PIONEER OPPORTUNITY

# What We Do and Don't Know about Online Platform Rideshare/Delivery Workers in Massachusetts

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PIONEER INSTITUTE
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## Introduction

In August 2021, "Massachusetts Coalition for Independent Work" filed two versions of its "App-Based Drivers as Contractors and Labor Policies Initiative" for a possible vote in November 2022. The industry-backed initiative aimed to ensure that "app-based" drivers would continue to be classified as independent contractors, and that they would not be compensated for time spent waiting for rides or deliveries. Both versions featured guaranteed minimum compensation, paid sick time, healthcare stipends, accident insurance for drivers, and some legal protections against termination. One version of the initiative also mandated safety training for drivers. The initiative followed a similar effort in California (Proposition 22) which passed in November 2020 with approximately 60 percent of the vote. The legality of Proposition 22 is currently in dispute, and the Massachusetts initiative was recently dropped from the ballot by the state's Supreme Judicial Court (SJC).

The employment status of these workers in Massachusetts now becomes a legislative matter. The legislature must decide how to treat H.1234, which was introduced in 2021 and would achieve ends similar to those sought by the ballot initiative. The biggest hurdle to getting a good piece of legislation through the two Massachusetts chambers is that legislators and the general public actually know very little about online platform rideshare and delivery workers. This paper outlines the eight questions policymakers need to answer to have the fact base necessary to craft a rational set of policies about online platforms like DoorDash, Instacart, Lyft, Uber, etc.

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## Background

The onset of the COVID-19 pandemic has impacted all sectors of the economy, but perhaps none as much as the online platform rideshare/delivery sector and its labor market. Before the start of the pandemic, Uber and Lyft were already household names, creating the app-based rideshare industry from scratch and becoming an influential and disruptive economic force. At the start of 2020, the question of how best to classify workers in these industries — where workers enter into a professional relationship with firms that serve as middlemen to match workers to customers, usually to transport goods or people, such as drivers for Uber, Lyft, Instacart, DoorDash, Postmates or Grubhub — was already a hotly contested public policy issue.[1]

In March of 2020, the demand for mobility services at Uber and Lyft declined significantly, even as food and other product delivery apps became ubiquitous, stimulating considerable job growth through 2020 and 2021. The pandemic brought massive shifts in consumer behavior, especially with respect to delivery of groceries, household goods, meals, etc., through smartphone apps, greatly increasing the demand for gig workers. Delivery drivers were termed "essential workers," during the pandemic.

This nationwide change has impacted Massachusetts as well, with active policy and legal discussions regarding the employment status of gig workers. An indirect initiated state statute (Massachusetts App-Based Drivers as Contractors and Labor Policies Initiative) was originally scheduled to appear on the statewide ballot in November 2022. This initiative would have classified gig workers as independent contractors instead of full-time employees and was receiving heavy financial support from a coalition of rideshare and delivery firms before it was recently tossed by the SJC because it buried "vaguely worded provisions" deep into a proposal that, in effect, melded two unrelated subjects under a single question.

The legal landscape involving gig worker pay, benefits, and rights is still evolving in real-time. Since the mid-2000s, a majority of states have established task forces to examine whether gig workers should be considered independent contractors or standard employees. In April 2021, U.S. Secretary of Labor Marty Walsh signaled support for gig workers to be classified as employees. By the time this summary study is published, the Seattle City Council will have voted on policies mandating a minimum wage and per-mile rates for gig drivers.

**The legal landscape involving gig worker pay, benefits, and rights is still evolving in real-time.**

The Massachusetts ballot question came on the heels of a similar effort in California. California Assembly Bill 5 passed in 2019, with the intent of compelling many firms utilizing gig workers to classify the workers as employees. In response, California ballot initiative (Proposition 22), which passed with almost 60 percent approval in 2020, carved out exemptions for transportation and delivery drivers, classifying them as "independent contractors." Currently, the constitutionality of Proposition 22 is being argued over in courts.

Although not directly relevant for the gig workers, the lack of regularly scheduled and guaranteed time and income for retail, hourly workers has also been addressed at the state and local levels. Several states and the District of Columbia have instituted laws mandating compensation for workers who show up for scheduled hours but are sent away due to lack of work. Oregon and many localities have passed laws regulating work scheduling practices of businesses. For example, San Francisco passed the *Formula Retail Employee Rights Ordinances* in 2015 to mandate that "formula retail establishments," which include large chain restaurants and retailers, provide their workers with shift schedules two weeks in advance. If businesses needed to adjust schedules afterwards, they could be penalized by up to four hours of pay. Additionally, other provisions in the law penalized businesses that utilized on-call shifts when the employee is not called in to work, and induced firms to offer their part-time employees additional hours instead of hiring new workers.[2]

## Analysis: eight questions, eight answers

Would the Massachusetts Initiative, on balance, have benefited gig workers and consumers? Given the continued fight over Proposition 22 in California, there may not be a clear-cut answer to that question. But in both cases the fact remains: Not enough evidence is available to the public (or to legislators) to make an informed determination.

