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New York City Taxi & Limousine Commission

Proposed Rules – Driver Pay (High-Volume For-Hire Vehicles)

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BEFORE THE NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

**Request for comment: Amendments to the
HVFHS Minimum Driver Payment Rules**

Public Hearing: February 5, 2025

COMMENTS OF UBER USA, LLC

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Uber¹ appreciates the opportunity to submit this Comment to the New York City Taxi & Limousine Commission’s (the “Commission” or “TLC”) proposed amendments to the minimum driver payment rules for High-Volume For-Hire Services (the “Proposed Rule”), which would:

- Increase per-mile pay rates by changing the pre-existing methodology for calculating the “composition” of driver expenses;
- Change the pre-existing methodology for calculating and applying utilization rates;
- Limit High-Volume For-Hire Services’ (“HVFHS”) ability to manage access to their proprietary platforms; and
- Increase the amount of data provided to TLC.

While Uber supports stable and predictable driver earnings, we have several significant concerns with the Proposed Rule that must be addressed before the Commission takes action.

¹ “Uber” herein refers to Uber USA, LLC (HV0003) (B03404), and its affiliates. In submitting this comment, Uber incorporates by reference the report attached hereto as Exhibit A, and entitled “Report of Kristen Backor, Ph.D” (“Backor Report”), as well as the HR&A study attached hereto as Exhibit B, and entitled “New York City Uber Driver Earnings and Expenses Study” (“HR&A Study”).

As a threshold matter, Uber urges the Commission to reconsider yet another change to the HVFHS market before the market has had the opportunity to adjust to the prior changes. This is especially so given that much of TLC’s rationale for increasing the driver expense calculation is a direct result of other TLC policy-driven initiatives that are still in the process of being implemented. For example, in recent years, TLC has (1) established minimum pay standards, (2) increased those standards five times, (3) altered the calculation of utilization rates, (4) imposed caps on new for-hire vehicle (“FHV”) licenses, (5) altered those caps, and (6) imposed an electric vehicle mandate that aims to completely reshape the industry within the next five years.

Should the Commission proceed with rulemaking, Uber submits that the Proposed Rule and its purported justification fail to consider significant issues and are based on incomplete and insufficient data and analysis. Specifically, from the information available to Uber during the Comment period, the Proposed Rule appears to rely on unverifiable data and unwarranted assumptions in its proposal to raise the amount for per-mile driver expenses. These changes are based primarily on an expense model derived from a single, unreliable and undisclosed survey. Notably, this survey, its questions, and its underlying methodologies were not published or made available to regulated entities when TLC announced its proposed rule or for nearly the entirety of the Comment period. Instead, just hours before the Comment period was due to close, on February 4, 2025, TLC made a last-minute production of certain survey-related materials, which no regulated entity or member of the public could reasonably be expected to analyze or meaningfully comment on. The Commission’s failure to disclose critical information in a timely manner has precluded regulated entities from effectively commenting on the Proposed Rule, and absent a meaningful opportunity to consider the survey and underlying materials, it should not be considered a reliable source upon which to base rulemaking.

In fact the survey and TLC’s process lead to certain demonstrably false assumptions about vehicle depreciation rates and highly imprecise and unreliable self-reported estimates about EV charging wait times that are inconsistent with other data sources.

TLC’s attempts to alter the methodology for calculating utilization rates and impose new driver notice and application access requirements are also arbitrary and capricious. TLC departs from a consistent policy of reevaluating and calculating utilization rates annually, and based on data analysis time periods that are announced in advance, in favor of an approach leaving these

calculations entirely to TLC's discretion. This creates uncertainty for all parties, as evidenced by TLC's selection of an arbitrary date range for calculating the newly proposed rates, and where the date range was determined retroactively and without notice to HVFHS companies. Further, TLC's new notice and access requirements impose significant burdens on drivers and HVFHS platforms alike.

There are a number of changes to the Proposed Rule and to the methodology employed to develop a revised rule that are necessary to begin to address some of the concerns identified.

To begin, Uber urges the Commission to forgo updates to the methodology for calculating driver expenses and limit per-mile rate increases to the CPI-W methodology established in prior years. Further, to the extent the Commission is contemplating rate increases in future years, the Commission should consider making such adjustments less frequently, whether every three or five years, or no more often than it updates taximeter rates.

TLC's purported justification for recalculating driver expenses is arbitrary. Drivers' core expenses remain the same. TLC has not shown that the existing methodology of relying on inflation-metric based assessments warrants change or is insufficient, such that the inflation-based metrics do not reflect the total blend of expenses identified by TLC, such as drivers choosing larger and/or electric vehicles. To the extent the Commission is committed to altering the "composition" of driver expenses, it should not let the process be skewed by any demonstrably false or otherwise unwarranted assumptions from a single survey it relies upon for its cost methodology, and without external verification of the responses provided. At a minimum, this would include looking to more reliable sources of cost-data than self-reporting, verifying and/or validating the survey responses provided, revising the depreciation calculation to reflect the demonstrable fact that an FHV retains value for at least seven years, and eliminating the calculation of wait times to charge EVs as part of the expense model.

Finally, annual recalculations of utilization rates and arbitrary redefinings of the utilization rate logic can result in too frequent changes. Although Uber would welcome less frequent calculations, the Commission cannot grant itself a standardless right to revise the utilization rate any time it wants based on date collection time periods that have not been identified to the industry in advance of the data collection period—especially where TLC is trying to limit FHVs ability to

manage utilization on their platforms. Uber would also urge the Commission against adopting harmful rules governing driver access to HVFHS applications, which will make it harder for the industry to function efficiently for the benefit of riders and drivers.

I. TLC SHOULD NOT ADOPT A MAJOR CHANGE IN THE AMOUNT OR COMPOSITION OF DRIVER EXPENSES FOLLOWING AND DURING A PERIOD OF SIGNIFICANT POLICY CHANGE AND UNCERTAINTY

After relying on a specific methodology for calculating per-mile driver expenses over the past six years—and updating that rate five times during this period to ensure driver pay matched the rate of inflation—TLC has decided to abandon its established approach in favor of a new calculation of what TLC now labels the “*composition* of driver expenses.” TLC bases its calculation and new rates on a report it commissioned by Dr. James A. Parrott and the Center for New York City Affairs at the New School (the “Parrott Study”). TLC takes all of the conclusions and substantive analysis from the Parrott Study at face value, with no additional verification or analysis. According to TLC, the Parrott Study led it to develop a new model for calculating driver expenses that aims to account for the “shift from sedans to mid-size SUVs,” the increase in short-term vehicle rentals given TLC’s “limitation on new for-hire vehicle licenses,” and the increased usage of electric vehicles as a result of “TLC policy efforts like the Green Rides Initiative.”²

TLC’s proposal to undertake a major reevaluation of the composition of driver expenses is unwarranted at this time given that current per-mile rates remain in line with expenses and given the significant changes that the FHV market is undergoing. *See* N.Y.C. Admin. Code § 19-549 (requiring TLC “at a minimum, consider” among the factors “the adequacy of for-hire vehicle driver income considered in relation to for-hire vehicle driver expenses”). As TLC itself notes, two of the three major drivers of alleged increased costs are the result of TLC’s own policy initiatives: the cap on new FHV licenses leading more drivers to rent and the electric vehicle mandate in the Green Rides Initiative. In prior engagements with the Commission, Uber has explained that both of these efforts could impose costs for drivers and the many city residents who rely on FHVs for their transportation needs.

² Proposed Rule at 3-4.

With the proposed increases to the per-mile rate, the economic consequences of TLC’s policy initiatives are coming into focus for the first time. By TLC’s own account, the cap on FHV licenses is leading drivers to increasingly rely on what TLC concludes are less cost-efficient rental options. Uber has previously argued against these caps on the grounds that they would increase costs, and TLC’s analysis appears to confirm as much. Uber would again encourage TLC to reevaluate the prudence of these license caps and not raise per mile rates until it provides relief from the caps, or at a minimum, defer reevaluating driver expenses on the basis of a policy that might merit reconsideration and likely must change in order to meet the goals of the Green Rides Initiative, namely, by granting more licenses for EVs that could be acquired instead of rented.

In a similar vein, TLC notes that drivers are increasingly shifting to EVs due to the fact that those vehicles were for a period exempt from the license cap and due to mandates that an increasing share of High-Volume For-Hire Vehicle (“HV-FHV”) rides be completed by EVs. Here, too, Uber has previously raised concerns about the costs of complying with the mandate on the timeline laid out by TLC. TLC’s proposal newly imposes higher pay requirements based on higher expenses that will purportedly result from this government-mandated EV transition. Those higher expenses result in higher pay rates that must be passed on to riders or otherwise borne by the HVFHS. Again, Uber would urge TLC to reconsider the prudence of such an aggressive timetable for shifting to EVs, especially in light of its determination that EVs impose higher expenses on drivers and by extension riders, and where TLC has not committed to or otherwise granted additional new FHV-vehicle licenses for EVs. Similarly, Uber would encourage TLC to withhold reevaluating driver expenses on the basis of this unsettled policy determination. Furthermore, as the Parrott Study itself notes, the “electric vehicle market and charging infrastructure are rapidly evolving.”³ As detailed below, the trajectory of that evolution suggests that the Parrott study overestimates certain costs to drivers. But, at this juncture, it suffices to say that it would be inadvisable for the Commission to undertake a wholesale reevaluation of driver expenses when the EV ecosystem is “rapidly evolving” and the pace of EV uptake remains an unsettled policy question among local and federal regulatory bodies.

³ James A. Parrott, *Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard* at 19 (December 2024).

To the extent the Commission determines it remains necessary to still reevaluate per-mile rates, Uber submits that the preferable method, given the ongoing policy uncertainty, would be to proceed with a revision based on the percentage change in the annual average Consumer Price Index for Urban Wage Earners and Clerical Workers for the NY-NJ-PA metro area (the “CPI-W”). Doing so would be consistent with the Commission’s existing rules and past practice. Neither Parrott nor TLC have shown that the CPI-W does not already capture the changes that TLC uses to justify its proposed change, such as a shift to SUVs and electric vehicles. Moving forward, Uber submits that the Commission should implement inflationary rate adjustments no more frequently than taximeter rate increases, or another schedule that is less than annually, such as once every three or five years. The current practice of annual inflationary adjustments creates a great deal of variability and leaves little time for riders and drivers alike to adjust to shifting prices. Less frequent adjustments would allow greater time for the industry to normalize and reduce the risks of unfavorable policy outcomes, including reducing rider demand.

II. TLC’S PROPOSAL TO ALTER THE METHODOLOGY FOR CALCULATING PER-MILE DRIVER EXPENSES IS BASED ON UNVERIFIABLE DATA AND UNWARRANTED ASSUMPTIONS

Should the Commission decide to proceed with changing the methodology for calculating the composition of driver expenses, Uber has serious concerns with TLC’s decision to do so on the basis of a single, unreliable and unverified survey that rests on a number of erroneous assumptions. This Comment highlights a number of those concerns. In preparing this Comment, Uber retained Dr. Kristin Backor, who currently serves as Director of the Market Research Center of Excellence at Charles River Associates and who previously led the Stanford Institute for the Quantitative Study of Society. Dr. Backor has over fifteen years of experience in survey best practices and conducting reliable empirical social science research. Dr. Backor has provided a review of best practices in survey design and reporting and whether they have been followed in the Parrott Study, as well as her observations as to potential survey issues and biases and how they may have impacted the results of Dr. Parrott’s survey. Because TLC declined to publicly release any of the underlying materials associated with the survey until just hours before the Comment was due, Dr. Backor only had the opportunity to conduct her review based on limited publicly available information. Her report is attached as Exhibit A to this Comment.

A. TLC FAILED TO TIMELY DISCLOSE OR ADEQUATELY IDENTIFY THE DATA UNDERLYING THE PARROTT STUDY

As a preliminary matter, Uber has serious concerns with TLC’s current proposal to revise its driver expense model using “a driver survey, current data on the vehicle fleet, and related research on vehicle costs.”⁴ When TLC first announced its proposed rule and for nearly the entire Comment period, the Commission had neither disclosed nor described (i) the survey questions posed and the method they were sent to drivers; (ii) the responses to the survey; (iii) the data or research reviewed and the processes used for selecting that data; (iv) the methodologies used in reviewing and analyzing the data; (v) the outputs of those reviews and analyses; or (vi) the Commission’s decision making process to draft the Proposed Rules using those outputs. These materials have been specifically requested in multiple detailed Freedom of Information Law requests and via email correspondence.⁵ Just hours before the Comment deadline, TLC finally made a partial production of certain survey-related materials and estimated that other materials would be provided within 150 days. Given the last-minute nature of this production, Uber has not yet had the opportunity to meaningfully review the 32 documents, totaling over 600 pages, included in TLC’s disclosure. Upon receiving the files, Uber promptly urged TLC to consider postponing the February 5 hearing to allow for meaningful review of these additional materials,⁶ but TLC summarily declined the request. *See generally FBME Bank Ltd. v. Lew*, 209 F. Supp. 3d 299, 312 (D.D.C. 2016) (noting “[t]he purpose of requiring agencies to disclose certain information, evidence, or material during the notice-and-comment period is to allow the public to *meaningfully* comment on the proposed rule”) (emphasis added). Absent further time to review, Uber can only base its Comment on what was available to it prior to this late-breaking production.

Notice and comment is designed to serve important policy goals, including providing maximum public participation to affected parties, and ensuring that agencies have full information before making decisions. Here, the Commission has gravely undermined those goals by thus far

⁴ Proposed Rule at 4.

⁵ Letter from Nicholas Davoli to Records Access Officer, New York City Taxi & Limousine Commission (December 27, 2024), attached hereto as Exhibit C; Letter from Karen Dunn to Records Access Officer, New York City Taxi & Limousine Commission (January 29, 2025), attached hereto as Exhibit D; Letter from Karen Dunn to Records Access Officer, New York City Department of Transportation (January 29, 2025), attached hereto as Exhibit E.

⁶ Letter from Nicholas Davoli to Deputy Commissioner & General Counsel Sherryl Eluto, New York City Taxi & Limousine Commission (February 4, 2025), attached hereto as Exhibit F.

refusing to provide information and materials critical for regulated parties and affected communities to meaningfully comment on the Proposed Rule. *See Zehn-Ny LLC v. New York City Taxi and Limousine Commission*, No. 159195, 2019 WL 7067072, at *4-5 (N.Y. Sup. Ct. Dec. 23, 2019). Further, the Commission’s failure to provide a copy of the survey instrument alongside the results of the survey is contrary to best practices in survey design, calling into question the trustworthiness and utility of the data it produced and subsequent conclusions about the target population.⁷

B. THE LIMITED SURVEY DATA AVAILABLE INDICATE THE SURVEY IS UNREPRESENTATIVE OF THE TARGET POPULATION AND UNRELIABLE

Beyond the lack of information, what the Parrott Study has disclosed indicates that the survey is unreliable and an inappropriate basis for the Proposed Rule. *See, e.g., Friends of Boundary Waters Wilderness v. Bosworth*, 437 F.3d 815, 826-27 (8th Cir. 2006) (“Sample size, potential for bias, interviewing techniques, reliability of extrapolating data, and poor recollection are all relevant factors the agency failed to properly consider in analyzing the survey results, making the resulting estimates arbitrary and capricious.”); *Hernandez v. Stewart*, No. 1:20-cv-03241, 2021 WL 6274440, at *7-9 (E.D. Wash. Mar. 1, 2021) (finding agency’s survey of employers arbitrary and capricious where it did not define key concepts and failed to validate findings with a survey of workers); *High Sierra Hikers Ass’n v. Weingardt*, 521 F. Supp. 2d 1065, 1075–76 (N.D. Cal. 2007) (finding agency’s reliance on survey results arbitrary and capricious where survey “allowed anonymous responses without any means to verify that the respondents were the intended recipients” and “the recipients knew [the survey’s] purpose”).

While TLC sent the survey to nearly 90,000 drivers, Dr. Parrott notes the Commission only received 6,750 responses, and then provides some unknown number between 3,000 - 4,500 were “substantially completed.”⁸ It is unclear why Dr. Parrott provided a range of completed surveys and could not identify the actual number of “substantially completed” surveys. Dr. Parrott has not indicated what constitutes “substantial” completion, but it appears the response rate was calculated only for a single question—which is inconsistent with best survey design practices. This leaves

⁷ See Backor Report ¶¶ 9, 11-12 (noting the TLC report does not include information on the methodology used or “explain how the drivers for this survey were selected or the response rate for this survey” and that TLC’s “failure to provide survey materials means it is impossible to fully evaluate the reliability and validity of the survey”).

⁸ Parrott, *Revised Expense Model* at 2.

ambiguous when survey responses were included in the ultimate analysis and when they were not, as well as which questions individuals actually answered.⁹ There appears to be a discrepancy of over 2,000 respondents between the total “responses” and “substantially completed surveys,” but the lack of survey data makes it difficult to assess these dropouts, which often provide insight into flaws in survey design.¹⁰

Applying an unclear standard, the TLC Survey appears to have had a low response rate of roughly 5%. While low-response rates can be accounted for in good survey design, they reflect an increased risk that the survey responses come from a vocal minority of respondents. Here, it appears that TLC has not addressed or adequately corrected for potential bias in the population of survey respondents. That appears particularly to be the case given that the share of high-volume drivers (i.e., those driving over 40 hours per week) completing the survey was twice the share of those drivers in the overall driver population based on TLC’s analysis of company records, and the share of low-volume drivers (i.e., those driving less than 20 hours a week) completing the survey was about half the share reflected in actual company records.¹¹ This discrepancy underscores the risk of skewed responses in this low-response rate survey.

As to the survey’s specific findings, there is a significant possibility that biases were introduced in the way the survey was conducted. For example, it remains unclear whether respondents were aware of the purpose of the study (which could have led to biased or overestimated responses).¹² Similarly, the framing of individual questions and answer choices could have been leading or suggestive.¹³ Because many of the survey questions address past events—such as the amount of time worked or wait times for EV charging—respondents may have experienced recall bias for which Dr. Parrott did not correct.¹⁴ Likewise, the use of multiple-choice questions can skew answers if the full choice set was not exhaustive or randomized, or can confuse respondents if the answers do not appropriately match questions.¹⁵ Without additional data about the survey, it remains challenging to meaningfully test the validity of the results, but there are

⁹ Backor Report ¶¶ 19-20.

¹⁰ *Id.* ¶ 20.

¹¹ *Id.* ¶ 14.

¹² *Id.* ¶¶ 23-24.

¹³ *Id.* ¶¶ 26-32.

¹⁴ *Id.* ¶ 27.

¹⁵ *Id.* ¶¶ 28-31.

ready errors on the face of the survey that create serious doubt.¹⁶ To take just one example, the total number of responses regarding the time it takes to charge an EV does not align with the number of respondents who answered that they own or rent an EV, suggesting some issue or confusion with the question and answer set on this topic.¹⁷ There is no indication that TLC or Dr. Parrott took any steps to verify or otherwise cross-check the data reported.

Additionally, there are questions about overall data quality. Dr. Parrott reports that “[g]enerally, outliers in the top 5 percent and bottom 5 percent of most questions calling for quantitative responses were excluded” without adequate elaboration of what he means by “generally” or “most questions,” among other deficiencies.¹⁸ And, since the survey was “anonymized and confidential,” TLC has not offered any evidence of means taken to verify that respondents were the intended recipients of the survey or that the responses were deduplicated.¹⁹ Not only is it improper to revise rules using data generated from a survey with a response rate below 5%, TLC has failed to provide any justification for using unreliable, unverified, and undisclosed survey data in place of available and more reliable data sources.

Rather than relying on unverified driver estimates of expenses provided in response to survey questions, TLC should have verified the survey responses it received, such as by requesting or making available a mechanism to substantiate matters with supporting documents, or based its expense estimates on readily available more reliable and independent sources. For instance, TLC could have relied on maintenance cost estimates available from AAA rather than individual estimates from those motivated to answer the survey for their own financial interest. Likewise, given TLC had existing data on make, model, and year information, it could have used financing costs from retailers rather than self-reported payments. Depreciation costs could have been calculated using Kelly Blue Book Data, vehicle auction data, or a similar public appraisal source. Vehicle rental costs could have been drawn from the advertised rental rates offered or contracts with renters through the City’s largest FHV rental companies (e.g., Buggy, Tower, American Lease, Fast Track Mobility, Sally, and/or Revel). And insurance quotes could be secured directly

¹⁶ *Id.* ¶¶ 33-35.

¹⁷ *Id.* ¶ 34. 484 respondents answered the question about wait times, while one would expect 686 responses to this question based on the 16% of the 4,288 respondents (or 686 respondents) cited as owning or renting an EV.

¹⁸ Parrott, *Revised Expense Model* at 10 n.6; Backor Report ¶¶ 36-37.

¹⁹ See Backor Report ¶18.

from insurance companies or their New York State filings. Likewise, TLC could have required or at least invited survey respondents or a subset of survey respondents to substantiate their answers with documentation, such as receipts, invoices, etc. The HR&A Study Uber has presented to the Commission provides one example of how accessible these sources are and how they can be relied upon to develop a more reliable and verifiable estimate of expenses.²⁰

C. THE PER-MILE RATE IS BASED ON DEMONSTRABLY FALSE DEPRECIATION ASSUMPTIONS

A key driver of higher per-mile expenses in the Parrott Study is its baseless treatment of depreciation, and specifically the reliance on an assumption that FHV's have zero value after five years. Dr. Parrott, and by extension TLC, did not purport to determine actual depreciation, let alone the more relevant metric of economic value—which in the context of a licensed for hire vehicle is its ability to generate earnings. Instead, Dr. Parrott stated “A vehicle driven intensively providing for-hire vehicle passenger services for five years on the streets of New York City” would “likely” be completed “depreciated” and “with minimal residual value.”²¹ Likewise, Dr. Parrott surmised: “After five years of driving 32,500 miles per year providing HV-FHV services will total 162,500 miles” after which the vehicle is “likely” to have “inconsequential resale value.”²² Thus, Dr. Parrott did not study and reach an actual conclusion about resale value, he made an assumption. More importantly, he did not ask the right question—can the vehicle owner derive economic value from a five-year-old licensed vehicle (even if it cannot be resold for an amount he deems “consequential”). As a result, he counts all driver vehicle payments as an expense that must be compensated within five years, and then assumes that the vehicle is worthless when it is paid off.

This is proven false by real-world data that is within TLC's purview. The City's own data source shows that 45,000 of the ~107,000 active FHV's (i.e., 42%) are model year 2019 or older.²³ Consistent with those data (and confirming that cars older than five years are routinely used for FHV rides), Uber's 2024 trip data show that 41% of completed trips were fulfilled by vehicles model year 2019 or older. Given this, TLC's assumption that vehicles older than five years have no value is arbitrary and unsubstantiated. It is also inconsistent with multiple determinations from

²⁰ See generally HR&A Study.

²¹ Parrott, *Revised Expense Model* at 3.

²² *Id.* at 33.

²³ *For Hire Vehicles (FHV) - Active*, NYC Open Data, <https://data.cityofnewyork.us/Transportation/For-Hire-Vehicles-FHV-Active/8wbx-tsck/data> (last visited Jan.30, 2025).

TLC. First, per TLC, a medallion taxicab vehicle—vehicles that drive an estimated twice as many miles per year²⁴—can operate for 7 years.²⁵ Second, in connection with the Green Rides Initiative, TLC concluded that “ICE vehicles ... reach the end of their lifecycle—based on TLC data, after about seven years of use.”²⁶ There, TLC further conclude[d] that “vehicles tend to exit or ‘retire’ from the for-hire market after seven years of driving.” TLC’s determination in this rulemaking that FHV vehicles are of zero value after five years is not only demonstrably false but at odds with a position TLC took less than two years ago. Perhaps most telling of all is TLC’s own comment to the study’s author in a December 4, 2024 draft of the Parrott Study—a draft that was not provided until mere hours before the comment period closed—which states: “*FHVs can be in service for more than five years, so there’s residual value in their use as FHVs beyond the five-year mark . . .*” Thus, TLC itself recognizes, and explicitly acknowledged, that its “no-value-after-five-years” approach is indefensible.

TLC’s depreciation analysis fails to reasonably account for the many factors impacting a driver’s choice to forego a vehicle upgrade once a vehicle is paid off. Indeed, given that the expense of operating a paid-off vehicle is significantly reduced, there is good reason to assume an operator/owner would continue using that vehicle as long as possible so as to realize higher earnings. TLC’s methodology instead compensates the implausible (and inefficient) decision to simply replace a car at the five-year mark. A more reasonable alternative, Uber submits, would be for TLC to revise the depreciation calculation within the driver expense analysis to match to actual data, and at a minimum assume the vehicle has value for at least 7 years. In doing so, TLC can acknowledge the ongoing value of FHVs operating today, which is apparent in the data available to TLC, and bring the analysis in-line with the retirement schedule for medallion taxicabs (although a ten-year period or longer might be even more appropriate given that medallion taxicabs are driven twice as many miles each year as FHVs).

²⁴ The most recent estimate in a TLC Factbook is from 2014 and estimates that a “typical taxi travels 70,000 miles per year.” New York City Taxi & Limousine Commission, Taxicab Factbook (2014), https://www.nyc.gov/assets/tlc/downloads/pdf/2014_tlc_factbook.pdf.

²⁵ See TLC Rule § 67-18. TLC is contemplating extending medallion taxicab lifecycles longer due to COVID. New York City Council, Int. No. 373 (2024).

²⁶ New York City Taxi & Limousine Commission, Notice of Promulgation, Green Ride Initiative (Oct. 18, 2023).

D. THE PARROTT STUDY MAKES UNWARRANTED ASSUMPTIONS ABOUT CHARGING WAIT TIMES AND TLC’S DECISION TO RELY ON THEM IS CONTRARY TO LAW

The Parrott Study also erroneously incorporates unreliable assumptions related to EV charging costs and time to significantly inflate the per-mile expense calculation. According to the Parrott Study, about half of FHV drivers estimate that they usually wait 30 minutes or longer to use an EV charger. These recollections are at odds with empirical evidence available to Uber and cast significant doubts on the reliability of this factor in the cost assessment.

Uber has a charging partnership with Revel, the largest publicly accessible fast charging network in New York City. As part of the partnership, Revel provides up to a 25% discount on charging to Uber drivers, making it more affordable to fast charge. Revel’s network of fast chargers ranges up to 320kW, and there are 64 fast chargers available today at charging hubs in Queens, Manhattan and Brooklyn.

Currently, Revel sees that all chargers are occupied only 1-2% of the time throughout the day, with the average wait time until a charger becomes available between 10 and 15 minutes during peak hours. This is considerably lower than driver estimates in the Parrott Study.²⁷ Furthermore, Revel is working to actively incentivize off-peak charging to better distribute demand throughout the day, ensuring greater accessibility for more customers. This approach not only helps reduce congestion during peak hours but also enhances overall charging efficiency, enabling faster charging times for drivers, and lower charging costs. Revel is also continuing to expand their network, opening up 132 chargers by the end of the year and further alleviating congestion during peak times.

The Parrott Study attempts to account for evolving EV infrastructure by developing high and low estimates of wait times. The problem is that the upper bound is anchored on the inherently unreliable and demonstrably inaccurate survey-respondent recollection of average wait times. Instead, TLC should have interviewed Revel for information, and taken reasonable efforts to verify

²⁷ As noted above, survey questions about wait times are particularly susceptible to validity issues. Backor Report ¶¶ 27, 34. Absent a more rigorous evaluation of survey design, it would be arbitrary and capricious for TLC to rely on this single survey question to introduce a significant new cost factor into the driver expense methodology.

or substantiate the charging times reported in the Survey, such as by having a person go to popular charging stations and measure real world wait times.

Moreover, TLC has not clearly laid out a rationale or basis for why the statute requires accounting for these wait times. Under the governing statute, TLC is required to consider “the duration and distance of the trip, the expenses of operation to the driver, any applicable vehicle utilization standard, rates of fare and the adequacy of for-hire vehicle driver income considered in relation to for-hire vehicle driver expenses.” § 19-549. A plain reading of this language does not contemplate that drivers should be compensated for time spent charging their vehicle. Moreover, the Parrott Study itself acknowledges most drivers “charge only one time per day.”²⁸ There are invariably many factors that may go into when and where a driver decides to charge, and drivers may be engaging in other activities during charging time that do not warrant compensation. TLC’s approach is to compensate for an expense not contemplated by the statute and to do so in a way that makes no distinction between more or less efficient choices when it comes to charging. It is highly unusual. Drivers are not compensated for the time it takes to add gasoline, or conduct repair or maintenance. Likewise neither independent contractors nor traditional employees are compensated for their comparable time, such as commuting. TLC’s decision to include time required to charge a vehicle battery is arbitrary and capricious.

III. TLC SHOULD NOT TIE MILEAGE RATES TO SUV OWNERSHIP

TLC justifies changing the mileage rates largely on drivers’ voluntary shifts towards SUVs. The law does not require this, and TLC’s approach creates adverse incentives. Under the law, TLC is charged with determining a “minimum payment” that considers, among other things, “the expenses of operation to the driver.” N.Y.C. Admin. Code § 19-549(b). Pursuant to this mandate, TLC should consider whether any given expense is required or reasonable. The HVFHS do not mandate which vehicles drivers can use (separate from requiring them to be licensed by TLC per TLC’s rules). Drivers who select SUVs may do so to take advantage of higher-paying trip offers, or because of their personal preference. Either way, there is no need for TLC to mandate that this extra expense be included in the minimum payment, and to the contrary, TLC’s proposed rule only incentivizes further movement towards SUVs. TLC should instead set expenses based on a more

²⁸ Parrott, *Revised Expense Model* at 20.

efficient and reasonable vehicle, like a sedan. TLC data demonstrate that Toyota Camrys and Honda Accords are common vehicles that meet drivers' and riders' needs.

IV. TLC'S CHANGED METHODOLOGY FOR CALCULATING THE UTILIZATION RATE AND PROPOSED RULES REGARDING ACCESS TO APPLICATIONS ARE ARBITRARY AND CAPRICIOUS

A. TLC INTRODUCES INSTABILITY BY DEPARTING FROM EXISTING UTILIZATION RATE CALCULATION METHODS

TLC's Proposed Rule rescinds the prior method of annually calculating utilization rates in favor of a discretionary approach under which TLC will "monitor and publish" utilization rates, altering rates in the future via additional rulemakings "as needed to reflect changing industry dynamics."²⁹ A shift away from annual recalculation would be advisable if it reduced the frequency of revisions and created more stability for drivers and the HVFHS industry, but TLC provides no explanation or standards for future recalculations and purports to subject regulated parties to TLC's arbitrary whim. This is only further illustrated by TLC's arbitrary and capricious decision to set the industrywide time-based utilization rate "[t]o reflect current industry dynamics" based on data from May 2023 through April 2024.³⁰ At no point prior to May 2023 did TLC indicate to HVFHS that it would use that time period to assess utilization data for purposes of setting future rates.

Uber strongly objects to the Commission's proposal to reevaluate the utilization rate at arbitrary points, creating maximal uncertainty for drivers, riders, and regulated entities. Uber further objects to the selection of May 2023 to April 2024 as the relevant time period for calculating utilization. As explained in the Commission's "Statement of Basis and Purpose," TLC retroactively selected May 2023 to April 2024 purportedly to remove months when HVFHS allegedly "manipulated when drivers appeared available."³¹ This is a misleading and false allegation that appears related to access restrictions necessitated by the current utilization rate calculation rules. Moreover, far from some unforeseen "manipulation," these access restrictions were anticipated and accounted for in TLC's prior utilization measurement program. When TLC staff presented the currently operative rule in October 2022, it noted platforms would likely seek to limit driver access to maintain utilization levels above the 53% floor. Additionally, Dr. Parrott

²⁹ Proposed Rule at 6.

³⁰ *Id.*

³¹ *Id.*

and Dr. Michael Reich’s 2018 study (which provided the model for TLC’s original earnings rule) alluded to driver access restrictions as a likely measure to maintain/increase utilization.³²

TLC’s sudden objection to the platform access restrictions implemented by HVFHS is no more than a veiled attempt to justify the Commission’s decision to retroactively cherry pick data and arrive at a policy driven outcome, without having given the HVFHS industry advance notice of the data period over which it was measuring utilization for purposes of setting future rates. The Commission now claims that instead of the access restrictions, HVFHS could adopt other, less effective, measures to ensure consistent utilization, but those claims are at odds with TLC and Dr. Parrott’s prior analyses. Notably, in 2018, Drs. Parrott and Reich submitted that, “company policies that increase utilization rates will also benefit the drivers. They will be able to provide more rides in any given hour, thereby earning more on an hourly basis, even though their pay for each trip might be lower.”³³ Furthermore, since January 2024, Uber has maintained a waitlist of drivers seeking to operate on its platform and strictly limited new driver activations (what TLC now posits is its preferred method for managing utilization). These are restrictions that have imposed significant consequences on drivers hoping to earn a livelihood from the HVFHS industry or those returning to the industry after having taken time away. Given these circumstances, TLC’s proposal to introduce significant uncertainty in utilization rate calculations is arbitrary and capricious.

TLC should drop its proposed rule, announce a future time period over which it will measure and calculate utilization rates so the HVFHS’ have fair due process, and only then set rates when that time period is concluded and the data has been analyzed.

B. THE PROPOSED RULES GOVERNING DRIVER ACCESS TO HVFHS APPLICATIONS ARE UNLAWFUL

The notice requirement of Proposed Rule § 59D-22(c), which purports to require that Uber grant third parties unfettered access to its proprietary platform and through its copyrighted smartphone application, subject only to meaningless exceptions and a 72-hour notice requirement, interferes with Uber’s existing contracts and its rights to determine who it associates with and

³² James A. Parrott & Michael Reich, *An Earnings Standard for New York City’s App-based Drivers: Economic Analysis and Policy Assessment* at 56-57 (July 2018).

³³ *Id.* at 35.

when. It also risks financial harm to Uber and drivers, as well as a lack of service to the public. For example, requiring 72-hour notice presents problems for driver availability in surge periods. HVFHS may issue the requisite 72-hour notice of restriction and later find that drivers who had previously been notified of a restriction are unavailable during a period of high rider demand. This is arbitrary and capricious because it operates to the detriment of drivers, passengers, and HVFHS alike. It also is unfair to Uber given TLC purports to reserve for itself the right to unilaterally pick a time period over which to measure utilization, and then set new rates based on utilization over that time period.

Additionally, the proposed 16-hour availability requirement of Proposed Rule § 59D-22(c) is arbitrary and contrary to Uber's rights. It would allow drivers to log on to the platform, and go through a long period of idle time with no requirement to accept trips, thus further driving down Uber's utilization. TLC itself acknowledges that drivers may take a break for multiple hours over a sixteen hour period. In fact, TLC's Proposed Rule invites fraudulent behavior of drivers remaining logged into the apps while having no intent to perform trips, for the purposes of manipulating HVFHS' utilization rate. Over the long run, this risks even further pay hikes, given TLC's self-granted claim to reassess utilization any time it wants, and higher costs for riders. Further, the 16-hour requirement is contrary to TLC driver fatigue rules, which prohibit FHV drivers from transporting passengers for more than 10 hours in any 24-hour period.³⁴

V. TLC RELIES ON NUMEROUS ARBITRARY AND/OR UNDISCLOSED ASSUMPTIONS

A significant number of unjustified assumptions appear throughout the Parrott Report and permeate the Proposed Rule. The assumptions appear to be mostly plucked from thin air, with no substantiation, or at best undisclosed substantiation. For example:

(1) The Proposed Rule incorporates the Parrott Study's assumption that 30% of drivers rent their licensed vehicle. This assumption is admittedly not accurate, per the Parrott Study's admission that TLC's own data show that only 27% of vehicles are owned by a business (and thus likely rented). The Parrott Study hypothesizes that the mismatch is perhaps due to informal renting

³⁴ 35 RCNY § 59B-18.

arrangement but offers no evidentiary basis for this assumption leaving only the study's admission that the Survey results as to rental percentages are not accurate.

(2) The Parrott Study does not adequately explain how it derived its weights, or the assumptions from which it derives its weights for purposes of building the composite per-mile rate. First, the Parrott Study gives confusing and inconsistent explanations for how it derived its weights. Compare:

“Cost structures reflecting acquisition (or rental) costs, insurance, maintenance, and fuel or battery charging costs were compiled for each of four vehicle categories and weighted to reflect each category's **projected share of high-volume trips for 2025.**” (Page 3)

with

“The composite HV-FHV expense model developed in this report combines expenses for the four types of vehicles and ownership status shown in Figure 7. The weighting method used in compiling the composite expense picture was based on the 70-30 owner-renter split and **the ICE vehicle vs. EV shares of trips performed in 2023.**” (Page 13)

“Exhibit 14 brings together the expenses for the four categories of drivers into a single, composite per mile expense factor. The composite factor uses the weights indicated in the middle column (e.g., 0.583 for ICE owned vehicles) that are based on a 12.5 percent EV share and a 70 percent-30 percent breakdown for owners compared to renters.” (Page 32)

It is not clear if Dr. Parrott used trip counts from 2023, or projected trip totals for 2025, and if so, what those projections were or how they were made (and why they chose to use 2023 data when 2024 data was available).

Furthermore, Exhibit 8 of the Parrott Study reflects that the split of owned versus rented, according to the June - July 2024 TLC Driver Survey, was 64%-36%. As shown in Exhibit 8, those shares when adjusted for “weights based on # of trips” are 67%-33%. There is no meaningful explanation for how the “weights” were calculated to adjust from a 64%-36% split to a 67%-33% split, and there is no explanation at all for how the split was then further adjusted in Exhibit 14 of the Parrott Study to be 70%-30% (beyond the say-so that 30% is the right number to use regardless

of what an actual computation based on data sources would yield). Yet, the split ultimately used for TLC's expense model was 70%-30%.

