

GOODWILL NYNJ Bridge to Tech Program



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This paper calls for continued investment in Goodwill NYNJ’s Bridge to Tech program, a powerful initiative that provides low-skilled, unemployed individuals with high-demand skills so they can find work, advance along a clear career pathway, reach self-sufficiency, and become important contributors to the economic and social well-being of their families, communities, and our city.

Goodwill NYNJ examines the Bridge to Tech program, provides data and evidence of its clear and powerful impact on its participants, and presents a set of recommendations for how New York City can make the most of this work. In short: Bridge to Tech is designed to serve New Yorkers who receive public benefits and lack the academic skills and foundational tech knowledge to enter the sector. Through a contextualized and integrated curriculum, participants gain the academic remediation and fundamental technology skills needed to access advanced training programs and gain entry to growing positions in the technology sector.

After the first three years of the program, Goodwill NYNJ achieved consistent and remarkable results in academic remediation for participants. On average our participants achieve 2-3 grade level gains in both reading and math – a critical requirement for entry and persistence through advanced technology training programs. Our learners represent the most underrepresented in the sector, with over 50% African American/Black and over 50% women. All participants in the program are recipients of public benefits (TANF). Our Bridge to Tech program ensures that people facing economic challenges are equipped with the knowledge and support needed to access and persist in the next step of their employment journey.

Goodwill NYNJ is advocating for funding and expansion of this model. Through funding from the City Council, private and corporate foundations, and leveraging TANF dollars we have proven that Bridge models create inclusive and critical tracks into a sector which has historically struggled to diversify and find quality talent. We believe bridge programs like Bridge to Tech should be funded to ensure that talented City residents, especially those facing economic barriers, have access to in-

demand employment opportunities. In addition to expansion, participants in programs like Bridge to Tech should receive a 6-12-month income disregard to incentivize their continued participation and avoid opportunity cost tradeoffs. We are asking stakeholders to integrate bridge programs across New York City so they are a part of existing large-scale investments in tech infrastructure (like Tech NYC) and larger networks that support tech employment.



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A special thanks to Goodwill NYNJ’s donors and shoppers whose contributions to our retail operation support innovative workforce development programs like Bridge to Tech.

Introduction: The Need for Bridge Programs

Goodwill Industries of Greater New York and Northern New Jersey Inc., (Goodwill NYNJ) empowers people with disabilities and other barriers to employment to gain independence through the power of work. Through assessment, skills training, coaching, and case management, participants obtain meaningful employment. In New York, its workforce development programs serve recipients of public benefits (TANF) referred by New York City’s Human Resources Administration (HRA).

In the late 2010s Goodwill NYNJ recognized a trend among job seekers: while many were interested in middle-skills jobs and advanced training programs, they lacked the basic skills needed to gain entry. And if they did manage to be accepted, persistence in the program was a challenge due to a myriad of life circumstances. Most technical and occupational skills training programs, apprenticeship offerings, and post-secondary trainings require a 10th grade reading and math score in addition to a significant time commitment. According to the US Department of Education, an estimated 2 million New Yorkers are not eligible for most training programs (including those focused on technology) because they lack basic skills. For purposes of this report, basic skills are: literacy (reading), numeracy (math), and digital problem-solving.”¹ Without this foundational base of knowledge, New Yorkers are ineligible for the programs that could put them on a clear path out of poverty.

Bridge programming is a solution to the disconnect between unemployed and underemployed adults and training providers. The New York City Career Pathways website, Bridge Bank, defines a bridge program as one that “prepares individuals with low educational attainment and limited skills for entry into a higher educational level, occupational skills training or career-track jobs, building the competencies necessary for work and education alongside career and supportive services.”² By design, bridge programs allow individuals with limited basic skills (math, reading, and digital problem solving) to transition to higher levels of learning and training that can lead to improved economic and employment outcomes.

Mayor Bloomberg’s 2016 Career Pathways report called for a \$17 million investment in bridge programming because it offers New Yorkers who have no other safety net a route to a living wage. In the years following, very few investments were made despite the general enthusiasm for this model among workforce development experts. At the same time, there is a well-documented disconnect between employer demand for diverse, equitable talent and job seekers themselves. Our Bridge to Tech program addresses the skills gap for adult learners while simultaneously addressing the gender and racial diversity challenges in tech sector hiring.



