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IRLE WORKING PAPER
#105-24
October 2024

The Economic Situation of Gig Passenger Drivers in Minnesota

James A. Parrott, Michael Reich, and Xingxing Yang

Cite as: James A. Parrott, Michael Reich, and Xingxing Yang. (2024). "The Economic Situation of Gig Passenger Drivers in Minnesota". IRLE Working Paper No. 105-24.
https://irle.berkeley.edu/publications/working-papers/the-economic-situation-of-gig-passenger-drivers-in-minnesota/

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The Economic Situation of Gig Passenger Drivers in Minnesota

James A. Parrott, The New School

Michael Reich, University of California Berkeley

Xingxing Yang, University of Southern Florida

Abstract

In May 2024 the State of Minnesota adopted a statewide minimum compensation standard for transportation network company (TNC) drivers, following the models in place in New York City and Seattle. In a report we conducted for the state, we used trip and compensation data for all of 2022 to analyze driver activity and compensation levels in relation to time worked and driver expenses, as well as the number of hours and miles TNC drivers accumulate per week, disaggregated by wait time, dispatch time and ride time. We also estimated the extent of "multi-apping," i.e., drivers providing trips for both TNC companies. Our proposed core compensation standard would allow drivers to earn the equivalent of the state and local minimum wages for employees after covering all vehicle expenses; our alternative formulation included benefits.

We also considered how the proposed standards would affect access, availability and costs of rides, and provide comparisons between the adopted Minnesota pay standard and those existing in New York City, Seattle, and the rest of Washington State. On an after-expense basis, the Minnesota pay standard will increase hourly pay from an average of $12.34 to a minimum of $18.13. Effective implementation will require regular monitoring and review to make adjustments if the balance of driver supply and consumer demand deviates from the baseline conditions prevailing in 2022. Going forward, the state needs to require regular reporting of unadjusted company data to ensure effective monitoring and enforcement.

Prepared for the Labor and Employment Relations annual meeting, New York City, June 29, 2024. Portions of this paper draw from a 2024 report by Parrott and Reich for the Minnesota Department of Labor and Industry.

Introduction

While the extent of gig work is sometimes exaggerated, the number of workers using online labor platforms, particularly in ridesharing and delivery work, has increased significantly. Using tax data, Garin et al. (2023) show that the number of platform workers rose from about two million in 2019 to about five million in 2021. Over 85 percent of the 2021 level consisted of workers on transportation or delivery platforms. While most of the transportation platform workers had gross earnings under $20,000 in 2021, the number with gross earnings equal to or greater than $20,000 nearly exceeded the total number of workers on all non-transportation platforms. Thus, the great majority of online platform workers are in the transportation sector.

The growth in the number of gig drivers, whose pay as independent contractors is not covered by protections for employees, has led multiple jurisdictions to enact or consider pay standards.

In May 2023, Minnesota Governor Tim Walz vetoed a pay standard passed by the state legislature at the end of the 2023 legislative session. That pay standard grew out of concerted advocacy by drivers, but it was not based on Minnesota-specific data or an analysis of its possible impact. Together with his veto, the governor issued an executive order calling for a comprehensive study of the economic situation of Minnesota TNC drivers and establishing a blue-ribbon committee of industry stakeholders.[1]

In the fall of 2023, we were asked by the Minnesota Department of Labor and Industry (DLI) to prepare an analysis of the working conditions of Minnesota TNC drivers. We present here the main findings of our March 2024 report for DLI.[2] In May 2024 the Minnesota State Legislature enacted and the Governor signed legislation establishing a statewide minimum compensation standard for transportation network company (TNC) drivers. (The Minnesota standard does *not* apply to food delivery drivers.) The Minnesota standard generally follows models already in place in New York City and Seattle (Parrott and Reich 2018, 2020). This paper also discuss the implications of the Minnesota pay standard that takes effect December 1, 2024, and comments on aspects that will require ongoing monitoring and review.

Our data came from two sources: We surveyed drivers to obtain data on driving behavior, expenses, and demographics. We used trip and compensation data provided by the two TNCs for all of 2022 to analyze driver activity and compensation levels in relation to time worked and

[1] Executive Order 23-07 states that while "the benefits of TNCs include convenience, increasing transportation access for low-income communities and individuals with disabilities, safety, and reliable quality," yet "because drivers are typically classified as independent contractors, drivers are not afforded the same workplace protections as typical employees, including the protection of wage and hour laws." The work of the blue-ribbon committee and the purpose of this study were that "Minnesota should advance laws that promote fairness and transparency for TNC drivers, and those policies should be informed by research, Minnesota-specific data, discussions, and stakeholder input." For the committee's report, see *Recommendations for the Compensation, Wellbeing and Fair Treatment of Transportation Network Company Drivers*, Minnesota Department of Labor and Industry, December 30, 2023. https://www.dli.mn.gov/sites/default/files/pdf/TNC_EO_23_07_final_committeee_report_123023.pdf

[2] James Parrott and Michael Reich, Transportation Network Company Driver Earnings Analysis and Pay Standard Options, Prepared for the Minnesota Department of Labor and Industry, March 8, 2004. (Hereafter, DLI report). https://www.dli.mn.gov/sites/default/files/pdf/TNC_driver_earnings_analysis_pay_standard_options_report_030824.pdf

driver expenses. We also examined the number of hours and miles TNC drivers accumulate per week, disaggregated by wait time, dispatch time and ride time as well as the extent of "multi-apping," i.e., drivers providing trips for both TNC companies. To account for post-pandemic driver recruiting challenges, we also updated our analysis of the TNC business model presented in our 2018 and 2020 reports

Our core compensation standard proposal would allow drivers to earn the equivalent of the state and local minimum wages for employees after covering all vehicle expenses. Our alternative proposal added benefits, including health insurance, retirement savings and unemployment insurance coverage. We also considered how the proposed standards would affect access, availability and costs of rides, and we provide comparisons between the adopted Minnesota pay standard and those existing in New York City, Seattle, and the rest of Washington State.

Our DLI report separately analyzed trip activity and compensation for drivers in the seven-country Twin Cities (Minneapolis-St. Paul) metro area and those in the smaller cities and counties in the rest of the state, an area referred to in the report as Greater Minnesota. Ninety-five percent of all TNC trips in 2022 originated in the Twin Cities metro area. The analysis we present here focuses on the Twin Cities metro area; the enacted pay standard applies uniformly across the state without distinction between the metro area and Greater Minnesota.

Driver demographics

Exhibit 1 presents American Community Survey (ACS) demographic data about taxi drivers and chauffeurs, which includes rideshare drivers. The ACS data refer only to an individual's primary occupation; TNC drivers are far more numerous in this occupation than taxi drivers. Exhibit 1 also compares these drivers to all Minnesota workers. Census data-- and the driver survey-- indicate that, compared to all Minnesota workers: the majority of Minnesota TNC drivers are male immigrants and Black or African American with less than four-year college degrees; many live in low-income households (up to 200 percent of the federal poverty level); and are disproportionately reliant on public assistance.

