

COVID and the Risky Immigrant Workplace: How Declining Employment Standards Socialized Risk and Made the COVID-19 Pandemic Worse

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Abstract

This article investigates the impacts of the COVID-19 pandemic in NYC as they were concentrated on immigrant workers and their communities, studying one group of immigrant workers, namely taxi drivers. Based on two years of ethnographic research with the New York Taxi Workers Alliance, a union of 24,000 taxi and app-based drivers in NYC, conducted before and during the pandemic, as well as formal interviews and an original survey of 1,002 union members, my research shows how drivers' precarious existence in the work–citizenship nexus informed their experiences of sustaining their families during the pandemic. COVID highlighted how the welfare state's increasing privatization of risk, the fissuring of the workplace, and the rise in employment precarity have generated an immigrant underclass. This manifested in immigrant drivers experiencing the pandemic through the lens of specific uncertainties—health, economic, bureaucratic, and immigration—that shaped their unequal access to pandemic support. This process in turn produced a boomerang effect, as immigrant drivers' weaker connection to state and social institutions made it harder to contain the virus in their communities, a development which ultimately puts society writ large at greater risk. This article advances our knowledge of precious employment by introducing the concept of *uncertainties* to explain the socio-cultural aspects of how crises of social reproduction are generated. It also extends our understanding of the decline

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of the welfare and regulatory state by showing how this process interacts with immigrant status.

Keywords

COVID-19, labor unions, immigration, precarity, welfare state, fissured workplace

Introduction

The COVID-19 pandemic hit New York City in March 2020, with devastating impacts on workers' health and economic fortunes, impacts that were felt hardest in service industries where work could not be transitioned online. These service workers in New York City found themselves either unemployed without financial support or recast as frontline workers in risky service jobs that lagged in providing proper safety equipment. Of these workers, those who were immigrants, documented and undocumented alike, were less likely to have access to immediate social protections because of their concentration in informal employment arrangements.

While the available epidemiological data shows that immigrant communities were the hardest hit by the COVID pandemic, it is less clear why this was the case. Demographic factors and occupational sorting certainly play a role in explaining the disparate impact, but this article aims to uncover the socio-cultural determinants of immigrants' experience of the pandemic. This is accomplished through an examination of the case of immigrant drivers in New York City. Even before the pandemic immigrants worked in an increasingly diminished industry. Taxi driving had already faced waves of deregulation since the 1970s, and the introduction of app-based drivers in the 2010s furthered the decline of the industry. These drivers, taxi and app-based alike, felt renewed pressure to make a living with the drop in demand triggered by the pandemic. The industry offers workers no income security, no guaranteed hours, and no employer-sponsored healthcare to rely on if they got sick—as many drivers and their families did during the pandemic. The drivers' economic situation compelled them to keep working, exacerbating the pandemic at a critical moment in NYC and contributing to the further spread of the virus throughout the City's immigrant neighborhoods.

The catastrophic impact of COVID-19 on immigrant drivers highlights the unique challenges faced by workers operating at the nexus of precarious employment and immigration. For decades, the government shifted health and financial risks onto workers and their families by making social insurance programs more difficult to access (Hacker [2019] 2006). Similarly, firms have actively implemented subcontracting and outsourcing to remove workers from social and labor law protections, a condition known as fissured employment (Weil 2014). Gig economy firms have benefited from these processes, maintaining that those who use their apps to work are not employees entitled to labor law or social protection programs but are instead independent contractors responsible for their own risks of employment. Both “the great risk

shift" and the fissuring of employment that initially arose following the 1970s financial crisis has resulted in an increased precarity of employment (Standing 2011). Migrants, regardless of legal status, are more likely to be funneled into precarious labor (Anderson and Rogaly 2005), as immigration enforcement controls both their conditions of entry and the conditions of their remaining, thereby institutionalizing this uncertainty into their conditions of employment. As a result, many immigrant occupations are characterized by a quality of "unfreedom" (Phillips 2013), an example of which are the debt-to-work contract structures that obligate workers to incur debt to enter an industry. In the taxi industry, this occurs through the requirement that drivers purchase or rent their own vehicles or medallions, costing significant sums that are often acquired through predatory loans. This combination of forces leaves immigrant workers with weaker legal and social protections, weaker connections to government institutions, and with a greater burden of "unfreedom" in their employment. These pressures drastically limited taxi drivers' ability to sustain themselves in the further challenging conditions of the pandemic. Immigrant workers' precarity and conditions of unfreedom when compounded by the COVID pandemic generated a crisis of social reproduction within immigrant communities. This article advances the concept of "uncertainties" to explain the socio-cultural mechanisms through which precarity generates social reproduction crises.

The racialized impacts of the COVID-19 pandemic highlight the broader social consequences of labor law and welfare state decline in the last decades. Research confirms that poor and minority populations in the U.S. have been the most affected by the coronavirus (Purkayastha 2020). A study across OECD countries found that immigrants and their children were infected with COVID at higher rates, faced higher mortality rates, had worse labor market outcomes, and worked disproportionately in frontline sectors compared to their native-born counterparts (Scarpetta, Dumont and Liebig 2020). A meta-analysis of studies about race and ethnicity and COVID found results indicating that infections and death rates increase not just with age and comorbidities but also with racial and gender inequalities, noting that COVID acted as an exacerbator of preexisting socioeconomic inequality (Côté et al. 2021). A study of Canadian workers found that among low-income workers, immigrants and minorities faced a greater risk of COVID exposure at work, thus adding a health-related dimension to our understanding of racialized job stratification (St-Denis 2020, 402). A similar effect could be found in the U.S. meatpacking industry, where government intervention forced a largely immigrant workforce to continue working in unsafe "sacrifice zones" in the name of national interest (Carrillo and Ipsen 2021). This article joins this literature in exploring how the process of welfare and regulatory state decline interacts with workers' status as immigrant in producing a disparate experience of the pandemic. The great transfer of risk onto these precarious immigrant workers resulted in concentrated virus outbreaks that ultimately left society unable to contain the pandemic. This mode of privatization of risk is emblematic of modernization's tendency to create what Beck (1992) calls the "risk society." Precaritization and the privatization of social risk in the name of greater profits ultimately produces a boomerang effect, eventually increasing the risk

exposure for everyone, including those who would profit from this scheme. This boomerang effect was evident in the NYC taxi industry, where immigrant drivers living with similarly situated immigrant workers in other frontline industries pressed to continue working created conditions that spread the virus faster. In this way, COVID highlighted the externalities of both the regulatory state's racialized provision of benefits and the racialized processes of welfare-state decline.

To evaluate the experiences of immigrant drivers during the pandemic and investigate the socio-cultural determinants of COVID's concentrated impact in immigrant working-class communities, I conducted ethnographic research that included: following the pandemic responses taken by drivers and the New York Taxi Workers Alliance (NYTWA); formally interviewing seventeen drivers and union officials; and working with the Alliance to survey their membership about the impact of the virus. The convenience sample survey was sent to drivers through email, social media, and the union's WhatsApp groups, and generated 1,002 responses covering all classes of drivers in the city. My collaboration with the NYTWA on the creation and dissemination of this survey follows in the tradition of community-engaged research (Strand et al. 2003), contributing to the exploratory nature of some of the article's findings. The resulting qualitative and survey data highlight how the drivers' intersecting marginalizations as both immigrants and precarious workers exposed them to high levels of health and economic risk, precipitated unique challenges that undermined their individual abilities to sustain themselves financially, and lays bare the impact that taxi drivers' economic struggle had on the City's overall efforts to contain the virus. This article argues that the externalities of the pandemic as they were experienced by immigrant drivers was principally a result of their precarity and was shaped by several types of uncertainties during the pandemic, namely: health uncertainty; economic uncertainty; bureaucratic uncertainty; and immigration uncertainty. These uncertainties—exacerbated by the racially distributed decline of social protections—are the mechanisms through which socio-cultural phenomena generated a further crisis of social reproduction that contributed to the markedly adverse experience of immigrant communities during the pandemic.

The Creation of the Risky Workplace

The COVID pandemic represents the latest challenge to American workers, who have already seen a broad decline in their standards of employment. In the decades following World War Two, firms organized around internal labor markets and Fordist employment models that provided workers a large degree of security and social protection, though this system was also racially stratified (Boyle 1998). In the 1970s, firms saw an opportunity to shed some of their employer obligations, using the financial crisis to push toward more "flexible" work arrangements (Kalleberg 2011). Such flexibility has generally benefited employers and shareholders at the expense of workers, making work more contract-based, temporary, and part-time (Beck 2000). In essence, the declining employment conditions over the last half century have generalized conditions previously relegated to the secondary sector (Kalleberg 2011). Flexibilization

has made fulltime and permanent work increasingly unobtainable (Vosko 2010). Even workers who remain in standard employment relationships experience greater uncertainty, face greater pressure from the growing informal sector, and experience precarity when navigating obtuse employment enforcement agencies (Gleeson 2016). While employment has become less standard, this does not mean that all nonstandard work is precarious (Osnowitz 2010), with traditional barriers of race and gender reproduced in the allocation of better and worse forms of nonstandard employment.