What's more, TLC's purported application of those weights in the December 27, 2024 study seems to have been flatly erroneous. In the calculations in Exhibit 14 of that report, it appears TLC used an owned versus rented split of 67%-33% ($0.583 + 0.083$ v. $0.292 + 0.042$), even though the exhibit label says "70% owned, 30% leased." This resulted in an inflated estimate of the per-mile expense rate. Only one day before the hearing, February 4, 2025—mere hours before this comment was due—was this significant discrepancy purportedly corrected by TLC, with new value in the "Weights" column in Exhibit 14 reflecting a 70%-30% split amongst owned versus rented vehicles. As a result, TLC revealed that its previously-calculated "Weighted Expense Factor" values were erroneous, and the increase over the current expense factor had been overstated by a full percentage point (11.4% December 27, 2024 increase versus 10.4% February 4, 2025 increase).

Nor is there any way to assess the basis for the assumption, embedded within Exhibit 14, that the split of ICE vehicles versus EVs is 87.5%-12.5%. Exhibit 8 reflects that "Driver Survey Shares" reveal a split of 84%-16% ($53\% + 31\%$ versus $11\% + 5\%$), and then "weights based on # of trips" are applied to yield an 87.5%-12.5% split ($58.3\% + 29.2\%$ versus $8.3\% + 4.2\%$). But TLC never says where those "weights" came from or how they were applied to the driver survey results. There is no indication that TLC made "weights" computations using *actual data that was available to it* regarding the number of trips with each type of vehicle (and, if it did so, over what time period). Instead, the only source Exhibit 8 cites is the survey from June-July 2024. Without more information, it appears the study's authors have predetermined that their calculations should yield a result of 12.5% weight for EVs, stating "we give EVs a weight of 12.5 percent." Was the 12.5% rate *calculated* based on data, or was it "*given*" (as the study says) by the authors? The public cannot tell, because the methodology for computing the weighted numbers is not disclosed: there is not a single calculation anywhere in the study—even the 11th-hour corrected version of the study—showing how it is that the "weights based on # of trips" in Exhibit 8 yielded a 12.5% EV share computation.

Without additional time to review the updated report and additional information, it remains difficult—and in many instances, impossible—to assess what additional errors remain in the Parrott Study.

(3) The Parrott Study assumes without basis, and contrary to logic, that 20% of drivers who rent vehicles, also pay \$3,500 for vehicle maintenance each year. The only basis for this assumption is apparently a special survey of renters, which reportedly resulted in “30 percent” reporting being responsible for maintenance, and over half of renters reporting \$3500 in annual maintenance. The basis of this “special” renters survey is not disclosed; these figures could represent only three responses. There is no indication Parrott or TLC attempted to verify these reports, for example, by reviewing rental agreements, receipts, invoices, or conducting follow up interviews. Finally, this assumption defies common sense. A vehicle owner renting out his or her vehicle would have little ability to compel a short term renter to pay \$3500 per year for maintenance, when the renter could simply rent the vehicle without paying anything for maintenance, and then rent a different vehicle with maintenance included. To the extent a vehicle owner had a method to compel a renter to pay for maintenance, then the price of the rental would be lower than the prices assumed by Dr. Parrott and TLC for a rental with maintenance included.

VI. CONCLUSION

Uber continues to support the Commission’s goal of protecting driver payments. Still, it is imperative that the Commission take the time to consider the serious concerns detailed above before taking further action. The Proposed Rule as it stands is arbitrary and capricious and should be amended.

Exhibit A

BEFORE THE NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

Report of Kristen Backor, Ph.D.

February 4, 2025

I. INTRODUCTION

1. I am Director of the Market Research Center of Excellence at Charles River Associates (“CRA”), a global economics and management consulting firm. My education includes an M.A. and a Ph.D. in sociology, both from Stanford University, and a B.A. from Texas A&M University. My coursework included training in survey design, research methods, sampling and demography, and statistics.
2. For over fifteen years, I have conducted quantitative and qualitative research. I currently lead CRA’s Market Research Center of Excellence, which manages companywide development and execution of market research, including developing and executing key internal processes, trainings, and best practices. I have designed, conducted, and overseen the development of hundreds of surveys, and much of this work has focused on quantitative survey assessments. Prior to my work in consulting, I led the Stanford Institute for the Quantitative Study of Society, a multi-disciplinary independent research center at Stanford University that focused on developing and conducting empirical social science research. Complete details of my professional experience and publications are described in my curriculum vitae, a copy of which is attached as Appendix A.
3. The materials that I have relied upon are listed in Appendix B. I reserve the right to supplement or modify this report, if warranted, as additional information is made available to me. In addition, I reserve the right to prepare additional supporting materials such as summaries, graphical exhibits, or charts.
4. My report is organized as follows. Section II provides a summary of best practices in survey design and reporting and whether they have been followed in the December 2024 report, “Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard” submitted by James A. Parrott (“Parrott Report”) to the New York City Taxi and Limousine Commission (“TLC”), as well as the survey conducted by the TLC (“TLC Survey”) and relied upon by the Parrott Report. Section III describes

potential survey issues and biases and how they may have impacted the results of the TLC Survey analyzed in the Parrott Report.

5. Based on my review, the materials provided within the Parrott Report are insufficient to determine whether the TLC Survey followed best practices; the Parrott Report also fails to follow best practices by not releasing a full survey report. In addition, the data presented within the Parrott Report raises questions about potential issues and biases, including within the survey invitation, questionnaire design, and data cleaning processes. As a result, neither the TLC Survey nor the Parrott Report's analyses of the TLC Survey are reliable for drawing conclusions about the population surveyed.

II. THE PARROTT REPORT AND TLC SURVEY VIOLATE BEST PRACTICES IN SURVEY DESIGN AND REPORTING

6. Effective survey design is crucial for ensuring that the results of a survey are valid and reliable. Well-designed surveys should accurately reflect the opinions, behaviors, and attitudes of the respondents, providing trustworthy data that can inform decisions and policies. Poorly designed surveys, on the other hand, can lead to biased or misleading results, which can result in incorrect conclusions and potentially costly mistakes.
7. To achieve reliable results, surveys must be representative of the target population and include a carefully designed survey questionnaire and stimuli to avoid biased responses.¹ There is a substantial body of academic literature on best practices in survey design (including potential biases) and reporting.
8. In order to properly assess a survey's methodology and the reliability of its results and to evaluate whether best practices have been followed, the survey researcher and/or sponsor must provide a detailed "survey report" that fully characterizes the

¹ See, e.g. Diamond, Shari Seidman, "Reference Guide on Survey Research," *Reference Manual on Scientific Evidence: Third Edition*, Federal Judicial Center, 2011 ("Diamond 2011"), pp. 376-380, 387-388; "Manual for Complex Litigation, Fourth Edition," Federal Judicial Center, 2004 ("Manual for Complex Litigation"); pp. 102-103.

design and implementation of the survey. For example, the Reference Manual of Scientific Evidence states that: “[t]he completeness of the survey report is one indicator of the trustworthiness of the survey” and that a “survey report generally should provide in detail:”²

- (a) The survey’s purpose;
 - (b) The target population “and a description of the sampling frame;”
 - (c) A “description of the sample design, including the method of selecting respondents, the method of interview, the number of callbacks, respondent eligibility or screening criteria and method, and other pertinent information;”
 - (d) A breakdown of the number of potential respondents contacted, potential respondents not reached, respondents who were not eligible for the survey, respondents who declined to take the survey, incomplete interviews or terminations, and completed interviews;
 - (e) The “exact wording of the questions used, including a copy of each version of the actual questionnaire, interviewer instructions, and visual exhibits.”
9. The TLC survey fails to disclose information on the majority of these details, calling into question the trustworthiness of the survey and making it impossible to determine its utility for drawing conclusions about the target population. For example, as the Manual for Complex Litigation states, in the context of a survey used in litigation matters, “in assessing the validity of a survey, the judge should take into account the following factors:”³
- (a) The “questions asked were clear and not leading”;

² Diamond 2011, pp. 415-416.

³ Manual for Complex Litigation, p. 103.

- (b) The “survey was conducted by qualified persons following proper interview procedures”; and
 - (c) The “process was conducted so as to ensure objectivity (e.g., determine if the survey was conducted in anticipation of litigation and by persons connected with the parties or counsel or by persons aware of its purpose in the litigation).”
10. In the absence of this information, we must rely on the information included in the Parrott Report to draw conclusions about whether survey best practices appear to have been followed.

A. The Parrott Report Did Not Produce a Copy of the TLC Survey Materials for Proper Evaluation

11. As set out above, it is standard practice for survey materials to be provided alongside the results of the survey so that the potential impact of factors like question wording and question order can be evaluated properly. These materials may include, but are not limited to, the complete written survey (including any instructions for fielding the survey [e.g., script or programming language for how questions are shared]), the invitation shared with potential respondents to encourage them to complete the survey, the visuals of how the survey appeared to respondents (if programmed) and the full survey dataset collected when respondents took the survey. The description provided in the Parrott Report is insufficient for determining whether best practices have been followed and for evaluating the reliability and validity of the TLC Survey. It is my understanding that some subset of survey materials were disclosed for the first time on the afternoon of February 4, 2025, but I did not have them as I prepared this report and would not meaningfully be able to review them ahead of the February 4, 2025 deadline for submitting this report.
12. In addition to the TLC Survey, the Parrott Report also appears to rely on a “special survey of drivers renting their vehicles” apparently related to the

calculation of maintenance costs for vehicle renters.⁴ This appears to have been a follow-up survey sent to “a limited number of renting drivers”.⁵ Beyond this, I have not been able to identify any information on the methodology used, and the Parrott Report does not appear to explain how the drivers for this survey were selected or the response rate for this survey. Given the low response rate to the main survey, as discussed below, even in the best case where all drivers identified as renting in the main survey were contacted, the respondents would likely be a small subset of drivers.

B. The TLC Survey Sample is Not Representative of the Target Population

13. Survey best practices state that a survey sample should “accurately represent” the target population of interest and that a “survey that provides information about a whole irrelevant population is itself irrelevant.”⁶ The TLC Survey respondents are not representative of the population they are supposed to represent.
14. First, the respondents report that they are much more likely to be highly engaged in for-hire driving. As set out in the Parrott Report, the Center for New York City Affairs analysis of actual company records indicates that only 28% of for-hire vehicle (“FHV”) drivers spend more than 40 hours per week for-hire driving.⁷ However, more than twice as many survey respondents, 65%, indicate they spend more than 40 hours per week for-hire driving.⁸ Conversely, according to actual company records, 24% of FHV drivers spend less than 20 hours a week engaged in for-hire driving, compared to only 13% of the respondents to the TLC Survey.
15. This difference in the proportion of drivers spending more than 40 hours per week for-hire driving suggests that the surveyed FHV drivers are non-representative of the population at large. However, because this discrepancy relates to reported hours, an alternative explanation is that the answers to this question provided by

⁴ Parrott Report, p. 18.

⁵ Parrott Report, p. 17.

⁶ Diamond 2011, pp. 377, 380. *See also* Manual for Complex Litigation, p. 103.

⁷ Parrott Report, Exhibit 10.

⁸ Parrott Report, Exhibit 6.

FHV drivers are unreliable due to other factors, such as imperfect recall and/or issues resulting from the ranges provided in multiple choice questions about time spent driving. In other words, non-representative responses to such questions suggest two possibilities (not mutually exclusive): either a biased subset of respondents answered the survey, and/or those who answered the survey over-reported hours, resulting in non-reliable data. Without the survey document, dataset, and other contextual information, it is impossible to determine the actual cause and potential impact of such issues. Accordingly, neither the TLC Survey nor the Parrott Report's analyses of the TLC Survey are reliable for drawing conclusions about the population surveyed.

16. Second, the share of FHV drivers of electric vehicles ("EV"s) in the TLC Survey is double the share observed in the TLC vehicle and trip data. EV drivers account for 16% of the respondents of the TLC Survey and 8% in the TLC's own vehicle data.⁹
17. Given that the TLC Survey is, at best, highly non-representative of the population it intends to study on dimensions that can be observed, it is also likely to be non-representative on other dimensions. Responses from a self-selected non-representative sample should not be extrapolated to make determinations and policy decisions about a population.

C. The Parrott Report Did Not Provide Appropriate Context to Understand Response Rates and Sampling Frame

18. The Parrott Report indicates that the survey was "anonymized", but does not clarify what this means in the context of the responses. How were individuals invited? How were they invited anonymously? What were they told about the sponsor and purpose of the survey? The answers to these questions have important implications for understanding response rates and potential bias, as discussed below.

⁹ Parrott Report, Exhibits 3, 7.

19. The description of the number of completes is similarly lacking. The survey indicates that “it generated 6,757 responses”, but only 3,000-4,500 “substantially” completed surveys. The actual response rate is calculated for only a single question, which is an atypical approach to determining survey response rates. Without a definition of a “substantially completed” survey, it is unclear which surveys were included, and to which questions these individuals responded. It is also unclear why a range is provided if the surveys are considered as completes.¹⁰
20. In addition, the difference between “responses” and “substantially completed surveys” suggests that over 2,000 respondents started the survey but dropped out before achieving the threshold defined as “substantial”. Survey dropouts provide key information to inform survey analysis; they may suggest errors in survey design (e.g., issues with programming that lead people to quit or get stuck in the survey), poorly designed questions (e.g., frustrating answer options that lead people to discontinue), or other issues (e.g., long surveys that people give up on, resulting in a biased population). Without information on when respondents may have discontinued and why, the reason for these dropouts, and their potential impact, cannot be determined.

D. The TLC Survey Response Rate Is Relatively Low

21. As noted above, depending on the question, the TLC Survey appears to have had a response rate of around 5% or less.¹¹ Given this low response rate, it is not surprising that the respondents were not representative of New York City’s population of FHV drivers.¹² A low response rate is not necessarily in and of itself a problem, but does indicate that there is an increased risk that the survey responses come mostly from a “vocal minority” (particularly when clear patterns

¹⁰ Parrott Report, p. 10.

¹¹ The Parrott Report indicates between 3,000 and 4,500 substantially complete surveys from a population of 89,000 FHV drivers (Parrott Report, p. 10).

¹² New York City has approximately 179,000 active for-hire vehicle drivers, according to data from NYC Open Data retrieved on February 4, 2025 at For Hire Vehicles (FHV) - Active Drivers | NYC Open Data. The survey was sent to 89,000 drivers who provided at least 100 trips between November 2023 and May 2024, which is a significant restriction and likely excluded a significant portion of all for-hire vehicle drivers that were active at the time.

of bias are apparent, such as over-representing drivers who work more than 40 hours per week). For example, drivers that work more than 40 hours per week may be more likely to be interested in for-hire driving and, therefore, in responding to surveys related to it, leading such drivers to be over-represented in the survey sample. The high dropout rate further suggests that the small percentage who did complete the survey were particularly invested in providing their input and thus the response rate is reflective of a biased population.

III. THE LIMITED DATA PROVIDED SUGGEST THAT THE TLC SURVEY WAS SUBJECT TO MULTIPLE POTENTIAL SOURCES OF SURVEY BIASES

22. As discussed above, the Parrott Report failed to follow best, if not standard, practices by releasing a survey report that does not fully characterize the TLC Survey. Without appropriate context, and with clear sampling limitations, it is not possible to determine the quality of the questions and resulting data collected from the TLC Survey or to determine the appropriateness of the purported analyses of the survey data contained in the Parrott Report. Nonetheless, based on details provided in the Parrott Report, I have identified several potential issues that may be present; a detailed survey report would have provided me with the ability to adequately review to ensure best practices were followed. In the absence of a detailed survey report, neither the TLC Survey nor the Parrott Report's analyses of the TLC Survey are reliable for drawing conclusions about the population surveyed.

A. Respondents May Have Had Knowledge of the Survey Sponsor and/or Topic

23. Best survey practice states that respondents (and interviewers) should be "blind to the purpose and sponsorship of [a] survey."¹³ Awareness by respondents of the sponsor of the survey can induce answers respondents would not have otherwise provided. Such a risk is especially acute if respondents have a stake in the

¹³ Diamond 2011, p. 374. *See also*, Diamond 2011, pp. 410-411.

outcome of the survey. This is a particular risk in the present context where, depending on how the survey was implemented and communicated, respondents may have been able to infer that their responses would be used to inform the For-Hire Vehicle Minimum Pay Standard.

24. As noted, the invitation to and instructions for this survey were not provided, so it is not possible to determine if the survey's purpose and sponsor were known by the respondents. The Parrott Report indicates that "it is not surprising that a disproportionate share of responses came from drivers logging a high number of weekly hours" but fails to provide an explanation for this other than to state "[t]hese high-hour drivers are very committed to this work and heavily rely on it as their main source of income."¹⁴ The acknowledged overrepresentation of individuals who drive 40 or more hours a week potentially suggests that respondents were aware the survey was related to For-Hire Vehicle driving.

B. The Questionnaire May Have Been Subject to Potential Survey Biases

25. Best practice requires that all "questions on a survey...be clear and precise" and avoid conveying "unexpected meanings and ambiguities to potential respondents."¹⁵ In order to determine whether best practice has been followed, it is important to review the actual instructions and text of the questions as seen by respondents. In the absence of the actual survey text, observations within the Parrott Report can provide some sense of potential issues and biases that may have been present.
26. Question framing can give respondents key information about the survey author's expectations and assumptions. Leading questions are questions written in such a way that they push respondents toward a specific mindset or response. For example, in a study where respondents were shown a video of a car accident and then asked questions about it, respondents who were asked "How fast were the cars going when they smashed into each other?" estimated higher speeds than

¹⁴ Parrott Report, pp. 14-15.

¹⁵ Diamond 2011, p. 387.

- those asked "How fast were the cars going when they hit each other?"¹⁶ Given the scope for potential bias resulting from leading questions, it is essential that the questions in the TLC Survey were formulated in a balanced and non-suggestive way if potentially significant bias in responses is to be avoided. Without the survey document, it is impossible to determine if the questions were worded appropriately.
27. Survey respondents can also experience recall bias, in which issues occur when the questions require respondents to recall past events and/or describe their own subjective experiences. Many of the questions in the Parrott Report appear to relate to past events, including questions about the length of time working as a for-hire driver, the usual wait time to use a public or commercial charger or the time it takes for the vehicle to charge. Recall of wait times in particular has been shown to be poor in certain situations (which may have impacted estimates of how long respondents waited to use a charger).¹⁷ It is possible that respondents experienced recall bias, but without being able to review the survey, including instructions to the respondents, and full dataset for attention checks and accuracy of recall across questions, this cannot be determined.
28. The way answers are presented can also lead to bias. It is apparent from the Parrott Report that multiple-choice questions were used for at least a subset of questions in the TLC survey.¹⁸ As described in Diamond 2011, "[i]f the respondent is asked to choose one response from among several choices, the response chosen will be meaningful only if the list of choices is exhaustive...."¹⁹ Even if respondents are provided with an optional open-ended response (which is not possible to determine from the Parrott Report for most questions), that does

¹⁶ Loftus, Elizabeth F., and John C. Palmer. "Reconstruction of automobile destruction: An example of the interaction between language and memory", *Journal of verbal learning and verbal behavior* 13:5, 1974, pp. 585-589.

¹⁷ See, for example, Rutland, Emma et al., "Measuring access: how accurate are patient-reported waiting times?", *Sexually Transmitted Infections*, 84:1, 2008, pp. 70-71; Thomson, David A. et al., "How Accurate Are Waiting Time Perceptions of Patients in the Emergency Department?," *Annals of Emergency Medicine*, 28:6, 1996, pp. 653-654.

¹⁸ See, for example, Parrott Report, Exhibit 6 and Appendix Exhibit 2.

¹⁹ Diamond 2011, pp. 393-394.

- not necessarily resolve the issue because “most respondents nevertheless will select an answer from among the listed ones.”²⁰
29. In addition, depending on the question, it is best practice to randomize the order in which responses to multiple choice questions are presented to avoid bias from “order effects” (e.g., some respondents may default to the first option).²¹ Typically, information on the available responses, the inclusion of open-ends, and the use of randomization would be included within the survey document, but without this information, it is unclear whether answer options were presented in line with best practices.
30. The answer options in a multiple-choice set also provide the respondent with information about what is considered normal or typical and set bounds around how the information can be analyzed. For example, the Parrott Report provides data for a question on “importance of for-hire income”, with the provided answer options including “It is less than 10% of my income”, “It is more than 10% but less than half of my income”, “It is more than half but not all of my income”, and “It is my sole source of income”.²² It is unclear how these cut points of 10% and 50% were determined or why the categories are grouped in this way.
31. This question also provides an example of a mismatch between question and answer options; where possible, answer options should reflect the question being asked to ensure respondents have a clear understanding of how to respond. In this case, the question is about importance, but the responses are about percentage of income, which may not reflect how respondents think about importance. For example, the income could be very important, even if it represents a relatively small percentage of the respondent’s income.

²⁰ Diamond 2011, p. 394.

²¹ Diamond 2011, pp. 396, 420. There are cases where it does make sense to arrange responses in a specific order, typically when responses follow an obvious sequence or logic.

²² Parrott Report, Exhibit 6.

32. The multitude of ways a survey can bias respondents through both the framing of questions and the set of possible answers further demonstrates the importance of disclosing a copy of the survey questionnaire as it was seen by respondents, as well as the instructions provided regarding the implementation of the survey. None of this information was produced for the TLC Survey in the Parrott Report, so there is no way of evaluating the quality of the TLC Survey and the impact of potential biases from the information provided in the Parrott Report. Accordingly, one cannot consider the results in Parrott Report purportedly based on the TLC Survey as reliable for drawing conclusions about the population surveyed.

C. The Parrott Report’s Description of the TLC Survey Raises Questions About Sampling and Interpretation

33. In order to properly interpret the numbers and analyses provided within the Parrott Report, it is important to know the sampling frame for a given analysis, including how many respondents answered a specific question and what types of responses were received. Since the Parrott Report is not transparent about completions and sample sizes, it is unclear what percentage of respondents should have answered a given question and what data are missing.
34. For example, in Exhibit 11, 484 respondents provide input on the time it takes to charge their electric vehicle.²³ However, if (as indicated) 16% of the 4,288 respondents cited for the response rate of 4.8 percent who own or rent an electric vehicle, one would expect 686 responses to this question. Without an understanding of survey skip patterns (which indicate if only a subset of respondents should be answering), overall response rates, or analysis of fully completed surveys, it is difficult to understand why responses are missing for the remaining 29% of those charging an electric vehicle.
35. In addition, the Parrott Report states , “[t]he responses of drivers who selected ‘Other’ were excluded from the shares cited”, but it is unclear how many drivers

²³ Parrott Report, Exhibit 11.

this represented and what responses they gave in “Other”.²⁴ The numbers being referenced appear to have been rescaled as they sum to 100% even without the “Other” responses, so it is unclear how many people were removed. This is not in line with survey best practices, which require additional information about such responses and why they were removed. This is particularly important for “Other” responses, which can introduce questions about survey design (if, for example, responses entered in “Other” suggest errors in the available answer choices) or respondent quality (if, for example, the open-ended “Other” response does not make sense).

D. The Parrott Report Raises Questions About the TLC Survey Cleaning and Data Quality

36. Data cleaning is an important part of ensuring data quality overall. The Parrott Report states that in analyzing the TLC Survey data, “Generally, outliers in the top 5 percent and bottom 5 percent of most questions calling for quantitative responses were excluded, as well as responses outside the range of what would be considered reasonable (e.g., monthly vehicle payments less than \$120 or greater than \$2,500).”²⁵ However, without a complete survey report, this description raises more questions than it answers:

- (a) What is meant by “generally”? How often were these processes followed?
- (b) What does “most questions” mean? Why would some questions not have outliers removed?
- (c) How did the author determine what was “considered reasonable”? Was the 5 percent threshold insufficient for removing respondents flagged as “outliers”? Was standard deviation considered as a potential way to remove outliers, or not?

²⁴ Parrott Report, p. 20 and fn 16.

²⁵ Parrott Report, fn 6.

- (d) How many respondents were excluded overall as a result of this cleaning? The statement implies at least 10 percent, if not much higher, of respondents were excluded, but this would correspond to a significant number of flagged “outliers”, potentially raising concerns about overall data quality
37. No other information is provided regarding whether any other respondents who completed the survey were excluded from the sample for analysis. For example, survey cleaning usually involves consideration of time spent taking the survey. It is unclear whether time spent taking the survey was recorded and whether respondents were excluded if they were observed to have taken the survey “too fast” (suggesting a lack of attention). Similarly, another method survey researchers use to ensure respondents are dedicating appropriate attention to the survey is through a question that requires a specific answer in order to qualify for the survey (e.g., “Please select 4 for this question”). However, without the full details of the survey, there is no way to ascertain what measures were taken, if any.

E. Conclusions Included in the Report Lack Sources

38. Finally, the Parrott Report fails to indicate sources of information for some of its conclusions, raising questions about when and how the survey has been used for analysis. For example, the Parrott Report estimates that drivers spend an average of \$36 every other week on cleaning but does not provide a source for this information.²⁶ It is unclear if this information has been drawn from the survey, secondary research, internal assumptions, or another source.



Kristen Backor, Ph.D.

²⁶ Parrott Report, p. 30.

Appendix A

Kristen Backor

Vice President and Director

PhD, Sociology
Stanford University

MA, Stanford University

BA, Texas A & M University

Dr. Kristen Backor has been designing, conducting, and executing market research for over 15 years. Dr. Backor's business consulting engagements focus on customer insights work, including qualitative and quantitative market research with a variety of stakeholders (from consumers to physicians). In her capacity as Vice President and Director of the Market Research Center of Excellence at Charles River Associates, she provides guidance and oversight for projects concerning customer insights and qualitative and quantitative research assessments across practices within CRA.

Experience

Business

2017–Present *Vice President and Director of Market Research Center of Excellence, Charles River Associates, Austin, TX*

- Dr. Backor designs and leads execution of market research projects and manages companywide development and execution of market research, including developing key internal processes, trainings, and best practices.
- As an expert witness, Dr. Backor designs, executes, and testifies as to the interpretations of both qualitative and quantitative surveys for a variety of matters, including under the Fair Labor Standards Act.

2010–2016 *Management Consultant, C1 Consulting, San Francisco, CA*

- Dr. Backor designed and executed quantitative and qualitative market research, including product profile testing, concept and message testing, positioning, strategy, segmentation, and opportunity assessment.

2006–2008 *Co-founder, CKA Survey Consulting, Stanford, CA*

- Dr. Backor designed, conducted, and analyzed market research, including surveys and focus groups, within university departments.

Academic

2005–2009 *Head Research Assistant, Stanford Institute for the Quantitative Study of Society, Stanford University*

- Dr. Backor conducted quantitative and qualitative research exploring technological, political, and educational issues and managed a team of ten researchers conducting quantitative studies across scientific disciplines.

2003–2006 *Research Assistant, Sociology Department, Stanford University*

- Dr. Backor conducted experimental research with undergraduate students and trained research assistants to support execution and analysis.
- 2004-2006 *Teaching Assistant*, Sociology Department, Stanford University
- Dr. Backor supported education and training of undergraduates in a variety of topics, including research methods.
- 2003 *Research Assistant*, Sociology Department, Texas A & M University
- Dr. Backor conducted experimental research and quantitative and qualitative assessments on a variety of topics.

Publications and Selected Writing

- DiNardo, Katherine W, Alice Houk, Christine Shim, **Kristen Backor**, Erika Sloan, Jolien Sweere, Isabel N Schuermeyer, Mary K Hughes, Thomas W. Leblanc. 2022. "The mental health burden and quality of life impact of myelodysplastic syndromes in patients and their caregivers." *Blood* (2022) 140 (Supplement 1): 8122–8123.
- **Backor, Kristen**, Brandon Duke, and Yamini Jena. 2022. "Addressing Low Response Rates in Expert Surveys." *Law360*, May 23.
- **Backor, Kristen**, Eddie Li, Jing Li, Elizabeth Rountree, and Billy Wang. 2021. "Assessing physician practices and expectations in the post-COVID era." *Pharma Forum*, January 22.
- Wang, Billy and **Kristen Backor**. 2020. "Transition into the post-COVID era: Evolving physician practices and expectations." *Medical Economics*, October 1.
- **Backor, Kristen** and Abby Turner. 2020. "Five issues to consider when using survey data to support employment litigation: How 'mental math' can cause survey fatigue and lead to errors." *Law360*, September 2.
- Rankin, Peter, and **Kristen Backor**. 2019. "Use of Expert Witnesses in International Arbitration: Experiences and Preferences." *Corporate Disputes Magazine*, Apr-Jun 2019 Issue.
- **Kristen Backor**. Dissertation: "Anger in the Workplace: Effects of Gender and Frequency in Context on Social and Job-Related Outcomes." 2009.
- Ridgeway, Cecilia L., **Kristen Backor**, Yan E. Li, Justine E. Tinkler, and Kristan G. Erickson. 2009. "How Easily Does a Social Difference Become a Status Distinction: Gender Matters." *American Sociological Review*, 74(1-Feb):44-62.
- Norman H. Nie and **Kristen Backor**. 2007. "The Development of the Internet in Everyday Life" in *Fortschritte der politischen Kommunikationsforschung: Festschrift für Lutz Erbring*, edited by Krause, Fretwurst, and Vogelgesang. Wiesbaden: VS Verlag.

Presentations

- Dinardo, Katherine (presenter), Alice Houk, Christine Shim, **Kristen Backor**, Erika Sloan, Jolien Sweere, Isabel Schuermeyer, Mary Hughes, Thomas Leblanc. 2022. "The Mental Health Burden and Quality of Life Impact of Myelodysplastic Syndromes in Patients and Caregivers. Poster at the American Society of Hematology Conference, in New Orleans, Louisiana, December 10-13, 2022.
- Rountree, Elizabeth, **Kristen Backor (presenter)**, and Donald D. Hoang. 2019. "Assessing New Product Share: A Study of the Impact of Anchoring and Piping On Physicians'

Expected Product Use.” Presentation at the American Association of Public Opinion Research (AAPOR) Conference, in Toronto, Canada, May 16-19.

- Rountree, Elizabeth, Rob Sederman, **Kristen Backor (presenter)**, Erika Sloan, and Greta Olesen. 2018. “Mapping Behavioral Influencers in the Pharmaceutical Industry.” Presentation at the BigSurv: Data Meets Survey Science Conference, in Barcelona, Spain, October 25-27.
- Golde, Saar, Norman H. Nie, and **Kristen Backor**. 2007. “Estimating Survey Fatigue in Time Use Study.” Paper presented at the International Association for Time Use Research Conference, in Washington, D.C., October 17-19.

Testimony

- Expert survey, report, and reply report on behalf of Defendant in *Bradley v. DentalPlans.com and Cigna Health and Life Insurance Company*. (2023). United States District Court for the District of Maryland Northern Division. Case 1:20-cv-01094-CCB.
- Expert review, declaration, and deposition on behalf of Defendant in *David George Williams v. Amazon.com Services LLC* (2022). United States District Court for the Northern District of California. Case 3:22-cv-1892-vc.
- Expert survey and report on behalf of Defendant in *Brady v. TI Group Automotive Systems, LLC*. (2021-2022). United States District Court Eastern District of Michigan, Detroit Division. Case 5:21-cv-11905-AJT-CI.
- Expert survey, report, and deposition on behalf of Plaintiff in *Delara v. Diamond Resorts Int'l Mktg.* (2020-2021). United States District Court of Nevada. Case 2:19-cv-00022-APG-NJK.
- Expert survey, report, and deposition on behalf of Plaintiff in *Gonzalez v. Diamond Resorts Int'l Mktg.* (2020-2021). United States District Court of Nevada. Case 2:18-cv-00979-APG-NJK.
- Expert review, declaration, and deposition on behalf of Defendant in *David Browne, et al., v. P.A.M Transport, Inc.* (2019-2020). United States District Court for the Eastern District of Arkansas. Case 5:16-cv-05366-TLB.

Consulting projects

Consumers and Technology

- Qualitative and quantitative assessment of consumer understanding of labeling
- Qualitative and quantitative evaluation of how mental health professionals consider impact of social media use
- Quantitative assessment of impact of product attributes on product selection in consumer behavior
- Quantitative experimental assessment of impact of informational emails and technology (phone application and health monitoring device) on consumer health behaviors in high-risk consumers

- Qualitative assessment of potential for health technology device to influence consumer behavior
- Qualitative and quantitative assessment of impact of a phone application on consumer health and behavior
- Quantitative assessment of trends in time utilization in daily life, including impact of Internet use
- Quantitative assessment of impact of survey fatigue on response quality for consumers
- Ethnographic and quantitative assessment of donning and doffing behaviors and off-the-clock work among current employees
- Quantitative assessment of off-the-clock work and behaviors among current and former employees

Education

- Quantitative assessment of undergraduate perceptions and opportunities for improvement of on-campus offerings and services
- Quantitative and qualitative assessment of impact of volunteering program among high school students
- Experimental assessment of self-control in young children

Oncology

- Pre- and post-quantitative assessment of new product to capture impact of product launch
- Quantitative assessment of the impact of visits from company representatives on product perceptions, use, and knowledge
- Quantitative and qualitative assessment of perceptions of competitor and client perceptions and development of decision-making model around product choice
- Qualitative assessment of impact of unbranded messaging campaign on behaviors and attitudes
- Qualitative and quantitative assessment of potential campaign imagery and messaging to understand impact and red flags in multiple countries
- Qualitative assessment and comparison of potential options and pricing for a product in development
- Qualitative and quantitative assessment of perceived value of products being considered for potential acquisition
- Qualitative and quantitative assessment of impact of new competitor data on product use
- Qualitative assessment, including online consumer focus groups, of potential and positioning for new consumer product

- Qualitative assessment of use and impact of electronic medical records on treatment behaviors and testing
- Qualitative assessment utilization and considerations in mammography centers
- Qualitative assessment of materials for disease education

Ophthalmology

- Quantitative and qualitative assessment of knowledge, sources of information, and interaction with company representatives
- Qualitative assessment of buying process for diagnostic assessment tools
- Qualitative assessment of functional and emotional benefits for a new product in development
- Qualitative assessment of indication statement language and product positioning for a new product in development
- Qualitative and quantitative assessment of physician referral patterns
- Qualitative assessment of advertising concepts for a new product in development
- Qualitative assessment of characteristics involved in developing thought leadership
- Qualitative assessment of potential positioning for a product with declining sales
- Qualitative and quantitative assessment to prepare for upcoming competitor launch
- Quantitative assessment of pricing sensitivities around new product launch
- Qualitative and quantitative assessment of considerations for new treatment paradigm
- Qualitative and quantitative assessment of market in anticipation of line extension for existing product
- Qualitative evaluation and assessment of marketing materials for upcoming products

Respiratory

- Qualitative assessment of role of nursing staff in patient treatment, management, and adherence

Rheumatology

- Qualitative assessment of customer perceptions for client and competitor products in a crowded marketplace
- Qualitative assessment of advertising campaign impact on behavior and treatment decisions
- Qualitative assessment of impact of nurse involvement on patient adherence and compliance
- Quantitative assessment of impact of upcoming product launches on treatment behaviors in the future landscape
- Qualitative and quantitative assessment of opportunities and considerations for shifting treatment paradigms

- Qualitative assessment of advertising campaign and messaging preferences among physicians

Other

- Qualitative assessment, including focus groups, of likely use, potential pricing, and potential impact of new product in oral health
- Qualitative assessment of advertising campaign and messaging preferences among physicians in influenza
- Quantitative multi-phase assessment of impact of label update on product perceptions and use
- Experimental research incorporating quantitative and qualitative assessment of the development and impact of perceived social status differences in undergraduate students

Honors and awards

W. Neal Kocurek Award for Health Care Advocacy; Robert C. Byrd scholarship, President's Endowed scholarship, Director's Excellence scholarship, Shell National Merit scholarship, Texas A & M University

Appendix B

Materials Relied Upon

Reports

Parrott, James A., “Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard,” December 2024.

Journal Articles, Book Chapters, and Working Papers

Diamond, Shari Seidman, “Reference Guide on Survey Research,” *Reference Manual on Scientific Evidence: Third Edition*, Federal Judicial Center, 2011.

Loftus, Elizabeth F. and John C. Palmer, “Reconstruction of automobile destruction: An example of the interaction between language and memory”, *Journal of verbal learning and verbal behavior*, 13:5, 1974.

Rutland, Emma C., Rowberry, R. Patel, and J. A. Cassel, “Measuring access: how accurate are patient-reported waiting times?”, *Sexually Transmitted Infections*, 84:1, 2008.

Thomson, David A., Paul R. Yarnold, Stephen L. Adams, and Alan B. Spacone, “How Accurate Are Waiting Time Perceptions of Patients in the Emergency Department?,” *Annals of Emergency Medicine*, 28:6, 1996.

Other Public Sources

“Manual for Complex Litigation, Fourth Edition,” Federal Judicial Center, 2004.

NYC Open Data, “For Hire Vehicles (FHV) - Active Drivers,
<https://data.cityofnewyork.us/Transportation/For-Hire-Vehicles-FHV-Active-Drivers/xjfq-wh2d/data>, accessed on February 4th, 2025.

Exhibit B

New York City Uber Driver Earnings and Expenses Study

Uber Technologies, Inc.

Final Report | November 4, 2024



Introduction

Purpose of the Memo

Uber Technologies, Inc. (Uber) engaged HR&A Advisors, Inc. (HR&A) to conduct an independent study on earnings and expenses of for-hire vehicle (FHV) drivers in New York City for the twelve-month study period between April 2023 and April 2024. The FHV industry in New York City is subject to various regulations, including a minimum earnings rate for drivers. To conduct the analysis, HR&A relied on publicly available data, third party data sources, and proprietary data provided from Uber to calculate a weighted average of earnings per-hour and costs per-mile of an average Uber operation in New York City. This memorandum presents HR&A's findings and methodologies for the New York City Uber Driver Earnings and Expense Study.