The ACS data also indicate that the earnings of Minnesota TNC and taxi drivers are insufficient to attain economic security without reliance on public subsidies. Among the predominant cohort of Minnesota drivers—male, immigrant workers without a four-year college degree, median annual earnings equaled $26,000 in transportation occupations in 2021, according to the ACS. This amount was lower than in four of the six occupational categories that account for two-thirds of Minnesota workers in this workforce cohort.[3]

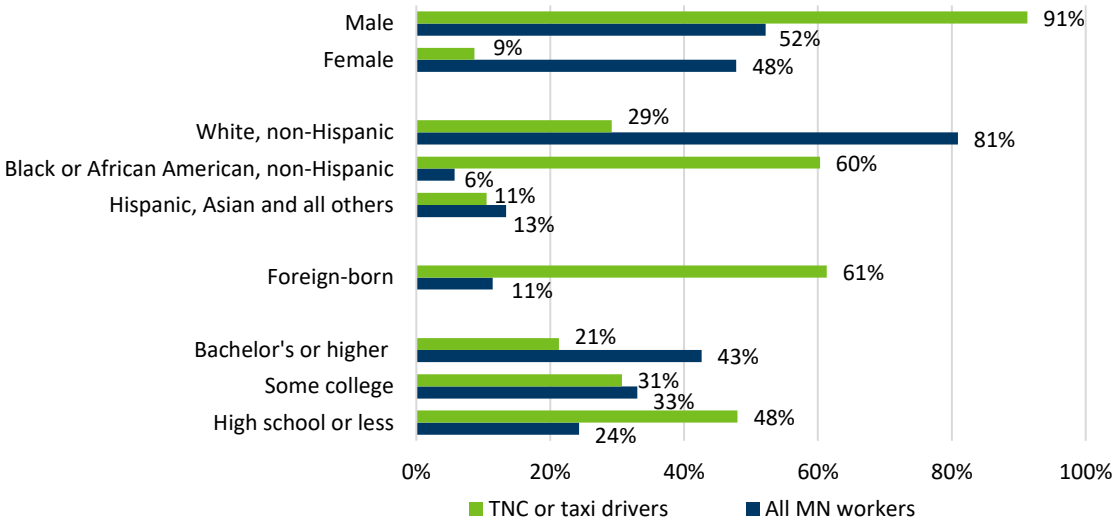
As Exhibit 2 shows, TNC and taxi drivers are more than two-and-a-half times as likely as the average Minnesota worker (39 percent to 15 percent) to have household earnings that fall below 200 percent of the federal poverty line ($12,880 for a single person household in 2021; $26,500

[3] Median pay was lower ($23,600) in food prep and serving occupations, but higher in transportation occupations in production ($35,300), construction ($31,900), office and administrative support ($29,500), and in building grounds and maintenance ($27,600). Center for New York City Affairs analysis of the 2017-2021 5-year ACS sample.

for a four-person household.) Drivers are also much more likely than all workers to receive Supplemental Nutrition Assistance Program (SNAP) benefits—by 18 percent to 5 percent.

Exhibit 1

Minnesota TNC and taxi driver demographics



Source: American Community Survey, 2017-21

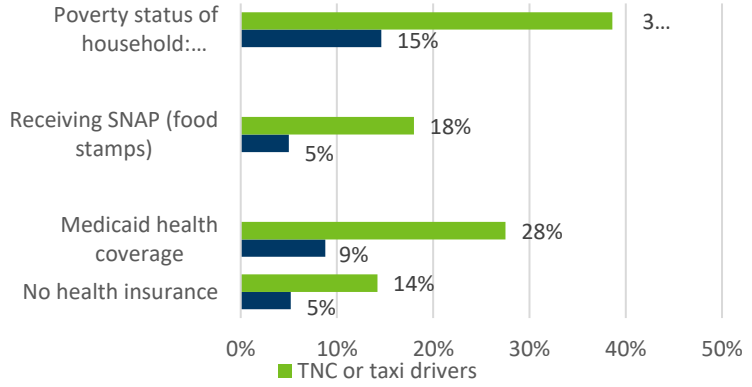
Drivers are also about three times as likely as all Minnesota workers to rely on Medicaid health coverage (28 percent to 9 percent) or to have no health insurance (14 percent to 5 percent).

Minnesota TNC driver survey

To inform this study, in December 2023 the Department of Labor and Industry emailed a survey to nearly 8,000 drivers licensed with the Metropolitan Airport Commission (MAC), which operates the Minneapolis-St. Paul Airport. The survey elicited over 1,800 valid responses, a 24 percent response rate. The survey included a series of basic demographic questions.

The distribution of responses closely tracked the gender, race or ethnicity, age and country of birth characteristics for Minnesota TNC and taxi drivers in the ACS data shown in Appendix Exhibit 1. For example, 60 percent of the drivers in the ACS data are Black or African American and 63 percent of survey respondents self-identified as Black or African American. Fifty-eight percent of survey respondents were 35 to 54 in age, nearly identical to the 56 percent share in the ACS data. The foreign-born share of survey respondents was somewhat higher than in the ACS data (74 percent vs. 61 percent).

Exhibit 2
Minnesota TNC and taxi drivers compared to all workers on measures of economic well-being



Source: U.S. Bureau of the Census, American Community Survey, 2017-21

Survey highlights

- Ninety-three percent of survey respondents were men, 58 percent were between the ages of 35 and 54, and 63 percent were born in Africa.
- The age, gender and place of birth of the survey respondents largely matched Census data for Minnesota TNC and taxi drivers. Census data show Minnesota drivers tend to be middle-aged, immigrant men—largely from Africa—who do not have education beyond a high school degree.
- According to the survey results, a typical TNC driver in Minnesota drives full-time or near full-time to provide their sole or primary source of income. Immigrant drivers are especially likely to drive full-time and for driving to be their sole source of income.
- Most drivers (90 percent) own the vehicle they use as a TNC driver, and nearly 60 percent purchased a vehicle for the sole purpose of being a TNC driver.
- Drivers spend significant amounts of time waiting for passenger requests and driving to pick up passengers. In many, but not most cases, drivers receive passenger requests while they are already with a passenger. Drivers who spend longer waiting for passenger requests tend to drive more hours.

Previous studies in New York City and Seattle have found that TNC drivers generally fall into one of three groups.[4] Casual drivers, who work fewer than ten hours per week, make up the largest of the three groups of drivers, but they perform a small proportion of all trips. Committed drivers, who work between 10 and 20 hours per week, and highly committed drivers, who work more than 20 hours per week, constitute a smaller portion of all drivers, but they perform a large majority of all trips.

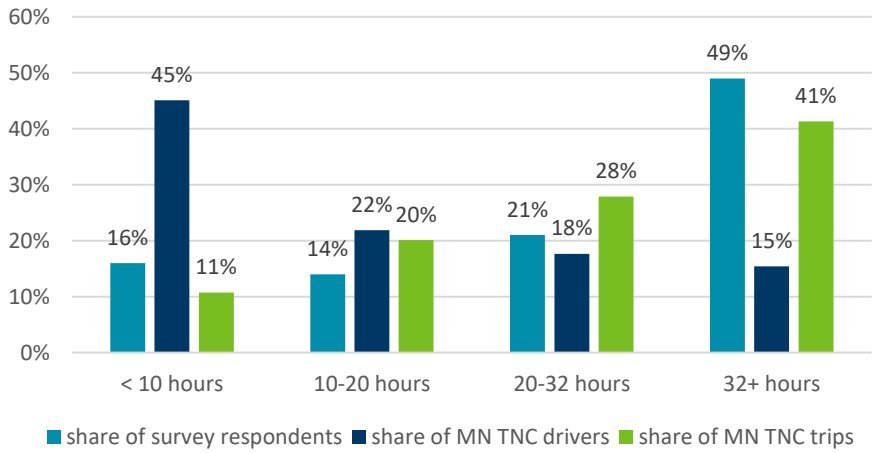
[4] James A. Parrott and Michael Reich, *An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment*, Report for the New York City Taxi and Limousine Commission, Center for New York City Affairs, July 2018; James A. Parrott, and Michael Reich, *A Minimum Compensation Standard for Seattle TNC Drivers*, Report for the City of Seattle, Center for New York City Affairs, July 2020.

The data provided by the companies reveals a similar pattern for Minnesota. Nearly half (45 percent) of all drivers in the company data are casual drivers who typically work fewer than 10 hours a week. These drivers provided only 11 percent of all trips. In contrast, the 33 percent of drivers work 20 or more weekly hours provided 69 percent of all trips in 2022.