The historic decline in employment standards was enabled by both government action and inaction. As firms devised new ways to exclude workers from labor protections, governments failed to modernize sufficiently in response, allowing for increasingly fractured worker protections manifesting in legal arrangements such as outsourcing, subcontracting, and employee misclassification, leaving an increasingly large portion of low-wage workers outside of conventional labor law protections. Weil (2014) called this phenomenon the “fissured workplace”—the logical extreme of which is the gig economy, where employment is outsourced to each individual worker (Wolf 2021, 2022). Workplace fissuring, declining governmental oversight, and budget cuts to enforcement agencies in combination with systemic labor law violations by employers have generated more *de facto* “unregulated work” (Bernhardt, McGrath and DeFilippis 2008). The effects of increased workplace fissuring and unregulated work are made worse by the United States’ punitive immigration policies. Due to their liminal status, immigrants are often targeted for areas of work that have reduced protections and heightened fissuring, which in turn generates precarity that can be valuably exploitable to unscrupulous employers. In this way, immigrants’ experience of the decline of the welfare and regulatory state is multiply intersectional.

The diminishment of formal labor protections was part of a wider societal shift toward the privatization of risk. Hacker ([2019] 2006) argues that since the 1980s, corporate lobbies in alliance with conservatives in government have weakened social insurance programs and offloaded risk onto individuals, contending that these programs had created too much social moral hazard. The movement to 401(k) plans instead of defined-benefit pensions, for example, was championed by business and encouraged through federal tax code changes. Hacker ([2019] 2006) dubbed this general trend “the great risk shift” and notes that as the privatization of risk has escalated, it has caused significant hardship for many and greater anxiety for many more, especially so for racial minorities.

The historical racialization of immigrant employment niches helps clarify why immigrant workers face more difficulty accessing social protections. From its very origins, U.S. social policy has been racially distributed and limited in scope because of racial division (Fox 2012; Katzenbach 2013; Quadagno 1994). This can be clearly seen during the New Deal era when, to gain the legislative support of Southern Democrats, policymakers excluded the “Black” agricultural and domestic service occupations from labor protections such as the minimum wage and the right to form a union (Katzenbach 2013; Perea 2011). Just as the creation of these programs was racialized in intent and structure, so, too, has been their diminishment. Indicative of this dynamic, a study of precarious workers in New York City during the pandemic

found that workers faced barriers to accessing unemployment assistance due to frustration with the bureaucracy, uncertainty about eligibility, and the financial inability to afford to wait thereby forcing them to keep working (Ravenelle, Kowalski and Janko 2021). These processes can also be seen in the evolution of the NYC taxi industry, where decades of workplace fissuring and risk shift have coincided with a transition from an industry dominated by white European immigrants to immigrants of color from the Global South. As employment protections and the welfare state have declined, shifting risk onto workers, it is racial minorities who have experienced the brunt of the decline, leaving the average immigrant worker particularly ill prepared to weather the pandemic. Utilizing the case of immigrant drivers in New York City, this article adds to our understanding of how workers' status as immigrants have been aggravated by the progressive decline of the welfare and regulatory state.

Immigrant Precarity, Unfreedom, and the Pandemic

The effect of declining employment standards that undermines general wellbeing of workers has been labeled by scholars as "precarity." Some go so far as to say these socioeconomic changes have generated a new and growing class of the precariat (Standing 2011). Typically, precarity is defined as having work that is uncertain, unstable, and insecure, and characterized by the shifting of the risks of employment from firms and governments onto individual workers by restricting access to social protection programs (Hewison 2016; Vosko 2010). As Mahmud (2014) points out, however, precarity has been the general condition of employment throughout history, with the postwar welfare period representing the anomaly. Importantly, the consequences of precarious work impact workers beyond the job, undermining their health, family formation, and community cohesion (Kalleberg and Vallas 2018), thus illustrating how the risk shift and declining employment standards of precarity hurt workers' quality of life and access to social protections in addition to reduced job quality.

The impacts of rising precarity are not felt uniformly, however, as occupational sorting dramatically shapes an individual worker's experience of precarity. Scholars have long discussed how occupation sorting and labor market segmentation occur (Doeringer and Piore 1971). While all workers have been experiencing greater uncertainty and exposure to volatility in recent decades, racial minorities and immigrants have borne the brunt of these impacts (Branch and Hanley 2018). Non-white workers have long experienced allocative discrimination in hiring, with white men receiving the most advantageous positions (Blau 1977; McPherson, Smith-Lovin and Cook 2001).

Immigrant workers, such as the drivers under study here, face additional ramifications of the increasing employment precarity than their native-born counterparts. Evaluating precarity due to immigrant status does not just reflect one's legal conditions of citizenship or residency (referred to here as "legal" or "immigration" status) but the overall precarity derived from being an immigrant minority in a majority culture. It is an intersectional understanding of immigrant status appreciating how citizenship, race, religion, language, and class compound into a greater or lesser experience of the

precarity and unfreedom that can accompany the immigrant experience. The salience of immigration status in generating worker precarity arose with the emergence of the global cities' phenomena (Sassen 1996), which generated a bifurcated urban service economy in cities like New York. This increased demand for immigrant labor and was aided by the passage of the 1965 Hart-Celler Act, which eliminated the U.S.'s country-of-origin quota system that had favored European immigration despite the historically decreasing flow from these countries. This relaxation in U.S. immigration restrictions resulted in an explosion of immigrants from South and East Asia as well as Africa (Zhou and Bankston 2016). These legal changes encouraging immigration worked in concert with the decline in employment standards to generate a large foreign source of surplus labor-power who could more easily be fired and deported without the concerns of social reproduction attended to domestic sources of labor (Wills et al. 2010). This created a large divide between the highly protected, high-wage workers and the highly flexible, low-wage immigrant workers who provided them service (Lewis et al. 2015). Once in global cities like New York, immigrants encountered significant occupational segregation into unregulated jobs, often according to strict gender divides across occupations (Bernhardt, McGrath and DeFilippis 2008). A major source of this occupation segmentation is driven by immigrant labor market incorporation, which largely occurs through immigrant networks, variously called "ethnic networks," "enclaves" or "niches" (Massey et al. 1987; Portes and Bach 1985; Waldinger 1996). Immigrant niche development can result in an industry becoming racialized and stigmatized, triggering a decline in employment standards and government intervention (Tilly 1998). Occupational niche development further encourages precarity as what are seen as "bad immigrant jobs" are othered and ignored by society.

The intersection of immigration and employment precarity produces a hyper-precarity. Hyper-precarity, or what some call the "work–citizenship nexus" (Munck 2008), is the condition immigrants face due to their compounding marginalization as both immigrants and low-wage workers (Lewis et al. 2015). Hyper-precarity results from businesses exploiting legal regimes that place some workers "on the other side of universality, a 'moral and legal *no man's land*, where universality finds its spatial limit'" (Mahmud 2014, 702). The work–citizenship nexus impacts workers regardless of legal status, as employers can threaten to report family members or call immigration authorities despite the individuals' actual legal status (Bernhardt, McGrath and DeFilippis 2008). Goldring and Landolt (2011) found that in Canada, legal migrants with non-permanent status, while still a legal status, experienced long-lasting negative effects from their continued exposure to precarious employment. Similar results were found in the U.S., where immigrants naturalized under the 1980s IRCA law nevertheless experienced limited upward mobility (Clark and Kossoudji 1999). Anderson and Rogaly (2005) in their study of migrants in London, too, found that regardless of immigration status, immigrants are funneled into occupations defined by subcontracting, relying on employment agents while outside of the protection of law, circumstances that can quickly result in conditions of forced labor. Immigration controls not only shape the conditions of entry but also the conditions of remaining in a country, such as temporary visa or green card holders in the U.S. whose right to stay is tied to a

single employer, leading such uncertainty to become institutionalized (Anderson 2010). Immigration, regardless of actual legal status, presents extra-legal conditions for these workers to navigate and generates precarity with persistent effects on the workers' lives.

This hyper-precarity impacts immigrants' labor market outcomes and opportunities, which in turn undermines their wellbeing and ability to sustain their communities. Phillips (2013) argues that we should view the current system of migrant labor in the global economy as one of "unfreedom." Scholars have noted a major way immigration becomes unfree is through entrapping contracts, with migrant sponsors or immigrants entering employment agreements that require indebtedness (Breman 2007; Bales, Trodd and Williamson 2009). Phillips (2013) notes that processes of unfreedom are not just about exclusion but of the "adverse incorporation" of these workers into the precarious labor market. These issues are frequently amplified by asymmetric information between the parties, such that immigrants do not know they have entered a "tunnel of entrapment" until it is too late. This notion of contractual unfreedom perfectly matches the experience of both conventional taxi and app-drivers, who both need to take on tremendous quantities of personal debt to secure their medallions or cars to work. These debt loads, often offered by unscrupulous vendors and dealerships, come with ballooning interest rates preventing drivers from leaving the sector, and are a factor that pressured drivers to keep working throughout the pandemic. This effect Lewis et al. (2015) call "compulsion by necessity" and generates unfreedom for even legal immigrants by limiting their available financial options.

These problems came to a boiling point during the COVID-19 pandemic as immigrant workers faced a crisis of social reproduction. Social reproduction refers to the ability of workers to sustain themselves. In effect, such crises replicate the social infrastructures that maintain unequal class status across generations, as the great risk shift has also offloaded the costs of social reproduction onto individuals and families through the retrenchment of the welfare state. Globally, neoliberal policies and economic liberalization have created a widespread crisis of social reproduction that produces "both the necessity and the desire for people to migrate across international borders in search work" (Wills et al. 2010, 2). Concurrently, migrant labor becomes appealing to employers and the state as the immigrant status of these workers allows both agents to deny responsibility for immigrant workers' social reproduction (Mahmud 2014). Intensifying the conditions of unfreedom in which they may be entangled, immigrants are often responsible not only for their own social reproduction but for that of their families back home, to whom they send remittances.

