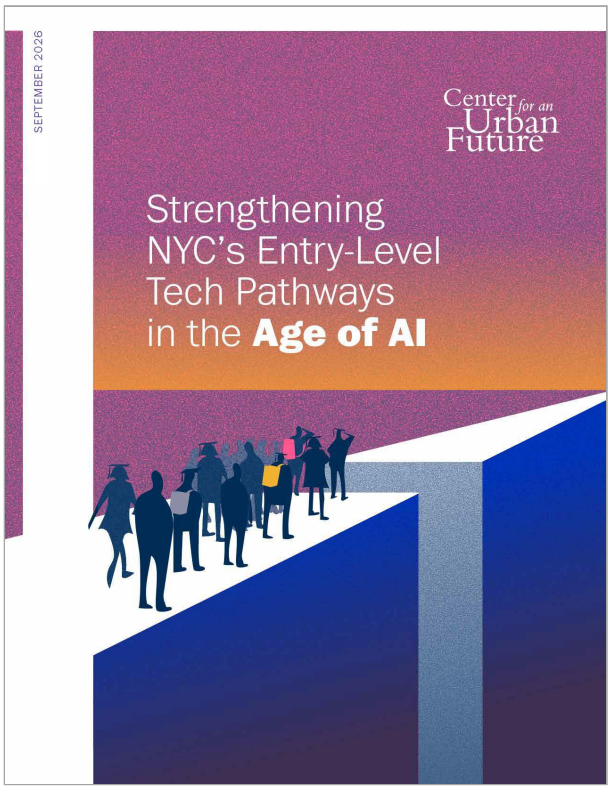

Report - September 2026

Strengthening NYC's Entry-Level Tech Pathways in the Age of AI

The tech sector remains a vital source of well-paying jobs in NYC, but entry-level hiring for tech positions has plummeted in recent years, impacting college grads and tech training participants. With the first rung of the ladder under pressure in today's AI era, city leaders should help reimagine on-ramps to tech careers for low-income New Yorkers.

by Will Markow and Eli Dvorkin

- **Read the full report here.**
- **Read the report's recommendations here.**

For more than two decades, New York City's tech sector has been one of the city's most dependable engines of middle- and high-wage job growth. Employment surged by more than 133 percent from 2004 to 2024, while tech roles expanded across healthcare, finance, media, and beyond. At the same time, a new generation of workforce organizations—Pursuit, Per Scholas, NPower, The Marcy Lab School, and others—built powerful on-ramps into these careers, opening doors for thousands of New Yorkers from lower-income backgrounds to access family-sustaining wages.

But in the AI era, the first rung of the ladder is under growing pressure. A new analysis by the Center for an Urban Future reveals that entry-level tech job postings have plummeted 49 percent in New York City since 2022—a greater drop in the total number of jobs posted than any other field. While many other parts of the city's economy are also experiencing notable declines in entry-level hiring, likely due in part to the rise of generative AI, our analysis finds that tech roles have been hit the hardest. This shock to entry-level tech jobs is not only contributing to a slowdown in the city's economy; it also has the potential for a calamitous impact on the city's tech training ecosystem.

The same workforce organizations that have helped thousands of New Yorkers access better jobs through innovative training models—many of which have been emulated across the country—are now experiencing significant reductions in placement opportunities for their graduates. Employers that until recently hired dozens of their students have sharply curtailed entry-

level hiring, in some cases bringing it to a near standstill. At the same time, where employers are still hiring in tech, training program graduates are facing a surge in competition—from Ivy League graduates to recently laid-off workers with two to three years of experience. In interviews with local training providers, all expressed deep concern about the dramatic downturn in entry-level tech hiring over the past three years, with several citing declines in employment rates for program participants of one-third or more.

Overall, our first-of-its-kind analysis reveals that the occupations most impacted by generative AI in New York City have faced the steepest declines in hiring. Jobs with the highest AI exposure have seen entry-level job postings fall 29 percent since 2022. By contrast, jobs with minimal exposure to generative AI saw a 21 percent increase in entry-level postings during the same period. While AI is not the only factor driving the entry-level jobs pullback, the correlation between AI exposure and decreased early-career opportunity is a major trend poised to accelerate, with serious consequences for New York City's economy and for the mayor and City Council's policy goal of expanding access to good jobs.

Amid these challenges, opportunities are emerging in roles driven by the AI boom. Since 2022, entry-level postings for jobs that require AI skills have grown 20 percent—a significant jump during a time when most tech jobs were in retreat. The growth in entry-level AI jobs is also spreading across industries, from professional services and finance to healthcare and education. Job prospects are similarly on the rise for tech workers with skills in fields such as security and data analysis, and training providers are adapting to target new industries and overlay AI-related skills across existing programs or build entirely new ones.

These tech training pathways are not broken, but they are under major strain. At the same time, employers are responding to real pressures—including higher capital costs, economic uncertainty, and rapid changes in how entry-level work is being organized and automated—which helps explain why hiring has slowed even as demand for more senior-level tech-enabled talent remains strong. With AI adoption accelerating rapidly—and potentially far bigger disruptions on the horizon—New York cannot afford to let its most effective entry points into tech careers wither.