Survey respondents were disproportionately long-term and highly committed drivers, 86 percent reported they had been driving for one year or longer. As Exhibit 3 shows, 49 percent typically worked 32 hours or more per week and 21 percent worked 20 to 32 hours per week. Casual drivers were under-represented among respondents, accounting for only 16 percent. These differences are not surprising. More committed drivers are more invested in improving the economic conditions of drivers and are therefore more likely to complete the survey.

A driver pay standard should ensure the well-being of those drivers whose earnings are most reliant on driving and who perform the bulk of Minnesota trips. Therefore, the earnings analysis in the next section excludes trip activity performed by the large number of casual drivers who drive fewer than 10 hours per week and account for only 11 percent of all statewide trips. The committed and highly committed drivers who work 10 or more hours per week comprise 55 percent of all drivers and collectively provide nearly nine out of every 10 TNC trips.

Exhibit 3
The 45 percent of TNC drivers who work less than 10 hours a week provide only 11 percent of all trips



Trip and Earnings Data

We analyzed data provided by Uber and Lyft about more than 18 million transportation network company (TNC) trips originating in Minnesota in 2022. Data were provided at the trip level with a unique driver identifier, pickup and drop off county, pickup duration and distance, trip duration and distance, timestamps rounded down to three minutes for trip acceptance date and time, and trip start and end date and time.[5] The data included P1 minutes measured only as the time since the most recent last rejected offer preceding the current trip. Thus, reported P1 minutes excluded

[5] When drivers worked for both companies, the companies coordinated to assign drivers a unique driver identifier to protect the anonymity of the driver but allow for the identification of overlapping P1 and P2 times.

any P1 waiting time for the driver that preceded the time of a rejected offer. We discuss this feature of the data further below. The data also excluded any P1 driver waiting time that was not followed by a trip, for example, driver waiting time at the end of a shift.

The companies also provided driver earnings and tips from passengers. Promotions and bonuses not tied to specific trips were prorated for the affected trips, such as, if a $120 bonus was paid for 30 completed trips, $4 would be added to each of the 30 contributing trips. The companies did not separately identify the dollar amounts of promotions and bonuses, which may be substantial relative to base driver pay. A recent report on Massachusetts TNC activity that utilized data from a third-party provider indicated that various forms of incentive pay averaged about 30 percent of gross driver pay (excluding tips).[6] The companies did not provide any data about fares paid by passengers or company commissions.[7]

We detail the steps to "clean" the data in Appendix Exhibit 3 of the DLI report. For example, we excluded trip records with missing data elements and trips with extreme values, such as trip times fewer than one minute or trips that implied vehicle speeds greater than 80 miles per hour. Such data cleaning steps removed about one percent of trips from each monthly file. Since the data provided by the companies also excluded P1 miles, we approximated P1 miles by assuming an average P1 speed of half the P2 speed and multiplying by P1 minutes (divided by 60).

In any month in 2022, about one-quarter of Minnesota TNC drivers provided at least one trip for both companies. We refer to these drivers as "multi-app" drivers; we refer to drivers who in any month provided trips for just one of the companies as "single-app" drivers.

When the trip data indicated overlapping P1 and P2 times across the companies, we adjusted the trip data to eliminate cross-company overlapping times. To determine when there was overlap, we first compensated for the rounding of the P2 and P3 time stamps in the data provided by the companies. We detail these steps in the DLI report. When we found overlap, we reduced P1 and/or P2 times for the succeeding trip to eliminate overlapping times. Wes also adjusted P1 and P2 miles proportionate to the reduction in the time segment. The subsequent earnings and working time analyses reflect these adjustments.

Frequency of a driver's trips overlapping across the two companies

In the company-provided data, about a quarter of drivers provided trips for both companies in any given month. In the driver survey, 62 percent of respondents indicated they drove for both companies. However, the data suggest few drivers have both apps on at any given time. Only 2.8 percent of all trips in 2022 involved a driver providing trips for both companies within a shift.[8] An even smaller share of all trips, 0.5 percent of the total (1 in 200), involve cross-company overlap in P1 or P2 times.[9]

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[6] Drivers Demand Justice and Big Lake Data, *The real economics of ridehail work, What it's like to work for Uber and Lyft in Massachusetts*, October 2023.

[7] Commissions are the percentage of the fare (less tolls) that the companies retain.

[8] The start of a driver's shift was determined as the endpoint of a gap between the imputed P1 starting time of a trip and the P3 ending time of the preceding trip that is greater than two hours.

[9] Drivers working on both apps at some point in a month are more common in the Twin Cities metro area than in the rest of the state. For example, in January 2022, 28 percent of all Minneapolis/St. Paul metro drivers were multi-app, nearly twice the 15 percent for the rest of the state.

As we show below (Exhibit 5), the P1 (driver waiting time) share of driver working time in 2022 was 12.8 percent in the Twin Cities metro area and 20.1 percent in the Minnesota counties outside of the Twin Cities. This percentage differs from earlier studies; for example, Parrott and Reich (2020) found the P1 share of time to be about 38 percent in Seattle.[10] A transportation engineering firm engaged by Uber and Lyft, Fehr and Peers, found that the P1 share of miles ranged from 30 to 38 percent for six U.S. metropolitan areas.[11]

While both of those reports reflect pre-pandemic conditions in 2018 or 2019, data for 2022 that has come to light since our DLI report show roughly similar results. Data included in a report for the City of Seattle's Office of Labor Standards indicates that the P1 time share for Seattle TNC trips in 2022 was about 41 percent.[12] Our preliminary analysis of Uber and Lyft data for New York City for 2022 suggests a P1 time share of about 30 percent.[13] The Jacobs, Reich, Challenor and Farmand study of TNC drivers using Gridwise data for January 2022 estimated P1 time shares of 30 percent for the Los Angeles and Bay areas, and 31 percent for Boston, Chicago and Seattle.[14]

Many drivers left the industry during the worst of the pandemic. In the post-pandemic period, the companies have often encountered difficulty recruiting drivers back or recruiting new drivers to their platforms.[15] The companies have responded by increasing the use of "forward dispatch." Forward dispatch occurs when a driver who is in the middle of a trip receives an offer for the next trip. If the driver accepts the trip offer, he or she begins the P2 time for the next trip as soon as they complete the current trip. In these circumstances, P1 time is eliminated entirely. Forty percent of all Minnesota trips in 2022 had a P1 time of zero, indicating a considerable use of forward dispatch.

For trips that do not involve forward dispatch, the companies measured P1 as the elapsed time since the most recent rejected offer. In recent years, the companies have begun indicating to drivers the likely time, distance and driver earnings of trip offers. The companies have also provided drivers with the option of accepting or rejecting those offers. Thus, the company data about Minnesota trips thus show a high share of short positive P1 times. In January 2022, for example, 31 percent of all trips had reported P1 times of fewer than 2.5 minutes (with an average of about 50 seconds). This amount is in addition to 39 percent of the trips in January 2022 with zero P1 values (indicating forward dispatch).