Despite the growing importance of the gig economy, there does not yet exist robust academic literature or broad consensus on this topic. The lack of good data from authoritative entities, such as the Bureau of Labor Statistics, the rapidly changing nature of gig work, and the impact of the COVID-19 pandemic have made it difficult to capture a comprehensive picture of gig workers. However, there are several recent studies (academic papers and consulting reports), that describe this sector in some detail. Below, we outline what is currently known as well as highlight what is unknown about this important and growing labor force.

This paper outlines the eight key questions that need to be answered for legislators to craft rational oversight of the gig economy.

### 1. What is the population we are interested in, and do we have the data needed to study that group?

The population that would have been impacted by the Massachusetts initiative, had it gone to the ballot in November, are "app-based drivers" who are defined as:

> *… drivers for rideshare and delivery companies who use digital applications and who are not (1) required to work specific days or hours; (2) required to accept specific requests; (3) restricted from working for multiple rideshare or delivery companies; or (4) restricted from working in any other lawful occupation or business.*
>
> *~ from text of ballot summary of Massachusetts App-Based Drivers as Contractors and Labor Policies Initiative (2022)*[3]

These would be drivers who use smartphone apps from firms such as Uber, Lyft, Instacart, DoorDash, Postmates, Grubhub, Amazon Flex, etc. to connect with customers.

The industry is extremely young, and it is evolving fast. Uber, the first of these app-based rideshare/delivery firms, launched with three cars in 2010. Lyft launched in 2012. Currently, several million drivers use Uber and Lyft apps worldwide, although the industry is characterized by a high rate of "churn," or drivers who stop using the app after a short period of experimentation.[4] As such, detailed individual-level longitudinal data is in short supply. Researchers have had to study the workers in this new industry based on how the available data define the workforce.

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Data used for research in this area can be broadly grouped into four categories:

1. ***Survey data from government sources and think tanks***

The Current Population Survey (CPS) is a monthly survey of U.S. households from the Census Bureau that provides snapshots of the labor force. In 2017, data on "contingent workers" in "alternative employment arrangements" were collected in the Contingent Worker Supplement (CWS). Contingent workers are those who report that their jobs are only temporary, as they do not have an explicit or implicit contract for stable long-term employment. Workers in alternative employment arrangements include independent contractors, on-call workers, and those contracted by help agencies or third-party firms.

The American Community Survey (ACS), also run by the Census, covers many of the same topics as the CPS. In addition to telephone and in-person visits (as is done for CPS), ACS also solicits responses via mail and the internet. While CPS surveys are voluntary, ACS responses are mandatory. Regardless, both surveys have high response rates. The ACS sample size is much larger (three million per year vs. 100,000 per year for CPS). Both surveys have rich socio-demographic and career-related information collected consistently over decades, making them the "workhorses" of labor and personnel economics analyses.

The General Social Survey (GSS), run by the National Opinion Research Center (NORC) at the University of Chicago and supported by the National Science Foundation (NSF), is a long-running representative survey of adults in the U.S. that collects, beyond standard socio-demographic information, data about behaviors and attitudes that touch on civil liberties, crime and violence, social mobility, etc. The sample size for the survey is relatively small.

The GSS, ACS, and the CPS — CWS only ask about details of the primary job/work arrangement. Information on secondary jobs, if any, are unavailable. In addition, the CPS — CWS asked about "electronically mediated employment," which includes jobs or tasks assigned by apps from rideshare or delivery firms. It also encompasses traditional independent contractor jobs (house or yard work, for example) obtained through websites or work done entirely online (ex. filling out surveys for Amazon Mechanical Turk). The questions on electronically mediated employment had substantive issues with false positives, with too many survey takers responding "yes" to these questions while holding primary jobs that were unsuited for electronically mediated work, such as police officers and surgeons.

The American Time Use Survey — Leave and Job Flexibility Module (ATUS) measures the amount of time survey respondents spend engaging in various activities. Survey takers keep a 24-hour time diary. While finer information about scheduling flexibility is captured, detailed information that would help identify gig work is unavailable. The data is linkable to the demographic information in the main CPS.

The Survey of Informal Work Participation (SIWP), Survey of Household Economics and Decision-making (SHED), and The Survey of Enterprising and Informal Work Activities (EIWA) are online surveys run by the Federal Reserve. SHED measures general economic well-being of U.S. households and EIWA was conducted in 2015 to track the online and offline income earning activities of adults. For both SIWP and EIWA, common examples of labor provided include personal services (rideshare/delivery, running errands, etc.), housework/yard work and other maintenance work, and disabled/elderly/childcare services. Popular online work activities include selling new/used/handmade goods online, renting out property or cars (ex. Airbnb), and completing online tasks through websites (ex. Amazon Mechanical Turk). Because these surveys were administered online, people who choose to fill them out may not be representative of the U.S. population. In addition, response rates for the surveys were under 10 percent.

