



AN ANALYSIS OF APP-BASED DRIVERS IN CALIFORNIA

February 2022



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AN ANALYSIS OF APP-BASED DRIVERS¹ IN CALIFORNIA

KEY FINDINGS

- From fourth-quarter 2020 to third-quarter 2021, there were around 1.37 million drivers who performed at least one ride or delivery across the DoorDash, Instacart, Lyft, and Uber platforms in California. Drivers are registered across multiple apps, but the extent to which this occurs is not fully known.
- Including tips, average gross driver earnings have increased from \$27.34 per engaged hour² in third-quarter 2019 to \$34.46 in third-quarter 2021, a 26% increase. Excluding tips, earnings increased from \$23.45 to \$25.17 in the same period (a 7% increase).
 - Across all metropolitan regions in California, average tipped gross earnings exceeded \$30 per engaged hour while average untipped gross earnings exceeded \$20 per engaged hour. Gross earnings were the highest in Napa, with average tipped engaged gross hourly earnings of \$40.49 and average untipped engaged hourly earnings of \$28.15. Gross earnings were the lowest in Bakersfield, with average tipped engaged hourly earnings of \$30.22 and average untipped engaged hourly earnings of \$21.76.
- From fourth-quarter 2020 to third-quarter 2021, driver earnings totaled \$4.3 billion across the platforms in California.
 - In third-quarter 2021 alone, gross driver pay, including tips, totaled \$1.35 billion.
- As of third-quarter 2021, two-thirds of drivers work with a given platform for fewer than five hours per week.
- App-based drivers are more often male, and tend to have higher educational attainment than the average California worker.
- An overwhelming majority of drivers (82.3%) report satisfaction with app-based work, and a large majority (75%) report they would prefer to be classified as independent contractors rather than as employees.
 - Apparently, this is because drivers value the ease with which they can earn extra cash and the flexibility to do so on their own schedule, two attributes that are central to app-based work. Overall, most app-based drivers do not seek full-time work on platforms. These drivers primarily use platforms as-needed to buttress existing sources of income.

¹ "Driver(s)" is used to reference DoorDash, Instacart, Lyft, and Uber rideshare and delivery workers. A small percentage of workers using those platforms use bicycles, scooters, or other non-automotive transportation methods to complete accepted deliveries and rides.

² "Engaged time" is defined as all time between accepting a trip/delivery request and dropping off the rider/order.

INTRODUCTION

The rise of app-based rideshare and delivery network platforms has generated a great amount of public discourse about driver remuneration, the costs drivers incur while working with such platforms, as well as how drivers should be classified. The purpose of this independent study is not to weigh in on any of these debates, but rather to understand how much app-based drivers earn, who app-based drivers in California are, how they use these services, and their level of satisfaction with the platforms. The data used in this analysis was drawn from four app-based rideshare and delivery platforms and a survey of app-based drivers in the state conducted by EMC Research, a public opinion research firm. A full description of the data used can be found in the appendix.

The use of private vehicles to transport passengers between locations is not new, nor are food delivery services. Yet this landscape has transformed with the advent of app-based platforms. Since the emergence of these platforms, urban transportation has been radically transformed, as has the delivery market. Across the nation, there are millions more trips taken via app-based rideshare platforms than taken by taxi. Grocery and restaurant deliveries are far more commonplace today than in the past. In California, hundreds of thousands of drivers work on these platforms. This is a staggering number when compared to the 30,000 taxi drivers who drove in California in 2010 prior to the launch of app-based driving platforms.

This report considers two types of app-based platforms. Transportation Network Companies (TNCs) are platforms matching passengers with drivers who typically complete these trips with a personal vehicle, and Delivery Network Companies (DNCs) are platforms which connect local restaurants, grocery stores, and other retailers to local consumers. On DNCs, consumers order food, groceries and other goods, which are delivered by a network of drivers.

Although there's a low-barrier-to-work earning opportunity, driving with TNC and DNC platforms is accessible for those who meet certain criteria. Drivers must be allowed to work legally in a given jurisdiction and have access to an eligible motor vehicle or alternative qualifying method of transportation. A driver must also provide proof of vehicle insurance, and all drivers are screened to determine eligibility subject to their driving record and criminal history.

In 2019, the California Assembly passed Assembly Bill 5 (AB 5), which sought to reclassify many independent contractors, including app-based drivers, as employees. The law shifted the burden of proof for classifying individuals as independent contractors onto the app-based platforms.

In response to the passage of AB 5, app-based platforms – including DoorDash, Instacart, Lyft, Postmates, and Uber – worked with app-based drivers to propose a new framework for app-based drivers. Proposition 22 (“Prop 22”) was approved by nearly 60% of the state’s voters at the ballot box on Nov. 3, 2020. As part of Prop 22, drivers would continue to be classified as independent contractors, but they would also receive certain earnings guarantees, benefits (including a health care stipend), and insurance coverage from app-based platforms.



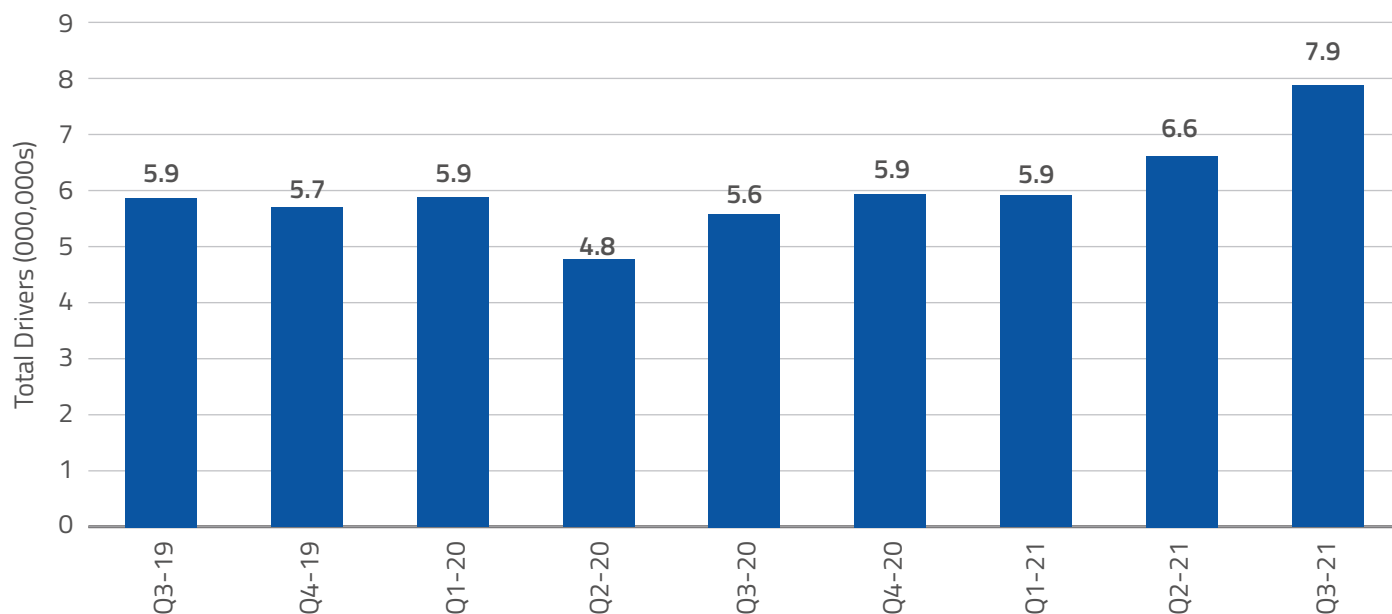
APP-BASED DRIVERS IN CALIFORNIA: COUNT, TRIPS, HOURS AND WAGES

According to data provided by DoorDash, Instacart, Lyft, and Uber, from fourth-quarter 2020 to third-quarter 2021 there were around 1.37 million drivers who performed a delivery or a ride across the platforms.³ It is possible that drivers are registered across multiple apps, but the extent to which this occurs is not fully known. In third-quarter 2021, 800,000 drivers completed one ride or delivery on the platforms. This represents a 41% increase compared to the number of drivers registered across the platforms in third-quarter 2020. This figure does not represent the total number of drivers registered on platforms in the state, as some drivers are registered across multiple platforms.

³ See appendix for detailed definitions and methodology for estimates described in this report.