Driver availability on short notice is a key feature of the TNC business model. Thus, actual P1 time and the miles driven during P1 time are factored into the existing TNC pay standards in New York City and Seattle, and by the state of Washington. The modified P1 data DLI received impacts the ability to conduct this analysis. Drivers reject trips for a variety of reasons. Results

[10] See Exhibit 30 in James A. Parrott, and Michael Reich, *A Minimum Compensation Standard for Seattle TNC Drivers*, Report for the City of Seattle, Center for New York City Affairs, July 2020.
[11] Fehr and Peers, *Estimated TNC Share of VMT in Six US Metropolitan Regions (Revision 1)*, Aug. 6, 2019, Fig. 3.
[12] Seattle Office of Labor Standards, *Seattle's Transportation Network Company Minimum Payment Ordinance: Impacts and Analysis*, May 2024.
[13] Koustas, Parrott, and Reich, preliminary work in progress.
[14] Ken Jacobs, Michael Reich, Tynan Challenor and Aida Farmand, Giv Passenger and Delivery Driver Pay in Five Metro Areas, Center on Wage and Employment Dynamics and UC Berkeley Labor Centers, May 2024.
[15] Tim Bradshaw and Dave Lee, "Is Uber's driver shortage finally over?" *Financial Times*, Oct. 5, 2022.

from the Minnesota driver survey show the primary reason drivers reject trips are offers they consider not economically viable. See the box below.

Forward dispatch and trip rejections are each common

Two-thirds of Minnesota TNC driver survey respondents reported they receive trip offers while they still have a passenger in the car more than 10 percent of the time, with 19 percent indicating forward dispatch offers on 40 percent or more of their trips. As noted in the text, about 40 percent of all trips have a zero P1 time indicating an accepted forward dispatch offer. In response to Question 8 on the driver survey regarding trip offer rejections (which may occur with or without a passenger in the car), 23 percent report that they reject 20 percent or more of trip offers, and another 28 percent report they reject offers from 5 to 20 percent of the time. By overwhelming numbers (83 percent), drivers indicate they reject trip offers because they will not earn enough for that trip to make it worthwhile or because the trip would take them to an area where it would be hard to get another trip offer.

We made a series of adjustments to gauge the effects of the companies' truncation of P1 times on driver earnings. For example, we adjusted upward short positive P1 times data that were fewer than 2.5 minutes. We used high and low adjustment assumptions and then used the mid-point of that range to adjust the short positive P1 times. Appendix Exhibit 3 of the report explains this exercise in detail.[16] We found that adjusting the short P1 times would increase driver earnings under the base pay standard by 3.3 percent in the Twin Cities metro area and by 2.3 percent for drivers in Greater Minnesota.

Other data adjustments made by the companies were inconsistent with standard definitions of P1 by independent researchers. Our analysis in the report relied on the company data as submitted, and thus may have under-stated P1 time and the scaling up factor used in pay standard options presented in the report.

Earnings

We analyzed overall earnings for each committed driver (those whose average weekly hours were 10 or more) for each month during 2022. Exhibit 4 shows earnings, exclusive of tips, first on a gross basis, and then on an after-expense (net) basis—after subtracting an expense amount based on a driver's total miles multiplied by the applicable IRS business mileage rate.[17] Gross earnings per hour over all time worked averaged $30.27, while net earnings averaged $14.48.

Promotions and bonuses received by drivers are reflected in the company data on an allocated basis. Although not indicated in the data descriptions provided with the company data, news

[16] The adjustment method was based on an analysis of P1 times that were less likely to be affected by rejected trip offers. Appendix Exhibit 3 shows that such an adjustment has a limited impact on the overall average P1 times and resulting shares of total working time (and miles). The adjustment described in the report did not include an adjustment for the exclusion of end-of-shift P1 times.

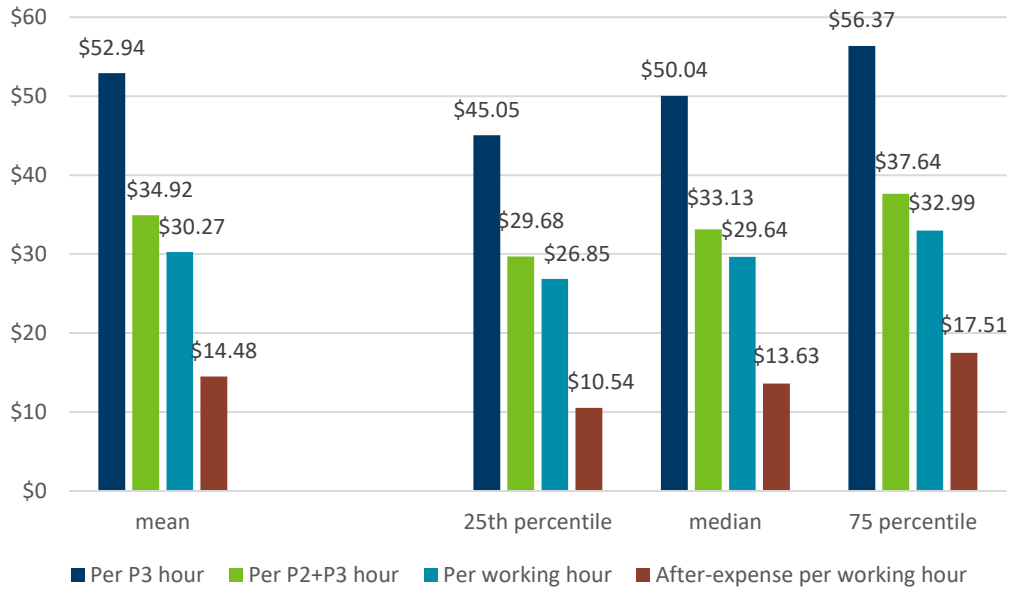
[17] Since gas and vehicle (new and used) prices were rising rapidly in early 2022, the IRS adopted a rare midyear rate adjustment. For the first six months of 2022 the IRS business mileage rate was 58.5 cents per mile, and for the second half of the year, the rate rose to 62.5 cents. For 2023, the IRS rate rose to 65.5 cents, and in 2024, it is 67 cents. We developed a Minnesota-specific expense method for 2024 costs that is included in the minimum

reports indicate the companies added a 55 cent per trip fuel surcharge to passenger fares. Uber's surcharge was in place from March 16, 2022, through Jan. 3, 2023, and Lyft's fuel surcharge was effective March 16, 2022, through Sept. 30, 2022.[18] The company data on driver earnings presumably includes fuel surcharges provided to drivers.

Exhibit 4 also shows the distribution of hourly earnings (mean—25th percentile—median—75th percentile) for four measures: passenger time (P3); engaged time (P2 + P3); all working time (P1 + P2 + P3) or time with the app on, and for all working time after expenses. Since Twin Cities metro drivers had a passenger in their car about 58 percent of their working time in 2022, their average hourly pay for all working hours is considerably less than for just their P3 time: average gross earnings per working hour were $30.27 compared to $52.94 per P3 hour (Exhibit 4). Median values are slightly lower.

After subtracting estimated expenses from gross earnings, the after-expense earnings per working hour falls by half or more. Thus, for the median Twin Cities metro driver in the exact middle of the pay distribution, after-expense pay per working hour was $13.63; the average after-expense earnings across all drivers was $14.48 per working hour.[19]

Exhibit 4
Hourly earnings for Twin Cities metro drivers



compensation standard options. For the Exhibit 4 pay comparisons we use the applicable IRS rates since we did not estimate Minnesota-specific expenses for 2022.

[18] Pete Grieve, "Amazon, Uber and Other Companies Are Dropping Fuel Surcharges After Gas Prices Plunge," *Money*, January 26, 2023.
[19] As noted above, expenses were estimated based on the IRS business mileage rates for 2022, since we did not develop detailed Minnesota expense estimates for 2022.

P1, P2 and P3 time and mileage shares determine scaling factors

Exhibit 5 shows the shares of working or on-app time and total miles for each of the P1, P2 and P3 trip segments. As we discussed above, the P1 shares are particularly low in Minnesota compared to previous TNC studies.

