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The Western New York Manufacturing and Tech Workforce Coalition was developed through planning efforts undertaken as part of the EDA's Good Jobs Challenge and Build Back Better Regional Challenge. Both were part of a suite of federal American Rescue Plan funds focused on boosting regional economies and connecting Americans with good jobs, especially those individuals who were disproportionately hurt by the COVID-19 pandemic. Regions were challenged to identify investments that would be transformative in expanding economic opportunity to more residents and growing the local economy. In Western New York, workforce development for manufacturing and tech emerged as priority areas of investment for regional economic development.

The 12-member coalition developed out of these planning efforts is working together on a project portfolio to strengthen the manufacturing and tech workforce across five Western New York counties: Allegany, Cattaraugus, Chautauqua, Erie and Niagara. Western New York is situated in the westernmost part of New York State along the US-Canadian border. It is a region with more than 1.4 million people, 34,163 firms and 483,641 workers (US Census, ACS, 2021; NYS DOL, QCEW, 2021).

The coalition is a collaborative strategy that supports an ecosystem approach that builds the pipeline for tech and manufacturing. These two interconnected industries are regional priorities with pressing workforce issues – from hard-to-fill jobs and hard-to-find skills to retirement cliffs and job openings that go unfilled. Investing in a coordinated, collaborative strategic way will address current workforce challenges, maximize impact and leverage federal, state and local dollars, including EDA's \$500,000 Build Back Better planning award to WNY and its \$25 million investment in three projects that will boost manufacturing across the region.



ABOUT THIS STRATEGY
WHAT MAKES IT UNIQUE?

About the workforce strategy

The WNY Manufacturing and Tech Workforce Coalition is a collaborative strategy that supports an ecosystem approach to workforce development. It aggregates strengths of partners and existing programs as it brings together intermediaries, employers, workforce trainers, pipeline program developers, and service providers. It lays a foundation for future workforce planning efforts in the region for other priority industries. This strategy also creates a model that can be replicated across Upstate New York and/or regions that seek to align workforce development with industry needs and broader economic development strategies.

KEY ELEMENTS OF THE STRATEGY AND HOW WE WILL BUILD THE ECOSYSTEM FOR IMPACT:

A SHARED VISION: Our shared vision is an inclusive workforce that meets the needs of job seekers and creates a reliable and inclusive talent pipeline for employers in manufacturing and tech. This vision guided project development, helped to align projects and will drive implementation.

PARTNERSHIPS: This strategy was built by aligning trainers, industry, intermediaries, pipeline developers and CBOs around a shared vision and coordinating their roles and projects to support ecosystem building and workforce improvements.

EXPANDED TRAINING OPTIONS: Our strategy ramps up best practice models and creates new industry-driven training opportunities focused on in-demand skills and credentials that lead to higher-paying jobs with career pathways. Program buildout is focused in underserved areas of the region with untapped talent pools, including people of color and women who are underrepresented in manufacturing and tech.

ACCESS: Through partnerships with community-based organizations, and through engagement of trainers who take a holistic individualized approach, our strategy removes the many barriers that individuals often face to training and work through supportive services such as free training, transportation, career coaching, stipends, clothing for interviews and work, and more.

ASSESSMENT: Shared definitions and metrics with ongoing data collection and reporting will quantify the extent to which we are moving the needle, and addressing the needs of job seekers and employers. Regular progress measurement will also allow us to identify and grow elements of the strategy that are working well and quickly respond to evolving and/or emerging needs in the regional economy.

SHARED RESOURCES: Will maximize available resources and investments for impact, facilitating partnerships, outreach to target populations, job placement and the sharing of best practices.

COMMUNICATIONS: Consistent communications will foster information sharing across the coalition and region to amplify collective impacts and maintain alignment of this strategy with other initiatives in regional economic development.

What makes it unique?

While our coalition includes some members that have existed in Western New York for more than a century, these organizations have never partnered with each other in this way until now. This workforce coalition brings together diverse workforce stakeholders, who are all taking the time to regularly meet, talk with each other, build trust, commit internal staff and resources, coordinate programs, and engage employers together. This approach is very unique in this region, particularly in the workforce realm. Working together to pursue the EDA grants in 2022 offered many organizations an opportunity to see if what they can accomplish together is greater than the sum of what they can do individually and how a collaborative strategy could be transformative and garner lasting impacts. In 2023, the coalition was formally established, with core members meeting consistently throughout the year. 2024 saw the launch of the coalition council, co-chaired by two major employers in WNY and comprised of 25 manufacturing and tech employer partners.

Elements that make the strategy unique:

Collaborative

Our strategy brings together 12 coalition members representing nonprofit trainers, community colleges, universities, apprenticeship training, K-12 career programs, workforce development organizations and intermediaries, industry, and community-based organizations. They are working together around a shared vision of growing and retaining a talent pipeline to meet the needs of manufacturing and tech employers, while expanding opportunity into good paying career pathways for more residents.

Holistic

Our strategy removes the barriers Our strategy ramps that community up evidence-based members often face best practices that are to pursuing a career effectively enrolling in manufacturing underrepresented and tech. Through individuals from wraparound services under-resourced provided as part communities, training of training and job for in-demand. placement, and good-paying jobs through partnerships that don't require with communitycollege, providing based service individualized providers, program wraparound services, partcipants are and placing graduates connected with the in jobs with career supportive services pathways. Programs they need to succeed such as Northland in training, work and Workforce Training career advancement. Center and Goodskills Employers benefit Career Builder are from an expanded yielding positive talent pipeline to meet outcomes but need current and future to be scaled through hiring needs. partnerships and ecosystem building.