¹Adult Literacy in the United States – Data Point – US Department of Education NCES 2019 -179

² Bridge Bank, <https://www.nyc.gov/site/careerpathways/strategy/nyc-bridge-bank.page>


Why Tech?

In New York City, the information technology industry has an estimated economic impact of nearly \$165 billion. The median salary for technology workers here is \$116,773³ compared to the overall New York City median wage of \$74,314.⁴ With digital transformation across the economy in all sectors and innovations in emerging tech and artificial intelligence, the technology industry will grow by an estimated 15% through 2031.⁵ The projected growth ensures an ever-present need for strong talent at every level.

Bridge programs are designed to connect people with limited skills and work experience to advanced training providers, and New York City is home to several trainings, boot-camps, and community colleges that offer a next step to job seekers. At the same time, there is a growing demand, since before the pandemic, for equitable access across demographic groups to the good jobs promised within the sector, especially when you look at representation among those who develop the technology that shapes our lives. Despite the demand and its steady growth, however, the New York City tech workforce is overwhelmingly white and male. Not only does the IT workforce not look like the New York City workforce as a whole, but a report by the Community Service Society also suggests that tech employment opportunities are drawing people from outside of NYC in rather than “providing avenues for upward mobility for economically disadvantaged New Yorkers.”⁶

Goodwill NYNJ hypothesized that New Yorkers receiving public benefits could improve their basic skills in a short amount of time through intensive short-term bridge instruction and thus, qualify for advanced training programs. Their status also meant that they could maintain their public benefits while in the training. Comprehensive wraparound supports were included to remove barriers and ensure persistence in the training and beyond, while a contextualized curriculum would improve their math and reading scores.

Since its launch in January 2020, the resulting Bridge to Tech program has succeeded in improving math and reading scores for unemployed and underemployed New Yorkers. Their persistence in the program and gaining of industry-recognized credentials resulted in higher wage employment than without the program.



“The Bridge to Tech program with Goodwill changed my life. They gave me the opportunity to be a part of an industry I’ve always wanted to be a part of.”

BRIDGE ALUMNI

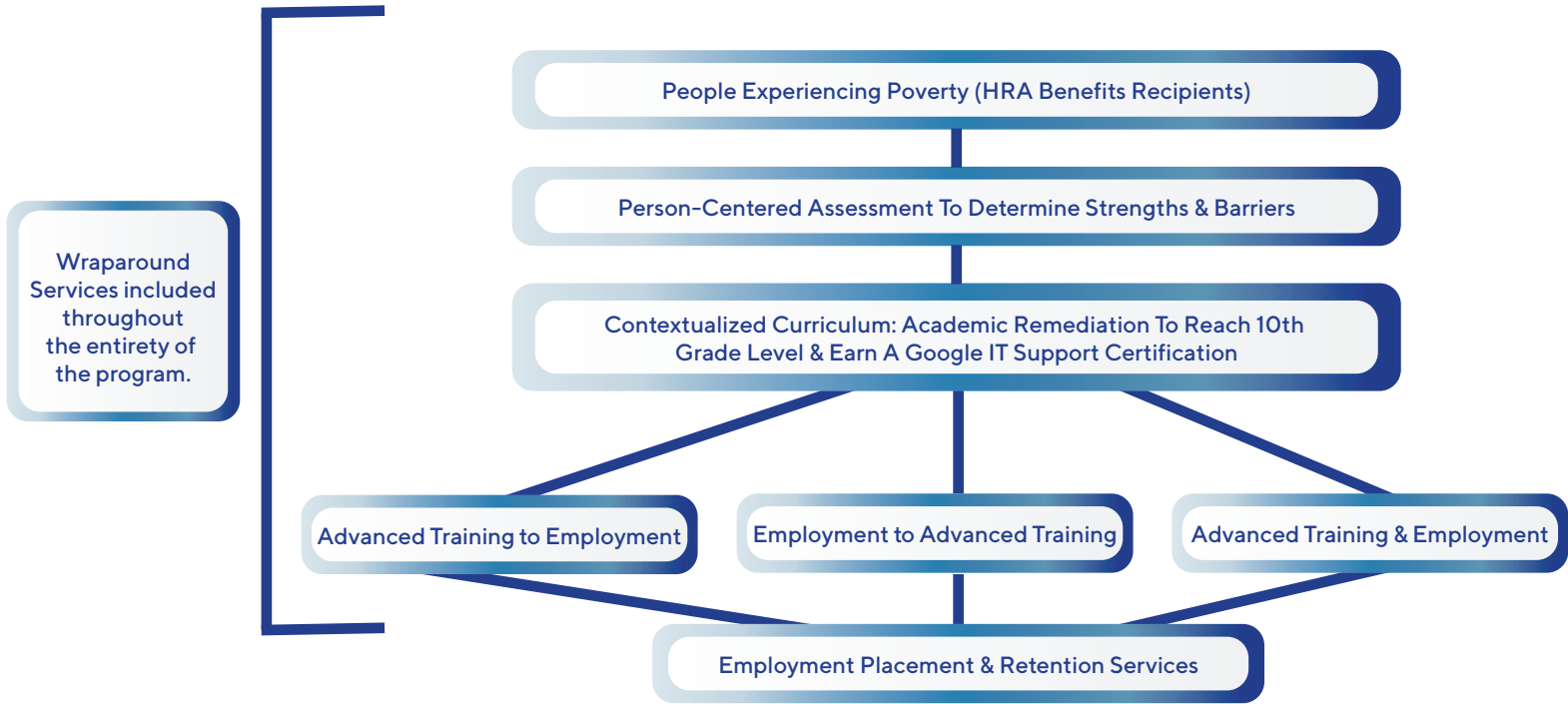
³ State of the Tech Workforce, CompTIA Cyberstates 2023