Given immigrants' precarity and relative unfreedom, what remains to be determined is the socio-cultural mechanisms through which their precarity contributes to the generation of social reproduction crises. Past research has noted the hostility immigrants have historically faced in accessing social insurance programs in concert with occupational sorting and housing segregation together helped shaped the socio-spatial concentration of COVID's impacts on New York City's immigrant communities. This study puts forward *uncertainty* as the mechanism through which socio-cultural processes also contributed to deepening the COVID crisis. Taxi drivers—alongside immigrants in

other frontline service occupations such as healthcare, janitorial, and food service—found themselves not only recast as essential workers but struggling to access social protection programs. This forced them to attempt to keep working despite the public health threat, creating a reinforcing spiral of disease transmission in immigrant communities. Immigrant workers' degree of unfreedom prevented them from protecting themselves during the pandemic the way the majority population was able to. This contradictory position of needing to protect themselves while lacking the proper means to do so produced uncertainties that caused these workers greater physical, emotional, and financial strain. Understanding the role of such uncertainties in contributing to the immigrant social reproduction crisis during the COVID-19 pandemic illustrates the broader social consequences of ignoring immigrant workers' employment precarity. The concentration of harm in these communities in turn generated a boomerang effect in which immigrant precarity contributed to faster spread of the virus across the city, and the lack of social protections for these workers made the virus harder to control overall.

Methods

This study is based on two years of ethnographic research with the NYTWA during the pandemic and included formal interviews with drivers and union officials and a convenience sample survey of NYTWA members' COVID experience. The ethnographic research emphasized attending union rallies and meetings, shadowing union organizers, and accompanying the union to public City Council meetings and lobbying sessions at the statehouse in Albany. When the pandemic hit NYC in March of 2020, the Alliance wanted to survey members to assess their immediate needs and invited me to collaborate to determine whether there were any pertinent sociological research questions that should be added to the survey. Through our collaboration, I suggested adding questions about the pandemic's impact on drivers' health, economic situation, and general wellbeing that went beyond the offer of mutual aid that was the Alliance's primary interest.¹ This collaboration situates the survey in the realm of community-engaged research (Strand et al. 2003) which shaped the survey's research objectives. This collaboration in the context of already ongoing, longer-term ethnographic study and interview work allows me to bring greater critical analysis and objectivity to the case. The survey was launched in mid-April of 2020, about a month after then-New York governor Cuomo announced his lockdown order, and most of the responses were recorded in the first two weeks. The union sent out the survey to workers alongside a COVID resource guide and distributed the survey to members via their email list, Twitter, Facebook, and various WhatsApp groups that the union runs to communicate with its members.

The survey generated 1,002 unique responses from drivers in the New York metro area. Given the multiple distribution methods, it is hard to assess the response rate, but the union claims to have 24,000 members of the City's total 16,500 yellow or green cabs and 101,600 for-hire-vehicle drivers,² which includes licensed app drivers (TLC 2020). The union did not want to ask questions about demographics or

immigration status in the survey for fear it would discourage drivers from seeking support. Generally, the City reports that 96 percent of medallion and 91 percent of app drivers are foreign born (TLC 2020). The largest country of origin for medallion cab drivers is Bangladesh (23 percent) and for app drivers is the Dominican Republic (14 percent), although South Asians make up the largest share of drivers across both categories at 30–40 percent (TLC 2020).

Several months later, in July 2020, the union conducted a second survey of solely medallion-owner drivers as part of their campaign to obtain debt relief for these drivers. This survey asked additional questions about medallion owners' experiences of the pandemic, including if they had gotten sick from COVID and if their lenders had paused payments given the state of emergency.⁴ This survey generated responses from 348 medallion owners. The results to this survey are also presented in the findings, providing a useful point of comparison in understanding how COVID continued to impact drivers three months after our initial survey.

Despite the limitation of a convenience sample being a non-representative sample, its relative speed and low cost made it a useful survey method in the sudden onset of the pandemic. Similar COVID impact studies of the City's Transportation Workers Union conducted by a team at NYU (Gershon 2020) and a study of gig workers in California conducted by a team at ULCA (Herrera et al. 2020) also used convenience samples. Our own survey was additionally biased by its connection to member requests for help from the union, as the survey offered assistance during the pandemic, with the particular focus of helping drivers apply for unemployment insurance (UI). While this biased the sample, as those who did not need such assistance might have felt discouraged from filling out the survey, the severity of the crisis meant nearly all drivers were applying for unemployment insurance or small business loans. Given this non-representative sample, the analytic approach of this article was to employ descriptive statistics using cross tabulations.⁵ Ultimately, despite the limitations of a convenience sample, the survey allows us to triangulate and contextualize the interview and ethnographic data.

Finally, I reached out to thirty-five drivers, both traditional and app-based, for formal interviews. These drivers were union members who I had met through previous ethnographic research or while following the Alliance's pandemic response. This resulted in fourteen formal interviews with drivers about their experiences navigating the COVID storm and three with union leadership. Most of the interviews were conducted in English but a few were conducted in Bengali with the aid of a union organizer providing translation. Given COVID restrictions, interviews were conducted over the phone or by Zoom between July and September of 2020 and lasted between thirty minutes to an hour. Most of the drivers formally interviewed were from Bangladesh with others from India, Pakistan, West Africa, China, and eastern Europe, while one was American born. A few drivers chose not to disclose their country of origin. I additionally attended numerous union rallies during the pandemic, where I discussed the impact of the virus with both drivers and union staffers. Informal interviews at rallies also included conversations with Caribbean and Latinx drivers. Drivers were not compensated for either their survey responses or interviews beyond any follow-up

support and resources offered by the NYTWA in response to their driver-assessed-need survey. Interviews were coded in accordance with the four primary themes of uncertainty: health; economic; bureaucratic; and immigration. Pseudonyms have been used for drivers interviewed but not for union officials.

Results

This article explores the impact of immigrant workers' precarity during the COVID pandemic, identifying the kinds of uncertainties this precarity generated at the outset of the pandemic as well as the hurdles workers faced in balancing health and safety with their economic realities. Across the interviews and surveys, four forms of uncertainty emerged as presenting the greatest challenges to drivers' ability to sustain themselves, their families, and their communities: health uncertainty; economic uncertainty; bureaucratic uncertainty; and immigrant community uncertainty. *Health uncertainty* was generated both by immigrant drivers' weak connections to the social safety net and to unreliable channels of information regarding how to avoid infection. *Economic uncertainty* was generated by the debt-to-work structure of the industry, which undermined drivers' ability to provide for their families. Governmental *bureaucratic uncertainty* was generated by the tensions of drivers' fissured employment conditions, as well as by immigrant status and language fluency when interacting with bureaucracies that are largely designed for and implemented by the majority white, English-speaking population. *Immigration uncertainty* resulted not just from the worker's own legal status but that of their families and friends, as well as the compounding challenges that arose from immigrant occupational and housing segregation. These uncertainties, therefore, are the socio-cultural mechanisms through which the disparate impact of the COVID pandemic and the attendant crisis of social reproduction was generated for precarious immigrant workers during the pandemic.

Navigating Health Uncertainty

COVID has had an outsized impact on the health of NYC taxi drivers. The health risk drivers faced was intensified by both their immigrant status and their concentration in heavily impacted immigrant residential communities. Drivers faced three principal forms of health uncertainty due to the COVID pandemic: health-related employment precarity; healthcare access uncertainty; and uncertainty regarding safety precautions. These uncertainties were the result of taxi driving as both precarious and immigrant work.

Taxi driving is a job that puts workers in constant contact with large numbers of New Yorkers each day. Although ridership declined dramatically with the outbreak of the pandemic, those drivers who did keep working faced greater exposure to the virus. Because of the early-pandemic subway closures in the first month of New York's COVID crisis, app drivers found themselves suddenly in the role of front-line workers, transporting nurses and doctors to work. Many longtime drivers also suffer from work-related health conditions that doctors' call "Taxi Driver

Syndrome." This is associated with higher incidence of genital and urinary organ diseases and cancers due to the physical stress of long-term driving (Mass, Goldfarb and Shah 2014), putting them in a high-risk category for COVID-related death. This was confirmed by our survey which found that many drivers were at a greater risk due to their underlying health conditions when compared to the rest of the city population (Table 1). Drivers in our survey had a median age 7.5 years higher than the city's labor force at large, putting them at a greater risk for COVID infection.⁶ Drivers were also at increased risk given their relative worse health than the average New Yorker. Only around half of the drivers in our survey reported being in "good" health, in contrast to over three-quarters (77 percent) of city residents reporting "good" health or better (NYC Dept. of Health & Mental Hygiene 2017). Drivers were also more likely to live in households susceptible to spreading COVID. One investigation found a strong link between the spread of COVID in New York City and average household size, as NYC neighborhoods with higher average household size experienced greater rates of infection (Dobkin, Cruz and Kim 2020). We found 44 percent of drivers reported living with four or more people whereas the New York City average household size is only 2.62. In our survey a month after the March lockdown, 5 percent of drivers reported having caught COVID. In our follow-up survey of just medallion drivers in July, 28 percent of respondents reported they had caught COVID and 4 percent reported having been hospitalized with COVID. An additional 9 percent of medallion owners said they did not catch COVID but that someone they lived with did. This compares to the 2.6 percent of New York City residents who had caught COVID in the same period, of whom only 0.70 percent had been hospitalized by the end of July 2020.⁷ Drivers, like other immigrant workers in their communities, often reported living with other frontline workers. Given immigrant workers' housing patterns and the absence of adequate social protections these workers were primed the spread the virus throughout New York City.