Builds Best Practices

Our strateav leverages dedicated intermediaries that connect the dots between trainers, employers, service providers, job seekers and funders. Industrybased intermediaries like TechBuffalo are convening, connecting, and facilitating collaboration: collecting, analyzing and sharing data; and strategically supporting programs that build an inclusive talent pipeline. Coalition-wide intermediaries like UBRI offer problem solving, capacity building resources that support project implementation, and shared outcomes/

Connects

the Dots

Maximizes Impact

Born out of Build **Back Better** planning efforts, our ecosystem-building strategy was built in close alignment with the \$25 million **Build Back Better** investment projects that will boost manufacturing across WNY through infrastructure buildout, innovation and workforce development. To maximize impact of this investment and ensure that it is transformational, this strategy prioritizes a stronger and expanded talent pipeline that will meet current hiring needs and fill the needs of a larger and more tech-intensive manufacturing industry for years to come.

impact measurement.

WHO DOES WHAT?
WHO DOES WHAT?

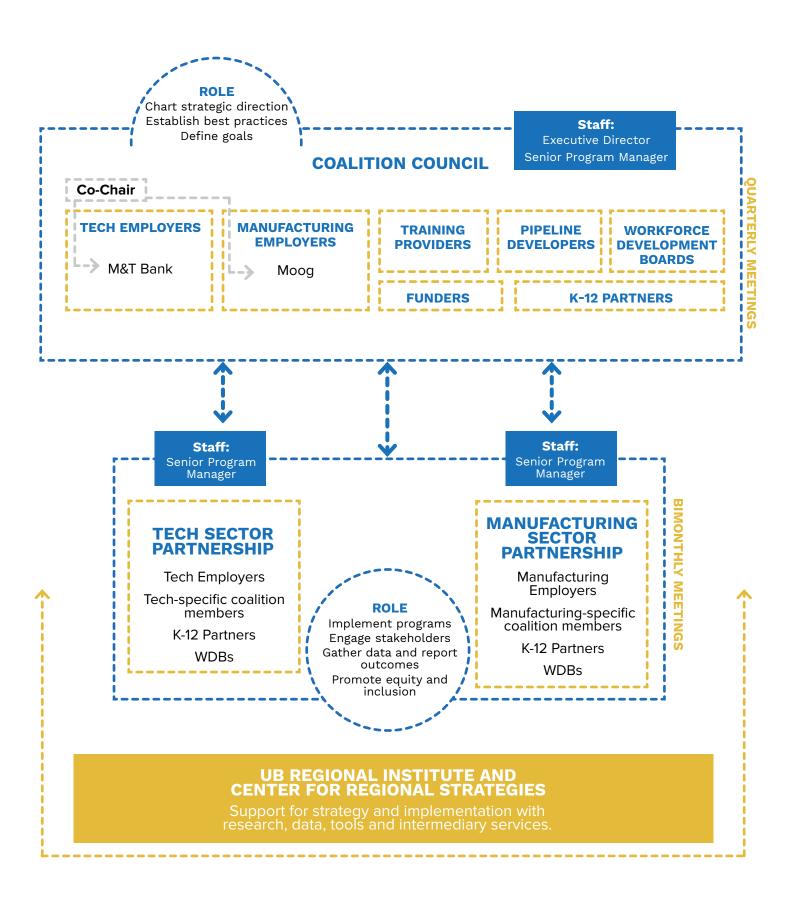
Who does what?

The workforce challenges we face in manufacturing and tech are larger than any one or two organizations can address on their own. A siloed approach will not achieve the momentum and impact that our regional manufacturing and tech workforce needs at this moment in time. With commitments from industry, and partnerships with the public, private and philanthropic sectors, the WNY Manufacturing and Tech Workforce Coalition supports and strengthens 12 members and 10 interconnected projects that will build the manufacturing and tech workforce in Western New York for years to come.

Coalition members are committed to working together to strengthen the workforce through partnerships around a shared vision, alignment and coordinated efforts, and leverage funding for an ecosystem approach.

12 Coalition Members

that repres	ent:		
		MEMBERS	
INDUSTRY		Manufacturers Association of the Southern Tier	The coalition has commitments and support from dozens of employers and other workforce partners across the region who will be engaged in project
MANUFACTURING AND TECH PIPELINE DEVELOPERS		Dream-It-Do-It (MAST and BNMA) and TechBuffalo	
TRAINERS	Community colleges	Jamestown Community College	implementation that builds a skilled workforce in manufacturing and tech through connections between businesses, trainers, service providers, intermediaries, and other workforce development
	Postsecondary trainers	BCAT, Goodwill of WNY, Northland Workforce Training Center, and Per Scholas	
	Higher education	Trocaire College and University at Buffalo - The Center for Industrial Effectiveness	partners. Investments in this coalition and coordinated, collaborative
WORKFORCE DEVELOPMENT		Workforce Development Boards of Cattaraugus-Allegany and Chautauqua Counties	approaches have the potential to change the status quo of workforce development in Western New York.



