

REPORT OF THE BERKELEY RESEARCH GROUP (BRG)

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ANALYSIS OF CALIFORNIA APP-BASED DRIVER JOB LOSSES IF NETWORK PLATFORMS ARE REQUIRED TO RECLASSIFY DRIVERS AS EMPLOYEES RATHER THAN INDEPENDENT CONTRACTORS

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Assembly Bill 5 (AB 5), which was enacted in September 2019, established a legal test that its author claimed would require reclassification of app-based rideshare and food delivery drivers as employees rather than independent contractors if certain conditions are met. In November 2020, 58.6% of California voters approved Proposition 22 (Prop 22) which guarantees that app-based drivers remain classified as independent contractors. However, pending litigation challenging Prop 22 could lead to court orders requiring reclassification of drivers as employees rather than independent contractors.

Extant research and our analysis indicate not only that drivers overwhelmingly prefer to maintain their independent contractor status, but also that reclassification of drivers will have significant adverse economic consequences for them.

The available evidence shows that most drivers prefer the unique flexibility provided by the network platforms:

- **According to a 2018 U. S. Bureau of Labor Statistics (BLS) study, “79 percent of independent contractors preferred their arrangement over a traditional job.”²**
- **According to a 2020 survey conducted by The Rideshare Guy, 71 percent of app-based drivers prefer to be classified as independent contractors.³**

¹ This report is an update of our 2020 report. See: D. Lewin, et al., *Analysis of Driver Job Losses if Gig Economy Companies Must Re-Classify Drivers as Employees Rather Than Independent Contractors*, May 2020, https://media.thinkbrg.com/wp-content/uploads/2020/06/0111225/BRG-REPORT-JOB-LOSS-SUMMARY-MAY-14-2020_FINAL_website.pdf.

² Bureau of Labor Statistics (2018), “Contingent and Alternative Employment Arrangements – May 2017.” News Release [USD-18-0942], Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.

³ Campbell, Harry, “Everything You Should Know About AB5 and Its Impact on Uber,” *The Rideshare Guy (Blog)*, 7 June 2021, <https://therideshareguy.com/ab5-end-of-rideshare>.

- **In 2021, more than 1.4 million California app-based drivers earned income from using four network platforms, namely, DoorDash, Instacart, Lyft, and Uber.⁴**
- **In 2021, the weekly average number of hours worked per driver per platform was 2.7.⁵**

The ability of app-based drivers to continue earning income from using these platforms is dependent on the continued success of the platform companies that build and maintain the marketplaces connecting drivers with consumers.⁶ Our analysis finds that the continued operation of the platform companies in California depends upon two key factors:

1. The continued willingness of drivers to provide rideshare and delivery services for food, groceries, and other items, mostly on a part-time/occasional basis with the flexibility afforded by independent contractor status, for the amounts consumers are willing to pay for these services; and
2. The continued willingness of consumers to pay the cost of the services offered by the drivers, rather than use alternative modes of transportation or delivery (including consumers driving their own vehicles).

Reclassification of app-based drivers as employees will significantly and negatively affect both of these prerequisites for the companies’ continued operations in California and therefore adversely affect the ability of drivers to continue earning income, for three important reasons.

First, an employment model will inevitably require the network platforms to eliminate the flexibility that drivers find so attractive about working as independent contractors. The companies will have little choice but to discontinue this flexibility in order to assure compliance with the many legal requirements that apply to employees and to control operating costs.⁷ For example, at present under Prop 22, drivers have the flexibility to work when and how long they want on

⁴ Calculated as the sum of unique drivers who performed at least one ride or delivery while logged on to one of the four platforms - DoorDash (including Caviar), Instacart, Lyft, and Uber (including Uber Eats and Postmates) - in California in 2021. This does not equate to the number of individual drivers, since drivers can work with multiple platforms.

⁵ Calculated as the sum of the number of engaged hours on the four platforms divided by the sum of number of drivers of the four platforms in California in 2021 divided by 52.

⁶ For the purposes of this report, “consumers” specifically means demand-side platform users (i.e., rideshare passengers and/or those who order from delivery network companies).

⁷ Shaw, Kathryn. *Economics of Flexible Work Schedules in The App-Based Economy*. June 2022, <https://yesformassdrivers.org/wp-content/uploads/2022/07/Shaw-Report-FINAL.pdf>.

whatever platforms they want in any geographic area of their choosing. They also have the ability to choose which jobs they take and which jobs they decline. Under an employment model, network companies will require drivers to adhere to a set schedule to comply with wage and hour laws, and may need to require drivers to work in particular geographic areas with higher volumes of customers in order to minimize operating costs. Network platform companies will also limit drivers' ability to decline work in order to accommodate demand with fewer drivers.

These changes will fundamentally alter how drivers engage with the network platforms. The evidence indicates that the loss of flexibility is likely to bring about a massive reduction in the number of drivers willing to provide rideshare and delivery services facilitated by the network platform companies, thereby significantly reducing the accessibility, reliability, and convenience of these services.

