# **On-Demand Workers, Sub-Minimum Wages**

Evidence from Transportation Network Provider Trips in the City of Chicago

January 19, 2021

### Frank Manzo IV, M.P.P.

Policy Director Illinois Economic Policy Institute

## Robert Bruno, Ph.D.

Professor and Director University of Illinois at Urbana-Champaign Project for Middle Class Renewal

















# **Executive Summary**

The City of Chicago has experienced a significant increase in app-based transportation network provider (TNP) services, also called "ride-sharing" services. Drivers working for Uber, Lyft, and Via—the three TNP companies licensed with the city—are currently classified as self-employed "independent contractors," an arrangement that prohibits them from accessing basic labor protections, such as minimum wage laws.

There are thousands of TNP drivers in Chicago, but the COVID-19 pandemic has had a significant impact on the size of the TNP workforce.

- Before the pandemic, there were more than 110,000 registered TNP drivers, 66 percent of whom (72,000 drivers) were active and recorded at least one trip during September 2019.
- During the pandemic, there were fewer than 67,000 registered TNP drivers, 44 percent of whom (29,000 drivers) were active and recorded at least one trip during September 2020.
- The average number of trips completed by active drivers was unchanged at 123 trips per month.

A sample of 77,974 TNP trips completed during the exact same times on the exact same days in the middle of September 2019 and September 2020 reveals the full effects of the COVID-19 pandemic.

- Total vehicle miles traveled with passengers by TNP drivers fell by 63 percent year-over-year.
- The average distance per trip fell by 5 percent but the average duration per trip fell by 18 percent, indicating that TNP drivers completed trips at a faster pace due to decreased traffic congestion.
- The average customer tip decreased by 39 percent and the share of trips resulting in a tip to the driver decreased from just 21 percent to 14 percent.

On-demand workers for app-based transportation network providers generally earn sub-minimum wages in the City of Chicago. While Uber, Lyft, and Via drivers in Chicago make between \$19 and \$23 per hour in gross earnings, they earn significantly less after expenses and taxes. After accounting for vehicle expenses reported by AAA, gasoline prices published by the U.S. Department of Energy, and payroll taxes:

- The average TNP driver in Chicago earned \$12.30 per hour in 2019, 5 percent below the \$13-per-hour minimum wage in 2019.
- The average TNP driver in Chicago earned \$15.09 per hour in 2020, an estimate that is artificially inflated because TNP workers did not experience the usual levels of traffic congestion.
- The average TNP driver in Chicago would have only earned \$13.62 per hour in 2020 with prepandemic levels of traffic congestion, 3 percent below the \$14-per-hour minimum wage in 2020.

This analysis suggests that the treatment of TNP drivers as "independent contractors" suppresses their earnings, shifting income from the workers to the executives and shareholders of TNP companies. Two potential policy alternatives could be pursued to improve outcomes for TNP drivers in the City of Chicago:

- 1. <u>State lawmakers could classify TNP drivers as employees</u>, granting them full employment rights and access to basic labor protections, including minimum wage laws, overtime pay laws, workers' compensation coverage, unemployment insurance benefits, and the ability to collectively bargain.
- 2. <u>Elected officials in Chicago could incorporate a minimum driver pay standard into the Chicago Transportation Network Providers Ordinance</u>, increasing average net pay to \$15 per hour. After New York City implemented a minimum pay standard, driver pay increased by 8 percent, passenger wait times decreased by 18 percent, and TNP company commission rates fell—indicating that Uber, Lyft, and other TNP companies absorbed part of the increase in costs.

Although drivers for transportation network providers struggle to earn the minimum wage in Chicago, there are options that elected officials could consider to promote fairness and boost worker earnings.

### **Table of Contents**

Executive Summary	i
Table of Contents	ii
About the Authors	ii
Introduction	1
A Brief Review of the Research on Transportation Network Providers	2
Drivers of Transportation Network Providers: September Data	3
Sample of Transportation Network Provider Trips: September Data	4
Hourly Pay of Drivers of Transportation Network Providers	6
Implications for State and Local Government Elected Officials	10
Sources	12
Cover Photo Credits	14

### **About the Authors**

**Frank Manzo IV**, M.P.P. is the Policy Director of the Illinois Economic Policy Institute (ILEPI). He earned a Master of Public Policy from the University of Chicago Harris School of Public Policy and a Bachelor of Arts in Economics and Political Science from the University of Illinois at Urbana-Champaign. He can be contacted at <a href="mailto:fmanzo@illinoisepi.org">fmanzo@illinoisepi.org</a>. In the interest of full disclosure, Frank Manzo IV reports that he holds shares of stock in Uber Technologies (NYSE: UBER) as part of his investment portfolio.

**Robert Bruno**, Ph.D. is a Professor at the University of Illinois at Urbana-Champaign School of Labor and Employment Relations and is the Director of the Project for Middle Class Renewal (PMCR). He also directs the Labor Education Program (LEP) at the University of Illinois at Urbana-Champaign. He earned a Doctor of Philosophy in Political Theory from New York University, a Master of Arts from Bowling Green State University, and a Bachelor of Arts from Ohio University. He can be contacted at bbruno@illinois.edu.

## Introduction

The City of Chicago has experienced a significant increase in non-traditional work arrangements over the last decade. These forms of contingent work, which typically require app-based or online platforms, are often referred to as the "gig" economy, the "sharing" economy, or the "on-demand" economy (Lichfield, 2015). The "gig" economy includes freelancers like writers and lawyers, manual laborers through companies like TaskRabbit and Handy, and property owners who rent out homes and rooms to tourists through services like Airbnb and Vrbo. The most well-known "gig" economy companies are the app-based transportation network providers, Uber and Lyft.

The City of Chicago considers a transportation network provider (TNP) any company that "provides prearranged transportation services for compensation through an Internet-enabled application or digital platform to connect passengers with drivers of vehicles for hire" (BACP, 2021). TNPs are also sometimes called "ride-sharing" companies and "high-volume for-hire services" (New York City, 2020). The City of Chicago Transportation Network Providers Ordinance requires all TNP companies to be licensed and requires that all TNP vehicles and drivers obtain and display TNP Vehicle Registration Emblems with TNP Chauffeur Licenses to protect consumers and ensure passenger safety. Uber, Lyft, and Via are the only three TNP companies licensed with the City of Chicago (Greenfield, 2019). Between 2015 and 2018, the annual number of TNP vehicle miles traveled in Chicago increased by 344 percent, contributing to ridership loss on Chicago Transit Authority (CTA) bus and rail services (City of Chicago, 2019).