Total CA App-Based Drivers

Hundreds of Thousands

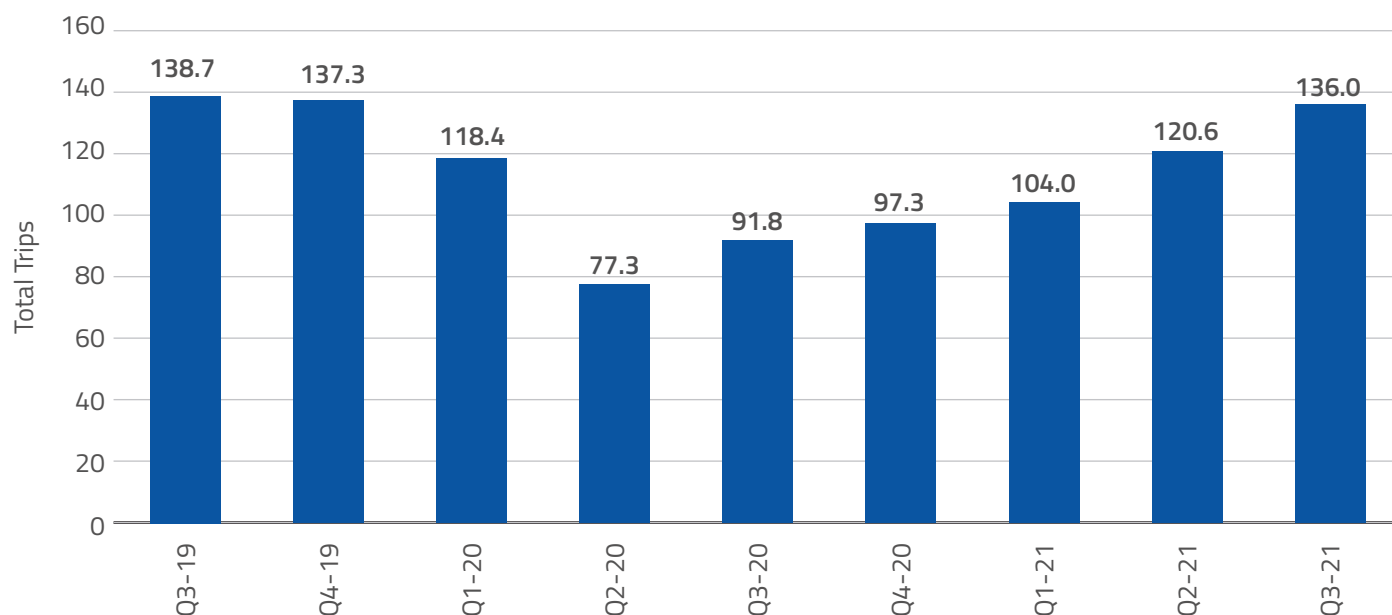


Sources: DoorDash, Instacart, Lyft, and Uber; Analysis by The Center for Economic Forecasting and Development

In 2021, the total number of trips and deliveries increased markedly following a trough in these numbers at the height of the COVID-19 pandemic. In third-quarter 2021, there were nearly 140 million trips and deliveries in California across the platforms in the state.

Total Trips and Deliveries

(Millions)



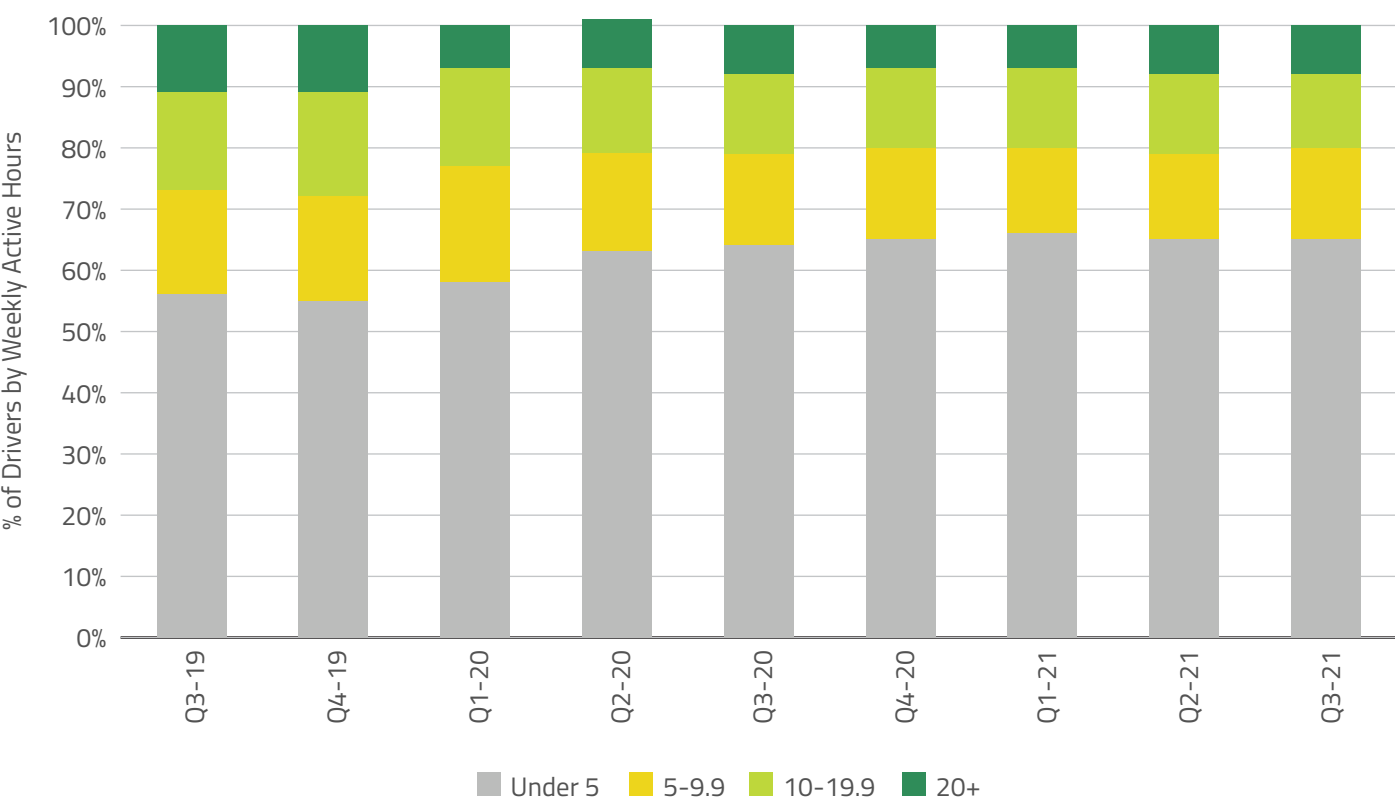
Sources: DoorDash, Instacart, Lyft, and Uber; Analysis by The Center for Economic Forecasting and Development

DRIVER HOURS

The majority of drivers on any individual platform engage with services on a part-time basis. As of third-quarter 2021, two-thirds of drivers worked with any one platform for fewer than five hours per week. The precise extent of multi-apping is unclear. According to two independent studies of TNC drivers in Seattle which tracked multi-apping across Lyft and Uber, anywhere between 33% and 52% of drivers work with both platforms.⁵ These figures, however, undercount the extent of multi-apping because drivers could be active on platforms other than Lyft and Uber.

In a survey of California rideshare and food delivery drivers, 36% of respondents report driving on platforms for fewer than 14 hours per week; another 22% of respondents report driving on platforms for 15 to 20 hours per week; 18% report driving on platforms for 21 to 30 hours per week; and 22% report driving on platforms for more than 30 hours per week. Additionally, only 23% of drivers report working with platforms on what would conventionally be considered a full-time basis. Seventy-seven percent of respondents report working with platforms on a part-time basis (45%) or only occasionally (32%).⁶