City and state government will have to play a decisive role. To get ahead of what's coming, the Mamdani administration should act now to launch an "AI Service Corps" that creates paid, hands-on pathways into emerging tech roles while helping public agencies and small businesses deploy AI responsibly; establish a "Workforce AI Readiness Fund" to support upskilling, reskilling, and displacement response; and convene a Mayoral AI Workforce Task Force to align industry, CUNY, and training providers around a shared strategy.

If entry-level tech pathways dry up, thousands of New Yorkers will lose access to family-sustaining careers, and the city will lose the diverse, homegrown talent base its tech economy depends on. The moment to reinforce and reimagine these on-ramps is now.

This report, supported by a grant from Pursuit, examines the current state of entry-level tech hiring in New York City. By combining online job postings data from Lightcast, employment and graduation data from the Department of Education's IPEDS, and AI exposure data from the Anthropic Economic Index, this report analyzes the impact of AI on early career opportunities, details the challenges posed to aspiring tech workers and training organizations, identifies bright spots across the tech workforce, and puts forward a set of five practical recommendations for policymakers to renew and bolster pathways into tech-powered careers.

Read the full PDF of the report here.

Six Ideas to Strengthen NYC's Tech Workforce Pathways in the AI Era

1. LAUNCH AN "NYC AI SERVICE CORPS" TO CREATE PAID, HANDS-ON AI

WORK EXPERIENCE WHILE EXPANDING ACCESS TO AI SERVICES.

To help create a bridge to employment for more early-career, underrepresented talent, city leaders should launch an "NYC AI Service Corps"—a paid, six-month fellowship placing emerging technologists in small businesses, nonprofits, and city agencies to deliver practical AI transformation services. Fellows would gain hands-on experience building AI tools, improving data systems, and solving real operational challenges for organizations that lack the resources of larger firms.

This initiative would simultaneously expand access to applied AI services across the city and rebuild a critical early-career entry point into tech. An initial $10 million in city funding—co-designed and co-invested with major AI and tech firms and philanthropic organizations—could launch the program at scale. Over time, the model could evolve into a pay-it-forward structure in which employers that hire fellows contribute a portion of wages to sustain future cohorts.

2. ESTABLISH AN "NYC WORKFORCE AI READINESS FUND" TO SUPPORT UPSKILLING, JOB TRANSITION, AND RAPID-RESPONSE TRAINING.

To prepare for the labor market disruptions posed by artificial intelligence, New York City should launch the nation's first "Workforce AI Readiness Fund," alongside a high-level Mayoral AI Workforce Task Force.

Seeded with city dollars—and co-designed and co-invested with major AI and tech companies, impact investors, and philanthropic partners—the Fund would support industry-informed AI skills training across CUNY and nonprofit providers, upskilling and job-transition assistance for workers displaced or at risk of displacement by AI, and rapid-response training in occupations and industries most exposed to AI disruption. By anchoring investments in demonstrated employer demand and measurable career outcomes, the Fund would mobilize private co-investment while ensuring access and equity.

The accompanying Mayoral AI Workforce Task Force should bring together leaders in AI, economic policy, workforce agencies, employers, and frontline practitioners to guide strategy and anticipate risk. The Task Force would develop AI Workforce Preparation Plans—from exposure and applied use to advanced technical training and displaced-worker response—ensuring that the city's policies and investments get ahead of the massive labor market transitions likely to unfold over the next four years. **This work could be housed within the city's Workforce Development Board, building its capacity to coordinate across agencies, strengthen employer partnerships, and align workforce investments with the rapidly changing needs of the AI economy.**

By lowering the risk of retraining for both workers and employers, and by coordinating action across sectors, the Workforce AI Readiness Fund would help ensure that AI-driven change expands opportunity rather than accelerates economic exclusion.

3. RECRUIT THE NEXT 100 LARGE EMPLOYERS TO EXPAND APPRENTICESHIPS, PAID INTERNSHIPS, AND DIRECT HIRING PIPELINES.

No other city has as many large employers as New York City—not just Fortune 500 companies, but hundreds of private firms that employ thousands of workers across the five boroughs. These larger employers account for a disproportionate share of the city's net job growth in recent years. Yet too many New Yorkers, especially those from lower-income backgrounds, lack clear, reliable pathways into them. The success of the New York Jobs CEO Council—launched six years ago by JPMorganChase's Jamie Dimon and CEOs from roughly 25 of the city's largest companies—demonstrates what is possible when employers are meaningfully engaged. Jobs Council member companies have hired more than 65,000 low-income New Yorkers into living-wage jobs since 2021 and are committed to hiring 100,000 by 2030.