Drivers utilizing the app-based platforms of Uber, Lyft, and Via are currently classified as self-employed "independent contractors." While there are some benefits to being independent contractors, especially in terms of job flexibility and entrepreneurial activity, workers who are classified as independent contractors lose protections to basic labor standards, including minimum wage laws, overtime pay laws, paid family and medical leave policies, workers' compensation coverage, and unemployment insurance benefits (Xu & Erlich, 2019). Independent contractors also forgo the ability to join unions and collectively bargaining for better working conditions. Because TNP drivers are presently considered "independent contractors," estimates of their average hourly pay vary, ranging from as little as \$8.55 per hour to as much as \$23.25 per hour (Zoepf, 2018; Catt, 2020).<sup>1</sup>

The COVID-19 pandemic has severely disrupted the economics of transportation network providers. The public health crisis caused an unprecedented shock to both demand and supply, reducing the number of trips requested by consumers as well as the number of drivers willing to work in the frontline, face-to-face sector at a high risk of becoming infected by the virus. The number of Uber and Lyft riders fell by between 60 percent and 75 percent in the second quarter of 2020 (Lavietes & McCoy, 2020). However, once the majority of Chicago area residents are vaccinated and the pandemic comes to an end, the supply of and demand for TNP services is likely to return to pre-pandemic levels and trends (Koustas et al., 2020).

This report, conducted jointly by researchers at the Project for Middle Class Renewal (PMCR) at the University of Illinois at Urbana-Champaign and the Illinois Economic Policy Institute (ILEPI), examines data on transportation network provider drivers and trips in the City of Chicago. After a brief review of the economic literature on TNPs, data on Uber, Lyft, and Via drivers in Chicago are disclosed. Subsequently, a sample of TNP trips is utilized to estimate the average number of trips and miles driven per month by TNP drivers in Chicago. Finally, estimates on the average hourly pay of TNP drivers are presented, both before

<sup>&</sup>lt;sup>1</sup> Uber and Lyft, however, have promoted potential earnings of up to \$35 per hour to prospective workers (Henao & Marshall, 2019).

and after the COVID-19 pandemic. Finally, potential policy implications that emanate from the findings are offered for officials in the City of Chicago and the State of Illinois.

## A Brief Review of the Research on Transportation Network Providers

There is a growing body of economic research on transportation network providers (TNP) in the United States. One early conclusion of the academic research was that the technologies utilized by Uber, Lyft, and other companies in the "gig" economy lower costs for consumers and provide labor flexibility for workers (Chen et al., 2019). A recent study found that workers were attracted to driving for Uber because the platform offers flexibility and consistent earnings per hour that do not vary much with the number of hours worked (Hall & Krueger, 2017). One of the reasons why earnings per hour are relatively stable is that TNP drivers spend a higher fraction of their time with passengers in their vehicles than do taxi drivers, due to more efficient driver-passenger matching technologies (Cramer & Krueger, 2016).

Most Uber drivers maintain other full-time careers or part-time jobs and work for Uber to supplement their incomes (Hall & Krueger, 2017). Nationally, the average Uber driver only works 17 hours per week, with a majority (51 percent) of drivers working 15 hours per week or fewer (Mishel, 2018; Frizell, 2015). Uber data also suggest that drivers spend about half of their time working without passengers in their vehicles (Rodino-Colocino, 2019). In the City of Chicago, 56 percent of Uber drivers work between 1 hour and 15 hours per week, 31 percent work between 16 hours and 34 hours per week, 9 percent work between 35 and 49 hours per week, and 4 percent work over 50 hours per week (Hall & Krueger, 2017). TNP drivers in Chicago spend about 55 percent of their time with passengers in their vehicles, 10 percent of their time driving to pick up passengers, and 35 percent of their time waiting for ride requests (Fehr & Peers, 2019). The median number of trips per hour is 1.55 trips for the typical TNP driver in Chicago (Hall & Krueger, 2017).

Economic researchers generally conclude that companies like Uber and Lyft provide low wages for drivers. A 2018 report from Stanford University found that median net profits for Uber drivers ranged from \$8.55 per hour to \$10.00 per hour (Zoepf, 2018). Another 2018 study found that Uber driver compensation the income drivers earn after Uber commissions and vehicle expenses—averages \$11.77 per hour, with about one-third of the total fare going to Uber (Mishel, 2018). If a "modest benefits package" and payroll taxes are included, the W-2 equivalent wage is just \$9.21 per hour (Mishel, 2018). An investigative analysis of driving for Uber and Lyft in the Denver metro area included time spent without passengers, the need to travel back-and-forth between areas of high and low ridership, and driving expenses and estimated that net hourly wages ranged from \$5.72 per hour to \$10.46 per hour before taxes, suggesting that TNP drivers earn considerably less than the minimum wage in Colorado (Henao & Marshall, 2019). Similarly, researchers at the University of California, Berkeley and The New School found that while gross driver hourly pay for TNP drivers in Seattle is approximately \$21.53 per hour, TNP drivers net only \$9.73 per hour after expenses—well below the city's minimum wage of \$16.39 per hour in 2020 (Parrott & Reich, 2020). Another 2020 study by researchers at Cornell University found that the median TNP driver in Seattle earned \$23.25 per hour after expenses (Catt, 2020). One problem with the Cornell University study, however, was that it did not include time waiting for passengers as work time, which is "at odds with the conventional understanding of work" (Scheiber, 2020).

Transportation network providers have important social consequences as well. Based on data from more than one million Uber drivers in the United States, researchers have found that male drivers earn 7 percent more, on average, than female drivers for doing the same job—meaning that "there is no reason

to expect the 'gig' economy to close gender differences" (Cook et al., 2018). TNP workers and individuals employed in other contingent work arrangements are 10 percentage-points less likely to have access to health insurance coverage than the national average (Tran & Sokas, 2017). Finally, for passengers, researchers have found "a pattern of discrimination" amongst Uber drivers themselves. A 2016 study of nearly 1,500 rides in Seattle and Boston revealed that, compared to white passengers, Black or African American passengers experienced up to 35 percent longer waiting times and a cancellation rate that was more than twice as frequent (Ge et al., 2016).