The National Longitudinal Survey (NLS), particularly the NLSY97, collected labor force information for approximately 9,000 workers aged between 12 and 16 in December 1996. These workers were surveyed annually until 2011 and then biennially since then. Questions regarding alternative work arrangements pertained more to temp jobs, freelance work, and on-call work, and did not specifically ask about online platforms.

The Pew Research Center conducted a survey of about 10,000 U.S. adults in August 2021 to ask specifically about gig work (The State of Gig Work in 2021).[5] The survey was conducted online from a persistent sample of respondents from the American Trends Panel (ATP). The Panel is nationally representative, and the response rate was over 90 percent.

***2. Private-sector financial transaction data***

JP Morgan Chase & Co. Institute's Online Platform Economy dataset uses information from over 100 platforms (apps) across many industry sectors. It contains banking transaction data from over 39 million (anonymized) checking accounts tied to Chase Bank. Data is collected as monthly cross sections from 2012 to 2018, and researchers identify gig work using direct deposits to checking accounts from gig firms.

Koustas (2018) used a large personal financial management aggregator software/app to find about 18,000 rideshare drivers from 2012 to 2016.[6] This equates to roughly 1 percent of drivers who have ever used an online platform to connect with customers. The dataset observes both outside spending and non-rideshare income.

Fos et al. (2021) used Unemployment Insurance data matched from individual credit profiles data from Equifax (one of the three major U.S, credit reporting agencies that most lenders use to gauge the credit worthiness of individuals) to examine whether gig work helps workers avoid falling into financial hardship, as measured by receipt of unemployment insurance benefits or credit delinquency.[7]

Data from these sources have rich financial transactions information, but often lack basic user socio-demographic characteristics. In addition, because they often center on the use of a particular banking institution, software, or app, the population being studied may not be representative of the gig worker population at large.

***3. Data supplied by app firms***

Some rideshare/delivery app firms have provided researchers with access to some of the data they collect in the course of running their businesses. On the plus side, these data tend to have excellent longitudinal properties. They are able to follow drivers as long as they use the firm's app. Since the firms set the prices and collect fares, they know the precise inputs that generate the drivers' earnings. Specifically, the firms know when and where the drivers were using the app to connect with customers. However, similar to the financial transactions data described above, a large shortcoming is the lack of basic socio-demographic information. The only information that can be observed about the driver is what is available on his/her driver's license. In many cases, this is restricted to gender, name, and home address. Researchers have attempted to infer race/ethnicity and family income.[8] Additionally, because data usually arrives from one firm, workers who are stitching together gigs from multiple firms cannot be observed.

***4. Tax data***

Several papers have used data from individual tax returns, either from the Internal Revenue Service (IRS) or state departments of revenue. Researchers have used Schedule C, 1099-MISC, and 1099-K forms from the IRS to identify individual contractors. Some have linked this data to state tax data (ex. California tax return form 540) to extract data on family structure, income, etc. These data have been useful in understanding the mix of independent contracting and traditional jobs in the labor market, in particular, showing that most of the growth in the "1099 workforce" has come from the growth of online platform work.[9] Although the universal coverage aspect of tax data is a desirable feature, the fast-evolving gig economy, with changing definitions of jobs, makes consistent measurement over time difficult, especially because the workers themselves may not understand the definitions. One study estimates that 25 to 30 percent of people who received a 1099-MISC from independent contracting jobs failed to file a Schedule C, as required by law.[10]

Because of the relative scarcity of credible studies of this population, in the following we make note of, but generalize and extrapolate across samples in several papers. The reader should be aware that this means, in some instances, the definition of gig/platform workers will change. However, we feel that the insights generated by the studies apply broadly to drivers who work for rideshare/delivery app firms.

## 2. What is the size of the online platform rideshare/delivery workforce?

Although this seems like an easy question, there is no definitive answer. Depending on the study, the population examined ranges tremendously in size, from around 1 percent to over 15 percent of the labor force.[11] This spread is due in part to differences in how studies define a gig worker, limitations in the available data on these workers, as well as the fast-changing nature of the gig economy, hastened even further by the COVID-19 pandemic. However, we can state with some degree of confidence that this workforce is experiencing fast growth, especially over the last three to four years, such that almost 10 percent of the working population has engaged in some online gig work in the past year.[12]

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That said, assessing the size of the workforce for just the subset of firms that would have been most relevant for the Massachusetts initiative remains difficult, as one of the primary benefits of being a driver using these apps is the ability to use multiple platforms simultaneously.[13] Even if we could take a "snapshot" to count unique workers across the rideshare/delivery app firms, the high rate of churn and the very flexibility in work hours these jobs offer complicates issues. For example, should a worker who logs in to one app for a few hours for a month before dropping out of this workforce be counted? How do we categorize a worker logging into multiple apps and working more hours than a standard full-time employee? What do we do with workers who have several-months long gaps in between intense bursts of activity?