About HR&A

HR&A Advisors, Inc. (HR&A) is an employee-owned company advising public, private, non-profit, and philanthropic clients on how to increase opportunity and advance quality of life in cities. We believe in creating vital places, building more equitable and resilient communities, and improving people's lives. HR&A's Urban Tech Innovation Practice works with governments, technology companies, institutions, advocates, and developers to leverage the technology and innovation economy to increase economic competitiveness, improve quality of life, and broaden economic opportunity in cities.

Key Findings

Overview

In 2018, the City of New York became one of the first major cities to regulate the economics of for-hire vehicles (FHV), establishing a minimum pay rate for drivers and a moratorium on the number of licenses for FHV. Given the City's regulations, dense urban environment, and low car-ownership rate, New York City developed a unique FHV market than the rest of the United States. In most parts of the United States, most FHV drivers work part-time with their pre-existing vehicles, so only marginal costs are relevant to calculating the costs of FHV operations. However, that is not the case with FHV drivers in NYC where it is common for drivers to rent or purchase vehicles for the express purpose of driving for a FHV platform.

Thus, based on analysis of data from Uber and third-party data sources, HR&A developed estimates on the earnings per hour and expenses per mile for an average Uber driver in New York City for the twelve-month period between April 2023 and April 2024. As part of the analysis, HR&A weighted estimates of expenses per mile based on the share of drivers that own vs. rent their vehicle and use gasoline vs. battery electric vehicles. On average, an Uber driver in New York City earned **\$35.86 per hour** and spent **\$0.62 per mile** on associated expenses for driving a FHV.

Summary of Key Findings

Earnings	Per Hour
Trip Earnings per Hour	\$32.300
Tips and Bonus Earnings per Hour	\$3.557
Total Earnings per Hour	\$35.857

Expenses	Per Mile
Fixed Costs per Mile	\$0.323
Variable Costs per Mile	\$0.294
Total Expenses per Mile	\$0.616

For the purposes of this analysis, full-time drivers were defined as Uber drivers working at least 32 hours for 50 weeks of the year¹. An average full-time Uber driver earned \$72,839 annually and incurred average expenses totaling \$19,966 during the study period. Therefore, the average annual net pay² for a full-time Uber driver in New York City is estimated at **\$52,900**³.

¹ Drivers online for at least 1,600 hours in a year are considered full-time.

² In this context, net pay does not account for income tax but represents the pre-tax earnings for an average driver after accounting for necessary business expenses related to driving a FHV.

³ Rounded to the nearest 100. This figure does not include any deductions or other tax reimbursements that business expenses could benefit from. Additional detail on the calculation of net pay is available on p. 4.

Earnings

- **Trip Earnings** are earned by drivers for their trips. These can include some per-trip incentives. HR&A's study found that Uber drivers earned **\$32.30 per hour** in trip earnings.
- **Tips and Uber bonus pay.** Uber bonuses are incentives that are not tied to a single trip. HR&A's study found that Uber drivers earned **\$3.56 per hour** in tips and incentives.

Detailed Earnings Table - All

Earnings Category	Per Hour
Trip Earnings	\$32.300
Uber Bonus Pay	\$3.123
Tips	\$0.434
Total Earnings	\$35.857

Distribution of Hourly Earnings

Quartiles	Earnings per Hour
Lower Quartile	\$30.702
Median	\$36.009
Upper Quartile	\$41.169

Expenses

- **Fixed costs** are constant, regardless of the number of miles a driver travels over a month or year. For all drivers, fixed costs include the costs of Taxi and Limousine Commission (TLC) license and insurance⁴, as required by law for drivers to operate in the City of New York. Additionally, all drivers bear the incremental cost of an unlimited data plan necessary to run the Uber app while working.

Unlike in other geographies, it is common for Uber drivers in New York City to purchase their cars for the express purpose of driving for Uber. Therefore, for vehicle owners, fixed costs include assumed interest payments on vehicle financing costs⁵. For renters, fixed costs include rental payments (i.e., rental offer price plus associated taxes and fees). Insurance is included in the rental price.

To calculate fixed costs per mile, HR&A totaled fixed costs monthly (as applicable) and divided by an estimate of the average monthly miles traveled per driver. Drivers traveled an estimated 2,700 miles per month on average based on an analysis of vehicle inspection documents provided by Uber⁶. The per-mile

⁴ TLC Drivers License fees are available for review [online](#). See p. 5 for more detail on how costs were annualized in this study.

⁵ Given that this study accounts for depreciation of a vehicle which becomes an asset upon fulfillment of an auto loan term, HR&A does not account for principal payment in the assessment of financing costs. See p. 7 for more detail on this approach.

⁶ Rounded to nearest 10. Average monthly miles traveled per driver are calculated by averaging annual odometer readings from TLC inspections for a randomized sample set of 918 inspections. See p. 5 for more information.

costs for renters are calculated based on the rental cost divided by the same estimated 2,700 miles per month traveled by the average driver.

- **Variable costs** refer to incremental expenses incurred for each additional mile traveled by a driver. For vehicle owners, variable costs include expenses related to fuel/battery charging, depreciation⁷, and maintenance. The only variable cost category applicable to renters is fuel/battery charging, since the rental company assumes costs related to depreciation and maintenance.
- **Weighting for Expenses:** Distinct cost estimates are formulated based on weighting of vehicle ownership and vehicle type. HR&A analyzed expenses associated with driving battery electric vehicles compared to gasoline vehicles for variable costs, given the difference in pricing across the vehicle types for fuel/battery charging, depreciation, and maintenance. To develop a single cost estimate, weighted averages are calculated based on the relative shares of drivers within each category, based on Uber's shared data and benchmarked against the TLC's monthly aggregate reports.

Share of Drivers by Weighting Category

Weighting Category	Function	Share of Drivers
Share of Drivers Using a Rental Vehicle	Used to calculate a weighted average of fixed and variable costs, based on costs for owners vs. renters	25.6%
Share of Drivers Using a Battery Electric Vehicle (BEV)	Used to calculate a weighted average of variable costs, based on costs associated with BEVs vs. gasoline vehicles	3.7%

Detailed Cost Table – All

Cost Category	All	Owners	Renters
Fixed Costs per Mile	\$0.323	\$0.175	\$0.754
TLC License		\$0.005	\$0.005
TLC Insurance		\$0.136	-
Interest Payments on Vehicle Financing Costs		\$0.028	-
Rental Cost		-	\$0.743
Unlimited Data Plan (Incremental)		\$0.006	\$0.006
Variable Costs per Mile	\$0.294	\$0.348	\$0.136
Fuel/Battery Charging		\$0.136	\$0.136
Depreciation		\$0.110	-
Maintenance		\$0.101	-
Total Costs per Mile	\$0.616	\$0.522	\$0.890

⁷ Time-based depreciation could be considered a fixed cost. For simplicity we kept a single estimate of depreciation due to both time and distance.

Estimate of Annual Net Pay for Full-Time Drivers

As noted earlier, full-time drivers are defined in this study as driving at least 32 hours a week for 50 weeks of the year. For this cohort of Uber drivers, the estimates of average annual earnings and expenses are \$72,839 and \$19,966, respectively, during the study period. This results in an average annual net pay for full-time drivers of **\$52,900⁸**.

Average Net Pay Calculation

Category	Average Sum
Average annual earnings for full-time drivers	\$72,839
Average annual expenses for full-time drivers	(\$19,966)
Rounded Estimate of Annual Net Pay for Full-time Drivers	\$52,900

⁸ Rounded to the nearest 100.

Detailed Estimates, Sources, and Assumptions

Calculating Average Monthly Miles Traveled per Driver

To calculate fixed costs on a per mile basis, HR&A estimated the average monthly miles traveled per driver by ownership. Odometer data from TLC and NYS DMV approved inspection stations was used to determine an annualized mileage per driver based on vehicle ownership. These are required every four months after the initial TLC inspection. Based on the dataset Uber provided with 918 observations from January 2023 through August 2024, the average monthly miles traveled per driver in the study period was **2,700 miles⁹**.

Analyzing the Most Common Vehicles

Uber provided HR&A a list of the top 350 most common vehicles¹⁰ used by drivers between April 2023 and April 2024. This dataset comprised 88% of all mileage driven on Uber's platform in New York City during the study period. HR&A cross referenced the lists of vehicles to the U.S. Department of Energy's (DOE) vehicle [database](#) to obtain data on fuel economy and vehicle class. Given the highly urbanized environment of New York City, the DOE's estimate for city fuel economy is used exclusively instead of estimates for highway and combined city-highway driving. Since gasoline vehicles and BEVs rely on different forms of power, they are analyzed separately.

HR&A also categorized vehicles according to vehicle class and used data from AAA to assign maintenance costs, data from retailers to assign financing costs, and data from retailers and the Kelley Blue Book to assign depreciation costs for the owner subset of drivers. Once each vehicle is assigned fuel economy, financing, maintenance, and depreciation data, a weighted average is calculated using each vehicle's share of total trip mileage. For the purposes of calculating insurance quotes, HR&A selected the most common vehicle used by Uber drivers, which was a Toyota Camry 2017.

For BEVs, HR&A compiled data on the DOE's estimates of power (kWh) required for a full charge as well as total range. Similar to gasoline vehicles, HR&A pulled data on maintenance, depreciation, and financing costs for BEVs and calculated a weighted average using each vehicle's share of total trip mileage. The average power for a full charge was 74 kWh and average mileage on a full charge was 300 miles.

Fixed Costs – TLC License

In New York City, all for-hire vehicle drivers are required to have an active TLC License. The TLC license includes both one-time and recurring charges for exams, safety coursework, and trainings¹¹. The three-year license cost is annualized by dividing by three years and other assumed costs without renewal requirements to be annualized over five years. The annual costs associated with maintaining a TLC license is calculated to be \$176.98 per year, which is divided by the annual mileage driver by all drivers comes out to **\$0.005 per mile**.

⁹ Rounded to nearest 10 miles.

¹⁰ A vehicle is defined as a distinct combination of make, model, and year. For example, a Toyota Rav4 2021, Toyota Rav4 Hybrid 2021, and Toyota Rav4 2020 are 3 different vehicles.

¹¹ TLC Drivers License fees are available for review [online](#).

Annualized Costs of TLC Drivers License

Licensing Expense	Cost	Applicable Years	Annualized Cost
Three Year License	\$252.00	3	\$84.00
Drug Testing	\$34.00	3	\$6.80
Defensive Driving Course, administered every 3 years	\$24.00	3	\$8.33
Fingerprint and photos	\$90.25	5	\$18.05
24-hour class	\$250.00	5	\$50.00
Exam fee per attempt	\$49.99	5	\$9.80
Total Annual Costs			\$176.98
Annualized Costs per Mile			\$0.005

Fixed Costs – TLC Insurance

HR&A estimated the costs associated with purchasing TLC insurance to be **\$0.136 per mile**. TLC insurance quotes were obtained from brokers representing American Transit, Hereford, Affirmative Direct, and Maya – identified by Uber as among the largest providers of rideshare insurance to drivers in New York City. Brokers quoted the base cost of TLC insurance at \$4,000 a year, with additional cost increases due to age of driver, points on license, age of vehicle, and numerous other factors. HR&A increased the quoted cost by 10% to account for the additional charges described by brokers. Dividing by the average monthly mileage for drivers yielded estimates of **\$0.136 per mile** for all drivers.

HR&A contacted representatives from four TLC insurance providers:

- American Transit: A&Y Brokerage Co., Blackridge Insurance Co., Gladys & Sons Brokerage Inc.
- Hereford: Pearland Brokerage, Inc.
- Maya: Contacted directly
- Affirmative Direct: Contacted directly

Note that TLC insurance costs are not applicable to renters, given that insurance is included in the rental cost.

Fixed Costs – Unlimited Data

HR&A estimated incremental costs associated with upgrading to an unlimited data plan at **\$0.006 per mile**. It is assumed that a basic plan includes 2 GB of data, 2,500 minutes, and 500 messages while an upgraded plan includes unlimited data generally necessary for ridesharing. On average, a basic plan costs \$30.60 per month, while an unlimited data plan costs \$46.10 per month. The monthly increment in cost is calculated as an average of the difference between the basic and unlimited data plans for ten cellular data plan providers. The average price difference (\$15.50 per month) is multiplied by 12 months to calculate the annual costs.

Monthly Limited and Unlimited Data Plans

Source	Price for 1-line, Limited Data	Price for 1-line, Unlimited Data	Price Difference
Consumer Cellular	\$17.50	\$32.50	\$15.00
Boost Mobile	\$25.00	\$25.00	\$0.00
Metro by T-Mobile	\$40.00	\$50.00	\$10.00
Google Fi	\$17.50	\$40.00	\$22.50
Cricket Wireless	\$55.00	\$60.00	\$5.00
T-Mobile Prepaid	\$25.00	\$37.50	\$12.50
Verizon	\$35.00	\$50.00	\$15.00
AT&T Prepaid	\$25.00	\$55.00	\$30.00
AT&T	\$36.00	\$51.00	\$15.00
T-Mobile	\$30.00	\$60.00	\$30.00
Average	\$30.60	\$46.10	\$15.50
Annualized Cost per Mile			\$0.006

Fixed Costs – Car Purchase Costs

Only 45% of New York City households have access to a vehicle, an extraordinarily low figure compared to the national average of 92%¹². Given this limited vehicular ownership, most Uber drivers who own cars in New York City purchase vehicles to work on Uber's platform. To account for this city-specific cost, HR&A used the most common vehicle from Uber's dataset on the top 350 most commonly used vehicles to find average financing charges for each vehicle class. HR&A then sourced average financing costs for the top vehicle in each class using third-party sources and an assumed loan term. To avoid double counting the cost of ownership, HR&A only considered the interest paid on the principal as financing cost for owners and attributed additional ownership costs to depreciation of the vehicle, therefore accounting for the value of the vehicle as an asset to owners¹³. The weighted average of this figure, with the most common car's financing costs taken as an average for each vehicle class, is estimated at **\$0.028 per mile** during the study period.

The cost of each vehicle was sourced from MSRP listed on company websites¹⁴. A typical car loan of 60 months¹⁵ with zero down and an interest rate of 7%¹⁶ were assumed to calculate monthly payment costs for the top vehicle in each vehicle class. Given Uber survey data from March 2023 indicating that 72.7% of NYC owners actively made

¹² The American Community Survey (ACS) 2018-2022 5-Year Estimates tracks [vehicular ownership](#) by occupied housing unit.

¹³ See p.10 for more detail on depreciation costs.

¹⁴ As detailed in the table on p.8, the most common cars were all [Toyota](#)- or [Tesla](#)-made vehicles.

¹⁵ See recent reports from [CapitalOne](#) and [Car and Driver](#) indicating an average car loan timeline between 5-7 years nationally.

¹⁶ See a recent report from [MarketWatch](#) on average interest rates in the study period.

payments on their car, HR&A discounted the monthly costs that were generated for each car from the above loan terms by 27.3%.

Weighting Category for Car Financing Costs

Weighting Category	Function	Share of Drivers
Share of Vehicle Owners Who Make Payments	Used to discount average of financing costs for drivers who own their cars	72.7%

Interest Payments for Financing Cost per Vehicle Class

Vehicle Class	Most Common Vehicle	Discounted Annual Interest Paid	Cost per Mile
Small Sedan	Toyota Corolla 2021	\$574.68	\$0.017
Medium Sedan	Toyota Camry 2017	\$630.70	\$0.019
Subcompact SUV	Toyota Highlander 2022	\$980.26	\$0.030
Compact SUV	Toyota Sienna 2020	\$1,033.20	\$0.031
Medium SUV	Toyota Highlander 2018	\$1,096.06	\$0.033
Hybrid Vehicle	Toyota Sienna Hybrid 2022	\$1,109.29	\$0.034
Electric Vehicle	Tesla Model Y 2023	\$1,274.86	\$0.039
Weighted Average		\$893.02	\$0.027

Fixed Costs – Rental Price

Renters, who comprise about 25.6% of all drivers in the study period, pay a weekly fixed price to rent a vehicle regardless of how many miles they drive. HR&A estimated rental costs at **\$0.743 per mile** during the study period. Unlike owners, drivers who rent through Uber’s suppliers tend to acquire and use their vehicles for the primary purpose of doing app-based rideshare work.

Uber provided weekly base prices offered to Uber drivers by Buggy, Tower, American Lease, Fast Track Mobility, Sally, and Revel in July of 2024. The range of base offers spanned from \$281 to \$650 per week depending on the vehicle description, with taxes and fees likewise varying from \$46 to \$65 per week. HR&A cross walked the vehicle description from the rental offers with the vehicle class from Uber’s most top 350 most commonly used vehicles dataset to calculate a weighted average of the weekly rental offers relative to the active Uber fleet citywide.

Dividing by the average monthly mileage for the respective groups of renters yielded estimates of **\$0.743 per mile**. Despite the high cost compared to owner car financing costs, renters comprise a minority of total drivers, so the overall impact on aggregate cost estimate is minimal.

Weekly Rental Price Offers

Vehicle Class	Estimate Vehicle Share	Average Offer (excl. taxes and fees)	Average Taxes & Fees	Estimate Cost per Week
Midsize Cars	84%	\$419	\$50	\$469
Minivan - 4WD	13%	\$524	\$59	\$583
Hybrid	2%	\$350	\$50	\$400
Compact Cars	2%	\$348	\$46	\$394
Weighted Average		\$430	\$51	\$481
Annualized Cost per Mile				\$0.743

Variable Costs – Fuel/Battery Charging

HR&A estimated fuel/battery charging costs at **\$0.136 per mile** based on a weighted average of gasoline and electricity costs from the 12 months of the study period (April 2023 to April 2024). HR&A used data reported by the New York State Research and Development Authority (NYSERDA) on the New York City Metropolitan Area to calculate the average gas price to be **\$3.41/gallon**. For gasoline vehicles, HR&A divided the weighted average MPG for the most commonly used vehicles by the average gas price per gallon.

For BEVs, HR&A calculated the electricity cost per full battery charge, based on the weighted average kWh needed for a full charge¹⁷ and the electricity cost per kWh. HR&A reviewed the cost of electricity per kWh at New York City Department of Transportation (DOT) public charging stations offering DCFC (Level 3) charging¹⁸, at DOT public charging stations offering curbside (Level 2) charging¹⁹, at Tesla superchargers²⁰, and at Revel charging stations citywide²¹ to arrive at an estimated charging rate of **\$0.40 per kWh** during the study period. HR&A then divided the electricity cost per full charge by the weighted average miles per full charge (range) to calculate battery charging costs per mile.

HR&A calculated the share of Uber drivers using BEVs in New York City from Uber's dataset on driver activity to generate a weighted average of fuel/battery charging costs per mile. HR&A assumed the same distribution of vehicles for owners and renters.

Fuel/Charging Costs per Mile

Cost Category	Share of Vehicles	Cost of Energy per Mile
Gasoline Vehicles	96.3%	\$0.137
BEVs	3.7%	\$0.103
Total Costs per Mile	100%	\$0.136

¹⁷ See p. 5 for more information.

¹⁸ See the DOT's [website](#) for rates.

¹⁹ See DOT [promotional material](#) for rates.

²⁰ Tesla does not publish rates online. Charging rates were collected through conversations with supercharger users.

²¹ See Revel's [website](#) for rates.

Variable Costs –Depreciation

To avoid double counting the cost of ownership, HR&A only considered the interest paid on the principal as a financing cost for owners and attributed additional ownership costs to depreciation of the vehicle²². Depreciation was, therefore, calculated at an average of **\$0.110 per mile** during the study period.

Depreciation was calculated first by calculating the loss in value from a standard MSRP²³ to an average reasonable value for the most commonly used car in each vehicle class from Uber’s dataset. Kelley Blue Book values²⁴ were used to determine a reasonable value for each top vehicle and an average was calculated to account for the variety of conditions that vehicles can be in after five years of use driving for-hire in New York City. This figure was divided by the annual mileage driven by Uber drivers for a five-year period. The weighted average of this figure, with the most common car’s average depreciation costs taken as an average for each vehicle class, in an average of **\$0.110 per mile** during the study period.

Depreciation Cost per Vehicle Class

Vehicle Class	Most Common Vehicle	Est. MSRP at Purchase	Est. Price at 5 Yrs	Depreciation Cost per Mile
Small Sedan	Toyota Corolla 2021	\$21,020.00	\$10,285.67	\$0.065
Medium Sedan	Toyota Camry 2017	\$23,070.00	\$8,846.33	\$0.086
Subcompact SUV	Toyota Highlander 2022	\$35,855.00	\$19,279.67	\$0.101
Compact SUV	Toyota Sienna 2020	\$37,790.00	\$16,661.67	\$0.128
Medium SUV	Toyota Highlander 2018	\$40,090.00	\$15,657.33	\$0.149
Hybrid Vehicle	Toyota Sienna Hybrid 2022	\$40,575.00	\$20,392.67	\$0.123
Electric Vehicle	Tesla Model Y 2023	\$46,630.00	\$20,293.67	\$0.160
Weighted Average				\$0.110

²² See p.7 for more detail on car financing approach.

²³ MSRP values were sourced from the websites of [Toyota](#) and [Tesla](#).

²⁴ The [Kelley Blue Book](#) is an industry-standard source for estimating car value.

Variable Costs – Maintenance

HR&A estimated maintenance costs at **\$0.101 per mile** based on data from AAA and Uber. Based on a cross-walk of the most commonly used cars by AAA-designated vehicle classes, HR&A calculated average costs related to upkeep based on the share of each vehicle class used by Uber drivers in the study period. Maintenance costs are only applicable to owners, since such costs are assumed in the rental price.

Maintenance Cost per Vehicle Class

Vehicle Class	Cost per Mile
Small Sedan	\$0.091
Medium Sedan	\$0.109
Subcompact SUV	\$0.095
Compact SUV	\$0.104
Medium SUV	\$0.106
Hybrid Vehicle	\$0.091
Electric Vehicle	\$0.081
Weighted Average	\$0.101

Exhibit C



VIA ELECTRONIC MAIL

Records Access Officer
New York City Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver Street, 22nd Floor
New York, NY 10004
FOIL@tlc.nyc.gov

Re: FOIL Request 2024 Driver Survey

December 27, 2024

Dear Records Access Officer:

Pursuant to New York Public Officers Law § 84 et seq. (the “Freedom of Information Law”), Uber USA, LLC (“Uber”) requests the Commission produce the following records.

1. A complete copy of questions from the Commission’s 2024 NYC driver survey (the Survey).
 - a. For the avoidance of doubt, this request concerns the Survey referenced in James A. Parrott’s December 2024 report entitled *Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard* (the Report).¹
2. Complete copies of survey responses received by the Commission.
 - a. As referenced in the Report, Uber believes the Commission received 6,757 responses.
3. Copies of any and all summary reports concerning the Survey.
4. Copies of any and all memoranda drafted or commissioned by TLC using data obtained from the Survey.
5. Copies of any and all internal correspondence concerning the Survey.
 - a. Uber believes the following custodians may have corresponding correspondences: David Do, James DiGiovani, Russell Glynn, and Maya Zamek. The inclusion of these custodians shall not limit the scope of Uber’s request or the Commission’s responsibility to provide all responsive records.
6. Copies of any and all reports provided to James A. Parrott or the Center for New York

¹ https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf



City Affairs at the New School in connection with the Report.

7. Copies of any and all data files provided to James A. Parrott or the Center for New York City Affairs at the New School in connection with the Report.
8. Copies of any and all reports received from James A. Parrot or the Center for New York City Affairs at the New School in connection with the Report.
9. Copies of any and all data files received from James A. Parrott or the Center for New York City Affairs at the New School in connection with the Report.
10. Copies of any and all correspondence received or sent by the Commission concerning the Report.
 - a. Uber believes the following custodians may have corresponding correspondences: David Do, James DiGiovani, Russell Glynn, and Maya Zamek. The inclusion of these custodians shall not limit the scope of Uber's request or the Commission's responsibility to provide all responsive records.
11. Copies of any and all contracts between the Commission and James A. Parrott or the Center for New York City Affairs at the New School concerning the Report.
12. Copies of any and all internal correspondence relating to the publication of the Report on December 26, 2024.

Please note that the Freedom of Information Law requires an agency to respond to requests within five business days of receipt. If, for any reason, any portion of this request is denied, Uber requests the Commission provide the reasons for the denial in writing and provide the name and address of the person or body to whom an appeal should be directed.

Respectfully,

A handwritten signature in black ink, appearing to read "ND", written over a light gray horizontal line.

Nicholas Davoli
Senior Counsel
Uber Technologies, Inc.

Exhibit D

January 29, 2025

ATTN: Records Access Officer
New York City Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver Street, 22nd Floor
New York, NY 10004
FOIL@tlc.nyc.gov

To the Records Access Officer at the New York City Taxi and Limousine Commission (“TLC”) Office of Legal Affairs:

Pursuant to Sections 84 *et seq.* of the New York Public Officers Law, I request the following records in connection with the TLC’s proposed rule entitled “Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service” (the “Proposed Rule”).

The TLC has set a deadline of February 4, 2025 for submission of comments on the Proposed Rule. The requested records are necessary to enable effective public comment on the Proposed Rule, including any underlying analyses and materials that purportedly provide the basis for it.

1. Any contract or other agreement between the TLC and/or the New York Department of Transportation (“DOT”) and any other consultant or team member in connection with the development and/or preparation of the proposed rule entitled “Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service” (the “Proposed Rule”).¹ A copy of the proposed rule is attached.
2. All communications, and all records referring to, reflecting, or containing such communications, with respect to any economic, policy, data, or other analysis performed in connection with the Proposed Rule, between:
 - a. The TLC and DOT

¹ For the purpose of these requests, “TLC” shall refer to TLC and anyone employed or otherwise engaged by TLC. “DOT” shall refer to DOT and anyone employed or otherwise engaged by DOT.

- b. The TLC and anyone employed or otherwise engaged by the New York City Council (“City Council”), including any member of the City Council and any staff representatives.
 - c. The TLC and anyone employed or otherwise engaged by the Office of the Mayor of New York City, including the Mayor of New York City and any staff representatives.
 - d. The TLC and any consultant engaged or otherwise consulted regarding the development and/or preparation of the Proposed Rule.
 - e. The TLC and any representatives of any organization that represents taxicab drivers and/or drivers of for-hire vehicles.
 - f. The TLC and any other individual or entity.
3. All records related to the decision to propose rules to adjust:
- a. Utilization Rates to include a distance-based component within the per-mile portion of the driver pay formula, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in sections 59D-03(j), 59D-22(b) of the Proposed Rule.
 - b. Utilization Rates to set the Utilization Rate “for purposes of calculating the per-mile rate for all High-Volume For-Hire Services” at 68.5%, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(b) of the Proposed Rule.
 - c. Utilization Rates to set the Utilization Rate “for purposes of calculating the per-minute rate for all High-Volume For-Hire Services” at 53.3%, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(b) of the Proposed Rule.
 - d. Per Mile Rates to set the per mile expense factor for non-Accessible Vehicles at \$0.879 per mile for each mile a driver transports a passenger in the City, “to account for ☐ new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.
 - e. Per Mile Rates to set the per mile expense factor for non-Accessible Vehicles at \$1.758 per mile for trips beginning in the city but ending outside the city, “to account for ☐ new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.

- f. Per Mile Rates to set the per mile expense factor for Accessible Vehicles at \$1.061 per mile for each mile a driver transports a passenger in the City, “to account for [] new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.
- g. Per Mile Rates to set the per mile expense factor for Accessible Vehicles at \$2.122 per mile for trips beginning in the city but ending outside the city, “to account for [] new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.

This request, and the requests below, include all analyses, models, calculations, data, spreadsheets and other computer files and code (with all formulas intact), communications, documents, and other records that are used therein, and any and all of their modules for any purpose, including for analyzing, calculating, and/or modeling the baseline alternative, all policy options discussed, and all policy options that were otherwise tested or modeled and not discussed. This request further includes all inputs for and outputs produced by these analyses, models, calculations, data, spreadsheets and other computer files and code, communications, documents, and other records. These requests, and the requests below, include all responsive records in the possession of the TLC, including any consultant or team member engaged with the preparation and/or development of the Proposed Rule and/or any underlying reports, analyses, models, calculations, spreadsheets, or other computer files and code.

- 4. All records related to the decision to depart from previous expense models in calculation of the per miles rates based on “changes in the composition of driver expenses,” including all records that formed or were otherwise used to create, generate, or run any economic, policy, data, or other analysis performed in connection with the increase.
- 5. All records related to the decision to not automatically calculate and adjust applied utilization rates annually going forward, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(b) of the Proposed Rule.
- 6. All records related to any method decided upon and/or considered for monitoring and altering utilization rates and “changing industry dynamics” going forward in lieu of annual calculations and adjustments.
- 7. All records related to the decision to propose rules:
 - a. Imposing requirements that High-Volume For-Hire Services provide “72 hours’ notice” to a “Driver who could otherwise make themselves available to accept dispatches” if the High-Volume For-Hire Service “will restrict that Driver’s ability to accept dispatches on that calendar day,” as specified in the “Statement

of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(c)(1) of the Proposed Rule.

- b. Imposing a driver access requirements that High-Volume For-Hire Services “allow any Driver who has made themselves available to accept dispatches to continue to be available to accept dispatches for at least 16 hours following their initial availability,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(c)(2) of the Proposed Rule.
 - c. Adding a requirement that High-Volume For-Hire Services include a “designation of the Vehicle status at each geographic position and the distance traveled since the previous geographic position” in the records transmitted to TLC as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-14(a)(2)(iv) of the Proposed Rule.
 - d. Adding a requirement that High-Volume For-Hire Services report to TLC the date and time at which a Vehicle became unavailable to accept dispatches, as well as the “designation of the reason for the Vehicle unavailability including failure to meet licensure requirements, violation of TLC rules, violation of company rules or policies, and supply management,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-14(a)(2)(iv) of the Proposed Rule.
8. All records referring to, reflecting, or containing the following materials or information as referenced in the “Statement of Basis and Purpose” of the Proposed Rule, and on which the Proposed Rule is purportedly “based”:
- a. “the underlying figures” of “driver costs that form the basis of the per-mile rate”
 - b. “changes in the composition of driver expenses;”
 - c. Dr. Parrott’s “driver expense report” and/or the “composite expense model;”
 - d. “a driver survey” and/or “surveying over 89,000 active HV for-hire vehicle drivers;”
 - e. “current data on the vehicle fleet;”
 - f. “related research on vehicle costs;”
 - g. “costs of acquiring and operating EVs;”
 - h. “costs of short-term vehicle rentals;”
 - i. “structural changes in the industry;”

- j. “analyzing characteristics of the 86,000 vehicles involved in providing HV for-hire services as of early 2024;”
- k. “onboarding new drivers” and/or “platform restrictions;”
- l. “issues with the ways utilization rates are calculated and applied;”
- m. “current industry dynamics;”
- n. “data from May 2023 through April 2024;”
- o. “over five years of detailed monthly trip, session, and breadcrumb GPS data reporting by the HV companies;” and
- p. “other jurisdictions that have adopted similar driver pay formulas;” and/or “the approach of other jurisdictions.”

The foregoing requests do not seek data produced to the TLC or any other government agency by individual FHV companies or any other proprietary data.

For the purposes of these requests, I request that the datafiles be produced as a CSV file, or in the original data format if not feasible.

I remind the TLC of a prior request (the “Prior Request”) dated December 27, 2025, for records in connection with TLC’s “2024 Driver Survey.” The Prior Request remains outstanding and unfulfilled. I reiterate the Prior Request and fully incorporate it by reference. If materials were previously produced in response to the Prior Request, please include a copy of them and any correspondence relating to such productions.

Please note that the Freedom of Information Law requires an agency to respond to requests within five business days of receipt. If, for any reason, any portion of this request is denied, I request TLC provide the reasons for the denial in writing and provide the name and address of the person or body to whom an appeal should be directed.

Thank you for your prompt compliance with this matter.

Sincerely,

/s/ Karen L. Dunn

Karen L. Dunn

cc: Records Access Officer
New York City Department of Transportation
55 Water Street, 4th Floor
New York, NY 10041
foiladmin@dot.nyc.gov

NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

Notice of Public Hearing and Opportunity to Comment on Proposed Rules

What are we proposing? The Taxi and Limousine Commission (“TLC”) is proposing to amend its rules governing minimum driver payment for high-volume for hire services. Specifically, these proposed rules would increase minimum per-mile pay rates to account for increased driver expenses, change the way utilization rates are calculated and applied, prevent high-volume companies from manipulating driver availability, and collect additional data related to driver availability.

When and where is the Hearing? TLC will hold a public hearing on the proposed rule. The public hearing will take place at 10:00 am on February 5, 2025. The public hearing will be held online using Zoom. There will be no in person public hearing. The public hearing will be livestreamed on TLC’s website at www.nyc.gov/tlc. To participate in the public hearing, please e-mail the TLC at tlcrules@tlc.nyc.gov or call TLC at 212-676-1135 by February 4, 2025. After you have signed up to speak, TLC will provide you with a Zoom URL to enter in on your computer or dial-in via phone number if you prefer to call in.

How do I comment on the proposed rules? Anyone can comment on the proposed rules by:

- **Website.** You can submit comments to the Taxi and Limousine Commission through the NYC rules website at www.nyc.gov/nycrules.
- **Email.** You can email comments to tlcrules@tlc.nyc.gov.
- **Mail.** You can mail comments to the Taxi and Limousine Commission, Office of Legal Affairs, 33 Beaver Street – 22nd Floor, New York, NY 10004.
- **Fax.** You can fax comments to the TLC at 212-676-1102.
- **By speaking at the hearing.** To sign up to speak and provide testimony, you must e-mail the TLC at tlcrules@tlc.nyc.gov or call 212-676-1135 by 5:00 p.m. on February 4, 2025. Speakers will not be able to sign up to testify the day of the hearing. Those who did not sign-up in advance to testify are welcome to view the live-stream of the meeting on TLC’s website. Please note that the hearing is for accepting oral testimony only and is not held in a “Question and Answer” format.

Is there a deadline to submit written comments? Yes, you must submit written comments by February 4, 2025.

Do you need assistance to participate in the Hearing? You must tell the Office of Legal Affairs if you need a reasonable accommodation of a disability at the Hearing. You must tell us if you need a sign language interpreter. You can tell us by mail at the address given above. You may also tell us by telephone at 212-676-1135. You must tell us by February 4, 2025. This

location has the following accessibility option(s) available: Simultaneous transcription for people who are deaf or hard of hearing and audio only access.

Can I review the comments made on the proposed rules? You can review the comments made online on the proposed rules by going to the website at www.nyc.gov/nycrules. A few days after the hearing, copies of all comments submitted online, copies of all written comments, and a summary of oral comments concerning the proposed rule will be available to the public at the Office of Legal Affairs.

What authorizes the Commission to make this rule? Sections 1043 and 2303 of the City Charter and Section 19-503 of the New York City Administrative Code authorize the Commission to make this proposed rule. This proposed rule was not included in TLC's regulatory agenda for fiscal year 2024 because it was not contemplated when the Commission published the agenda.

Where can I find the Commission's rules? The Commission's rules are in Title 35 of the Rules of the City of New York.

What rules govern the rulemaking process? TLC must meet the requirements of Section 1043 of the City Charter when creating or changing rules. This notice is made according to the requirements of Section 1043 of the City Charter.

Statement of Basis and Purpose

TLC is proposing changes to its rules relating to per-trip driver pay for trips dispatched by high-volume for-hire services (HVs). These proposed rules amend the minimum per-mile rate to account for increased driver expenses, change the way utilization rates are calculated and applied, limit the HVs' ability to manipulate driver availability to achieve utilization rates that do not reflect actual driver working time, and expand TLC's data reporting requirements so the agency can better monitor industry trends and enforce violations.

In 2018, TLC drafted a per-trip driver minimum pay policy applicable to the largest for-hire vehicle (FHV) bases, now categorized as HVs and currently comprising Lyft and Uber, and commissioned two economists to study the city's FHV industry and evaluate the agency's proposed policy. The resulting report was issued in 2018 and favorably evaluated TLC's proposed driver pay policy.¹ Following Local Law 150 of 2018,² TLC adopted the driver pay policy through rulemaking.³ The driver pay rules have since been amended.⁴

¹ James A. Parrott and Michael Reich, "An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment" (June 2018), available at <http://www.centrernyc.org/an-earnings-standard>. Hereinafter "the 2018 Report." The precise expense estimates were revised in an updated January 2019 report available at <https://www.centrernyc.org/the-new-york-city-app-based-driver-pay-standard-revised>.

² Local Law 150 of 2018, codified as New York City Ad. Code § 19-549, available at <https://nyc.legistar.com/LegislationDetail.aspx?ID=3487613&GUID=E47BF280-2CAC-45AE-800F-ED5BE846EFF4&Options=ID|Text|&Search=150>.

³ The 2018 rule package as adopted is available at https://www1.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf.

⁴ See https://www.nyc.gov/assets/tlc/downloads/pdf/proposed_rule_fhv_driver_pay_03_08_2023.pdf.

Driver Expenses

Local Law 150 of 2018 specifically states that, in establishing “a method for determining the minimum payment that must be made to a for-hire vehicle driver for a trip dispatched by a high-volume for-hire service”, TLC must consider driver expenses.⁵ TLC’s adopted rules established minimum per-trip payments for HV trips, based on a formula, to provide drivers a minimum take-home pay that covers their expenses and accounts for total working time, including time spent transporting passengers as well as time waiting for a dispatch and driving to pick up passengers.⁶ A critical component of the minimum pay formula is the **per-mile rate** that is calculated to cover a typical driver’s expenses, such as their costs to acquire, license, insure, and maintain a vehicle with which to provide for-hire service. TLC rules also established yearly adjustments to the per-mile rate to account for inflation using the Consumer Price Index for Urban Wage Earners and Clerical Workers for the NY-NJ-PA metro area (CPI-W), to ensure that real driver earnings were not reduced over time.⁷

TLC has increased the per-mile rate five times since the minimum pay rules were implemented in February of 2019, including annual adjustments in 2020, 2022, 2023, and 2024 that captured inflation as measured by the percent increase in the CPI-W.⁸

Separately from the CPI-W increases, in November of 2022, following a period in which vehicle and gasoline costs rose much faster than the overall CPI-W, TLC adopted rules that provided an update to the per-mile rate using the regional Transportation Index published by the U.S. Bureau of Labor Statistics.⁹ Although a legal challenge by Uber required that TLC provide greater explanation of the reasons and methodology for increasing the per-mile rate in such a manner, an updated version of the rules was adopted and implemented in March of 2023. Combined with the scheduled CPI-W increase calculated in February 2023, the additional Transportation Index-based adjustment led to a total increase of 13.16% in the per-mile rate for 2023.