Second, in order to cover the significantly higher costs⁸ resulting from the employment model, the companies will be forced to raise the prices charged to customers for app-based rideshare and delivery services. An increase in the prices charged to consumers will materially reduce the demand for services offered by the drivers,⁹ thereby reducing both the companies' revenues and the drivers' earnings.

Third, the interaction of these two consequences (reduction in the supply of drivers and higher consumer prices) is likely to produce a downward spiral in consumer demand for rideshare and delivery services, further threatening continued ride share and delivery operations in California and the drivers' income-earning opportunities. As the number of drivers declines, the responsiveness of drivers to consumer demand also declines, thereby leading to increased consumer wait-times for pick-up or delivery, which make these services less convenient and less reliable, further reducing consumer demand. With lower demand, the network platform companies will be under even greater pressure to raise consumer prices to cover their fixed costs, attract willing "employee" drivers, and improve the customer experience. The higher prices, in turn, will further reduce consumer demand, thereby threatening continued operation of the platform model

⁸ Companies incur administrative costs when maintaining an employee workforce – typically costs associated with human resources, accounting, onboarding, recruiting, supervising, compliance, and other functions, which are not necessary when engaging with independent contractors.

⁹ In economics, a change in demand in response to a change in price is referred to as price elasticity of demand. See Footnote 18 of this report for details.

in California, income-earning opportunities for app-based drivers, and the availability of app-based rideshare and delivery services to consumers.

METHODOLOGY

Our analysis is based on company data for California covering 2021 provided by four platforms: DoorDash (including Caviar), Instacart, Lyft, and Uber (including Uber Eats and Postmates). The data are limited to the four platforms and do not cover drivers who used other rideshare or delivery platforms. Berkeley Research Group (BRG) had independent access to and full discretion in analyzing these data. We worked with each company individually to establish uniform data definitions for the purposes of this report, but none of the four companies had access to data from the other companies at any time. This report was commissioned and paid for by Protect App-Based Drivers and Services.

To calculate the impact of transitioning to an employment model, we first estimated the rise in benefit costs which would in turn increase consumer prices. Employing peer-reviewed estimates of price elasticity, we calculated anticipated consumer demand reductions. We assumed that, in order to minimize their costs, the companies would require drivers operating under an employment model to adhere to a 40-hour workweek. Then we estimated the number of drivers who would be needed within the framework of the employment model to satisfy consumer demand.

Benefits costs are often represented as a percentage of wages. Driver payouts under the independent contractor model include both labor compensation and an allowance for driving expenses.¹⁰ To determine the labor compensation that would constitute wages under an employment model, we deducted the driving expenses¹¹ from the driver payouts.¹² We assumed that the benefits costs under an employment model will be 41.3% of the driver wages, following

¹⁰ We assume that the platform companies will adjust driver compensation to reflect the transfer of financial responsibility for vehicle operating expenses from driver to company.

¹¹ Total miles driven by drivers during engaged hours of the four app-based companies in California in 2021 multiplied by the mileage reimbursement rate set by Proposition 22 for the 2021 calendar year (\$0.3 per mile).

¹² Total driver payout by the four app-based platforms in California in 2021, including tips.

the Bureau of Labor Statistics (BLS) data.¹³ We subtracted the estimate of the current benefits costs¹⁴ from this figure to calculate the increase in benefits costs.

Next, to estimate the companies' total sales (that is, the amounts paid by customers), we assumed that 80% of customer payments go to drivers and 20% go to platform companies, drawing on Uber's 19% take rate in 2021.¹⁵ The total sales were estimated as the total driver payout divided by 80%. To account for the pass-through of the entire benefit cost increase to consumers,¹⁶ we added the benefit cost increase to the total sales.¹⁷ Dividing the new total sales by the old total sales yielded the percent increase in gross consumer prices.

Applying the concept of price elasticity of demand,¹⁸ we estimated the resulting change in demand, which was then translated into a decrease in the number of engaged hours. Assuming that under an employment model, drivers would work 40 hours a week of which 75% (30) would be engaged hours, we found 98,153 to be the number of employee drivers needed to fulfill the new

¹³ Bureau of Labor Statistics (BLS), Employer cost of benefits as a fraction of wages and salaries for private industry workers, Employer Costs for Employee Compensation – September 2021 [USDLE-21-2146]. The average employer cost for wages and salaries is \$26.36 and total benefits is \$10.88 ($\$10.88 / \$26.36 = 41.3\%$).

¹⁴ The current benefits encompass occupational accident insurance, earnings guarantee, and healthcare subsidies. While the costs associated with earnings guarantee and healthcare subsidy the four platforms are current incurring are known, the cost associated with occupational accident insurance is unknown to us. We estimated this cost using the cost associated with healthcare subsidy and its fraction to driver compensation, as occupational accident insurance is provided to the drivers who are also eligible for healthcare subsidy. Based on the BLS data cited above, the benefits cost most comparable to occupational accident insurance, which are life insurance, short-term and long-term disability insurance, and workers' compensation averages is 23.11% of the cost associated with health insurance. Therefore, we estimate the current cost associated with occupational accident insurance is 23.11% of the platforms' health subsidy costs.