The lower end of estimates (about 1.6 percent for all gig work and 1 percent for rideshare/delivery work) was arrived at by counting only those who were actively engaged in online work in a given week or month between 2015 and 2018 from observed direct deposits from gig firms to checking accounts of workers. Across an entire year, the estimates reach 4.5 percent for all gig work, attesting to the short-term nature of worker engagement in this sector.[14]

At the other end, more than 15 percent of respondents answered in the affirmative when researchers at the Pew Research Center asked about having earned money from an online gig platform in 2021.[15] When the same survey asks about engaging in gig work currently as well as in the past year, approximately 4 percent and 9 percent of respondents answer yes. Although we caution against a direct comparison between the banking transaction study (with 2018 data) and the Pew study (with 2021 data), the two-to-three-fold increase in online gig work participation is suggestive of the growth experienced over the past four years, as well as the potential for future growth in this sector.

## 3. What does the rideshare/delivery workforce look like?

The rideshare/delivery workforce is surprisingly difficult to describe in terms of basic socio-demographic characteristics.

**With the high churn rates for many of the rideshare/delivery apps, summary statistics do not necessarily reflect the current workforce.**

As mentioned above, many of the standard Census surveys we would normally use to describe a working population suffer from overly broad definitions of the relevant gig workers. Even in surveys that zero in on gig workers, the focus tends to be on whether the respondent has ever engaged in such work. With the high churn rates for many of the rideshare/delivery apps, summary statistics do not necessarily reflect the current workforce. Research using data from the app firms themselves often provide little insight: the data is collected to facilitate business transactions, not for research purposes. As such, basic information, such as race/ethnicity, income status, family structure, etc. may be unavailable.

With the broadest category of workers in "alternative employment arrangements," researchers have found a positive relationship between education and flexible work arrangements. The interpretation is that workers with more education are engaged in jobs that do not require rigidly controlled schedules.[16]

With a more concentrated definition of workers as "independent contractors," they tend to be older, male, and have lower incomes. They are also less likely to have health insurance or any retirement plans to which they have been contributing. There is mixed evidence on race/ethnicity and education. Workers who have engaged in online gig work are more likely to be Hispanic, younger, and have lower income.[17]

Finally, data from the gig app firms themselves show that males comprise a large majority of the workforce. The age distribution of those using these apps mirrors the U.S. working population. Race/ethnicity and income must be guessed at from the driver's name and broad, aggregated descriptor of home address on driver's licenses. While Whites are about half of the workforce, the fraction of the workforce that is Hispanic and Black workers is sizable, each at about 20 percent of the workforce. Household income is estimated to be similar to U.S. averages.

## 4. Why do these workers participate in this labor market?

***a. How well are workers compensated and what attributes of the job do these workers value?***

It is a simple question. However, there are no simple answers. For most "traditional" jobs, labor survey data would contain hourly wage, weekly/monthly earnings, and/or hours worked this week/month. However, with rideshare/delivery work, calculations are much more open to interpretation.

Good data exist on how much money drivers receive from rideshare/delivery firms through tax and proprietary firm data. Precise time-on-task data is also captured by the firms. However, estimates of drivers' per-hour rates vary wildly, depending on the study, from under \$5 to over \$25.[18]

Both extremes are difficult to reconcile with our understanding of the labor market—that workers will move to good opportunities and firms will have to set compensation to attract and retain workers. If hourly earnings were really under \$5, it seems unlikely that many people would agree to work as rideshare/delivery drivers, especially in the current (as of 2022) labor market, in the midst of the Great Resignation.

On the other hand, the assertion that drivers earn, net of expenses, over \$25 per hour also seems odd, as the study that generated the estimate asserts that taxi drivers and chauffeurs, who are subject to stricter licensing requirements, yet perform virtually identical tasks in their jobs, earn less than 70 percent of what rideshare/delivery drivers make. In such circumstances, it seems unlikely that anyone would work for traditional taxi or limousine companies.

As is usually the case, the answer depends on the details. First, on the revenue side, earnings depend on individual choices. How many hours a day/week/month do they work? Obviously, more hours worked usually leads to more money earned, but the nature of pricing for gig work complicates this calculation, as it depends greatly on what hours and at what location drivers choose to work. Fares/rates for many of the rides/deliveries are not fixed. Prices for rides fluctuate in response to demand, in many cases, in real time. If there are many customers requesting rides/deliveries and few drivers, those who are willing to work at that time and location can generate higher earnings as prices increase.

Then there is the cost side. As drivers are independent contractors, they are responsible for all their business expenses. Their vehicles must be maintained, depreciation accounted for, and insurance purchased. Benefits, such as health insurance and retirement plans, which would normally be subsidized and provided by employers, are now the driver's responsibility. How researchers sum up these costs greatly impacts the bottom line.

