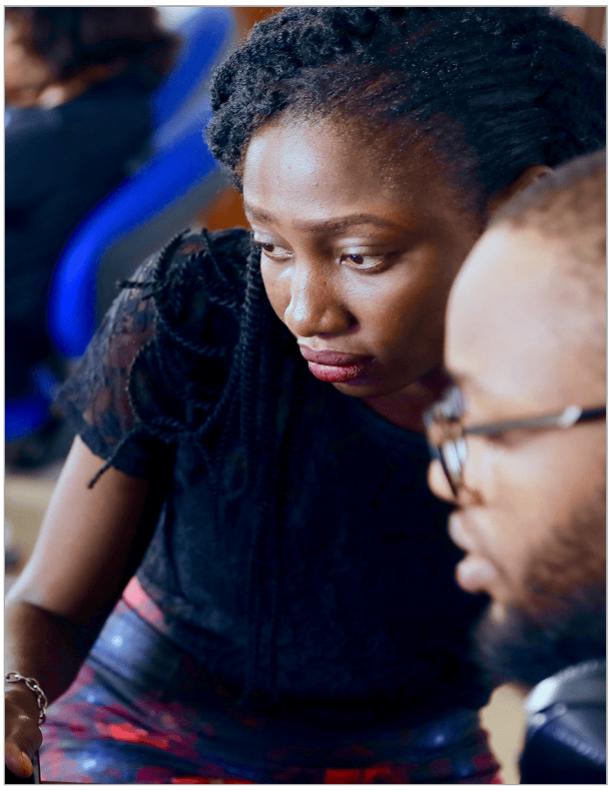
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Report - September 2018

The Promise of Apprenticeships in New York

Apprenticeships increase economic mobility for people without a college degree, help employers find diverse and qualified employees, and are an ideal training model for New York's fastest-growing industries. New York can do much more to realize their potential.

by Naomi Sharp and Eli Dvorkin

- The following is an excerpt from *The Promise of Apprenticeships in New York.*
- Read the full policy brief (PDF)
- View the recommendations

Apprenticeships are gaining ground in the United States. Built to align the skills of workers with the needs of employers, the apprenticeship model is a powerful tool for economic mobility—opening career paths to people with limited education by allowing them to earn a salary and learn a profession at the same time. In the U.S., research indicates that registered apprentices out-earn their peers by more than $300,000 over the course of their careers.[1] And apprenticeships are a valuable model for growing industries like healthcare, finance, and tech with a significant number of middle-skills jobs.

But while President Trump has embraced apprenticeships in recent years and states from Colorado to South Carolina have implemented ambitious initiatives to expand this high-impact career pathway model, apprenticeships are still a relatively untapped opportunity in New York.

There have been promising steps in the right direction during the past year. Governor Cuomo recently announced a new state investment to create pre-apprenticeship and registered apprenticeship positions in advanced manufacturing and healthcare over the next four to six years. Meanwhile, in New York City, Mayor de Blasio launched ApprenticeNYC, which aims to establish 450 apprenticeships in the industrial, health, and tech industries over the next three years.

But New York has a significant opportunity to go further down this path. New York has just under 17,000 apprenticeships, a surprisingly small number for a state with a labor force of 9.6 million. Though the third most populous state, New York ranks seventh in the number of registered apprenticeships, 12th in the number of apprentice programs, and 45th in the rate of growth in apprenticeships since 2011. In New York City, apprenticeships appear to be even rarer. Although the city accounts for 48 percent of the private sector jobs in the state and 43 percent of the state's population, only 11.9 percent of the registered apprenticeship programs statewide are in the five boroughs. Meanwhile, only a handful of apprenticeship programs exist in the city's fast-growing fields like the tech sector, healthcare, hospitality, and the finance industries—serving a few dozen employees annually at most.

Expanding apprenticeships should be a priority for New York City and State, with clear benefits for workers and employers. At a time when New York's economy is booming but far too many New Yorkers remain stuck in low-wage jobs, apprenticeships provide one of the most reliable springboards into the middle class. They are a proven model for vaulting individuals from low- and moderate income backgrounds into well-paying jobs and giving them skills and credentials that set them up for long-term career success.