Weekly Avg Hours Worked by App-Based Drivers in California
By Quarter



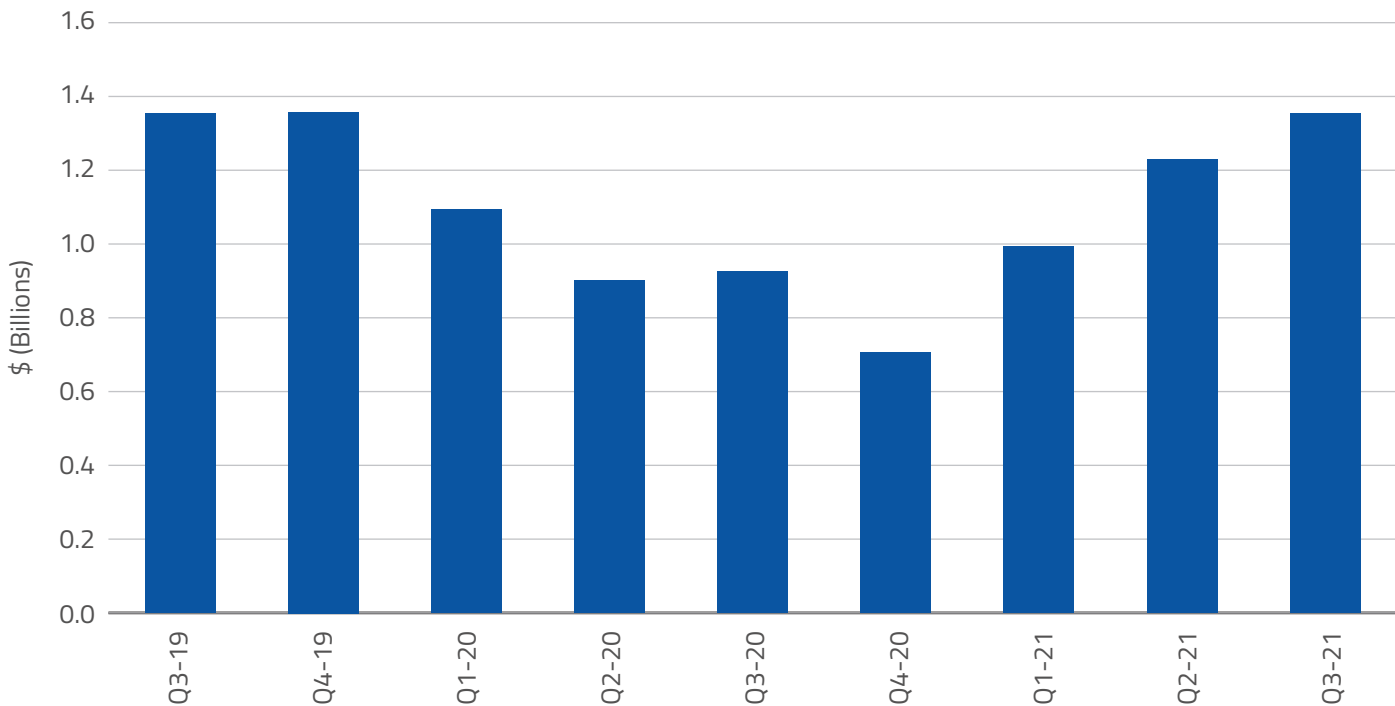
Sources: DoorDash, Instacart, Lyft, and Uber; Analysis by The Center for Economic Forecasting and Development

⁴ Hyman, Louis, et al. Cornell University, 2020, Platform Driving in Seattle, https://ecommons.cornell.edu/bitstream/handle/1813/74305/Cornell_Seattle_Uber_Lyft_Project_Report_2020_Final_Version_JDD_accessibility_edits_7_14_2020.pdf?sequence=1&isAllowed=y. Accessed 15 Nov. 2021.
⁵ Parrott, James A., and Michael Reich. University of California Berkeley, 2020. A Minimum Compensation Standard for Seattle TNC Drivers, https://irle.berkeley.edu/files/2020/07/Parrott-Reich-Seattle-Report_July-2020.pdf. Accessed 15 Nov. 2021.
⁶ 2021 California Statewide Survey of Drivers for App-Based Platforms, EMC Research

DRIVER EARNINGS

Including tips, in third-quarter 2021 app-based drivers earned close to \$1.4 billion in California. From fourth-quarter 2020 to third-quarter 2021, driver earnings totaled \$4.3 billion in the state.

Gross App-Based Driver Total Earnings Including Tips



Sources: DoorDash, Instacart, Lyft, and Uber; Analysis by The Center for Economic Forecasting and Development

Including tips, app-based drivers in California earned close to an average of \$35 per engaged hour in third-quarter 2021. These numbers represent a weighted average across the four platforms. Earnings without tips amounted to \$25.17 per hour in the same period. These figures represent gross earnings and do not account for costs drivers incur for fuel, auto insurance, maintenance, and depreciation. Furthermore, these estimates refer to the time a driver spends en-route to a pickup or on a trip and do not account for time waiting for a ride or delivery request. A discussion of these issues can be found in the appendix.

Including tips, gross driver earnings have increased from \$27.34 in third-quarter 2019 to \$34.46 in third-quarter 2021, a 26% increase. There is variation in driver earnings by region. Earnings are higher in the larger coastal cities, while drivers in more rural cities earn relatively less. This variation reflects differences in the cost of living across these places. In spite of this variation, average tipped earnings were in excess of \$30 per hour across each of the state’s metropolitan statistical areas, and average untipped earnings exceeded \$21 per hour.

Gross Average Engaged Hourly Earnings

Q3-21

	WITHOUT TIPS	WITH TIPS
San Francisco	\$31.07	\$39.83
Los Angeles	\$29.50	\$37.05
Inland Empire	\$22.92	\$31.34
San Luis Obispo	\$24.59	\$36.35
San Diego	\$29.45	\$37.90
Sacramento	\$23.84	\$33.24
Chico	\$21.32	\$32.63
Fresno	\$21.53	\$30.32
Bakersfield	\$21.76	\$30.22

Sources: DoorDash, Instacart, Lyft, and Uber; Analysis by Center for Economic Forecasting and Development

Gross Average Hourly Earnings

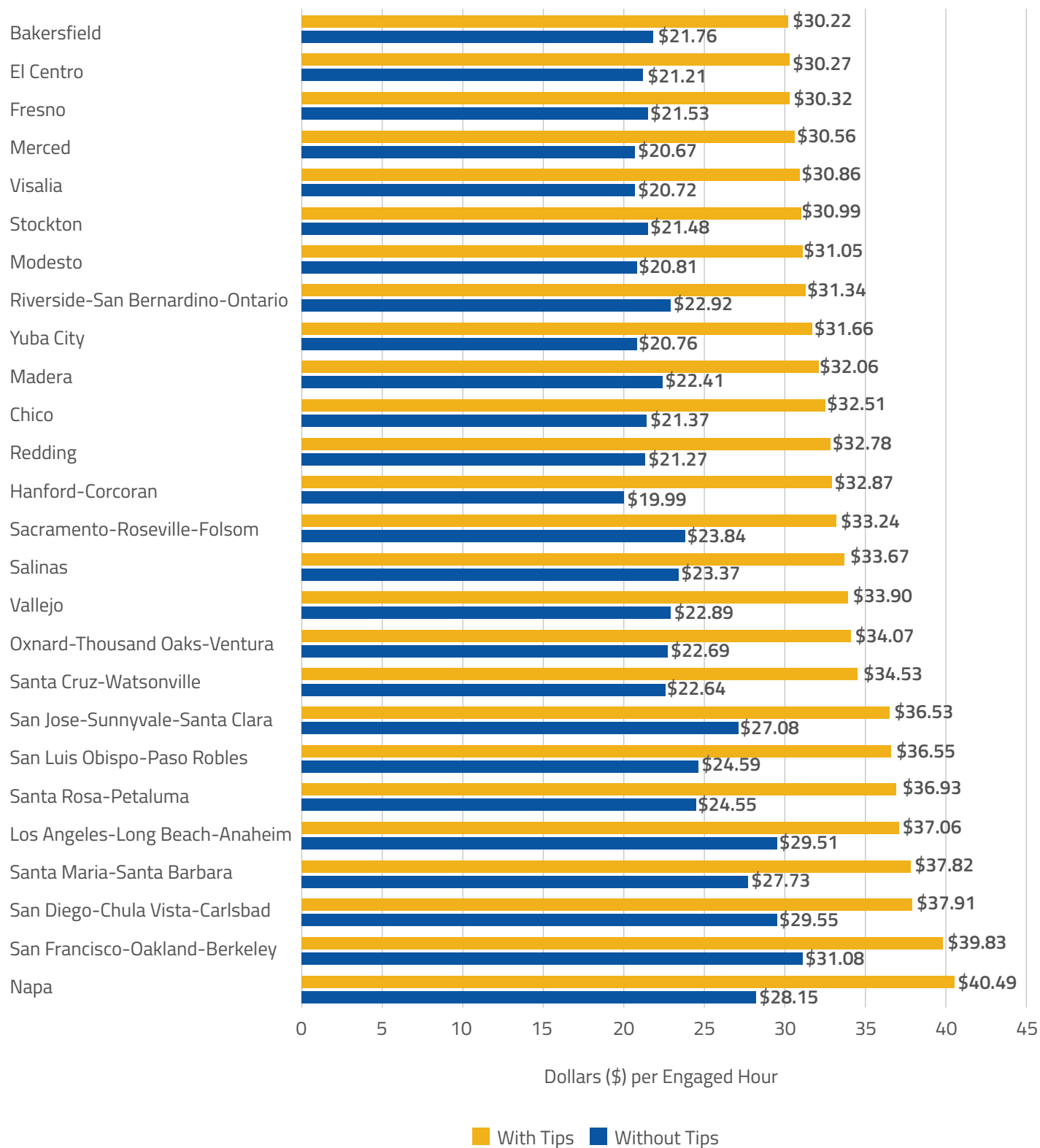
California



Sources: DoorDash, Instacart, Lyft, and Uber; Analysis by Center for Economic Forecasting and Development