WHY IS IT NEEDED NOW? WHY IS IT NEEDED NOW?

Why is this strategy needed now?

Tech and manufacturing are pivotal to WNY's economic future. Manufacturing is a substantial part of our regional economy that offers higher-paying career pathways with limited training. Manufacturers are posting an increasing number of open jobs, but hiring is challenged by retirement cliffs and technical skill gaps. Tech jobs are also higher paying and in high-demand, but employers face difficulties hiring due to skill gaps and talent shortages. Women and people of color are underrepresented in both tech and manufacturing jobs. Industry-driven training programs that are focused on underrepresented populations can help strengthen the workforce pipeline, fill hiring gaps, and grow the tech and manufacturing sectors, leading to economic prosperity for WNY residents and businesses.

TECH AND MANUFACTURING JOBS...

... ARE IN HIGH DEMAND

Job Postings 10,541 17,110 in tech in manufacturing

1.049 tech job openings projected each year through 2033

Tech jobs are projected to grow 3X faster than the WNY economy overall through 2033

... OFFER ENTRY-LEVEL OPPORTUNITIES

27% of job postings in tech do not require a bachelor's degree

33% of job postings in manufacturing only require a HS diploma/ equivalent

TECH AND MANUFACTURING JOBS...

... ARE BECOMING HARD TO FILL

of manufacturing workers in WNY are age 55 or older and approaching retirement,

while just under 20% are young adults ages 25 to 34

1 out of every 2

job postings in tech is left unfilled

... ARE ESSENTIAL TO THE WNY **ECONOMY**

Manufacturing makes up

10.4% of jobs in WNY compared to 8% across the US

22% of all job postings in WNY require tech skills

... PROVIDE HIGHER-PAYING CAREERS

\$88,180 avg wage for tech jobs

(57% more than the WNY average)

\$70,503 avg wage for manufacturing

(25% more than the WNY average)

... LEAVE WOMEN AND PEOPLE OF COLOR **UNDERREPRESENTED**

About

25% of tech and manufacturing workers are female

> (females make up over 50% of the overall WNY workforce)

Black and Hispanic workers make up

18% of the WNY workforce,

but just 12% of manufacturing and 11% of tech workers

Sources: Lightcast, 2023. Occupational and Industry data. Manufacturing figures are based on industry data (NAICS 31). Tech figures are based on occupational data using 14 SOC codes that define computer tech jobs. NYS Department of Labor, Quarterly Census of Employment and Wages, 2021.

WHO WILL BENEFIT? WHO WILL BENEFIT?

Who will benefit?

As training opportunities are expanded in underserved areas of the region and investments reach job seekers who have historically faced barriers to training and employment in tech and manufacturing, the impact of this strategy will accrue over time. It will most directly affect the un/underemployed residents, tech trainers, hiring tech and manufacturing firms, growing business corridors like Northland, and communities across the region that are working hard to attract and retain talent in tech and manufacturing. The coalition is focusing on inclusive workforce development across the counties of WNY.

EMPLOYERS, specifically manufacturers and tech-enabled employers seeking to fill jobs and build an inclusive workforce.

1,615 employers hiring tech workers

1.342 employers hiring manufacturing workers

RESIDENTS OF WNY could benefit from the workforce coalition, especially the under/unemployed, communities of color, and underrepresented populations.

Prime working age (25-54) in/near poverty and without a job:

63,852 total

57% women (36,108)

45% people of color (28,767)

Prime working age (25-54) with a job, but in/ near poverty and without college:

28,991 total

49% women (14,305)

48% people of color (14.049)

TRAINING AND EDUCATION **PROVIDERS** that deliver industrydriven programs for diverse student populations.

colleges/universities

workforce trainers

Graduating over 8,000

in related programs each year

Sources: Residents: IPUMS USA, University of Minnesota, US Census American Community Survey (ACS), 2021. Communities: US Census ACS, 5-year estimates, 2017-2021. Neighborhoods of concentrated poverty are census tracts with poverty rates above 20%. Employers: Lightcast Job Postings, 2023. Includes companies with one or more job postings for tech and manufacturing jobs from Feb. 2022-Jan. 2023. Based on occupation codes (SOC). Tech is defined using 14 computer/IT SOC codes. Manufacturing includes all production occupations (SOC 51-000). Training and Education: Lightcast Educational Pipeline, analysis of NCES IPEDS, 2017-2021. Based on academic programs that could be used for computer and production occupations (SOC 15-0000 and 51-000). Entire WNY: Based on an analysis from a Research Brief UBRI completed for Goodskills Career Builder, "The True Cost and Benefits and Training for a Diverse Workforce in Western New York," January 2023 at https://www.goodwillwny.org/goodskillsresearch.

THE ENTIRE WNY REGION could benefit through

the direct and secondary economic impacts of having prepared more residents for in-demand jobs and economic mobility. This includes higher wages for workers, increased productivity for employers, and additional tax revenues for local governments.



2.1% - 4%

0% - 2%

4.1% - 8%

8.1% - 38%

CATTARAUGUS TAUQUA Jamestow

NIAGARA

Sources: US Census, American Community Survey, 5-year estimates, 2021. Neighborhoods of concentrated poverty are census tracts with poverty rates above 20%.