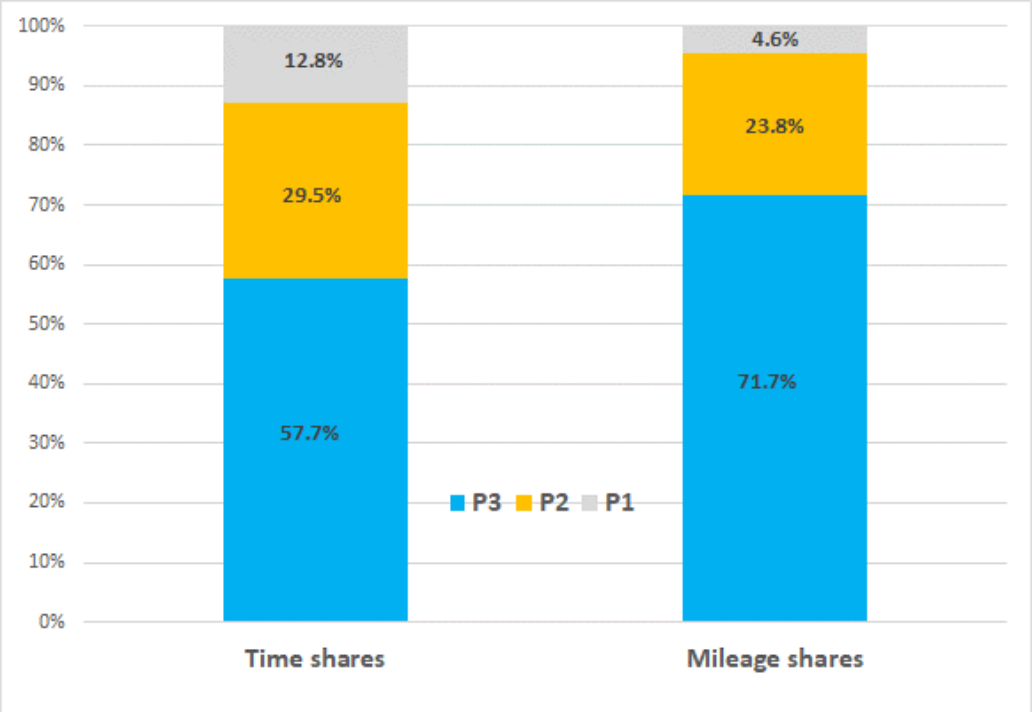
The increased use of forward dispatching constitutes the primary factor that reduces average P1 time. The P1 share of miles is less than half the P1 time share. Recall that since the companies did not provide data on P1 miles, we estimated assuming the average speed during P1 was half of P2 average speed.

The P1, P2 and P3 shares of time and mileage in Exhibit 5 are based on the company-provided data, with adjustments only to eliminate overlapping time across the two companies. We used the P3 values to compute the Minnesota pay standard options, which we presented below.

Minnesota-specific expense model

TNC drivers bear the entire responsibility for providing, maintaining and operating the vehicles they use to deliver TNC passenger services. To estimate the *net* earnings of TNC drivers, we must account for all expenses incurred in providing TNC services, including vehicle-related expenses such as licensing and vehicle registration, and the costs of a smart phone and data plan. Our expense analysis is based on local conditions specific to the Minnesota TNC industry.

Exhibit 5
In the Twin Cities metro area, drivers had passengers in their cars during 57.7 percent of on-app time, and 71.7 percent of trip miles



We compiled the annual cost of a driver's license, vehicle registration, license plates and related fees and taxes from the website of the Minnesota Department of Public Safety's Driver and Vehicle Services Division and checked with personnel in that office. These annualized costs totaled $243 and include the $25 fee drivers pay for registering with the Metropolitan Airports Commission to provide TNC trips at MSP Airport. The airport fee is the only TNC-specific cost in Minnesota.

MAC provided DLI with a list of airport-registered TNC drivers with detailed vehicle information about make, model and year of vehicles.[20] Using this data and online prices of used cars, we estimated than an average TNC vehicle cost $26,154, plus a monthly loan payment of $837, or a little over $10,000 a year. (In our survey data, the average monthly payment for those renting or leasing exceeded this $837 figure.).

While the companies provide liability insurance coverage, TNC drivers are required by state law to purchase their own liability and personal injury protection insurance. Some drivers add collision and comprehensive coverage for their vehicle, particularly for newer models with higher values. We used survey responses and online sources to estimate insurance and maintenance costs, which are included in Exhibit 6. Using detailed vehicle information, we determined an average U.S. Department of Energy combined city and highway fuel mileage rating for the Minnesota TNC fleet of 31.5 miles per gallon. According to the U.S. Energy Information Administration, average Minnesota retail regular gasoline costs for July through December 2023 were $3.43 per gallon.

Since most Minnesota TNC trips are provided by committed drivers, we amortized annualized vehicle expenses over 35,000 annual miles. As Exhibit 6 indicates, factoring in all of the itemized, Minnesota-specific components, annual vehicle and related costs spread over 35,000 annual miles comes to 63.83 cents per mile. This per mile factor is equally appropriate for a driver logging 15,000 or 20,000 annual miles as it is for a full-time driver logging 35,000 miles.

The 63.83 cents per mile expense rate we estimated for Minnesota TNC drivers is nearly five percent below the IRS 2024 67 cents per mile business mileage factor. The Minnesota rate is lower because vehicle acquisition costs were based entirely on used vehicles.[21]

[20] We grouped vehicles into eight common vehicle categories (for example, compact SUV and medium sedan) and four vintage year groups (2016, 2018, 2020 and 2022). We then used standard online sources to estimate Twin Cities metro area used car prices in those 32 vintage-vehicle categories and then estimated the annual payments for a driver financing the purchase of a vehicle.

[21] The airport data indicate that 46 percent of vehicles were model year 2020 or more recent while 54 percent were older than the 2020 model year.

Exhibit 6
Minnesota TNC vehicle and operating expenses

Expense Category	Specific Expenditure	Annual	Per Mile
Per mile costs based on 35,000 miles per year			
Licensing, vehicle registration fees & tax *		$243	0.0069
Operating costs	Vehicle acquisition	$10,044	0.2870
	Gas	$3,815	0.1090
	Vehicle maintenance	$3,434	0.0981
	Insurance	$2,664	0.0761
	Cellphone	$1,440	0.0411
	Vehicle cleaning	$700	0.0200
Operating costs	Subtotal	$22,097	0.6313
TOTAL VEHICLE AND LICENSING EXPENSES		**$22,339**	**0.6383**

Pay standard options

Our proposed TNC pay standard included two components: a per minute component to compensate for the driver's time, and a per mile component to compensate for vehicle and other necessary expenses, and as explained below, to cover the cost of possible common workplace benefits. We presented two options: a "base" per mile option that accounts for vehicle and other necessary expenses; and a "comprehensive" per mile option that adds several common workplace benefits; the cost of each benefit is computed as the incremental cost per mile.

We designed the Minnesota per minute rate to compensate drivers at the equivalent of the minimum wage, plus the employer share of federal Social Security and Medicare payroll tax: $15.57 minimum wage plus $1.28 in payroll tax in the Twin Cities metro area. The basic per mile rate provides for the 63.8 cents per mile cost of acquiring, operating, and maintaining a vehicle, based on Minnesota-specific costs from early 2024.

To pay drivers for their entire on-app time and for all the miles they drive during on-app time, we then scaled up the respective per minute and per mile components that would be applied to the time and distance of a TNC passenger trip. Scaling up the per minute pay rate involves dividing by the P3 share of on-app time; scaling up the per mile expense rate involves dividing by the P3 share of total miles driven during all three of the time segments for each trip.[22]

The scaled-up 2024 base compensation rates for the Twin Cities metro area are 48.7 cents per minute and 89.0 cents per mile. Since benefits are commonly part of an overall compensation package for employees, we estimated on a per mile basis: the cost of paid leave, health

[22] Driver compensation standards in New York City and Seattle used similar scaling factors, based on local conditions.

insurance, retirement savings and unemployment insurance. Exhibit 7 itemizes the cost of each benefit component included in the "comprehensive" pay standard mileage factor.