Because earnings are dependent on the drivers' and researchers' discretion, it is difficult to arrive at a simple "X dollars per hour" as driver earnings that can be widely agreed upon. It is interesting that the lower end of earnings estimates come from reports by think tanks that are focused on inequality in the labor market, low wage work, and unions, and the more generous estimates tend to come from studies supported and vetted by the rideshare/delivery app firms.
Instead, researchers have tried to understand what aspects of the job workers value.

There is substantial evidence that gig work provides a supplementary source of financial stability. Many workers do not rely on online platform work as their primary source of income.[19] However, the extra work can serve to stabilize cashflow when families are hit by negative financial shocks.[20] Workers are more likely to engage in gig work using online platforms after they have experienced a downturn in their earnings.[21] Those who work as drivers are less likely to rely on Unemployment Insurance or experience credit delinquency.[22] Studies that track cash flow of families using bank transactions show that workers engage (or re-engage) in gig work after a decline

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in income or cash flow.[23] These types of jobs can serve as a form of financial insurance or a safety net to buttress lost income and sustain a job search until re-entry into the traditional workforce.[24]

By leveraging firm data, which records what time of day workers were using the app to connect with passengers or deliveries, several studies have attempted to estimate how much workers value the flexibility offered by gig work. There appears to be a high degree of heterogeneity in worker preferences. There is also substantial variation in driver hours from week to week.[25] Some workers value pay more than flexibility and may be open to pre-set hours. Others value flexibility more and would be unwilling to supply labor if offered less flexible work arrangements (or would be willing to take a pay cut to retain flexibility).[26]

The range of pay cuts drivers may be willing to accept for maintaining flexibility range from 5 to 15 percent, again reflecting the fact that the driver population is heterogeneous. Some evidence from a broader set of workers in alternative work arrangements show that workers with fewer years of schooling tend to be in jobs with more limited control over their schedule or work location. Further, although the literature has assumed that women value flexibility more than men, evidence has shown that women have been less likely to have had more flexible work schedules.[27] The lower barriers to entry for rideshare/delivery work may allow these populations to achieve a more desirable workload and work-life balance by taking advantage of the flexible scheduling.

Direct surveys eliciting willingness to pay for benefits for gig workers reinforce the evidence of wide variation in worker preferences across the population with respect to desired types of traditional benefits. Overall, workers value benefits at almost 1:1 compared to cash payments once tax advantages of benefits are accounted for. Retirement savings are at the top of the wish list, while health benefits are at the bottom.[28]

***b. Are they "happy" with this work?***

The general understanding is that many of the workers who have participated in this sector have a favorable opinion of the work. The indirect evidence described above implies that drivers make use of gig work as a form of financial safety net and may value the scheduling flexibility gig jobs offer, staying with the work even when experiencing a downward trend in fares.[29] Direct evidence from worker surveys shows that a majority of gig workers feel that firms have been fair with respect to pay and assignments, and that they see themselves as independent contractors rather than employees. Furthermore, 8 in 10 gig workers rate their job experience favorably. In fact, the vast majority of Americans (over 90 percent) feel that gig work is a good way to earn extra money while retaining a flexible work schedule.[30]

Direct evidence from worker surveys shows that a majority of gig workers feel that firms have been fair with respect to pay and assignments, and that they see themselves as independent contractors rather than employees.

However, we caution that this is hardly definitive evidence that gig work is unequivocally "good" for workers. There is some limited evidence that while gig work is good for short-term income gains, engaging in gig work may hamper long-run income growth.[31] Less than one-third of Americans view gig work as a way to build a career.[32]

There is also an opaque understanding of how workers are compensated. One of the defining traits of the online apps is the ability to change fares/rates dynamically in response to demand and supply factors. Uber's "surge pricing" is the most famous example of leveraging data, sophisticated econometric models, and computational power to set prices. The sensitive, real-time responsiveness of pricing structures, made possible by the apps, has meant that less than half of gig workers have more than a "somewhat" understanding of how they are paid for the work they do.[33] There is some speculation that at least some of the churn in this labor market is due to new workers gradually learning about their compensation structure and exiting when they find it unsatisfactory.

## 5. How has the COVID-19 pandemic impacted the work force and work environment?

As described above, the gig sector has experienced large growth over the past decade, especially during the COVID-19 pandemic. Although correlation is not necessarily causation, the explosive growth in demand for services (over a third of Americans have reported using a delivery app during a 12-month period) and the (temporary) decimation of low-wage service sector labor markets (hospitality, leisure, and tourism in particular) at the start of the inducing a large number of new entrants into the gig labor force (over 15 percent of U.S. adults reporting they have engaged in gig work during the same period) strongly imply that the pandemic resulted in a sea change for the industry.[34]

The top reasons cited for engaging in gig work are to save extra money, to cover income gaps, or to be able to control one's own schedule. Almost 60 percent of gig workers reported that the income earned from these jobs was important for meeting basic needs.[35] Working as a rideshare/delivery driver seems to have "fit the bill" in an environment of extreme labor market fluctuations and difficulty getting stable child/elder care.

