

# LABOR SHORTAGES IN THE STATE OF NEW YORK

RECOVERING FROM COVID-19



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This report is for the millions of Americans and New Yorkers who have suffered in such distinct ways as a result of the coronavirus pandemic, particularly those who have lost their livelihoods.

## Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

## Honor Pledge

On my honor as a student, I have neither given nor received unauthorized aid on this assignment.



Michael Pugh  
April 2022

## Preface

Every reader of this report has a unique story from the COVID-19 pandemic. This ongoing pandemic has affected each of our lives in such unique and cataclysmic ways. This report will look to address the economic impact of the pandemic on the New York State labor market. However, it must be noted that the contents of this report and the remedies proposed are not a catch-all. The implications of the coronavirus pandemic throughout the country have been widespread and have altered the life trajectories of millions of Americans. For this report, we will focus on bringing individuals back into the labor force. This report will start by addressing the impacts of the pandemic on New York and shift into how economies have traditionally recovered from recessions. Then, this report will cover specific inducements for labor force participation, which will lead up to proposed alternatives, measured through evaluative criteria, and ultimately recommend an alternative to the client. This report will conclude by providing the necessary plan of action for government to implement the alternative.

## Executive Summary

The coronavirus pandemic has forced over a million New Yorkers out of the labor force. As the pandemic receded and employers began hiring, the New York State economy quickly found that the jobs demanded were not the jobs supplied. Workers who reentered the labor market began to demand more from their employers considering the toll the pandemic took on workers. With employers looking to attract workers, wages began to increase, and employers started to offer more benefits to return to work.

Traditionally, the most effective incentive to return to work is an increase in wages. According to the Survey of Consumer Expectations (SCE), when asked what is the lowest wage that would bring workers back to work, New Yorkers responded with a salary of about \$69,000 (SCE Labor Market Survey - Federal Reserve Bank of New York, 2021). The survey noted that the salary that was offered to prospective employees was \$58,000, on average. The labor market has understood this trend as weighted nominal hourly wages have continued to grow by 6.5% from the year prior, as of February 2022 (*Wage Growth Tracker*, n.d.). While New York State has already implemented a \$15-dollar minimum wage, a signing bonus is another incentive to entice workers to return to work.

In some cases, workers chose to retire as the pandemic rolled through the labor market. These workers were typically older and as they exited the labor force, there was a diminishing supply of younger workers to replace them. The transportation industry, in particular, has only recovered about 33,400 jobs out of the nearly 70,000 that were lost since April 2020 (Ettlinger & Hensley, 2021). Since New York relies on the trucking industry to transport 94% of goods throughout the state, persistent labor shortages will lead to supply shortages within the state and accelerate inflation (Testimony of the Trucking Association of New York, 2020).

Lastly, childcare was another roadblock to bringing workers back to work. The childcare industry faced shortages and was not immune to the impacts of the pandemic. As of September 2021, New York had yet to recover nearly 81,000 jobs in healthcare and social assistance, which includes childcare services (Ettlinger & Hensley, 2021). With little supply and adequate access to childcare services, many parents were forced to exit the labor force to tend to their children. With shortages of childcare professionals, costs have surged with low-income families bearing the burden. On average, New Yorkers pay \$15,000 per child per year, which is more than double the tuition for a SUNY school (Clark, 2022).

This analysis proposes three alternatives to address labor shortages in the state of New York:

1. Signing Bonus To Recently Employed Workers
2. Incentivize Retired Teachers to Work in Childcare Facilities
3. Revise Application Tracking Services

Each alternative is evaluated based on the following criteria: cost, effectiveness, cost-effectiveness, equity, and political feasibility. Implementing a signing bonus from leftover pandemic relief funds in the state budget is the best alternative to attract workers back into the labor force and alleviate labor shortages. It is projected that implementing a signing bonus will add nearly 74,000 jobs and cost New York state just over \$44.38 million.

## Problem Statement

As the pandemic decimated the New York State economy, losing 1.4 million jobs from March 2020 to April 2020, the path to recovery remains uncertain (Ettlinger & Hensley, 2021). As New York State recovers from the pandemic, the job market individuals are returning to is uniquely different from the one they left; the jobs the individuals are demanding are not the ones that are supplied. New York State has only recovered 56% of the jobs lost from the start of the pandemic, as of October 2021, and every industry has yet to fully recover (Ettlinger & Hensley, 2021).

## Client Overview

Assemblyman Al Stirpe is a Democrat who represents the 127th District of New York. The 127th District encompasses the northern and southern suburbs of Syracuse, New York. Assemblyman Stirpe sits on the Committee of Economic Development, Job Creation, Commerce and Industry and chairs the Committee on Small Business in the New York State Assembly. Membership on these committees leaves the Assemblyman in an ample position to legislate on labor shortages in New York. Previously, Assemblyman Stirpe has sponsored legislation to ensure broader access to unemployment insurance, implement funding for high technology training grants, as well as numerous bills supporting small business development (Al Stirpe - Assembly District 127 | Assembly Member Directory | New York State Assembly, n.d.).



## Background

### Economics of Labor Shortages: Have We Been Here Before?

When discussing labor shortages, it is important to understand what labor shortages are before diving deeper. A labor shortage occurs "when the demand for workers for a particular occupation is greater than the supply of workers who are qualified, available, and willing to do that job (Veneri, 1999)." Typically, when labor is abundant, employers tend to hire applicants that satisfy the exact needs of the firm. However, in a tight labor market, as the pool of labor shrinks, employers are more constrained with who they hire. The "ideal" candidate that firms may have hired before may not be available (Veneri, 1999). Typically, when labor shortages occur, in a constrained labor market, demand will exceed supply, which forces employers to increase wages to attract workers (Veneri, 1999). In theory, higher wages would be the remedy for a shortage in labor. However, different occupations require different responses (Veneri, 1999).

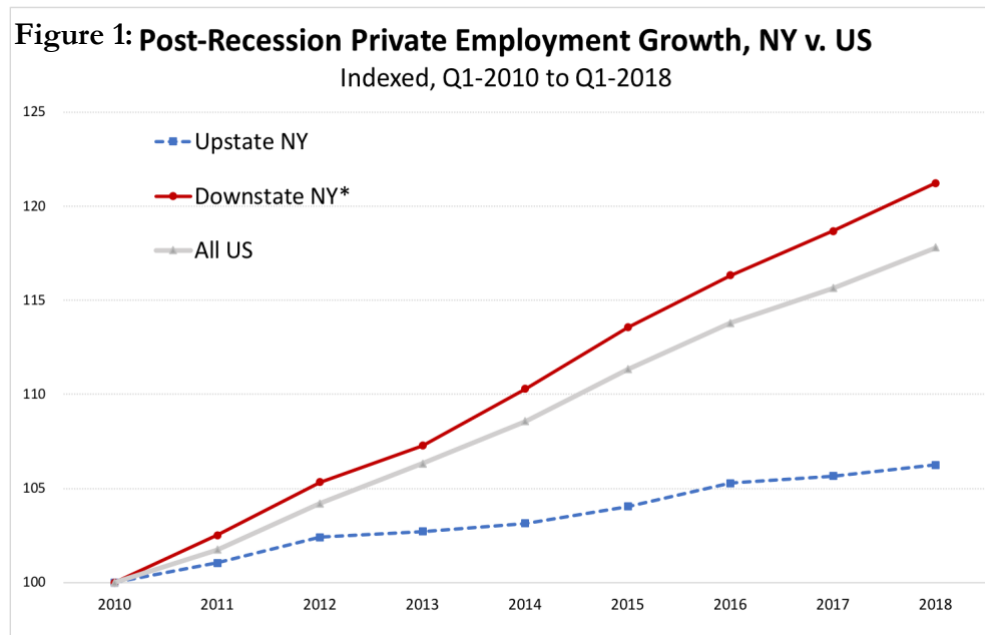
Throughout history, it is natural to experience a tight labor market in times of economic expansion. In 1992, the national unemployment rate was 7.5% and by 1998, unemployment dropped to 4.5% (Veneri, 1999). During this period, shortages were found among contractors and information technology (Veneri, 1999). Seeing how the 90s spurred the rise of computers and the internet, the discrepancy between the labor demanded—information technology—and the labor supplied is understandable. A study was conducted over the expansionary period from 1992 to 1997 to understand how growing employment and increasing wages influence a market response to raise wages. Looking at information technology workers, while at the time considered in a shortage, enjoyed a high starting salary, a plethora of job offers, and a general hiring environment that allowed prospective hires to have the option to choose their path forward (Veneri, 1999). Information technology in the 1990s was a burgeoning field, however, and can explain these conditions. While this may provide evidence for the influence of high market wages on employment opportunities, it does not apply to job sectors that are looking to refresh the available pool of workers, like blue-collar industries.