COMMUNITIES across WNY, particularly underserved communities where unemployed and underemployed residents are concentrated. like the cities of Buffalo. Niagara Falls, and Jamestown, where many Coalition programs are located and about half of the population lives in or near poverty. Additionally, 324,771 people across WNY live in a neighborhood of concentrated poverty.

	% In or Near Poverty	# of Working Poor	Prime Working Age (25-54) without a job
Buffalo	49%	14,028	32,715
Niagara Falls	44%	1,824	4,889
Jamestown	54%	1,598	3,218

MEASURABLE IMPACTS MEASURABLE IMPACTS

Project Summary

Project Lead	About the project
Buffalo Center for Arts and Technology (BCAT)	BCAT will expand its IT training to meet growing demand for work-ready IT workers. Tech training at BCAT leads to CompTIA national certification in four areas including IT Fundamentals, IT Technical Support, IT Networking and IT Security. Training includes instruction, certification fees, wraparound services, job placement coaching, and a participant stipend upon program completion.
Dream It Do It WNY (MAST & BNMA)	In partnership with manufacturing groups in Buffalo Niagara and the Southern Tier (BNMA and MAST), Dream-It-Do-It proposes to build out a redesigned Advanced Manufacturing Program that delivers career exploration opportunities, educational experiences and hands-on programming to middle and high school students across Western New York.
Goodwill of WNY	Goodwill of WNY will expand Goodskills Career Builder with a focus on training locations in Buffalo, Niagara Falls and Jamestown. Goodskills Career Builder is an industry-driven program with sector specific recruitment, career readiness training, an experiential work environment, support services, technical training, job training and placement and postemployment coaching for career advancement.
Jamestown Community College (JCC)	To support a strong and growing manufacturing base in the Southern Tier, JCC will launch a comprehensive advanced manufacturing training program for WNY residents, with new and expanded pathways into training, hands-on learning, wraparound services and strategic recruitment of underrepresented groups, underemployed workers and incumbent employees.
Northland Workforce Training Center (NWTC)	NWTC will build on its successful training model for advanced manufacturing with new and updated programming that prepares individuals for jobs in clean energy. The program will feature an Emerging Technologies Lab with a live microgrid and hands-on learning opportunities. In addition to industry-driven, employment-focused training, students receive wraparound services, career coaching and placement services.

Project Lead	About the project
Per Scholas	Per Scholas will expand its tuition-free IT training programs to WNY, strengthening the regional pipeline into higher-wage tech jobs. With two planned satellite locations and partnerships with coalition members, Per Scholas will eventually offer four training tracks, including Cloud, Cybersecurity, Systems Support, and Software/Data Engineering.
TechBuffalo	TechBuffalo will drive workforce development for tech, providing leadership, coordination, community outreach, communications and partnership-building opportunities for Coalition members. Leveraging its convening power and existing network, TechBuffalo will help align tech curriculum with employer needs and enable programs that build an inclusive tech talent pipeline through outreach.
Trocaire College	Trocaire will deliver Jump Start Plus tech training in underserved areas of Buffalo and Lackawanna. The 14-week program combines IT career exploration, work readiness training, and industry-recognized credentials. A financial stipend is available to participants who face barriers such as transportation or childcare.
UB - The Center for Industrial Effectiveness (UB TCIE)	To address the shortage of technicians across WNY and NYS, UB TCIE will launch a new certificate training program that prepares students for work as technicians and jobs that have traditionally been filled by individuals with two- and four-year degrees. In addition to training and internships, the program offers wraparound services and college credit that can be applied towards a degree.
Workforce Development Boards (Cattaraugus-Allegany and Chautauqua Counties)	WDBs will bridge the gap between businesses and training providers across the Southern Tier to meet evolving needs of manufacturing and tech employers through new and expanded training. Through wraparound services, the WDBs will address transportation, childcare and other major barriers that exist in rural areas of the region, while leveraging federal WIOA funding for training.

Buffalo Center for Arts and Technology (BCAT)

ABOUT THE MEMBER

Modeled on Pittsburgh's Manchester Bidwell Corporation, BCAT prepares adults for careers in high-demand industries including tech and Allied Health; and prepares high school youth for college and/or careers through an afterschool arts and technology program.

ABOUT THE PROJECT

BCAT prepares un/underemployed adults for careers in tech and Allied Health. BCAT's training leads to CompTia industry-recognized credentials. BCAT offers an introductory IT Fundamentals class, and prepares individuals for jobs as IT Technical Support Technicians, IT Network Support Specialist/Analyst, and IT Computer Security Specialist. Training is cost-free to participants and includes comprehensive wraparound services.

KEY PARTNERS

Industry Partners: Synergy IT Solutions, PCI, Lume Strategies, JMS Technical Solutions, StepForte, Evans Bank, Bank of America, Five Star Bank, City of Buffalo, Best Self Behavioral Health, ECMC, M&T Tech Academy, Lawley, Goldberg Segalla, CitiBank, Aleron, Independent Health, KeyBank, and TechBuffalo

Partners in blue are WNY Manufacturing and Tech Workforce Coalition members, or manufacturing and tech employers who are part of the Coalition Council.