Moreover, at a time when far too few New Yorkers from low-income backgrounds have managed to access well-paying jobs in growing industries like the tech sector, apprenticeships offer a model that works, helping individuals develop the skills and relationships they need to succeed. The model also provides employers with an effective way to diversify their workforces, while cultivating new employees who meet their specific hiring needs.

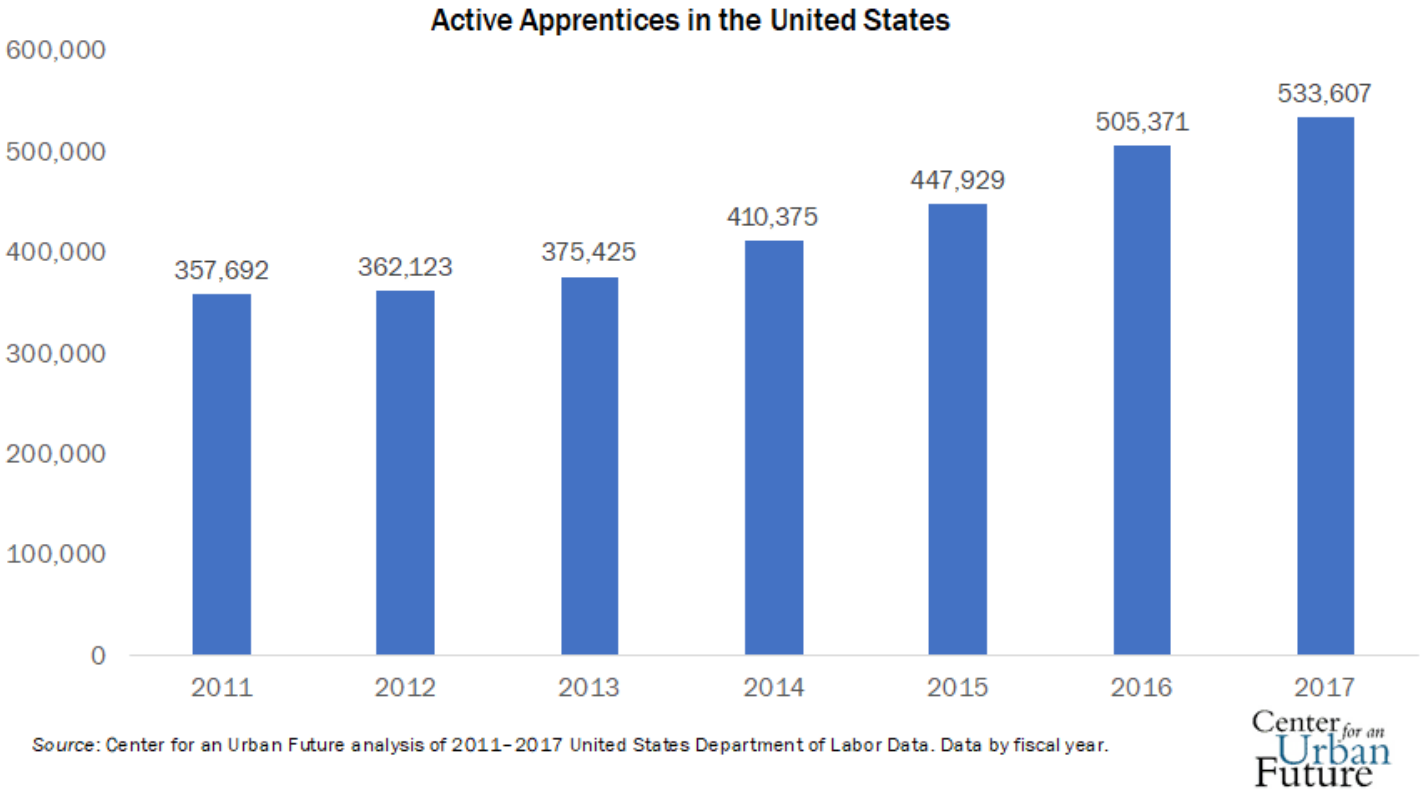
As we detail in this report, there are a number of reasons why apprenticeships have been relatively slow to get off the ground in New York—from an overly cumbersome state process for registering new apprenticeship programs to a paucity of employers that have embraced this model, particularly outside of the building trades. But as several other states have shown in recent years, these hurdles can be overcome. This report details some of these best practices, and sets forth several achievable steps for state and local policymakers, business leaders, and workforce development practitioners to take to help New York City and State deliver on the significant promise of apprenticeships.