While the driver costs that form the basis of the per-mile rate have been adjusted based on percent increases in other indexes, the underlying figures—such as vehicle payments, insurance premiums, and other for-hire expenses—have not been systematically analyzed or individually revised since the base rate was implemented in February 2019. Several factors have contributed to changes in the *composition* of driver expenses—distinct from the *magnitude* of individual costs, which are captured through inflation adjustments—since the initial expense model was developed in 2019. The steady shift from sedans to mid-size SUVs, for example, means drivers today tend to make larger upfront investments to acquire their vehicles. Further, the limitation on new for-hire vehicle licenses has expanded the market for short-term vehicle rentals, which have an expense structure distinct from owner-operated vehicles. TLC policy efforts like the Green Rides Initiative have increased the relative importance of wheelchair accessible vehicles (WAVs) and electric

⁵ Ad. Code § 19-549(b).

⁶ That 2018 rule package is available at https://www1.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf.

⁷ In rules passed in 2018 as § 59B-24(a)(4); now § 59D-22(a)(4).

⁸ Due to the Covid-19 pandemic, there was not an adjustment in 2021.

⁹ https://www.nyc.gov/assets/tlc/downloads/pdf/Statment_of_Substantial_Need_310_signed.pdf

vehicles (EVs) to overall driver costs. While WAV- and EV-related costs are not entirely new, specific cost items like EV charging were not addressed by the 2018 expense model. This is a critical omission given that more than 20% of HV trips in October 2024 were completed in either a WAV or EV. And additional changes are likely on the horizon: recent instability in the for-hire vehicle insurance market may signal another change, given the potential for significant increases to insurance premiums due to uncertainty in the for-hire insurance market.¹⁰

Seeking to better understand how the composition of driver expenses in New York City has evolved, TLC commissioned Dr. James A. Parrott of the Center for New York City Affairs at the New School and co-author of the 2018 Report, to develop a comprehensive update of the expense model based on a driver survey, current data on the vehicle fleet, and related research on vehicle costs. The analysis paid particular attention to the costs of acquiring and operating EVs and the costs of short-term vehicle rentals to ensure structural changes in the industry are sufficiently reflected in the composite expense model.¹¹

Upon surveying over 89,000 active HV for-hire vehicle drivers and analyzing characteristics of the 86,000 vehicles involved in providing HV for-hire service as of early 2024, the analysis arrived at a per-mile expense factor of **\$0.879 per mile** for non-WAVs before adjusting for utilization. This rate reflects **an increase of 11.4%** compared to the current non-WAV minimum effective March 1, 2024, and is weighted based on fuel type and ownership arrangement as shown in the table below. The revised per-mile factor for WAVs, weighted by ownership arrangement, was **\$1.061**, 3.9% greater than the current \$1.021 WAV per-mile factor before adjusting for utilization.¹²

Non-WAV composite expense factor			
<i>Fuel type/ownership arrangement</i>	<i>Per-mile factor</i>	<i>Weight</i>	<i>Weighted factor</i>
Gas-powered vehicles, owned	\$0.782	0.583	\$0.446
EV, owned	\$0.914	0.083	\$0.076
Gas-powered vehicles, rented	\$1.028	0.292	\$0.300
EV, rented	\$1.133	0.042	\$0.047
Composite total			\$0.879

WAV composite expense factor			
<i>Fuel type/ownership arrangement</i>	<i>Per-mile factor</i>	<i>Weight</i>	<i>Weighted factor</i>
Gas-powered vehicles, owned	\$1.037	0.700	\$0.726
Gas-powered vehicles, rented	\$1.118	0.300	\$0.335
Composite total			\$1.061

¹⁰ <https://www.nytimes.com/2024/09/16/nyregion/american-transit-insurance-uber-lyft-nyc.html>

¹¹ The resulting driver expense report, which provides greater detail on the driver expense methodology and findings, is available at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf.

¹² The WAV composite expense factor was not weighted by fuel type due to the lack of an electric accessible vehicle on the market.

TLC is proposing amendments to the per-mile rates to account for these new driver expense calculations. TLC will continue to monitor the efficacy of CPI-W-based adjustments in capturing real changes to drivers' expenses through supplemental data analysis and routine driver outreach.

Utilization Rate

An additional critical component of the driver pay rules is the utilization rate. In short, the utilization rate ensures that drivers are paid for all their working time—including time available for dispatch and time en route to a passenger—not just the time that they are performing a trip with a passenger in the vehicle.

The utilization rate is presently calculated by dividing the total time that all HV drivers spend transporting passengers by the total amount of time that all drivers are logged into a HV platform (including time waiting for a dispatch, time en route to pick up a passenger, and time with a passenger). The per-mile and per-minute pay rates are then divided by the utilization rate so that both trip time and non-trip time are accounted. To illustrate, if drivers in the aggregate are logged into the apps for two million hours and are with a passenger on a trip for one million hours, the utilization rate is 50%. A trip that pays \$20 based on the per-mile and per-minute minimum rates without accounting for utilization would pay \$40 after applying the utilization rate (\$20 divided by 50% is \$40). In other words, in this example, if drivers are only paid for time driving with a passenger, but they spend just as much time waiting for dispatches and traveling to pick up passengers, then they will earn half the income.

As recognized in the 2018 Report, the inclusion of a utilization rate in the driver pay formula is intended to incentivize HV companies to maintain a higher utilization rate, keeping drivers busier so that they are on income-generating trips for a higher percentage of their working time. The HV companies can do this in several ways, including most notably by not onboarding new drivers, which was the primary intended outcome discussed throughout the 2018 Report.¹³ When the supply of drivers is too far above the demand for rides, the result is that more drivers will be idle waiting to be dispatched and the utilization rate will fall (the denominator of the formula, total time on app, will increase more than the numerator, time on a trip, thus lowering the utilization rate).

Instead of not onboarding new drivers, the companies have for many years continued to onboard new drivers, increasing driver supply without ensuring adequate trips for those new drivers. In response to this driver oversupply caused by the companies' onboarding practices, and to raise the utilization rates to the levels required by the current rules, the companies have restricted platform access for drivers who were already working a shift and completing trips.¹⁴ These

¹³ See, e.g., pp. 56-57 ("With the new policy, companies will seek ways to increase utilization, such as: limiting the entry of new drivers into their systems; queuing the next ride when a driver is close to completing the current ride; allocating trips to drivers whose driving records suggest they drive very long hours and are therefore likely to reduce their hours; and by promoting more shared rides that increase measured utilization. The app technology provides the companies real-time information on driver time and history. In sum, the app companies could readily improve their management of driver utilization.").

¹⁴ HV companies have instituted these driver restrictions at least twice, in 2019 and in 2024. See, e.g., <https://www.vice.com/en/article/the-lockout-why-uber-drivers-in-nyc-are-sleeping-in-their-cars/> and <https://www.bloomberg.com/graphics/2024-uber-lyft-nyc-drivers-pay-lockouts>.

platform restrictions elevate the utilization rate but prevent drivers from working and earning the daily income they were expecting to earn and ultimately may reduce driver hourly income, in clear conflict with the intent of local law and the agency's driver pay rules.¹⁵

These proposed rules aim to address issues with the ways utilization rates are calculated and applied in order to more fully attain the benefits of TLC's first-in-the-nation driver pay policy.

The existing initial industrywide utilization rate of 58% was based on limited sample data provided by the HV companies before TLC began requiring more robust data reporting in 2019, and include data from two companies no longer operating in New York City (Juno and Via). To reflect current industry dynamics, TLC is proposing that the industrywide time-based utilization rate be set at 53.3%. This rate was calculated using data from May 2023 through April 2024, the most recent 12-month period in which HV companies were not using lockouts to manipulate when drivers appeared available.

Until now, TLC has only used a time-based utilization rate, i.e., the percentage of time that drivers are on a trip. Going forward, this time-based utilization rate will only be applied to the per-minute—i.e., time-based—portion of the driver pay formula. For the per-mile—i.e., distance-based—portion of the formula, TLC will use a distance-based utilization rate, defined as the percentage of total miles driven that drivers are on a trip (as opposed to miles driven en route to pick up a passenger or while waiting for a trip). In light of TLC's current understanding of utilization rates based on over five years of detailed monthly trip, session, and breadcrumb GPS data reporting by the HV companies, TLC determined that adding a distance-based utilization rate to the formula will more accurately reflect current industry dynamics and the function and intent of the utilization rate portion of the formula. This approach also aligns New York City with other jurisdictions that have adopted similar driver pay formulas.¹⁶ The distance-based utilization rate as estimated using data from May 2023 through April 2024 was 68.5%. TLC will also update its data specifications so that distance-based utilization rates may be calculated more easily in the future.

To further reduce the incentive to restrict driver access to the apps and align TLC's driver pay rules with the approach of other jurisdictions, TLC will not automatically calculate and adjust applied utilization rates going forward. Instead, TLC will monitor and publish utilization rates and alter such rates through the rulemaking process as needed to reflect changing industry dynamics.

Together, TLC's proposed increase in the per-mile driver expense rate, alteration of the time- and distance-based utilization rates, and the expected increase to the per-minute pay rate

¹⁵ Another way that the 2018 Report proposed that HV companies could maintain high utilization rates was through an increase in shared rides as a way to operate the fleet more efficiently and increase the proportion of passenger time by linking trips. Instead, since February 2019 (the month that the driver pay rules first went into effect), HV shared rides have declined by about 95%.

¹⁶ See reports on Seattle, https://www.seattle.gov/documents/Departments/LaborStandards/Parrott-Reich-Seattle-Report_July-2020%280%29.pdf, and Minnesota, https://www.dli.mn.gov/sites/default/files/pdf/TNC_driver_earnings_analysis_pay_standard_options_report_030824.pdf.

pursuant to the CPI-W of approximately 3.93%,¹⁷ will result in **a minimum per-trip payment of approximately \$29.38 for a sample trip** of 7.5 miles and 30 minutes. This reflects **an approximate increase of 6.1% over current rates and 27.7% over the original 2019 rates.**

Finally, while no longer automatically calculating and adjusting applied utilization rates, to minimize the incentive for lockouts, help ensure the efficient operation of the for-hire market and prevent TLC's minimum pay rules from being degraded, TLC is proposing rules that would govern drivers' access to the applications to address the issue of lockouts and HV company manipulation of driver availability data. Specifically, the proposed amendments establish that HV companies would be required to provide 72-hours' notice to any driver who the company will not permit to log into the application to accept trips on a given day. This is primarily intended to ensure that drivers have reasonable expectations of when they will be able to access the applications and thus reasonable expectations of their working hours and incomes.¹⁸ Additionally, the amendments establish that once a HV company has permitted a driver to log into the application to accept trips, the HV company may not log the driver off for the next 16 hours except in certain limited circumstances.¹⁹ This is primarily intended to address the issue of "mid-shift lockouts" whereby drivers, after being able to access the application and perform trips, are periodically and unpredictably logged off by the companies, boosting utilization rates but lowering driver hourly pay. This will also help prevent a "race to the bottom" whereby if one HV company engages in lockouts the other is more likely to follow suit so they are not at a competitive disadvantage. To ensure adequate monitoring and compliance of these requirements, TLC is expanding its data collection from HV companies to include more detailed information on driver lockouts.

TLC's authority for these rules is found in sections 1043 and 2303 of the New York City Charter and sections 19-503 and 19-549 of the New York City Administrative Code.

New material is underlined.

[Material inside brackets indicates deleted material.]

Section 1. Subdivision (j) of section 59D-03 of Title 35 of the Rules of the City of New York is amended to read as follows:

- (j) *Utilization Rate* refers to the percentage of time or distance, in aggregate, that all Drivers who have made themselves available to accept dispatches from High-Volume For-Hire Services spend transporting passengers on trips dispatched by High-Volume For-Hire Services. The Utilization Rate is calculated by dividing the total amount of time or distance those Drivers spend transporting passengers on trips dispatched by High-Volume

¹⁷ TLC calculates the percent increase in the annual average CPI-W in January, which is applied March 1. Because TLC is proposing an independent increase in the per-mile rate pursuant to the driver expense study based on data collected in 2024, in 2025 only the per-minute rate will be increased in accordance with the change in CPI-W.

¹⁸ This 72-hour notice requirement is similar to New York City's scheduling requirement for retail workers. *See* Ad. Code Title 6 § 7-650(b) ("such work schedule must be . . . transmitted electronically no later than 72 hours before the employee's first shift on the work schedule").

¹⁹ TLC is proposing 16-hour lockout protections because, according to TLC data, the overwhelming majority of HV drivers work a total of less than 12 hours a day, but will often take breaks during the day to maximize their earnings, for example working six hours during the morning rush hour, taking a mid-day break, and then six hours during the evening rush hour.

For-Hire Services, by the total amount of time or distance Drivers are available to accept dispatches from High-Volume For-Hire Services, have been dispatched by a High-Volume For-Hire Service to pick up a passenger but do not have a passenger in the vehicle, and are transporting passengers on trips dispatched by a High-Volume For-Hire Service.

§ 2. Subparagraphs (iv) and (v) of paragraph (2) of subdivision (a) of section 59D-14 of Title 35 of the Rules of the City of New York are amended to read as follows:

- (iv) The geographic position of the Vehicle during the entire time the Vehicle is available to accept dispatches from the High-Volume For-Hire Service at intervals no less frequent than every sixty (60) seconds, with a designation of the Vehicle status at each geographic position and the distance traveled since the previous geographic position
- (v) The date and time at which the Vehicle became unavailable to accept dispatches from the High-Volume For-Hire Service, or was prevented from becoming available, with a designation of the reason for the Vehicle unavailability including failure to meet licensure requirements, violation of TLC rules, violation of company rules or policies, and supply management

§ 3. Paragraph (1) of subdivision (a) of section 59D-22 of Title 35 of the Rules of the City of New York is amended to read as follows:

- (1) *Per Mile Rate.* For each mile a Driver transports a Passenger in the City on a trip dispatched by the High-Volume For-Hire Service, the High-Volume For-Hire Service must pay the Driver no less than [\$0.762] \$0.879 per mile for a trip dispatched to a Vehicle that is not an Accessible Vehicle and [\$0.987] \$1.061 for a trip dispatched to an Accessible Vehicle, divided by the High-Volume For-Hire Service's Utilization Rate, and for trips that begin in the City but end outside of the City, the Base must pay the Driver no less than [\$1.523] \$1.758 per mile for a trip dispatched to a vehicle that is not an Accessible Vehicle and no less than [\$1.975] \$2.122 per mile for a trip dispatched to an Accessible Vehicle for each mile a Driver transports a Passenger outside of the City; and

§ 4. Subdivision (b) of section 59D-22 of Title 35 of the Rules of the City of New York is amended to read as follows:

- (b) *Applied Utilization Rate.* The applied Utilization Rate for purposes of calculating the per-minute [and per-mile rates] rate for all High-Volume For-Hire Services will be [58%] 53.3%. The applied Utilization Rate for purposes of calculating the per-mile rate for all High-Volume For-Hire Services will be 68.5%. [Each January, the Commission will calculate the Utilization Rate for all High-Volume For-Hire Services for the prior calendar year. If the Utilization Rate for all High-Volume for

Hire Services for the prior calendar year is at least 53%, the applied Utilization Rate will be 58% for the following calendar year. If the Utilization Rate for all High-Volume For-Hire Services for the prior calendar year is below 53%, the applied Utilization Rate for all High-Volume For-Hire Services for the following year, effective from the immediately following March 1 until the subsequent March 1, will be the actual Utilization Rate from the previous calendar year.]

§ 5. Section 59D-22 of Title 35 of the Rules of the City of New York is amended by adding a new subdivision (c), to read as follows:

(c) Driver access to High-Volume For-Hire Service applications.

- (1) Notice requirement. A High-Volume For-Hire Service must provide at least 72 hours' notice to any Driver who could otherwise make themselves available to accept dispatches from that High-Volume For-Hire Service on a calendar day if such High-Volume For-Hire Service will restrict that Driver's ability to accept dispatches on that calendar day.
- (2) Access requirement. A High-Volume For-Hire Service must allow any Driver who has made themselves available to accept dispatches to continue to be available to accept dispatches for at least 16 hours following their initial availability.
- (3) Exceptions. A High-Volume For-Hire Service may restrict a Driver's ability to accept dispatches, without 72 hours' notice, for lack of licensing credentials, violation of TLC rules, and violation of the High-Volume For-Hire Service's rules and policies including misconduct and excessive cancellation or non-acceptance of dispatches.

<u>§59D-22(c)</u>	<u>Fine: \$500 per failure to provide notice or failure to allow Driver access</u>	<u>Appearance REQUIRED</u>
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NEW YORK CITY MAYOR'S OFFICE OF OPERATIONS

253 BROADWAY, 10th FLOOR

NEW YORK, NY 10007

212-788-1400

CERTIFICATION / ANALYSIS

PURSUANT TO CHARTER SECTION 1043(d)

RULE TITLE: Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service

REFERENCE NUMBER: TLC-154

RULEMAKING AGENCY: Taxi and Limousine Commission

I certify that this office has analyzed the proposed rule referenced above as required by Section 1043(d) of the New York City Charter, and that the proposed rule referenced above:

- (i) Is understandable and written in plain language for the discrete regulated community or communities;
- (ii) Minimizes compliance costs for the discrete regulated community or communities consistent with achieving the stated purpose of the rule; and
- (iii) Does not provide a cure period because a cure period is not practicable under the circumstances.

/s/ Francisco X. Navarro

Mayor's Office of Operations

December 26, 2024

Date

NEW YORK CITY LAW DEPARTMENT
DIVISION OF LEGAL COUNSEL
100 CHURCH STREET
NEW YORK, NY 10007
212-356-4028

CERTIFICATION PURSUANT TO
CHARTER §1043(d)

RULE TITLE: Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service

REFERENCE NUMBER: 2024 RG 121

RULEMAKING AGENCY: Taxi and Limousine Commission

I certify that this office has reviewed the above-referenced proposed rule as required by section 1043(d) of the New York City Charter, and that the above-referenced proposed rule:

- (i) is drafted so as to accomplish the purpose of the authorizing provisions of law;
- (ii) is not in conflict with other applicable rules;
- (iii) to the extent practicable and appropriate, is narrowly drawn to achieve its stated purpose; and
- (iv) to the extent practicable and appropriate, contains a statement of basis and purpose that provides a clear explanation of the rule and the requirements imposed by the rule.

/s/ STEVEN GOULDEN

Date: December 26, 2024

Senior Counsel

Exhibit E

January 29, 2025

ATTN: Records Access Officer
New York City Department of Transportation
55 Water Street, 4th Floor
New York, NY 10041
foiladmin@dot.nyc.gov

To the Records Access Officer at the New York Department of Transportation (“DOT”):

Pursuant to Sections 84 *et seq.* of the New York Public Officers Law, I request the following records in connection with the New York City Taxi & Limousine Commission’s (“TLC”) proposed rule entitled “Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service” (the “Proposed Rule”).

The TLC has set a deadline of February 4, 2025 for submission of comments on the Proposed Rule. The requested records are necessary to enable effective public comment on the Proposed Rule, including any underlying analyses and materials that purportedly provide the basis for it.

1. Any contract or other agreement between the DOT and/or the TLC and any other consultant or team member in connection with the development and/or preparation of the proposed rule entitled “Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service” (the “Proposed Rule”).¹ A copy of the proposed rule is attached.
2. All communications, and all records referring to, reflecting, or containing such communications, with respect to any economic, policy, data, or other analysis performed in connection with the Proposed Rule, between:
 - a. The TLC and DOT
 - b. The DOT and anyone employed or otherwise engaged by the New York City Council (“City Council”), including any member of the City Council and any staff representatives.

¹ For the purpose of these requests, “TLC” shall refer to TLC and anyone employed or otherwise engaged by TLC. “DOT” shall refer to DOT and anyone employed or otherwise engaged by DOT.

- c. The DOT and anyone employed or otherwise engaged by the Office of the Mayor of New York City, including the Mayor of New York City and any staff representatives.
 - d. The DOT and any consultant engaged or otherwise consulted regarding the development and/or preparation of the Proposed Rule.
 - e. The DOT and any representatives of any organization that represents taxicab drivers and/or drivers of for-hire vehicles.
 - f. The DOT and any other individual or entity.
3. All records related to the decision to propose rules to adjust:
- a. Utilization Rates to include a distance-based component within the per-mile portion of the driver pay formula, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in sections 59D-03(j), 59D-22(b) of the Proposed Rule.
 - b. Utilization Rates to set the Utilization Rate “for purposes of calculating the per-mile rate for all High-Volume For-Hire Services” at 68.5%, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(b) of the Proposed Rule.
 - c. Utilization Rates to set the Utilization Rate “for purposes of calculating the per-minute rate for all High-Volume For-Hire Services” at 53.3%, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(b) of the Proposed Rule.
 - d. Per Mile Rates to set the per mile expense factor for non-Accessible Vehicles at \$0.879 per mile for each mile a driver transports a passenger in the City, “to account for ☐ new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.
 - e. Per Mile Rates to set the per mile expense factor for non-Accessible Vehicles at \$1.758 per mile for trips beginning in the city but ending outside the city, “to account for ☐ new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.
 - f. Per Mile Rates to set the per mile expense factor for Accessible Vehicles at \$1.061 per mile for each mile a driver transports a passenger in the City, “to account for ☐ new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.

- g. Per Mile Rates to set the per mile expense factor for Accessible Vehicles at \$2.122 per mile for trips beginning in the city but ending outside the city, “to account for [] new driver expense calculations,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(a)(1) of the Proposed Rule.

This request, and the requests below, include all analyses, models, calculations, data, spreadsheets and other computer files and code (with all formulas intact), communications, documents, and other records that are used therein, and any and all of their modules for any purpose, including for analyzing, calculating, and/or modeling the baseline alternative, all policy options discussed, and all policy options that were otherwise tested or modeled and not discussed. This request further includes all inputs for and outputs produced by these analyses, models, calculations, data, spreadsheets and other computer files and code, communications, documents, and other records. These requests, and the requests below, include all responsive records in the possession of the DOT, including any consultant or team member engaged with the preparation and/or development of the Proposed Rule and/or any underlying reports, analyses, models, calculations, spreadsheets, or other computer files and code.

4. All records related to the decision to depart from previous expense models in calculation of the per miles rates based on “changes in the composition of driver expenses,” including all records that formed or were otherwise used to create, generate, or run any economic, policy, data, or other analysis performed in connection with the increase.
5. All records related to the decision to not automatically calculate and adjust applied utilization rates annually going forward, as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(b) of the Proposed Rule.
6. All records related to any method decided upon and/or considered for monitoring and altering utilization rates and “changing industry dynamics” going forward in lieu of annual calculations and adjustments.
7. All records related to the decision to propose rules:
 - a. Imposing requirements that High-Volume For-Hire Services provide “72 hours’ notice” to a “Driver who could otherwise make themselves available to accept dispatches” if the High-Volume For-Hire Service “will restrict that Driver’s ability to accept dispatches on that calendar day,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(c)(1) of the Proposed Rule.
 - b. Imposing a driver access requirements that High-Volume For-Hire Services “allow any Driver who has made themselves available to accept dispatches to continue to be available to accept dispatches for at least 16 hours following their

initial availability,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-22(c)(2) of the Proposed Rule.

- c. Adding a requirement that High-Volume For-Hire Services include a “designation of the Vehicle status at each geographic position and the distance traveled since the previous geographic position” in the records transmitted to TLC as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-14(a)(2)(iv) of the Proposed Rule.
 - d. Adding a requirement that High-Volume For-Hire Services report to TLC the date and time at which a Vehicle became unavailable to accept dispatches, as well as the “designation of the reason for the Vehicle unavailability including failure to meet licensure requirements, violation of TLC rules, violation of company rules or policies, and supply management,” as specified in the “Statement of Basis and Purpose” of the Proposed Rule and as reflected in section 59D-14(a)(2)(iv) of the Proposed Rule.
8. All records referring to, reflecting, or containing the following materials or information as referenced in the “Statement of Basis and Purpose” of the Proposed Rule, and on which the Proposed Rule is purportedly “based”:
- a. “the underlying figures” of “driver costs that form the basis of the per-mile rate”
 - b. “changes in the composition of driver expenses;”
 - c. Dr. Parrott’s “driver expense report” and/or the “composite expense model;”
 - d. “a driver survey” and/or “surveying over 89,000 active HV for-hire vehicle drivers;”
 - e. “current data on the vehicle fleet;”
 - f. “related research on vehicle costs;”
 - g. “costs of acquiring and operating EVs;”
 - h. “costs of short-term vehicle rentals;”
 - i. “structural changes in the industry;”
 - j. “analyzing characteristics of the 86,000 vehicles involved in providing HV for-hire services as of early 2024;”
 - k. “onboarding new drivers” and/or “platform restrictions;”
 - l. “issues with the ways utilization rates are calculated and applied;”

- m. “current industry dynamics;”
- n. “data from May 2023 through April 2024;”
- o. “over five years of detailed monthly trip, session, and breadcrumb GPS data reporting by the HV companies;” and
- p. “other jurisdictions that have adopted similar driver pay formulas;” and/or “the approach of other jurisdictions.”

The foregoing requests do not seek data produced to the DOT or any other government agency by individual FHV companies or any other proprietary data.

For the purposes of these requests, I request that the datafiles be produced as a CSV file, or in the original data format if not feasible.

Please note that the Freedom of Information Law requires an agency to respond to requests within five business days of receipt. If, for any reason, any portion of this request is denied, I request DOT provide the reasons for the denial in writing and provide the name and address of the person or body to whom an appeal should be directed.

Thank you for your prompt compliance with this matter.

Sincerely,

/s/ Karen L. Dunn

Karen L. Dunn

cc: Records Access Officer
New York City Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver Street, 22nd Floor
New York, NY 10004
FOIL@tlc.nyc.gov

NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

Notice of Public Hearing and Opportunity to Comment on Proposed Rules

What are we proposing? The Taxi and Limousine Commission (“TLC”) is proposing to amend its rules governing minimum driver payment for high-volume for hire services. Specifically, these proposed rules would increase minimum per-mile pay rates to account for increased driver expenses, change the way utilization rates are calculated and applied, prevent high-volume companies from manipulating driver availability, and collect additional data related to driver availability.

When and where is the Hearing? TLC will hold a public hearing on the proposed rule. The public hearing will take place at 10:00 am on February 5, 2025. The public hearing will be held online using Zoom. There will be no in person public hearing. The public hearing will be livestreamed on TLC’s website at www.nyc.gov/tlc. To participate in the public hearing, please e-mail the TLC at tlcrules@tlc.nyc.gov or call TLC at 212-676-1135 by February 4, 2025. After you have signed up to speak, TLC will provide you with a Zoom URL to enter in on your computer or dial-in via phone number if you prefer to call in.

How do I comment on the proposed rules? Anyone can comment on the proposed rules by:

- **Website.** You can submit comments to the Taxi and Limousine Commission through the NYC rules website at www.nyc.gov/nycrules.
- **Email.** You can email comments to tlcrules@tlc.nyc.gov.
- **Mail.** You can mail comments to the Taxi and Limousine Commission, Office of Legal Affairs, 33 Beaver Street – 22nd Floor, New York, NY 10004.
- **Fax.** You can fax comments to the TLC at 212-676-1102.
- **By speaking at the hearing.** To sign up to speak and provide testimony, you must e-mail the TLC at tlcrules@tlc.nyc.gov or call 212-676-1135 by 5:00 p.m. on February 4, 2025. Speakers will not be able to sign up to testify the day of the hearing. Those who did not sign-up in advance to testify are welcome to view the live-stream of the meeting on TLC’s website. Please note that the hearing is for accepting oral testimony only and is not held in a “Question and Answer” format.

Is there a deadline to submit written comments? Yes, you must submit written comments by February 4, 2025.

Do you need assistance to participate in the Hearing? You must tell the Office of Legal Affairs if you need a reasonable accommodation of a disability at the Hearing. You must tell us if you need a sign language interpreter. You can tell us by mail at the address given above. You may also tell us by telephone at 212-676-1135. You must tell us by February 4, 2025. This

location has the following accessibility option(s) available: Simultaneous transcription for people who are deaf or hard of hearing and audio only access.

Can I review the comments made on the proposed rules? You can review the comments made online on the proposed rules by going to the website at www.nyc.gov/nycrules. A few days after the hearing, copies of all comments submitted online, copies of all written comments, and a summary of oral comments concerning the proposed rule will be available to the public at the Office of Legal Affairs.

What authorizes the Commission to make this rule? Sections 1043 and 2303 of the City Charter and Section 19-503 of the New York City Administrative Code authorize the Commission to make this proposed rule. This proposed rule was not included in TLC's regulatory agenda for fiscal year 2024 because it was not contemplated when the Commission published the agenda.

Where can I find the Commission's rules? The Commission's rules are in Title 35 of the Rules of the City of New York.

What rules govern the rulemaking process? TLC must meet the requirements of Section 1043 of the City Charter when creating or changing rules. This notice is made according to the requirements of Section 1043 of the City Charter.

Statement of Basis and Purpose

TLC is proposing changes to its rules relating to per-trip driver pay for trips dispatched by high-volume for-hire services (HVs). These proposed rules amend the minimum per-mile rate to account for increased driver expenses, change the way utilization rates are calculated and applied, limit the HVs' ability to manipulate driver availability to achieve utilization rates that do not reflect actual driver working time, and expand TLC's data reporting requirements so the agency can better monitor industry trends and enforce violations.

In 2018, TLC drafted a per-trip driver minimum pay policy applicable to the largest for-hire vehicle (FHV) bases, now categorized as HVs and currently comprising Lyft and Uber, and commissioned two economists to study the city's FHV industry and evaluate the agency's proposed policy. The resulting report was issued in 2018 and favorably evaluated TLC's proposed driver pay policy.¹ Following Local Law 150 of 2018,² TLC adopted the driver pay policy through rulemaking.³ The driver pay rules have since been amended.⁴

¹ James A. Parrott and Michael Reich, "An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment" (June 2018), available at <http://www.centrernyc.org/an-earnings-standard>. Hereinafter "the 2018 Report." The precise expense estimates were revised in an updated January 2019 report available at <https://www.centrernyc.org/the-new-york-city-app-based-driver-pay-standard-revised>.

² Local Law 150 of 2018, codified as New York City Ad. Code § 19-549, available at <https://nyc.legistar.com/LegislationDetail.aspx?ID=3487613&GUID=E47BF280-2CAC-45AE-800F-ED5BE846EFF4&Options=ID|Text|&Search=150>.

³ The 2018 rule package as adopted is available at https://www1.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf.

⁴ See https://www.nyc.gov/assets/tlc/downloads/pdf/proposed_rule_fhv_driver_pay_03_08_2023.pdf.

Driver Expenses

Local Law 150 of 2018 specifically states that, in establishing “a method for determining the minimum payment that must be made to a for-hire vehicle driver for a trip dispatched by a high-volume for-hire service”, TLC must consider driver expenses.⁵ TLC’s adopted rules established minimum per-trip payments for HV trips, based on a formula, to provide drivers a minimum take-home pay that covers their expenses and accounts for total working time, including time spent transporting passengers as well as time waiting for a dispatch and driving to pick up passengers.⁶ A critical component of the minimum pay formula is the **per-mile rate** that is calculated to cover a typical driver’s expenses, such as their costs to acquire, license, insure, and maintain a vehicle with which to provide for-hire service. TLC rules also established yearly adjustments to the per-mile rate to account for inflation using the Consumer Price Index for Urban Wage Earners and Clerical Workers for the NY-NJ-PA metro area (CPI-W), to ensure that real driver earnings were not reduced over time.⁷

TLC has increased the per-mile rate five times since the minimum pay rules were implemented in February of 2019, including annual adjustments in 2020, 2022, 2023, and 2024 that captured inflation as measured by the percent increase in the CPI-W.⁸

Separately from the CPI-W increases, in November of 2022, following a period in which vehicle and gasoline costs rose much faster than the overall CPI-W, TLC adopted rules that provided an update to the per-mile rate using the regional Transportation Index published by the U.S. Bureau of Labor Statistics.⁹ Although a legal challenge by Uber required that TLC provide greater explanation of the reasons and methodology for increasing the per-mile rate in such a manner, an updated version of the rules was adopted and implemented in March of 2023. Combined with the scheduled CPI-W increase calculated in February 2023, the additional Transportation Index-based adjustment led to a total increase of 13.16% in the per-mile rate for 2023.

While the driver costs that form the basis of the per-mile rate have been adjusted based on percent increases in other indexes, the underlying figures—such as vehicle payments, insurance premiums, and other for-hire expenses—have not been systematically analyzed or individually revised since the base rate was implemented in February 2019. Several factors have contributed to changes in the *composition* of driver expenses—distinct from the *magnitude* of individual costs, which are captured through inflation adjustments—since the initial expense model was developed in 2019. The steady shift from sedans to mid-size SUVs, for example, means drivers today tend to make larger upfront investments to acquire their vehicles. Further, the limitation on new for-hire vehicle licenses has expanded the market for short-term vehicle rentals, which have an expense structure distinct from owner-operated vehicles. TLC policy efforts like the Green Rides Initiative have increased the relative importance of wheelchair accessible vehicles (WAVs) and electric

⁵ Ad. Code § 19-549(b).

⁶ That 2018 rule package is available at https://www1.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf.

⁷ In rules passed in 2018 as § 59B-24(a)(4); now § 59D-22(a)(4).

⁸ Due to the Covid-19 pandemic, there was not an adjustment in 2021.

⁹ https://www.nyc.gov/assets/tlc/downloads/pdf/Statment_of_Substantial_Need_310_signed.pdf

vehicles (EVs) to overall driver costs. While WAV- and EV-related costs are not entirely new, specific cost items like EV charging were not addressed by the 2018 expense model. This is a critical omission given that more than 20% of HV trips in October 2024 were completed in either a WAV or EV. And additional changes are likely on the horizon: recent instability in the for-hire vehicle insurance market may signal another change, given the potential for significant increases to insurance premiums due to uncertainty in the for-hire insurance market.¹⁰

Seeking to better understand how the composition of driver expenses in New York City has evolved, TLC commissioned Dr. James A. Parrott of the Center for New York City Affairs at the New School and co-author of the 2018 Report, to develop a comprehensive update of the expense model based on a driver survey, current data on the vehicle fleet, and related research on vehicle costs. The analysis paid particular attention to the costs of acquiring and operating EVs and the costs of short-term vehicle rentals to ensure structural changes in the industry are sufficiently reflected in the composite expense model.¹¹

Upon surveying over 89,000 active HV for-hire vehicle drivers and analyzing characteristics of the 86,000 vehicles involved in providing HV for-hire service as of early 2024, the analysis arrived at a per-mile expense factor of **\$0.879 per mile** for non-WAVs before adjusting for utilization. This rate reflects **an increase of 11.4%** compared to the current non-WAV minimum effective March 1, 2024, and is weighted based on fuel type and ownership arrangement as shown in the table below. The revised per-mile factor for WAVs, weighted by ownership arrangement, was **\$1.061**, 3.9% greater than the current \$1.021 WAV per-mile factor before adjusting for utilization.¹²

Non-WAV composite expense factor			
<i>Fuel type/ownership arrangement</i>	<i>Per-mile factor</i>	<i>Weight</i>	<i>Weighted factor</i>
Gas-powered vehicles, owned	\$0.782	0.583	\$0.446
EV, owned	\$0.914	0.083	\$0.076
Gas-powered vehicles, rented	\$1.028	0.292	\$0.300
EV, rented	\$1.133	0.042	\$0.047
Composite total			\$0.879

WAV composite expense factor			
<i>Fuel type/ownership arrangement</i>	<i>Per-mile factor</i>	<i>Weight</i>	<i>Weighted factor</i>
Gas-powered vehicles, owned	\$1.037	0.700	\$0.726
Gas-powered vehicles, rented	\$1.118	0.300	\$0.335
Composite total			\$1.061

¹⁰ <https://www.nytimes.com/2024/09/16/nyregion/american-transit-insurance-uber-lyft-nyc.html>

¹¹ The resulting driver expense report, which provides greater detail on the driver expense methodology and findings, is available at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf.

¹² The WAV composite expense factor was not weighted by fuel type due to the lack of an electric accessible vehicle on the market.

TLC is proposing amendments to the per-mile rates to account for these new driver expense calculations. TLC will continue to monitor the efficacy of CPI-W-based adjustments in capturing real changes to drivers' expenses through supplemental data analysis and routine driver outreach.

Utilization Rate

An additional critical component of the driver pay rules is the utilization rate. In short, the utilization rate ensures that drivers are paid for all their working time—including time available for dispatch and time en route to a passenger—not just the time that they are performing a trip with a passenger in the vehicle.

The utilization rate is presently calculated by dividing the total time that all HV drivers spend transporting passengers by the total amount of time that all drivers are logged into a HV platform (including time waiting for a dispatch, time en route to pick up a passenger, and time with a passenger). The per-mile and per-minute pay rates are then divided by the utilization rate so that both trip time and non-trip time are accounted. To illustrate, if drivers in the aggregate are logged into the apps for two million hours and are with a passenger on a trip for one million hours, the utilization rate is 50%. A trip that pays \$20 based on the per-mile and per-minute minimum rates without accounting for utilization would pay \$40 after applying the utilization rate (\$20 divided by 50% is \$40). In other words, in this example, if drivers are only paid for time driving with a passenger, but they spend just as much time waiting for dispatches and traveling to pick up passengers, then they will earn half the income.