# **Drivers of Transportation Network Providers: September Data**

There are thousands of transportation network provider (TNP) drivers registered with the City of Chicago (Figure 1). In September 2019, before the COVID-19 pandemic, there were more than 110,000 registered TNP drivers—25 percent of whom were registered to work for multiple TNPs. However, only about 72,000 TNP drivers (66 percent) recorded at least one fared trip during the month (City of Chicago, 2021a).

The COVID-19 public health crisis had a significant impact on the size of the TNP workforce (Figure 1). In September 2020, during the COVID-19 pandemic, there were fewer than 67,000 TNP drivers registered with the City of Chicago, a 40 percent decrease. The number of drivers working for multiple TNPs fell by 7 percentage points, from 25 percent to 18 percent. Just over 29,000 TNP drivers (44 percent of all registered TNP drivers) recorded at least one fared trip during the month, representing a 59 percent year-over-year decline in the number of TNP drivers working.

FIGURE 1: DATA ON TNP DRIVERS REGISTERED WITH THE CITY OF CHICAGO IN SEPTEMBER, 2019 VS. 2020

TNP Drivers in September	2019	2020	Change
Total Drivers Registered in Chicago	110,288	66,548	-39.7%
<u>TNPs</u>			
Registered with Only One TNP	82,399	54,438	-33.9%
Registered with Multiple TNPs	27,889	12,110	-56.6%
Share of Drivers Who Work for Multiple TNPs	25.3%	18.2%	-7.1%
<u>Trips</u>			
Drivers Reporting At Least One Trip	72,222	29,415	-59.3%
Drivers Reporting No Trips	38,066	37,133	-2.5%
Share of Drivers with At Least One Trip	65.5%	44.2%	-21.3%

Source(s): Authors' analysis of "Transportation Network Providers – Drivers" from the Chicago Data Portal (City of Chicago, 2021a).

Among TNP drivers recording at least one fared trip, the average number of trips during the month did not change over the year. In September 2019, the average active TNP driver completed 123 trips. The median TNP driver completed 81 trips and the top 10 percent of drivers completed 306 trips or more. One year later, the average number of trips completed by TNP drivers remained 123 trips. The median decreased to 78 trips, but the threshold amount of activity to be in the top 10 percent of TNP drivers increased to 312 trips or more. The data indicate that although consumer demand for TNP services fell, it was met by a comparable drop in the supply of TNP drivers that resulted in the average remaining driver completing about as many trips over the month as he, she, or they were recording pre-pandemic (Figure 2).

FIGURE 2: THE AVERAGE AND DISTRIBUTION OF TRIPS IN SEPTEMBER BY CHICAGO'S TNP DRIVERS, 2019 vs. 2020

Number of Trips by Drivers with At Least One Trip	2019	2020	Change
Average	123.1	123.3	0.2%
10th Percentile	6	5	-16.7%
25th Percentile	23	22	-4.3%
Median (50th Percentile)	81	78	-3.7%
75th Percentile	187	186	-0.5%
90th Percentile	306	312	2.0%
N=	72,222	29,415	-59.3%

Source(s): Authors' analysis of "Transportation Network Providers – Drivers" from the Chicago Data Portal (City of Chicago, 2021a).

# Sample of Transportation Network Provider Trips: September Data

To estimate the average fare and average tip collected by TNP drivers, a sample of TNP trips reported to the City of Chicago during the middle of September is utilized. The sample includes the Thursday of the second full week of September, the Sunday of the third full week of September, and the Tuesday of the third full week of September. Data were gathered for six-trip start times, or pickup times, each comprising a 15-minute block. The pickup times were four hours apart: 12:00 a.m. (midnight), 4:00 a.m., 8:00 a.m., 12:00 p.m. (noon), 4:00 p.m., and 8:00 p.m. for each day. In 2019, midnight data on Sunday might include some weekend nightlife activity from the previous Saturday night while the 8:00 a.m. and 4:00 p.m. timeslots on Thursday and Tuesday are likely to include commutes to work. No time block had more than 5,000 trips, but all had between 199 trips and 4,808 trips. All data comes from the Chicago Data Portal (City of Chicago, 2021b).

FIGURE 3: SAMPLE OF TRIPS AND AVERAGE METRICS PER TRIP – SECONDS, MILES, FARES, TIPS, AND TOTAL COSTS

Sample in the	Sample	Averages Per Trip (with Passengers in Vehicles)				
Middle of September	Trips	Time (Seconds)	Miles	Fare	Tip	<b>Total Cost</b>
2019	56,028	1,166.4	6.75	\$12.99	\$0.81	\$17.02
2020	21,946	952.5	6.39	\$13.36	\$0.49	\$17.78
Year-Over-Year Change	-60.8%	-18.3%	-5.2%	+2.8%	-39.2%	+4.4%

Source(s): Authors' analysis of "Transportation Network Providers – Drivers" and "Transportation Network Providers – Trips" from the Chicago Data Portal (City of Chicago, 2021a; City of Chicago, 2021b).

The total sample includes data on 77,974 trips in September 2019 and September 2020 (Figure 3). There were 56,028 trips during these three days in 2019 and just 21,946 trips during the comparable days in 2020, a 61 percent drop.<sup>2</sup> The average trip time fell by 18 percent, from 19.4 minutes (1,166 seconds) to 15.9 minutes (923 seconds), but the average trip distance only decreased by 5 percent, from 6.7 miles to 6.4 miles. This means that TNP drivers drove one mile every 2.9 minutes, or an average of 21 miles per hour, in September 2019 but only one mile every 2.5 minutes, or an average of 24 miles per hour, in September 2020. The faster trip times were likely caused by a significant decrease in traffic congestion in the Chicago metro area (Rumore, 2020). While the average TNP fare paid by customers increased by 3 percent due to an increase in prices and taxes, from \$12.99 per trip to \$13.36 per trip, the average customer tip for TNP drivers fell by 39 percent, from 81 cents per trip to just 49 cents per trip (Figure 3).

<sup>&</sup>lt;sup>2</sup> In a standard poll with a 99-percent confidence level, a sample size of 56,028 produces a margin of error of ±0.5 percent and a sample size of 21,946 produces a margin of error of ±0.9 percent (Creative Research Systems, 2012).