⁴ Census.gov 2021 American Community Survey

⁵ Occupational Handbook, US Bureau of Labor Statistics, September 2022

⁶ CSS (2018) “Who’s in and Who’s out in New York City’s Tech Sector”

KEY COMPONENTS OF BRIDGE TO TECH

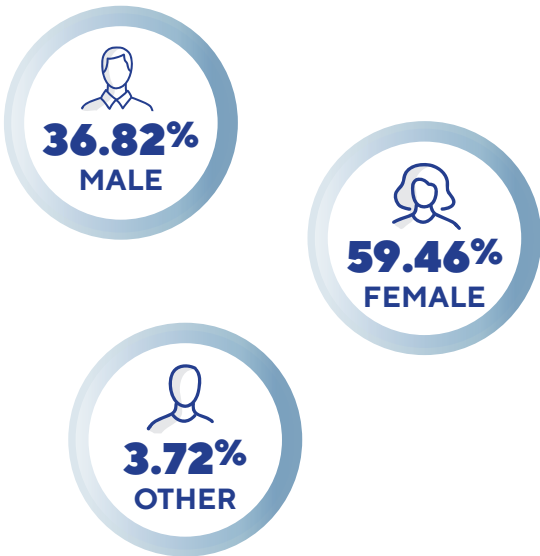


People Experiencing Poverty

Through a longstanding relationship with New York City’s Human Resources Administration (HRA), Goodwill NYNJ recruits New Yorkers from all five boroughs. These are some of the most economically disadvantaged New Yorkers; they have no other safety net and while eager to work, they are often discouraged from seeking training and employment. While our portfolio of participants is diverse and reflects an array of interests, education, and lived experiences, they have one common denominator – they receive public benefits from New York City’s Human Resources Administration. This is a critical factor in their ability to persist in a multi-week (or multi-month) training program.

In three years of Bridge to Tech, 100% of participants scored below 10th grade on reading and/or math on the TABE (Test of Basic Adult Education) - the standard used among most workforce development organizations and training providers. Many participants are young adults just embarking on a career, while 26% are over 45. Because of this diversity, the pathways offered by Goodwill NYNJ need to be just as varied and dynamic enough to continually mirror the range of experiences.

Demographic Information Breakdown
Gender



Person-centered assessment

Assessment is a critical component of strong workforce development programs because it gives providers an understanding of a person’s life circumstances, strengths, and goals. Goodwill NYNJ’s person-centered assessment leads to the creation of an Individualized Employment Plan which outlines a person’s barriers and how to address them. The Bridge to Tech team also assesses a person’s interest in the technology sector, their ability to commit to a full-time training program, and their appropriateness for an advanced training program. A comprehensive assessment at the outset ensures that participants are making an informed and supported decision regarding their career path. The person-centered assessment is the start of the individualized relationship process. Bridge to Tech differs from other adult programs, in that the participants are connected to a case manager who supports them from assessment and enrollment and then through the entire breadth of their journey. The assessments will continue to inform and support the participant’s aspirations, alleviating any barriers that arise, providing support through all stages, and assisting with navigating advanced training and eventually placement.