As recognized in the 2018 Report, the inclusion of a utilization rate in the driver pay formula is intended to incentivize HV companies to maintain a higher utilization rate, keeping drivers busier so that they are on income-generating trips for a higher percentage of their working time. The HV companies can do this in several ways, including most notably by not onboarding new drivers, which was the primary intended outcome discussed throughout the 2018 Report.¹³ When the supply of drivers is too far above the demand for rides, the result is that more drivers will be idle waiting to be dispatched and the utilization rate will fall (the denominator of the formula, total time on app, will increase more than the numerator, time on a trip, thus lowering the utilization rate).

Instead of not onboarding new drivers, the companies have for many years continued to onboard new drivers, increasing driver supply without ensuring adequate trips for those new drivers. In response to this driver oversupply caused by the companies' onboarding practices, and to raise the utilization rates to the levels required by the current rules, the companies have restricted platform access for drivers who were already working a shift and completing trips.¹⁴ These

¹³ See, e.g., pp. 56-57 ("With the new policy, companies will seek ways to increase utilization, such as: limiting the entry of new drivers into their systems; queuing the next ride when a driver is close to completing the current ride; allocating trips to drivers whose driving records suggest they drive very long hours and are therefore likely to reduce their hours; and by promoting more shared rides that increase measured utilization. The app technology provides the companies real-time information on driver time and history. In sum, the app companies could readily improve their management of driver utilization.").

¹⁴ HV companies have instituted these driver restrictions at least twice, in 2019 and in 2024. See, e.g., <https://www.vice.com/en/article/the-lockout-why-uber-drivers-in-nyc-are-sleeping-in-their-cars/> and <https://www.bloomberg.com/graphics/2024-uber-lyft-nyc-drivers-pay-lockouts>.

platform restrictions elevate the utilization rate but prevent drivers from working and earning the daily income they were expecting to earn and ultimately may reduce driver hourly income, in clear conflict with the intent of local law and the agency's driver pay rules.¹⁵

These proposed rules aim to address issues with the ways utilization rates are calculated and applied in order to more fully attain the benefits of TLC's first-in-the-nation driver pay policy.

The existing initial industrywide utilization rate of 58% was based on limited sample data provided by the HV companies before TLC began requiring more robust data reporting in 2019, and include data from two companies no longer operating in New York City (Juno and Via). To reflect current industry dynamics, TLC is proposing that the industrywide time-based utilization rate be set at 53.3%. This rate was calculated using data from May 2023 through April 2024, the most recent 12-month period in which HV companies were not using lockouts to manipulate when drivers appeared available.

Until now, TLC has only used a time-based utilization rate, i.e., the percentage of time that drivers are on a trip. Going forward, this time-based utilization rate will only be applied to the per-minute—i.e., time-based—portion of the driver pay formula. For the per-mile—i.e., distance-based—portion of the formula, TLC will use a distance-based utilization rate, defined as the percentage of total miles driven that drivers are on a trip (as opposed to miles driven en route to pick up a passenger or while waiting for a trip). In light of TLC's current understanding of utilization rates based on over five years of detailed monthly trip, session, and breadcrumb GPS data reporting by the HV companies, TLC determined that adding a distance-based utilization rate to the formula will more accurately reflect current industry dynamics and the function and intent of the utilization rate portion of the formula. This approach also aligns New York City with other jurisdictions that have adopted similar driver pay formulas.¹⁶ The distance-based utilization rate as estimated using data from May 2023 through April 2024 was 68.5%. TLC will also update its data specifications so that distance-based utilization rates may be calculated more easily in the future.

To further reduce the incentive to restrict driver access to the apps and align TLC's driver pay rules with the approach of other jurisdictions, TLC will not automatically calculate and adjust applied utilization rates going forward. Instead, TLC will monitor and publish utilization rates and alter such rates through the rulemaking process as needed to reflect changing industry dynamics.

Together, TLC's proposed increase in the per-mile driver expense rate, alteration of the time- and distance-based utilization rates, and the expected increase to the per-minute pay rate

¹⁵ Another way that the 2018 Report proposed that HV companies could maintain high utilization rates was through an increase in shared rides as a way to operate the fleet more efficiently and increase the proportion of passenger time by linking trips. Instead, since February 2019 (the month that the driver pay rules first went into effect), HV shared rides have declined by about 95%.

¹⁶ See reports on Seattle, https://www.seattle.gov/documents/Departments/LaborStandards/Parrott-Reich-Seattle-Report_July-2020%280%29.pdf, and Minnesota, https://www.dli.mn.gov/sites/default/files/pdf/TNC_driver_earnings_analysis_pay_standard_options_report_030824.pdf.

pursuant to the CPI-W of approximately 3.93%,¹⁷ will result in **a minimum per-trip payment of approximately \$29.38 for a sample trip** of 7.5 miles and 30 minutes. This reflects **an approximate increase of 6.1% over current rates and 27.7% over the original 2019 rates.**

Finally, while no longer automatically calculating and adjusting applied utilization rates, to minimize the incentive for lockouts, help ensure the efficient operation of the for-hire market and prevent TLC's minimum pay rules from being degraded, TLC is proposing rules that would govern drivers' access to the applications to address the issue of lockouts and HV company manipulation of driver availability data. Specifically, the proposed amendments establish that HV companies would be required to provide 72-hours' notice to any driver who the company will not permit to log into the application to accept trips on a given day. This is primarily intended to ensure that drivers have reasonable expectations of when they will be able to access the applications and thus reasonable expectations of their working hours and incomes.¹⁸ Additionally, the amendments establish that once a HV company has permitted a driver to log into the application to accept trips, the HV company may not log the driver off for the next 16 hours except in certain limited circumstances.¹⁹ This is primarily intended to address the issue of "mid-shift lockouts" whereby drivers, after being able to access the application and perform trips, are periodically and unpredictably logged off by the companies, boosting utilization rates but lowering driver hourly pay. This will also help prevent a "race to the bottom" whereby if one HV company engages in lockouts the other is more likely to follow suit so they are not at a competitive disadvantage. To ensure adequate monitoring and compliance of these requirements, TLC is expanding its data collection from HV companies to include more detailed information on driver lockouts.

TLC's authority for these rules is found in sections 1043 and 2303 of the New York City Charter and sections 19-503 and 19-549 of the New York City Administrative Code.

New material is underlined.

[Material inside brackets indicates deleted material.]

Section 1. Subdivision (j) of section 59D-03 of Title 35 of the Rules of the City of New York is amended to read as follows:

- (j) *Utilization Rate* refers to the percentage of time or distance, in aggregate, that all Drivers who have made themselves available to accept dispatches from High-Volume For-Hire Services spend transporting passengers on trips dispatched by High-Volume For-Hire Services. The Utilization Rate is calculated by dividing the total amount of time or distance those Drivers spend transporting passengers on trips dispatched by High-Volume

¹⁷ TLC calculates the percent increase in the annual average CPI-W in January, which is applied March 1. Because TLC is proposing an independent increase in the per-mile rate pursuant to the driver expense study based on data collected in 2024, in 2025 only the per-minute rate will be increased in accordance with the change in CPI-W.

¹⁸ This 72-hour notice requirement is similar to New York City's scheduling requirement for retail workers. *See* Ad. Code Title 6 § 7-650(b) ("such work schedule must be . . . transmitted electronically no later than 72 hours before the employee's first shift on the work schedule").

¹⁹ TLC is proposing 16-hour lockout protections because, according to TLC data, the overwhelming majority of HV drivers work a total of less than 12 hours a day, but will often take breaks during the day to maximize their earnings, for example working six hours during the morning rush hour, taking a mid-day break, and then six hours during the evening rush hour.

For-Hire Services, by the total amount of time or distance Drivers are available to accept dispatches from High-Volume For-Hire Services, have been dispatched by a High-Volume For-Hire Service to pick up a passenger but do not have a passenger in the vehicle, and are transporting passengers on trips dispatched by a High-Volume For-Hire Service.

§ 2. Subparagraphs (iv) and (v) of paragraph (2) of subdivision (a) of section 59D-14 of Title 35 of the Rules of the City of New York are amended to read as follows:

- (iv) The geographic position of the Vehicle during the entire time the Vehicle is available to accept dispatches from the High-Volume For-Hire Service at intervals no less frequent than every sixty (60) seconds, with a designation of the Vehicle status at each geographic position and the distance traveled since the previous geographic position
- (v) The date and time at which the Vehicle became unavailable to accept dispatches from the High-Volume For-Hire Service, or was prevented from becoming available, with a designation of the reason for the Vehicle unavailability including failure to meet licensure requirements, violation of TLC rules, violation of company rules or policies, and supply management

§ 3. Paragraph (1) of subdivision (a) of section 59D-22 of Title 35 of the Rules of the City of New York is amended to read as follows:

- (1) *Per Mile Rate.* For each mile a Driver transports a Passenger in the City on a trip dispatched by the High-Volume For-Hire Service, the High-Volume For-Hire Service must pay the Driver no less than [\$0.762] \$0.879 per mile for a trip dispatched to a Vehicle that is not an Accessible Vehicle and [\$0.987] \$1.061 for a trip dispatched to an Accessible Vehicle, divided by the High-Volume For-Hire Service's Utilization Rate, and for trips that begin in the City but end outside of the City, the Base must pay the Driver no less than [\$1.523] \$1.758 per mile for a trip dispatched to a vehicle that is not an Accessible Vehicle and no less than [\$1.975] \$2.122 per mile for a trip dispatched to an Accessible Vehicle for each mile a Driver transports a Passenger outside of the City; and

§ 4. Subdivision (b) of section 59D-22 of Title 35 of the Rules of the City of New York is amended to read as follows:

- (b) *Applied Utilization Rate.* The applied Utilization Rate for purposes of calculating the per-minute [and per-mile rates] rate for all High-Volume For-Hire Services will be [58%] 53.3%. The applied Utilization Rate for purposes of calculating the per-mile rate for all High-Volume For-Hire Services will be 68.5%. [Each January, the Commission will calculate the Utilization Rate for all High-Volume For-Hire Services for the prior calendar year. If the Utilization Rate for all High-Volume for

Hire Services for the prior calendar year is at least 53%, the applied Utilization Rate will be 58% for the following calendar year. If the Utilization Rate for all High-Volume For-Hire Services for the prior calendar year is below 53%, the applied Utilization Rate for all High-Volume For-Hire Services for the following year, effective from the immediately following March 1 until the subsequent March 1, will be the actual Utilization Rate from the previous calendar year.]

§ 5. Section 59D-22 of Title 35 of the Rules of the City of New York is amended by adding a new subdivision (c), to read as follows:

(c) Driver access to High-Volume For-Hire Service applications.

- (1) Notice requirement. A High-Volume For-Hire Service must provide at least 72 hours' notice to any Driver who could otherwise make themselves available to accept dispatches from that High-Volume For-Hire Service on a calendar day if such High-Volume For-Hire Service will restrict that Driver's ability to accept dispatches on that calendar day.
- (2) Access requirement. A High-Volume For-Hire Service must allow any Driver who has made themselves available to accept dispatches to continue to be available to accept dispatches for at least 16 hours following their initial availability.
- (3) Exceptions. A High-Volume For-Hire Service may restrict a Driver's ability to accept dispatches, without 72 hours' notice, for lack of licensing credentials, violation of TLC rules, and violation of the High-Volume For-Hire Service's rules and policies including misconduct and excessive cancellation or non-acceptance of dispatches.

<u>§59D-22(c)</u>	<u>Fine: \$500 per failure to provide notice or failure to allow Driver access</u>	<u>Appearance REQUIRED</u>
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NEW YORK CITY MAYOR'S OFFICE OF OPERATIONS

253 BROADWAY, 10th FLOOR

NEW YORK, NY 10007

212-788-1400

CERTIFICATION / ANALYSIS

PURSUANT TO CHARTER SECTION 1043(d)

RULE TITLE: Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service

REFERENCE NUMBER: TLC-154

RULEMAKING AGENCY: Taxi and Limousine Commission

I certify that this office has analyzed the proposed rule referenced above as required by Section 1043(d) of the New York City Charter, and that the proposed rule referenced above:

- (i) Is understandable and written in plain language for the discrete regulated community or communities;
- (ii) Minimizes compliance costs for the discrete regulated community or communities consistent with achieving the stated purpose of the rule; and
- (iii) Does not provide a cure period because a cure period is not practicable under the circumstances.

/s/ Francisco X. Navarro

Mayor's Office of Operations

December 26, 2024

Date

NEW YORK CITY LAW DEPARTMENT
DIVISION OF LEGAL COUNSEL
100 CHURCH STREET
NEW YORK, NY 10007
212-356-4028

CERTIFICATION PURSUANT TO
CHARTER §1043(d)

RULE TITLE: Amendment of Driver Pay Rules for High Volume For Hire Vehicle Service

REFERENCE NUMBER: 2024 RG 121

RULEMAKING AGENCY: Taxi and Limousine Commission

I certify that this office has reviewed the above-referenced proposed rule as required by section 1043(d) of the New York City Charter, and that the above-referenced proposed rule:

- (i) is drafted so as to accomplish the purpose of the authorizing provisions of law;
- (ii) is not in conflict with other applicable rules;
- (iii) to the extent practicable and appropriate, is narrowly drawn to achieve its stated purpose; and
- (iv) to the extent practicable and appropriate, contains a statement of basis and purpose that provides a clear explanation of the rule and the requirements imposed by the rule.

/s/ STEVEN GOULDEN

Date: December 26, 2024

Senior Counsel

Exhibit F



VIA ELECTRONIC MAIL

February 4, 2025

Ms. Sherryl Eluto
Deputy Commissioner and General Counsel
New York City Taxi and Limousine Commission
33 Beaver Street, 22nd Floor
New York, NY 10004
elutos@tlc.nyc.gov

Deputy Commissioner Eluto:

I write to express Uber's strong dissatisfaction with the Commission's response to our Freedom of Information Law Request dated December 27, 2024, concerning TLC's driver expense survey and Dr. Parrott's corresponding study. The timing of the Commission's response, received from Ms. Latifah Williams on February 4, 2025, at 1:25 PM ET, is unacceptable because it prejudices Uber's and the public's ability to comment on the proposed rule and participate in the rule making process.

The Commission's unjustified and egregious delay in providing the requested information has effectively sabotaged Uber's ability to conduct a thorough review and submit a comprehensive comment on the proposed rule before tomorrow's 10:00 AM ET Commission meeting. This delay is not only unprofessional but also raises serious questions about the Commission's commitment to transparency and fair regulatory practices.

Given the gravity of this situation, Uber urges the Commission to postpone tomorrow's hearing and extend the comment period to allow all regulated entities, including Uber, sufficient time to analyze the newly provided data, formulate informed responses, and then update their comments as needed.

The Commission's actions have severely undermined the integrity of this regulatory process, resulting in a failure to provide adequate notice to the public and opportunity for the public to comment. We expect swift corrective measures to ensure that all stakeholders can participate fully and meaningfully in these critical discussions that will shape the future of our industry.

Uber reserves the right to pursue all available legal remedies should the Commission fail to address these concerns promptly and adequately.

Respectfully,

A handwritten signature in black ink, appearing to be "ND" or similar initials, written over a light gray grid background.

Nicholas Davoli
Sr. Counsel
Uber USA, LLC

BEFORE THE NEW YORK CITY TAXI & LIMOUSINE COMMISSION

**Additional comment: Amendments to
minimum driver payment rules for HVFHS**

Extended Comment Period: March 5, 2025

**SUPPLEMENTAL COMMENTS OF
UBER USA, LLC AND ITS AFFILIATES**

Joshua Gold
3 World Trade Center
175 Greenwich St., Fl. 47
New York, NY 10007

Senior Director, Policy &
Communications for Uber USA,
LLC

The New York City Taxi & Limousine Commission (the “Commission” or “TLC”) has extended the comment period for its proposed amendments to the minimum driver payment rules for High-Volume For-Hire Services (the “Proposed Rule”) until March 5, 2025. Despite extending the comment period, the Commission has yet to confirm that it will make changes to address the concerns detailed in Uber’s prior comment on the Proposed Rule. Those concerns, identified by Uber and other commenters, must be addressed and Uber again urges the Commission to refrain from making yet another change to the HVFHS industry at a time of already significant change, and until the record reflects a rational basis for such changes.

Uber submits this additional comment (and reincorporates by reference the entirety of its prior comments) to address a number of concerns raised during the February 5, 2025, public hearing on the Proposed Rule regarding erroneous assumptions about vehicle depreciation and the reference to the IRS mileage reimbursement rate.

Uber also submits this comment to reiterate and further explain that the Proposed Rule is premised on an unreliable survey and insufficient data and analysis. As noted in Uber’s prior comment, the Commission declined to heed multiple requests for information from Uber related

to the decision to promulgate the Initial and Amended Rules. On the eve of the February 5 public hearing, the Commission made for the first time a partial response to one of Uber's Freedom of Information Law requests disclosing survey questions and some underlying materials informing its analysis. At the same time, TLC also released a revised Parrott Study correcting erroneous calculations from the prior version while still leaving unexplained why certain factors underlying those calculations were given particular "weights" other than TLC's say so. Review of the materials that were made available at the eleventh hour before the prior hearing confirms Uber's initial contention that the survey and resulting report is an unreliable source upon which to base this rulemaking.¹ Moreover, there is no indication that TLC made these materials available to the general public. Depriving the public of an opportunity to comment on the rule.

I. TLC SHOULD CONSIDER WHETHER ALTERNATIVE POLICY CHANGES MUST BE CONSIDERED BEFORE UPDATING DRIVER PAY ASSUMPTIONS TO REFLECT CURRENT POLICY UNCERTAINTY

As Uber noted in its prior comment, much of the impetus for updating the driver expense model is the result of TLC's own policy initiatives: namely, the cap on new for-hire vehicle (FHV) licenses leading more drivers to rent and the electric vehicle dispatch mandate in the Green Rides Initiative. Uber has previously explained that both of these efforts could impose costs for drivers and the many city residents who rely on FHV's for their transportation needs. TLC's Proposed Rule underscores precisely how these other initiatives may lead to higher expenses, and as outlined by a number of commenters during the February 5 Public Hearing, TLC should seriously consider whether changes are needed to those policies before updating its assumptions about the composition of driver pay expenses.

As to the FHV cap, several commenters noted concerns with TLC's restriction on new license plates. These commenters underscored Uber's concern that the cap may require drivers to undertake less efficient arrangements, such as greater reliance on rentals, and presented various alternatives for TLC to consider. TLC should reform the cap regime to relieve pressure on drivers and defer reevaluating the composition of driver expenses until settling on a new policy approach

¹ The list of items disclosed by TLC and reviewed by Uber are listed at Exhibit A. This partial disclosure fails to fully meet TLC's obligation to make a full disclosure of relevant materials, and the partial disclosure of material that was made demonstrates that the Parrott Study and the Proposed Rule are not justified.

to this issue. TLC's purported study revealed that TLC does not have a solid grasp on the functioning of the rental market. Similarly, as to the Green Rides Initiative, commenters emphasized various challenges with relying on electric vehicles and at least one driver requested that TLC revise the Green Rides Initiative to allow hybrid cars until and past 2030. As a whole, this testimony confirmed that TLC should reconsider policy choices that may lead to certain costs rather than retrofit a driver expense model to make up for the Commission's less than efficient policy choices.

Rather than embark on a wholesale recalculation of driver pay expenses based on policy decisions that remain in flux, Uber maintains that the more prudent approach for the Commission would be to reconsider those policy decisions, allow the FHV industry to equilibrate to those changes, and then proceed to determine what if any additional changes are needed to comply with the statutory directive to accurately account for actual driver expenses.

II. TLC'S DEPRECIATION ASSUMPTIONS FAIL TO REFLECT THE REAL-WORLD RESALE VALUE

A significant assumption in TLC's driver expense model outlined in a report commissioned from Dr. James A. Parrott and the Center for New York City Affairs at the New School (the "Parrott Study") is that the residual resale value of vehicles in the for-hire vehicle industry is fully depreciated after five years. This approach does not reflect the empirical reality of vehicle resale values in the FHV industry, or the fact that five year and older vehicles provide economic value and opportunities to for-hire drivers as detailed in Uber's prior comment.

To begin, TLC itself recognized that vehicles have residual value beyond five years in a comment it made on an earlier draft of the Parrott Study, noting: "FHV's can be in service for more than five years, so there's residual value in their use as FHV's beyond the five-year mark."² This was not merely a stray comment on a draft report but an assumption evident from other TLC rulemaking. TLC's Green Rides Initiative identifies correctly that vehicles remain on the road for seven years. To this day, TLC has not yet adequately explained this inconsistency in fact finding and policy, which undermines a key assumption of the driver expense model. With regard to the Proposed Rule, TLC's approach was not to properly attribute residual value to vehicles of five

² DRAFT v7 updated expense report 12-4-24 TLC.pdf, at 3, attached hereto as Exhibit B.

years but simply to add a caveat to the Parrott Study that TLC assumes such cars have no “residual resale value.” But this half-hearted caveat also defies empirical reality. Uber has reached out to fleet owners operating in New York City, who confirm that vehicles used in FHV service for up to 10 years can still be sold for \$3,000–\$5,000. And TLC data confirms that there are a multitude of vehicles that are older than five years completing trips in New York City.

Ultimately, TLC’s five-year depreciation approach is at odds with industry norms and demonstrably false. Any minimum pay model must be updated to more accurately capture true residual value past five years. At a minimum, that should entail accounting for at least a seven-year depreciation approach consistent with the assumptions of the Green Rides Initiative, the depreciation schedule for medallion taxicabs, and the actual depreciation reflected in actual trip data. But even more accurate would be a longer depreciation window such as 10 years. More generally, the fact that TLC proceeded with such an erroneous assumption suggests a deficiency in its overall approach. As Uber has done for residual value, TLC should verify the numerous assumptions made in the Parrott Study by reaching out to fleet owners and reviewing actual data on vehicles in use. Failure to do so has led to an inaccurate and inflated assessment of driver expenses.

III. TLC MISAPPLIES THE IRS MILEAGE REIMBURSEMENT RATE

During the public hearing, TLC cited the IRS mileage reimbursement rate as a justification for its depreciation approach. Moreover, TLC claimed that Uber recommends drivers use the IRS mileage reimbursement for their tax filing and thus it is a valid basis for measuring NYC’s for-hire drivers’ real-life expenses. TLC’s claims are misleading and misapply the IRS mileage reimbursement rate to this inappropriate context. First, the IRS mileage reimbursement rates use accounting depreciation, but the proper measure for driver expenses is economic depreciation. Accounting depreciation follows fixed schedules dictated by tax policy, often for the purpose of expensing costs rather than reflecting market realities. Moreover, the depreciation structure may be set to achieve a policy purpose (such as allowing for accelerated depreciation to stimulate investment). It also makes simplifying assumptions and incorporates data points to make it easier for taxpayers to use it, at the expense of accuracy or relevancy to for-hire drivers in NYC. For example, the IRS rate includes vans, pickups, and panel trucks, all with high cost per-mile and uncommon on Uber. TLC’s statutory mandate is to consider actual “expenses of operation to the

driver,” N.Y.C. Admin. Code § 19-549(b), and thus economic depreciation is the appropriate approach for determining driver costs because drivers use vehicles to derive income, and economic depreciation is based on actual economic value. Economic depreciation measures the actual loss in value of an asset over time, accounting for real-world resale value and other factors like income generation.

Furthermore, even the IRS acknowledges residual value that is at odds with TLC’s assumptions. The IRS depreciation schedules assume residual value after five years, meaning a vehicle is not considered to be worthless at the end of the depreciation period. Additionally, the IRS requires depreciation recapture—meaning that if a taxpayer claims more depreciation than the car’s actual loss in value, they must pay back the excess upon sale. This underscores the fact that residual value is a recognized principle, including under IRS rules.

TLC must revise its depreciation methodology to align with available data points on real-world vehicle values. Continuing to assume zero residual value contradicts both market data and TLC’s own recent determinations in connection with the Green Rides Initiative. Additionally, citing the IRS mileage reimbursement rate as justification for this approach is inappropriate, as even the IRS recognizes and accounts for residual value. A fair pay formula must be based on accurate economic assumptions. Uber urges TLC to correct its depreciation model to ensure a more just and realistic approach to driver compensation.

IV. THE LIMITED SURVEY MATERIALS DISCLOSED BY TLC CONFIRM THAT THE SURVEY INSTRUMENT WAS UNRELIABLE

On the eve of the initial comment period, TLC disclosed for the first time a limited set of survey materials in response to information requests by Uber. These materials appear to have been disclosed only in response to Uber’s FOIL request, but should have been made available to the public. Although this limited release of materials remains inadequate to fully assess the reliability of TLC’s survey and fails to fully address Uber’s FOIL requests, the documents that were made available underscore significant flaws in the survey and establish that it is an unreliable basis for TLC’s Proposed Rule. To inform this comment, Uber requested that Dr. Kristin Backor—who has over fifteen years of experience in survey best practices and conducting reliable empirical social science research—update her initial assessment of Dr. Parrott’s study and the TLC survey (appended to Uber’s prior comment) to reflect the survey materials disclosed by TLC. Dr. Backor

has prepared a supplemental report, attached as Exhibit C to this comment, confirming her initial view that the flaws in the methodology and design of the TLC survey render it critically flawed and mean its results are unreliable for drawing the conclusions that TLC relied upon for its Proposed Rule.

As detailed in Dr. Backor's Supplemental Report, the "Survey Questionnaire" ("Questionnaire") which is attached to the Supplemental Report in Appendix E, reveals multiple sources of survey bias that undermine the accuracy of the responses. A threshold deficiency is that the Questionnaire shows that survey respondents had explicit knowledge of the purpose of the survey. Given that respondents were apprised the goal was to inform driver pay, there was significant risk they might offer (even unintentionally) biased responses overstating expenses, which raises the question of whether this was TLC's and/or Dr. Parrott's intent.

The Questionnaire also confirms Dr. Backor's initial concern that the survey failed to implement controls to prevent respondents from guessing (e.g., by allowing answers indicating they "don't know" or were "unsure") or to ensure respondents were only answering questions about which they had personal knowledge. Although TLC neglected to produce any documents revealing how the survey was administered or whether certain questions could be skipped (i.e., "skip logic"), the documents that were produced further indicate that respondents could answer questions about which they had no familiarity. For example, 1,306 respondents answered Question 4.1, which asked where they charge their electric vehicle, but per the Parrott Report only 686 respondents indicated that they own or rent an electric vehicle. Relatedly, the survey questions were worded in a way that could have led to double counting, such as failing to distinguish between Uber and Lyft.

Another significant flaw in the survey was that the questions were asked in a manner that heightened the risk of recall bias. As Uber noted in its prior comment, TLC could have based its expense estimates on readily available, more reliable and independent sources (e.g., AAA estimates of maintenance costs or rental rates estimates from lease contracts in TLC's possession). Indeed, in prior rulemakings, TLC itself declined to proceed on the basis of survey results because "limited self-reported figures were not reliable enough to use in updating the expense

calculations.”³ Rather than adhere to that more prudent approach here, TLC instead proceeded with survey questions highly susceptible to recall bias, without any appropriate controls such as providing specific instructions regarding sources respondents should consult to answer the questions or narrow, targeted timeframes for their responses. To take one example, the answer choices in Question 4.2 normalize a baseline of once-a-day charging, without any explanation or clarification in the survey or report as to why that timeframe was selected. The consequence was survey results where even TLC voiced concern about the conclusions drawn, such as comments on prior versions of the Parrott Study noting unusual or potentially overstated results with regard to the total number of drivers who lease a vehicle.⁴

Ultimately, these deficiencies in TLC’s survey may only scratch the surface. TLC should release all of the materials gathered in connection with the survey. As Dr. Backor underscored in her Supplemental Report, the survey materials disclosed by TLC are an insufficient set of material with which to evaluate the validity of the TLC survey. However, given the flaws evident from the face of the materials thus far disclosed, TLC should not base its rulemaking on this single, unreliable survey and, to the extent it is determined to proceed with additional rulemaking, be limited to only verifiable data sources.

³ New York City Taxi & Limousine Commission, Proposed Amendment of Rules Relating to Payment of High Volume For Hire Vehicle Drivers -- REVISED (Jan. 24, 2023), <https://rules.cityofnewyork.us/wp-content/uploads/2023/01/TLC-Proposed-Amendment-of-Rules-re-Payment-of-High-Volume-For-Hire-Vehicle-Driver-REVISED-Preliminarily-Certified-1.24.23.pdf>

⁴ See Draft v2 updated expense report 9-29-24 TLC, at 10, attached hereto as Exhibit D; 10-3-24 expense report update and response to TLC comments on 9-29 draft, ¶ 2, attached hereto as Exhibit E.

Exhibit A

Items Disclosed by TLC

- 1 10-3-24 Expense Report Update and response to TLC comments on 9-29 draft.pdf
- 2 11-25 scenarios.xlsx
- 3 Agreement_Redacted.pdf
- 4 DRAFT v1 updated expense report 9-25-24a.pdf
- 5 DRAFT v2 updated expense report 9-29-24.pdf
- 6 DRAFT v2 updated expense report 9-29-24_TLC.pdf
- 7 DRAFT v3 updated expense report 10-7-24.pdf
- 8 DRAFT v3 updated expense report 10-7-24_TLC comments.pdf
- 9 DRAFT v4 updated expense report 11-24-24.pdf
- 10 DRAFT v4 updated expense report 11-24-24_TLC comments.pdf
- 11 DRAFT v5 updated expense report 12-3-24.pdf
- 12 DRAFT v7 updated expense report 12-4-24 TLC.pdf
- 13 DRAFT v7 updated expense report 12-4-24.pdf
- 14 Driver survey selected results EV owners vs nonEV owners 8-5-24.xlsx
- 15 EZ leasing_Redacted.pdf
- 16 FINAL TLC EXPENSE REPORT DEC 13 2024.pdf
- 17 FINAL TLC EXPENSE REPORT DEC 27 2024a.pdf
- 18 FT Weekly Rental Agreement_Redacted.pdf
- 19 Key questions re. the Sept. 29 revised draft.pdf
- 20 lease contract_Redacted.pdf
- 21 LTR to TLC re FOIL Responses 2025.02.04.docx
- 22 Outline for updated expense report.pdf
- 23 Outline for updated expense report_TLC comments.pdf
- 24 Parrott NYDN op-ed delivery pay standard 8-9-24.pdf
- 25 Q2.1 and 5.7 expectations re EV or WAV by own-lease.xlsx
- 26 Qualtrics Survey Software.pdf
- 27 Rental Agreement_Redacted.pdf
- 28 Rental Contract_Redacted.pdf
- 29 Revised 11-22 Exhs 12, 13, 14 + appendix for Exh 12.xlsx
- 30 Russell Sage driver survey_TLC comments.pdf
- 31 Suggested agenda for Nov 15.pdf
- 32 TLC expense proj workplan ver 1.pdf
- 33 TLC New School Final Signed Contract.pdf

Exhibit B

DRAFT 12-4-24 v7

Revised Expense Model for the NYC Taxi and Limousine Commission's High-Volume For-Hire Vehicle Minimum Pay Standard

December 2024

James A. Parrott, Center for New York City Affairs at The New School

Report for the New York City Taxi and Limousine Commission

Acknowledgements

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Executive Summary

The New York City Taxi and Limousine Commission's (TLC) minimum pay standard for High-Volume (HV) For-hire Vehicle (FHV) drivers includes per minute trip time and per mile trip distance components. Uber and Lyft drivers provide HV-FHV services as independent contractors using vehicles that they own or rent. Drivers have significant personal investment in their vehicles, and it is essential for the effective functioning of the HV-FHV market for drivers to be compensated fully for their time on the app as well as for all of the vehicle-related expenses they incur.

The HV-FHV vehicle fleet has evolved considerably since the inception of the pay standard in 2019. There are many more SUVs of various sizes (52 percent of the total) and electric vehicles, and the TLC is phasing in a policy that will require all HV-FHVs to be either electric or wheelchair accessible vehicles (WAVs) by 2030.

In light of these developments, the TLC commissioned this report to develop an updated method to quantify vehicle expenses and suggest appropriate modifications to the pay standard's per mile trip distance component for HV-FHV and wheelchair accessible trips. This report is based on an extensive survey of drivers regarding current expenses, current data on the vehicle fleet, research on the cost of charging electric vehicles (EVs), additional investigation into the costs of renting a TLC-registered vehicle, and research on vehicle-related costs.

The TLC sent a link to an anonymized and confidential survey to its email list of 89,000 HV drivers providing at least 100 trips between November 2023 and May 2024. The survey was fielded in the early summer of 2024, generating over 6,750 responses, with between 3,000-4,500 substantially completed surveys. For key questions, the response rate was 4-5 percent.

The demographics and driving characteristics of survey respondents fairly represent the universe of all HV-FHV drivers. Survey responses indicated that 95 percent of drivers are male, 91 percent were born outside the United States, and 86 percent are non-white. Forty percent of drivers were born in Asia, 27 percent hail from the Caribbean, Central or South America, and 17 percent were born in Africa or the Middle East. Workers tended to be prime-age (78 percent were between ages 25 and 54), with 19 percent 55 or older but only three percent ages 24 or younger.

Those responding to the survey largely drive full-time for Uber or Lyft (81 percent usually drove 32 hours or more per week), have done so for years (56 percent have driven for a for-hire company for five years or more), and 80 percent reported that driving is their sole source of income. The high proportion of survey respondents who drive full-time lines up with TLC trip data showing that three-quarters of all trips in 2023 were provided by those who drive 30 or more hours weekly. The distribution of responses by ownership status and vehicle type (internal combustion engine, ICE, or EV) also lined up with 2023 trip patterns.

The driver survey was the primary source of information on driver expenses for vehicle cost or rent, insurance and maintenance. Median and average responses were considered in tandem with other research on vehicle costs. Fuel costs for ICE vehicles were estimated using government vehicle mileage ratings and average gas costs for the previous six months. Electric vehicle

charging costs were derived using survey data on charging mode and times, electricity costs, and industry sources on charging times.

This report recommends a composite per mile cost factor reflective of vehicle cost structures along two dimensions: owned vs. rented, and internal combustion engine (ICE) vs. electric (EV) vehicles. Cost structures reflecting acquisition (or rental) costs, insurance, maintenance, and fuel or battery charging costs were compiled for each of the four vehicle categories and weighted to reflect each category's projected share of high volume trips for 2025. The trip weights for the composite per mile cost factor are owned ICE vehicles (.583), rented ICEs (.292), owned EVs (.083) and rented EVs (.042). Since most WAVs in current use are hybrids (there are no all-electric WAVs), the WAV-specific composite per mile factor is based on 70 percent of WAVs being owned and 30 percent rented.

The expense factor is geared to full-time drivers who provide the bulk of all HV trips and who purchased a vehicle for the purpose of driving for hire, as 93 percent reported in our driver survey. The average full-time driver logs 32,500 miles annually and owner-drivers typically finance the purchase of their vehicles over five years. A vehicle driven intensively providing for-hire vehicle passenger services for five years on the streets of New York City would likely be fully depreciated after five years with minimal residual resale value.

For the thirty percent of vehicles that are rented, it costs 25-30 percent more to rent a vehicle than to own one for use in providing HV-FHV services. This differential largely stems from the 20.875 percent sales tax on short-term vehicle rentals, higher insurance costs, and a "registration rent" that is a function of the costs and administrative burden of getting a vehicle licensed by TLC and the agency's limitation on the issuance of new vehicle licenses. An individual seeking to drive for Uber or Lyft cannot otherwise go out and purchase a vehicle and have it registered. When the TLC opened applications for EV-only FHV licenses, many new drivers took the opportunity to acquire an EV that could then be registered as an HV-FHV.

The analysis of EV expenses factored in a nominal allowance for drivers to be paid for some of the time they spend waiting for access to a charging station and for vehicle batteries to be charged. This is necessary since most city residents live in apartments or other multi-family homes and have to rely on public charging facilities.

While EV maintenance costs are less than for ICE vehicles, per mile battery charging costs were 19.6 cents compared to 13 cents for ICE vehicle fuel costs. Overall, per mile costs to own and operate an EV were 17 percent higher than for an ICE vehicle.

The composite \$0.879 per mile factor for non-WAV trips that this report derives is 11.4 percent higher than the existing \$0.789 per mile factor in effect since March 1, 2024. Under the existing pay standard regulation, even without a change in the underlying methodology, the expense factor would rise on March 1, 2025, by the annual average change in the Consumer Price Index for Urban Wage Earners and Clerical Workers for 2024, which has averaged 3.9 percent so far through the first 10 months. When combined with the per minute factor in determining the overall minimum pay standard, the proposed \$0.879 per mile factor would raise average driver

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trip pay by 2.7 percent compared to simply adjusting both the per minute and the per mile factors on March 1, 2025, by the CPI change.

Per mile fuel costs for WAVs were lower than for non-WAVs given the prevalence of more fuel-efficient hybrids, but the overall composite (70 percent owned, 30 percent rented) WAV per mile factor was \$1.061. This is 3.9 percent higher than the current WAV \$1.021 per mile expense factor in effect since March 1, 2024.

The revised expense model developed in this report has been designed so that any future updates can be made by TLC staff based on changes in such parameters as the proportions of EV and rented vehicles, or industry-wide changes in insurance and fuel/charging costs.

1. Updating the TLC's HV-FHV pay standard's expense factor

The New York City Taxi and Limousine Commission's (TLC) minimum pay standard for High-Volume (HV) For-hire Vehicle (FHV) drivers includes time and distance components.¹ The distance component is intended to compensate drivers for their vehicle expenses and is expressed as a per mile factor. In the initial pay standard taking effect in February 2019, the per mile factor was \$0.631. **Exhibit 1** shows the expense model from the [January 2019 report](#) that is the basis for the initial \$0.631 per mile factor.

