women of Southwestern PA, Inc.

## COMPANIES

Ace Wire Spring & Form Co., Inc.

Level Green Plumbing & Heating, LLC  
Colocation America





## PROGRAMS

- Manufacturing 2000 (M2K)
- Incumbent Worker Training
- Registered Machinist Apprenticeship Program
- Registered Robotics Technician Apprenticeship Program
- NTMA Program
- New Century Job Shop



**NEW CENTURY CAREERS**  
 305 East Carson Street  
 Pittsburgh, PA 15219  
 Tel: 412.258.6620  
 Fax: 412.258.6625  
[info@ncsquared.com](mailto:info@ncsquared.com)  
[www.ncsquared.com](http://www.ncsquared.com)

New Century Careers is a nonprofit manufacturer and technical skills development organization serving the Southwestern Pennsylvania community through inclusive access to technical training opportunities while helping employers find and develop technicians seeking purpose, passion and success in the workplace.

*NCC is a designee for the United Way of SWPA Contributor's Choice campaign. Code #1461264.*