Exhibit 7

Twin Cities metro per mile rates and expense options

Vehicle and operating expenses	P3 share of miles	Vehicle and operating expenses scaled for P3 share of miles	Base per mile rate
$0.6383	0.717	$0.890	**$0.890**

	Benefit component	Benefit cost	Base rate plus benefit cost
ESST	Earned sick and safe time	$0.030	$0.920
PL	Paid leave—includes ESST	$0.101	$0.991
HI	Health insurance	$0.137	$1.027
RS	Retirement savings	$0.073	$0.963
UI	Unemployment insurance	$0.007	$0.897
Comprehensive per mile rate (incl. PL + HI + RS + UI)		**$0.317**	**$1.207**

Exhibit 8 shows the base and comprehensive pay standard options for P3 time and P3 miles. The per minute rates are the same for each area's base and comprehensive options; only the per mile components differ.

Exhibit 8

Minnesota TNC pay standard options

	per P3 minutes	per P3 miles
Base pay standard	$0.487	$0.890
Comprehensive pay standard	$0.487	$1.207

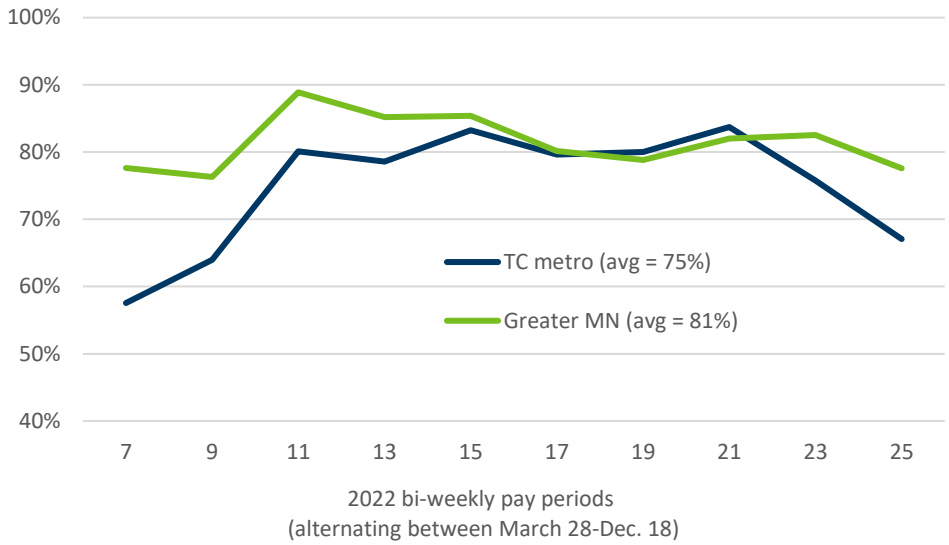
Most committed Minnesota drivers were paid below the base pay standard level in 2022

Based on our analysis of ten two-week periods in 2022, 75 to 80 percent of drivers were paid less than the base 2024 TNC minimum compensation pay standard option. (See Exhibit 9). However,

the number of drivers relative to trip demand and payment practices employed by the companies may have changed since 2022.

Exhibit 9

75 to 80 percent of committed drivers would have been paid below the base pay standard in 2022



Minnesota's statewide neogtiated pay standard

As directed by the Minnesota Governor's Executive Order, our DLI report was intended to inform the negotiating process for a driver pay standard during the 2024 legislative session. In early March 2024, the Minneapolis City Council enacted its own version of a driver pay standard, based on Seattle rates but not on any local data. The Minneapolis City Council pay standard bill called for a per minute rate of 51 cents, close to the 49 cents in our report but with a per mile rate of $1.40, higher than even the $1.21 per mile rate in our comprehensive benefit option. The Minneapolis measure was vetoed by the mayor, but his veto was overridden in the Council. In response, the companies threatened to leave if the city's pay standard took effect.

Against this politically charged backdrop, the legislature reached an agreement on the last day of its 2024 session on May 19. The negotiated agreement included input from drivers, drivers' advocates, the companies, and elected leaders in Minneapolis and was widely viewed as a win. The legislation's preemption clause nullified the Minneapolis ordinance.

The legislature's enacted pay standard called for a single state-wide standard of $0.31 per P3 minute and $1.28 per P3 mile. Exhibit 10 compares these rates to the base and comprehensive pay rates in our study. The per minute component of the final pay standard was well below the per minute standard in our report, but the $1.28 per mile result was well above the mileage rate in both options we proposed.

The compromise resulted in per trip after-expense hourly pay that landed between the base rate cand comprehensive rate options we calculated. The political pressure mounted by driver groups that led to the City Council proposal was also evident in the legislature and contributed to the

Exhibit 10

Enacted Minnesota pay standard increases after-expense hourly pay 47 percent

(a.) 2022 & 2023 trip parameters and actual trip pay

	P3 miles and minutes		
Twin Cities Metro area	miles	mins.	trip pay
2022 actual--study	7.87	14.64	$12.87
2023 Uber reported	**8.19**	**14.96**	**$12.62**

(b.) Enacted and study trip pay based on 2023 trip parameters

	P3 pay standard rates		P3 pay for avg trip		
	miles	mins.	miles	mins.	trip pay
Base study rates	$0.89	$0.49	$7.29	$7.29	$14.57
Comprehensive study rates	$1.21	$0.49	$9.89	$7.29	$17.17
					increase vs. 2023
Enacted rates	$1.28	$0.31	$10.48	$4.64	**$15.12**	**20%**

(c.) P3 distance and time shares; total trip metrics; expense metrics

	P3 shares *						
	distance	time	total trip (P1+P2+P3) miles	total trip (P1+P2+P3) minutes	trips per hour	avg speed (MPH)	expenses per mile	expenses per hour
2023	0.717	0.577	11.423	25.927	2.314	26.43	$0.638	$16.86

(d.) After-expense hourly pay

	trip pay	trip pay per hour	expenses per hour	After-expense hourly pay
2023 Uber reported	$12.62	$29.20	$16.86	**$12.34**
Base study rates	$14.57	$33.73	$16.86	$16.86
Comprehensive study rates	$17.17	$39.74	$16.86	$22.87
				increase vs. 2023
Enacted rates	$15.12	$34.99	$16.86	**$18.13**	**47%**

end result. Importantly, the companies conceded that they could accept the compromise and continue to do business throughout the state. [23]

The enacted pay standard, which becomes effective on December 1, 2024, would result in an average of $15.12 per trip (measured in P3 time), based on trip data for 2023 reported by Uber to the Department of Labor and Industry. A $15.12 standard would be 20 percent higher than the average 2023 trip pay of $12.62 for P3 time reported by Uber. (The $12.62 trip average for 2023 was $0.25 less than the $12.87 average amount that we found for all Uber and Lyft trips in 2022).

However, after factoring in expenses and expressing driver pay on an hourly basis (based on on-app or working time), the enacted pay standard equals $18.13 per hour (after expenses). The $18.13 enacted standard represents a 47 percent increase over average $12.34 after-expense hourly pay for 2023.[24] The $1.28 per mile rate was not intended to directly reflect a driver's vehicle expenses; rather, it was part of an overall negotiated pay standard along with the $0.31 per minute rate.