Table 1. Driver Virus Risk Factors Compared to the New York City Labor Force or Households.

	Drivers	NYC
Age (median)	47.5	40
% Over 55	27.6% (all drivers) & 51.5% (medallion only)	21.4%
Household size	44% live with 4 or more	NYC average household size 2.62
Live with an elderly person	35%	4.26% in NY State live in multigenerational households
Self-reported health "good"	52%	77%
Self-reported health "bad" or "okay"	43%	23%

Taxi driving as a precarious immigrant employment niche presented unique challenges for workers struggling to balance the uncertainty of their jobs with the uncertainty of their health. The general “unfreedom” (Phillips 2013) of the industry’s debt-to-work structure ultimately forced drivers to take risks with their health. As both medallion owners and app drivers take on tremendous amounts of debt to purchase and access their vehicles, the sudden loss of income during the pandemic meant rising debt due to accumulating loan interest. Drivers’ responses during interviews affirmed that the economic pressures from their debt and their lack of viable financial alternatives induced them to try to keep working or to return to work early, even despite gaining unemployment insurance in March 2020 from the Coronavirus Aid, Relief, and Economic Security (CARES) Act. As Kouame, a Côte D’Ivorian medallion driver, explained his COVID infection:

I kept working until I got sick because I don’t want to lose my medallion. I got COVID on March 26. I tried to go to the hospital, and it was full. Still, I was going to keep working. I was on the street in my cab, but then I got really sick. I called 911, but they didn’t take me to the hospital. They said, “Stay home. You will be safer.” I was so sick and so scared. I live alone. My family is in Africa. I was so worried.

The impact of all the financial risks of his employment being shifted onto him coupled with the large debt load that drove his uncertain employment made his health outcomes more uncertain. Kouame’s debt burden was such that he tried to continue working even after he knew he had COIVD.

Other drivers noted that the pandemic put into stark terms how uncertain their position as workers was. One driver, Krish, an immigrant from India, expressed his outrage at Uber’s announcement that they would give drivers who got COVID \$1,500 in compensation for missing work or alternatively as compensation to their families if they died:

You know, and I think so that is a shame on Uber. And it will be shame on me to work for \$1,500 if I get sick, or if I die, means Uber is putting drivers’ value \$1,500. It’s a multibillion-dollar company. All the money Uber made is from the drivers. And today they’re telling us if we work—and we are essential employees, we are essential workers. And we are willing to jeopardize our life to take a rich people from one destination to another. And our life value is only \$1,500. I don’t want to work for that … I don’t feel comfortable working for that kind of atmosphere.

Krish’s experience reflected the politicization many immigrant workers underwent during the pandemic. He felt taken advantaged of and underappreciated, pushing him to act. New York City saw an upsurge in immigrant activism following the pandemic, in which taxi workers played a prominent part.

Additionally, many taxi drivers faced uncertainty when attempting to access health-care due to their immigrant status. Access uncertainty does not only encompass insurance coverage but also uncertainty derived as an immigrant navigating the healthcare

system, such as language barriers or the need to rely on underfunded and less reliable public health institutions. Even when drivers did have health insurance, they reported confusion over evolving federal and city public health recommendations. Drivers also reported receiving unclear medical advice from their doctors, often made worse by language barriers. Numerous drivers told me their doctors advised them to stop working as they had preexisting conditions that would make them more susceptible to COVID. Yet they expressed bewilderment that these diagnoses did not come with additional support, such as extended pandemic benefits. As Chen, a Chinese driver, explained to me, “I have diabetes and asthma, so my doctor and the City say I shouldn’t work. I should stay home, but they only give support for so long. What do I do now?” Other drivers who caught COVID told me their doctors sent them conflicting messages about whether they should get tested or go to the hospital. Others said they did not have a regular doctor, and so relied only on the care of a family member.

When drivers did get sick, they largely depended on public health insurance for support and on New York City’s poorly funded public hospitals. Our survey found that most drivers rely on Medicare or Medicaid for their health insurance, which can in part be attributed to the expansion of Medicaid in New York State under the Affordable Care Act (ACA). Despite a public relations push by ride-hail companies asserting that they offer drivers a path for workers to obtain healthcare, only eight drivers in our study reported receiving health insurance from one of the insurance companies sponsored by the apps, indicative of how unaffordable these plans are in practice. Even drivers who did have insurance reported difficulties accessing the city’s strained public hospitals that predominantly served immigrant communities during the pandemic. Just because drivers do have health insurance does not mean they regularly use their insurance as they often struggle to find providers who provide care that is sensitive to their communities and their language abilities.

Health access uncertainty was compounded by the drivers’ general confusion over how to stay safe from infection. Drivers told me that the advice from their apps, garages, elected officials, and doctors seemed to be in constant shift. Much as in other parts of the country, immigrant communities also experienced a great degree of misinformation about the pandemic, spread over social media and WhatsApp groups (Ross, Diaz and Starrels 2020). Immigrant drivers in New York City use WhatsApp groups as a vital resource with which to share information about the job, the union, and their communities. During COVID, these groups could also spread misinformation and rumors.

Drivers who felt they had to keep driving faced increased COVID exposure and struggled to protect themselves. In our survey, 115 taxi drivers reported either recently driving a passenger to the hospital or driving a passenger they suspected was sick. Our survey found that neither garages nor app companies provided personal protective equipment (PPE) quickly in the first few weeks of the crisis. Moreover, we found that 75 percent of drivers reported not being able to obtain PPE from their garage or app company while only 6 percent of drivers reported being given PPE by their garage or app. As one driver explained, this left workers with many extra costs at a

time when they were earning less: "I spent a lot of money sanitizing the car. Each time the passenger gets out I had to sanitize the handle. Later in the pandemic, Lyft did send me one bottle of hand sanitizer and a mask. But you have to take time to go to the office to get enough."

The importance of customer ratings for app drivers further strained their ability to maintain employment while keeping themselves safe during the pandemic. Poor ratings from customers can result in a driver being kicked off the app. Drivers reported being scared that not providing customer service that broke social distancing rules would hurt their ratings. As Biju explained:

If we maintain, like, social distancing, because people, when you come to stop for them, then drivers are supposed to help them out [with their bags]. With social distancing, it may not be happening in that case. Before, in 100 percent cases, I tried to help people out. Now, you know, they keep their own belongings and should be taken care of by themselves.

Furthermore, as the politicization of the pandemic resulted in a vigorous anti-mask movement, drivers feared not only being kicked off the apps for their decisions but also feared physical violence. As Sharmin complained:

Plus, [drivers] are scared all the time. Some of the customers walk in without mask. They are scared, you know. And if they tell the customer not to do that, please wear the mask or they don't want to take him in their car, and that customer complaints to the Uber. Uber never listens to the driver. Uber listens to the customer. The driver will lose his job. In a lot of these cases, drivers said, "We just take the people without mask because if we fight with them, Uber listens to them not to the driver." You know, they just want to get rid of whatever income they are making. But it's a shame.

Many longtime Muslim drivers still carry the fear and trauma of the assaults and discrimination they faced following the 9/11 attacks (Mathew 2005). As in other service industries, app drivers were obliged to enforce city and state mask mandates, subjecting them to harassment they felt they must tolerate in order to avoid losing their jobs.

This uncertainty over how to avoid getting sick caused tremendous strain on drivers' mental health. As Salma, a Bangladeshi driver, explained to me:

When you were wearing a mask, you are having less oxygen in your brain. You are getting tired very soon. Yeah, and then like you're scared of being like infected. Who's riding in your car? ... Once you're infected, how many days you will be? Will I be at home, or will you have to go to hospital? How drastically will be your health situation? When I'm driving, I have to keep all these scary things in my head.

The severe mental health strain Salma and other taxi drivers suffered as a consequence of the pandemic was amplified by the precarious nature of their employment and the marginalization they experience as immigrant workers (Loustaunau et al. 2021). Huge debt burdens from medallions and app vehicle leases made it hard for drivers

to pause work, even after they received financial support, as will be discussed further in the next section. Beyond the mental strain, drivers' marginalized healthcare access and language barriers resulted in these workers receiving inconsistent medical care. Mixed messages from their companies and from government officials generated high levels of anxiety about the best course of action and opened room for the spread of misinformation through their communities.