This policy brief provides a detailed analysis of the opportunity to expand apprenticeship programs in New York City and State. Funded by Barclays, the report offers a new level of detail about the current landscape for apprenticeship programs in New York and outlines both the opportunities and challenges to expanding the model. Based on an extensive data analysis and interviews with more than 30 apprenticeship experts in New York and around the nation, the study also shines a light on some of the most promising apprenticeship initiatives in the U.S. and outlines several achievable recommendations for boosting apprenticeships in the city and state.

The American apprenticeship

An apprentice is a student-employee hybrid, receiving on-the-job training from their employer complemented by classroom instruction relevant to their industry. An apprenticeship usually lasts between one and five years, with a gradually increasing salary, after which the apprentice transitions to a regular full-time position. “Employers get to train people in the skills that they actually need for the job, and people earn while they learn,” says Esta Bigler, director of the Labor and Employment Law Program at Cornell University’s ILR School and chairperson of New York State’s Apprenticeship and Training Council, which reviews all applications for apprenticeship programs and recommends them for state approval. “The model of learning and earning at the same time is very, very valuable.”

Apprenticeship has long been integrated into the economies of European countries like Germany, where 60 percent of young people held an apprenticeship in 2014, and Switzerland, where 70 percent of teenagers participate in an apprenticeship. But the apprenticeship model is sparking increasing interest in the United States. In 2014, a study in Washington State found that registered apprenticeships had a greater impact on future salaries than any of the other ten workforce training programs assessed. According to the U.S. Department of Labor, 91 percent of apprentices transition straight to full-time work, earning an average starting wage of more than $60,000. The verdict is clear, says Robert Lerman, an Urban Institute fellow and former economist for the Congressional Joint Economic Committee and the U.S. Department of Labor: “Apprenticeship beats all other training programs by a mile.”



Expanding the apprenticeship model has become a rare issue with bipartisan support. With backing from the Obama administration, including federal grants for state apprenticeship initiatives, the number of apprentices nationally surpassed 505,000 in 2016 from 375,000 in 2013. In 2017, it hit 533,607. An executive order signed by President Trump last June doubled federal funding for apprenticeship programs to almost $200 million per year, while setting a goal to bring the number of apprentices in the U.S. to five million. More recently, a Trump administration task force on apprenticeship published a report with its own recommendations to expand apprenticeship programs, including pushing for industry-recognized alternatives to registered models. In America, where apprenticeships have mostly been confined to the building trades—unlike Europe, where apprenticeships span most major industries—apprenticeship programs are now emerging in fields like healthcare, cybersecurity, hospitality, and the creative industries. Employers that have started apprenticeship programs or apprenticeship-

like models in the U.S. include giants like Accenture, JPMorgan Chase, Amazon, Barclays, and CVS.

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1. Debbie Reed et al., "An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States," Mathematica Policy Research, July 25, 2012, https://www.mathematica-mpr.com/our-publications-and-findings/publications/an-effectiveness-assessment-and-costbenefit-analysis-of-registered-apprenticeship-in-10-states. Graduates of registered apprenticeship programs earn an estimated $301,533 more than their peers over their careers, including wages and benefits.

Photo Credit: NESA by Makers / Unsplash

- The following are recommendations from *The Promise of Apprenticeships in New York.*
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New York has an enormous opportunity to greatly expand the use of apprenticeships in the years ahead. The city and state can take several practical steps to recruit more employers, lower existing barriers to apprenticeship, and support opportunities for innovation. Taken together, these steps can significantly boost the number of apprenticeships statewide, and encourage the model to expand to a wider range of industries.