The most significant labor market alteration on the scale of the coronavirus pandemic is the Great Recession that occurred from 2007 to 2009. The Great Recession took on the notion that a tight labor market would raise wages. While the Recession was considered "over" in 2009, the unemployment rate in 2009 sat at 9.5%, and the share of the working-age population working was almost 60% (McCorkell & Hinkley, 2019) (BLS, n.d.). In 2014, with the labor market at a 5.6% unemployment rate, many economists thought this was consistent with full employment (McCorkell & Hinkley, 2019). However, during the period since the end of the Great Recession, wages remained stagnant, growing around one to two percent per month at an annualized rate (Atlanta FED, n.d.). Remarkably, before the pandemic, in 2019, the employment-to-population ratio—the share of working-age individuals that are currently working—was still below the pre-recession levels in 2007 (McCorkell & Hinkley, 2019). This signals that the post-recession recovery might not be completed and that there is more work to be done in all sectors of the economy. In the post-recession recovery, the labor demanded was among low-skilled workers and workers with and without a high school degree (McCorkell & Hinkley, 2019). Despite the demand for low-skilled labor, firms were "pickier" with new hires and did not have the incentive to increase wages (McCorkell & Hinkley, 2019). The Great Recession serves as an example that stagnant wage growth works in tandem with limited unemployment returns.

New York state's recovery from the Great Recession was emblematic of the slow and stagnant national trend described above. The Great Recession exposed a significant disparity between Upstate and Downstate New York, as Downstate—New York City, Long Island, and the Hudson Valley—saw some of the highest rates of private job growth within New York (McMahon,



2018). Meanwhile, Upstate New York gained less than one-third of the national rate of private-sector jobs as well as less than one-third of the jobs gained in Downstate (McMahon, 2018). This discrepancy can be seen in Figure 1, with the Y-axis representing thousands of jobs. The bulk of the jobs lost was in professional & business services, manufacturing, finance, construction, and wholesale trade (New York State Comptroller, 2010). Outside of construction and manufacturing, the bulk of these jobs was concentrated in Downstate New York and was recovered at a much quicker pace than the jobs lost in Upstate New York. Beyond the Great Recession and into the late 2010s, the bulk of the state economy has boasted a tight labor market, which is representative of the larger U.S. economy (Knapik-Scalzo, 2018).



Source: NYSDOL, Quarterly Census of Employment and

The U.S. economy continues to prove its durability. After the Great Recession, the unemployment rate was nearly 10%, and almost five years later, the unemployment rate dipped to 6.2% (Levanon et al., 2020). Toward the end of the 2010s, the U.S. labor market flexed its muscle and boasted the lowest unemployment rate (3.5%) since the 1960s (Levanon et al., 2020). While the tagline unemployment rates boast a strong labor market, looking closer, there are discrepancies as to who the labor market benefits. Blue-collar employers were bearing the brunt of critical labor shortages in the pre-pandemic labor market (Levanon et al., 2020). For reference, blue-collar workers refer to industries including agriculture, manufacturing, construction, and transportation, as well as a host of others (Levanon et al., 2020).

Preceding the labor shortage of blue-collar workers was a growing trend of the aging workforce. As the baby boomer generation reached retirement age, there has not only been difficulty filling the now-vacant jobs, but also replacing such a large segment of the working population. As the blue-collar baby boomer generation exits the labor force, and as the share of young adults with four-year degrees increases, the pool of applicants for blue-collar jobs becomes remarkably smaller (Levanon et al., 2020). The growing popularity and importance of e-commerce have made the demand for blue-collar work in manufacturing and transportation abundantly clear. While the red-hot macroeconomy points to the general welfare, the dwindling pool of blue-collar applicants for in-demand sectors of the economy poses long-term risks for the economy.

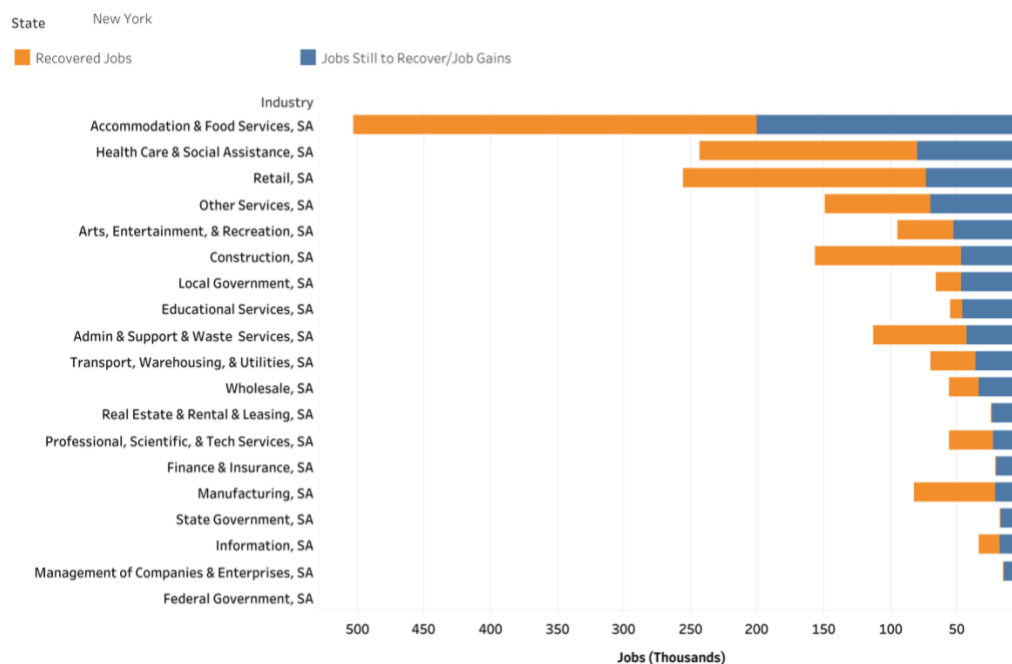


## The Pandemic's Influence on New York State

Despite the strong gains in the U.S. economy, the coronavirus pandemic erased the gains that were made in the labor market, turning a record half-century unemployment low of 3.5% into a record high of 14.7% (BLS, n.d.). The pandemic caused the United States economy to lose nearly 20 million jobs, and New York State made up 10% of the jobs lost (NYS Comptroller's Office, 2021). In March of 2020, the New York State economy had roughly 375,000 workers unemployed, with an unemployment rate of 3.9% (BLS, n.d.). Within a month, the New York State economy lost nearly 1.4 million jobs and saw the unemployment rate jump 284% to over 16% (NYS Department of Labor, n.d.).