In fact, only 14 percent of TNP rides resulted in a tip to the driver in September 2020, a 7 percentage-point drop from one year earlier (21 percent).<sup>3</sup> These findings corroborate a recent study of more than 40 million Uber rides, which found that only 16 percent of rides result in a tip and that 60 percent of passengers report that they never tip any of their Uber drivers (Chandar et al., 2019).

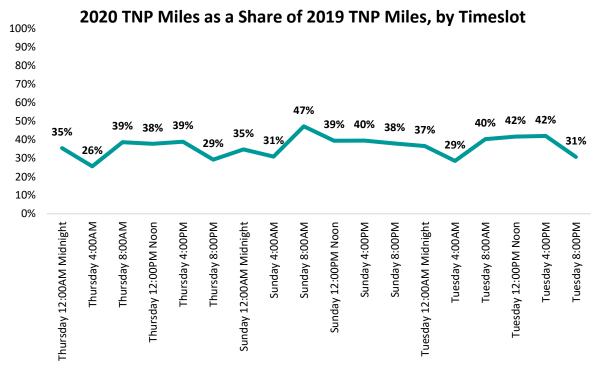
This data allows for an analysis of the total TNP vehicle miles traveled with passengers—total trips multiplied by the average miles per trip—and the total cost to passengers—total trips multiplied by the average total cost per trip (Figure 4). During these six timeslots on these three days in September 2019, TNP workers in Chicago drove about 378,000 miles with passengers in their vehicles and collected about \$954,000 in fares, tips, and taxes. On the equivalent days and times in September 2020, TNP drivers only drove about 140,000 miles with passengers in their vehicles and collected a total of about \$390,000 in fares, tips, and taxes. Over the year, TNP workers logged 63 percent fewer vehicle miles traveled and collected 59 percent less in TNP revenue due to the effects of the COVID-19 pandemic (Figure 4).

FIGURE 4: TOTAL MILES DRIVEN AND TOTAL COSTS COLLECTED BY TNP DRIVERS IN SEPTEMBER SAMPLE, 2019 vs. 2020

Sample in the Middle of September	Total Miles Driven by TNP Drivers	Total Costs (Revenue) Collected
2019	377,949.9	\$953,816
2020	140,317.7	\$390,103
Year-Over-Year Change	-62.9%	-59.1%

Source(s): Authors' analysis of "Transportation Network Providers - Trips" from the Chicago Data Portal (City of Chicago, 2021b).

FIGURE 5: TOTAL 2020 MILES DRIVEN AS A SHARE OF 2019 MILES DRIVEN BY TNP DRIVERS IN SAMPLE, BY TIMESLOT



Source(s): Authors' analysis of "Transportation Network Providers – Trips" from the Chicago Data Portal (City of Chicago, 2021b).

<sup>&</sup>lt;sup>3</sup> In the September 2019 sample, 12,064 trips out of 56,028 total trips resulted in a tip for the drive, a tip rate of 21.5 percent. In the September 2020 sample, just 3,135 out of 21,946 total trips resulted in a tip for the driver, a tip rate of 14.3 percent. Across the full sample, the average tip rate was 19.5 percent.

Figure 5 shows the year-over-year difference in TNP vehicle miles traveled with passengers in Chicago. There was a significant decrease in the total miles driven in September 2020 compared with September 2019. TNP miles driven with passengers were between 26 percent and 47 percent of their September 2019 values during the days and times in the sample. On average, the number of miles driven with passengers by TNP drivers in Chicago was just 37 percent of the comparable September 2019 value (Figure 5). This corresponds with the 63 percent drop in total miles reported in Figure 4.

# **Hourly Pay of Drivers of Transportation Network Providers**

All estimates on the average hourly pay of drivers working for transportation network providers (TNPs) depend on whether researchers make the right set of assumptions (Scheiber, 2020). First, while drivers who work for Uber generally keep 75 percent of the fare and 100 percent of their tips, the Uber commission depends on the service and can range from 20 percent to 28 percent. Drivers for Lyft keep 80 percent of the fare and 100 percent of their tips (Lamberti, 2020). Consequently, to arrive at conservative estimates, this analysis assumes that TNP companies charge an average commission of 20 percent of the fares, with TNP drivers retaining the other 80 percent.

Second, the dataset includes the average number of trips in September and the average total time per trip, permitting an evaluation of the total number of hours worked with passengers in the vehicles. However, only 55 percent of all Chicago TNP workers' time is spent driving with passengers in the vehicles while 10 percent is spent driving to pick up passengers and 35 percent is spent waiting for passengers to request rides (Fehr & Peers, 2019). This analysis assumes that the share of TNP drivers' time with passengers (as a percent of their total work time on the apps) did not change in 2020 due to the COVID-19 pandemic. With fewer passengers hailing rides, decreased traffic congestion, and faster trip times, TNP drivers for Uber, Lyft, and Via worked fewer hours per month, on average.

Finally, researchers must calculate the average cost per mile of driving. Two researchers at the University of California, Berkeley use the IRS tax deduction rate of 57.5 cents per mile (Jacobs & Reich, 2020). While this cost estimate per mile has been challenged, the authors respond by noting that the American Automobile Association (AAA), an automotive services and insurance company, reports that expenses range from 40 cents to 87 cents per mile, and that other estimates exclude most of the major costs of owning a vehicle, such as depreciation, taxes, financing, and license and registration fees (Thornberg et al., 2020; Jacobs & Reich, 2020). However, because 87 percent of TNP drivers in Chicago work less than 35 hours per week, many of these costs associated with owning vehicles—particularly financing costs, license fees, and registration fees—may not be considered work expenses because the drivers would own their cars and pay for these costs even if they did not drive for Uber or Lyft (Hall & Krueger, 2017; Scheiber, 2020). This analysis utilizes the weighted average per-mile costs for fuel, maintenance and repair, and vehicle depreciation estimated by AAA (AAA, 2019; AAA, 2020). Adjustments are made to the fuel cost to reflect average gasoline prices per gallon in Chicago in 2019 and 2020, according to the U.S. Department of Energy (EIA, 2021).<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> For 2019, AAA assumed a national average gas price of \$2.679 per gallon (AAA, 2019). The 52-week average gas price in Chicago, however, was \$2.754 per gallon, 3 percent higher than the national average (EIA, 2021). For 2020, AAA assumed a national average gas price of \$2.462 per gallon (AAA, 2020). The 52-week average gas price in Chicago, however, was \$2.308 per gallon, 6 percent lower than the national average (EIA, 2021).