Age

AGE RANGE	COUNT	PERCENTAGE
18 - 24	14	4.73%
25 - 34	97	32.77%
35 - 44	108	36.49%
45 - 54	54	18.24%
55 - 64	23	7.77%

Borough

BOROUGH	COUNT	PERCENTAGE
The Bronx	41	13.58%
Brooklyn	167	56.42%
New York	37	12.50%
Queens	41	13.85%
Staten Island	10	3.38%

Race

RACE	COUNT	PERCENTAGE
Black/African American	158	53.38%
Hispanic/Latino	43	14.53%
Asian	3	1.01%
Native American	1	.34%
White	6	2.03%
Other	44	14.86%
Decline to Answer	41	13.85%

Improving basic skills through contextualized + integrated curriculum

Bridge programs are intended to prepare adults for more advanced training by improving their basic skills in math and reading. The average participant comes to Bridge to Tech with math skills at a 7th grade level and reading at an 8th grade level. In order to improve these basic skills, and expose them to technology-related content, Goodwill NYNJ designed a contextualized curriculum based on Mazzeo, Rab, and Alssid's definition⁷:

“A diverse family of instructional strategies designed to more seamlessly link the learning of foundational skills and academic or occupational content by focusing teaching and learning squarely on concrete applications in a specific context of interest to the student.”



The curriculum takes the reading and/or math concepts (as aligned with grade level standards) and puts them in a real-world application relevant to the technology sector. This links the math and reading remediation work with IT-occupation related content which simultaneously introduces students to the sector and increases their basic skills. These contextualized lessons help participants increase their basic skills to achieve a higher grade level via the TABE and simultaneously prepares them for the training and work ahead.

Google IT Support Certificate

As part of ongoing program improvement and iteration, Goodwill NYNJ began offering students the option to complete an industry-recognized credential while in the Bridge to Tech class. The idea is that students would leave the program ready for work-based learning or entry-level employment. Since adding this to the Bridge to Tech curriculum, 97.10% students graduated Bridge to Tech with the Google IT Support Certificate. This better positions them for a variety of next steps – including diverse advanced training programs and employment.

Advanced Training Providers

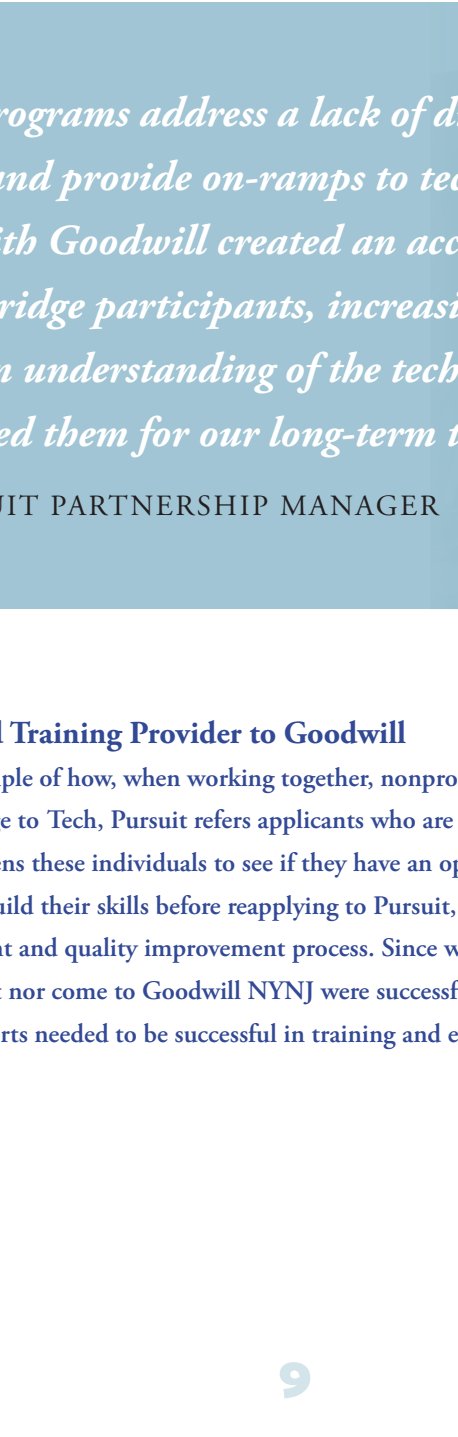
Since the initial design of Bridge to Tech, Goodwill NYNJ's partnership with advanced training partners was crucial. Participants need a next step, and Bridge to Tech leverages the many advanced training programs available in New York City. These partnerships have evolved over time and vary from very formal referral pathways with joint application processes to informal partnerships. These providers inform and shape our curriculum and are instrumental in ensuring the Bridge to Tech instruction adequately prepares participants for the rigor of advanced training. Strong collaboration results in:

- Participants are exposed to the content and expectations of advanced training programs
- Collaboration on curriculum design and iteration and co-teaching instruction
- Intentional customization of bridge programming content to mirror advanced training programs
- Smooth transitions for participants from bridge component to advanced training
- Participants continue to gain skills and have access to careers with higher earning potential such as IT Help Desk, Field Technician, and IT Support

⁷ Mazzeo et al 2003, pp 3-4

Advanced Training Providers (continued)

Over the three years of the program, we developed partnerships with a range of advanced training providers including Per Scholas, Pursuit, CUNY (BMCC, Laguardia, Kingsborough), and NuCamp. The range of providers ensures that participants have access to a variety of pathways and schedules to accommodate their individual interests and employment goals. In addition to supporting the application process, we provide a training subsidy to ensure that the participants do not have to shoulder the cost of the additional credentialing. Our diverse partners allow Bridge to Tech graduates to work in tech roles including: IT Support Desk, CyberSecurity, Software Engineering, Data Analytics, Help Desk, Field Technician, and App Development.



“Bridge to Technology programs address a lack of diversity in technology-related jobs and provide on-ramps to tech training and careers. Our program with Goodwill created an accelerated path to the Pursuit Fellowship for Bridge participants, increasing critical math and literacy skills and an understanding of the technology industry, which ultimately prepared them for our long-term training.”

REMI SYMBORSKI | PURSUIT PARTNERSHIP MANAGER

Reverse Referrals from Advanced Training Provider to Goodwill

Our partnership with Pursuit is an example of how, when working together, nonprofit organizations can better serve New Yorkers. Instead of accepting referrals from Bridge to Tech, Pursuit refers applicants who are ineligible for their program due to low basic skills to Goodwill NYNJ. Bridge to Tech screens these individuals to see if they have an open public benefits case. If they do, participants are enrolled in Bridge to Tech where they build their skills before reapplying to Pursuit, thus a reverse referral. This dynamic partnership also informs our curriculum development and quality improvement process. Since we launched this partnership in Year 2, 25 people who would not have been accepted to Pursuit nor come to Goodwill NYNJ were successfully connected to training, a path to working in IT, and the financial and wraparound supports needed to be successful in training and employment.

Employment

Bridge to Tech built a network of over 40 employers who offer entry level positions to its graduates. Long term placement and earning a family sustaining wage is the end goal for most participants. Goodwill NYNJ staff work closely with graduates to match them with job opportunities in not only

technology companies, but other sectors who rely on technology expertise, such as healthcare. Once employed, Goodwill NYNJ provides retention services, such as summer camp enrollments, celebrating milestones, and on-the-job coaching for one year.



87%
of all tech employment placements are full time positions



54%
of all employment placements in tech earn an average of \$20/hour



76%
of all employment placements are advance training graduates

“All the staff at Goodwill go above and beyond to make themselves available and put you in contact with the proper resources or services. After starting my job, Goodwill continues to check in on me and has even provided carfare so that I can get to work while still getting acclimated to a new life.”

EDWIN A. | BRIDGE TO TECH GRADUATE AND SYNOPTEK INTERN

Wraparound services to remove barriers

When you ask graduates what was most helpful, they often respond that the Bridge to Tech team was there for them, was their cheerleader, and offered critical support throughout the program.

Recognizing that adult job seekers often face a myriad of obstacles when committing to full-time training, from child care to internet access, Goodwill NYNJ provides individualized wrap-around and supportive services to enable participants to persist in training and employment.

The centrality of support services, robust case management, and collaborative problem-solving in addressing the challenges often associated with economic disadvantage are ever present for Bridge to Tech participants and staff. These challenges include homelessness, housing insecurity, domestic violence, lack of child care, and limited internet connectivity at home. The case

management team provides individualized interventions and supports to mitigate (or eliminate) their impact and allow participants to persist through Bridge to Tech, advanced training, and employment.