Gross Average Hourly Earnings by Core-Base Statistical Area*

Q3-21



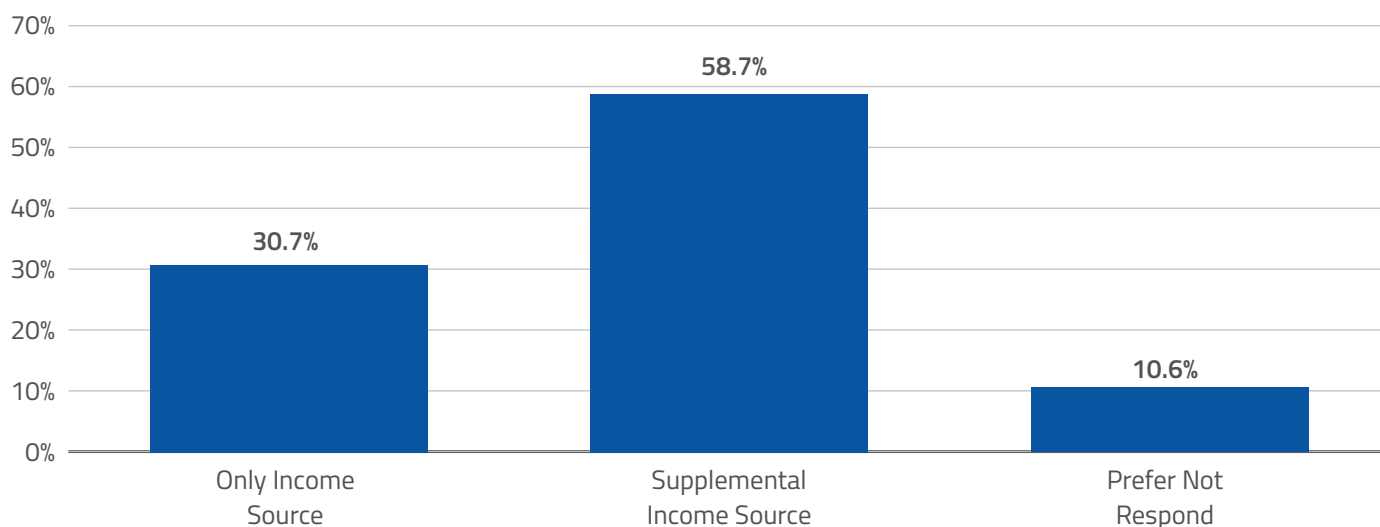
Sources: DoorDash, Instacart, Lyft, and Uber; Analysis by Center for Economic Forecasting and Development

* A core-based statistical area is a U.S. geographic area defined by the Office of Management and Budget

THE ROLE OF DRIVER EARNINGS

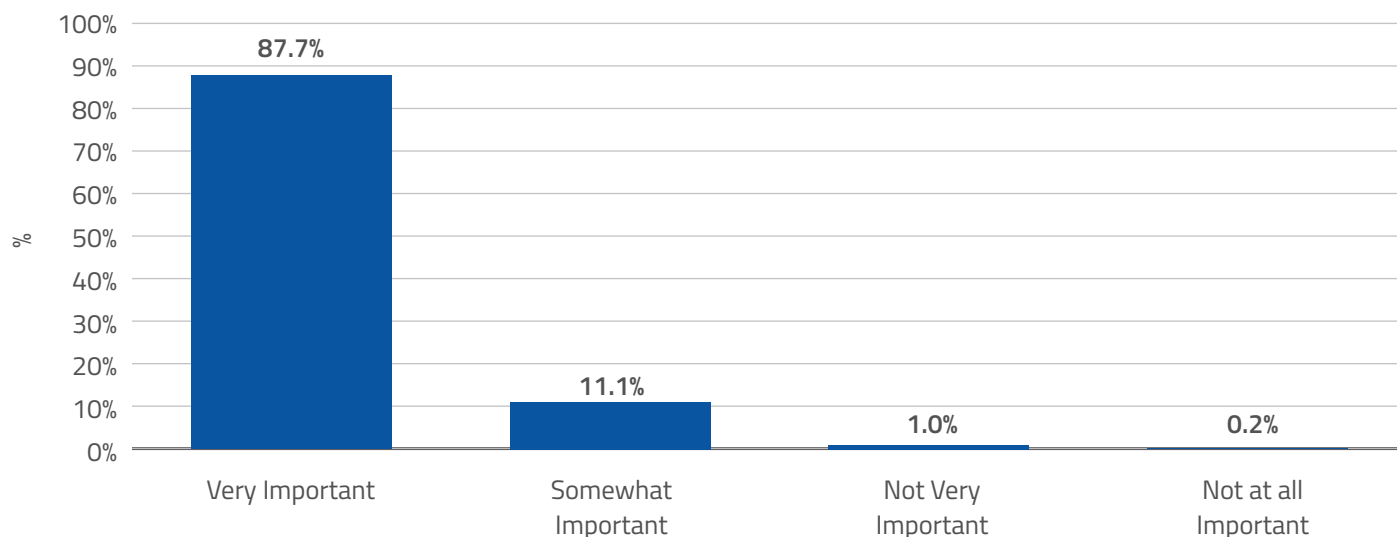
Fifty-nine percent of drivers surveyed report that the money they earn on these platforms represents supplemental income, while 33% say it is a primary source of income. This dovetails with the finding that the majority of drivers engage with platforms on a part-time basis. It should be noted that even those who use these platforms as a primary source of income may only work part-time. The platforms generally represent a way for drivers to reinforce other forms of income. Eighty-eight percent of drivers report that the ability to earn extra cash is a very important reason why they drive for the platforms.

Rideshare Earnings as Source of Income



Source: 2021 California Statewide Survey of Drivers for App-Based Platforms, EMC Research. "Role of App-Based Income: Only Income Source, Supplemental Income Source, or Prefer not to Respond." Percentages may not total 100% due to rounding.

Importance: Allows App-Based Drivers to Earn Extra Money (% Respondents)



Source: 2021 California Statewide Survey of Drivers for App-Based Platforms, EMC Research. "Importance: Allows me to Earn Extra Money". Percentages may not total 100% due to rounding. Analysis by Center for Economic Forecasting and Development

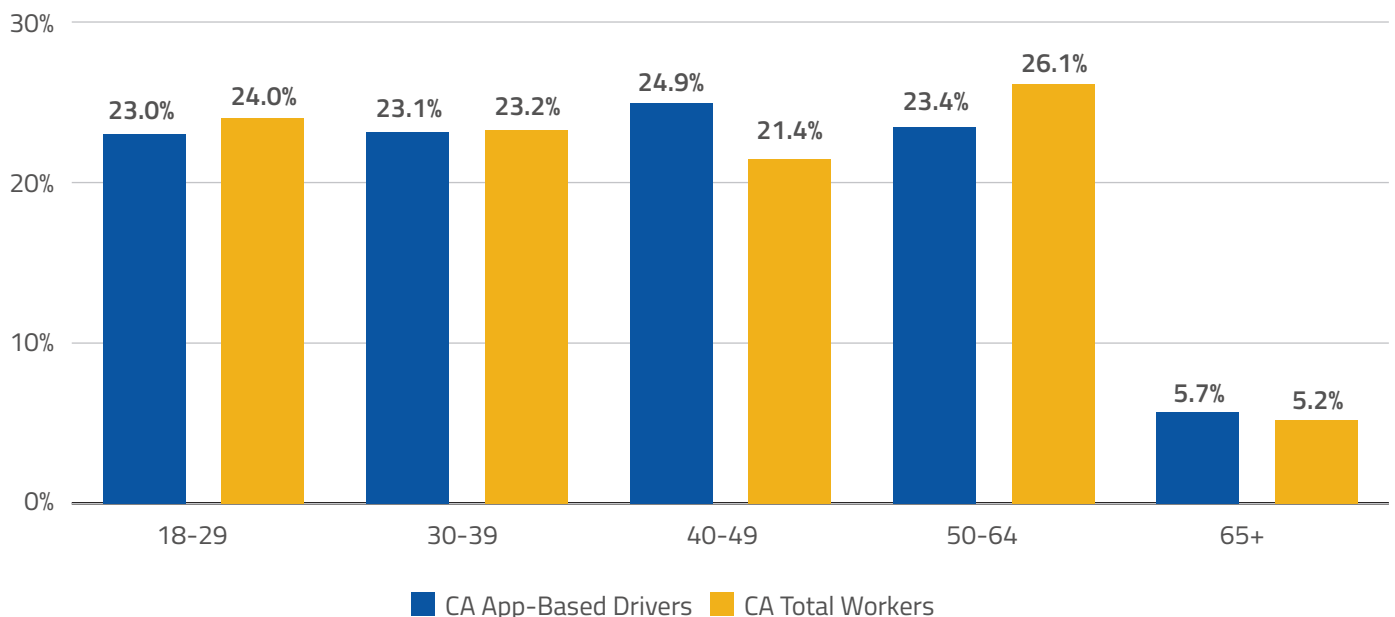


WHO ARE CALIFORNIA'S APP-BASED DRIVERS?