Exhibit 1

2019 Initial HV-FHV Expense Model (non-WAV)

[based on 35,000 annual miles]

Expense Category	Specific Expenditure Item	Annual	Weekly	Per Mile
One-Time--all amortized over 5 years				
	TLC 24-hour course--one time \$175	\$35.00	\$0.67	\$0.001
	TLC 24-hour course exam--one time \$50	\$10.00	\$0.19	\$0.000
	DMV E class license--one time \$113	\$22.60	\$0.43	\$0.001
	TLC fingerprinting--one time \$88.50	\$17.70	\$0.34	\$0.001
	WAV sensitivity training--one time \$60	\$12.00	\$0.23	\$0.000
	SubTotal	\$97.30	\$1.87	\$0.003
Recurring				
	TLC driver license--\$252 every 3 years	\$84.00	\$1.62	\$0.002
	TLC drug test	\$26.00	\$0.50	\$0.001
	Vehicle Registration	\$275.00	\$5.29	\$0.008
	TLC and DMV vehicle inspection	\$130.00	\$2.50	\$0.004
	years	\$16.67	\$0.32	\$0.000
	DMV new plates	\$5.00	\$0.10	\$0.000
	DMV vehicle license and plate renewal	\$400.00	\$7.69	\$0.011
	DMV vehicle use tax	\$40.00	\$0.77	\$0.001
	DMV commercial motor vehicle tax	\$400.00	\$7.69	\$0.011
	SubTotal	\$1,376.67	\$26.47	\$0.039
Operating				
	Gas	\$3,663.64	\$70.45	\$0.105
	Vehicle payment	\$9,608.75	\$184.78	\$0.275
	Commercial insurance	\$4,745.74	\$91.26	\$0.136
	Vehicle maintenance	\$1,659.51	\$31.91	\$0.047
	Vehicle cleaning	\$936.00	\$18.00	\$0.027
	SubTotal	\$20,613.64	\$396.42	\$0.589
	TOTAL	\$22,087.61	\$424.76	\$0.631

Source: Parrott, Reich, Rochford and Yang, *The New York City App-Based Driver Pay Standard, Revised Estimates for the New Pay Requirement*. Prepared for the NYC Taxi and Limousine Commission, Jan. 2019.

¹ See the NYC Taxi and Limousine Commission "Driver Pay" webpage." <https://www.nyc.gov/site/tlc/about/driver-pay.page>. For an analysis of the app-dispatched for hire vehicle industry and the rationale for the minimum pay standard, see James A. Parrott and Michael Reich, *An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment*, Prepared for the New York City Taxi and Limousine Commission, July 2018. <https://www.centernyc.org/an-earnings-standard>.

HV-FHV drivers provide individualized transportation services for passengers seeking to travel from point A to point B who are customers of the rideshare companies Uber and Lyft. Drivers provide these services as independent contractors using vehicles owned or rented by the drivers. Drivers have significant personal investment in their vehicles, and it is essential for the effective functioning of the HV-FHV market for drivers to be compensated fully for their time on the app as well as for all of the vehicle-related expenses they incur.

This report is a comprehensive update of that initial expense model based on an extensive driver survey regarding current expenses, current data on the vehicle fleet, research on the cost of charging electric vehicles (EVs), additional investigation into the costs of renting a TLC-registered vehicle, and related research on vehicle-related costs.

The pay standard regulation adopted in December 2018 included an automatic inflationary adjustment. There have been adjustments to both the time and distance components since 2019 in early 2020, 2022, 2023 and 2024. Due to Covid-19, there was not an adjustment in 2021. Generally, the annual adjustments are based on the change in the CPI-W. In 2023, however, since vehicle and gasoline costs rose much faster than the overall CPI in the prior year, the transportation component of the CPI-U was used to adjust the distance component. As **Exhibit 2** indicates, the current per minute and per mile factors effective March 1, 2024, are \$0.338 per trip minute and \$0.788 per trip mile.

(Both factors are divided by utilization to “scale up” pay so that drivers are paid for all of the time they are on the app and available to provide services and for all of the miles they drive during that time.)

Exhibit 2

NYC HV-FHV minimum pay factors (non-WAV, in-town) set by the TLC

effective date	per minute	per mile *		per minute	per mile *
				% ch. from prior period	
2/1/2019	0.287	0.631			
3/1/2020	0.291	0.640		1.4%	1.4%
3/1/2022	0.307	0.673		5.5%	5.2%
2/1/2023	0.327	0.714		6.5%	6.1%
3/13/2023	0.327	0.762		0.0%	6.7%
3/1/2024	0.338	0.788		3.5%	3.5%
* The transportation component of the regional CPI-U series (the series utilized in the TLC March 1, 2023 proposal), increased by 20.7 percent between 2018 and 2022.					

As Exhibit 1 indicates, the TLC HV-FHV expense model includes three categories of expenses: one-time, recurring and operating. The first two include fees for TLC training programs, vehicle

inspections, and various driver license or vehicle registration fees and taxes. These one-time and recurring expenses are a relatively minor portion of the overall per mile factor. The focus in this memo is on vehicle operating costs for fuel, maintenance, insurance and cleaning as well as payments (loan or rental) that give the driver access to the vehicle and represent depreciation or the wear and tear on the vehicle that erodes its value over time.

Annual cost of living adjustments to the per mile factor do not capture structural changes that have occurred in the industry. Three significant structural changes have occurred that affect driver vehicle cost.

- First, there has been a steady shift from sedans to mid-size SUVs to provide standard (non-premium priced) HV services.
- Second, there has been an increase in the relative importance of Wheelchair-Accessible-Vehicles (WAVs) and electric vehicles (EVs), partly because these vehicles have been the only vehicle types exempt (for policy reasons) from a limitation on the issuance of new FHV licenses that has been in place since August 2018.
- And third, as part of a broader shift on the part of the City of New York to respond to the climate crisis, the TLC adopted a Green Rides Initiative (GRI) in October 2023 that mandates that five percent of all HV-FHV rides in 2024 be in either zero-emission vehicles or WAVs. The mandate rises to 15 percent in 2025, 25 percent in 2026, 40 percent in 2027 and increases by 20 percent a year over the next three years, reaching 100 percent in 2030.

This last factor—the GRI—has already dramatically increased the share of trips by EVs and WAVs. In August 2024, 19.7 percent of all trips were performed by EVs or WAVs, up from 8.4 percent in April 2023. In August 2024, EVs provided 11 percent of all trips and WAVs 8.4 percent—most of the growth in the combined share resulted from increased EV trips.

This report updates vehicle costs and proposes two per mile factors, one that is a composite per mile factor for non-WAV vehicles (reflecting a combination of gas/hybrid (or internal combustion engine, hereafter ICE) vehicles and EVs and drivers who rent as well as own), and one that is specific to WAVs (**Appendix Exhibit 1** shows the initial WAV expense model implemented in February 2019.) WAVs generally are larger, heavier (as are EVs) and more costly vehicles due to the conversion necessary to make the vehicle wheelchair-accessible.

2. The 2024 HV-FHV vehicle fleet

To inform an analysis of the costs of operating vehicles providing HV-FHV services, it is important to understand the characteristics of the HV fleet. The TLC maintains a list of all vehicles registered to provide FHV services, a broad category of service that includes traditional livery car and limousine services as well as HV-FHV services. The FHV list includes information on Vehicle Identification Number (VIN), TLC plate number, WAV-equipped, and ownership data. Plate numbers were matched to a file containing HV-FHV trip information to identify FHVs on the list that were used for HV-FHV trips for the six months through July 15, 2024. The VINs were used to determine fuel type, make, model, year and vehicle body class. Data were also compiled on the average monthly number of HV-FHV trips performed by each vehicle for the six-month period through January 2024.

Exhibit 3 shows the characteristics of the 86,728 FHVs actively involved in providing HV services at the beginning of 2024. Over half (52 percent) of all vehicles were either mid- or full-size SUVs while 36 percent were sedans and 12 percent were minivans or vans.

For the purposes of developing a non-WAV and WAV per mile expense factor, vehicles were divided into three groups based on fuel type and WAV status as shown in Exhibit 3. Internal combustion engine (ICE) non-WAV vehicles accounted for 85 percent of all vehicles, with EVs accounting for eight percent and WAVs 7 percent.² (As of July 2024, there were no electric WAVs in the vehicle registry.) Since the cost and fuel charges differ between ICE vehicles and EVs, operating costs are estimated separately for non-WAVs and blended into an overall weighted average. About 30 percent of both EVs and non-EVs are rented rather than owned directly by the driver. The overall weighted expense factor also blends EVs and ICE vehicles by whether they are owned or rented.

While not shown separately in Exhibit 3, there are a little over 10,000 luxury vehicles that constitute 12.5 percent of all non-WAV vehicles used for HV services.³ We identified luxury models as those that qualify for Uber's premium-priced UberXL or Uber Black services and are model year 2019 or more recent. Passenger fares and driver payments are higher for premium-priced services. Lyft has a similar listing of vehicles for its premium-priced XL and Black services.⁴

Non-luxury, non-minivan ICE vehicles total a little over 62,500 HV-FHVs and constitute the core of the current fleet providing standard Uber and Lyft services. There has been a steady growth in the use of SUVs to provide these core services over the years. This is reflected in the shifting shares of sedans and SUVs by model year. In the current core fleet, 57 percent of the model years through 2019 are sedans but this share declines to 32 percent for the 2020-24 model

² In this report, we refer to gas and hybrid vehicles as internal combustion engine (or ICE) vehicles.

³ The luxury share of vehicles is based on CNYCA analysis of the July TLC HV-FHV fleet.

⁴ With the exception of a little over 250 Mercedes Metris vehicles, luxury models are not generally used for WAV services.

years. The SUV share of model years through 2019 was 40 percent, rising to 68 percent for 2020-24 model years.

Exhibit 3

Fuel type, body class, and WAV status of vehicles in the current HV-FHV fleet

<i>vehicle body class</i>	<i>All</i>	<i>body class share</i>	<i>Ice, non-WAV</i>	<i>EV, non-WAV</i>	<i>ICE WAV*</i>
Sedan and similar	31,445	36%	30,106	1,339	0
SUV and similar	45,245	52%	39,707	5,525	13
Minivan and Van	10,038	12%	4,120	14	5,904
Revised total	86,728	100%	73,933	6,878	5,917
<i>shares of all vehicles</i>	<i>100%</i>		<i>85%</i>	<i>8%</i>	<i>7%</i>

** There were no electric WAVs as of July 2024.*

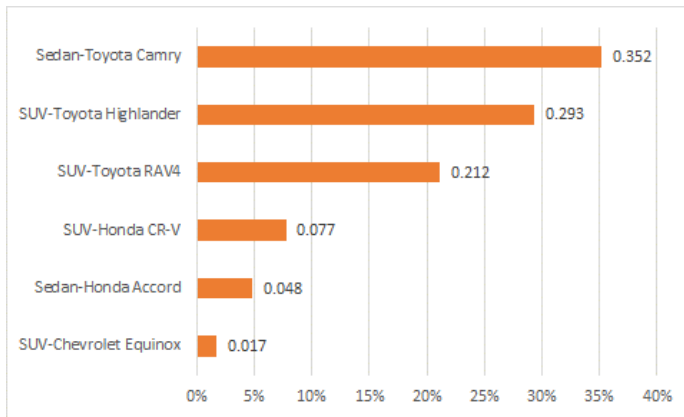
Source: Author's analysis of TLC vehicle and trip data.

Within the sedan and SUV (which includes crossover or mid-size SUVs) bodyclass categories there are a small number of models that provide the bulk of all trips. Using trip data for the six months through January 2024, six models were identified that provided more than three-fourths (76.5 percent) of all trips performed by model-year vehicles from the past 10 years (2015-24). Exhibit 4 shows these six common vehicle models with weights used to determine the overall gas mileage rating factored into the non-EV expense model (non-WAV).⁵

Exhibit 4

Trip-based weights for six most common vehicle models providing HV-FHV non-WAV services

⁵ Reflecting the shift toward more SUVs, the 50-50 trip weighting between the sedan vs. SUV models was adjusted to a 40 percent combined weight for the two sedan models and a 60 percent combined weight for the four SUV models in Exhibit 4.



Source: Author's analysis based on TLC vehicle and trip data. The Equinox model was included based on the popularity of its 2022 and 2023 model years. For the other models, underlying weights are for the 2015-24 model years.

3. 2024 NYC HV-FHV driver survey

This study employed an anonymized and confidential driver survey. The Taxi and Limousine Commission sent a link to the survey to its email list of 89,000 HV drivers providing at least 100 trips between November 2023 and May 2024. The survey ran from June 14 to August 2nd, 2024, generating 6,757 responses, with between 3,000-4,500 substantially completed responses for various questions. For example, there were 4,288 responses to the type of car owned or rented, for a response rate of 4.8 percent. Survey responses required data cleaning and the removal of outliers.⁶

Driver characteristics and driving experience

As described in the 2018 report, HV-FHV drivers are overwhelmingly male and immigrant and rely mainly on their earnings from driving for the passenger services. According to the 2024 survey, 95 percent of drivers are male (compared to 97 percent in 2018), 91 percent were born outside the United States, and 86 percent are non-white. Forty percent of drivers were born in Asia, 27 percent hail from the Caribbean, Latin America or South America, and 17 percent were born in Africa or the Middle East. Workers tended to be prime-age (78 percent were between ages 25 and 54), with 19 percent 55 or older but only three percent ages 24 or younger. See Exhibit 5.

Drivers responding to the survey largely drive full-time for a for-hire company (65 percent usually drove 40 hours or more per week), have done so for years (56 percent of drivers have driven for a for-hire company for five years or more), and relied on for-hire income as their main source of income. Eighty percent of drivers reported that driving is their sole source of income, and another 11 percent reported it was more than half but not all of their income). See Exhibit 6.

Exhibit 5 **Selected demographic characteristics of HV-FHV drivers**

⁶ Generally, outliers in the top 5 percent and bottom 5 percent of most questions calling for quantitative responses were excluded, as well as responses outside the range of what would be considered reasonable (e.g., monthly vehicle payments less than \$120 or greater than \$2,500).

Age	Count	Percentage
19-20	5	0%
21-24	92	3%
25-34	785	23%
35-44	1,124	33%
45-54	725	22%
55-64	469	14%
65+	167	5%
Total	3,367	100%
Gender Identification	Count	Percentage
Male	3,178	95%
Female	154	5%
Non-binary / third gender	6	0%
Prefer not to say	19	0%
Total	3,357	100%
Race/Ethnicity	Count	Percentage
Asian or Asian American	1,213	37%
Hispanic, Latino, Latinx, or Spanish	912	28%
White	470	14%
Black or African American	444	13%
Other	253	8%
American Indian or Alaska Native	9	0%
Native Hawaiian or Pacific Islander	4	0%
Total	3,305	100%
Country of Birth	Count	Percentage
Asia	1,337	40%
Latin America or the Caribbean	723	22%
Africa	424	13%
United States	302	9%
Europe, Canada or Australia	248	7%
Middle East	137	4%
South America	136	4%
Mexico	30	1%
Total	3,337	100%

Source: CNYCA-TLC Driver Survey, June-July, 2024.

Exhibit 6

Drivers' weekly hours, longevity, and reliance on for-hire driving as a source of income

Usual Hours Drive for a For-Hire Company per Week		
	Percentage	Count
Less than 5 hours	1%	30
5 to less than 10 hours	7%	304
10 to less than 20 hours	5%	202
20 to less than 32 hours	6%	290
32 to less than 40 hours	16%	719
40 hours to less than 50 hours	30%	1,342
More than 50 hours	35%	1,575
Total	100%	4,462
Average (hours)	42	
Median (hours)	45	
Length of Time Working as a For-Hire Driver		
	Percentage	Count
Less than 3 months	1%	29
3 months to less than 6 months	1%	68
6 months to less than 1 year	7%	303
1 to less than 3 years	22%	1,006
3 to less than 5 years	13%	569
5 years or more	56%	2,479
Total	100%	4,454
Average (months)	53	
Median (years)	5	
Importance of For-Hire Income		
	Percentage	Count
It is less than 10% of income	3%	131
It is more than 10% but less than half	6%	294
It is more than half but not all of my income	11%	469
It is my sole source of income	80%	3,476
Total	100%	4,370

Source: CNYCA-TLC Driver Survey, June-July, 2024.

Profile of vehicle type and ownership

Nearly two-thirds (64 percent) of HV-FHV drivers owned their vehicle, and 36 percent rented a vehicle. Eighty-four percent of respondents own or rent an ICE vehicle compared to 16 percent who own or rent an EV. See Exhibit 7. As discussed in Section 4 below, for purposes of weighting in the composite expense model, we estimated that 30 percent of drivers rented their vehicles and 70 percent owned.

Exhibit 7

Driver survey responses on ownership vs. renting and ICE vs. electric vehicles

	Count	Percentage
Own an ICE vehicle	2,268	53%
Own an EV	462	11%
Rent/lease an ICE vehicle	1,343	31%
Rent/lease an EV	215	5%
Total	4,288	100%

	Count	Percentage
Total own	2,730	64%
Total rent	1,558	36%
Total ICE vehicle (own or rent)	3,611	84%
Total EV (own or rent)	677	16%

Source: CNYCA-TLC Driver Survey, June-July, 2024.

Possibly as a function of the vehicle cap, survey responses indicate that a higher share of drivers who have started driving in the HV-FHV business in the past four years rent their vehicles (about half) compared to those who have been driving for five years or more (about a quarter). As noted in Exhibit 6 above, 56 percent of drivers have been driving for five years or more, according to survey responses.

The composite HV-FHV expense model developed in this report combines expenses for the four types of vehicles and ownership status shown in Figure 7. The weighting method used in compiling the composite expense picture was based on the 70-30 owner-renter split and the ICE vehicle vs. EV shares of trips performed in 2023. Exhibit 8 shows that the trip weights are fairly similar to the survey results.

Exhibit 8

Survey shares of vehicles by fuel and ownership status compared to weights used to compile composite HV-FHV expense model

	Driver survey shares	Weights based on # of trips
Own an ICE vehicle	53%	58.3%
Own an EV	11%	8.3%
Rent an ICE vehicle	31%	29.2%
Rent an EV	5%	4.2%
Total	100%	100.0%

Source: CNYCA-TLC Driver Survey, June-July, 2024.

Reflecting the high incidence of high-hour FHV drivers, survey respondents reported a median of 33,000 miles driven in the past year, with fairly slight variation around that figure. See Exhibit 9.

Exhibit 9

Median miles driven last year by type of vehicle and owner status

All drivers	33,000
Standard (non-WAV vehicles)	
ICE vehicle owners	35,000
EV owners	30,000
ICE vehicle renters	35,000
EV renters	35,000
WAV vehicles	
ICE WAV owners	30,000
ICE WAV renters	34,500

Source: CNYCA-TLC Driver Survey, June-July, 2024.

High-hour drivers perform a disproportionate share of all trips

The driver survey was sent to all 89,000 active HV-FHV drivers. Completion was voluntary but it is not surprising that a disproportionate share of responses were from drivers logging a high number of weekly hours. As noted in Exhibit 6, 65 percent of survey respondents reported average weekly hours of 40 or more, and another 16 percent recorded that they drove an average of 32-40 hours per week. These high-hour drivers are very committed to this work and heavily rely on it as their main source of income (88 percent of those driving 40+ hours weekly rely on driving as their sole source of income.)

Data that the companies are required to provide to the TLC also demonstrate that high-hour drivers provide a disproportionate share of all trips. According to Exhibit 10, drivers averaging 40 or more weekly hours of session or on-app time during 2023 accounted for 43.4 percent of all trips, and grouping all drivers working more than 30 weekly session hours together shows that they account for 74 percent of all trips.

Exhibit 10

Company data for 2023 show that high-average weekly hour drivers account for the bulk of trips

average weekly hours	# of drivers	# of trips	share of all drivers	share of all trips
less than 10	9,487	2,617,905	9.5%	1.1%
10 to 20	14,832	15,257,231	14.8%	6.6%
20 to 30	22,325	42,848,315	22.3%	18.5%
30 to 40	25,604	70,388,101	25.6%	30.4%
40 to 50	17,831	60,826,035	17.8%	26.2%
more than 50	10,072	39,807,903	10.1%	17.2%
All drivers	100,151	231,745,490	100.0%	100.0%

Source: CNYCA analysis of company data provided to the TLC

Viewed in this light, the high-hour drivers prevalent among survey respondents do reflect drivers who provide the bulk of all trips. At the other end of the spectrum, in the survey 12 percent of respondents reported driving fewer than 20 hours a week⁷; the company data indicate that in the universe of all FHV drivers, twice that share (24 percent) fall into this category but that these drivers only account for less than eight percent of all trips. Thus, the apparent under-representation of short-hour drives in the survey should not be cause for concern since those drivers provide so few trips and are not representative of a committed FHV driver.⁸

We grouped survey respondents into three buckets by average weekly hours (less than 20, 20-40, and 40+) to examine if there were significant differences depending on the number of hours worked each week as FHV drivers. A mixed picture resulted. On the one hand, both high-hour (40+ weekly hours) and low-hour drivers (less than 20 hours) tended to purchase new vehicles (71 percent and 68 percent, respectively), and both groups reported that they primarily purchased their vehicles to drive for Uber or Lyft by large margins (93 percent and 87 percent. Median insurance costs were also fairly similar (\$4700 annually for high-hour drivers and \$4500 for low-hour drivers.) Immigrants predominated by large margins (91 percent of high-hour drivers and 92 percent of low-hour drivers).

One area of difference had to do with the race/ethnicity breakdown: while there were somewhat similar shares of Asians and whites among high- and low-hour drivers (37-34 percent, and 15-12 percent) Latinx drivers more heavily concentrated among low-hour drivers (32 percent) than among high-hour drivers (26 percent). One area of obvious difference was the relative importance of driving as an income source: 88 percent of high-hour drivers said it was their sole source of income while 58 percent of low-hour drivers responded that way. Perhaps not surprisingly, high-hour drivers who are more reliant on driving as their sole source of income spent slightly more for their vehicles than low-hour drivers (\$42,000 vs. \$40,000). This could

⁷ On an un-rounded basis, the 536 drivers reporting fewer than 20 hours of usual weekly driving (see the first three rows in Exhibit 6) account for 12 percent of all survey respondents.

⁸ It could be that some relatively new drivers log fewer hours due to restrictions in getting access to the Uber and Lyft platforms. While the survey found that about seven percent of all drivers drive less than 10 hours weekly, 12 percent of drivers working for less than six months drive for less than 10 hours a week.

reflect a desire to purchase a larger vehicle in order to qualify for premium-priced services that tend to compensate drivers more.

Driver expenses reported in the survey

The active driver survey was the primary source of information on driver expenses. Drivers were asked about whether they were still paying for their vehicle, what their monthly loan payment was, and how much they paid for insurance and maintenance and repairs. The expense section of this report indicates the median survey responses for each of the four categories of vehicle types (ICE or electric vehicles) and owner status (own or rent).

Two thirds (66 percent) of respondents were still paying off their vehicle. Of these, the overwhelming majority— 93 percent— said they paid a vehicle payment monthly. About half of respondents who had purchased a vehicle said they had sourced a loan from a bank (48 percent), with only a slightly smaller number receiving a loan from a car dealership (42 percent). Only a small number of respondents said they had received a loan from family or friends (9 percent) or a garage (1 percent).

Similar to drivers who purchased a vehicle, a large majority of drivers said they rented their vehicle primarily to drive for Uber or Lyft (79 percent), while 20 percent said they rented equally for Uber/Lyft and personal use, with fewer than two percent indicating that they rented a vehicle primarily for personal use. Additional information on drivers renting their vehicles is included in the next section on renting.

The survey asked a series of questions of EV drivers to ascertain where they charged their vehicles and the time spent waiting for access to a charger and waiting for their EV battery to charge. This information will be discussed in the EV section that follows the section on renting below.

4. Vehicle rental analysis

We estimate that approximately 30 percent of HV-FHV drivers rent their vehicles. In examining the TLC’s list of nearly 87,000 FHV’s that we determined had been recently used to provide HV services, over 23,500 (more than 27 percent) vehicles were identified as having corporate or business, rather than individual, ownership. That is, ownership was in the name of a corporation, LLC or other form of business. While some individuals register vehicles in the name of LLCs, 50 business entities were listed as the registered owner of 47 or more vehicles each and collectively accounted for 59 percent of all vehicles registered to business owners. American United Transportation (“American”), Inc. topped the list of business owners with nearly 4,300 vehicles, followed by Rigo Limo-Auto Corporation (owned by Fast-Track Mobility leasing) with about 2,000 vehicles.

Since the driver survey indicated that about 40 percent of drivers who rent said they rented from another individual who owns a TLC license, and that that owner may not be listed as an LLC, it is possible that the number of vehicles that are leased or rented exceeds 27 percent. While 36 percent of survey respondents indicated that they rented the vehicle they used, this likely overstates the extent of renting. For the composite expense model developed in section 6, we assumed that 30 percent of vehicles were rented and 70 percent were driver-owned.

Of those drivers renting from a leasing company, nearly two-thirds of survey respondents indicated they rented from the four largest companies: American, 23 percent; Tower, 17 percent; Buggy, 13 percent; and Fast Track, 11 percent. The remaining 36 percent who rent from a leasing company reported “other.”

High vehicle rental costs and registration rent

One of the reasons that so many drivers rent their vehicles is that the limit on the issuance of new vehicle licenses that has been in place since 2018 means that drivers who do not already own a TLC-licensed FHV must either purchase a more expensive WAV (WAVs are exempt from the license limitation) or rent a licensed vehicle from a business or individual that owns such a vehicle. An individual seeking to drive for Uber or Lyft cannot otherwise go out and purchase a vehicle and have it registered. When the TLC opened applications for EV-only FHV licenses, many new drivers took the opportunity to acquire an EV that could then be registered as a HV-FHV. In a brief follow-up survey sent to a limited number of renting drivers, more than three-quarters of respondents indicated that renting a TLC vehicle was the only way they would be able to gain work as a FHV driver.

FHVs are typically rented on a weekly basis rather than a three-year lease term.

Respondents to the main driver survey who rented their ICE vehicles reported a median *weekly* rental payment of \$525; that’s \$27,300 on an annual basis. As discussed in Section 6 and Exhibit 13 below, factoring in all vehicle-related expenses, renting an ICE FHV is 31 more costly than owning, and renting an EV is 24 percent more costly to rent than to own.

Three factors largely account for this rent vs. own differential. First, renters are charged sales tax of 20.875 percent (8.875 percent for the regular New York City sales tax, and 12 percent short-term New York State car rental tax.) Second, itemized insurance costs for short-term rentals ranged from \$125-\$250 weekly, accounting for 25-50 percent of the total rental cost in a relatively small sample of rental agreements we examined. On an annualized basis, this is far greater than the insurance costs reported by owners.

And third, a portion of the rental payment is rent for the use of a TLC registration itself, rather than payment for the use of the vehicle. This *registration rent* is a function of the costs and administrative burden of getting a vehicle licensed by TLC and the agency's limitation on the issuance of new vehicle licenses. While we have not attempted to estimate this registration rent, we note that in agreements from some of the large rental companies, an "additional rent—For Hire Vehicle Permit Use" fee was listed as \$175, or about one-third of the total weekly rental fee. In some cases, this was the fee for a 4+ year-old vehicle with over 100,000 miles on the odometer.

While rental agreements typically include insurance costs, the general driver survey and a special survey of drivers renting their vehicles indicated that some are required to pay for some or all maintenance and repair costs out of pocket. In the survey of renting drivers, 30 percent indicated that maintenance costs were not included.⁹ For purposes of itemizing total rental costs in section 6, we estimated that 20 percent of renting drivers paid a median amount of \$3,500 annually.

⁹ Most of those indicating that they were responsible for maintenance and repair costs rented from individuals. A higher share of renters (well over half) responding to the general survey reported a median amount of \$3,500 for annual maintenance costs.

5. EVs, drivers, and EV operating and charging costs

The electric vehicle market and charging infrastructure are rapidly evolving, and these changes are shaping the costs for using EVs for HV FHV transportation services. There were 11,490 EVs in use for such services in August of 2024, lifting the EV share of FHV in New York City to 13 percent. The number of monthly EV high-volume passenger trips has averaged more than two million for most of 2024 and the August 2024 level reflected a six-fold jump over the number of EV trips in August 2023. Over that period, the EV share of all trips rose from 1.8 percent to 11.0 percent.¹⁰

Many more manufacturers are producing EVs and while the 2024 pace of EV sales growth has slowed from 2022 and 2023, expectations are that the EV share of the market will steadily rise. The TLC's Green Rides Initiative (GRI) ensures that there will be significant further EV growth in New York City in coming years. Forty percent of ICE vehicle owners and renters surveyed expect to be driving an EV by the end of 2026—if the survey results are an indication, that could mean an additional 20,000-25,000 EVs by the end of 2026.¹¹

There have also been significant investments in New York City's EV charging infrastructure in recent years, and additional investments are in the planning stages. The TLC's recent *Electrification in Motion* report documents ongoing efforts by the City Department of Transportation, the New York Power Authority, the City's Economic Development Corporation, the Port Authority and private companies such as Revel and Tesla to vastly expand charging capacity at the airports, municipal parking garages, selected curbside stations, and other locations.¹² The public charging infrastructure is particularly important for the GRI since, according to the driver survey, only about one-quarter of FHV drivers are able to charge at home. The TLC has convened key charging infrastructure actors and has educated drivers about their charging options, including through a new dedicated page on the TLC website.¹³

The *Electrification in Motion* report notes several examples of government and private incentives available to drivers to reduce the cost of purchasing an EV and lower the cost of home charging.¹⁴ While state and federal rebates may be worth several thousand dollars depending on the vehicle, since there is little specific data available and there likely is great unevenness in

¹⁰ Trip data from the Green Rides dashboard data site accessed through the TLC's online *TLC Factbook*, <https://www.nyc.gov/site/tlc/about/data-and-research.page>. The calculation of EV trip shares includes WAV trips in the denominator.

¹¹ Of those currently renting an ICE vehicle, 56 percent indicated they plan to drive an EV (or WAV) by 2026, and of those who currently own an ICE vehicle, 31 percent expect to be driving an EV (or WAV) by 2026. It is not clear if these respondents expect EV-only licenses to become available, or if these drivers are just planning to transition to EVs when their vehicles turn over.

¹² New York City Taxi and Limousine Commission, *Electrification in Motion. An Update on New York City's Electric For-Hire Vehicle Fleet*, September 2024.

¹³ https://www.nyc.gov/assets/tlc/downloads/pdf/electrification_in_motion_report_2024.pdf

¹⁴ <https://www.nyc.gov/site/tlc/about/ev-charging-faq.page#/find/nearest>

¹⁴ *Electrification in Motion*, p. 14.

drivers accessing these programs, and the longevity of these rebates and their exact amounts is not clear, we have not factored in these potential cost reductions.

Compared to gas/hybrid vehicles, EVs in the city's HV fleet tend to be newer and more expensive to own or lease. According to the driver survey, 86 percent of EV owners purchased their cars new and 81 percent of new EV owners purchased them in 2023 or 2024. Of the EVs purchased used, 88 percent were acquired in 2023 or 2024.

As the EV market has become more competitive, EV prices have come down, and as the presence of EVs in the overall market increases, a more extensive used EV market will grow in the years ahead. The U.S. Energy Information Administration reports that the average transaction price for all-electric vehicles in the U.S., not including any government incentives, declined by 1.8 percent from \$57,405 in January 2024 to \$56,371 in June 2024, and that while the average EV price in January 2024 was 21.1 percent higher than the overall average for all light-duty vehicle prices, by June 2024, that differential had eased to 15.9 percent.¹⁵ There are also federal and state incentives for purchasing EVs as well as incentives to encourage investments in charging stations.

Drivers responding to the survey confirmed that while EVs tend to be more costly, they have lower maintenance costs. Median maintenance costs of \$4,200 for EVs compared to \$5,000 for gas/hybrids. EV insurance costs are slightly higher but that reflects their higher value. Section 6 of this report will provide an itemized comparison of EV and non-EV expenses.

Estimating drivers' time spent charging EVs

Comparison of fuel costs per mile require an analysis of EV charging costs, including some allowance for the time that drivers spend waiting for a charge.

According to survey responses, a majority of drivers usually charge their vehicles at publicly available fast chargers (65 percent), followed by those who charge at home (25 percent), and those who use a publicly available Level 2 charger (10 percent).¹⁶ Most drivers charge only one time per day (66 percent), while just over a quarter charge more than once a day (27 percent), with a small remainder charging less than once a day (7 percent).

Survey respondents reported that EV charging station wait times were long. A majority of drivers said they had to wait more than 30 minutes to use a public or commercial charging station (28 percent reported between 30-60 minutes and 24 percent said they usually had to wait over an hour). See Exhibit 11. After waiting to access a charger, the majority of drivers not able to charge at home then must wait while their vehicle batteries charge. The lower panel in Exhibit 11 shows the distribution of time spent waiting while their batteries are charging. Fifty-two percent waited 30-60 minutes for their batteries to charge, 14 percent waited 1-2 hours, and 7 percent waited for more than 2 hours.

¹⁵ U.S. Energy Information Administration, "U.S. share of electric and hybrid vehicle sales increased in the second quarter of 2024," August 26, 2024.

¹⁶ The responses of drivers who selected "other" were excluded from the shares cited.

Exhibit 11

Survey responses regarding EV charging wait time

Usual Wait Time to Use a Public or Commercial Charger		
	Percentage	Count
There is usually no wait	10%	48
Usually less than 15 minutes	16%	79
15-30 minutes	13%	66
30-60 minutes	28%	139
1 hour or more	24%	116
I charge overnight	9%	43
Total	100%	491
Time Takes to Charge Vehicle		
	Percentage	Count
15 minutes or less	4%	18
15-30 minutes	13%	63
30-60 minutes	52%	250
1-2 hours	14%	69
2+ hours	7%	34
I charge overnight	10%	50
Total	100%	484

Source: CNYCA-TLC Driver Survey, June-July, 2024.

Considering the rapid pace of development in building out more extensive EV charging infrastructure, waiting times are very likely to come down in the months and years ahead. As a result, we have modeled high and low estimates for both access waiting time and charging waiting time and opt to use a mid-point between these ranges to better reflect the waiting times going forward. These estimates were made to provide a basis for compensating drivers for the extra time it takes them to charge an EV since only 25 percent are able to charge at home and three-fourths of drivers must seek out public charging facilities.

We start with the waiting times for access to a charger from the survey as the high-end estimates and make plausible assumptions about reductions. For example, we assume that waiting times to access a charging station decline by about two-thirds. Appendix Exhibit 2 details the high and low estimates used in the charging time modeling.

To estimate charging times for drivers using fast-chargers, we used survey results as a high estimate and information on Tesla Models Y and 3 fast charging times from the EV-Database research group for the low estimate. Further details on the allowances we make for the time drivers using home and Level 2 chargers spend, see the explanations provided in Appendix 2.

Estimating overall NYC EV charging costs

Exhibit 12 details the estimation of the costs of electricity and an allowance for drivers' time spent charging an EV. As with the estimation procedure for drivers' time spent charging an EV, we used high and low estimates for the key parameters involved in determining the cost per mile of charging an EV. In addition to driver time spent charging, the key parameters include vehicle battery capacity, kWh/per mile, and electricity costs for the three categories of charging mode (home, public Level 2, and public or private fast chargers).

Vehicle battery capacity and kWh/per mile vary depending on EV make and model. Electricity costs per kWh depend on mode and provider, and for drivers charging at home, on the charging equipment used. Electricity costs for EV charging are difficult to pinpoint within this rapidly evolving charging landscape and it is expected that as drivers gain experience with various charging options, they will be able to reduce both electricity costs and the time it takes to charge. It is reasonable, therefore, given this evolving EV charging context to use high and low estimates and to derive a midpoint estimate to better gauge likely costs.

Some of the factors used in the Exhibit 12 estimates, such as assuming that drivers will only draw down an average of 80 percent of battery capacity on a given charge to maintain a cushion against operating vagaries, or that driver time should be compensated at the independent contractor-equivalent of the minimum wage, are more certain so they are not varied between the high and low estimates. (Appendix Exhibit 2 details the sources consulted in developing the high and low estimates cited in Exhibit 12.)

Four steps were involved in estimating overall EV charging costs in Exhibit 12.

First, based on the weighted kWh/mile efficiency ratings for the two main EV models currently used in New York City (the Tesla Model Y and Model 3) and modeling high and low estimates for battery capacity, our midpoint estimate was that EVs would travel an average of 174 miles between charging events.

Second, based on the best available data on the electricity costs for the three main charging modes, and on the weights for the three forms of charging from the survey (65 percent fast charging, 25 percent home charging and 10 percent public Level 2 charging) the midpoint weighted EV electricity cost was 37.7 cents per kWh (the mid-point between 26.1 cents and 49.3 cents per kWh).

Third, given the 0.25-0.28 kWh/mile average (based on the Model 3 and Model Y, respectively), the per mile **electricity cost for EV charging came to 10.2 cents.**

Fourth, assuming that EVs travel 32,500 miles annually as HV-FHVs do on average, we expressed that on a monthly basis (2,708) and assumed a low estimate of 80 percent of that number (2,167) and a high estimate of 120 percent of that number (3,250) and estimated that the monthly number of charging events would range from a low estimate of nearly 12 to a high estimate of nearly 20. We estimated that the midpoint for drivers' time waiting for a charge and for charging was about 29 minutes (or 0.48 hours). Drivers should be reasonably compensated for time spent waiting to access a charger and for the

time they spend charging their vehicles. Using the \$17/hour state minimum wage in New York City (effective January 1, 2025) and adding in the employer share of payroll taxes that independent contractor drivers are required to pay, that would result in a midpoint **allowance for drivers' time of 9.6 cents per mile.**

The 10.2 cents per mile for electricity costs and the 9.6 cents per mile for drivers' time total 19.8 cents per mile as the EV per mile charging costs. This compares to 13 cents per mile for fuel costs for ICE vehicles. These EV cost per mile factors are key inputs into the expense model detailed in Exhibit 13 in the next section.