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While most drivers have had positive experiences doing gig work, a majority also reported concerns about getting COVID-19 while working. Many workers also reported being treated rudely and experiencing threats to their safety. However, it is unclear how much these negative aspects of the jobs were present prior to the pandemic.

### 6. What are the potential impacts of classifying these workers as contractors or regular employees?

The issues surrounding reclassification are well known. If driver classification switches from independent contractors to regular employees, it is expected to have impacts for both firms and drivers.

On the firm side, reclassification is viewed negatively. Uber's 2020 SEC Form 10-K section on risk factors to the business prominently and bluntly highlights the concern:[36]

> *Our business would be adversely affected if Drivers were classified as employees, workers or quasi-employees instead of independent contractors*

App firms would be required to provide employee benefits, pay increased taxes, and standardize/ guarantee a minimum wage. They may have to take a more active role in maintenance and monitoring of vehicles, provide/subsidize access to insurance, and be forced to set and manage shift schedules for drivers.

Beyond increasing financial, administrative, and legal overhead, there is another potential issue with reclassification for firms. As described above, the rideshare/delivery driver population has heterogeneous preferences, and many workers place a high value on the scheduling flexibility currently offered. Drastically altering employment conditions via reclassification may result in a large churn of workers. Reduced flexibility could force out workers who cannot or are unwilling to commit to a fixed schedule, and the prospect of a predictable income and schedule may make the job more attractive to others. To the extent that there are no credible estimates of the net impact on the supply of drivers, firms remain wary of large-scale personnel policy changes. Again, from Uber's 2020 SEC Form 10-K:

Beyond increasing financial, administrative, and legal overhead, … Drastically altering employment conditions via reclassification may result in a large churn of workers.

> *If we are unable to attract or maintain a critical mass of Drivers, …, our platform will become less appealing to platform users.*
> *Our business depends on retaining and attracting high-quality personnel, and continued attrition, future attrition, … could adversely affect our business.*

California's Proposition 22, which returns driver classification to independent contractor status and has the support of many rideshare/delivery firms, may reveal which parts of reclassification firms are most concerned with. The ballot measure would compel firms to guarantee minimum earnings and provide healthcare subsidies and vehicle insurance. It would continue to exempt drivers from earning overtime or having access to Unemployment Insurance or worker's compensation.

On the worker side, being classified as a contractor lowers the bar for entry into the field, allows workers to maintain flexibility in accepting jobs (even across competing employers), and set their own schedules. The downside, of course, is that they may not receive benefits and protections afforded to full-time employees, such as access to retirement investment vehicles (401(k), etc.) and employer-subsidized health insurance plans, or ability to collectively bargain. As revealed by surveys, gig workers value benefits.[37] However, it is not clear how the entirety of the change in compensation would be viewed. In particular, monetary compensation (excluding benefits) may decline for drivers who were inclined to work at times and locations with high demand and low supply.

With some evidence showing that drivers were willing to work longer hours to maintain constant hourly earnings when experiencing a downward trend in fares, the income to benefits tradeoff may not be viewed as favorably when the differences show up on paystubs.[38]

The public views workers who drive for online gig platforms as independent contractors. That said, four in ten Americans have not heard any debate about driver classification.[39] The public sentiment, then, may be driven by a lack of education or understanding about the issues.

### 7. Are there any differences between gig workers in Massachusetts vs. other states?

So far, most of the literature we have explored has focused on national (or sometimes international) samples of workers. Within the U.S., California has been a point of focus of research, mostly because many of the rideshare/delivery app firms started in Silicon Valley. As the services began to roll out in California, longitudinal data is more readily available, and academics in California with strong ties to these firms have been "first movers" in getting access to data of workers within the state.

In addition, California Assembly Bill 5 and Proposition 22 would create abrupt changes in how drivers are classified and compensated (and indirectly how services are delivered to customers), which can be used by researchers to gain insight into the labor market. While these insights are valuable to understand this workforce generally, it is worth questioning how much of what we have learned carries over to the Massachusetts context.

To date, there have been few credible studies that have focused on Massachusetts. There is some limited evidence to suggest that driver earnings in the state are higher than for workers in comparable industries (taxi and limousine drivers and other retail workers), which means re-classifying these workers to employees may result in substantive job losses, and that rideshare/delivery platform labor accounts for a small but growing share of the state's economy.[40] Although the SJC just tossed the ballot question, it is possible the fight will continue and move to the Legislature.

**To date, there have been few credible studies that have focused on Massachusetts.**

### 8. What is currently unknown about this labor market and its participants?

To summarize the literature reviewed above, there is currently a lot that is unknown about this labor market and its participants.