In the following section, the profile of app-based drivers is compared to the state's working population.

In general, for younger cohorts, there isn't a notable difference in the age profile of app-based drivers and the general working population. Drivers aged 18 to 49 make up a slightly larger share of the app-based driver workforce in relative comparison to the same combined/aggregate age bracket within the total California workforce. While drivers aged 50 years or older make up a smaller share of app-based drivers than is the case for the general working population in the state.

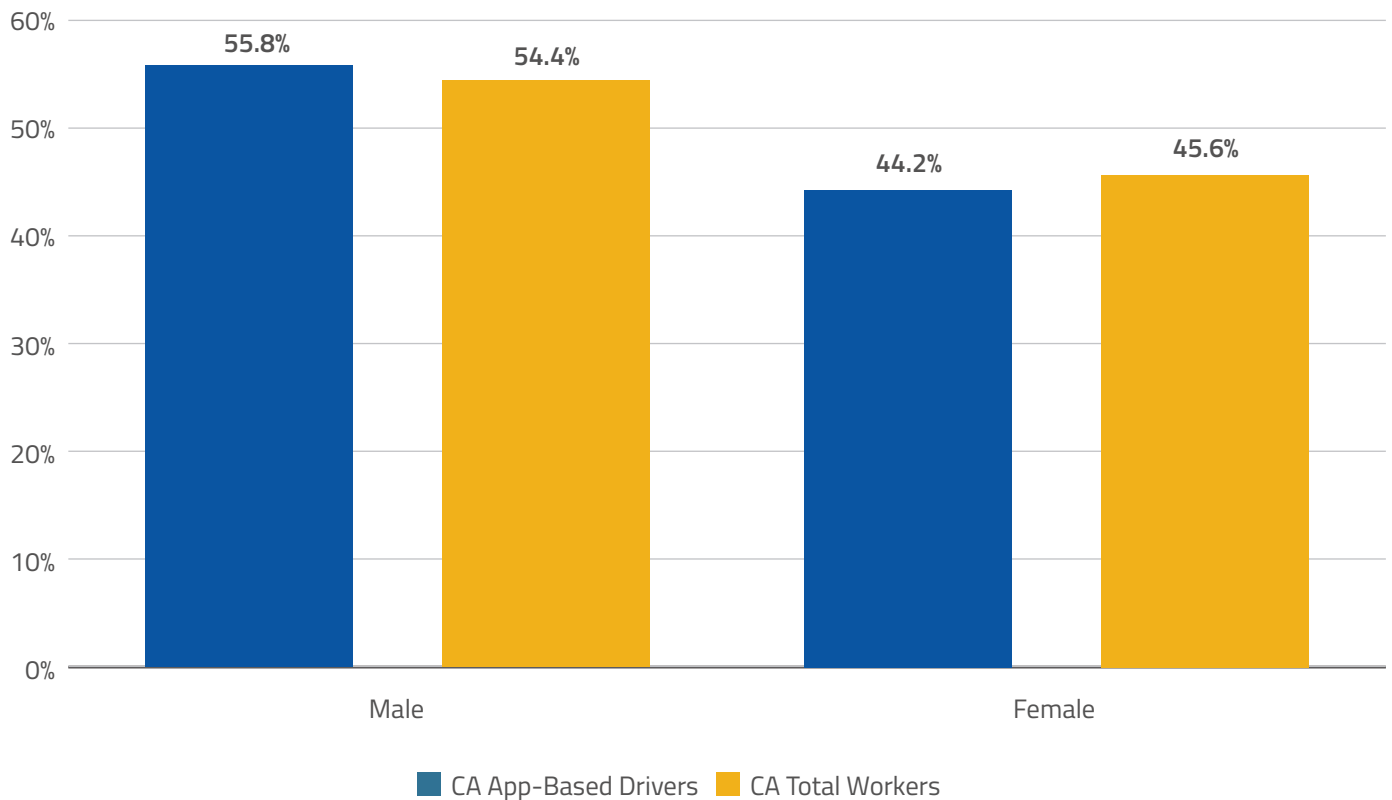
Age of App-Based Drivers Compared to Other Workers



Source: EMC Research, 2019 ACS 5-Year PUMS. Percentages may not total 100% due to rounding; Analysis by Center for Economic Forecasting and Development.*Methodology in Appendix

APP-BASED DRIVERS SKEW MORE MALE THAN THE ENTIRE WORKING-AGE POPULATION

Gender of App-Based Drivers Compared to Other Workers

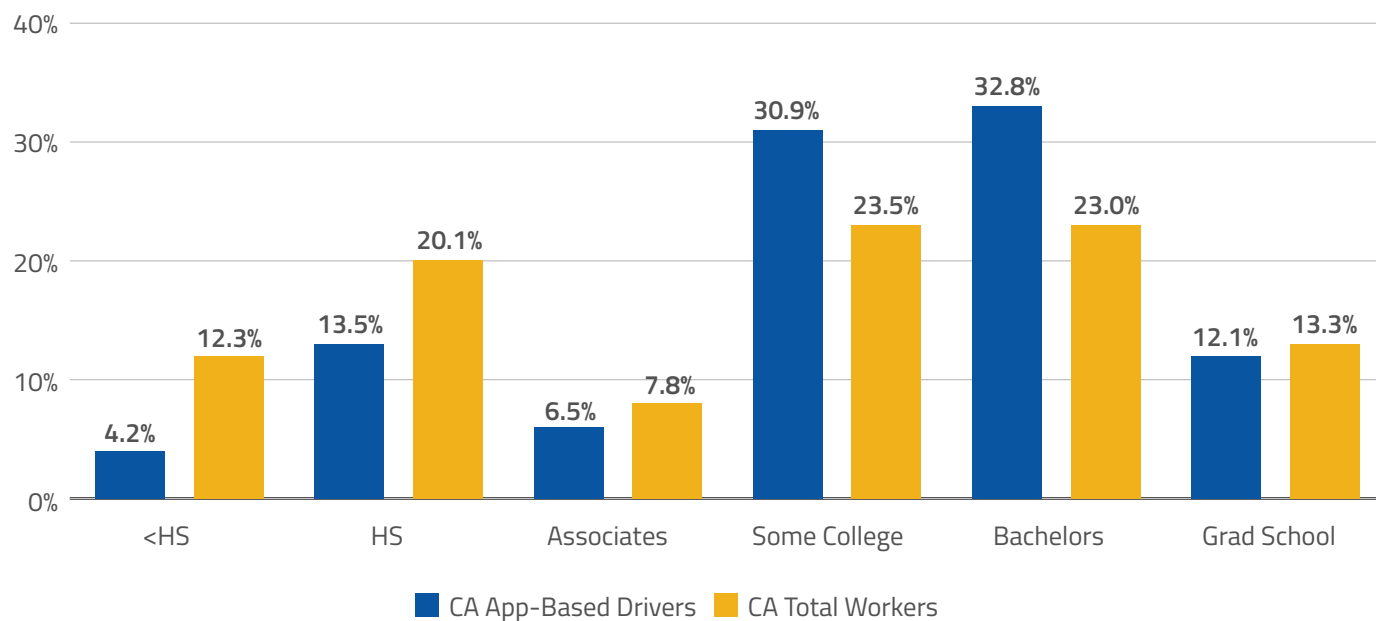


Source: EMC Research, 2019 ACS 5-Year PUMS. Percentages may not total 100% due to rounding; Analysis by Center for Economic Forecasting and Development. *Methodology in Appendix.

App-based drivers report higher educational attainment than the entire population of workers. Forty-five percent of app-based drivers hold a college degree or greater compared to 30% for the state's entire working-age population.