Exhibit 12

NYC EV charging costs = electricity costs + drivers' time

		units	low parameter ests.		high parameter ests.		mid-pt. est.
1 EV charging need and average miles per charge			<i>Model 3</i>		<i>Model Y</i>		
1.1 Useable battery capacity		kWh	57.5		57.5		
1.2 Assume average 80% battery usage per charge		kWh	46		46		
1.3 U.S. EPA kWh/mile rating		kWh/mile	0.25		0.28		
1.4 Miles per average charge		miles	184		164		
1.5 EV Database "real range"		miles	239		208		
2 NYC EV electricity charging costs	survey weight	units		weighted cost/kWh		weighted cost/kWh	
2.1 Residential rates for home charging	0.25	cost/kWh	\$0.084	\$0.021	\$0.299	\$0.075	
2.2 Public Level 2 charging	0.10	cost/kWh	\$0.136	\$0.013	\$0.340	\$0.033	
2.3 Public (or private) DCFC (fast charger)	0.65	cost/kWh	\$0.347	\$0.226	\$0.590	\$0.385	
2.4 Weighted NYC EV electricity charging costs	1.00	cost/kWh		\$0.261		\$0.493	
3 Weighted EV electricity charging costs per mile		electricity cost/mile		\$0.065		\$0.138	\$0.102
4 Driver allowance for waiting time for charger access and charging		units					
4.1 Total monthly miles traveled		miles	2,167		3,250		
4.2 # of charging events needed per month		number	11.8		19.8		
4.3 Weighted time waiting for charger per charging event		hours	0.21		0.60		
4.4 Weighted charging time per charging event		hours	0.28		0.67		
4.5 Hourly rate for driver time		\$/hour	\$18.40		\$18.40		
4.6 Allowance for driver time for waiting and charging time		per mile	\$0.049		\$0.142		\$0.096

Sources: see Appendix Exhibit 2 for data sources and assumptions.

6. Composite expense model for ICE vehicles and EVs

HV drivers bear the entire responsibility for providing, maintaining and operating the vehicles they use to perform services for Uber and Lyft passengers. This section explains the details of the vehicle acquisition and operating costs for ICE vehicles and EVs. In addition to presenting cost estimates separately for ICE vehicles and EVs, cost estimates are presented separately for each type depending on whether the vehicles are owned or rented.¹⁷ Expenses for each of these four categories of vehicles and owner/renter are itemized, and then combined them into a single composite expense model (non-WAV).

The high-hour drivers well represented in the driver survey provide the overwhelming bulk of Uber and Lyft trips. According to the survey, 65 percent of drivers of gas and hybrid vehicles who own their cars purchased them new and 35 percent acquired used vehicles. Sixty-five percent of drivers acquired their vehicles since 2020.¹⁸

The key operating expense categories include vehicle payment, insurance, maintenance and fuel (the cost of gas for ICE vehicles and the cost of EV charging for EVs). Vehicle cleaning costs are also estimated and included in overall operating expenses. In addition, licensing, registration and related fees charged to TLC drivers are itemized and included in the overall expense total.

Costs will be presented on a per mile basis assuming drivers log 32,500 miles annually, close to the median annual miles in the survey and the 35,000 annual miles used in the 2018 model. With increased congestion, average speeds have fallen by about 10 percent since 2018. At 32,500 miles per year, a HV vehicle will log 162,500 miles over five years, the typical length of an HV driver's loan, and have very little residual value. This five-year mileage total would be on top of odometer readings that exist for drivers purchasing used vehicles. Some of the used vehicles with high mileage when acquired by an HV driver may require replacement prior to loan payoff.

Expressing expenses on a per mile basis amortizes all vehicle and related expenses across a year's total mileage and is applicable whether the vehicle is used for business or personal use. Incorporating this per mile expense factor into the TLC minimum pay standard ensures that drivers are fairly compensated for all of their HV-related driving.

Uber recently commissioned the New York City-based consulting firm, HR&A, to prepare a report on the expense of for-hire vehicle drivers in New York City.¹⁹ The HR&A Uber report derives an overall per mile expense amount that is 30 percent less than our estimate. The main reasons for this lower estimate are that HR&A uses lower weights for the shares of EVs and

¹⁷ In New York City, a driver who rents their FHV vehicles typically has a "short-term rental agreement" with an open-ended term that specifies a weekly rental cost. Such agreements are subject to a total sales tax of 20.875 percent for short-term car rentals. New York State defines "short-term rentals" as those that are for less than one year.

¹⁸ The figures in this paragraph are for owners of non-WAV, non-luxury model vehicles that are exclusively used to provide standard Uber and Lyft services.

¹⁹ HR&A, *New York City Uber Driver Earnings and Expenses Study*, Final Report, for Uber Technologies, Inc., November 4, 2024. This report will be referenced here as the "HR&A Uber Expense Report."

rented vehicles in deriving the composite per mile factor and they use a flawed depreciation method to estimate vehicle costs.²⁰

Per mile gas costs

U.S. Department of Energy fuel economy data were used to determine the miles per gallon rating for city driving for the six common HV vehicles (non-luxury) identified in Exhibit 4.²¹ The composite result, derived by weighting average model mileage ratings, was 24.9 miles per gallon. According to the U.S. Energy Information Administration, the average weekly retail cost of regular gasoline in New York City for the 26 weeks through November 18, 2024, was \$3.23 per gallon.²²

At \$3.23 per gallon and 24.9 miles per gallon, the average fuel cost for a gas/hybrid ICE vehicle used for HV services is 13.0 cents per mile. The HR&A Uber report used a similar method of weighting average mileage ratings for Uber's data on widely used vehicles, but partly because they used a different base period (April 2023-April 2024) for gas prices, they estimated a higher per mile fuel factor 13.7 cents per mile for ICE vehicles.

The prior section of this report detailed the cost of charging an EV and an allowance for drivers' time spent charging an EV. As shown in Exhibit 12, we estimated a per mile EV electricity charging cost of \$0.102, very close to the \$0.103 amount in the HR&A Uber Report. However, the HR&A report ignores the fact that most drivers utilize public charging stations where they often have to wait for access to charging equipment as well as wait while their vehicles battery is charged. As noted in the previous Section, our discounted allowance for waiting time at the \$17 minimum wage level that will prevail in 2025 amounted to \$0.096 per mile.

Even though the HR&A Uber report ignored drivers' waiting time for charging and they weighted EVs less than we did (3.7 percent vs. our 12.5 percent EV weight) in deriving the composite mileage factor, our \$0.138 composite fuel/charging cost per mile was very close to HR&A's \$0.136 per mile fuel/charging cost.²³

ICE vehicle owners' expenses—vehicle payments

As noted in Section 3, the active driver survey was the primary source of information on driver expenses, with the exception of fuel and battery charging costs. Drivers were asked about

²⁰ Other differences involve the HR&A Uber report discounting interest costs that owners who have fully paid for their vehicles might have made, thus ignoring the prior investments made by 27 percent of drivers who indicated in an Uber survey that they were not actively making car payments on their vehicles; and excluding any allowance for drivers' time spent charging their EVs (either time spent waiting for access to a public charger or waiting for their vehicles to charge). For a side-by-side comparison of the HR&A Uber and our expense analysis, and a comparison of each report's composite weighting factors, see Appendix Exhibit 3.

²¹ <https://www.fueleconomy.gov/>. The average mpg rating for Honda Accords was 28.9, for Toyota Camrys, 27.3, and: Honda CRV, 27.6; Toyota Highlander, 20.4; Toyota RAV4, 25; and Chevrolet Equinox, 26.

²² The average weekly New York City gas price for the 52 weeks through November 18, 2024, was \$3.24. In its September 2024 Short-Term Energy Outlook, the U.S. Energy Information Administration projects that retail gasoline prices, on average, will be flat in 2025 compared to 2024. <https://www.eia.gov/outlooks/steo/>

²³ See Appendix Exhibit 3.

whether they were still paying for their vehicle, what their monthly loan payment was, and how much they paid for insurance, and maintenance and repairs.

As a check on the accuracy of monthly payments, the survey also sought information on the vehicle purchase price, amount of down payment, loan duration and interest rates. With this information, the monthly payment could be determined using an auto purchase loan calculator. For example, for ICE non-WAV vehicle owners, the median vehicle purchase price was \$40,000.²⁴ ICE vehicle drivers typically finance their vehicles over five years with a median interest rate of seven percent and a down payment of \$5,000, according to the driver survey. With these terms, a common car loan payment calculator indicates a monthly payment of \$763 (including sales tax in the amount financed), about four percent higher than the median value reported by drivers of \$735 per month.²⁵

Since almost all drivers finance the purchase of their vehicles, and report a down payment, the median \$5,000 down payment is amortized over 60 months and that monthly amount (\$83) is added to the median monthly payment drivers reported in the survey. Including the amortized down payment the total monthly vehicle payment for ICE vehicles was \$818.

Data from an extensive driver survey reflects what drivers are actually paying each month. Annualizing these payments (including amortizing the down payment) and dividing by 32,500 annual miles fairly represents the cost to the driver of driving for-hire. These per mile amounts from vehicle payments are detailed in Exhibit 13. These amounts include interest payments and the total purchase price and assumes that there is negligible residual value in the vehicle after 162,500 miles from 32,500 miles annually for five years of intensive, full-time driving on the streets and highways of New York City with passengers getting into and out of the vehicle several times a day. The wear and tear on a vehicle from this sort of use is substantial, leaving little likelihood of any meaningful resale value. In essence, the practical depreciation from such use is total. For EVs, the total miles accumulated over six years of financing equals 195,000. For those vehicles purchased used, odometer readings from the time of purchase would further push up total mileage at the end of these financing periods.

The method for approximating vehicle costs employed in the HR&A Uber report results in a per mile factor that is less than half the full depreciation cost method we use. The HR&A Uber method combines the financing costs with a very partial depreciation method. In estimating financing costs, the HR&A report uses similar factors to those we used: a five-year loan period at seven percent interest. However, they discount interest costs by 27 percent to reflect the portion of drivers who told Uber in a 2023 company survey that they were not making monthly vehicle payments. This ignores any interest payments those drivers might have previously made.

²⁴ Over the past five years, according to the Bureau of Labor Statistic's Consumer Price Index for Wage Earners for the New York metropolitan area, used vehicle prices peaked in 2022 and new car prices peaked in 2023. Thus, vehicle prices peaked when HV trip volume was rapidly rebounding from pandemic lows and drivers were returning to the Uber and Lyft platforms.

²⁵ The median down payment made by new and used ICE vehicle purchasers was \$5,000. For EVs, a similar exercise resulted in a loan calculator monthly payment for 72 months of \$1,056, 7.8 percent higher than the median value of \$981 reported in the survey. The median purchase price for EVs was \$59,900 (most were bought new).

To estimate depreciation, HR&A Uber apparently uses the difference between MSRPs and the Kelley Blue Book values for five-year old versions of the commonly used vehicles they analyze. This method apparently does not factor in the sort of mileage that a vehicle could be expected to have after driving five years at 33,000 miles annually (the annual mileage used to put expense on a per mile basis in the HR&A report).

The HR&A method appears to generate a much higher sales value to the driver than the Edmunds “instant used car value and trade in value” online appraisal service. Entering make-model-year information for the seven most common vehicles cited in the HR&A report (page 9), we found much lower used car values based on 165,000 miles and a central Brooklyn zip code. Using the HR&A method for estimating depreciation and substituting the Edmunds resale values would increase the depreciation per mile factor by 34 percent. It may also be that the HR&A report used average values for what a buyer would pay for a used car rather than the price a driver would receive when selling or trading in the used vehicle.

Additionally, the online appraisal services likely treat accumulated mileage as mostly highway miles rather than almost entirely city street miles as would be the case for a New York City for-hire vehicle driver. The actual wear and tear on a vehicle from city miles is significantly more than the wear and tear from highway miles.²⁶ So the resale values estimated by the online appraisal services likely overstate the actual value when a prospective buyer assesses the condition of a vehicle that has been intensively used for five years for for-hire vehicle services in New York City.

Moreover, the composite 11.0 cents per mile average depreciation cost for commonly used vehicles that the HR&A Uber report uses is far less than the national average of 30 cents per mile that factors into the \$0.67 IRS per mile allowance for 2024 for personal vehicles used for business purposes.²⁷ The 30 cents per mile IRS depreciation factor is very close to the 31.2 cents per mile blended ICE-EV vehicle ownership cost that we estimated.²⁸

An additional factor worth noting is that our report relies on actual vehicle payment amounts reported by drivers in the survey. This includes some drivers who own or rent luxury vehicles in order to qualify for higher earnings from providing premium-priced services, like Uber Black or Lyft Black. When an Uber or Lyft driver with a luxury vehicle provides a standard FHV service, they typically ~~not are under~~ compensated by the companies for the use of their luxury vehicle. Utilizing actual driver vehicle payments in the expense calculation partly captures some of the higher costs for luxury vehicles. One exception is that fuel and battery charging costs are based on the most common non-luxury vehicles. The companies encourage drivers to use luxury vehicles so the companies can offer the premium-priced services where fares typically average 40-60 percent higher than standard fares. The HR&A report does not acknowledge or reflect the use of, or higher costs associated with luxury vehicles.

²⁶ See, e.g., <https://goodcar.com/car-ownership/city-miles-vs-highway-miles>. City driving involves frequent stopping and starting, factors that put more stress on a vehicle's engine and brakes, and city streets have more potholes and uneven surfaces that can affect suspension, tire wear and wheel alignment.

²⁷ See, e.g., <https://www.pinionglobal.com/remind-new-standard-mileage-rates-for-2024/>

²⁸ See Appendix Exhibit 3.

Insurance costs

The median annual commercial insurance premium for ICE vehicle drivers was \$4,548 based on survey responses. As insurance rates have risen for FHV drivers in recent years, many drivers have increased their deductible amounts. Generally, auto insurance costs have risen significantly around the country and in New York City over the past two years. There is the additional risk of insurance cost hikes for Uber and Lyft drivers resulting from the fallout related to the reported insolvency of American Transit Insurance Co., New York City's largest taxi and FHV insurer.²⁹

The median \$4,548 insurance cost for ICE vehicle owners translates into a per mile amount of \$0.14. The per mile amount is slightly higher (\$0.146) for EV owners due to higher vehicle costs. Combining all owned vehicles yields a blended \$0.141 per mile, an amount very close to the \$0.136 estimated insurance cost in the HR&A Uber report.³⁰

Maintenance costs

Median annual maintenance costs for ICE owners was estimated by drivers responding to the survey at \$4,500. These costs reflect the high average annual mileage of New York City Uber and Lyft drivers and the high costs of maintenance services at local dealers and vehicle repair shops. Median maintenance costs for EV owners was \$4,000 (discussed further below). The blended per mile maintenance costs for owners of ICE and electric vehicles was \$0.137. Using a method based on AAA data for personal-use vehicles, HR&A estimated maintenance costs for the most common vehicles at \$.101 per mile. The differences are likely due to the fact that commercial passenger service use and mostly city mileage increase the need for maintenance, repairs and such things as tire replacement for for-hire vehicles, and the fact that our method relied on maintenance costs reported by New York City Uber and Lyft drivers.

Electric vehicle owners' expenses

According to the driver survey, the median cost for a new EV was \$60,000 and about \$40,000 when purchased used. Since most EVs have been purchased new, the median cost overall of an EV was also \$60,000.

Partly because average EV purchase prices have been higher than for ICE vehicles, and because the EV fleet tends to be newer (2023 was the median purchase year for EVs vs. 2020 for ICE vehicles), the median monthly EV payment is \$950, considerably higher than the \$735 median for ICE vehicles. However, since the median EV down payment was the same \$5,000 but the median loan duration is 72 months rather than 60, the amortized monthly value of the median EV down payment is \$69.

Since an EV has substantially fewer moving parts than an internal combustion engine, EV maintenance costs generally are considerably lower. EVs have fewer fluids, such as engine oil,

²⁹ See <https://www.nytimes.com/2024/09/16/nyregion/american-transit-insurance-uber-lyft-nyc.html>; <https://www.bloomberg.com/news/articles/2024-09-05/nyc-regulator-slams-taxi-insurer-for-decades-of-mismanagement>; and <https://www.bloomberg.com/news/articles/2024-09-03/nyc-risks-taxi-uber-meltdown-as-biggest-insurer-faces-huge-losses>.

³⁰ See Appendix Exhibit 3.

there is less brake wear, and the battery, motor and associated electronics in EVs require little to no regular maintenance.³¹ Responses from the driver survey indicated that median maintenance costs for EV owners was \$4,000, or 11 percent less than the \$4,500 reported by ICE vehicle owners. Part of this difference results from the fact that ICE vehicles in the HV fleet are older than EVs.

Median insurance costs for EV owners was reported at \$4,750, slightly higher than the \$4,548 cost for ICE vehicle owners (likely due to the higher median EV purchase cost).

ICE and electric vehicle renters' expenses

As noted in Section 4 above, we estimate that 30 percent of HV drivers rent their vehicles. The cost of renting a vehicle that is driven as much as most HV vehicles is considerably more costly than the cost of owning. In part, this reflects the need for the renter to pay a combined 20.875 percent sales tax and a "registration rent," and in part from the fact that business and individual owners renting out vehicles seek to make a profit from that, thus adding a cost dimension on top of depreciation costs.

Despite the fact that there is a sizable 87,000 vehicle HV fleet, there are no economies of scale for vehicle costs in the HV-FHV business in New York City. In other vehicle-intensive businesses, such as car rental companies or a company such as UPS that owns the vehicles its drivers use, there are significant economies of scale. However, because the rideshare business model requires drivers to individually procure the vehicle they use, there are few economies of scale. This near-absence of vehicle fleet economies of scale is compounded by the fact that 30 percent of drivers have to also pay a "registration rent" and New York's double-digit sales tax on rented vehicles. There are some economies of scale regarding WAVs since WAV leasing companies obtain their vehicles from converters who can modify a van for wheelchair accessibility at lower cost than individuals who acquire a van and then pay for converting to an accessible vehicle.

The median weekly rent paid by an ICE vehicle driver was \$525, and \$550 by an EV renter. As discussed in Section 4 on leasing, in some cases, the weekly rental payment is not all-inclusive. While insurance is typically included in the weekly vehicle rent, we estimate that 20 percent of renters need to separately pay for maintenance. From the driver survey, drivers ICE vehicle renters paid a median of \$3,500 annually for maintenance, and EV renters paid a median annual amount of \$3,000 for maintenance.

All of the annual amounts for vehicle payments (including amortized down payments), insurance and maintenance costs for these four categories of drivers are shown in Exhibit 12. Fuel costs and EV charging costs are also itemized.

³¹ U.S. Department of Energy, Alternative Fuels Data Center, "Maintenance and Safety of Electric Vehicles," <https://afdc.energy.gov/vehicles/electric-maintenance>.

The differential between our blended ICE-EV renter's per mile costs and the HR&A Uber cost estimate is half the differential for owners (17 percent vs. 34 percent).³² The main factor driving the difference for renters was the weekly rental payment. HR&A compiled rent offers from six major corporate rental companies and weighted them by their set of common vehicles. The weighted average weekly rent was \$430 for their study period from April 2023 to April 2024. The survey yielded an average weekly rent of \$528 (weighted by ICE and EV shares). Part of the difference could be from rising insurance and rental costs at the time the survey was fielded compared to the HR&A study period, and part could be from the heavier weight of EVs in our analysis (EVs have higher median weekly rents vs. ICE vehicles) compared to the HR&A Uber report (30 percent vs. 3.7 percent). Our driver survey included drivers who rented from individual vehicle owners rather than the major corporate rental companies; median and average weekly rents were slightly less for the former than for the latter.

Vehicle cleaning costs

Since the companies strongly encourage passengers to rate drivers, and these ratings are based on the cleanliness of their vehicles, it is estimated that drivers spend an average of \$36 per deluxe cleaning every other week for an annual total of \$936. Amortized over 32,500 miles, that equals \$0.029 per mile.

TLC and DMV licensing, training and vehicle registration costs

Various administrative, training and vehicle registration costs specific to driving for TLC-regulated services in New York should also be included in expenses borne by the driver. See Appendix Exhibit 2 for an itemization of these licensing and registration-related costs that result in a per mile factor of \$0.043 for owners. Since renters do not separately pay the vehicle registration related costs, \$0.008 per mile for licensing fees was included in the total per mile costs for renters.

Expense results and an overall composite expense factor

Exhibit 13 itemizes the expenses discussed above for each of the four vehicle type/ownership status categories. The total annual expenses for an ICE vehicle owner are \$25,405; amortized over 32,500 annual miles equals a per mile factor of \$0.782. Total annual electric vehicle owner expenses are \$29,697 equating to a per mile factor of \$0.914, 13.2 cents (or nearly 17 percent) per mile above the per mile factor for ICE vehicles.

Informed by median rent costs reported in the survey, the ICE vehicle renters' annual expenses were estimated at \$33,406, or \$1.028 per mile. The EV renters' annual expenses were estimated at \$36,825, or \$1.133 per mile. The ICE vehicle per mile factor for renters is 31 percent greater than for owners, and the EV per mile factor for renters is 24 percent greater than owners' costs. On a combined ICE and EV basis, renters' costs are 30.4 percent greater than owners' costs.

³² We show blended ICE-EV cost comparisons in Appendix Exhibit 3.

Exhibit 13

Four 2024 HV-FHV expense models, by fuel type and owned or leased status

ICE vehicle, owned					ICE vehicle, rented				
median year purchased: 2020									
expense item		monthly	annual	per mile	expense item	weekly	annual	per mile	
Gas (weighted mpg)	24.9		\$4,216	\$0.130	Gas (weighted 24.9 mpg)		\$4,216	\$0.130	
avg NYC gas price 6 mos. to 11/18/24	\$3.230				avg NYC gas price 6 mos. to 11/18/24				
Down payment (amortized over 5 yrs)	\$5,000	\$83	\$1,000		Weekly rent/lease cost	\$525	\$27,300	\$0.840	
Monthly payment		\$735	\$8,823						
Total vehicle payment			\$9,823	\$0.302					
Insurance			\$4,548	\$0.140	Insurance: (included in rental amt)		\$0	\$0.000	
Maintenance			\$4,500	\$0.138	Maintenance: allow 20% pay \$3500		\$700	\$0.022	
Vehicle cleaning (\$36 every two weeks)			\$936	\$0.029	Vehicle cleaning		\$936	\$0.029	
TLC and DMV licensing and registration fees #			\$1,382	\$0.043	Licensing costs only #		\$254	\$0.008	
TOTAL			\$25,405	\$0.782	TOTAL		\$33,406	\$1.028	
Electric Vehicles, owned					EVs, rented				
median year purchased: 2023									
expense item		monthly	annual	per mile	expense item	weekly	annual	per mile	
EV charging cost *			\$3,315	\$0.102	EV charging cost *		\$3,315	\$0.102	
Driver time for charging *			\$3,120	\$0.096	Driver time for charging *		\$3,120	\$0.096	
Down payment (amortized over 6 yrs)	\$5,000	\$69	\$833		Weekly rent/lease cost	\$550	\$28,600	\$0.880	
Monthly payment		\$950	\$11,400						
Total vehicle payment			\$12,233	\$0.376					
Insurance			\$4,750	\$0.146	Insurance: (included in rental amt)		\$0	\$0.000	
Maintenance			\$4,000	\$0.123	Maintenance: allow 20% pay \$3000		\$600	\$0.018	
Vehicle cleaning			\$936	\$0.029	Vehicle cleaning		\$936	\$0.029	
TLC and DMV licensing and registration fees #			\$1,343	\$0.041	Licensing costs only #		\$254	\$0.008	
TOTAL			\$29,697	\$0.914	TOTAL		\$36,825	\$1.133	
* See Exhibit 12									
# See Appendix Exhibit 4 for itemized details									

Exhibit 14 brings together the expenses for the four categories of drivers into a single, composite per mile expense factor. The composite factor uses the weights indicated in the middle column (e.g., 0.583 for ICE owned vehicles) that are based on a 12.5 percent EV share and a 70 percent-30 percent breakdown for owners compared to renters. The composite per mile expense factor is \$0.879. This value is 11.4 percent greater than the current expense factor that was effective March 1, 2024.

Exhibit 14

Composite 2024 HV-FHV expense model (non-WAVs)

87.5% ICE vehicles, 12.5% electric vehicles; 70% owned, 30% leased

	Per Mile Expense Factor	Weights	Weighted expense factor
ICE vehicle, owned	\$0.782	0.583	\$0.456
Electric Vehicle, owned	\$0.914	0.083	\$0.076
ICE vehicle, rented	\$1.028	0.292	\$0.300
EV, rented	\$1.133	0.042	\$0.047
Composite total expense factor			\$0.879
current expense factor			\$0.789
increase over current			11.4%

7. WAV expense model version

Eight percent of all HV-FHV trips in 2023 were trips in wheelchair-accessible vehicles. Section 59C-04 of the TLC Rules details specifications for Accessible For Hire Vehicles, and the TLC has an approved list of ADA compliant vehicle models that specifies the secondary manufacturer responsible for the conversion to an accessible vehicle.³³ Most of the TLC-approved WAVs have a rear entry wheelchair ramp.

Since Toyota Sienna minivans account for three-quarters or more of all WAV trips, we will gear our cost estimates to rear-entry wheelchair ramp-equipped Siennas. Since 2021, Toyota has only manufactured hybrid Siennas. Since there were no electric WAVs in the HV vehicle registry, our estimates are based on an average 35 mph for a late model hybrid Sienna. This is a substantial increase in fuel efficiency since the 2018 expense model when the typical vehicle model was a Chrysler Caravan with a 17 mpg rating.

We supplemented data on payment, maintenance and insurance costs from the driver survey with online pricing data for WAV-equipped Toyota Siennas. Most wheelchair minivan conversions cost approximately \$25,000-\$30,000. Costs were amortized over 32,500 annual miles. This was the median value from the survey and is greater than the 30,000 annual miles used for the 2018 expense model.

Exhibit 15 itemizes the cost items for owned and rented WAVs. The composite WAV per mile factor, also shown in Exhibit 15, blends cost estimates for owned and rented WAVs based on 30 percent of WAVs being rented.³⁴ Drawing from the survey and online prices for slightly used WAVs, the estimated monthly payment for a WAV is \$1,212.³⁵ Financing was based on a \$15,000 down payment and a five-year loan since five years of driving 32,500 miles per year will total 162,500 miles, after which the vehicle is likely to have inconsequential resale value. (This is particularly true for WAVs purchased used in the first place.) Exhibit 15 uses the average survey values for WAV drivers for annual insurance and maintenance costs.

Because of their larger size and with the additional wheelchair ramp equipment, WAV cleaning costs were estimated to be 25 percent higher than for non-WAV vehicles. As noted above, the greater fuel efficiency of the hybrid Sienna means that the per mile fuel costs were 9.2 cents, 3.8 cents per mile less than for the ICE vehicles used for non-WAV Uber and Lyft trips.

³³ <https://www.nyc.gov/site/tlc/vehicles/accessible-vehicle-requirements.page>

³⁴ The survey indicated that 32 percent of WAV responses were from renters, 29 percent of WAVs in the vehicle registry were owned under a corporate or business name and those vehicles provided 32.8 percent of all WAV trips during the six-month period through January 2024.

³⁵ The \$1,212 monthly payment (from Bankrate's loan calculator for a 5-year loan) based on a \$70,000 purchase price with NYC sales tax and a \$15,000 down payment (loan amount of \$61,213). The average Freedom Motors listed sale price for 10 used Sienna LE models with average mileage of 23,600 was \$70,716. Of the 10 Siennas, two were 2020 models, five were 2023 models, and two were 2024 models. The monthly loan payment for a 6-year loan was \$1,044, very close to the median monthly payment from the survey for those purchasing new WAVs.

Exhibit 15

WAV expense model

Sienna Hybrid Rear -entry WAV, owned				Sienna Hybrid Rear -entry WAV, leased			
assume 32,500 annual miles				assume 32,500 annual miles			
expense item	monthly	annual	per mile	expense item	monthly	annual	per mile
Gas (weighted mpg)	35	\$2,999	\$0.092	Gas (weighted mpg)	35	\$2,999	\$0.092
avg NYC gas price 6 mos. to 11/18/24	\$3.230			avg NYC gas price 6 mos. to 11/18/24	\$3.230		
Down payment (amortized over 5 yrs)	\$15,000	\$250	\$3,000	Weekly lease	\$600	\$31,200	\$0.960
Monthly payment		\$1,212	\$14,544				
Total vehicle payment			\$17,544	Maintenance: allow 20% at \$3500		\$700	\$0.022
Insurance			\$5,200				
Maintenance			\$5,400				
Vehicle cleaning (\$36 every two weeks) +25%			\$1,170	Vehicle cleaning (\$36 every two weeks) +25%		\$1,170	\$0.036
TLC and DMV licensing and registration fees #			\$1,382	Licensing costs only #		\$254	\$0.008
TOTAL			\$33,696	TOTAL		\$36,323	\$1.118
Composite WAV expense factor							
Per Mile Expense Factor Weights			Weighted expense factor				
Hybrid WAV, owned	\$1.037	0.700	\$0.726				
Hybrid WAV, rented	\$1.118	0.300	\$0.335				
Composite total expense factor			\$1.061				
current expense factor			\$1.021				
increase over current			3.9%				
# See Appendix Exhibit 4 for itemized details							

The average and median weekly rent costs for WAVs was \$600. We assumed that 20 percent of the rental agreements did not cover maintenance costs and used a median value of \$3,500 for those drivers.³⁶

The per mile total costs for WAV owners was \$1.037, and for WAV renters, \$1.118.³⁷ Weighting by the 70-30 split between owners and renters, respectively, resulted in a composite WAV per mile factor of \$1.061. That amount is 3.9 percent greater than the current \$1.021 WAV per mile factor. Expressed in terms of a per trip mile basis, the new WAV composite expense total is \$1.83 (vs. the current \$1.76 per trip mile amount.)

³⁶ In the survey, three-fourths of WAV renters reported an annual maintenance value that averaged \$4,900. Due to a limited sample (the N for WAV renters was 50), in order to not over-state the extent of renters who had to pay for their own maintenance, we scaled back the proportion of renters and used the lower median maintenance value.

³⁷ It is interesting to note that the renter vs. owner cost differential is less (eight percent) for WAVs than for non-WAV ICE vehicles (31 percent).

The differential between updated and current per mile factors for WAVs is much less than for non-WAVs. This is largely due to the much greater fuel efficiency for hybrid WAVs that are much more widely used today, and, to a slightly lesser extent, the change from amortizing based on 32,500 annual miles compared to 30,000 annual miles previously.

8. Conclusion

Since New York City's High Volume For-Hire Vehicle (HV-FHV) drivers are responsible for acquiring, operating and maintaining their vehicles, it is essential that they be fairly compensated through the per mile trip distance component of the Taxi and Limousine Commission's minimum driver pay standard for their vehicle expenses. The HV-FHV fleet has evolved considerably since the inception of the pay standard in 2019. There are many more SUVs and electric vehicles, and the TLC is phasing in a policy that will require all HV-FHVs to be either electric or wheelchair accessible vehicles (WAVs) by 2030. In light of these developments, the TLC has commissioned this report to develop an updated method to quantify vehicle expenses and suggest appropriate modifications to the pay standard's per mile trip distance component for [general](#) HV-FHV and [trips in wheelchair accessible trips](#) WAVs.

This report recommends a composite per mile cost factor [for non-WAVs](#) reflective of vehicle cost structures along two dimensions: owned vs. rented, and internal combustion engine (ICE) vs. electric (~~EV~~) vehicles ([EV](#)). Cost structures reflecting acquisition (or rental) costs, insurance, maintenance, and fuel or battery charging costs were compiled for each of the four vehicle categories and weighted to reflect each category's projected share of high volume trips for 2025. The trip weights for the composite per mile cost factor are owned ICE vehicles (.583), rented ICEs (.292), owned EVs (.083) and rented EVs (.042). Since [most all](#) WAVs in current use are [hybrids \(and there are no all electric WAVs\)](#), [ICE-powered](#), the WAV-specific composite per mile factor is [weighted solely based](#) on 70 percent of WAVs being owned and 30 percent rented.

The expense factor is geared to full-time drivers who provide the bulk of all HV-[FHV](#) trips and who purchased a vehicle for the purpose of driving for hire, as 93 percent reported in our driver survey. The average full-time driver logs 32,500 miles annually and owner-drivers typically finance the purchase of their vehicles over five years. A vehicle driven intensively providing for-hire vehicle passenger services for five years on the streets of New York City would likely be fully depreciated after five years with minimal residual value.

For the thirty percent of vehicles that are rented, it costs 25-30 percent more to rent a vehicle than to own one for use in providing HV-FHV services. This differential largely stems from the 20.875 percent sales tax on short-term vehicle rentals, higher insurance costs, and a "registration rent" that is a function of the costs and administrative burden of getting a vehicle licensed by TLC and the agency's limitation on the issuance of new vehicle licenses.

The analysis of EV expenses factored in a nominal allowance for drivers to be paid for some of the time they spend waiting for access to a charging station and for vehicle batteries to be

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charged. This is necessary since most city residents live in apartments or other multi-family homes and have to rely on public charging facilities.

The composite \$0.879 per mile factor for non-WAV trips that this report derives is 11.4 percent higher than the existing \$0.789 per mile factor in effect since March 1, 2024. Under the existing pay standard regulation, even without a change in the underlying methodology, the expense factor would rise on March 1, 2025, by the annual average change in the Consumer Price Index for Urban Wage Earners and Clerical Workers for 2024, which averaged 3.9 percent through the first 10 months. When combined with the per minute factor in determining the overall minimum pay standard, the proposed \$0.879 per mile factor would raise [pay for an average trip of 7.5 miles and 30 minutes](#) ~~average driver trip pay~~ by 2.7 percent compared to simply adjusting both the per minute and the per mile factors on March 1, 2025, by the CPI change.

The revised expense model developed in this report has been designed so that any future updates can be made by TLC staff based on changes in such parameters as the proportions of EV and rented vehicles, or industry-wide changes in insurance and fuel/charging costs.

Appendix Exhibit 1 2019 Wheelchair-Accessible Vehicle (WAV) Expense Model

2018 Chrysler Grand Caravan, 17 city mpg, 30,000 miles per year

Expense Category	Specific Expenditure Item	Annual	Weekly	Per Mile
One-Time--all amortized over 5 years				
	Vehicle downpayment--\$3,000	\$600	\$11.54	0.020
	TLC 24-hour course--one time \$175	\$35	\$0.67	0.001
	TLC 24-hour course exam--one time \$50	\$10	\$0.19	0.000
	DMV E class license--one time \$113	\$23	\$0.43	0.001
	TLC fingerprinting--one time \$88.50	\$18	\$0.34	0.001
	WAV sensitivity training--one time \$60	\$12	\$0.23	0.000
	SubTotal	\$697	\$13.41	0.023
Recurring				
	TLC driver license--\$252 every 3 years	\$84	\$1.62	0.003
	TLC drug test	\$26	\$0.50	0.001
	Vehicle registration	\$275	\$5.29	0.009
	TLC and DMV vehicle inspection	\$130	\$2.50	0.004
	DMV defensive driving course--\$50 every 3 years	\$17	\$0.32	0.001
	DMV new plates	\$5	\$0.10	0.000
	DMV vehicle license and plate renewal	\$400	\$7.69	0.013
	DMV vehicle use tax	\$40	\$0.77	0.001
	DMV commercial motor vehicle tax	\$400	\$7.69	0.013
	SubTotal	\$1,377	\$26.47	0.046
Operating				
	Gas	\$5,121	\$98.48	0.171
	Vehicle payment (includes \$11,000 modification costs)	\$9,334	\$179.51	0.311
	Commercial insurance	\$4,790	\$92.12	0.160
	Vehicle maintenance	\$2,270	\$43.65	0.076
	Vehicle cleaning	\$936	\$18.00	0.031
	SubTotal	\$22,452	\$431.76	0.748
TOTAL		\$24,526	\$471.65	0.818

Source: Parrott, Reich, Rochford and Yang, "The New York City App-Based Driver Pay Standard: Revised Estimates for the New Pay Requirement," Prepared for the NYC TLC, CNTCA, Jan. 2019.