First and foremost, we still do not have a definitive basic description of the workforce. The standard workhorse datasets labor economists often use are not up to the task of identifying workers who are engaged in rideshare/delivery work. Firm data that contains observations only on these workers often fail to collect basic socio-demographic characteristics of interest. The fast evolution of the industry and the large amount of worker churn means that an accounting of workers that is accurate today may not be relevant tomorrow.

Second, there is no consensus on how much drivers earn. Because so much of the compensation depends on drivers' own choices as well as the pricing set by the apps, researchers can arrive at very different numbers. Until there is an agreed upon framework to determine compensation, discussions about earnings can be unfruitful.

Third, we have no credible studies that examine the potential impact of reclassification. It would impact gig firm profits, workers who use the apps to connect with customers, and the customers themselves. While public policy might not be particularly interested in these firms' bottom lines, negative impacts on firms may be passed on to both drivers and consumers. Drivers may be faced with large changes in their compensation and scheduling, which may be beneficial for some but detrimental to others. Customers may face higher fares and longer wait times if gig firms must trim their workforce in response to reclassification. If California's Proposition 22 is upheld in the courts, the one "natural experiment" that may yield insights will not take place.

## Conclusion

Our current state of understanding on these issues should encourage us to collect more and better data to do objective research. This is a fast-growing and evolving portion of the labor force, where many people who cannot enter into traditional job arrangements find the flexibility of these gigs attractive or necessary. At the same time, the lack of bargaining power, transitory nature of gig work, complicated pricing structure, and the extremely deep pockets of the firms give the impression of an unbalanced labor relationship. We simply do not know enough to predict the impact of any ambitious policy change. To make new policy without a deeper understanding of the labor market is to embrace the ethos of many Silicon Valley firms: to "move fast and break things," and may, beyond the ripples across the economy-at-large, disproportionately impact disadvantaged sub populations.

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## Endnotes

1 For simplicity, we will use "gig workers" as a shorthand for these workers throughout this document.

2 Scheduling ordinances may have an outsized impact for the gig economy if these workers also participate in labor markets that are targeted by the legislation.

3 Massachusetts Attorney General (2021) "Summary of No. 21-11," https://www.mass.gov/doc/21-11-final-summary/download

4 Blystone, D. (2021) "The Story of Uber", Investopedia https://www.investopedia.com/articles/personal-finance/111015/story-uber.asp#toc-ubers-valuation-funding-rounds.

Davis, Levi (2021) "Lyft vs. Uber: What's the Difference?," Investopedia https://www.investopedia.com/articles/personal-finance/010715/key-differences-between-uber-and-lyft.asp.

Iqbal, Mansoor (2022) "Uber Revenue and Usage Statistics (2022)" BusinessofApps https://www.businessofapps.com/data/uber-statistics/.

Iqbal, Mansoor (2022) "Lyft Revenue and Usage Statistics (2022)" BusinessofApps https://www.businessofapps.com/data/lyft-statistics/

5 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

6 Koustas, D. (2018) "Consumption Insurance and Multiple Jobs: Evidence from Rideshare Drivers" Working Paper.

7 Fos. V., N. Hamdi, A. Kalda, J. Nickerson (2021) "Gig Labor: Trading Safety Nets for Steering Wheels" Working Paper.

8 Income imputation is done after addresses are aggregated to a higher level (beyond the Census block) for privacy reasons. That is, researchers do not have access to the actual address.

9 Collins, B., A. Garin, E. Jackson, D. Koustas, and M. Payne (2019) "Is Gig Work Replacing Traditional Employment? Evidence from Two Decades of Tax Returns" Working Paper

10 Benrhardt A., C. Campos, A. Prohofsky, A. Ramesh, and J. Rothstein (2021) "The "Gig Economy" and Independent Contracting: Evidence from California Tax Data" California Policy Lab Working Paper 2021-6.

11 In some of the literature looking at all workers in alternative employment arrangements as defined above, estimates approach 60 percent of the labor force.

12 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

13 There are studies that are able to take advantage of banking, personal finance management software, or individual tax returns records to capture work across multiple firms (Farrell, Greig, and Hamoudi (2019), Koustas (2018), Collins et al (2019)., Bernhardt et al (2021)).

14 Katz, Lawrence F. and Alan B. Krueger (2016) "The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015." NBER Working Paper No. 22667

Katz, Lawrence F. and Alan B. Krueger (2019) "Understanding Trends in Alternative Work Arrangements in the United States" RSF: The Russell Sage Foundation Journal of the Social Sciences, 5 (5) 132–146.

Farrell, Diana, Fiona Greig, and Amar Hamoudi (2019) "Bridging the Gap: How Families Use the Online Platform Economy to Manage their Cash Flow." JPMorgan Chase Institute. https://institute.jpmorganchase/institute/research/laborm-markets/report-bridging-the-gap.pdf.