Navigating Economic Uncertainty

The precarity of drivers' employment and immigrant status during the pandemic also presented unique forms of economic uncertainty. While workers across many industries experienced disruptions or dislocations due to the COVID outbreak, the workplace fissuring and conditions of unfreedom that characterize the taxi driving industry has shifted all the risk of employment onto these immigrant workers themselves, forcing drivers to make hard decisions during the pandemic. First, lack of knowledge about real industry conditions as they fluctuated over the course of the pandemic and its many variant waves, compounded by these workers' weaker attachment to employment and the welfare state, generated constant uncertainty. Second, the debt-to-work structure of the industry generated uncertainty and confusion, as benefit rules changed throughout the pandemic and the debt load drivers faced thrust them into a legal limbo, where some relief programs treated them as employees and others as small business owners. Third, the unique structure of app driving dictated by algorithmic management and customer ratings made drivers fear for their ability to maintain their employment if they took steps to safeguard their health. Economic uncertainty during the pandemic was further intensified by immigrant workers' marginalized social position and their sense that this position prevented them from speaking up.

Economically, COVID devastated the taxi industry. The industry was suffering from a general downturn before COVID, and drivers were already struggling with declining incomes. The NYTWIA reported 90 percent of members had to stop working due to COVID, which a study found represented one of the largest job-loss rates among unions in the city (Milkman and Luce 2020). Trips per day in the industry fell from over a million in February to 160,000 in April (Schneider 2020). The precipitous financial impacts forced many drivers to rely on family, friends, or immigrant networks, or to take on additional debt to weather the storm. As Kouame explained, "The impact of COVID is very bad. It has been damaging. We were already struggling big time. I tried to borrow money from friends for [my medallion] mortgage. COVID just finished us up. We are desperate. I don't know if there is any tomorrow for yellow [taxis]." Our survey found drivers were in desperate need of financial support. We found 789 of 1,002 drivers reported not having enough money for rent in the previous month, and 83 percent of drivers reported either not having enough money to put food on the table or were close to not having enough money. Of the 1,002 survey respondents, 715 reported taking on new debt in the last month due to COVID. We found

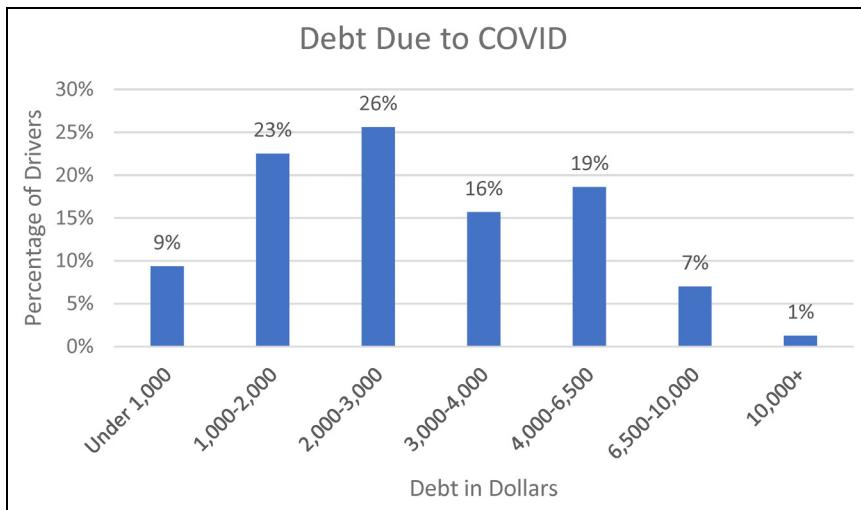


Figure 1. Self-reported debt drivers took out in the first month of the pandemic.

68 percent of drivers took on at least 2,000 dollars of debt, and 8.25 percent took on 6,500 dollars or more in the first month of the pandemic (Figure 1).

This economic crash generated a lot of financial uncertainty that was made more extreme by drivers' inability to properly assess industry conditions. Because drivers in all sectors are cast as independent contractors, the decision to work or not was left to the drivers themselves. While other low-wage workers returned to work when their restaurants or stores reopened following government guidelines, taxi drivers had to make this calculus themselves. This, too, posed large financial risks, as going back to work stopped UI payments and required drivers to pay fees for inspections and licensing to get back on the road. As Mohammed, an app driver, explained the dilemma to me, weighing the prospect of his UI running out despite the start of a second wave of infections in the fall of 2020:

At first it wasn't enough [UI] money, but I stored my license plate, so I don't have to pay the insurance. Meaning, I canceled the [NYC Taxi and Limousine Commission (TLC)] license plate. The car was paid off. The TLC plate is in virtual storage so I can get the plates back. But I will have to make an appointment with the bases [app companies] to accept the car and then get the plates. And the TLC will have to do a physical inspection—it's not that easy and it will cost me money. Once I do this, I have to work. It's a big risk. I got to make sure it's good to drive again.

Mohammed only had enough money to cover the reactivation costs once. That Mohammed and other drivers are forced to make such calculations with their livelihoods underscores how all the risks of their employment have been shifted onto these individual workers.

In this way, the debt-to-work and independent contractor structures of the industry have not only contributed to health uncertainty but also economic uncertainty for these drivers. Significantly, both medallion and app drivers take on tremendous amounts of debt to purchase their vehicles and secure the licenses to drive. Nearly all non-yellow lease drivers hold large debt loads, not only from these initial investments but also from subsequent costs related to City requirements, app company pressures, and vehicle wear and tear that makes upgrading their vehicle every few years a necessity. Prior to the pandemic, the NYTWA had already been fighting for years, calling for debt relief for medallion-owner drivers whose medallion costs had been artificially inflated by lenders in City-run auctions (Rosenthal 2019). Similarly, the NYTWA has also been fighting against predatory loans that have saddled app drivers with ballooning debts (Desai and Moya 2019). Our survey found 442 drivers reported having missed payments on their medallion or app vehicle, and 423 reported missing liability insurance or workers' compensation payments due to COVID. While the federal government suspended payments and interest on Fannie & Freddie mortgage loans as well as on student loan debt after the onset of the pandemic, medallion owners were at the mercy of their lenders for such relief. In the second July survey of medallion owners, only 24 percent of medallion owners said their lenders had suspended payments at all in the early months of the pandemic, while 33 percent said their lenders had never suspended payments during the pandemic. Bigu, a Bangladeshi medallion owner, explained, "The bank is calling me every day about the medallion. But I said I can't work—I have preexisting conditions. If you take my medallion, I can never pay you back." Similarly, some drivers were told payments would pause, only to find their lenders took their payments anyway. As Alexandru, a Romanian medallion owner, described:

I talked to the mortgage people on the last day I drove the car, March 19. I drove the whole day and only made ten dollars. I told them, "We have to do something because we don't have money." They said, "Don't worry about paying." But then they took the money anyway because we had automatic pay. I over drafted and that has a 20 percent interest rate. I can't fix it; I am at the mercy of these companies.

COVID only made the medallion-owner debt crisis worse.

This debt uncertainty was intensified by the evolving nature of pandemic relief programs. As drivers and other independent contractors are conventionally excluded from many social welfare programs, in March 2020, Congress temporarily modified the rules for eligibility through the CARES Act. This made all drivers eligible for UI but did not account for all their contractor costs, such as car debt. The result was an abstruse situation in which the government told drivers that while they would be considered employees for the purposes of UI, they should still apply as small business owners for additional financial relief. The rules for eligibility were unclear, and the government sent mixed signals by attaching interest rates to these business loans despite promising to forgive these debts later. One driver explained this confusion:

I haven't missed car payments yet because I registered my Uber as an LLC so I could get a federal small business loan, but it was just a little. I used it to pay for the car. Without that, I would have been late and lost everything. But I still have nothing now, which is why I'm still hanging out [searching for fares] on the street. Yesterday I requested to have the loan forgiven but haven't heard yet. If they don't forgive it, that's more bills in the future.

This shows how drivers' lack of access to social protections forced them to rely on the more uncertain small business programs that are structured as debt. As drivers struggled to navigate this obscure and ever-changing landscape of pandemic relief, many simply turned to what they knew, which meant going back to work, borrowing from immigrant social networks, or taking on credit card debt. One driver told me he put \$50,000 on his credit card to keep his medallion in the hopes the City would eventually agree to the Alliance's taxi driver debt-relief plan. While the interest rates on medallion and app vehicles are high, they are nothing compared to what credit cards charge. In this way, the debt-to-work structure of the taxi driving industry mirrors other precarious immigrant jobs that increasingly require entrapping contracts with large upfront costs (Breman 2007; Bales, Trodd and Williamson 2009).

Another type of economic uncertainty app drivers faced was the uncertainty of maintaining employment in the face of public health restrictions. In the absence of managers, drivers are subject to algorithmic management (Rosenblat 2018), which uses indirect signaling to drivers of when, how, and where to work while maintaining the apps' claims of drivers' managerial independence. These drivers, however, find algorithmic management to be anything but indirect. Drivers complained that to avoid being deactivated from the app (i.e., fired), they must work many hours including at unpopular times and perform large amounts of emotional labor for customers, such as providing water bottles and snacks at the drivers' own expense, since negative customer ratings can result in their termination. As the pandemic dragged on, drivers feared that they would not be able to get back on the apps or that the apps' algorithms would de-prioritize them in assigning trips if they did not resume working. As Ali, a Bangladeshi Uber and Lyft driver, explained:

Uber and Lyft pressure you to work certain hours. If drivers are not doing a certain amount of hours or jobs, they aren't letting you work. They are pressuring to work full time or only busy hours. It was a really tough situation for the drivers. We had to do a certain amount or couldn't work at all. It takes from freedom of driving with these apps from the driver.

Despite UI payments, drivers feared that if they did not risk their health and return to work, they would not have jobs to return to.