HOW FUNDING WILL BE USED

BCAT is expanding the number of IT classes it delivers and the number of participants served, providing IT training leading to CompTIA national certification in four focus areas: 1) IT Fundamentals, 2) IT Technical Support (A+ certification), 3) IT Networking and 4) IT Security and Exam Prep+. All BCAT training is tuition- and fee-free to participants and includes instruction, academic supports, training materials and certification fees, job placement coaching, comprehensive wraparound services and a stipend at completion/certification. BCAT will collaborate with Coalition members and others on outreach, wraparound services and connecting graduates with employers that seek tech talent.

INVESTMENT IMPACTS

Annually, BCAT will prepare over 100 Buffalo residents struggling to secure a career with opportunities for advancement and economic stability through employment with tech and tech-aligned businesses. BCAT boasts an 85% graduation and certification rate and a 70% employment rate for graduates.



DREAM IT DO IT WNY

Powered by the Buffalo Niagara Manufacturing Alliance and the Manufacturers Association of the Southern Tier

ABOUT THE MEMBER

Dream It Do It Western New York is energizing and building the early talent pipeline. The Dream It Do It Advanced Manufacturing Programs (DIDIAMP) is connecting, engaging, enriching, challenging and rewarding students on their way to manufacturing career pathways. DIDIAMP provides manufacturers with access to an early talent pipeline for talent validation and recruitment.

The initiative is powered by Buffalo Niagara Manufacturing Alliance (BNMA) and the Manufacturers Association of the Southern Tier (MAST) and their combined 300+ members.

ABOUT THE PROJECT

DIDIWNY will ramp up DIDIAMP. DIDIAMP is a redesign of the DIDI program. DIDIAMP packages best practices and hands-on programming to expand career pathways into manufacturing for youth. Starting at age 13, students enrolled in DIDIAMP can earn electronic badges and an industry recognized certification. DIDIAMP uses a technology platform for enrollment, badging, certification and maintaining long-term connections between students and manufacturers.

KEY PARTNERS

Training Partners: School districts throughout Western New York, Post Secondary Institutions, PTECH programs and BOCES

Industry Partners: Buffalo Niagara Manufacturing Alliance (BNMA) and the Manufacturers Association of the Southern Tier (MAST)

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HOW FUNDING WILL BE USED

With funding, DIDIWNY will expand DIDIAMP to school districts across Western New York over the next five years, engaging more middle and high school students in manufacturing career exploration opportunities through hands-on programming such as work based job experiences, manufacturing technology tours and manufacturing camps. DIDIWNY will bring on additional DIDI Directors who facilitate implementation of the program, align resources and organizations, and link manufacturers with middle/high schools in the region. A multi-sector investment approach in this program will support a sustainable program that will grow the manufacturing talent pipeline in Western New York.

INVESTMENT IMPACTS

Youth and underrepresented groups will be introduced to advanced manufacturing and begin career pathways. A strong manufacturing workforce is imperative to maintaining and growing the \$26.8 billion in annual manufacturing shipments from our region. Ultimately, hundreds of residents across WNY will earn goodpaying jobs, bringing millions of dollars of economic benefit to the



Goodwill of Western New York (WNY)

ABOUT THE MEMBER

Goodwill of WNY is a nonprofit that helps individuals with barriers to employment prepare for, find, and keep higher-wage jobs with career pathways. Goodwill has been serving WNY for more than 100 years.

ABOUT THE PROJECT

Goodwill seeks to expand Goodskills Career Builder, a rigorously evaluated industrydriven model, which leverages next and best practices in workforce development based on research and data. Goodwill partnered with the UB Regional Institute (UBRI) to build the comprehensive model which includes sector specific recruitment, career readiness training, an experiential work environment, support services, technical training, job training and placement and post-employment coaching for career advancement. All of these components are critical to an individual's success, longterm increased wages and ability to build generational wealth.

KEY PARTNERS

Training Partners: Northland Workforce Training Center, Trocaire College, TechBuffalo, Jamestown Community College and Orleans/ Niagara BOCES

Industry Partners: Fresenius Kabi, M&T Bank, Ingram Micro, Safetec of America, Dahlstrom Roll Form, Blackstone Advanced Technologies, Cummins, Milkbone, National Fuel, and **Spectrum** (Charter Communications)

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HOW FUNDING WILL BE USED

Investments will enable Goodskills Career Builder to solidify its presence across WNY, with a focus on current training locations in Buffalo, Niagara Falls, and Jamestown. Funding would cover program implementation and development, including course/ training materials and equipment, program personnel, and wraparound services such as transportation. Investments will also support outreach and partnership building efforts with community organizations, recruitment of underserved populations to increase enrollment, and with employers, to ensure training meets industry needs. All funding and investments will help Goodwill reach its goal to self-fund 90% of their workforce programs via increased retail revenue within the next 4 years.

INVESTMENT IMPACTS

Funding will lead to good-paying jobs for unemployed and underemployed individuals. An estimated 250 underserved workers will complete training annually and receive wraparound services for three years. 75% of program graduates will be placed in high quality jobs and/or advanced training opportunities. 75% of trainees will be people of color. The program primarily serves underrepresented populations, such as women, people of color, and individuals in poverty. The average participant faces at least three major barriers to a higher-paying job. Over the course of a 20-year career, the potential public savings from an investment in

> Goodskills Career Builder training that transitions an individual from un/underemployment to a higher-paying career ranges from \$200,000 to \$419,000 per trainee, depending on family

Jamestown Community College (JCC)

ABOUT THE MEMBER

With three locations, JCC serves Chautauqua, Cattaraugus, and Allegany Counties and is a key manufacturing education and training provider for the Southern portion of Western New York with enrollment of more than 2,000 in traditional academic programs, 2,000 high school students in dual enrolled courses, and 2,000 non-traditional students enrolled in Workforce Development programs. JCC has campuses in Jamestown, Cattaraugus County (Olean) and a North County Extension Center in Dunkirk, NY.