New York quickly became the epicenter of the pandemic with more confirmed cases than any other country outside of the United States (Dzhanova, 2020). However, New York gradually reduced the rate of positive tests as months passed. By June, New York State had the lowest infection rate in the nation (Reuters, 2020). Since April 2020, the New York State economy has regained about 56% of the jobs lost, which lags behind the 78% of jobs recovered nationally (Ettlinger & Hensley, 2021). Neighboring states, like Vermont, Pennsylvania, and New Jersey have all recovered 71%, 68%, and 68% respectively (Ettlinger & Hensley, 2021). As a somewhat promising note, in 2021, New York State employment has grown 2.4% over the year, compared to its labor contraction of -8.9% in 2020 (Ettlinger & Hensley, 2021). In July 2021, 24% of individuals were looking for work, compared to around 19% the month prior (SCE Labor Market Survey - Federal Reserve Bank Of New York, 2021). This increase was largely driven by individuals without a college degree and incomes below \$60,000 (SCE Labor Market Survey - Federal Reserve Bank Of New York, 2021). Despite not finding work, the push to seek work signals growing optimism about returning to the labor force.

**Figure 2: Jobs Recovered and Gained Following Initial Pandemic Loss as of Sept. 2021**



Ettlinger, M., & Hensley, J. (2021, October 22). COVID-19 Economic Crisis: By State. Carsey School of Public Policy | UNH. <https://carsey.unh.edu/publication/COVID-19-Economic-Impact-By-State>

As seen in Figure 2, the bulk of the jobs lost in New York State has yet to be recovered. The total length of the lines for each sector listed is the number of jobs lost from February to April 2020 (Ettlinger & Hensley, 2021). Represented in orange are the jobs that have been recovered, while the blue represents the jobs that still need to be recovered. The hardest-hit industry in New York State was the hospitality industry, noted in the chart as Accommodation and Food Services; the industry has yet to recover nearly 200,000 jobs since the start of the pandemic in April 2020 (Ettlinger & Hensley, 2021). The key to attracting workers back into the labor force is increasing wages. As of October 2021, nominal unweighted hourly wages have increased by 4.1% over twelve months (*Wage Growth Tracker*, n.d.). Even more remarkable, wages for individuals without a college degree have increased by 4%, signaling a heating job market for low-skilled work. In New York State, this is coupled with the State moving forward with the gradual increase to a \$15 minimum wage (New York State Department of Labor Announces \$15 Minimum Wage Phase-in to Continue as Labor Shortages Drive-Up Wage Earnings, 2021).

Despite the increasing prospects to return to work, individuals remain on the sidelines. According to the Indeed Hiring Lab, which conducts the Job Seeker Survey, nearly 30% of jobless individuals are passively searching for jobs, which is the same rate as those who are not searching at all (Bunker, 2021). In the same survey, fears of the coronavirus, supporting children, and unemployment payments were among the top reasons for not looking to return to work (Bunker, 2021). As vaccinations continue, with New York State about 76% fully vaccinated, individuals are more prepared to head back to work, even as new variants may cause concern (Bunker, 2021) (*New York - COVID-19 Overview - Johns Hopkins*, n.d.).

### The Consequence to the Community

If left untreated, workers from key sectors of the New York state economy will be left behind. For example, if the trucking industry fails to recover the jobs lost, as well as replace the retired workers, the state economy will face persistent supply shortages. As truckers transport the majority of goods throughout the state, any reduction in the number of truckers will result in shipping delays and higher prices for consumers. The same principle applies to other industries as well. For childcare in particular, as childcare facilities remain understaffed and overstretched in demand, families in need will face higher prices for services, pricing out low-income families that may need the services the most.

Any decrease in the capacity of the New York state economy will reinforce the burden the pandemic has played on the state. Stagnant and geographically uneven growth as a result of the Great Recession can be looked to as a bellwether for New York if the economic impact of the pandemic goes unaddressed. Households across the state will feel the burden of the pandemic for years to come as the state will slowly look to recover what was lost in 2020 and 2021. Even as the country at large begins to recover at a remarkable pace, the inflationary impact of pandemic relief has signaled increased anxiety from the Federal Reserve as they look to increase interest rates to tame the economy (Timiraos, 2022). With increasing interests rates, firms will be hesitant to hire workers as their supply of money becomes more limited. Low-income and diverse individuals and households across the state are counting on returning to work to remember pre-pandemic gains.

## What Can Be Done About Labor Shortages?

### Increasing Wages

The previous section illustrated the basic economics behind the primary driver of workers returning to the labor force: increasing wages. New York State announced in 2016 that it would gradually increase the minimum wage from around \$8 an hour in 2013 to \$15 an hour in 2021 (New York State Department of Labor Announces \$15 Minimum Wage Phase-in to Continue as Labor Shortages Drive-Up Wage Earnings, 2021). About 56% of the jobs lost during the pandemic were in minimum wage industries like retail, health care and social assistance, and leisure and hospitality (Report on New York State Minimum Wage Increases Scheduled for 2022, 2021). Having elected to increase the minimum wage for 2021 to \$15, New York State has created an incentive for low-wage workers to return to the labor force. The incentive is more than needed, however. In the state, job postings in July 2021 exceeded pre-pandemic postings by about 72% (Report on New York's Minimum Wage Increases Scheduled for 2022, 2021). In July 2021, low-skill and low-wage postings exceeded pre-pandemic levels by over 95% (Report on New York's Minimum Wage Increases Scheduled for 2022, 2021).

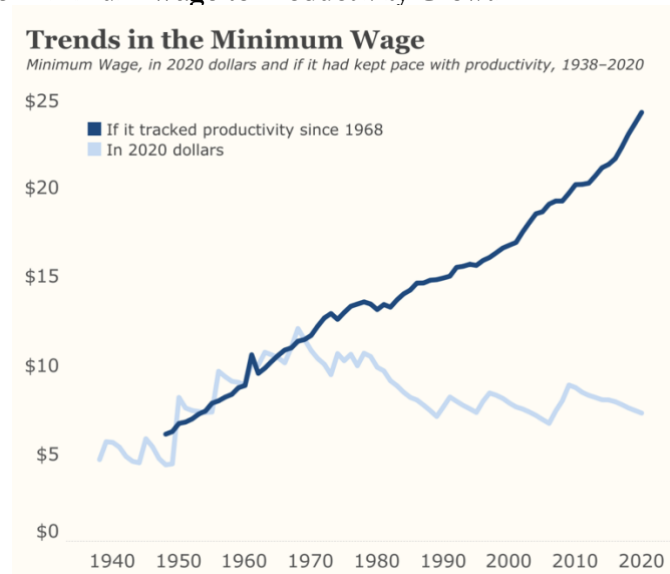
Despite the minimum wage increases later in 2022, New York State workers are beginning to value their work more. According to the Survey of Consumer Expectations (SCE), when asked what is the lowest wage that would bring them back to the job in their desired field of work, New Yorkers responded with a salary of about \$69,000 (SCE Labor Market Survey - Federal Reserve Bank of New York, 2021). Noted in the SCE is the wage offered to applicants. In July 2021, the latest month of data, individuals were offered, on average, about \$58,500 (SCE Labor Market Survey - Federal Reserve Bank of New York, 2021). This reveals that the prevailing wages offered to workers are below the minimum they are willing to accept. The SCE, however, was not dissected by job industry or field but was a result of a survey of households. While we do not get an accurate sense of the industry breakdown of the desired wage, the survey results reinforce the idea that higher wages are needed to entice workers back into the labor force.