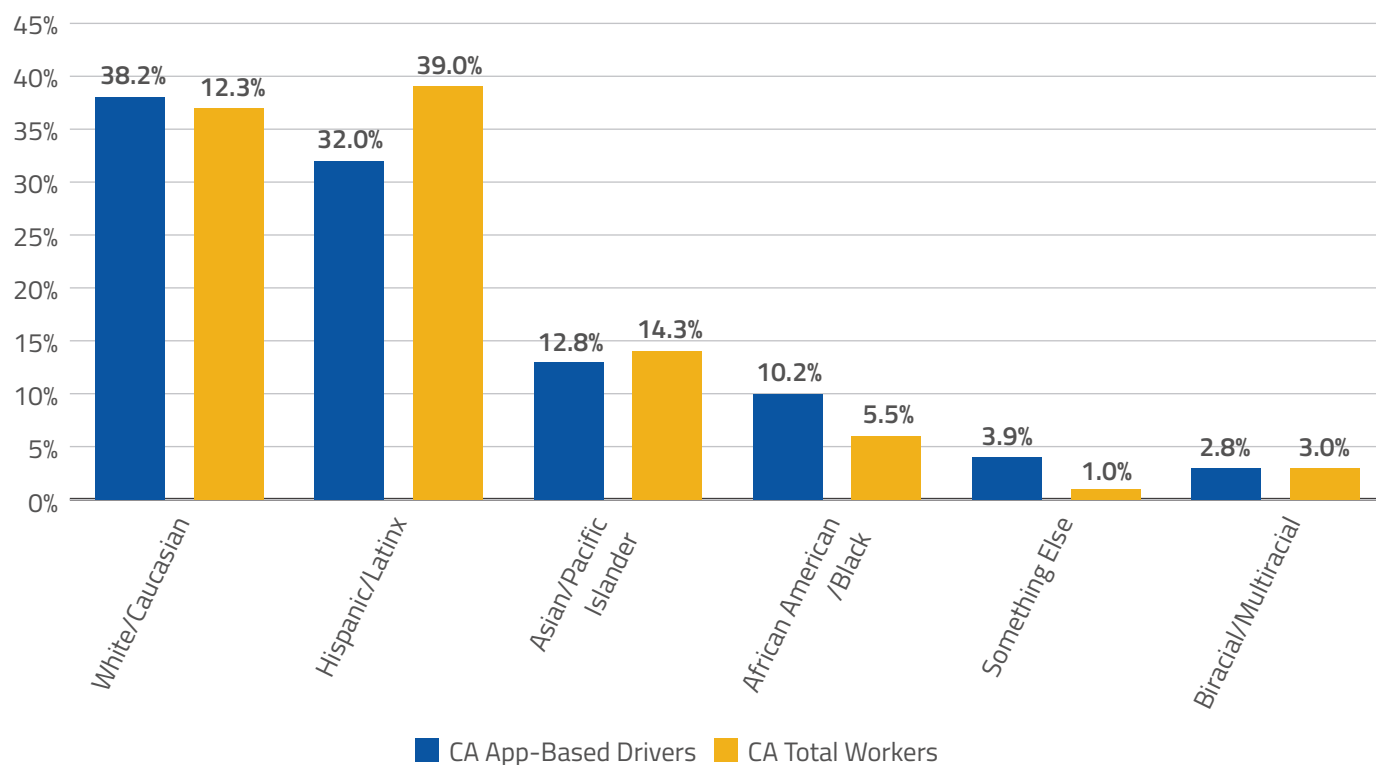
However, the racial and ethnic distribution of app-based drivers is somewhat similar to the state's broader general population (not the worker population), although there is a significantly higher share of African-American/Black drivers on app-based platforms.

Education of App-Based Drivers Compared to Other Workers



Source: EMC Research, 2019 ACS 5-Year PUMS. Percentages may not total 100% due to rounding; Analysis by Center for Economic Forecasting and Development. *Methodology in Appendix

Ethnicity of App-Based Drivers Compared to CA General Population



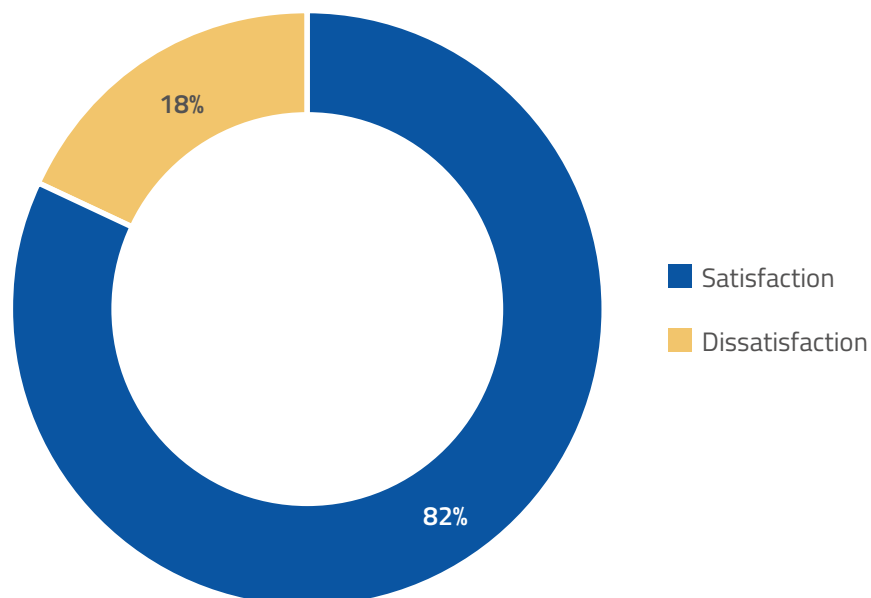
Source: EMC Research, 2019 ACS 5-Year PUMS. Percentages may not total 100% due to rounding; Analysis by Center for Economic Forecasting and Development. *Adjusted for 10.8% Drivers "Prefer Not Respond"

APP-BASED DRIVER SATISFACTION WITH PLATFORMS & PREFERENCES FOR WORK ARRANGEMENTS

Numerous legislative efforts have sought to transform the nature of platform work and the classification of app-based drivers. California voters approved Prop 22 in November 2020, which ensured app-based drivers could remain independent contractors. AB 5 sought to change the independent contractor landscape in California by making it more difficult for app-based platforms to classify drivers as independent contractors. This section reports drivers' views on working with app-based platforms.

Eighty-two percent of drivers report being satisfied with their work on rideshare and food delivery platforms,⁷ and 75% prefer their status as an independent contractor. These findings are consistent with the Bureau of Labor Statistics' (BLS) Contingent Worker Supplement (CWS). Every ten years or so, the BLS surveys contingent workers, which includes independent contractors. According to the CWS (2017), 79.1% of independent contractors preferred alternative work arrangements while only 8.8% expressed displeasure, with the latter stating their preference for a traditional work arrangement.

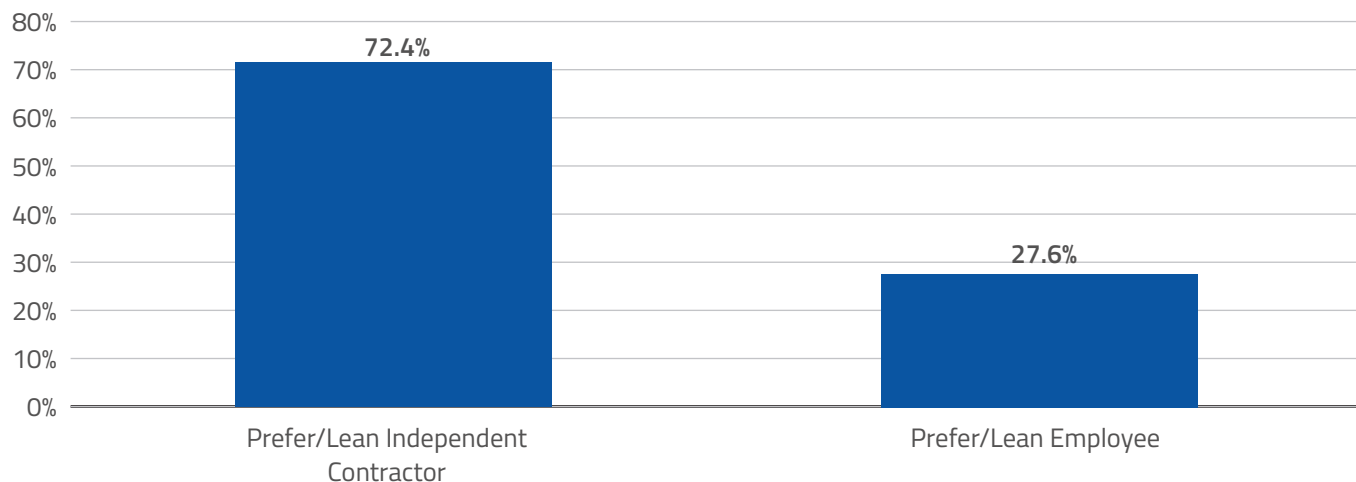
App-Based Driver Satisfaction With Platforms



Source: 2021 California Statewide Survey of Drivers for App-Based Platforms, EMC Research. "Satisfaction Driving for Apps"; Analysis by Center for Economic Forecasting and Development

⁷ 2021 California Statewide Survey of Drivers for App-Based Platforms, EMC Research.