Case management is only successful when staff forms supportive relationships with participants from the initial assessment. Weekly check-ins between staff and participants occur after the initial assessment. During Bridge to Tech enrollment, participants receive an array of supports. The top five included technology equipment, like laptops and hotspots, transportation assistance, and in-kind financial supports in the form of gift cards for purchasing food and critical items. Supports services correlate with a 73% completion rate for all completed cohorts. Results from alumni surveys also attribute supportive services to success in the program.

Recommendation #1***Bridge programs work and should be invested in for TANF recipients.***

While many jobs in IT do require at least a bachelor's degree, more and more employers are adopting skills-based hiring practices, where certification and credentialing alone can qualify one for entry-level employment. IT support, cybersecurity specialist, systems administrator, and network support are some areas one can access with the right combination of training and certification without a four-year degree.⁸

Goodwill NYNJ's Bridge to Tech program proves that people can increase their math and reading skills and obtain an industry-recognized credential. It is notable that TANF (Temporary Assistance for Needy Families) recipients are often overlooked for innovative investments, with the City investing in Small Business Services and Department of Youth and Community Development's Summer Youth Employment Program (WIOA). Goodwill NYNJ knows this group of our most economically disadvantaged New Yorkers have talent that should not be overlooked and designed Bridge to Tech to meet their specific needs.

Another key factor of Goodwill's Bridge to Tech model is that participants maintain their benefits while in the program. This means that they do not have to sacrifice a much-needed income while in training. For many participants and families, the benefits from HRA (TANF) are a safety net and maintaining these benefits have a significant impact.

Recommendation #2***Integrate bridge programs across New York City so they are a part of existing investments in tech infrastructure and networks that support tech employment.***

The information technology (IT) sector is projected to have sustained growth over the next decade and is a leading generator of well-paying jobs in New York City. As digital transformation occurs across the economy, tech-specific firms and employers in all industries – from healthcare to media – will need to fill nearly 16,800 tech jobs annually through 2028.⁹

These networks and employers must work closely with bridge programs to meet their hiring needs, and act as content experts in curricular design. By integrating Bridge to Tech into the tech ecosystem in New York City, Goodwill NYNJ can ensure its graduates have the skills that match employer demand, thus improving graduation and employment outcomes and helping fill open tech jobs with diverse, local talent.

Recommendation #3***Income disregard legislation must be passed.***

Income disregard is critical policy shift which would provide recipients of public benefits with the flexibility to engage in bridge programs and sector focused advanced training while building the financial security with the economic safety net of ongoing benefits for a period of 6-12 months. New York City must establish a 6 month, 100% income disregard for New Yorkers receiving cash assistance who are participating in job training, postsecondary education programs, and unsubsidized or subsidized employment programs. Goodwill NYNJ does not want public policy to be a barrier for New Yorkers achieving family sustaining wages. This paper asks that income disregard legislation be amended to include assistance related to childcare, food, and housing, and pertain to any government funded job training, education or employment program.

⁸ Bureau of Labor Statistics, US Department of Labor, Occupational Outlook Handbook, Computer Support Specialists, at <https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm> September 2022

⁹ Bridge Bank, <https://www.nyc.gov/site/careerpathways/strategy/nyc-bridge-bank.page>

Conclusion

Goodwill NYNJ's Bridge to Tech program is connecting underrepresented communities for whom the tech industry would seemingly be out of reach to promising IT careers. Goodwill NYNJ's model builds basic skills quickly, enables participants to acquire an industry-recognized credential in a relatively short period, and matches them with the jobs and experience needed to become gainfully employed. Our model is critical in closing equity gaps for underserved communities, and our goal is to bring more low-income New Yorkers into the middle-income labor force.

Indeed, our economy is transforming at an extraordinary rate, and the need for skilled labor in current or emerging industries will only increase over the years. Industries from construction to health care are innovating and require higher skill, aptitude, and experience levels. Investments in bridge programs can ensure that all New Yorkers willing to work are included in the city's economic growth.

Bridge programming is a starting point in meeting an industry's need for skilled talent and opening access points for those seemingly cut off from promising career pathways. Collaboration between industry and workforce programs is central to this endeavor. Such a partnership must continue to grow and enhance programs like Bridge to Tech and link them to paid internships, pre-apprenticeships, and apprenticeships, thereby articulating a clear and economically sustainable path forward for participants. Doing so allows all to fully participate in the economy and businesses to grow and innovate, thereby creating the conditions to advance equity and a thriving economy.