Commit to doubling apprenticeships over the next five years in New York City and State. Apprenticeships are among the most effective ways to jumpstart economic opportunity for more New Yorkers, and recent investments in apprenticeship from Governor Cuomo and Mayor de Blasio are a major step in the right direction. But these initiatives should be just the beginning of an ambitious effort by New York's state and local governments to double the number of apprenticeships over the next five years. Given the size of New York's economy and the growing hiring needs of employers statewide, New York should push to create quality apprenticeship programs, both registered and unregistered, at a much faster pace.

Create a statewide task force with industry leaders to grow apprenticeships in every region. For apprenticeships to reach their full potential, New York State and City will need to greatly increase the involvement of employers and improve how the state markets, develops, and implements new apprenticeship programs. To inform this approach, Governor Cuomo should convene a statewide task force on apprenticeship—comprising leaders from the private sector, educational institutions, workforce development providers, economic development officials, and nonprofit intermediaries—with the goal of developing recommendations to help double the number of apprentices over the next five years. In addition, the task force should focus on strategies to align apprenticeship with the needs of each region. Empire State Development's ten regional offices and their corresponding regional councils can contribute to the work of the task force by helping to identify regional needs and convening local employers and industry groups around the goal of expanding apprenticeships.

Grow the number of apprenticeships beyond the building trades, in fields like tech, healthcare, finance, and the creative economy. Like the rest of the country, New York State's apprenticeship programs have traditionally been in the building trades. But industries like healthcare, tech, and green energy are growing, and have significant numbers of middle-skills jobs that can be filled through apprenticeships. New York should make a long-term commitment to growing apprenticeships and expanding the model to additional industries. In the short-term, Governor Cuomo should launch a state initiative on apprenticeship that sets specific goals for expanding apprenticeship outside of the building trades, with the goal of adding at least 10,000 apprenticeships in other industries over the next five years. New York can help to achieve this by significantly expanding its efforts to market the Empire State Apprenticeship Tax Credit. In addition, New York City should develop its own ambitious goals around apprenticeships in growing fields, and make apprenticeships a much larger part of its efforts to engage employers on their workforce needs.

Apply for growing federal funding for state apprenticeship programs. Funding from the U.S. Department of Labor is increasingly available to states taking ambitious steps with apprenticeship. New York should aggressively pursue those federal resources, in addition to investing its own state funds into expanded apprenticeship programs.

Hire apprentices in government agencies. New York should invest in its own apprenticeship system by hiring apprentices in government, as states like Kentucky do—IT roles in state government offices, for instance, could be filled by apprentices. Both New York City and State should work with the CUNY and SUNY systems to develop new apprenticeships for entry-level, career-track occupations in government agencies, and set a goal of creating 1,000 apprenticeships in government over the next five years.

Expand pre-apprenticeship and youth apprenticeship programs. Apprenticeship programs have proven highly effective at connecting workers with lower levels of formal education to well-paying, career-track jobs. But for many working New Yorkers who could benefit the most from apprenticeship—including those without a high school diploma or with limited English proficiency—the basic requirements of an apprenticeship program may be out of reach. In order to prepare more working adults for apprenticeship programs, New York should scale up pre-apprenticeships and pre-pre-apprenticeships. These programs can help build the basic English and math skills required to gain entry to a full apprenticeship, which can open up this pathway to more people. New York should also work to ensure that more adult basic education courses connect with opportunities in pre-apprenticeships, and begin growing the number of pre-apprenticeships in fields beyond the building trades. In addition, the city and state should follow the model laid out by Colorado's CareerWise program and commit to a major expansion of youth apprenticeships in partnership with business leaders, industry associations, and training organizations. In particular, the city and state Departments of Education should set a goal of making youth apprenticeships in a variety of industries available in every high school, including summer pre-apprenticeship programs that can connect to career-track apprenticeships after graduation.