After independent contractor taxes of $1.39 are deducted, the $18.13 after-expense hourly rate will yield $16.74 an hour, about five percent more than the projected Minneapolis minimum wage of $15.97 on January 1, 2025, and 50 percent more than the projected Minnesota statewide $11.13 minimum wage outside of the Twin Cities.[25] The comparable 2025 after-expense pay standard to local minimum wage premium ratios for New York City would be 43 percent, for Seattle, 58 percent, and for Washington State outside of Seattle, 29 percent.[26]

Impact

A pay standard that incorporates vehicle and necessary expenses and benefits into the per mile rate will increase driver compensation, which could lead to an increase in the supply of drivers. Some existing drivers may choose to drive more and additional drivers may be attracted to drive for a TNC. This expansion of driver labor supply should lower recruitment and retention costs for the TNCs. The reduced turnover and more experienced driver workforce should also improve the safety and quality of rideshare services.

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[23] News coverage included: Max Nesterak, "Here's what's in the bill regulating Uber and Lyft driver pay and labor standards," *Minnesota Reformer*, May 21, 2024; and Dara Kerr, Uber and Lyft are fighting minimum wage laws. But in this state, the drivers won." *NPR*, June 17, 2024.

[24] Expenses calculated using the $0.638 mileage rate estimated in our study multiplied by the average 26.43 miles travelled per hour by Minnesota TNC drivers.

[25] The 2024 statutory local minimum wage for large employers in Minneapolis and St. Paul is $15.57. Assuming the 2024 minimum is adjusted upward by a 2.6 percent inflation factor, the 2025 minimum wage would be $15.97.

[26] These comparisons are for after-expense hourly pay net of independent contractor taxes based on applying respective pay standard per minute and per mile rates to the 2023 Twin Cities average trip parameters (i.e., P3 time and distance, hourly speed, and trips per hour). Expenses are calculated for each area based on the authors' estimates of adjusted actual expenses rather than the per P3 mile rates since, except for New York City, per P3 mile rates include other factors in addition to vehicle expenses. Independent contractor taxes for Seattle and Washington State outside of Seattle include a business gross receipts tax. See Parrott and Reich, 2020, p. 47.

The supply of drivers—both the number of drivers and the hours worked by individual drivers—is likely to increase, but it is difficult to predict by how much. Uber studies, most notably one by Hall, Horton and Knoepfle, have estimated that driver labor supply is highly responsive to pay increases.[27] However, these studies use data from well before the pandemic, when the number of unemployed workers with limited educational attainment searching for work far exceeded the number of low-wage job openings. That has not been the case since 2020.

In the post-pandemic period, and especially in 2022 and early 2023, the number of such job openings substantially exceeded the number of job seekers. As a result, pay has increased in low-wage jobs, reversing decades of stagnant wages and growing wage inequality.[28] Data from the Minnesota Department of Employment and Economic Development (DEED) indicates pay for the lowest-wage jobs in the seven-county metro area rose nearly twice as fast during the past two years as for the overall private sector workforce, 13.7 percent compared to 7.1 percent.[29]

Immigrants with limited English language proficiency comprise a significant portion of the TNC workforce in Minnesota.[30] Nonetheless, recent pay increases in closely related industries, such as in package delivery and warehouse work, will likely affect the supply of TNC drivers. On the other hand, the growth of immigrant labor in Minnesota during the past decade likely contributed to the nearly 50 percent increase in the number of TNC drivers since early 2022.[31]

Unfortunately, there are no studies of TNC driver labor supply in the post-pandemic period. It nonetheless seems likely that the number of drivers will increase because of the pay standard. Even before the enactment of the Minnesota driver pay standard, available data from the Metropolitan Airport Commission (MAC) shows that the driver pool is rising faster than the number of trips. From the first quarter of 2023 to the first quarter of 2024, the number of airport trips rose by 17.5 percent, while the number of active drivers registered with MAC to drop off and pick up passengers at the airport increased by 26.4 percent. Airport trips account for nearly 20 percent of all trips in the Twin Cities metro area.

To the extent driver supply increases faster than the growth in consumer demand, forward dispatch and P3 shares will decline. Passenger waiting times will decline but the pay standard will need to be adjusted to offset these likely responses or driver pay per on-app hour will fall.

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[27] Jonathan V. Hall, John J. Horton, and Daniel T. Knoepfle, "Ride-Sharing Markets Re-Equilibrate," NBER Working Paper No. 30883, 2023.

[28] David Autor, Arindrajit Dube, and Annie McGrew, "The Unexpected Compression: Competition at Work in the Low Wage Labor Market," NBER Working Paper No. 31010, November 2023.

[29] Low-wage sectors include Trade and Transportation, Leisure and Hospitality, and Other Services. Wage change measured as the change in average weekly wages for the first three quarters of 2021 to the first three quarters of 2023 (latest data available). Minnesota Department of Employment and Economic Development, Quarterly Census of Employment and Wages.

[30] The TNC driver survey indicated 74 percent of respondents were foreign-born and 45 percent indicated that English was not the primary language spoken at home (although 94 percent of the surveys were completed in English.)

[31] DEED reports that the state's immigrant workforce increased by more than 80,000 workers from 2011 to 2021 (an increase of over 31 percent) compared to the 75,500 increase (only a 2.8% increase) in the native-born workforce over that period. Sixty-one percent of the foreign-born population were in their prime working years (25-54 years of age) compared to 38 percent of the total population. Minnesota DEED, "The Importance of Immigration in Minnesota," August 2023. 082223_immigration_MN_tcm1045-591108.pdf

Although the companies could raise fares in response to a pay standard, they have considerable latitude on the size of the increase. If the companies raise fares, passenger demand for rides might fall enough to lower the aggregate earnings of drivers. Lacking data about fares paid by passengers and about commissions and fees paid to the TNCs, it was not possible to analyze how Minnesota passengers have responded to fare increases nor how TNC commissions may have increased or decreased. But the companies are unlikely to raise prices to levels that would significantly reduce consumer demand and commissions.

As mentioned, relatively high company commissions provide transportation network companies some latitude for absorbing higher driver compensation. The companies should save on recruitment and retention costs because the higher driver compensation would incentivize more drivers to stay with the TNC. The companies sometimes provide bonuses to induce drivers to drive more or in certain locations or at certain times. With better and more certain compensation, there will be less need for the companies to provide bonuses. Reduced turnover and a more experienced driver workforce should also improve the safety and quality of rideshare services and reduce company insurance costs.

In addition to not having passenger fare data, other data limitations constrained our ability to more precisely gauge the impact of the pay standard. Since the company-provided data did not include information on trip offers that were rejected, we could not examine the apparent practice of companies "auctioning" trips at low compensation rates to drivers.[32] The data provided only had county identifiers for pickup and drop-off, although all the Twin Cities metropolitan counties have suburban and rural area identifiers. Since the company data did not have zip-code or other detailed geographic identifiers, we were also not able to examine payment differences by area.

Discussion

Data requirements: The pay standard options we developed are based on the specific balance of driver supply, consumer demand, and company pricing policies that existed in 2022. The MAC 2024 data show that over the past year the number of drivers has grown faster than the number of trips. Such changes will evolve further in the coming years. The ongoing adequacy and impacts of the compensation policy face multiple challenges: changing labor market conditions over time, the difficulty in predicting the magnitude of labor supply responses to the TNC compensation standard, the lack of data during the past year regarding changes in the demand for rides, and the possibility of further changes in TNC operating practices. In our view, it will therefore be important for the State of Minnesota to monitor each company's trips, earnings and fare data on an ongoing basis, and to make appropriate and timely adjustments to the compensation standard.

Compliance window: The 14-day compliance window in the Minnesota pay standard may cause problems in the future. Unlike in New York City, where the minimum pay rates are applied to

[32] As noted earlier, on the Minnesota driver survey, 23 percent of drivers reported that they reject 20 percent or more of trip offers, and another 28 percent reported they reject offers from 5 to 20 percent of the time. By overwhelming numbers (83 percent), drivers indicate they rejected trip offers because they will not earn enough for that trip to make it worthwhile or because the trip would take them to an area where it would be hard to get another trip offer.

each trip, in Minnesota the companies have considerable latitude in compensating drivers for individual trips, as long as the total compensation over the pay period equals at least the sum of the per mile and per minute rates applied on an aggregate basis.