Figure 6 presents estimates on trips, fares, gross earnings, and hours worked for TNP drivers in the City of Chicago in 2019 and 2020. Chicago data on registered TNP drivers is utilized to determine the average trips per month (City of Chicago, 2021a). The average seconds, fares, tips, and total costs per trip come from the sample data on trips in the middle of September for each year. That data also comes from the Chicago Data Portal (City of Chicago, 2021a).

In 2019, the average TNP driver earned \$11.20 per trip (Figure 6). Based on a mean of 123 trips per month, the average TNP driver earned about \$1,400 in gross earnings per month, or about \$16,500 annually. The average time spent with passengers was just under 40 hours per month, equivalent to 479 hours annually. Assuming that 55 percent of a TNP driver's work time is spent with passengers in Chicago—which is an estimate determined by a consulting company in a study commissioned by Uber and Lyft—the average total annual employment level of TNP drivers in Chicago was 870 hours worked in 2019 (Fehr & Peers, 2019). Consequently, the average TNP driver earned \$19.01 per hour in gross income, before vehicle expenses and taxes, in 2019.

FIGURE 6: TRIPS, FARES, GROSS INCOME, AND HOURS WORKED FOR AVERAGE TNP DRIVER IN CHICAGO, 2019-2020

Trips, Fares, Gross Income, and Hours Worked	2019	2020	2020 (With
Estimates for the Average TNP Driver in Chicago	(Actual Data)	(Actual Data)	Typical Traffic)
<u>Driver Trip Data (September)</u>			
Average Trips Per Month	123.1	123.3	123.3
Average Miles Per Hour (with Passengers)	20.8	24.2	20.8
Average Trip Seconds	1,166.4	952.5	1,105.5
Average Miles Per Trip	6.75	6.39	6.39
<u>Customer Cost Per Trip Data</u>			
Average Fare Per Trip	\$12.99	\$13.36	\$13.89
Average Tip Per Trip	\$0.81	\$0.49	\$0.49
Average Total Cost Per Trip	\$17.02	\$17.78	\$18.31
<u>Driver Gross Income Estimates</u>			
Driver Income Per Trip: 80% of Fare + 100% of Tips	\$11.20	\$11.18	\$11.60
Driver Income Per Month: Income Per Trip x Trips	\$1,378.31	\$1,378.42	\$1,431.26
Driver Income Per Year: Income Per Month x 12	\$16,540	\$16,541	\$17,175
<u>Driver Hours Worked Estimates</u>			
Monthly Hours with Passengers: Average Time x Trips	39.9	32.6	37.9
Annual Hours with Passengers: Monthly Hours x 12	478.6	391.6	354.5
Total Annual Hours Worked (55% of Time with Passengers)	870.2	712.0	826.4
Driver Hourly Gross Income Estimates			
Gross Income Per Hour: Earnings Per Year ÷ Total Hours	\$19.01	\$23.23	\$20.78

Source(s): Authors' analysis of "Transportation Network Providers – Drivers" and "Transportation Network Providers – Trips" from the Chicago Data Portal (City of Chicago, 2021a; City of Chicago, 2021b). The analysis assumes that 55 percent of Chicago TNP drivers' work time is spent with passengers in their vehicles (Fehr & Peers, 2019).

In 2020 during the COVID-19 public health crisis, the average TNP driver earned \$11.18 per trip (Figure 6). Based on a mean of 123 trips per month, the average TNP driver earned about \$1,400 in gross earnings per month, or about \$16,500 annually. These outcomes are all essentially unchanged compared with prepandemic values. However, the average time spent with passengers fell by 18 percent to under 33 hours per month, or 392 hours annually driven mainly by reduced traffic congestion and, to a lesser extent, by shorter average trip distances. Due to reduced demand from passengers, the average TNP driver in

Chicago only worked an estimated 712 total hours in 2020. As a result, the average TNP driver earned \$23.23 per hour in gross income, before vehicle expenses and taxes, in 2020.

The gain in average hourly gross income for TNP workers between 2019 and 2020 is artificially inflated by the drop in traffic congestion. Uber, Lyft, and Via drivers were able to complete the same number of trips in a shorter amount of time, resulting in higher earnings per hour. An additional assessment is thus included to consider what would have happened to the average hourly gross income for Chicago's TNP drivers in 2020 if they had experienced typical traffic levels. While the average fare would have increased by an estimated \$0.53 per trip due to the extra time passengers would have spent in vehicles—leading to an increase in gross driver earnings per year to nearly \$17,200—the number of hours worked with and without passengers would have also increased. The net effect is that the average TNP driver would have earned an estimated \$20.78 per hour in gross income, before vehicle expenses and taxes, which is about 11 percent less than the actual estimates for 2020.

FIGURE 7: TOTAL TNP DRIVER EXPENSES FOR TNP DRIVERS IN CHICAGO, PER MILE AND PER HOUR, 2019-2020

Total TNP Driver Expenses in Chicago: Estimates Per Mile and Per Hour Worked	2019 (Actual Data)	2020 (Actual Data)	2020 (With Typical Traffic)
Total Driver Expenses Per Mile	(Actual Data)	(Actual Data)	Typical Traine)
Fuel (AAA-Adjusted)	\$0.119	\$0.100	\$0.100
Maintenance and Repair (AAA)	\$0.089	\$0.091	\$0.091
Depreciation (AAA)	\$0.301	\$0.339	\$0.339
Total Cost Per Mile	\$0.509	\$0.530	\$0.530
Average TNP Driver Miles and Hours Worked			
Total Miles Driven Per Year	9,964.8	9,463.5	9,463.5
Total Hours Worked Per Year	870.2	712.0	826.4
Total Driver Expenses Per Hour			
Fuel (AAA-Adjusted)	\$1.37	\$1.33	\$1.14
Maintenance and Repair (AAA)	\$1.02	\$1.21	\$1.04
Depreciation (AAA)	\$3.44	\$4.50	\$3.88
Total Cost Per Hour	\$5.83	\$7.04	\$6.07

Source(s): Authors' analysis of *Your Driving Costs* reports by AAA for 2019 and 2020 with adjustments to the fuel cost to reflect average gas prices in Chicago in 2019 and 2020 (AAA, 2019; AAA, 2020; EIA, 2021). TNP driver miles, hours worked, and expenses per hour include authors' analysis of "Transportation Network Providers – Drivers" and "Transportation Network Providers – Trips" from the Chicago Data Portal (City of Chicago, 2021a; City of Chicago, 2021b).