Make New York City the leading hub of apprenticeship in the nation. Mayor de Blasio deserves credit for establishing ApprenticeNYC, but he should go well beyond that program's modest goals and chart a course for creating the nation's largest urban apprenticeship initiative. In a city with a labor force of more than 4 million and where a growing number of businesses are struggling to find employees with the skills they need, the mayor needs to aim higher than simply creating 450 apprenticeships through ApprenticeNYC. The de Blasio administration should at least double that goal. Expanding apprenticeships in a dramatic way would help the mayor accomplish his goal of reducing income inequality. New York City already has an ecosystem of industry associations, community-based organizations, training organizations, nonprofits, and other groups with connections to employers that can play an intermediary role if given the resources. The city should make grants available for these non-government organizations to act as intermediaries and create their own registered and high-quality unregistered apprenticeships.

Expand ApprenticeNYC and move it outside government. The city should follow through on its goal to create 450 apprenticeships through ApprenticeNYC, and quickly move beyond manufacturing—the first industry targeted for apprenticeships—by developing new apprenticeships in tech and healthcare. The city should also expand its approach to include promising sectors outside the current scope, such as the creative economy and hospitality. The Department of Small Business Services is also right to recognize that the most effective long-term goal would be to bring this program outside of government. That should entail more than transferring responsibility for individual programs to intermediaries: The city should follow the lead of Colorado and make ApprenticeNYC a public-private partnership that can live and thrive outside of government.

Create a new office to lead the expansion of apprenticeship programs across New York State outside of the Department of Labor. In New York, housing the state's apprenticeship efforts in the State Department of Labor has become a barrier to employer engagement. For the most part, businesses don't see NYSDOL as an agency that has their interests at

heart. That's largely due to the fact that the department is charged with enforcing labor and wage laws, and not with economic development. Although New York absolutely needs an agency focused on labor enforcement, expanding apprenticeships across the state will be difficult without more employer buy-in. And that's unlikely to happen at NYSDOL. The states that have had success with apprenticeship have expanded their approaches beyond the Department of Labor, creating new agencies or mobilizing existing ones to lead their apprenticeship efforts. Similarly, New York needs an apprenticeship agency that has strong connections to employers. The best option would be to follow the model of Colorado and create a public-private partnership designed to gain the trust of employers and focus full-time on apprenticeship. Under this model, the state would help establish an organization that is outside of government but funded with state support and includes representation from state agencies including the Labor Department and Empire State Development. Another option is for Empire State Development—the state's economic development agency—to oversee apprenticeship programs in the state while also working with experienced apprenticeship staff from NYSDOL.

Prioritize apprenticeship in the new Office of Workforce Development. Even if New York moved responsibility for apprenticeship programs outside of NYSDOL, the state should take steps to better integrate apprenticeship programs into the state's workforce development programming. Earlier this year, Governor Cuomo and the Legislature took a number of important steps to bolster workforce development in the state, including a new $175 investment in workforce training programs and the creation of a new state office of workforce development. The new Office of Workforce Development, proposed as part of the governor's recent workforce development plan, should make expanding apprenticeship one of its top priorities. Meanwhile, to ensure the best possible outcomes for New York's workforce, the state's new investment should include flexible funding to develop and market new apprenticeship programs. In state and city agencies, public-private partnerships, and among nonprofit workforce development providers, apprenticeships should be promoted as an important part of the workforce development toolkit.

Task Empire State Development and its Regional Economic Development Councils with building employer engagement around apprenticeship. No state entity is better suited to make the business case for apprenticeship than Empire State Development, New York's economic development agency. Those efforts could be led by a handful of new apprenticeship staff placed in different regional offices, similar to South Carolina's regional distribution of its apprenticeship experts, who would be tasked with marketing the apprenticeship model to employers and building apprenticeship programs into new economic development initiatives.