¹⁵ Uber's ridesharing take rate in 2021 reported in its 10-K is 19%. We assumed that the driving work across the four app-based companies was interchangeable, applying a set of assumptions aligned with the rideshare company's business model.

¹⁶ We assume that 100% of all cost increases are passed on to the consumers.

¹⁷ We assume that the non-labor cost remains the same.

¹⁸ In our original report, as well as in the present report, we used the price elasticity of demand for ridesharing services of -1.2 that Parrott and Reich found in their 2018 study of ridesharing in New York City (Parrott, James A., and Michael Reich. "Report for the New York City Taxi and Limousine Commission." *The New School Center for New York City Affairs*, July 2018, p. 50.) After the release of our first report, Dr. Reich criticized us for using his estimate of elasticity, suggesting that the elasticity he and his co-author reported in their 2018 study was too high (Reich, Michael. "Pay, Passengers and Profits: Effects of Employee Status for California TNC Drivers." *IRLE Working Paper No. 107-20*, Oct. 2020.). We believe that our use of the elasticity from the Parrott-Reich study is reasonable and fully justified. Nevertheless, we performed a sensitivity analysis to determine how use of a lower elasticity would affect our results. Specifically, we substituted an elasticity of -0.2 – the elasticity Dr. Reich now favors – for the -1.2 found by Parrott and Reich in their 2018 study and re-ran our model. We also substituted an elasticity of -0.7 – mid-way between Dr. Reich's -0.2 and the Parrot-Reich elasticity of -1.2 – and re-ran our model. We found that use of these lower elasticities had no material effect on the output of our model: 93.2% reduction on -1.2 (Parrot-Reich), 92.3% reduction on -0.7 (mid-point), and 91.4% reduction on -0.2 (Reich).

demand. This signified a substantial 93.2% decrease from the current 1,444,315¹⁹ unique driver jobs across the four platforms in California during 2021.

CONCLUSION

Given (1) the economic realities of the network platform companies' markets, (2) published research and data regarding the industry, and (3) the results of our in-depth research and economic modeling, we conclude that requiring drivers to be classified as employees, rather than independent contractors, will:

- **Reduce the number of app-based driver jobs needed to satisfy consumer demand by at least 93%**, resulting in the immediate elimination of work opportunities for hundreds of thousands of Californians currently working as independent contractor drivers;
- **Significantly threaten the continued operation of the network platform model in California;**
- **Reduce the number of needed driver jobs from 1,444,315 to 98,153 - a reduction of more than 1.3 million app-based driver jobs.** This is almost identical to the conclusion our economic analysis reached using 2019 data prior to the COVID-19 pandemic.

In sum, the employment model will significantly reduce both the number of driver jobs available and the income-earning opportunities of those Californians who've worked as independent contractors using the app-based platform companies.

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¹⁹ The sum of unique drivers who performed at least one ride or delivery while logged on to one of the four platforms in California in 2021. This refers to the number of unique opportunities available to potential drivers across the platforms and does not equate to the number of individual drivers, since drivers can work with multiple platforms.

David Lewin is the Neil H. Jacoby professor emeritus of management, human resources, and organizational behavior at the UCLA Anderson School of Management. He has provided consulting advice and expert testimony in numerous labor and employment matters involving age, gender, race, and religious discrimination, wrongful termination, executive compensation, employee compensation, performance management, constructive discharge, wages and hour, and independent contractor versus employee status. In these areas, Dr. Lewin has often designed and analyzed data obtained from survey questionnaires, interview protocols, and observational studies. He has also consulted widely on human resource management issues and practices with companies in the U.S. and abroad.

Dr. Lewin has published 25 books and more than 150 scholarly and professional journal articles on numerous aspects of human resource management and employment relations. He is a Fellow and recent member of the Board of Directors of the National Academy of Human Resources and served as faculty director of the UCLA Anderson School's Advanced Program in Human Resource Management. Formerly on the faculty of the Columbia University Graduate School of Business, Dr. Lewin joined the UCLA Anderson School in 1990.

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Bill Hamm is an economics consultant with high-level experience in both business and government. Prior to entering the private sector, Dr. Hamm headed the non-partisan Legislative Analyst's Office in California where he earned a nationwide reputation for objectivity, expertise, and credibility on public policy issues ranging from taxation to healthcare. He also spent eight years in the Executive Office of the President in Washington, D.C., where he headed a division of the Office of Management and Budget responsible for analyzing the programs and budgets of the Department of Labor and other federal agencies.

Dr. Hamm holds a BA from Dartmouth College and a PhD in economics from the University of Michigan. He is a member of the American Economic Association and the American Law and Economics Association; a fellow of the National Academy for Public Administration; and a director of the Grameen Foundation, an international not-for-profit organization that develops innovative, sustainable solutions to fight global poverty and hunger.

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