TNP drivers in Chicago earn significantly less per hour after vehicle expenses and taxes. Figure 7 displays estimates from AAA on average fuel costs, maintenance and repair costs, and vehicle depreciation costs per mile in 2019 and 2020 (AAA, 2019; AAA, 2020). In 2019, Chicago drivers paid an average fuel cost of 11.9 cents per mile and an average maintenance and repair cost of 8.9 cents per mile. Depreciation costs amounted to 30.1 cents per mile. Cumulatively, driver expenses totaled 50.9 cents per mile in 2019. In 2020, Chicago drivers paid just 10.0 cents per mile in fuel costs due to a decrease in gas prices. On the other hand, both maintenance and repair costs and depreciation costs increased to 9.1 cents per mile and

<sup>&</sup>lt;sup>5</sup> For example, Uber levies a cost of \$0.28 per minute for Chicago customers using their UberX service (Uber, 2021). Note that time without passengers would also have increased because the rise in traffic congestion back to pre-pandemic levels means it would have taken TNP drivers longer to drive to passengers hailing their vehicles.

<sup>&</sup>lt;sup>6</sup> Recall that adjustments are made to the fuel cost to reflect average gas prices in Chicago in 2019 and 2020 (EIA, 2021).

33.9 cents per mile, respectively. Accordingly, driver expenses totaled 53.0 cents per mile in 2020. In both years, these estimated driver expenses were less than the IRS tax deduction rate of 57.5 cents per mile. This is primarily because the total cost per mile estimates in Figure 7 do not include license and registration fees, expenses for full-coverage insurance, and financing costs.

The AAA (and AAA-adjusted) cost per mile estimates can be used to determine the average cost per hour worked for TNP drivers, based on annual estimates for their average total miles driven and average total hours worked (Figure 7). In 2019, the average TNP driver incurred \$5.83 in total fuel, maintenance and repair, and depreciation costs per hour. Total costs increased to \$7.04 per hour in 2020, partly because depreciation costs increased and partly because TNP workers drove about the same number of miles (5 percent less) but worked significantly fewer hours (18 percent less). That is, while total vehicle expenses stayed about the same, the number of hours dropped, resulting in higher costs per hour. A separate analysis finds that costs would have gone up from \$5.83 per hour in 2019 to \$6.07 per hour in 2020, an increase of 4 percent, if TNP drivers had experienced the usual amount of traffic congestion in Chicago.

After accounting for expenses and self-employment payroll taxes, the average Uber, Lyft, and Via driver in Chicago earned less than the city's minimum wage in 2019 (Figure 8). While TNP drivers earned an average of \$19.01 per hour in gross income, they paid an average of \$5.83 per hour in vehicle expenses and 88 cents per hour in payroll taxes. Consequently, the average TNP driver only earned an estimated \$12.30 per hour in 2019. This is 5.4 percent below the \$13-per-hour minimum wage in the City of Chicago as of July 1, 2019 (BACP, 2019).

The average W-2 equivalent pay of TNP workers was also very close to the city's minimum wage in 2020 (Figure 8). After accounting for expenses and payroll taxes, the average Uber, Lyft, and Via driver in Chicago earned \$15.09 per hour in 2020, which exceeded the minimum wage of \$14 per hour effective July 1, 2020 in Chicago (ABC7, 2020). However, this hourly rate of pay was artificially inflated because TNP workers did not experience the usual levels of traffic congestion while driving on Chicago roads. With prepandemic levels of traffic congestion, TNP drivers would have only earned an hourly wage of \$13.62 per hour after expenses and taxes, which is 2.7 percent below the city's \$14-per-hour minimum wage.

FIGURE 8: AVERAGE TNP WAGE PER HOUR AFTER EXPENSES AND TAXES IN CHICAGO, 2019-2020

Average TNP Wage Per Hour (After Expenses and Taxes)	2019	2020	2020 (With
in Chicago: W-2 Equivalent Take-Home Pay	(Actual Data)	(Actual Data)	Typical Traffic)
Gross Earnings Per Hour	\$19.01	\$23.23	\$20.78
Total Expenses: Total Cost Per Hour	-\$5.83	-\$7.04	-\$6.07
Payroll Taxes: Self-Employment FICA and Medicare Taxes*	-\$0.88	-\$1.10	-\$1.10
Hourly Wage After Expenses and Taxes	\$12.30	\$15.09	\$13.62
Minimum Wage in the City of Chicago	\$13.00	\$14.00	\$14.00
Hourly TNP Wage vs. City's Minimum Wage	-5.4%	+7.8%	-2.7%

Source(s): Authors' analysis of "Transportation Network Providers – Drivers" and "Transportation Network Providers – Trips" from the Chicago Data Portal (City of Chicago, 2021a; City of Chicago, 2021b). The analysis assumes that 55 percent of Chicago TNP drivers' work time is spent with passengers in their vehicles (Fehr & Peers, 2019). The analysis also includes information from *Your Driving Costs* reports by AAA for 2019 and 2020 with adjustments to the fuel cost to reflect average gas prices in Chicago in 2019 and 2020 (AAA, 2019; AAA, 2020; EIA, 2021). \*NOTE: Payroll taxes are calculated after deducting 57.5 cents per mile. The IRS tax deduction rate of 57.5 cents is utilized because it exceeds the total costs per mile of 50.9 cents in 2019 and 53.0 cents in 2020 from Figure 7 (i.e., TNP drivers are, on average, better off taking the standard deduction per mile than itemizing costs per mile). Self-employed workers pay a payroll tax rate of 7.65 percent for Social Security and Medicare on 92.35 percent of their earnings (Landau, 2015).