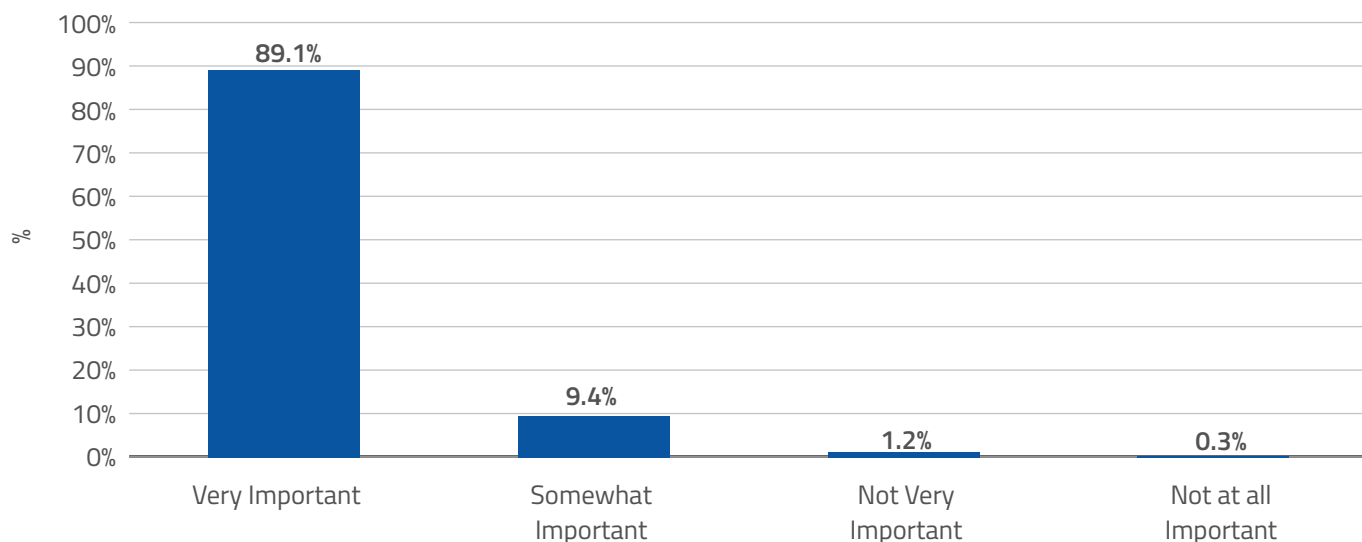
Driver Preference for App-Based Driving Tenure



Source: EMC Research, 2019 ACS 5-Year PUMS. Percentages may not total 100% due to rounding; Analysis by Center for Economic Forecasting and Development *Methodology in Appendix

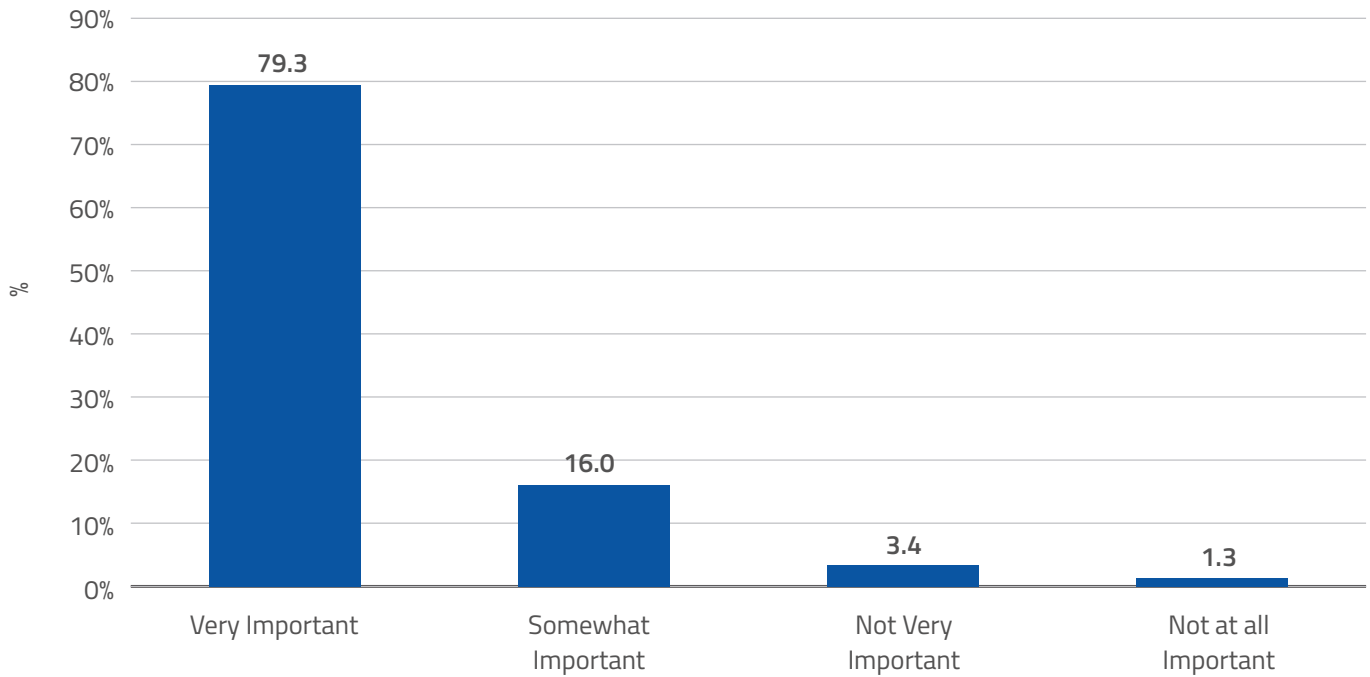
Based on survey responses, a picture emerges as to why drivers report satisfaction with app-based work, and why the majority report their preference to be classified as independent contractors. The first response concerns app-based drivers' income mix discussed above. For the majority of drivers, app-based work is not their primary source of income. As such, app-based driving provides them with the flexibility to earn extra money without being beholden to a particular schedule. App-based work affords great flexibility, allowing drivers to work at their convenience. This is reflected in the attributes that drivers report as being very important features of app-based work, with 89% indicating schedule flexibility is very important, 79% saying being their own boss is very important, and 71% stating the ability to be paid quickly is very important.

Importance: Provides Flexibility in App-Based Driver Schedule (% Respondents)



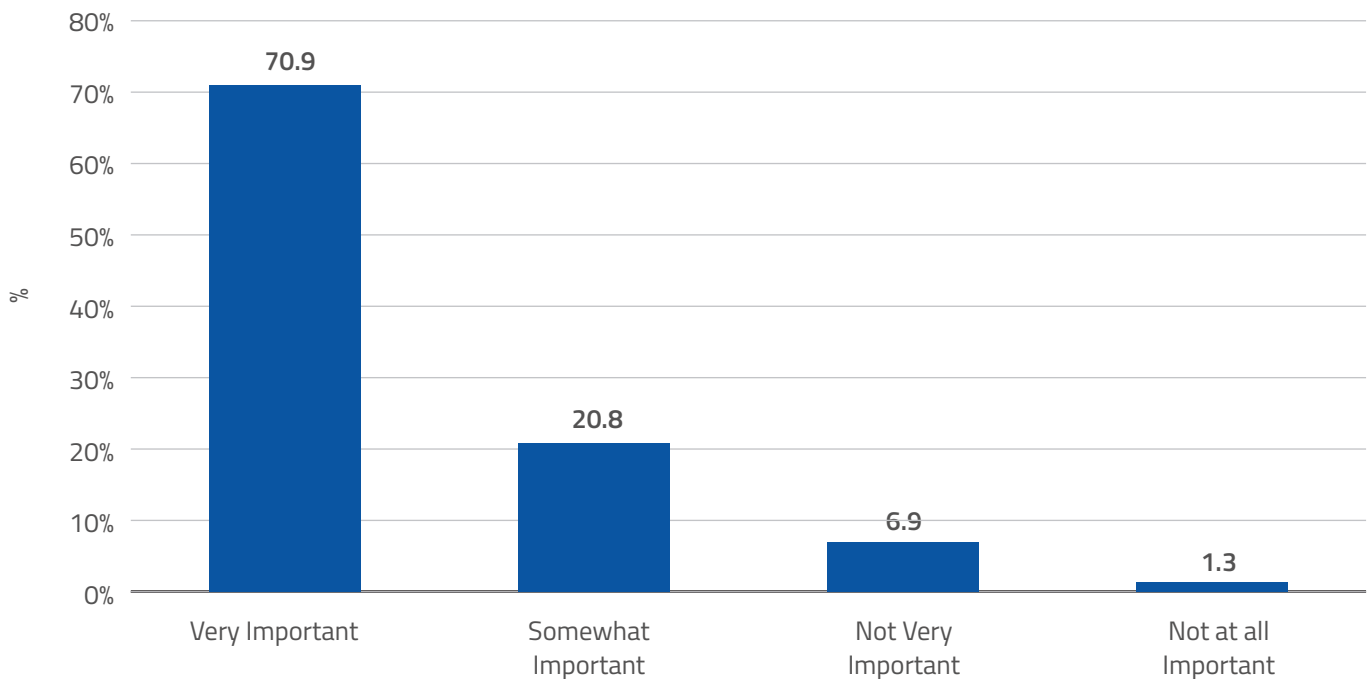
Source: California Statewide Survey of Drivers for App-Based Platforms, EMC Research. "Importance: Provides Flexibility in my Schedule". Percentages may not total 100% due to rounding.; Analysis by Center for Economic Forecasting and Development