Navigating Bureaucratic Uncertainty

Taxi drivers' precarious employment and immigrant status also colored their interactions with government agencies when the state attempted to temporarily plug the holes in the Country's social safety net in response to the pandemic. Bureaucratic

uncertainty was characterized by confusion over fluctuating eligibility rules and immigrants' language barriers, distrust of regulators, and hesitation due to negative previous experiences with bureaucracies.

The greatest source of bureaucratic uncertainty for drivers was the rules of eligibility for various support programs as they altered over the course of the pandemic. Most traditional yellow drivers in New York City either own their medallion or lease a cab from a garage and are therefore considered independent contractors, lacking these traditional labor protections. As a result, Congress passed the Coronavirus Aid, Relief, and Economic Security Act, which was signed into law on March 27, 2020, establishing Pandemic Unemployment Assistance (PUA) that allowed state departments of labor to extend benefits to such independent contractors and others who would not traditionally have access to unemployment. In contrast, app-based drivers had already in 2018 been ruled by the New York State Department of Labor (DOL) as employees rather than independent contractors under state unemployment insurance law, in a challenge brought by the NYTWA (Scheiber 2020). Despite this ruling, when the pandemic hit, Uber and other app companies refused to comply with the UI law and withheld wage data from the DOL. In response, early in the pandemic, the NYTWA successfully sued the New York State DOL to force them to hold gig companies accountable and follow the department's 2018 determination. This process itself, however, generated a lot of initial unclarity, as Uber was petitioning the DOL to allow drivers access to PUA, but once the NYTWA won their lawsuit, app drivers, formally classified as employees, became eligible only for regular UI and not PUA.

This ambiguity around shifting eligibility rules created much confusion for drivers. As Gleeson (2016) has shown, even when immigrant workers have employment rights, their immigrant status can undermine their ability to access these rights or find redress for abuses at work when navigating government bureaucracies. The immigrant drivers' language proficiency and knowledge of the benefits available to them also resulted in disparate access, with many drivers being unable to successfully navigate complicated regulatory changes. These problems can be seen in the speed and issues drivers had in finding government support. Our survey was released on April 18, 2020. Most drivers filed for UI between the weeks of March 15 and April 12. Only thirty drivers had received unemployment assistance at the time they filled out the survey, even though a majority had applied before we launched the survey. Overall, 88 percent of drivers were either still waiting on a UI decision (58 percent) or were not sure of the status of their claim (30 percent) at the time of filling out the survey. In contrast, of all New York State residents who applied for UI in April 2020, the month most driver filled out the survey, only 1 percent had not received their first payment within thirty-five days. Even for May 2020 claimants, who across the board encountered a processing bottleneck, fewer New Yorkers overall were forced to wait for payments (63 percent) than drivers had.

When drivers did communicate with the DOL about UI and PUA, the instructions they received were not always consistent. As the union president, Bhairavi Desai, explained, "The DOL was refusing to implement the law. They were confusing the

drivers. They were forcing drivers to fill out multiple applications. Telling app drivers to fill out forms they shouldn't have had to under the law. Not telling yellow drivers about PUA. It undercut the benefits they were entitled to." When drivers were contacted by the DOL about their unemployment applications, only 19 percent of the drivers we surveyed reported being told to apply for PUA and 45 percent reported being told nothing about PUA (Figure 2). Indicative of this confusion, when I asked one driver, who worked primarily for a yellow garage but had also worked for Uber, if he was told by the DOL to apply for PUA, he said, "No, just regular unemployment because in 2017 I used to work as an Uber driver, too, so I'm just getting the regular unemployment." This driver had not been given proper information, denying him valuable financial support he was entitled to. Congress exacerbated this state of uncertainty by their failure to promptly extend UI as the pandemic dragged on. Each time benefits were about to run out, drivers expressed a wave of fear as the industry had yet to rebound.

Language barriers, a complicated system, inconsistent messaging, and workers' distrust of bureaucracy further clouded immigrant taxi drivers' attempts to access benefits in a timely manner. Despite the State setting two definitive rates for weekly UI payments for yellow and app-based drivers, respectively, drivers in my interviews reported being awarded vastly different amounts. For example, John, a white, American-born driver, not only reported a relatively easy experience applying for unemployment insurance but knew to appeal his initial payment determination to get the full amount he was owed. In contrast, when I explained to some immigrant drivers that they were being underpaid and could appeal their rate, they reported it felt like too much of a hassle and that their English was not good enough

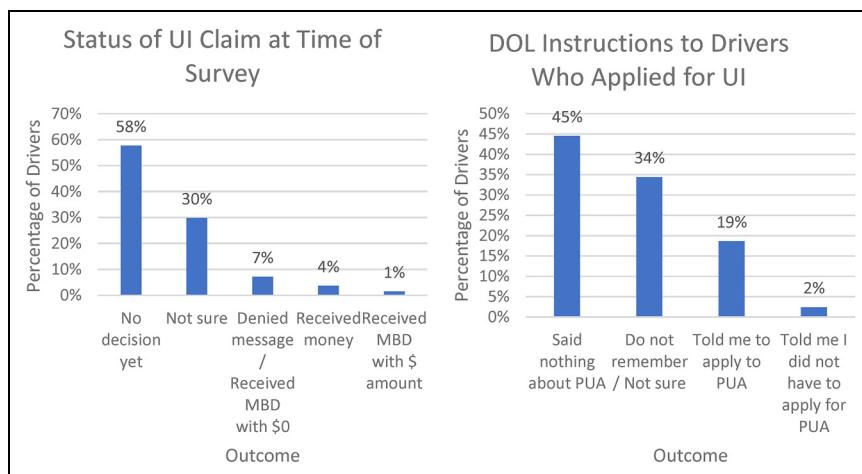


Figure 2. Status of drivers' UI claims and instructions received from the Department of Labor (DOL).

to fight the ruling. Early in the pandemic, immigrant eligibility for PUA was also unclear, and many feared that applying for it would impact their immigration applications. While the NYTWA attempted to provide them guidance, some drivers interviewed noted that they had ultimately turned to brokers in their community to help them file for benefits or to store their TLC plates. Many of these brokers took advantage of these immigrants' limited experience of the system, taking illegal cuts from their benefits or, in one case, stopped returning a driver's calls after stealing his car.

Drivers were often wary of interacting with bureaucracies they felt devalued them because of their immigrant status. One example, the Taxi and Limousine Commission, the primary regulator of taxis and app vehicles in NYC, is in the conflicting position of being tasked both with protecting drivers' rights and fining drivers for failing to follow City regulations. The fines and licensing fees the TLC collects are a major revenue source for the City and are often viewed by drivers as a scheme to exploit immigrant workers' desperation. During the pandemic, drivers depended on the TLC to allow them to temporarily store their license plates, saving them money on fees and insurance with the plan to later get back on the road when conditions improved. Drivers complained that the TLC continued implementing their "harassing" fines and fees during this period, however, instead of streamlining the system in response to the pandemic. As one driver explained, a view of the TLC typical of the immigrant drivers I spoke with:

When you sit down and have a conversation [with the TLC], you know that the basis of the whole thing is they are banking on the ignorance of these vulnerable drivers who probably don't speak very good English. And they think they are foreigners, which is all based on a recipe of subjugation. So, they set up the system to continue to marginalize the drivers. [For] example, [...] I had an inspection with TLC. My car is a brand-new vehicle ... And they said the car started making noise ... So, the TLC gave it back to me for more inspections. They say, "Oh, you have, you failed inspection," but nothing was really wrong, they just wanted more money ... I told them, "I can't take it anymore ... I will have to go to court with you." ... Most of these brothers and sisters [other drivers], some of them didn't even go to school, can't read their letters. What [weaker English-speaking drivers] do is, when they have been stopped several times, they know to bring me their letters to have me to explain it to them... [The TLC] was trying put me in the same category ... Yeah, that's all it's about, it's about money. It's about taking advantage of the vulnerable and the poor. This is what our system is built up upon. And now the pandemic probably is teaching them a lesson. You have to keep the economy vibrant, and everybody who has to have a safe life. You just cannot put your knee on one person's neck.

It was hard for drivers to trust that they could find relief from the same organizations they felt had been exploiting them before the pandemic. This driver's comments also speak to the boomeranging externalities of the fissured workplace. Setting up a system that made these immigrant workers so precarious in the first

place undermined the City's later ability to effectively provide them financial relief during the pandemic.

Navigating Immigrant Community Uncertainty

Beyond the health, economic, and governmental bureaucratic uncertainty that exacerbated the effects of the COVID pandemic for drivers, they also faced unique uncertainties stemming from their concentration within immigrant communities. First, immigrant drivers were likely to live with other frontline workers in other immigrant employment niches such as food service, nursing, and government service work. Second, while taxi drivers are more likely to be documented than workers in other immigrant employment occupations, drivers still had many family members and friends whose insecure immigration status complicated their finding formal pandemic support. Finally, these workers' tenuous connection to social welfare programs triggered a general crisis of social reproduction in these communities, as traditional family and community structures of support were strained by the demands of the pandemic.