On-demand workers for app-based transportation network providers generally earn sub-minimum wages. While some high-frequency drivers may earn above Chicago's minimum wage rate, TNP drivers who work full-time may also incur higher costs. For example, a full-time Uber or Lyft driver may need to own a separate vehicle that he, she, or they use only while working. For these workers, the total expenses per hour estimated in this report are likely too low, because they must also pay for financing costs, registration fees, and insurance premiums on the extra vehicle. Similarly, the estimates on the average Uber and Lyft driver's hourly wage in this analysis may be too high because they assume that drivers retain 80 percent of total fares, even though Uber's commission rates range from 20 percent up to 28 percent (Lamberti, 2020). Despite these conservative assumptions that tend to produce hourly wage estimates that fall on the high end, the average TNP worker earns about 3 percent to 5 percent less than Chicago's minimum wage. TNP drivers also earn between \$1.38 and \$2.70 less than \$15 per hour, which will be the minimum wage in the City of Chicago on July 1, 2021 (Elejalde-Ruiz, 2019).

## **Implications for State and Local Government Elected Officials**

This analysis of transportation network provider (TNP) driver earnings and expenses—contained in a sample of 77,974 trips in September 2019 and September 2020 from the anonymized records of more than 169 million trips in the City of Chicago since November 2018—suggests that the treatment of TNP drivers as "independent contractors" suppresses their earnings. Uber, Lyft, Via, and other delivery drivers, whose jobs are nearly indistinguishable from traditional employees, suffer an earnings penalty that shifts income from workers to the executives and shareholders of the TNP companies. Addressing the structural conditions that exempt drivers from labor and employment laws necessitates a re-consideration of their employment status. Therefore, two potential policy alternatives could be pursued to improve outcomes for TNP drivers.

First, state lawmakers could treat TNP drivers who provide labor or services for remuneration as employees. Under this potential option, TNP workers would be classified as employees unless the TNP companies can prove that the workers are free to perform services without the control or direction of the companies, the workers perform tasks that are outside the usual course of the companies' activities, and the workers are engaged in an independent occupation or trade of the same nature (Lake, 2021). TNP drivers would be granted full employment rights and would be covered under minimum wage laws, overtime pay laws, paid sick and family leave laws, and the unemployment insurance and workers' compensation systems in Illinois. During the COVID-19 public health crisis, unemployed TNP workers have been eligible for Pandemic Unemployment Assistance (PUA), even though Uber and Lyft did not make contributions into the state's unemployment insurance system on their behalf. This means that the costs of unemployment insurance for TNP drivers have been socialized onto other Illinois taxpayers. Classifying TNP drivers as employees of the TNP companies would correct this problem and ensure that corporations like Uber and Lyft contribute their fair share towards the tax base. Additionally, the average TNP driver earns at or below the city's minimum wage, and only about one-in-seven TNP rides (14 percent) resulted in tips in 2020 and one-in-five (21 percent) did in 2019. Classifying TNP drivers as employees would ensure a wage floor for all TNP workers because, if a worker's wages and tips do not equal the minimum wage, then the TNP companies would be responsible for making up the difference.

Second, local elected officials could ensure that TNP drivers who provide labor or services for remuneration are guaranteed robust standards of hourly pay and working conditions. Elected officials could incorporate a minimum driver pay standard into the licensing and regulatory framework of the City of Chicago Transportation Network Providers Ordinance to protect TNP drivers from being paid less than

the city's \$15-per-hour minimum wage in 2021. The minimum pay standard would increase fares by about 8 percent, which would boost the average gross earnings of TNP workers to \$22.39 per hour. After accounting for expenses and expenses—assuming both pre-pandemic levels of traffic congestion and pre-pandemic gasoline prices per gallon—these gross hourly earnings would translate into a \$15 per hour wage for the average TNP driver.

In February 2019, New York City implemented a minimum driver pay standard (New York City, 2020). The policy did increase the average base passenger fare by 6 percent but resulted in an 8 percent increase in weekly pay for TNP drivers. Driver utilization increased by 2 percent, indicating that the minimum pay standard incentivized drivers to work more hours. At the same time, passenger wait times fell by 18 percent and company commission rates fell, indicating that part of the increase in passenger fares was absorbed by Uber, Lyft, and other TNP companies. While there was a small decrease in total trips by customers, the decline was not large enough to offset the increase in earnings for TNP workers and was concentrated in places with better access to public transit (Koustas et al., 2020). These findings are consistent with existing empirical research which concludes that minimum wages boost worker incomes and lift workers out of poverty while having little to no effect on employment levels or consumer prices (Bruno & Manzo, 2019).

There is a need for additional research on TNP companies and drivers in the City of Chicago and across Illinois. For example, future research can reveal the effects of the "independent contractor" status of TNP workers on social outcomes, including lost unemployment insurance contributions, lost workers compensation premiums, and lost income taxes for workers earning below the minimum wage. Future studies are also needed to fully understand the impacts of driver delivery services like UberEats, DoorDash, Grubhub, Postmates, Instacart, and Caviar, which deliver food and groceries to households (Corpuz & Woo, 2021).

As defined under current law, transportation network providers' drivers—who depend on their hours transporting passengers to enhance their wellbeing—struggle to earn the minimum wage in the City of Chicago. This status quo for "gig" workers only embeds a new low-wage contingent labor force into the state's economy. TNP drivers could either be fully covered as employees under employment law to expand worker protections or be provided with enforceable standards of pay and working conditions. Either public policy approach would promote fairness and boost wages for on-demand workers in the City of Chicago and the State of Illinois.