While New York has been proactive in gradually increasing the minimum wage and limiting its impact on small businesses, hitting the \$15 minimum wage leaves little wiggle room for the State. The Division of the Budget recommends that the minimum wage in Upstate New York be indexed to the Consumer Price Index for Wage Earners and Clerical Workers (CPI-W), which is in line with what other states like Minnesota, Oregon, and Connecticut will be doing soon (Report on New York's Minimum Wage Increases Scheduled for 2022, 2021). The state also recommends not only tying the minimum wage to the CPI-W, but to labor productivity growth. Tying the minimum wage to productivity growth would allow for wages to grow as the worker becomes more productive; as the individual produces more goods and services per hour, per se, their compensation should reflect that productivity (Baker, 2020). The logic behind not tying wages to inflation is that doing so ensures workers will be purchasing the same amounts of goods and services (Baker, 2020). The implications for this would be massive. Tracking productivity since 1963, the minimum wage, as estimated, would be roughly \$24 per hour, equating to a \$48,000 a year salary for a full-time worker (Baker, 2020). For comparison, a \$15 an hour worker working full-time would earn \$30,000 a year. This distinction can be seen in Chart 2 below, with the dark blue line tracking the minimum wage if it was connected to productivity, and the light blue line represents the minimum wage. Considering the bulk of Upstate New Yorkers work in low-wage industries, a productivity-backed minimum wage would prove monumental in increasing the livelihoods of Upstate New Yorkers.

The push to tie compensation to productivity is nothing new. For the majority of the post-World War II economic expansion, compensation was closely linked with productivity. There was nearly a one-to-one change in productivity growth and compensation since World War II (Calabria,

2013). However, since the 1970s, that direct correlation started to diverge, creating what is known as the “productivity-compensation gap”(Brill et al., 2017). In the period from 1987 to 2015, productivity outpaced compensation, particularly in the fields of information, manufacturing, and retail (Brill et al., 2017). Policymakers need to watch the productivity-compensation gap for future wage increases. As productivity increases in the future, there remains to be a mechanism in place to tie productivity to the minimum wage.

**Figure 3: Tying the Minimum Wage to Productivity Growth**



Baker, D. (2020, January 21). This is What Minimum Wage Would Be If It Kept Pace with Productivity. *Center for Economic and Policy Research*. <https://cepr.net/this-is-what-minimum-wage-would-be-if-it-kept-pace-with-productivity/>

## Benefits to Return to Work

It is worth addressing a common notion that unemployment insurance (UI) and the enhanced benefits seen over the pandemic kept workers out of the workforce. While in theory enhanced UI benefits would reduce the incentive to return to the labor force, multiple studies have shown that the UI benefits have not served as a disincentive to work, and individuals have been ample to return to work in ample time (Altonji et al., 2020)(Petrosky-Nadeau & Valletta, 2021). As another incentive to return to the workforce, Senator Ben Sasse (R-NE) introduced the National Signing Bonus Act which further increases the incentive to work. To bring workers back, this legislation would have taken existing unemployment insurance funds and repurposed them into a fund that would be used for anyone who goes back to work within a two-month window. Repurposing funds will go to workers as a "signing bonus" of up to 101% of previous unemployment insurance benefits (Sasse to Introduce National Signing Bonus Act, 2021). New York State could use federal funds from the American Rescue Plan via the State and Local Recovery Fund to implement a similar piece of legislation in New York. According to a recent survey of unemployed Americans who lost their jobs during the pandemic, 40% of individuals stated that they would increase their urgency in finding a job if offered a \$1,000 signing bonus (*Hiring Bonuses Show Real Potential to Bring Back America's Workers*, 2021). This response was also high among ages 25 to 34 and those with some college education (*Hiring Bonuses Show Real Potential to Bring Back America's Workers*, 2021). This offers a promising sign for state signing bonuses.

A signing bonus would not be a novel idea, either. Several states, including Colorado, Connecticut, Idaho, Montana, Maryland, and Oklahoma have implemented a system in which unemployed persons can qualify for a signing bonus upon proof of employment (“State Solutions for Supporting the Return to Work and Filling Open Jobs,” 2021). Montana implemented a bill similar to Sen. Sasse’s, which notes that funds authorized through the American Rescue Plan will be used for a return-to-work bonus of \$1,200 given to individuals who returned to the labor force and remained for at least one month (*Montana to Launch Return-to-Work Bonuses, Return to Pre-Pandemic Unemployment Program to Address Workforce Shortage*, 2021). Just under 3,000 applications were approved in Montana and the bulk of recipients were individuals that received employment in jobs that paid around \$10-\$20 an hour (*Return to Work*, n.d.). This indicates that the bonus is targeting individuals around the minimum wage and offers a strong incentive to return to work. At a glance, Montana is about 90% recovered from the pandemic, which is above the national recovery rate. Montana’s employment-to-population ratio, which measures the percent of the population that is fully employed, is nearly back to pre-pandemic levels of 60% (Ettlinger & Hensley, 2021). While this may only capture a small number of individuals in a less populated state compared to New York, the results are still encouraging. Considering New York State has already increased the minimum wage, and since nominal wages are increasing across the country by 6.5% as of February 2022, a signing bonus could further incentivize a return to work (*Wage Growth Tracker*, n.d.).

## Workforce Development

If we suppose productivity should increase pay, investing in workers and workforce development is another path toward higher incomes. Large companies across the country, like Amazon and IBM, have already started preparing their workforce for the future. At Amazon, Machine Learning University provides Amazon employees with the opportunity to upskill and reskill to transition to different opportunities within the company (Ludwig, 2021). Amazon has also committed itself to train nearly 29 million workers by 2050 in cloud computing (Ludwig, 2021). Such an investment would rapidly shift the course of the company and allow workers to become educated while maintaining work. Yet, Amazon is one of the largest companies in the world with the resources necessary to retrain its workforce. What is it that New York State can do?

In 2019, New York State announced the Workforce Development Initiative (WDI) to invest \$175 million into workforce development projects across the state (Workforce Development Initiative, n.d.). WDI is intended to “support strategic regional efforts that meet businesses’ short-term workforce needs, address long-term industry needs, improve regional talent pipelines, enhance flexibility and adaptability of local workforce entities, and expand workplace learning opportunities (Workforce Development Initiative, n.d.).” In the first round of funding, about \$70 million was awarded to 225 businesses across New York, and the applications for the second round of funding remain open as of December 2021 (Workforce Development, n.d.). Unfortunately, there is little available data on the efficacy of WDI on businesses attracting employees, particularly in the past year since the pandemic. In general, however, there is a growing push to have higher education and industry work together. In New York State, natural gas and electric company National Grid teamed up with Hudson Valley Community College (HVCC) to launch an Associate in Occupational Sciences degree program and has worked with other community colleges across the state, like Onondaga Community College (Mari & Reyes, 2018). Recognizing its aging workforce, National Grid was able to partner with local institutions, as well as create an in-house “National Grid Academy” to educate its current and future workers (Mari & Reyes, 2018). As success stories like National Grid grow across the state, WDI has the potential to bring more businesses and workers back into the New York Economy.