15 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

16 Mas, A. and A. Pallais (2020) "Alternative Work Arrangements," NBER Working Paper 26605.

Abraham, K., and S. Houseman (2022) "What do we Know about Alternative Work Arrangements in the United States?" W.E. Upjohn Institute for Employment Research Working Paper.

17 Benrhardt A., C. Campos, A. Prohofsky, A. Ramesh, and J. Rothstein (2021) "The "Gig Economy" and Independent Contracting: Evidence from California Tax Data" California Policy Lab Working Paper 2021-6.

18 Jacobs, K. and M. Reich (2021) "Massachusetts Uber/Lyft Ballot Proposition Would Create Subminimum Wage." UC Berkeley Institute for Research on Labor and Employment Brief.

BW Research Partnership (2022) "Hourly Earnings of App-Based Rideshare Drivers and Food Delivery Workers in Massachusetts" Mass Insight Global Partnerships.

19 Collins, B., A. Garin, E. Jackson, D. Koustas, and M. Payne (2019) "Is Gig Work Replacing Traditional Employment? Evidence from Two Decades of Tax Returns" Working Paper

20 Koustas, D. (2018) "Consumption Insurance and Multiple Jobs: Evidence from Rideshare Drivers" Working Paper.

21 Farrell, Diana, Fiona Greig, and Amar Hamoudi (2018) "The Online Platform Economy in 2018: Drivers, Workers, Sellers and Lessors." JPMorgan Chase Institute.

Farrell, Diana, Fiona Greig, and Amar Hamoudi (2019) "Bridging the Gap: How Families Use the Online Platform Economy to Manage their Cash Flow." JPMorgan Chase Institute.

22 Fos. V., N. Hamdi, A. Kalda, J. Nickerson (2021) "Gig Labor: Trading Safety Nets for Steering Wheels" Working Paper.

23 Farrell, Diana, Fiona Greig, and Amar Hamoudi (2019) "Bridging the Gap: How Families Use the Online Platform Economy to Manage their Cash Flow." JPMorgan Chase Institute.

24 Jackson, E. (2020) "Availability of the Gig Economy and Long Run Labor Supply Effects for the Unemployed" Working Paper

25 Hall, Jonathan V., and Alan B. Krueger (2018) "An Analysis of the Labor Market for Uber's Driver-Partners in the United States." ILR Review 71, no. 3: 705–32.

26 Chen, K., J. Chevalier, P. Rossi, and E. Oehlsen (2019) "The Value of Flexible Work: Evidence from Uber Drivers" Journal of Political Economy 127(6): 2735-2794.

Chen, K., J. Chevalier, P. Rossi, and L. Currier (2020) "Suppliers and Demanders of Flexibility: The Demographics of Gig Work" Working Paper

Chen, K., C. Ding, J. List, and M. Mogstad (2020) "Reservation Wages and Workers' Valuation of Job Flexibility: Evidence from a Natural Field Experiment" NBER Working Paper 27807

Katsnelson, L., and F. Oberholzer-Gee (2021) "Being the Boss: Gig Workers' Value of Flexible Work," Harvard Business School Working Paper 21-124.

27 Mas, A. and A. Pallais (2020) "Alternative Work Arrangements," NBER Working Paper 26605.

28 Gruber, J. (2022) "Designing Benefits for Platform Workers" NBER Working Paper 29736.

29 Hall, Jonathan V., and Alan B. Krueger (2018) "An Analysis of the Labor Market for Uber's Driver-Partners in the United States." ILR Review 71, no. 3: 705–32.

30 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

31 Jackson, E. (2020) "Availability of the Gig Economy and Long Run Labor Supply Effects for the Unemployed" Working Paper

32 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

33 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

34 Gould, E. and M. Kassa (2021) "Low-wage, low-hours workers were hit hardest in the COVID-19 recession The State of Working America 2020 employment report" Employment Policy Institute.

Accenture (2021) "Platform Work: Research with Workers using the Uber app During the First Year of the Covid-19 Pandemic" Report.

35 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

36 Uber (2020). Annual report. Retrieved from https://s23.q4cdn.com/407969754/files/doc_financials/2021/ar/FINAL-Typeset-Annual-Report.pdf.

37 Gruber, J. (2022) "Designing Benefits for Platform Workers" NBER Working Paper 29736.

38 Hall, Jonathan V., and Alan B. Krueger (2018) "An Analysis of the Labor Market for Uber's Driver-Partners in the United States." ILR Review 71, no. 3: 705–32.

39 Anderson, M., C. McClain, M. Faverio, and R. Gelles-Watnick (2021) "The State of Gig Work in 2021" Pew Research Center

40 Osman, T. (2022) "How Many App-based Jobs Would be Lost Converting Rideshare and Food Delivery Drivers from Independent Contractors to Employees in the Commonwealth of Massachusetts?" Beacon Economics Report.

Feler, L. (2022) "The Impact of Rideshare and Delivery Platforms on the Massachusetts Economy" Report.

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