ABOUT THE PROJECT

JCC will launch a comprehensive advanced manufacturing training program for WNY residents, with new and expanded pathways into training, hands-on learning, wraparound services and strategic recruitment of underrepresented groups and underemployed workers and incumbent employees.

KEY PARTNERS

Training Partners: Goodwill of WNY, Northland Workforce Training Center, Southern Tier West, Chautauqua/Allegany Workforce Development Boards, MAST, and Dream It Do It

Industry Partners: Cummins JEP, Dahlstrom Roll Form, Blackstone, Ulrich Fabrications, Cutco, Napoleon Engineering Services, Great Lakes Cheese, Reynolds, Wells, Purina, and

Monofrax

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HOW FUNDING WILL BE USED

Manufacturing (two projects):

JCC will expand its current offerings to all three campus locations. These offerings were developed in partnership with employers. The programs are fast-track offerings with a 90% completion and job placement rate. Programs include Welding Fundamentals, Machining/ CNC Operator, Industrial Maintenance Technician and the Building Automation Systems Technician.

JCC will develop 14 new programs targeting employers and their incumbent workforce in addition to those with some manufacturing background interested in upskilling. These short-term programs are in areas of CNC Mill, CNC Lathe, CAD/CAM Programming, Macro Programming and In-Process Inspection, Automated Machining & Manufacturing, Electrical, Controls, Robotics and Building Automation.

Information Technology:

JCC will launch industry-driven courses at all three of their locations and at industry partner sites. Funding will address the educational and training gaps in areas of Al, IoT, Industry 4.0, Cloud Computing, Automation, and Virtual/Augmented Reality. Courses will target employers and their incumbent workforce as well as fast-track programs embedding various industry certifications leading to employment.

The investment will expand recruitment, retention and successful course completion, utilize portable equipment, provide wraparound services addressing obstacles and barriers, and enhance work with employers on job placement and retention.

INVESTMENT IMPACTS

JCC will provide comprehensive industry-driven training in manufacturing for Western New York residents, especially the underemployed and underrepresented groups such as women and people of color. Up to 368 individuals will be upskilled or placed in good-paying jobs over three years, creating millions of dollars in economic benefits for the region through increased wages, spending and other indirect economic impacts.

Northland Workforce Training Center

ABOUT THE MEMBER

A signature workforce initiative of NYS, NWTC applies a proven comprehensive model to upskill and support workers in order to fill the job needs in advanced manufacturing and clean energy.

ABOUT THE PROJECT

NWTC will build on its successful training model for advanced manufacturing with new and updated programming that prepares individuals for jobs in clean energy. The program features an Emerging Technology Lab with training and hands-on learning to operate, maintain and repair infrastructure for solar, wind and renewable power sources. The lab features a live microgrid. NWTC will also deliver HVAC and Industrial Wiring training as well as a Short-Term Certificate Program in CNC Machining.

KEY PARTNERS

Training Partners: Alfred State College, SUNY Erie Community College, and Buffalo Public Schools (BPS)

Industry Partners: Moog, BNMA, Buffalo Sewer Authority, Buffalo Solar, National Grid, National Fuel, Construction Exchange for HVAC/Heat Pumps, and Tesla among others

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HOW FUNDING WILL BE USED

Funding will build an Emerging Technologies Lab on the Northland campus in East Buffalo, with specialized equipment to train students on clean energy infrastructure. Funding provides all students with a Student Success Team that contributes to high retention and graduation rates through wraparound services, career coaching and placement services. Investments will also facilitate partnerships and input from industry to ensure training at NWTC remains industry driven and employment focused. It will also support outreach to reach residents who are historically underrepresented in higher-paying career pathways such as people of color and women.

INVESTMENT IMPACTS

NYS will have demand for 211,000 clean energy workers by 2030 and 318,000 by 2040 to meet NYS environmental goals. This expansion at Northland will address industry demand, while building a diverse and inclusive clean energy workforce. With seed investments of \$5.5M, NWTC anticipates enrolling 192 students a year in clean energy training leading to a certificate or degree. NWTC has a 75% retention rate, 80% graduation rate and 80% job placement rate. The





Per Scholas

ABOUT THE MEMBER

For nearly 30 years, Per Scholas has been on a mission to drive equity and opportunity in the everadvancing technology landscape by unlocking the untapped potential of individuals, uplifting communities, and meeting the needs of employers through rigorous tech training. By teaming up with dynamic employer partners, ranging from Fortune 500 companies to innovative startups, Per Scholas is forging inclusive tech talent pipelines, fulfilling an ever-increasing need for skilled talent. With national remote training and campuses in 20+ cities and counting, Per Scholas offers nocost training programs in the most sought-after tech skills, spanning Cloud, Cybersecurity, Data Engineering, IT Support, Software Engineering, and more. To date, 25,000+ individuals have been trained through Per Scholas, propelling their professional trajectories into high-growth tech careers with salaries three times higher than their pre-training earnings. At Per Scholas, diversity, equity, inclusion, and belonging aren't just buzzwords—they are in Per Scholas' DNA. 85+ percent of learners are people of color, two in five are women, and more than half hold a high school diploma as their highest educational credential.