## Childcare

The supply of childcare workers, in particular, has posed unique challenges to families across the country and New York State. As of September 2021, New York State has yet to recover almost 81,000 jobs within healthcare and social assistance, which includes childcare services (Ettlinger & Hensley, 2021). Likewise, nearly 5 million households with a child under the age of 12 were unable to access childcare because of limited opportunities, high costs, or because of safety concerns (Carson et al., 2021). Over 30% of low-income households are likely to experience these symptoms, while about 20% of households with higher incomes still report this to be an issue (Carson et al., 2021). Among ethnicities, Black, Hispanic, and low-income households report that childcare is out of reach, leading to disproportionate job loss (Carson et al., 2021). This problem is not unique to the pandemic either. Rather, the pandemic exposed how fragile the childcare industry is. According to national data, between May and June of 2020, about 13% of working parents lost their job or reduced their hours because of the lack of childcare (Carson & Mattingly, 2020). 25% of families spend more than 10% of their income on childcare across the country (Carson & Mattingly, 2020). In New York, families spend anywhere between \$2,600 a month to \$21,000 a year on childcare (Brisport, 2021). That cost is comparable to college tuition at CUNY or SUNY schools (Brisport, 2021).

In addition to cost, the burden on low-income families also comes from the means-testing scheme New York state implements to determine financial need. Families undergo the means-testing process when they cannot cover the cost of childcare (Brisport, 2021). Means-testing requires hours of additional paperwork for families which may prevent families from even accessing childcare. This process takes months and can often result in different results for families with very similar backgrounds (Brisport, 2021). This process is not only arduous for families, but also for the government to administer and providers to process through. Arguably the largest strain on the childcare capacity in New York is the fact that 64% of New Yorkers live in a “childcare desert,” meaning there are no available providers, or they are too far away (Brisport, 2021). This problem extends even further for parents who work outside of the traditional work hours as facilities have trouble providing service during those other hours (Brisport, 2021).

The high costs to consumers and the diminishing availability of childcare providers results in low pay for those who work in childcare. The pandemic exacerbated this issue and created staffing shortages for facilities (Brisport, 2021). Childcare workers are highly credentialed and require an extensive background before working in the industry. To become a childcare professional, New York state requires credentials after completing state or national requirements. There are six credentials which are all based on the different types of providers across the state: child development associate, children’s program administrator, family childcare, family development, infant and toddler care and education, and School-age Child Care (*Child Care Training and Professional Development for Licensed and Registered Programs* | *Division of Child Care Services* | OCFs, n.d.). To complete some of these requirements, workers need to work unpaid labor as well as incur educational debt to pay for the credentials. A major roadblock for workers across the state is affording the training and certification requirements (Brisport, 2021). In a survey of New York state childcare providers, over 25% noted that there is a lack of qualified staff available in facilities (Brisport, 2021). Quelling this shortage of qualified childcare workers means reducing barriers to entry or increasing worker pay.

## Evaluative Criteria

Each alternative proposed targets symptoms of the labor shortages seen in New York state. To evaluate each alternative, it is necessary to use the following criteria: cost, effectiveness, cost-effectiveness, equity, and political feasibility. The Alternative with the best-evaluated outcome across each alternative will be considered for recommendation.

### Cost

This criterion will evaluate each alternative's direct cost to the government. The cost will be measured in dollars from the New York State Budget. The lowest cost outcome would be the most ideal for this criterion.

### Effectiveness

This criterion will be measured in potential jobs created as a result of the alternative. This analysis will rely on prior reports from similar programs as well as reasonable assumptions based on past results. A key question in evaluating each alternative is: Does this program bring the most workers back to work? The alternative with the most jobs created will be ideal for this criterion.

### Cost-Effectiveness

This criterion will rely on a calculation from the prior two criteria. Based on the total cost, this report will divide by the total number of jobs created to find the most cost-effective alternative. The alternative with the lowest cost per job created would be ideal for this criterion.

### Equity

This criterion will evaluate each alternative's propensity to reach out to the communities with the most need. Measuring this criterion will be qualitative, using categories low, medium, and high. A low equity score means that this alternative fails to benefit those in the most need. A medium equity score reaches out to some vulnerable populations but does not have a large impact on the needs of that community. A high equity score reaches out to the community in the most need, whether that may be based on gender, race, ethnicity, or geographic location.

### Political Feasibility

This criterion will evaluate whether each alternative considers the politics at each stage of the legislative process, starting with the committee stage to the Governor's signature. It is important to identify important veto points along the process and understand whether this alternative, based on policy history, is likely to pass. This will be scored qualitatively using the categories low, medium, and high. A highly feasible alternative would indicate the ease at which it is passed with a majority in the Assembly and Senate. A medium feasible alternative may face stumbling blocks throughout the legislative process—like a close vote in the General Assembly, considerable time in program and council, or considerable time in conference committee. An alternative that is low feasibility means that it will be difficult to pass either chamber of the legislature or get the governor's signature.

## Alternatives

This section provides more detail on the proposed alternatives to bring workers back to work in the state of New York. Each alternative addresses different issues and symptoms of the labor shortages including higher monetary incentives to return to work, addressing childcare, and developing the workforce. Each alternative will be measured using the previously stated criteria.



### Alternative 1: Signing Bonus

Sen. Sasse's National Signing Bonus Act would have pulled from previously authorized pandemic relief funds to issue a signing bonus for newly hired workers. In New York State, a similar plan could be used. According to Governor Hochul's Executive Budget for the fiscal year 2023, there remain considerable funds from the federal government for pandemic relief, estimated at around \$2 billion (Ferré-Sadurní & Ashford, 2022). New York State could implement a payment structure with a flat payment of \$1,200 once unemployed individuals have received a job and have remained within the job for at least one month. Individuals must also have an active unemployment claim since a certain date. For ease, individuals with an unemployment claim as of January 1, 2022, or who have received unemployment insurance within the year, are eligible for the signing bonus. Individuals who have since accepted a position must show proof of acceptance of an offer of employment, a discontinuance of unemployment insurance benefits, and will receive funds upon completion of four full weeks on the job.

Funds will be allocated from the roughly \$2 billion of federal funds for pandemic relief. Individuals will receive funds either through direct deposit or debit card, which would work identically to unemployment insurance. Currently, the New York State unemployment insurance payment system works through the state's website where individuals filed their initial claims. Individuals can input their bank information to ensure the convenience of payment (Unemployment Insurance Payment Options, n.d.). When applying for the signing bonus, individuals can apply on the same account and website online to ensure that prior information is saved.

### Cost

This program would be funded through the Governor's proposed the Fiscal Year 2023 budget. Allocated within the budget is about \$2 billion for Covid relief initiatives. Since the start of 2022, New York State has had 39,090 individuals come off unemployment as of March 5 (U.S. Employment and Training Administration, 2022). Looking at the state of Montana, which implemented a similar signing bonus program, nearly 75% of the funds allocated for the program went unspent (Dietrich, 2022). Out of the \$15 million that was allocated to the program, the state spent upwards of \$3.6 million on bonuses to individuals (*Report Highlights Success of Montana Return to Work Bonus Program*, n.d.). More than 6,000 Montanans applied for the signing bonus and a little over 3,000 were approved (*Report Highlights Success of Montana Return to Work Bonus Program*, n.d.). Individuals who did not get approved did not meet the eligibility requirements. Therefore, the effective approval rate was about 50%. If we look at New York State and assume there will be a similar take-up rate and assume that the 39,090 individuals noted above gain employment, about 19,545 individuals would receive a bonus, which would total \$23,454,000 if awards total \$1,200 each for the first three months of the year. If this program were to end after June 4, 2022—since unemployment claims reflect the end of the week—it would cost the state \$35,286,914.04 in total. Extending the program to June assumes that after March, the New York state economy would add a further 19,722 jobs based on estimations that filings would continue to decrease one percent after each week in the future. After March, if the program shows to be a strong incentive to returning to work and unemployment claims decrease by two percent, a further 34,883 individuals would come off unemployment. With a 50% take-up, 17,441 individuals would receive a bonus, making the total cost of the program \$44.38 million. This estimate also the state would have the same take-up rate as Montana, a state with dramatically different demographics. This also assumes that the who individuals came off unemployment found a job.