Make CUNY and SUNY the engine of New York's apprenticeship system. CUNY and SUNY should become the anchor of the state's apprenticeship system, actively seeking employer partners and developing programs to ensure that many more students have access to apprenticeships while earning college credit. In particular, New York's community colleges can do much more to prepare students for careers by developing two-year associate's degrees and shorter-term credentials that double as the related instruction component of apprenticeship programs in growing fields. The state's public colleges are ideal providers of related instruction for apprentices: They can synthesize the needs of multiple employers into a shared curriculum, while guaranteeing the apprentice an academic credential. But few campuses are developing the close relationships with employers required to get these programs off the ground. CUNY and SUNY should establish a goal of bringing apprenticeships to every campus while cultivating relationships with employers in tech, finance, healthcare, hospitality, and the creative economy, among other growing industries. CUNY and SUNY have both received state funding to create apprenticeships—in the case of SUNY, $9 million over three years to create apprenticeships in advanced manufacturing and healthcare—but the state's public college system should play a larger role in New York's apprenticeship strategy. One obstacle is that current resources are largely tied to specific occupations and existing registered programs, which limits innovation. The state should empower CUNY and SUNY with the flexible funding required to take the lead in designing related instruction for apprenticeship programs in an array of fields, while collaborating with a broader range of employers.

Make it easier to create an apprenticeship program in New York State. A more approachable, better publicized

registration process will ensure that employers aren't turning to unregistered apprenticeship solely to avoid state bureaucracy. Employers shouldn't have to call the Department of Labor to get the information they need. The website should include clear instructions for registering an apprenticeship, a timeline for the process, links to all necessary paperwork and other resources, and should explicitly appeal to non-building-trade employers. New York should also explore ways to streamline registration where possible: for instance, the Apprenticeship Council should consider holding some of its meetings to approve programs remotely. New York could also follow the lead of roughly half of all U.S. states, including Colorado and South Carolina, and simply use the federal registration process.

Support the development of high-quality unregistered programs. New York has room for many more high-quality unregistered apprenticeships, and some employers and intermediaries—especially in industries beyond the building trades—will prefer them for their speed and flexibility. The partnership developed between Per Scholas and Barclays demonstrates that unregistered programs can be rigorous, appealing to the employer and protective of the apprentice, and better suited for some industries than registered apprenticeship. New York State should encourage the growth and adaptation of these models to new industries and employers as another important pathway to increasing apprenticeship statewide.

Empower intermediaries to help employers create apprenticeships. Intermediaries can play a valuable role in expanding both registered and unregistered apprenticeships. For example, the Manufacturers Association of Central New York has enabled smaller manufacturers to register apprenticeships by using a shared framework; in New York City, Per Scholas is exploring taking its apprenticeship model with Barclays to other employers in finance. New York should encourage that kind of work by establishing a source of funding for organizations that already have the trust of employers to market, develop, and guide employers through the process of creating apprenticeship programs. In addition, a new bill introduced by Senator Tammy Baldwin, the Promoting Apprenticeships through Regional Training Networks for Employers' Required Skills Act of 2018, would provide grants to help intermediaries and other local partnerships build new apprenticeship programs and provide funds to support apprentices, and New York could benefit significantly from its passage.

Promote New York's promising Empire State Apprenticeship Tax Credit, while designing other incentives to encourage apprenticeship in new fields. The Empire State Apprenticeship Tax Credit is a strong step forward for New York, and the state should continue investing in efforts to market this tax credit to employers in new industries. However, the cost savings of the tax credit is often more than offset by the expense of paying for the related instruction component of an apprenticeship program. In order to strengthen the appeal of this program—especially for smaller employers that may balk at the overall costs of setting up an apprenticeship—the state should consider subsidizing the cost of related instruction provided by community colleges or other quality training providers. This subsidy could be designed to target the first groups of employers to create apprenticeships in untested but fast-growing target industries for apprenticeship, like green energy and cybersecurity.

Create an Apprentice Support Fund to provide temporary assistance with costs that can be barriers for new apprentices. Transportation, childcare, technology costs, and other expenses can be prohibitive during the first stages of an apprenticeship. To ensure apprenticeship is accessible to New Yorkers from low-income backgrounds, the state should establish a source of temporary funding for intermediaries to help apprentices with those costs during the first year or two of apprenticeship, ensuring that more New Yorkers are able to succeed in an apprenticeship program.

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