ABOUT THE PROJECT

Per Scholas will expand its tuition-free IT training programs to WNY, strengthening the regional pipeline into higher-wage tech jobs. In addition to industry-driven technical training and industry credentials, Per Scholas provides professional business skills, learner support services, direct connections to employers, and alumni advancement services. With two planned satellite locations and partnerships with coalition members, Per Scholas will eventually offer four training tracks, including Cloud, Cybersecurity, Systems Support, and Software/Data Engineering.

HOW FUNDING WILL BE USED

Funding will support Per Scholas' expansion into Buffalo, New York. This includes securing and equipping dedicated classroom and office space and launching coursework offerings in mid/later 2024. The investment will also propel the reach of training, services, and employer partnerships across the region through satellite sites launched in 2025.

INVESTMENT IMPACTS

Per Scholas will serve up to 260 individuals a year in WNY and generate an estimated \$8 return for every dollar invested. The program has an 85% graduation

rate, and the typical graduate earns 3X their pre-training wages.



TechBuffalo

ABOUT THE MEMBER

TechBuffalo is a nonprofit based in Buffalo that convenes, connects and cultivates collaboration between employers, trainers, potential talent pools and service providers to drive growth of an inclusive and accessible workforce ecosystem for tech talent.

ABOUT THE PROJECT

TechBuffalo will foster coordination, collaboration and provide overall leadership across tech employers, trainers, community partners and potential talent pools. They will leverage their existing network, convening power and strategic plan to align curricula and supportive services to foster job placement, retention, and larger, more inclusive tech talent pipelines. TechBuffalo will also track and share ecosystem metrics.

KEY PARTNERS

Training Partners: BCAT, Goodwill of WNY, M&T Tech Academy, NWTC, Per Scholas, Trocaire College, Niagara University, SUNY Erie, and

University at Buffalo

Industry Partners: ACV, Aleron, CUBRC, Ingram Micro, Lighthouse Technology Services, M&T Bank, Microsoft, Moog, National Fuel, National Grid, Odoo. Rich Products. Seneca One, Tesla, and Univera Healthcare

Partners in blue are WNY Manufacturing and Tech Workforce Coalition members, or manufacturing and tech employers who are part of the Coalition Council.

HOW FUNDING WILL BE USED

Investments will allow TechBuffalo to dedicate staff to workforce development, building up the capacity of the regional tech ecosystem and the capacity of individual coalition members to recruit, train and place graduates with tech and tech-aligned employers. Investments will support activities that improve alignment between trainers and employers, cultivate partnerships, expand understanding of talent gaps and information sharing, and track workforce outcomes and impacts over time. TechBuffalo will also invest in marketing and community outreach/engagement to support talent recruitment of underrepresented residents by increasing visibility of careers in tech especially for non-traditional learners and raising the region's profile as a tech and innovation hub through creative partnerships.

INVESTMENT IMPACTS

By investing in TechBuffalo as an intermediary to work together on focused strategies, the region can allocate funding more effectively; better align and coordinate existing public and nonprofit organizations; and attract and retain talent. The result will be the continued buildout of an inclusive, growing, and sustainable regional tech economy including increases in the number of tech jobs, tech jobs held by women and



Trocaire College

ABOUT THE MEMBER

A private nonprofit, career-oriented, coeducational college whose workforce development role has grown with multiple community partnerships and with the addition of the 7,000 square-foot Trocaire College Technology Institute (TCTI).

ABOUT THE PROJECT

Trocaire is delivering Jump Start Plus tech training in underserved areas of Buffalo and Lackawanna. The program leads to industryrecognized credentials and combines IT career exploration, work readiness training, and 200 hours of IT certification instruction to expand pathways into tech for underserved residents living in poverty. In addition to 14 weeks of free training, the program offers a stipend to remove barriers such as transportation and childcare.

KEY PARTNERS

Training Partners: Goodwill of WNY, Northland Workforce Training Center, M&T Tech Academy, Harvest House New Hope Education Center, Gerard Place, Buffalo Urban League, and 716 Ministries

Industry Partners: TechBuffalo

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HOW FUNDING WILL BE USED

Trocaire College will expand the pipeline of qualified tech professionals with the implementation of Jump Start Plus. Trocaire will collaborate with CBOs on outreach, and with employers who interface with trainees throughout the training and are committed to interviewing graduates. Through a partnership with 716 Ministries, Trocaire will provide wraparound services, work readiness training, mentorship and job placement services. Training is 14 weeks long with four cohorts of 12 students each year. Participants prepare for the CompTIA Fundamentals+ certificate, and will also be equipped to certify for CertNexus CyberSafe and CompTIA A+.

INVESTMENT IMPACTS

Trocaire will train 96 individuals for entry- and midlevel careers in tech, equipping them with in-demand, industry-recognized credentials.



TECHBUFFALO

UB - The Center for Industrial Effectiveness (UB TCIE)

ABOUT THE MEMBER

UB TCIE is a professional continuing education and training provider connecting industry with assets of UB's School of Engineering and Applied Sciences. They offer solutions to facilitate economic development and operational excellence, helping individuals and businesses reach their full potential across many industries.