If implemented, this alternative would have additional administrative costs. While creating and implementing a new application link similar to the unemployment insurance application, the

state must be active in mitigating fraud. This can be done by creating a unique pin or create two-factor authentication. Likewise, the application for the bonus must be distinct and on its own webpage to ensure minimal confusion for filers.

### Effectiveness

When looking at this alternative, we can see that the benefits are realized upon obtaining a job. Extensive literature explored in previous sections also makes clear that individuals in this current job market are demanding higher wages (Goldberg, 2021). As individuals are demanding more pay, and as jobs already offer signing bonuses to attract workers, signing bonuses may prove to be a surplus requirement (Thomas, 2021). Looking at Montana as an example, of the 24,000 eligible workers, nearly 6,000 applied but just over 3,000 workers were eligible and awarded the bonus (Dietrich, 2022). Based on the projections above, the total amount of individuals over the course of the three-month period will bring approximately 74,000 individuals back to work. Given a 50% approval rate, this alternative would rate as moderately effective.

### Cost-Effectiveness

This program is relatively inexpensive for the state to administer given the size of the pandemic relief funds available. As of November 2021, the New York State economy regained roughly 56% of the jobs it lost from the pandemic, which is about 784,000 jobs of the 1.4 million lost. To find the cost-effectiveness ratio, we would take the total cost of the program, \$44,383,602.30, and divide it by the total number of jobs created from the program, which is about 36,986 jobs. The cost-effectiveness ratio would be approximately \$1,200 per job created. Therefore, the cost per marginal job created is one-to-one, making this alternative cost-effective.

### Equity

The signing bonus would look to target specifically those unemployed and newly employed individuals who have been challenged the most by the pandemic. In critical areas like the service industry, transportation, agriculture, and construction, individuals receive minimum wage and are highly diverse. The Signing Bonus should be geared toward these individuals. A key consideration here is the accessibility of the online platform in which it is placed. A fully online platform might miss individuals that might not have internet service or have filed for unemployment differently. For these considerations, this program is mediumly equitable.

### Political Feasibility

The Democratic-controlled Assembly, Senate, and Governorship should prove to be politically feasible to pass a signing bonus legislation. States that passed similar legislation, like Arizona and Montana, are both Republican trifectas, which is promising. Given the Governor's push for workforce initiatives, getting the signing bonus bill through the Assembly and Senate would be highly feasible. While politically feasible, it must be noted that the legislative process will be long and arduous. After the bill's introduction, it would go to a committee's program and council, which refines and reviews the language of the measure. As the legislature becomes more deliberative, this potential bill will take longer to make its way to the Governor's desk.

## Alternative 2: Supplementing Childcare

The key issue within childcare, as it relates to the larger issue of labor shortages, is that workers often cite the struggles of not finding adequate childcare for reasons they are not returning to work (Miller, 2021). Not only is the cost a burden for families—roughly \$15,000 per child per year in New York, more than double the tuition of a SUNY school—but there is a shortage of individuals within the childcare industry (Clark, 2022). The State government can begin by incentivizing the industry by supplementing the incomes of childcare workers. Governor Hochul as well as state legislators have talked about budgetary inclusions for childcare. The passage of the Governor's budget proposal will largely determine the fate of these efforts.

Outside of supplementing wages, which is shown as a strong incentive to return to work, a creative solution could be incentivizing retired teachers to work in childcare facilities. The idea behind bringing retired teachers into childcare is that the industry already refers to those within facilities as "teachers" (Clark, 2022). Within New York State, childcare facilities must provide instructional learning, physical activity, and meals according to state rules (Clark, 2022). Naturally, traditional teachers are inclined to satisfy this type of work, so retired teachers would be a natural fit within the childcare infrastructure. To attract retired teachers into childcare, the government can allow retirees to still collect their pensions while working and collecting income. Under the New York State Retirement and Social Security Law (RSSL), if a retiree under the age of 65 were to return to work their earnings will be capped at \$35,000 if the retiree worked for a state-run institution (*Life Changes*, n.d.). If the retiree is over 65, there is no cap on potential earnings. If a retiree under 65 returned to work, the retiree would either pay back their pension if their earnings surpass the cap or pause their pension until the retiree retires again (*Life Changes*, n.d.). If the retiree does return to a public institution, they would need to seek approval through a Section 211 waiver before getting hired. Legislation that would either increase the cap or suspend the requirement for a Section 211 waiver would encourage retirees to return to work, and in this case, potentially return to childcare facilities.

The two streams of income can encourage retirees who may still want to work in a familiar setting to operate. The state could simplify the transition for retirees by easing the regulations in place since there is considerable overlap when tending to the needs of children. Specific regulations can be found under the Official Compilation of Codes, Rules, and Regulations of the State of New York (NYCRR) in Parts 413 through 418 (Child Care Regulations and Policies | Division of Child Care Services | OCFS, n.d.) Likewise, New York state could ease credential requirements for retired teachers as they return to work given their prior experience. There are six credential courses that childcare professionals must take and most of them overlap with experience in teaching. For example, the child development associate credential or the school-aged child care credential (*Child Care Training and Professional Development for Licensed and Registered Programs* | Division of Child Care Services | OCFS, n.d.).

### Cost

This alternative has functionally no cost to the government. At the end of the fiscal year 2021, the New York State Teachers Retirement System's net position was \$148.1 billion. This alternative would not change the total cost to the government, as the incentive would be for teachers to still collect their pensions. From the NYSTRS report from 2021, there are currently 175,790 retired members and beneficiaries collecting from the fund. In fiscal year 2021 the NYSTRS spent \$7,702,180,656. Expanding the cap for retirees to earn through Section 212 of the RSSL would not come at a cost to the government directly. If the cap is expanded and waivers are suspended,

workers between the ages of 55 and 65 would still receive pension benefits that would have been paid out anyways creating no substantial cost to the government.

### Effectiveness

With the limited available data, there is little evidence to show that the waiver process has been effective in recent years. This could reflect the difficulty in navigating the 211-waiver process, but it may also explain that retirees are comfortable staying on the sidelines during the pandemic. Looking at the Empire Center, an Albany think tank that tracks data on waivers, there has been only one waiver since March of 2020 which was approved (*SeeThroughNY::Waivers*, n.d.). With the available data, it can be suggested that even making changes to the waiver system might not have a substantial effect on bringing retirees back into the labor force. As of 2021, if there are roughly 176,000 retired teachers, and assuming that 40% of retirees (70,400) are between the ages of 55 and 65, and a limited number of those individuals would return to work in childcare facilities, the problem is twofold; One, the limited pool of applicants would do little to quell the shortage of childcare professionals and two, considering the near-zero applications for waivers since March 2020, there is little incentive to return.

### Cost-Effectiveness

With the available data and the significant assumptions made, this particular alternative has a significantly low cost-effectiveness score. Despite minimal costs to the government, there is little evidence to support that a reduction in licensing and requirements for retirees to return to work will make this alternative worthwhile. If implemented, this analysis would project that an impact would be marginal at best.