The companies could continue to auction trips to the lowest-bidding driver, a practice that could become more prevalent if driver supply exceeds consumer demand. The companies will then offer more trips to the drivers willing to work for less pay. It is thus possible that the combination of the 14-day window and the absence of any driver supply-regulating mechanism will reduce compensation levels to the level of the minimum pay standard. In that case, the standard will become a ceiling as well as a floor, limiting the ability of drivers to earn above that level.

Incentive to increase utilization In New York City, in addition to the standard applying on a trip basis, the structure of the pay standard formula includes P3 (utilization) in the denominator of the rate structure. This structure pressures the companies to limit access to the platforms to keep driver supply at any time somewhat in line with consumer demand.[33] A separately enacted vehicle cap has at times checked the growth in driver supply.

The possibility that the State of Minnesota would revise the pay standard in the event driver waiting times rise could incentivize the companies to better manage driver access to their platforms. Some drivers may see such actions as imposing limits on their "flexibility." However, in the TNC business model, in which drivers are independent contractors, the companies have been treating driver waiting time as a free good. That model creates a tension between driver flexibility and fair compensation for the more committed drivers. The companies could schedule drivers in shifts, as companies like UPS do, as well as increase their reliance on full-time drivers. Part-time drivers will still be needed to even out driver supply and consumer demand.

Other provisions of the Minnesota law:

- During P2 and P3, TNC companies are required to provide liability insurance coverage and security for the payment of disability and income loss and medical expense benefits for work-related injury during P2 and P3.
- TNC drivers may opt into Minnesota's paid family and medical leave benefits.[34]
- The companies are required to provide, within 24 hours of each trip completion, electronic receipts to drivers showing P2+P3 time and miles, total driver compensation, any gratuity, and total passenger fare for each trip.
- The companies are also required to provide weekly summaries with total time the driver is logged onto the app, total time and miles for P2 and P3 segments, total fares paid by passengers, and total compensation to the driver, including any gratuities.
- An appeals procedure for deactivations and a requirement that the TNCs contract with an independent driver advocacy organization that is tasked with assisting drives in their

[33] In New York City, P3 time and distance utilization were both 58 percent when the policy was implemented in early 2019. The plan was to update the utilization factor annually. However, the 58 percent utilization was maintained in the second year and again during the pandemic and its immediate aftermath. In March 2023 a new regulation called for adjusting the per-minute and per-mile utilization rates in the pay standard formula, if the average industry utilization fell below 53 percent for the prior year. In that case, the prior year's actual utilization rate would be incorporated into the pay standard.

[34] The Minnesota paid family and medical leave program takes effect January 1, 2026.

appeals and providing other technical or legal assistance on issues related to providing TNC services.

- The legislation states that nothing in its language prohibits collective bargaining and no provision "shall be construed to determine whether a TNC driver is an employee."[35]

Many of these provisions came from the consensus policy recommendations of the blue ribbon commission during the summer-fall of 2023, providing a starting point for the legislative compromise.[36] While not eligible for Minnesota's workers' compensation program, TNC drivers will have workplace injury insurance coverage similar to workers' compensation that provides for medical benefits and lost pay. However, drivers will not have unemployment insurance coverage. Under a recent agreement with the New York Labor Department, Uber drivers in New York state have unemployment insurance coverage and the company pays unemployment payroll taxes into the state trust fund.[37]

Loan program Although it was dropped from the Minnesota legislation at a late stage, a proposal to establish a publicly funded zero percent interest auto loan program for drivers could receive renewed attention next year. Since vehicle prices, insurance and financing costs have all risen in recent years, a low-cost financing program could benefit many drivers.

Conclusions

In May of 2024 Minnesota became the first state to adopt a single minimum compensation standard for all gig passenger drivers. (Reflecting higher vehicle costs, there is a different pay standard for drivers of wheelchair accessible vehicles.) In our report for the state, we used both survey data and company-provided trip and earnings data for 2022 to assess the economic conditions of these drivers. The typical driver is a male immigrant and is more likely to receive public benefits. While 45 percent of drivers work less than ten hours per week, they perform only 11 percent of all rides. The more committed drivers, those who work at least ten hours per week and who are more likely to rely on driving as their main source of income, provide nearly 90 percent of all trips. We find that the average committed driver was paid only $12.43 per hour (after expenses) in 2022.

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[35] Minnesota 93rd Legislature, HF No 5247, Article 17, Transportation Network Companies. https://www.house.mn.gov/cco/journals/2023-24/J0519119.htm#19606

[36] *Recommendations for the Compensation, Wellbeing and Fair Treatment of Transportation Network Company Drivers*, Minnesota Department of Labor and Industry, December 30, 2023. https://www.dli.mn.gov/sites/default/files/pdf/TNC_EO_23_07_final_committeee_report_123023.pdf

[37] This settlement followed years of administrative rulings by the State Unemployment Insurance Appeals Board in over 200 individual cases that Uber and Lyft drivers should be considered employees and not independent contractors, and thus eligible for unemployment compensation. The New York Taxi Workers' Alliance worked with legal services attorneys for several years to secure favorable rulings from State UI Appeals Board administrative judges regarding employee classification for UI purposes that established UI eligibility in New York State. These actions culminated in a November 2023 agreement between the New York State Labor Department and Uber for the company to pay past and future unemployment insurance payroll taxes for all Uber and Uber Eats drivers and couriers. The agreement retroactively covers taxes back to 2013, when it began operating in New York State. "Governor Hochul Announces Unprecedented Settlement Agreement Between the NYS Department of Labor and Uber," November 2, 2023, https://www.governor.ny.gov/news/governor-hochul-announces-unprecedented-settlement-agreement-between-nys-department-labor-and.

The Minnesota standard has two components: a per minute rate to compensate drivers for all their working time and a per mile rate to compensate drivers for all their expenses. This approach is similar to the standards previously implemented in New York City and Seattle. In both of those cities, the standard increased driver pay without adversely affecting the industry. We estimate that the Minnesota minimum standard represents a 47 percent increase over average 2023 driver pay.

Unresolved issues

In Minnesota the companies have a two-week window to compensate the drivers for their trips, rather than paying them the minimum for each trip, as New York City requires. The companies will therefore have an incentive to offer more rides to the drivers who are willing to accept lower pay per ride. In that event, the pay standard could become a ceiling as well as a floor.

The new law does not provide for trip and driver data to be provided by the companies to the state. Without such data-reporting requirements, it will be difficult for the state to monitor compliance with the standard and to judge driver complaints about their pay. Equally important, without a data-reporting requirement, the state will not be able to monitor how changes in the driver labor market and in the companies' business practices impinge on the effectiveness of the pay standard.

The companies did provide data that we used to assess the economic conditions of Minnesota drivers and to determine a minimum wage equivalent pay standard. However, the data had already been curated by the companies. The companies chose to define P1 time as beginning only after the last refusal of a ride offer and excluding P1 time at the end of a shift. The conventional definition of P1 includes all time before the first ride, all the time a driver is waiting to accept a ride offer and any waiting time after the last ride of the driver's shift. The companies' changes reduce P1 time substantially, compared to what we and others have found in other areas for 2022 and in Minnesota more recently. The data adjustments therefore affect calculations of how much drivers are earning per hour during their entire shift time. Minnesota would do well to require the companies to periodically report raw data on all trips and earnings, just as New York City does.

To conclude, Minnesota has been able to enact a pay standard for gig passenger drivers similar to those that have worked successfully in New York City and Seattle. Some unresolved issues remain for the state and advocates to address in the near future.

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