ABOUT THE PROJECT

UB TCIE will create a new certificate program (Gen-Tech program) that prepares individuals for technical career pathways. With industrydriven curriculum and industry-recognized credentials, this program offers a cost-effective alternative to a college degree that is shorter in duration (4 to 6 months). Participants will have access to internship experiences, wraparound services, and college credit that they can apply towards a degree as they move up a career ladder.

KEY PARTNERS

Training Partners: Alfred State College, SUNY Erie, Goodwill of WNY, Northland Workforce Training Center, and Buffalo **Educational Opportunity Center**

Industry Partners: Linde, National Fuel, Aero Precision, Global Foundries, Edwards Vacuum, Moog, Sumitomo Rubber, Fresenius Kabi, and Thermo Fisher

Partners in blue are WNY Manufacturing and Tech Workforce Coalition members, or manufacturing and tech employers who are part of the Coalition Council.

HOW FUNDING WILL BE USED

Funding will enable TCIE to launch, implement and rightsize this program to meet employer needs and address the shortage of technicians in WNY and across NYS. Investments will support curriculum development with industry and university-based subject matter experts, course training materials, outreach and marketing in underserved areas of the region, and wraparound service provision. With additional funding, UB TCIE can develop industry-specific specializations for the Gen-Tech program. Remote learning opportunities can also be organized to support this programming as well as other Coalition members.

INVESTMENT IMPACTS

Up to 100 individuals will be trained under a proposed pilot of the program, funded with a grant from the NYS Office of Strategic Workforce Development. Upon completion, students are directly prepared for entrylevel jobs with a salary of up to \$70,000. Nearly all are expected to be directly hired by their internship sponsor. UB TCIE employer partners have agreed

> to waive degree requirements in lieu of the Gen-Tech certificate. This practice widens accessibility to a lower cost and time the Gen-Tech program of opportunities for

good-paying careers at commitment. Launching will create an abundance WNY's workforce.

Workforce Development Boards (WDBs) (Cattaraugus-Allegany and Chautauqua Counties)

ABOUT THE MEMBER

WDBs set policy for the local workforce development system, serving both job seekers and business. WDBs (formerly known as WIBs) use federal Workforce Innovation and Opportunity Act (WIOA) funds to link job seekers with job openings, services and training.

ABOUT THE PROJECT

WDBs will bridge the gaps among job seekers, trainers and employers to strengthen the workforce for manufacturing and tech across the Southern Tier, and will braid public funding into Coalition strategies. Along with existing federal funding, the WDBs will utilize the new funding for training and wraparound services, addressing the barriers faced by rural residents in the region.

KEY PARTNERS

Training Partners: Catt-Allegany BOCES, Jamestown Community College, and Erie 2 **BOCES**

Industry Partners: Tech and manufacturing employers across Allegany, Cattaraugus and Chautaugua Counties including MAST

Partners in blue are WNY Manufacturing and Tech Workforce Coalition members, or manufacturing and tech employers who are part of the Coalition Council.

HOW FUNDING WILL BE USED

Dedicated staff will conduct outreach to CBOs, WIOAfunded Career Centers, and underserved populations to recruit participants, raise awareness of training and job opportunities in manufacturing and tech, and develop a training pipeline. Employers, trainers and unions will participate in curriculum development with regional trainers to ensure training programs are industry driven. With flexible funding, WDBs can broaden the training options that are available to job seekers, especially those who are most in need. WIOA funding will cover remedial or introductory training at one provider and the more flexible funding will cover industry-specific training that is needed for higher-paying entry-level jobs in tech and manufacturing. Graduates will receive career placement services and post-placement services with the anticipated outcome of full-time employment in their chosen field of study. Transportation, childcare and other wraparound services will be provided to participants who face these barriers.

INVESTMENT IMPACTS

Approximately 100 residents will receive training to start a career pathway in manufacturing or tech.



Measurable impacts

The WNY Manufacturing and Tech Workforce Coalition will provide training to approximately 2,540 un/underemployed individuals over a project implementation period of up to three years. Assuming these individuals who receive training are placed in higher-paying entry-level jobs in tech or manufacturing over a three-year period, this collective effort would result in an estimated:

> \$62 million in increased wages

\$15 million in increased payroll tax revenues

\$42 million in increased employer output

\$415 million in regional economic activity

(a return on investment of 14 to 1)

With Coalition intermediaries focused on program sustainability, impacts are anticipated to be recurring, generating benefits for individuals, employers, the public sector and the region as a whole for years and decades to come. The Coalition is pursuing a data sharing agreement with the NYS Department of Labor that will enable it to track collective outcomes of training using individuals' wage records. This data will enable the Coalition to report on its progress in terms of job placement, wage increase, employer/industry, and worker retention. Combined with data tracked on the trainer level, these findings can also be analyzed by geography and trainee demographics. The Coalition will also evaluate its impact by tracking broader workforce trends in investment areas, underserved/underrepresented communities, and the entire WNY region. These broader workforce trends include labor force participation, educational attainment, access to higher-paying jobs, median incomes, and small business growth. Through data and research, the Coalition will support implementation within and across projects, keeping projects responsive to evolving needs of industry and job seekers while building on what is already happening across the region.