### Equity

Given the need for adequate childcare in the state, supplementing the industry would come as a massive benefit to families in need. As explored earlier, childcare in New York is associated with high prices for families, and in particular, low-income families. To supplement the childcare industry with qualified professionals—in this case, former teachers—would be a significant burden lifted off the shoulders of the state and families in need. In theory, this policy is highly equitable; if qualified professionals are entering the childcare profession, families in need of childcare would reap the benefit. Yet, the benefit realized by the consumer is marginal at best. Therefore, declaring this alternative as equitable—redistributing highly qualified teachers into childcare to alleviate shortages—depends on the overall effectiveness of the policy, which was explored above. This alternative scores low in equity.

### Political Feasibility

This alternative would be politically difficult. Given the fact that New York State Unified Teachers controls the retirement fund, obtaining their support is critical. Previous bills relating to teacher retirement died in committee. Previous revisions to the policy were achieved through executive order declaring the shortage of healthcare workers a statewide disaster (Executive Order No. 4, 2021). While the legislation would be straightforward, the process in which this bill would become law is difficult given the tight timeline of the legislature's time in session, which ends in June 2022. The month of April is dedicated to working on the budget, and May is where policy deliberation can occur once the budget is passed. Given the fact that the governor has previously signed an executive order on this issue signals a glaring need for workforce revitalization and a willingness to do something about it. This alternative rates as moderately feasible.

### Alternative 3: Revising the Hiring Process for a Developing Workforce

Research has indicated that employers in this labor market have systematically overlooked a broad swath of capable candidates due to the nature of their skill sets. "Hidden workers" are those looking for work yet lack the skillset required for specific positions. Hidden workers are also individuals who are willing to work more and are actively seeking employment (Fuller et al., 2021). The skill gap is further reinforced through the algorithms firms use to filter top applicants. According to research from the Harvard Business School, in partnership with Accenture, there are nearly 27 million hidden workers in the United States. These individuals remain hidden due to the requirements (like employment status and prior employment) employers set for candidates (Fuller et al., 2021). Likewise, seemingly willing and capable individuals are filtered through recruiting algorithm systems like Applicant Tracking Systems (ATS). Employers use ATS to generate refined parameters to find only highly skilled candidates while overlooking candidates that could perform at a high level with slight guidance (Fuller et al., 2021).

The proposed action starts with limiting the influence of ATS within hiring processes. In 2019, New York State announced the Workforce Development Initiative (WDI) to invest \$175 million into workforce development projects across the state (Workforce Development Initiative, n.d.). WDI is intended to "support strategic regional efforts that meet businesses' short-term workforce needs, address long-term industry needs, improve regional talent pipelines, enhance flexibility and adaptability of local workforce entities, and expand workplace learning opportunities (Workforce Development Initiative, n.d.)." Continuing with WDI, New York State could stipulate that funds would be contingent on whether ATS is used in select businesses. This message is in line with the State of the State Address given by Governor Hochul which emphasized the need to overhaul the current workforce (Governor Hochul Announces Comprehensive Plan to Strengthen New York's Workforce and Help Grow the Economy, n.d.). Action on this would include stipulating that any public funds going toward developing the workforce must limit the use of ATS so that the algorithm generates a larger pool of potential applicants. If the goal is to develop the workforce, hiring adaptable and motivated workers is a step in that direction.

#### Cost

Any revision to this system would be borne onto businesses themselves. ATS services are an added cost for employers as they contract these systems out to find top applicants. If companies wish to apply for WDI funds, they would be able to save the funds once used for ATS and work towards developing their workforce. Companies pay per month to use ATS based on how many positions are being actively recruited for or based on how many recruiters are assisting the company ("How Much Does an Applicant Tracking System Cost?" n.d.). These services are easier to manage at larger companies but can add up at smaller organizations. If companies comply, funds would be allocated per the requirements of the Workforce Development Initiative. This alternative is projected to be low cost given the limited size WDI at \$175 million, as of 2019. In 2020, the WDI Interactive Grants Program launched 231 projects across the state for \$2.7 million, impacting 14,392 workers (*Annual Impact Report: Growing and Keeping Good Jobs in New York State*, 2021). This program is significantly underutilized given that \$175 million is allocated and only \$2.7 million was issued, which is just over one percent of funds. If program applications increased by 20%, the total cost to the government would be \$3.2 million. With that, this alternative would classify as low cost.



### Effectiveness

This alternative is not effective. If this alternative was to increase potential applications by 20% to 277, which is likely given the impact of the coronavirus on WDI projects, the state could reasonably assume that this would be a great starting point for the program. Given the potential returns for workforce development programs in the future (e.g., increased skillset, wages, education), this program would still not come close to using all of the allocated funds. If the 2020 numbers were \$2.7 million for 231 projects, that is approximately \$11,700 per program. Using that same ratio, costs would exceed \$3.2 million and would yield roughly 17,270 jobs. In sum, this program is largely ineffective given the limited use of allocated funds, despite the returns on the approved projects.

### Cost-Effectiveness

At most, there are 27 million individuals across the country who are left behind because of ATS services (Fuller et al., 2021). Without direct data on how many jobs this may create in New York State, we can assume that since New York makes up about 6% of the U.S. population, it can be projected that New York State has, at most, 1,620,000 individuals left behind because of ATS. It would be unrealistic to assume the 1.62 million workers left behind would be rehired, considering that would fully recover the New York State economy. If the program applications are increased by 20%, mentioned above, and the rate at which job creation is the same, the jobs added would be 17,270. Using the costs measured above, the \$3.2 million costs of the 277 potential programs would impact about 17,270 workers, yielding a cost-effectiveness score of about \$185.29 per job created. \$185.29 per job created is highly cost-effective, however, this is based on a large assumption that the 1.62 million people left behind in New York would obtain a job as a result of this program.

### Equity

This alternative earns a high equity rating because revising the hiring process would include more diverse applicants that would have otherwise been left out of consideration. Revising the hiring process not only leads to a fairer result but also encourages a more holistic decision-making process for employers. Even though employers could still choose applicants who are highly qualified, knowing the process includes a broader swath of capable individuals reveals the equitable process. Of course, the widened applicant pool would encourage employers to hire the once excluded employees, particularly in a labor shortage. However, given the nature of the alternative and its revisions to the hiring process, a requirement to hire fringe applicants would be an overstep of government into the nature of the conduct of private business. With that in mind, ensuring a more equitable process for a diverse population of applicants would rate this alternative highly equitable.

### Political Feasibility

Similarly, with the prior alternative, this alternative would be politically difficult. The proposed legislation would not be complex, however, since the alternative is not cost-effective, legislators would be skeptical of supporting legislation on this matter. Again, the process in which this bill would become law is fraught given the tight timeline of the legislative session. While the governor is committed to workforce development initiatives, a program with this minute of an impact is unlikely to gain the coalition it would require to pass.