Importance: Allows Me to Be My Own Boss (% Respondents)



Source: California Statewide Survey of Drivers for App-Based Platforms, EMC Research. "Importance: Provides Flexibility in my Schedule". Percentages may not total 100% due to rounding.; Analysis by Center for Economic Forecasting and Development

Importance: Allows App-Based Drivers to Get Paid Quickly (% Respondents)



Source: California Statewide Survey of Drivers for App-Based Platforms, EMC Research. "Importance: Provides Flexibility in my Schedule". Percentages may not total 100% due to rounding.; Analysis by Center for Economic Forecasting and Development



CONCLUSION

This report provides context of who app-based drivers in California are, how they use rideshare and food delivery services, how much they earn, and their level of satisfaction with app-based work. Overall, most app-based drivers do not seek full-time work on platforms, primarily using this type of work as needed to supplement existing sources of income.

Including tips, gross driver earnings averaged \$34.46 an hour in third-quarter 2021 across the platforms. This figure does not account for costs drivers incur, and it refers to time drivers are engaged in servicing a ride or delivery request. It has increased since third-quarter 2019 when gross hourly earnings averaged \$27.34, including tips, representing a 26% increase. These earnings figures are consistent with drivers' self-reported earnings in the EMC survey and other analyses of app-based driver company data.

App-based drivers are more often male, and have higher educational attainment than the average worker in California. An overwhelming majority of drivers report satisfaction with app-based platform work, and a large majority report they would prefer to be classified as independent contractors rather than as employees. The latter is consistent with findings reported by the BLS, in which most independent contractors report preferring this type of work arrangement. Drivers prefer having the ability to earn extra cash quickly and to flexibly do so on their own schedule, two attributes that are central to platform work.

APPENDIX

The earnings figures presented in this report represent gross earnings and do not account for cost drivers incurred during engaged hours. The cost of fuel, depreciation due to miles driven, maintenance associated with the level of driving, and in some cases the insurance can all vary depending on the level of service a driver provides. Some believe it is reasonable to adjust drivers' earnings for such costs. Prop 22 states that the earnings guarantee includes a per-mile payment (currently \$0.30 per mile) under certain conditions, which is designed to offset incurred expenses. These costs are typically estimated on a per-mile basis and vary from study to study. A study of Seattle drivers estimates driving costs account for around 10% of driver earnings⁸. Assuming driver expenses of 10%, the typical app-based driver in California would have net earnings of over \$20 per hour based on data provided by app-based platforms for engaged hours.

Specifically, the earnings relate to engaged (P2 and P3) hours. In app-based driving, time is typically categorized as follows:

- P1 is the time spent with an app open while a driver is not engaged in a ride or delivery.
- P2 is the time from acceptance to pickup of a ride or delivery.
- P3 is the time spent taking a passenger or delivery to a destination.

Critics argue that P1 hours, for which drivers are not paid, represent unpaid work. Payment for P1 hours, however, is a complicated issue. For starters, P1 time recorded on one app can, and in some cases does, overlap with simultaneous recording of P2 and P3 time on other apps. So, while a driver is waiting to be offered a ride or delivery on one app (recording unpaid P1 time), the driver could be spending this time engaged in a ride or delivery on another app (recorded as paid P2 or P3 time). If drivers were compensated for P1 time, drivers could also have the app open without any intention of accepting a ride or delivery. In fact, they would actually have a financial incentive to turn it on even if they have no intention of driving.

P1 time might also overlap with a driver's commute time. Imagine a suburban rideshare driver who can earn more money in a downtown location. The driver may turn on the app while leaving home to see if any rides can be picked up along the way. Does this time with the app turned on represent conventional work time, or is it a commute for which employees are not typically compensated?

P1 time could also represent time when an app is left turned on but a driver is running errands or doing other personal tasks. In short, while these figures represent only P2 and P3 hours, it's a challenge to draw firm conclusions about the impact of P1 time because it is difficult to know precisely how much time a driver is waiting for a ride or delivery instead of engaging in some other activity.

⁸ Hyman, Louis, et al. Cornell University, 2020, Platform Driving in Seattle, https://ecommons.cornell.edu/bitstream/handle/1813/74305/Cornell_Seattle_Uber_Lyft_Project_Report_---Final_Version_-_JDD_accessibility_edits_-_7_14_2020.pdf?sequence=1&isAllowed=y

DEFINITIONS

Total Drivers (See Population or Registrations)

The registration count of unique app-based drivers who completed at least one ride/delivery in California in the periods of study. This may include duplicate drivers across platforms (a driver can count as a driver with Lyft and as a driver with Uber if driving with both platforms during the specified period).

Average Weekly Hours

Numerator: For a given quarter, the sum of hours when drivers are engaged in a ride, defined as the time the driver spends driving to pick up a passenger or delivery (P2) and the time with a passenger or delivery in the vehicle (P3).

Denominator: The number of weeks during a quarter when a driver was able to drive on a platform (including weeks in which the driver did not complete a ride).

Percent of Drivers by Average Hours Driven Per Week

Numerator: The count of population where average weekly hours < X.

Denominator: Population.

Total Pay

The sum of driver pay for all drivers over the study period, excluding tips.

Total Tips

The sum of tips paid to all drivers in the population over the study period.

Total Trips

The sum of all trips, as well as deliveries, by registered drivers in a given period.

Average Hourly Pay

The total pay, or pay plus tips, in a given period divided by driver hours (sum of P2 and P3 engaged hours in a given period). Average hourly pay figures are calculated across independently provided data from the four app-based platforms for this report. Weighted averages are calculated from these figures. For state-level wage data, each company provided average hourly pay and the total number of drivers engaged during each quarter. Wages are weighted by the number of drivers across each individual platform. For CBSA-level data, wages are weighted by the number of trips (in the absence of the number of drivers by CBSA).

METHODS

Company Data

Company data are provided by DoorDash, Instacart, Lyft, and Uber, covering the period from third-quarter 2019 to third-quarter 2021. The Center for Economic Forecasting had independent access to this data and full discretion in analyzing the provided data. The Center for Economic Forecasting worked with each company to establish uniform data definitions. None of the platforms involved in this report had access to data from other platforms at any time.

EMC Driver Survey Data

The EMC Driver Survey was conducted from Sept. 1 – 8, 2021 of app-based rideshare and delivery network drivers who drive with at least one selected platform (Uber, Lyft, DoorDash and Instacart) and had been active at least once in the three months preceding the survey. An email invitation was sent to 625,000 drivers across Uber, Lyft, DoorDash, and Instacart, with an incentive (\$5 gift card) offered to respondents who completed the survey. A total of 1,508 drivers completed interviews, and responses were weighted to ensure the sample was representative of the overall driver population in California. The survey was offered in both English and Spanish to better accommodate a larger share of drivers.

Averages

When cross-platform averages are created across these figures, total trips on the respective platforms are used as weights for a given period.

American Community Survey (ACS) Demographics Comparisons

To compare survey findings to U.S. Census data, the American Community Survey PUMS 5-YR was used. The data are based on all PUMS respondents 18 years or older since drivers on the platforms must be 18 years or older. The PUMS estimates measure the employed population in California.

For Figures Where “Prefer Not Respond” is Removed from the Total

Whenever the number of respondents who preferred not to answer a question in the EMC Survey was significant enough to skew direct comparisons to other data sources, “prefer not to respond” respondents were removed from the sample, and all remaining figures were readjusted so the sum of the new readjusted percentages total 100%. For example, if 10% of respondents of a survey question answered “prefer not respond,” the remaining 90% of responses were each multiplied by 1.11 repeating so the adjusted percentages totaled 100%. This enables direct comparison to data sources such as the U.S. Bureau of Labor Statistics’ findings within the American Community Survey, which typically removes respondents who do not respond to individual questions before publishing data.