Immigrant drivers' concentration in immigrant neighborhoods with other frontline immigrant workers focused the impacts of the pandemic on these communities. As the *New York Times* reported, the seven square miles of Central Queens, where most drivers in our survey lived, was the neighborhood hardest hit by COVID (Correal and Jacobs 2020; Khullar 2020). This area is home to some of the city's largest Latinx, Bangladeshi, Indian, Chinese, Filipinx, and Nepalese communities—for many of which, driving is a predominant source of employment. This small geographical area had nearly as many COVID cases as did all of Manhattan, which has three times as many residents. Residents here live in some of the densest housing conditions in the city and predominantly work in occupations that could not be shifted online. Similarly, the NYTWA's African membership largely lives in the Southeast Bronx, where the death rate from COVID was the highest in the city (Schwartz and Cook 2020). The Bronx is also ranked as New York's least healthy county, with high rates of COVID comorbidities, and doctors note that the lack of preventive healthcare for immigrants in the Bronx made it harder for them to seek medical attention when infected, often relying instead on faulty information from social media (Ross, Diaz and Starrels 2020).

Our survey found that drivers were both at high risk for contracting the virus and were disproportionately positioned to spread the virus to others. Taxi drivers are older, live with more people, and are more likely to live with an elderly person than the average New Yorker. As discussed above (Table 1), we found drivers lived with an above average number of people and were more likely to live with an elderly person. As one Chinese driver explained, "My wife is still working at the post office, but we live with my elderly mom. And we have kids. How are we supposed to keep everyone safe?" Drivers also tended to live in the neighborhoods hardest hit by the pandemic. Looking at the thirty-five zip codes in the city where drivers were most likely to report living, 83 percent of these neighborhoods had an above average number of COVID total cases

and 57 percent were in the top quintile for COVID cases across the city. Of these same neighborhoods, 69 percent had above average COVID infection rates, and 29 percent were in the top quintile for COVID infection rates.⁸

The legal immigration status of drivers' friends and families also added uncertainty during the pandemic. While taxi drivers themselves are far more likely to be documented than workers in other immigrant occupations, this does not mean they are immune from the insecurity of the work–citizenship nexus. Many drivers only have temporary, not permanent, residency status, restricting their options for finding other employment. Many also noted having family members with uncertain immigration status, which limited their family's access to social support during the pandemic. Multiple drivers in my interviews noted that when the pandemic hit and international borders closed, their spouse or another family member got stuck in their home country, straining childcare resources. One driver, Ali, told me he had to suffer through COVID infection alone while his wife was stuck in Bangladesh. Others discussed the emotional toll of helping friends or family members who did not qualify for pandemic support. As John explained to me:

I have a friend who was working full time at a restaurant, the restaurant closed. He was laid off, and because he does not have papers, he didn't get any kind of unemployment assistance whatsoever. So, you know, he's basically been extremely, you know, just relying on assistance, like help from friends and struggling, basically.

John then went on to explain to me that because the supplemental pandemic benefits had run out, he himself was going to be late on his next month's rent. That John described himself as "lucky" highlights the widespread desperation faced by working-class New Yorkers throughout the pandemic.

The COVID-19 crisis created a general crisis of social reproduction, as traditional community structures failed to meet the increased needs. It is often argued by app companies that their independent contractor model is desired by the workers themselves for the flexibility the work provides. In my interviews, drivers certainly noted the flexibility of both app and traditional taxi driving as a major draw to the industry. However, drivers explain the flexibility not as a benefit, but a necessity driven by the relative unfreedom of their other employment options and of the stress of their weak attachment to possible social services for support. As one driver explained, "I started driving because my wife's nurse job doesn't provide flexibility. I need to be able to take care of the kids if I need to." When the pandemic undermined their ability to provide for their families, many drivers expressed the mental strain of this loss. As one driver said, "It's tough. Some of us have pride. I can't go out and beg for food. I can't believe I'm in this situation. I'm doing the best I can to keep my mind and body together." Additionally, many taxi drivers must not only attend to their own social reproduction but that of family members in their home country, who depend on remittances that these drivers were suddenly no longer able to send. Another Bangladeshi driver, who had worked both yellow and apps for twenty-one years, lamented his inability to provide for his kids and suggested he might follow some friends to the Midwest:

I know like more than like ten families who were driving yellow and Lyft and Uber. They move to another state because, you know, they can't afford it here ... So, they went to mostly Indiana ... Houses are very cheap. You know, they have a lot of jobs over there? Some of them, they work for Amazon. So, I was thinking to maybe go look for a house.

The uncertainty of these immigrant workers' lives driven by their employment precarity precipitated a general crisis of social reproduction in the pandemic, as traditional community structures broke down in the face of the virus's overwhelming concentration in their communities.

Union Response

The multiple and intersecting uncertainties precarious immigrant drivers and their communities had to navigate during the pandemic required the help of community mediators, and the unique nature of these uncertainties helps explain the form of unionism employed by the NYTWA. The NYTWA formed in the late 1990s out of South Asian immigrant organizing in the city and the community's goal to rehabilitate their dominant industry. In many ways, the Alliance is more like a workers' center than a traditional union. Immigrant workers, who face many barriers to forming or participating in traditional unions, have instead historically formed immigrant workers' centers that can fight for immigrant workers as both workers on their jobs and immigrants in their communities (Fine 2006; Rosenfeld 2019). Instead, the Alliance operates as a worker center/union hybrid, exhibiting features of both forms. In this way, the Alliance has made great strides in improving the taxi and app-based driving industry in NYC despite their lack of formal union rights under the National Labor Relations Board due to drivers' status as independent contractors (Johston 2019; Gaus 2014; Wolf 2021). The Alliance's response to the COVID pandemic shows how such workers' center/union hybrid models can be employed to provide representation for precarious immigrant workers and how these organizations can play a mediating role between immigrant communities and the state. The moment of crisis in which the pandemic exacerbated already existing inequalities also highlights the role workers' centers can play in generating political meaning and understanding for these communities, directing community anger toward collective action.

Immediately following the NY governor's shutdown order in March 2020, the Alliance focused on providing mutual aid to drivers' communities. This included connecting drivers to food banks, bringing supplies to sick drivers, and generating a pandemic resource booklet. The union also coordinated with the Mayor's Immigrant Affairs Office to help distribute PPE to immigrant communities throughout the city. The survey discussed herein was a major component of the Alliance's mutual aid effort. Everyone who filled out the survey and requested assistance was received a follow-up call by an Alliance staff member, regardless of whether the respondent was a dues-paying member or even occupied as a taxi driver. Their commitment to helping anyone in the community who needed assistance is indicative of the mission of workers' centers historically.

Defending taxi drivers' legal rights was another primary goal of the Alliance's COVID response. Central to this program was ensuring drivers got access to unemployment benefits. Connecting drivers to government assistance was an ever-moving target, as new laws were passed and government rulings changed, and the union's lawsuits were instrumental in determining the benefits drivers could obtain. The Alliance also partnered with a legal clinic at Columbia University to get thousands of drivers, both app and yellow, legal support for their unemployment insurance claims, processing 3,000 driver requests for support. Additionally, the union made 5,000 calls to members in the first month of the pandemic in response to member requests for help.

Like other social movements, the Alliance engaged in numerous acts of protest over the course of the pandemic, utilizing the stark inequalities of the pandemic as a renewed call for long-stalled reforms. As the president, Bhairavi Desai, explained the need for protests during the pandemic, "Protests are the only way to be heard in this moment where there is so much crisis and pain. It's so hard to be heard when 9 million people [in the city] are facing the same crisis. To be heard you have to be seen." Beyond fighting for UI benefits, the Alliance engaged in a massive fight for medallion debt relief for owner-drivers. The union, backed by powerful political allies including State Attorney General Tish James and U.S. Senator Chuck Schumer, argued that the City and lenders had illegally marketed the value of taxi medallions to drivers, artificially inflated their price during City-run actions, and specifically targeted immigrants to take on this economic burden (Rosenthal 2019). The union had already been pushing for the city to restructure the drivers' debt into manageable and fair payment plans when the pandemic hit and pushed the issue to a crisis point. The NYTWA pushed Sen. Schumer to include medallion debt relief in the federal COVID-19 relief funds for New York City, to pay for the Alliance's debt-forgiveness program. Instead of embracing the plan, however, New York City mayor Bill de Blasio issued his own plan using the federal funding, which was less generous to drivers and which the union labeled a "bank bailout" only. Not backing down, the union established a 24/7 protest camp in front of city hall. There they stayed for forty-five days despite dropping temperatures. But the City would not budge, and on October 20, 2021, the union began a hunger strike that garnered international media attention. In total, six drivers fasted for fourteen days, with seventy-eight people, including City Council members, joining the strike in solidarity at various points (Crabapple 2021). Throughout, the union engaged in civil disobedience, blocking traffic on the Brooklyn Bridge with their cabs and joining with elected officials to block traffic on Broadway next to city hall. Pitching themselves as heroic essential workers who had helped doctors and nurses get to work in the early day of the pandemic, the Alliance received broad public support and sympathetic editorials in the local press. On November 3, the Alliance and the City reached an agreement that adopted nearly every detail of the drivers' plan. For some drivers, this victory meant relief of half a million dollars of debt. In the heart of the pandemic when 90 percent of their members had to stop working, the union achieved two of their major goals: getting the New York State DOL to enforce the ruling that app drivers were employees under UI law and achieving debt relief for medallion drivers.