Mayor Zohran Mamdani should build on this model by launching a mayor-led initiative to spur collective action among the

next 100 large and mid-sized employers, CUNY, and trusted workforce providers. Using challenge-based procurement, the city should select and support one or more employer-facing intermediaries to make it easier for companies to signal talent needs, coordinate asks and points of contact, and connect with skilled candidates across CUNY and the workforce training ecosystem. This is especially important for employers outside the city's largest companies, which often lack extensive campus recruiting teams or formal internship programs and face too much friction in navigating multiple institutions and providers. The goal should be to build a more coordinated talent system—one that connects employers to workers with the skills they need, helps providers align training with real demand, and moves more lower-income New Yorkers into middle- and high-wage careers over the next decade. This effort should include a renewed focus on apprenticeship pathways into technology careers, drawing on prior apprenticeship planning work by Pursuit, the Partnership for New York City, the New York Jobs CEO Council, and other ecosystem partners as an important foundation.

At a moment when AI-assisted job applications are flooding employers with thousands of résumés per opening, structured partnerships that align talent with opportunity offer real value. By leveraging the convening power of City Hall and tying public support to clear, measurable hiring outcomes, the mayor can rebuild the first rungs of the career ladder and ensure that New York's largest employers are active partners in expanding economic mobility.

4. EXPAND CREDIT-BEARING DUAL ENROLLMENT AND CAREER AND PROFESSIONAL LEARNING (CPL) PATHWAYS.

As artificial intelligence reshapes occupational tasks, narrow technical skills may become outdated more quickly while durable skills such as critical thinking, problem-solving, communication, and contextual judgment grow in importance. In this environment, a college credential may matter more, not less. At the same time, a college degree alone is no longer sufficient: students increasingly need access to the employer-connected, applied learning models pioneered by high-performing workforce organizations. Yet today, New York City's workforce system offers limited pathways for combining nondegree training with college credit, forcing too many learners to choose between short-term job training and long-term academic advancement.

To change this, city and state leaders should expand credit-bearing dual enrollment and Career and Professional Learning (CPL) pathways so that high-quality, industry-aligned training counts toward a college credential—allowing more CUNY students to access nimble, employer-connected programs. This will require CUNY, in partnership with the State Education Department and trusted nonprofit providers, to scale credit-for-prior-learning policies, formalize articulation agreements, and align funding incentives with credit portability and placement outcomes. The mayor should work with CUNY leadership to reward campuses that integrate workforce partnerships into credit-bearing programs rather than siloing them in noncredit divisions.

By bridging applied training with academic credentials, the city can ensure that learners build both immediate job-ready skills and durable competencies that remain valuable as technology evolves—strengthening entry into the labor market today while preserving upward mobility over time.

5. STRENGTHEN WRAPAROUND SUPPORTS AS CORE WORKFORCE INFRASTRUCTURE.

New York City should significantly expand investment in wraparound supports that reduce the financial and logistical barriers to completing training and sustaining early-career employment. Childcare assistance, transportation support (including OMNY subsidies), stipends, emergency aid, mental health services, and career navigation should be treated as core components of workforce policy—not optional add-ons.

Already, some of the city's training providers have realized the importance of wraparound support and are working to provide it. In January of 2026, CUNY's University Dean for Technology and Computer & Information Sciences announced a partnership with Last Mile Education Fund—which provides financial support for college students to finish a degree in high-demand STEM fields—to start an "NYC Talent Innovation Fund" offering wraparound supports for CUNY computing students.

The city should adopt a similar model, partnering with training organizations to offer wraparounds for their students. Funding should be tied to completion and employment outcomes, incentivizing providers to design programs that are realistic for working adults and career switchers. By addressing non-tuition costs directly, the city can improve persistence, narrow equity gaps, and ensure that public investments in training translate into sustained wage gains.

6. BUILD AN "NYC WORKFORCE INFORMATION HUB" TO PROVIDE REAL-TIME LABOR MARKET INTELLIGENCE.

In a labor market being reshaped by AI at unprecedented speed, lagging indicators and static reports are no longer sufficient. Students and training providers are unsure which fields remain viable, employers are recalibrating job requirements, and policymakers risk investing in programs that prepare workers for yesterday's roles rather than tomorrow's opportunities.

The mayor should work with the Workforce Development Board—potentially in partnership with NYCEDC—to establish a "Workforce Information Hub" that provides real-time, accessible labor market intelligence to guide decision-making across the ecosystem. Initially structured as a public-facing dashboard, the Hub would track in-demand occupations, emerging skills, task-level changes, and aligned training programs across the city. It should also support internal coordination, helping agencies, CUNY, nonprofit providers, and employer-facing intermediaries align investments around verified demand signals rather than anecdotes.

Strengthening NYC's Entry-Level Tech Pathways in the Age of AI is a publication of the Center for an Urban Future. Researched and written by Will Markow and Eli Dvorkin. Additional research by Alejandra Díaz-Pizarro and Rachel Neches. Edited by Eli Dvorkin and Ava Manson. Designed by Stislow Design.

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CENTER FOR AN URBAN FUTURE
120 Wall Street, 20th Floor, New York, NY 10005

cuf@nycfuture.org