## Outcomes Matrix

	<b>Signing Bonus</b>	<b>Supplementing Childcare</b>	<b>Revised Hiring</b>
<b>Cost</b>	<b>\$44.38 million</b>	<b>Low</b>	<b>\$3.2 million</b>
<b>Effectiveness</b>	<b>Moderate</b> (74,000 Jobs Created)	<b>Limited Effectiveness</b>	<b>Low</b> (17, 270 Jobs Created)
<b>Cost-Effectiveness</b>	<b>\$1,200/ job created</b>	<b>Marginal</b>	<b>\$185/job created</b>
<b>Equity</b>	<b>Medium</b>	<b>Low</b>	<b>High</b>
<b>Political Feasibility</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>

## Recommendation

Based on the outcomes matrix above, implementing a signing bonus for formerly unemployed individuals satisfy most of the evaluative criteria. With low-cost relative to the available funds, the signing bonus poses a manageable solution and enticement for workers to rejoin the labor force. The signing bonus is also projected on a moderate approval rate, and even if that were to increase, the costs associated with this program would still be manageable given the available coronavirus relief funds. However, the low assumed approval rate is the reason why this alternative has a moderate effectiveness score. It would be reasonable to assume in a more populous state, like New York, that the take-up rate would be higher and therefore more effective. New York State still has roughly 616,000 jobs to recover, and a signing bonus does not come close to adequately filling those jobs. However, over the six months that this program is available, it would help create roughly 74,000 jobs, based on the projections made above. While this alternative is creates a direct, one-to-one investment to job creation ratio, the near 74,000 jobs that it would create far outweigh the almost 17,000 jobs that are projected with the third alternative. If solving the labor shortage is the most important goal, it is satisfied by returning individuals to work with a signing bonus. In looking at the alternatives in this report, the signing bonus generates the most jobs in return for the investment made. As mentioned before, the signing bonus is moderately equitable since the funds doled out to recipients go to those once on unemployment, but it might not go to individuals who do not have access to internet service or those who might have been unaware of the program in general. A more targeted implementation strategy could help remedy this situation. Finally, as for political feasibility, the signing bonus scored highly feasible because in speaking to those inside Albany, there have already been talks to include a signing bonus for jobs created, albeit for healthcare workers. Given the willingness to include this program in a proposed budget, legislation to widen the program to formerly unemployed individuals would not be politically difficult.



## Adoption

Now that the signing bonus alternative has been recommended, it is important to understand the next steps. The legislative process in the General Assembly begins at the committee level. As the Assemblyman is a part of the Economic Development, Job Creation, Commerce, and Industry committee a legislative bill draft would be sent to the Program and Council staff. At this stage, the bill would get reviewed and refined. This stage is where technocrats review language and assess the merits of the bill. This stage of the legislative process is a critical hurdle in the bill's quest to become law. Gaining momentum throughout the General Assembly is the next largest hurdle to overcome. Looking at bills within this session relating to recovery from the pandemic, the passage has seemed likely, particularly as most action has come from the Senate (*New York Assembly Economic Development, Job Creation, Commerce, and Industry Committee*, n.d.).

## Implementation

If this legislation is passed and signed by the governor, its administration falls to the Department of Labor. The Department of Labor in New York State is responsible for the distribution of unemployment insurance. Once the legislation is signed, funds must be distributed to the Department of Labor from the Department of the Budget. Complications may arise if more individuals take up the signing bonus than anticipated. The Department of Labor must be able to establish strong communication channels with the Department of the Budget to mitigate any issues that may arise. If take-up exceeds what is projected here in this report, bureaucrats may come overwhelmed with the claims that continue to pour in. This occurred during the pandemic as New York State dealt with nearly 725,000 claims of fraud in 2021, which is almost double the rate of fraud in 2020 (Corp, 2021). In combatting fraud, the Department of Labor has since employed an identity verification platform called ID.me, which provides filers to securely verify their identity by confirming their information to access their benefits (*How New York Is Cracking Down on Unemployment Fraud*, 2021). Using ID.me to administer the signing bonus can decrease the likelihood of fraud.

Individuals who have received unemployment insurance would be in the New York state database. On the same site where individuals file for unemployment insurance, there will be another application for individuals who have gained employment. Per the recommendations section, individuals must show proof of employment, a discontinuance of unemployment insurance benefits, and completion of four weeks of work. To mitigate false testimony, filers for the signing bonus must list their active employer for verification purposes. Filing can be done online at the state's Department of Labor website or by calling the Department directly (Unemployment Insurance Payment Options, n.d.). Workers could also complete this process through their employer upon completion of their four weeks and the employer could assist with sending the required materials. Such assistance could mitigate the chance for individuals to miss out on the bonus and increase take-up rates creating a lower cost per job created. However, allowing workers to submit claims through their employer places considerable trust in the employer. Employers may forget to file the paperwork which may lead to the employee missing out on the bonus. When implementing the signing bonus, the Department of Labor should issue guidelines for employers to encourage employees to sign-up for the signing bonus.

This program requires a very similar program to filing a claim for unemployment insurance. While filing a claim sounds straightforward, there are always chances for missteps. To ensure compliance, and potentially boost take-up, individuals can sign up for the program when reporting hours for their unemployment claim. Typically, when individuals are on unemployment, they must indicate the hours in which they work. If hours exceed 30 hours per week or pay is more than \$504 a

week, benefits will lapse (*Unemployment Insurance Claimant Handbook*, n.d.). To minimize fraud when signing up for the bonus, individuals can create a pin and could create two-factor authentication to ensure the claimant's identity which would work alongside ID.me.

Having two forms on the Department of Labor's website may be confusing for filers. The website must be clear and distinct when indicating the sign-up for the signing bonus. Currently, looking on the Department of Labor's website, there is a page titled "Helping NY Get Back To Work (*Department of Labor Home Page*, n.d.)." Once the signing bonus is implemented, the link to the bonus can be put on this page to help potential filers navigate the website. As said before, the link and application for the signing bonus would work quite similarly to the application for unemployment insurance. Through ID.me, applicants can confirm their information from their unemployment claim, their banking information, and their proof of employment. Once confirmed, the applicant can submit their claim and wait for the approval. On the DOL's side, once an application is received, it must be reviewed, and qualifications must be confirmed. DOL employees may be overwhelmed with the added burden of reviewing signing bonus applicants and unemployment insurance claims. To mitigate this, the DOL may have to hire more employees. Hiring more DOL employees would not change the cost estimate for this alternative as this is a short-term program and the starting salary for a DOL employee is almost \$40,000 a year.

The implementation of the signing bonus will be straightforward. Most of the work can be done through the Department of Labor's website by creating a new form for re-employed individuals to fill out. Creating the ability for employers to have employees complete this process at work gives employees the access to the internet required as well as having verification from the employer on-site. The creation of this application should be a near duplicate of an unemployment filing with similar questions being asked of the respondent. Most of the information should already be on file with the state since the filer has previously received unemployment payments. As per unemployment payments, payment directly to the individual usually takes two to three weeks (*Unemployment Insurance Payment Options*, n.d.). This alternative is administratively nimble and should not come as a significant burden to the department.

## Concluding Thoughts

1.4 million New Yorkers lost their jobs in a month's time. Families across the state struggled to cope with the sudden loss of work and with the choice between their children and their income. Sowed deep into the American ethos is the attachment to work and the purpose it brings. The annals of history will remember this pandemic for the destruction it brought not only to New York, but to the country and the world. Whether it's a longtime hospitality equipment provider in Buffalo who lost his job and his mother-in-law to the pandemic, or the former New York City cabdriver who drove New Yorkers to the hospital in the city to keep his family afloat, we all have our unique stories from the pandemic (Berger & Brody, 2021). Remedying the ills of this pandemic and the tolls it took on the labor market are no easy manner. Implementing a signing bonus through the pandemic relief funds would be a path toward a pre-pandemic labor market. Based on the projected effectiveness, implementing a signing bonus will add 60,000 jobs to the New York state economy. This projection relies on Montana's program, and it would be reasonable to assume that take-up in New York would be higher given its higher population. This direct transfer payment to formerly unemployed individuals sends money to those in the most need. Given the provisions in the budget for pandemic relief, this alternative is inexpensive and allows the government to work towards initiatives in other areas identified in this report. Decisive action to curb the labor shortage will alleviate supply chain concerns throughout the state.

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