The stark inequality exposed by the pandemic and the Alliance's stunning victories proved a momentous opportunity for popular education in these immigrant communities. The desperation of the moment and the concentration of harm on immigrant workers deemed essential provided a powerful frame of reference with which to alter the narrative and demand change. The Alliance's pandemic wins for both app driver UI coverage and medallion debt relief had a big impact on the membership. Interviewees pointed to these victories and to the Alliance's mutual aid efforts during the height of the pandemic as the reasons for their ongoing commitment to the union. The Alliance in turn reported a jump in membership and in dues payers following their successes. The Alliance exemplifies how community unionism can play a mediating role in helping workers caught in the work–citizenship nexus and experiencing hyper-precarity. By adopting an innovative worker center/union hybrid model, the Alliance was able to straddle the dual precarities taxi drivers face as both insecure workers and immigrants. During the pandemic, the role the union played was vital in connecting drivers to social supports they otherwise struggled to access. The malleability of NYTWA's union model points the way forward to providing a voice for workers and communities that are otherwise excluded from labor and social protection programs.

Conclusion

The COVID-19 pandemic unleashed an unprecedented challenge to our sociopolitical infrastructure. When the pandemic exploded in New York City, the impacts were not felt uniformly. The “epicenter of the epicenter” was found in the city’s immigrant neighborhoods, where low-wage service workers, like taxi drivers, found themselves recast as essential workers while simultaneously facing declining incomes and precipitous job loss. While thousands of white-collar workers in the city began working from home or received unemployment insurance, many immigrant workers found these benefits difficult or impossible to access. New York’s immigrant communities felt the worst effects of the pandemic, due to their hyper-precarity. These problems added to the general decline in employment protections and the welfare state in the United States since the 1970s. As immigrant workers are disproportionately concentrated in fissured employment arrangements (Weil 2014), they are left more weakly connected to social insurance programs and to government bureaucracy more generally—resources that provided vital lifelines to millions during the pandemic.

While the demographic and socio-spatial factors that contributed to immigrants’ disparate experience of the pandemic were clear, the socio-cultural mechanisms that functioned to exacerbate this gap were less well understood. This article evaluated the role of four specific uncertainties—health, economic, bureaucratic, and immigration—as mechanisms driving the socio-cultural aspects of the pandemic’s unequal impact on immigrant communities. These uncertainties are generated by immigrant workers’ employment precarity and conditions of unfreedoms that are in turn the result of their position within the work–citizenship nexus and the racialized process of welfare-state decline.

For scholars of the welfare and the regulatory state, this article shows how the decline in these systems interacts with workers' immigrant status. The great risk shift and the decline in labor protections is an intersectional process having more significant externalities for minority populations. The decline in employment protections and of the welfare state, when combined with the hyper-precarity of immigrant workers, generated a boomerang effect as the denial of social incorporation for these workers turned their neighborhoods into virus hot spots that in turn fueled the severity of the crisis in New York City at large. This effect was due to immigrants' occupational segregation into weakly regulated work, resulting in their relative unfreedom due to adverse labor market incorporation (Phillips 2013). The issues of precarious immigrant employment are felt broadly throughout immigrant communities, regardless of an immigrant's legal residency status (Anderson and Rogaly 2005). I found that the uncertainty derived from their position in the work–citizenship nexus characterized NYC immigrant taxi drivers' experiences of the pandemic. This uncertainty manifested in a social phenomenon, as immigrant communities attempted to make meaning of the crisis and navigate support structures they were previously weakly attached to.

For scholars of immigration and employment, this article highlights the role of the work–citizenship nexus in generating uncertainties that resulted in a crisis of social reproduction, which became unmanageable during the pandemic. The four uncertainties under consideration here were health uncertainty, economic uncertainty, bureaucratic uncertainty, and immigration uncertainty. In each case, drivers' precarious employment, guided largely by their independent contractor status and their position as immigrants, characterized their experience of these uncertainties. Health uncertainty owed both to drivers' contact with many customers as well as to their weak connection to dominant healthcare systems, which failed to provide immigrant communities with consistent messaging about the pandemic or adequately combat COVID misinformation in their communities. Economic uncertainty was primarily driven by the relative unfreedom of the debt-to-work structure of the taxi industry. App drivers faced additional uncertainty as restrictive company rules and threat of deactivation pushed drivers back to work earlier than many wanted and generated the fear of customer backlash if they enforced COVID safety protocols. Bureaucratic uncertainty was driven by changing rules, the historically weak institutionalization of immigrant workers, and past negative interactions with government bureaucracies that made finding pandemic support more difficult for these drivers. Finally, immigration uncertainty stemmed from the concentration of the pandemic in their communities, concerns for undocumented friends and family members, and a general crisis of social reproduction further intensified the pain of the pandemic on immigrant workers. Highlighting *uncertainties* as socio-cultural mechanisms through which precarity generates community crises expands our understanding of employment precarity as a community process with broad externalities. Threats to the maintenance of social reproduction, however, prompted strategies of community organizing and labor union response that were singular to the social position and needs of immigrant drivers and their communities.

For social and labor movement scholars, this article explores how unique representative forms aided in transforming a moment of crisis into a moment of popular

education and movement. The extreme COVID crisis compounded by drivers' previous ill treatment in their precarious jobs consolidated into popular education and resistance. Organizations like the NYTWA played a mediating role not only in helping drivers and their communities navigate the uncertainty of the pandemic but also to make meaning of their circumstances and direct their anger toward collective action. Additionally, examination of the NYTWA highlights how innovative worker center/union hybrid models can better serve precarious immigrant workers given their lack of formal protections under labor law.

The findings of this article do have analytic limits due to the sampling strategy and as a singular case study thereby limiting the generalizability but underscore the need for further research on the intersection of precarious immigrant workers, fissured employment, and the great risk shift. While this study investigated the case of taxi drivers in NYC, the issues of uncertainty, immigrant precarity, and the racialization of the risk shift raises broadly applicable questions for scholars of immigration and labor. Additionally, the convenience sample survey conducted points to the need for future representative studies of the immigrant experience that can quantify the broader externalities of the government ignoring and marginalizing immigrant communities at work. Importantly, however, my partnership in this research with an immigrant organization helped to combat the conventional access challenges of surveying a weakly institutionalized population. This experience highlights the potential importance for researchers studying marginalized populations in utilizing community-engaged research that can provide tangible research benefits. Regardless of the study's limits, the ethnographic and interview data robustly illustrate the challenges and strategies of immigrant drivers in finding social support during the COVID-19 pandemic.

In conclusion, the experience of New York City taxi drivers and their communities during the COVID-19 pandemic highlights the boomerang effect of failing to extend social citizenship and protections to immigrant workers. The racialized nature of the decline of the welfare and regulatory state is revealed as an intersectional process for immigrant workers within the work–citizenship nexus. These forces helped drive working class immigrants' employment precarity and made responding to the social reproduction crisis of the pandemic within their communities untenable. This article proposed *uncertainties* as a means for understanding the socio-cultural processes that hampered immigrant workers' response to the pandemic. The consequences of these uncertainties not only intensified the pandemic but underscore the society-wide externalities of persistent immigrant precarity. Considering these uncertainties, evaluating the role of NYTWA's efforts to support drivers during the pandemic highlights why traditional forms of worker representation fail to help precarious immigrant workers, who instead require holistic representation both on the job against workplace abuse but also in their communities, where they face a crisis of social reproduction.

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Notes

- 1 All research was conducted in accordance with the ethical guidelines approved by University of Wisconsin-Madison's Institutional Review Board. Updated IRB approval was obtained to include this COVID research and survey. All data was stored, and confidentiality was maintained in accordance with the IRB approval.
- 2 While NYC recognizes many categories of taxis, the two major categories are traditional yellow taxis, which includes medallion-owner drivers, garage-owned yellow cabs, and green cabs that serve the Boroughs outside of Manhattan, and for-hire vehicles, which includes app-based cabs, black cars, and limousines. I primarily use the terms “yellow” and “for-hire vehicles” to represent these categories broadly. Otherwise, I use the specific class term when referring to issues facing one group, such as medallion owners or app drivers.
- 3 “Licensed” does not mean active, so these numbers are likely over counts.
- 4 A taxi medallion gives a driver the right to own and operate their own yellow or green cab in NYC. About 30 percent of yellow and green cabs are owned by individual drivers instead of garages. As discussed in detail below, before COVID hit, medallion owners were already facing a debt crisis due to possibly illegal actions of the City and lenders as well as a decline in earnings due to the entry of ride-hailing apps to the market.
- 5 Data is presented for all driver types combined instead of disaggregated between sectors. This is done for two reasons. First, many drivers reported working in multiple sectors concurrently. Second, as the survey data is supplemental to the qualitative research, I avoided detailed manipulations of the data.
- 6 Data on the ages of NYC's labor force were based on cumulative 2020 CPS data calculations made by the Bureau of Labor Statistics (BLS). The data is unpublished but was obtained through written communication with an economist at the BLS in February 2021.
- 7 New York City percentages are based on the author's calculations of New York Health Department data. Hospitalizations are reported as the sum of current patients, cumulative discharged patients, and cumulative hospital fatalities. Data accessed April 2022 at: <https://coronavirus.health.ny.gov/covid-19-data-new-york>
- 8 Numbers are based on NYC Health Department Data as of October 20, 2020. Accessed at: <https://github.com/nychealth/coronavirus-data/blob/master/data-by-modzcta.csv>

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