### **Sources**

- AAA. (2020). Your Driving Costs: 2020. American Automobile Association.
- AAA. (2019). Your Driving Costs: How Much Are You Really Paying to Drive? American Automobile Association.
- ABC7. (2020). "Illinois Minimum Wage Increases Take Effect July 1." WLS-TV.
- Business Affairs and Consumer Protection (BACP). (2021). "Transportation Network Providers (Ride-Hail Companies)." City of Chicago.
- Business Affairs and Consumer Protection (BACP). (2019). "Minimum Wage Update: May 28, 2019." City of Chicago.
- Bruno, Robert and Frank Manzo IV. (2019). Raising the Minimum Wage to \$15 in Chicago by 2021: Effects on Incomes, Employment, and Prices. University of Illinois at Urbana-Champaign; Illinois Economic Policy Institute.
- Catt, Mary. (2020). "Seattle Ride-Shar Drivers Earn City Average, ILR Study Finds." Cornell Chronicle.
- Chandar, Bharat; John List; Uri Gneezy; and Ian Muir. (2019). *The Drivers of Social Preferences: Evidence from a Nationwide Tipping Field Experiment*. Stanford University; University of Chicago; University of California San Diego; Lyft.
- Chen, M. Keith; Peter Rossi; Judith Chevalier; and Emily Oehlsen. (2019). "The Value of Flexible Work: Evidence from Uber Drivers." *Journal of Political Economy*, 127(6).
- City of Chicago. (2021). (a). "Transportation Network Providers Drivers." Chicago Data Portal.
- City of Chicago. (2021). (b). "Transportation Network Providers Trips." Chicago Data Portal.
- City of Chicago. (2019). *Transportation Network Providers and Congestion in the City of Chicago*. Mayor Lori E. Lightfoot.
- Cook, Cody; Rebecca Diamond; Jonathan Hall; John List; and Paul Oyer. (2018). *The Gender Earnings Gap in the Gig Economy: Evidence from Over a Millions Rideshare Drivers*. Stanford University; University of Chicago; Uber Technologies.
- Corpuz, John and Kelly Woo. (2021). "Best Food Delivery Services in 2021: Grubhub vs. Uber Eats vs. DoorDash." *Tom's Guide*.
- Cramer, Judd and Alan Krueger. (2016). "Disruptive Change in the Taxi Business: The Case of Uber." *American Economic Review*, 106(5): 177-182.
- Creative Research Systems. (2012). "Sample Size Calculator."
- Energy Information Administration (EIA). (2021). "Weekly Chicago, IL Regular Reformulated Retail Gasoline Prices." U.S. Department of Energy.
- Elejalde-Ruiz, Alexia. (2019). "Chicago City Council Raises Minimum Wage to \$15 by 2021, but Restaurant Servers Still Will Get Lower Tipped Wage." *Chicago Tribune*.
- Fehr & Peers. (2019). Estimated Percent of Total Driving by Lyft and Uber: In Six Major U.S. Regions, September 2018. Commissioned by Lyft and Uber.
- Frizell, Sam. (2015). "Uber Just Answered Everything You Want to Know About Your Driver." TIME.
- Ge, Yanbo; Christopher Knittel; Don MacKenzie; and Stephen Zoepf (2016). *Racial and Gender Discrimination in Transportation Network Companies*. National Bureau of Economic Research.

- Greenfield, John. (2019). "Emanuel: Chicago Is Now the First U.S. City to Publish Detailed Ride-Hailing Data." StreetsBlog Chicago.
- Hall, Jonathan and Alan Krueger. (2017). "An Analysis of the Labor Market for Uber's Driver-Partners in the United States." *Industrial and Labor Relations Review*, 71(10).
- Henao, Alejandro and Wesley Marshall. (2019). "An Analysis of the Individual Economics of Ride-Hailing Drivers." *Transportation Research Part A: Policy and Practice*, 130: 440-45.
- Jacobs, Ken and Michael Reich. (2020). The Effects of Proposition 22 on Driver Earnings: Response to a Lyft-Funded Report by Dr. Christopher Thornberg. University of California, Berkeley.
- Koustas, Dmitri; James Parrott; and Michael Reich. (2020). New York City's Gig Driver Pay Standard: Effects on Drivers, Passengers, and the Companies. University of Chicago; The New School; University of California, Berkeley.
- Lake, Rebecca. (2021). "California Assembly Bill 5 (AB5)." Investopedia.
- Lamberti, Patty. (2020). "How Much Money Can You Really Make Driving for Uber or Lyft?" Money Under 30.
- Landau, Doug. (2015). "Self-Employed Multiplier of 0.9235 for Social Security, Medicare." Abrams Landau, Ltd.
- Lavietes, Matthew and Michael McCoy. (2020). "Waiting for Work: Pandemic Leaves U.S. Gig Workers Clamoring for Jobs." *Reuters*.
- Lichfield, Gideon. (2015). "All the Names for the New Digital Economy, and Why None of Them Fits." Quartz.
- Mishel, Lawrence. (2018). *Uber and the Labor Market: Uber Drivers' Compensation, Wages, and the Scale of Uber and the Gig Economy*. Economic Policy Institute.
- New York City. (2020). "Driver Pay Rates." NYC Taxi & Limousine Commission.
- Parrott, James and Michael Reich. (2020). *A Minimum Compensation Standard for Seattle TNC Drivers*. The New School; University of California, Berkeley.
- Rodino-Colocino, Michelle. (2019). "Uber Drivers Report 80-Plus Hour Workweeks and a Lot of Waiting." *The Conversation US*.
- Rumore, Kori. (2020). "Empty Roads, Trains, Buses and Airports: How COVID-19 and Staying at Home Changed How Chicago Gets Around." *Chicago Tribune*.
- Scheiber, Noam. (2020). "When Scholars Collaborate With Tech Companies, How Reliable Are the Findings?"

  The New York Times.
- Thornberg, Christopher; Sherif Hanna; and Victoria Pike Bond. (2020). *Proposition 22: Analyzing the Impact on App-Based Drivers' Earnings*. University of California, Riverside.
- Tran, Molly and Rosemary Sokas. (2017). "The Gig Economy and Contingent Work: An Occupational Health Assessment." *Journal of Occupational and Environmental Medicine*, 59(4): 63-66.
- Uber. (2021). "Uber Price Estimator."
- Xu, Lisa and Mark Erlich. (2019). The Economic Consequences of Misclassification in the State of Washington. Harvard University.
- Zoepf, Stephen. (2018). The Economics of Ride Hailing, Revisited. Stanford University.

## **Cover Photo Credits**

- Blokhin, Andriy. (2016). "Divided street with traffic on South Michigan Avenue in downtown with cars and skyscrapers." Received from Shutterstock.com subscription.
- David, Jackson. (2021). "Person Driving Car." Received from Canva.com Free Photos.
- Oleksandr, Lutsenko. (2019). "Uber driver holding smartphone in Volkswagen car." Received from Shutterstock.com subscription.
- Powell, Alex. (2021). "Selective Focus Photography of High-rise Building." Received from Canva.com Free Photos.
- Sundry Photography. (2019). "Lyft and UBER stickers on the rear window of a vehicle offering rides in San Francisco Bay Area." Received from Shutterstock.com subscription.