Appendix Exhibit 2, page 1

NYC EV charging costs = electricity costs + drivers' time (also Exhibit 12)

		units	low parameter ests.		high parameter ests.		mid-pt. est.
1	EV charging need and average miles per charge		<i>Model 3</i>		<i>Model Y</i>		
1.1	Useable battery capacity	kWh	57.5		57.5		
1.2	Assume average 80% battery usage per charge	kWh	46		46		
1.3	U.S. EPA kWh/mile rating	kWh/mile	0.25		0.28		
1.4	Miles per average charge	miles	184		164		
1.5	<i>EV Database "real range"</i>	<i>miles</i>	239		208		
2	NYC EV electricity charging costs	survey weight units		weighted cost/kWh		weighted cost/kWh	
2.1	Residential rates for home charging	0.25 cost/kWh	\$0.084	\$0.021	\$0.299	\$0.075	
2.2	Public Level 2 charging	0.10 cost/kWh	\$0.136	\$0.013	\$0.340	\$0.033	
2.3	Public (or private) DCFC (fast charger)	0.65 cost/kWh	\$0.347	\$0.226	\$0.590	\$0.385	
2.4	Weighted NYC EV electricity charging costs	1.00 cost/kWh		\$0.261		\$0.493	
3	Weighted EV electricity charging costs per mile	electricity cost/mile	\$0.065		\$0.138		\$0.102
4	Driver allowance for waiting time for charger access and charging	units					
4.1	Total monthly miles traveled	miles	2,167		3,250		
4.2	# of charging events needed per month	number	11.8		19.8		
4.3	Weighted time waiting for charger per charging event	hours	0.21		0.60		
4.4	Weighted charging time per charging event	hours	0.28		0.67		
4.5	Hourly rate for driver time	\$/hour	\$18.40		\$18.40		
4.6	Allowance for driver time for waiting and charging time	per mile	\$0.049		\$0.142		\$0.096

Appendix Exhibit 2, page 2

Sources and assumptions in estimating NYC electric vehicle charging costs

ITEM		Sources informing assumptions and estimates
1	EV charging need and average miles per charge	
	Tesla Models Y, Tesla Model 3, Toyota bZ4X, Kia Niro	Examined data for the four most common EVs in NYC HV-FHV fleet (TLC, July 2024, Table 2, Electrification in Motion, p. 15) and used Tesla Model 3 for the low parameter estimate and Tesla Model Y for the high parameter estimate.
1.1	Useable battery capacity	57.5 kWh for both Tesla models according to EV Database, an independent non-profit seeking to provide real-world operating data on EVs. ev-database.org
1.2	Assume average 80% battery charge	Charging speed slows as the battery gets closer to full to prevent damage to the battery. It is more cost- and time-efficient for drivers to charge until the battery reaches 80%. It can take about as long to charge the last 10% of an EV battery as the first 90%. https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds
1.3	U.S. EPA kWh/mile rating	U.S. Department of Energy, www.fueleconomy.gov
1.4	Miles per average charge	Multiply 80% average battery usage by kWh/mile.
1.5	EV Database "real range"	Strictly for comparison to miles per average charge, EV Database organization's estimate of range in miles in "real world" conditions.
2	NYC EV electricity charging costs	
2.1	Residential rates for home charging	Con Ed residential rates, using off-peak rates for low parameter and peak rates for high parameter. This modeling does not factor in any equipment costs.
2.2	Public Level 2 charging	NYC curbside Level 2 chargers cost \$2.50/hr between 6AM and 9PM and \$1 per hour overnight. EV-Database indicates the Level 2 charging time for both Tesla models is 6.25 hours. The low parameter uses the \$1 overnight rate, the high parameter uses the \$2.50 6AM-9PM rate. Electricity costs are the charging time multiplied by the electric rate divided by the kWh/mile rating.
2.3	Public (or private) DCFC (fast charger)	Low parameter is average of JFK (\$0.20/kWh), DOT municipal garages (\$0.39/kWh) and Revel's lower price point of \$0.45/kWh. High parameter is Revel's Manhattan price point of \$0.59.
2.4	Weighted NYC EV electricity charging costs	
3	Weighted EV electricity charging costs per mile	Electricity charging costs per mile equal the electricity cost/kWh weighted for the three charging modes multiplied by the EPA kWh/mile rating. The midpoint of the low and high electricity costs/kWh is \$0.102.

Appendix Exhibit 2, page 3

Sources and assumptions in estimating NYC electric vehicle charging costs

4	Driver allowance for waiting time for charger access and charging	
4.1	Total monthly miles traveled	On average, HV FHV drivers log 32,500 miles annually, 2,708 monthly. Low estimate is 80 percent of the monthly average, the high estimate is 120 percent of the monthly average.
4.2	Number of charging events needed per month (@ miles per avg. charge)	This equals the number of total miles traveled divided by miles per average charge.
4.3	Weighted time waiting for charger per charging event	Q. 4.4 on the driver survey asked how long drivers wait for access to a charging station. We used the midpoint for each response range (e.g., 22.5 minutes for the 15-30 minute range) and derived a weighted total of 35.9 minutes (0.6 hours). Since we expect access waiting time to decline as the city's EV charging infrastructure expands, we used the survey results as the high parameter. A distribution weighted toward shorter ranges was posited to approximate a low parameter weighted value of 12.4 minutes. Expressed in hours these values, weighted by driver shares of charging mode, become 0.21 and 0.60 hours. Drivers are assumed to wait with their vehicles during this waiting time.
4.4	Weighted charging time per charging event	For those charging at home a nominal low-high range of 5-10 minutes is assumed to set up charging. Level 2 charging requires 6-7 hours for an 80 percent charge. It is assumed that drivers park their car at a curbside charger and leave their vehicle. We assumed that drivers will spend a low-high range of 20-40 minutes locating a curbside or other public Level 2 charging facility and tending their vehicle during charging. For the 65 percent of drivers use DCFC charging stations, our low estimate was based on the average of EV-Database estimates that Tesla Model Ys require 18 minutes to charge to 80 percent and that Model 3s take 24 minutes. For DCFC users, our high estimate was based on the midpoint (52.17 minutes) of survey responses. Drivers likely stay with their vehicles while using a public or private fast-charger. Weighted based on the shares by charging mode, the low range is 0.28 hours and the high range estimate is 0.67 hours (or a range of about 17-40 minutes). As noted above, this modeling does not include the cost of any charging equipment purchased for home use.
4.5	Hourly rate for driver time	A minimal hourly rate for drivers' time would be \$17 (the New York City minimum wage effective January 1, 2025) plus \$1.40 to cover the employer share of payroll taxes on \$17 that an independent contractor driver would pay.
4.6	Per mile allowance for driver time for waiting and charging time	This calculation compensates drivers for the sum of their time waiting for a charger and the charging time as described above. Compensation is at \$18.40 per hour, with the average waiting times for access and charging multiplied by the number of monthly charging events, and the result divided by monthly mile traveled to put it on a per mile basis.

Appendix Exhibit 3

Comparison of HR&A and CNYCA Expense Analyses

Summary items, ICE and electric vehicles, per mile expense

Blended costs for ICE and electric vehicles	HR&A Uber Report		CNYCA	
	owners	renters	owners	renters
TLCF license	\$0.005	\$0.005	\$0.042	\$0.008
Vehicle payment	\$0.138		\$0.312	
Down payment			\$0.030	
Monthly payment			\$0.281	
Interest	\$0.028			
Depreciation	\$0.110			
Rental cost		\$0.743		\$0.845
Fuel/battery charging	\$0.136	\$0.136	\$0.138	\$0.138
Insurance	\$0.136		\$0.141	
Maintenance	\$0.101		\$0.137	\$0.021
Vehicle cleaning			\$0.029	\$0.029
Unlimited data plan	\$0.006	\$0.006		
Total costs per mile	\$0.522	\$0.890	\$0.798	\$1.041
Composite per mile factor for both owners and renters	\$0.616		\$0.879	

Comparison of different composite expense weighting

	HR&A Uber Report	CNYCA
Share of drivers renting a vehicle	25.6%	30.0%
Share of drivers using an EV	3.7%	12.5%

Sources: HR&A, *New York City Uber Driver Earnings and Expenses Study*, Final Report, for Uber Technologies, Inc., November 4, 2024; see Exhibit 13 and 14 for CNYCA estimates.

Appendix Exhibit 4

TLC and DMV licensing and registration-related expenses

annual costs amortized over 32,500 miles

expense item	cost	annual	per mile
One-time costs amortized over five years			
TLC 24-hour course	\$250.00	\$50.00	
TLC 24-hour course exam	\$49.00	\$9.80	
DMV E class license	\$107.50	\$21.50	
TLC fingerprinting	\$90.25	\$18.05	
WAV sensitivity training	\$100.00	\$20.00	
DMV new plates	\$25.00	\$5.00	
DMV commercial vehicle registration title certificate	\$50.00	\$10.00	
Recurring costs (annual unless specified differently)			
TLC driver license--\$252 every 3 years	\$252.00	\$84.00	
TLC drug test	\$34.00	\$34.00	
Vehicle Registration *	\$226.60	\$226.60	
TLC and DMV vehicle inspection (TLC every 2 years)	\$112.00	\$74.50	
DMV defensive driving course--\$50 every 3 years	\$50.00	\$16.67	
DMV commercial vehicle regis. (every 2 years) **	\$194.50	\$97.25	
TLC vehicle license (every two years)	\$550.00	\$275.00	
DMV vehicle use tax	\$40.00	\$40.00	
DMV commercial motor vehicle tax	\$400.00	\$400.00	
Total TLC and DMV licensing and registration		\$1,382.37	\$0.043

* Weighted average of gas/hybrid (\$233.50--85%) and EV (\$187.50 (15%).

** Fee for a 4,000-4,500-pound vehicle.

See TLC "Get a TLC Drivers License"

<https://www.nyc.gov/site/tlc/drivers/get-a-tlc-drivers-license.page>

Exhibit C

BEFORE THE NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

Supplemental Report of Kristen Backor, Ph.D.

March 5, 2025

I. INTRODUCTION

1. I submitted a report to the New York City Taxi and Limousine Commission (“TLC”) on February 4th, 2025 (“Backor Report”). I understand that some subset of materials related to the survey conducted by the TLC (“TLC Survey”) were disclosed for the first time on the afternoon of February 4, 2025, including a June 2024 extract from Qualtrics Survey Software of what appears to be the survey questionnaire (“Survey Questionnaire”) and three backup datafiles including: (i) a cross tabulation on questions Q2.1 and Q5.7; (ii) responses split by EV and non-EV drivers for several questions; and (iii) the backup files for Exhibits 12 through 14 of the “Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard” submitted by James A. Parrott (“Parrott Report”).¹ I did not have these materials and thus was not able to review them ahead of the February 4, 2025 deadline for submitting the Backor Report, and my conclusions in that report were based on the Parrott Report alone. This report is based on my review of the “Survey Questionnaire” and the backup datafiles produced on February 4, 2025 (collectively, the “Materials Disclosed”).
2. An updated version of my curriculum vitae is attached as Supplemental Appendix A. The materials that I have relied upon are listed in Supplemental Appendix B with copies attached in Supplemental Appendix C through F. I reserve the right to supplement or modify this report, if warranted, as additional information is made available to me. In addition, I reserve the right to prepare additional supporting materials such as summaries, graphical exhibits, or charts.
3. My report is organized as follows. Section II provides an overview of flaws in the TLC Survey as demonstrated by the new materials disclosed while Section III

¹ Qualtrics_Survey_Software.pdf; Q2.1_and_5.7_expectations_re_EV_or_WAV_by_own-lease.xlsx; Driver_survey_selected_results_EV_owners_vs_nonEV_owners_8-5-24.xlsx (“EV Owners Selected Results”); Revised_11-22_Exhs_12_13_14_appendix_for_Exh_12.xlsx.

- updates the Backor Report's conclusions regarding whether best practices in survey design and reporting were followed given the disclosure of new materials.
4. After review of selected materials produced since the submission of the Backor Report, I stand by my initial conclusion that flaws in the methodology and design of the TLC Survey, which is relied upon by the Parrott Report, render the TLC Survey critically flawed and its results unreliable for drawing conclusions about the population surveyed.
- (a) The TLC Survey goes against best practices and likely biases the reported answers including by informing respondents about the survey's sponsor and purpose; failing to prevent or reduce respondent guessing; and presenting questions that are potentially unclear, lack precision, and/or depend on respondent recall.
- (b) The Parrott Report still fails to follow best practice in survey design and reporting and does not provide information sufficient to evaluate the conclusions of the TLC Survey effectively.

II. THE MATERIALS DISCLOSED SUPPORT THE CONCLUSION THAT THE TLC SURVEY WAS SUBJECT TO MULTIPLE SOURCES OF SURVEY BIAS

A. Respondents Had Knowledge of the Survey Sponsor and Topic

5. Best survey practice states that respondents (and interviewers) should be "blind to the purpose and sponsorship of [a] survey."² Awareness by respondents of the sponsor of the survey can induce answers respondents would not have otherwise provided. Such a risk is especially acute if respondents have a stake in the outcome of the survey.

² Diamond, Shari Seidman, "Reference Guide on Survey Research," *Reference Manual on Scientific Evidence: Third Edition*, Federal Judicial Center, 2011 ("Diamond 2011"), p. 374. *See also*, Diamond 2011, pp. 410-411.

6. According to the Survey Questionnaire, survey respondents were explicitly told that the purpose of the survey was to assist the TLC in updating “the driver expenses incorporated into its minimum pay standard for FHV drivers” and that completion of the survey would assist in “the analysis of driver expenses.”³ By informing survey respondents that the answers to the questions would affect the minimum pay started for FHVs and emphasizing the importance of driver expenses, the TLC Survey incentivized respondents to overstate and/or inflate their expenses (even unintentionally), thereby biasing the results of the survey and rendering them critically flawed.

B. The Survey Questionnaire Does Not Follow Best Practices to Reduce Respondent Guessing or Confirm Respondent Attention

7. Best practice requires that the survey be structured to limit the extent to which respondents provide answers to questions to which they have little or no confidence in the veracity of their answer.⁴ However, other than requesting upfront that respondents provide accurate responses, the TLC survey fails to implement any controls to limit respondent guessing.
8. For example, two methods researchers may use to limit guessing include: (i) instructing respondents not to guess and (ii) providing a “don’t know” or “unsure” option to answer each question.⁵ In contrast, (i) the TLC Survey does not contain any specific instruction to respondents not to guess and (ii) does not provide any option for respondents to select a “Don’t know” or “Unsure” option. In cases where respondents may lack certainty, survey researchers may also choose to eliminate the “don’t know” option and add follow-up questions that measure the level of confidence.⁶ No such questions to assess confidence were included in the TLC Survey based on the Survey Questionnaire.

³ Survey Questionnaire, p. 1.

⁴ Diamond 2011, pp. 389-390.

⁵ Diamond 2011, pp. 389, 391.

⁶ Diamond 2011, p. 391.

9. Additionally, researchers can limit guessing by preventing respondents from answering questions to which they would have little or no familiarity. For example, there is no reason to ask respondents questions of EV charging if they do not own an EV. However, while skip logic question patterns were not provided (see Section III), there is some evidence that non-EV owners or renters were allowed to answer the EV questions. In particular, the newly disclosed materials reveal that 1,306 respondents answered the question “Q4.1 - Where do you usually charge your EV battery?”, including 886 respondents who answered “Other”.⁷ However, according to the Parrott Report, 677 respondents in the TLC Survey indicated they owned or rented an EV.⁸ It is not apparent how 1,306 respondents could have provided an answer to question Q4.1 unless non-EV owners and renters were allowed to answer the question.
10. Another method survey researchers use to ensure respondents are dedicating appropriate attention and care to the survey is through a question that requires a specific answer in order to qualify for the survey (e.g., “Please select 4 for this question”). Based on the Survey Questionnaire provided, there is no evidence that the TLC Survey included such a question.

C. The Survey Questionnaire Was Subject to Potential Survey Biases Based on Design

11. Best practice requires that all “questions on a survey...be clear and precise” and avoid conveying “unexpected meanings and ambiguities to potential respondents.”⁹ However, a review of the Survey Questionnaire indicates several potential ambiguities, including in question framing and wording.

1. Question Framing

12. As noted in the Backor Report, question framing can give respondents key information about the survey author’s expectations and assumptions. Leading

⁷ EV Owners Selected Results, tab “EV Charging”.

⁸ Parrott Report, Exhibit 7.

⁹ Diamond 2011, p. 387.

- questions are questions written in such a way that they push respondents toward a specific mindset or response. Given the scope for potential bias resulting from leading questions, it is essential that the questions in the TLC Survey be formulated in a balanced and non-suggestive way if potentially significant bias in responses is to be avoided. However, questions within the survey have built-in assumptions about driver behaviors. For example, Q4.4 asks “How long, on average, do you have to wait...”, potentially prompting respondents to recall a wait.
13. In addition, despite distinguishing between Uber and Lyft in the first question as answer choices regarding for which company or companies respondents drive, the remainder of the survey alternately combines (as in Q1.2, “...how many hours per week do you usually drive for Uber and Lyft [together]”) or treats as indistinguishable (as in Q1.3, “...how long have you driven for Uber or Lyft?”) the company or companies for which respondents drive. These decisions have significant implications for question interpretation and thus for the estimates provided. For example, instructing respondents to group Uber and Lyft and using the vague term “drive for” in Q1.2 about hours per week driven may lead to double-counting and introduces the potential for different interpretations across respondents. Should respondents consider only time with passengers in the car? Time when engaged by a passenger (including driving to pick up a passenger)? Time when in the car with app(s) active and looking to pick up rides? If active ride-seeking time is included, should drivers who have both Uber and Lyft open at the same time double-count that time?

2. Recall Bias

14. Survey respondents can also experience recall bias, in which issues occur when the questions require respondents to recall past events and/or describe their own subjective experiences. Many of the questions in the Parrott Report relate to past events, such as:

- (a) “Q1.4. In the last year, about how many miles did you drive your primary vehicle for Uber or Lyft?”
 - (b) “Q1.5. In the last year, how much did you spend on routine maintenance for your vehicle (such as brakes, tires) not related to collisions or crashes?”
 - (c) “Q2.2. How much did your vehicle cost when you purchased it? (If you own a wheelchair-accessible vehicle, include conversion costs in this number.)”
 - (d) “Q2.12. If you made a down payment when you purchased your vehicle, what was the amount?”
 - (e) “Q4.4 How long, on average, do you have to wait to use or access a public or commercial charging station?”
 - (f) “Q4.5. If you wait with your vehicle while it charges, how long do you wait for the battery to charge?”¹⁰
15. Notably, respondents were not provided with any specific instructions regarding what sources they should reference when answering these questions. The only instruction observed in the survey is the ask to be as accurate as possible as the beginning. However, and notwithstanding the incentive bias discussed above, this is not sufficient to ensure respondents answered each of the above question by referencing documentation as opposed to making guesses (See also Section II.B.).
16. In addition, there is no evidence that the timeframes were chosen based on respondent thinking. Proper survey design typically includes cognitive interviews and pre-testing to ensure that the survey questions reflect respondent language

¹⁰ As discussed in the Backor Report, recall of wait times in particular has been shown to be poor in certain situations (See, for example, Thomson, David A. et al., “How Accurate Are Waiting Time Perceptions of Patients in the Emergency Department?,” *Annals of Emergency Medicine*, 28:6, 1996, pp. 653-654).

- and thinking, including considerations such as timeframes.¹¹ The Parrott Report and the new materials provided include no evidence that such discussions were conducted. In the case of questions requiring recall, this may mean that the timeframes used do not match respondent thinking; for example, Q1.4 asks about miles driven “in the last year”, but this timeframe may be too long for respondents to recall mileage accurately.
17. Finally, the survey is not consistent regarding the tense of its questions, which potentially may have confused the respondents and made recall more difficult. For example, Q2.6 asks respondents if they are “still paying off your vehicle”; Q2.7 asks respondents “How often is each payment for your vehicle?”, both of which are in the current tense. However, Q2.8 proceeds to ask respondents “What is/was the interest rate on your vehicle loan?” while Q2.9 asks, “What is/was the length in months of your loan?”, both of which ask about current and prior loans. Q2.10 returns to a present tense with “How much is your vehicle payment?”¹²

3. Other Issues

18. As the Backor Report noted, the way answers are presented also can lead to bias, such as when the answer options in a multiple-choice set provide the respondent with information about what is considered normal or typical and set bounds around how the information can be analyzed. The production of the full survey document does nothing to assuage these concerns; in addition to Q1.6 (importance of driving for Uber or Lyft) described in the Backor Report, other questions introduce similar issues. For example, Q4.2 asks, “How often do you usually charge your vehicle?” and offers options of “One time per day”, “More than one time per day”, and “Less than one time per day”, which normalizes a baseline of once a day charging that may not be accurate.
19. Depending on the question, it is also best practice to randomize the order in which responses to multiple choice questions are presented to avoid bias from “order

¹¹ Diamond 2011, pp. 388-389.

¹² Survey Questionnaire, pp. 5-6.

effects” (e.g., some respondents may default to the first option).¹³ Typically, information on the available responses, the inclusion of open-ends, and the use of randomization would be included within the survey document. Based on the survey questionnaire provided, there is no evidence that choices were randomized, where appropriate. For example, Q2.1 asks, “...Do you own or lease/rent the vehicle you use?”, with “I own an electric vehicle (EV)” listed as the first response.¹⁴ No randomization is indicated, and the first answer option appears to define “EV” for option 3 (“I rent/lease an EV”), meaning that randomization would result in the provided options not making sense when option 3 came before option 1.

III. THE MATERIALS DISCLOSED ARE INSUFFICIENT AND LACK NECESSARY INFORMATION TO FULLY EVALUATE THE PARROTT REPORT AND TLC SURVEY

20. As discussed in the Backor Report, “[i]n order to properly assess a survey’s methodology and the reliability of its results and to evaluate whether best practices have been followed, the survey researcher and/or sponsor must provide a detailed ‘survey report’ that fully characterizes the design and implementation of the survey.”¹⁵ A copy of the survey questions and a subset of underlying analytical files covering six questions and Exhibits 12-14 of the Parrott Report are not sufficient for properly evaluating the TLC Survey, notwithstanding the significant number of flaws discussed above.

A. The Materials Disclosed Do Not Constitute a Sufficient Set of Materials to Properly Evaluate the TLC Survey

21. As discussed in the Backor Report, it is standard practice for survey materials to be provided alongside the results of the survey so that the potential impact of factors like question wording and question order can be evaluated properly. These

¹³ Diamond 2011, pp. 396, 420. There are cases where it does make sense to arrange responses in a specific order, typically when responses follow an obvious sequence or logic.

¹⁴ Survey Questionnaire, pp. 3-4.

¹⁵ Backor Report, ¶ 8.

- materials may include, but are not limited to, information on interview procedures, the respondent invitation, survey programming language (such as randomization and skip logic, which would indicate who sees what questions), and the full survey dataset collected when respondents took the survey, none of which have yet to be made available.
22. I am also not aware of any materials produced related to a “special survey of drivers renting their vehicles” referenced in the Parrott Report.¹⁶ Accordingly, it continues to be the case that I have not been able to identify any information on the methodology used, and the Parrott Report does not appear to explain how the drivers for this survey were selected or the response rate for this survey. In short, the Materials Disclosed do not allow one to determine whether the TLC Survey was conducted in a manner following survey best practices; therefore, it should not be relied upon until sufficient information is provided.
- B. The Materials Disclosed Did Not Provide a Full Dataset to Understand Response Rates and Sampling Frame**
23. As noted in the Backor Report, the survey indicates that “it generated 6,757 responses”, but only 3,000-4,500 “substantially” completed surveys.¹⁷ The Materials Disclosed did not include a full dataset for evaluation, so questions remain about the overall response rate and the response rate for specific questions. Skip logic was not provided as part of the survey document, so it is not possible to know who saw a particular question or to determine whether responses are missing and why (i.e., did they see the question and choose not to answer or did they never see the question at all).
24. The lack of a full dataset also means that survey dropouts cannot be evaluated. As noted in the Backor Report, survey dropouts provide key information to inform survey analysis. The Materials Disclosed lack information on when respondents may have discontinued and why.

¹⁶ Parrott Report, p. 17.

¹⁷ Parrott Report, p. 9.

C. The Lack of Full Dataset and Detailed Cleaning Procedures in the Materials Disclosed Does Not Allow Evaluation of TLC Survey Cleaning and Data Quality

25. As noted in the Backor Report, data cleaning is key to ensuring data quality.¹⁸ The description of data cleaning in the Parrott Report was vague and missing key information such as which questions had outliers removed, how outliers were determined, and how many respondents were excluded. The lack of a full dataset and a comprehensive description of cleaning procedures in the Materials Disclosed means that data cleaning procedures and the impact of respondent removals still cannot be evaluated, and thus the final survey results cannot be relied upon to draw conclusions about the population.

* * *

26. After review of the Materials Disclosed, the information provided continues to be insufficient to determine whether the TLC Survey followed best practices overall, and confirms the presence of bias, such as that introduced by informing respondents of the purpose of the survey. In addition, the Materials Disclosed raise new concerns about issues like question wording, skip logic, and randomization. As a result, the Parrott Report's analyses of the TLC Survey are not reliable for drawing conclusions about the population surveyed.



Kristen Backor, Ph.D.

¹⁸ Backor Report, ¶¶ 36-37.

Supplemental Appendix A

Kristen Backor

Vice President and Director

PhD, Sociology
Stanford University

MA, Stanford University

BA, Texas A & M University

Dr. Kristen Backor has been designing, conducting, and executing market research for over 15 years. Dr. Backor's business consulting engagements focus on customer insights work, including qualitative and quantitative market research with a variety of stakeholders (from consumers to physicians). In her capacity as Vice President and Director of the Market Research Center of Excellence at Charles River Associates, she provides guidance and oversight for projects concerning customer insights and qualitative and quantitative research assessments across practices within CRA.

Experience

Business

2017–Present *Vice President and Director of Market Research Center of Excellence*, Charles River Associates, Austin, TX

- Dr. Backor designs and leads execution of market research projects and manages companywide development and execution of market research, including developing key internal processes, trainings, and best practices.
- As an expert witness, Dr. Backor designs, executes, and testifies as to the interpretations of both qualitative and quantitative surveys for a variety of matters, including under the Fair Labor Standards Act.

2010–2016 *Management Consultant*, C1 Consulting, San Francisco, CA

- Dr. Backor designed and executed quantitative and qualitative market research, including product profile testing, concept and message testing, positioning, strategy, segmentation, and opportunity assessment.

2006–2008 *Co-founder*, CKA Survey Consulting, Stanford, CA

- Dr. Backor designed, conducted, and analyzed market research, including surveys and focus groups, within university departments.

Academic

2005–2009 *Head Research Assistant*, Stanford Institute for the Quantitative Study of Society, Stanford University

- Dr. Backor conducted quantitative and qualitative research exploring technological, political, and educational issues and managed a team of ten researchers conducting quantitative studies across scientific disciplines.

2003–2006 *Research Assistant*, Sociology Department, Stanford University

- Dr. Backor conducted experimental research with undergraduate students and trained research assistants to support execution and analysis.
- 2004-2006 *Teaching Assistant*, Sociology Department, Stanford University
- Dr. Backor supported education and training of undergraduates in a variety of topics, including research methods.
- 2003 *Research Assistant*, Sociology Department, Texas A & M University
- Dr. Backor conducted experimental research and quantitative and qualitative assessments on a variety of topics.

Publications and Selected Writing

- DiNardo, Katherine W, Alice Houk, Christine Shim, **Kristen Backor**, Erika Sloan, Jolien Sweere, Isabel N Schuermeyer, Mary K Hughes, Thomas W. Leblanc. 2022. "The mental health burden and quality of life impact of myelodysplastic syndromes in patients and their caregivers." *Blood* (2022) 140 (Supplement 1): 8122–8123.
- **Backor, Kristen**, Brandon Duke, and Yamini Jena. 2022. "Addressing Low Response Rates in Expert Surveys." *Law360*, May 23.
- **Backor, Kristen**, Eddie Li, Jing Li, Elizabeth Rountree, and Billy Wang. 2021. "Assessing physician practices and expectations in the post-COVID era." *Pharma Forum*, January 22.
- Wang, Billy and **Kristen Backor**. 2020. "Transition into the post-COVID era: Evolving physician practices and expectations." *Medical Economics*, October 1.
- **Backor, Kristen** and Abby Turner. 2020. "Five issues to consider when using survey data to support employment litigation: How 'mental math' can cause survey fatigue and lead to errors." *Law360*, September 2.
- Rankin, Peter, and **Kristen Backor**. 2019. "Use of Expert Witnesses in International Arbitration: Experiences and Preferences." *Corporate Disputes Magazine*, Apr-Jun 2019 Issue.
- **Kristen Backor**. Dissertation: "Anger in the Workplace: Effects of Gender and Frequency in Context on Social and Job-Related Outcomes." 2009.
- Ridgeway, Cecilia L., **Kristen Backor**, Yan E. Li, Justine E. Tinkler, and Kristan G. Erickson. 2009. "How Easily Does a Social Difference Become a Status Distinction: Gender Matters." *American Sociological Review*, 74(1-Feb):44-62.
- Norman H. Nie and **Kristen Backor**. 2007. "The Development of the Internet in Everyday Life" in *Fortschritte der politischen Kommunikationsforschung: Festschrift für Lutz Erbring*, edited by Krause, Fretwurst, and Vogelgesang. Wiesbaden: VS Verlag.

Presentations

- Dinardo, Katherine (presenter), Alice Houk, Christine Shim, **Kristen Backor**, Erika Sloan, Jolien Sweere, Isabel Schuermeyer, Mary Hughes, Thomas Leblanc. 2022. "The Mental Health Burden and Quality of Life Impact of Myelodysplastic Syndromes in Patients and Caregivers. Poster at the American Society of Hematology Conference, in New Orleans, Louisiana, December 10-13, 2022.
- Rountree, Elizabeth, **Kristen Backor (presenter)**, and Donald D. Hoang. 2019. "Assessing New Product Share: A Study of the Impact of Anchoring and Piping On Physicians'

Expected Product Use.” Presentation at the American Association of Public Opinion Research (AAPOR) Conference, in Toronto, Canada, May 16-19.

- Rountree, Elizabeth, Rob Sederman, **Kristen Backor (presenter)**, Erika Sloan, and Greta Olesen. 2018. “Mapping Behavioral Influencers in the Pharmaceutical Industry.” Presentation at the BigSurv: Data Meets Survey Science Conference, in Barcelona, Spain, October 25-27.
- Golde, Saar, Norman H. Nie, and **Kristen Backor**. 2007. “Estimating Survey Fatigue in Time Use Study.” Paper presented at the International Association for Time Use Research Conference, in Washington, D.C., October 17-19.

Testimony

- Expert survey, report, and reply report on behalf of Defendant in *Bradley v. DentalPlans.com and Cigna Health and Life Insurance Company*. (2023). United States District Court for the District of Maryland Northern Division. Case 1:20-cv-01094-CCB.
- Expert review, declaration, and deposition on behalf of Defendant in *David George Williams v. Amazon.com Services LLC* (2022). United States District Court for the Northern District of California. Case 3:22-cv-1892-vc.
- Expert survey and report on behalf of Defendant in *Brady v. TI Group Automotive Systems, LLC*. (2021-2022). United States District Court Eastern District of Michigan, Detroit Division. Case 5:21-cv-11905-AJT-CI.
- Expert survey, report, and deposition on behalf of Plaintiff in *Delara v. Diamond Resorts Int'l Mktg.* (2020-2021). United States District Court of Nevada. Case 2:19-cv-00022-APG-NJK.
- Expert survey, report, and deposition on behalf of Plaintiff in *Gonzalez v. Diamond Resorts Int'l Mktg.* (2020-2021). United States District Court of Nevada. Case 2:18-cv-00979-APG-NJK.
- Expert review, declaration, and deposition on behalf of Defendant in *David Browne, et al., v. P.A.M Transport, Inc.* (2019-2020). United States District Court for the Eastern District of Arkansas. Case 5:16-cv-05366-TLB.

Consulting projects

Consumers and Technology

- Qualitative and quantitative assessment of consumer understanding of labeling
- Qualitative and quantitative evaluation of how mental health professionals consider impact of social media use
- Quantitative assessment of impact of product attributes on product selection in consumer behavior
- Quantitative experimental assessment of impact of informational emails and technology (phone application and health monitoring device) on consumer health behaviors in high-risk consumers

- Qualitative assessment of potential for health technology device to influence consumer behavior
- Qualitative and quantitative assessment of impact of a phone application on consumer health and behavior
- Quantitative assessment of trends in time utilization in daily life, including impact of Internet use
- Quantitative assessment of impact of survey fatigue on response quality for consumers
- Ethnographic and quantitative assessment of donning and doffing behaviors and off-the-clock work among current employees
- Quantitative assessment of off-the-clock work and behaviors among current and former employees

Education

- Quantitative assessment of undergraduate perceptions and opportunities for improvement of on-campus offerings and services
- Quantitative and qualitative assessment of impact of volunteering program among high school students
- Experimental assessment of self-control in young children

Oncology

- Pre- and post-quantitative assessment of new product to capture impact of product launch
- Quantitative assessment of the impact of visits from company representatives on product perceptions, use, and knowledge
- Quantitative and qualitative assessment of perceptions of competitor and client perceptions and development of decision-making model around product choice
- Qualitative assessment of impact of unbranded messaging campaign on behaviors and attitudes
- Qualitative and quantitative assessment of potential campaign imagery and messaging to understand impact and red flags in multiple countries
- Qualitative assessment and comparison of potential options and pricing for a product in development
- Qualitative and quantitative assessment of perceived value of products being considered for potential acquisition
- Qualitative and quantitative assessment of impact of new competitor data on product use
- Qualitative assessment, including online consumer focus groups, of potential and positioning for new consumer product

- Qualitative assessment of use and impact of electronic medical records on treatment behaviors and testing
- Qualitative assessment utilization and considerations in mammography centers
- Qualitative assessment of materials for disease education

Ophthalmology

- Quantitative and qualitative assessment of knowledge, sources of information, and interaction with company representatives
- Qualitative assessment of buying process for diagnostic assessment tools
- Qualitative assessment of functional and emotional benefits for a new product in development
- Qualitative assessment of indication statement language and product positioning for a new product in development
- Qualitative and quantitative assessment of physician referral patterns
- Qualitative assessment of advertising concepts for a new product in development
- Qualitative assessment of characteristics involved in developing thought leadership
- Qualitative assessment of potential positioning for a product with declining sales
- Qualitative and quantitative assessment to prepare for upcoming competitor launch
- Quantitative assessment of pricing sensitivities around new product launch
- Qualitative and quantitative assessment of considerations for new treatment paradigm
- Qualitative and quantitative assessment of market in anticipation of line extension for existing product
- Qualitative evaluation and assessment of marketing materials for upcoming products

Respiratory

- Qualitative assessment of role of nursing staff in patient treatment, management, and adherence

Rheumatology

- Qualitative assessment of customer perceptions for client and competitor products in a crowded marketplace
- Qualitative assessment of advertising campaign impact on behavior and treatment decisions
- Qualitative assessment of impact of nurse involvement on patient adherence and compliance
- Quantitative assessment of impact of upcoming product launches on treatment behaviors in the future landscape
- Qualitative and quantitative assessment of opportunities and considerations for shifting treatment paradigms

- Qualitative assessment of advertising campaign and messaging preferences among physicians

Other

- Qualitative assessment, including focus groups, of likely use, potential pricing, and potential impact of new product in oral health
- Qualitative assessment of advertising campaign and messaging preferences among physicians in influenza
- Quantitative multi-phase assessment of impact of label update on product perceptions and use
- Experimental research incorporating quantitative and qualitative assessment of the development and impact of perceived social status differences in undergraduate students

Honors and awards

W. Neal Kocurek Award for Health Care Advocacy; Robert C. Byrd scholarship, President's Endowed scholarship, Director's Excellence scholarship, Shell National Merit scholarship, Texas A & M University

Supplemental Appendix B

Materials Relied Upon

Reports

Backor, Kristen, Report to the New York City Taxi and Limousine Commission, February 4, 2025.

Parrott, James A., “Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard,” December 2024.

Disclosed Materials

Driver_survey_selected_results_EV_owners_vs_nonEV_owners_8-5-24.xlsx.

Q2.1_and_5.7_expectations_re_EV_or_WAV_by_own-lease.xlsx.

Qualtrics_Survey_Software.pdf.

Revised_11-2_Exhs_12_13_14_appendix_for_Exh_12.xlsx.

Journal Articles, Book Chapters, and Working Papers

Diamond, Shari Seidman, “Reference Guide on Survey Research,” *Reference Manual on Scientific Evidence: Third Edition*, Federal Judicial Center, 2011.

Thomson, David A., Paul R. Yarnold, Stephen L. Adams, and Alan B. Spacone, “How Accurate Are Waiting Time Perceptions of Patients in the Emergency Department?,” *Annals of Emergency Medicine*, 28:6, 1996.

Supplemental Appendix C

Driver_survey_selected_results_EV_owners_vs_nonEV_owners_8-5-24.xlsx.

Non EV owners

Variable	Question	Mean	Median	Min	Max	SD	N	P10	P25	P50	P75	P90
Q1.4	miles driven past yr	34,627	30,000	0	250,000	31,051	2,000	55	18,000	30,000	45,000	60,000
Q1.5	maintenance in last year	5,927	4,500	2	35,000	5,631	1,959	1,000	2,500	4,500	8,000	12,920
Q2.2	cost of vehicle	43,863	42,000	37	108,000	23,546	1,915	12,160	30,000	42,000	60,000	76,600
Q2.3	what year vehicle bought or leased	2020	2021	2014	2024	3	2047	2016	2018	2021	2023	2023
Q2.8	interest rate if loan	7.7	7.0	0.0	67.0	6.0	1,647	1.0	4.0	7.0	9.0	14.0
Q2.9	length of loan	90	60	0	2,026	197	1,695	5	36	60	72	72
Q2.10	amount of payment (monthly)	2,370	801	250	60,000	7,869	1,092	490	611	801	1,096	1,500
Q2.12	amount of down payment	6,277	5,000	0	34,500	6,461	1,661	3	2,000	5,000	9,000	15,000
Q2.13	annual insurance cost	4,532	4,500	5	10,000	2,173	1,802	500	4,000	4,500	5,700	7,200

EV owners

Variable	Question	Mean	Median	Min	Max	SD	N	P10	P25	P50	P75	P90
Q1.4	miles driven past yr	31,823	30,000	0	120,000	21,837	394	510	18,000	30,000	41,000	60,000
Q1.5	maintenance in last year	5,505	4,000	0	30,000	5,878	377	13	1,500	4,000	7,000	15,000
Q2.2	cost of vehicle	55,573	59,000	58	95,000	18,318	383	35,000	50,000	59,000	65,000	74,800
Q2.3	what year vehicle bought or leased	2023	2023	2020	2024	1	407	2021	2023	2023	2023	2023
Q2.8	interest rate if loan	8.3	7.0	1.0	25.0	4.5	351	4.0	6.0	7.0	10.0	14.0
Q2.9	length of loan	99	72	1	1,650	198	351	24	60	72	72	72
Q2.10	amount of payment (monthly)	3,105	950	400	60,000	9,929	330	635	800	950	1,103	1,378
Q2.12	amount of down payment	8,440	5,500	0	50,000	7,857	365	2,000	4,500	5,500	10,000	18,000
Q2.13	annual insurance cost	4,477	4,500	300	10,300	2,328	370	500	3,800	4,500	5,896	7,500

Supplemental Appendix D

Q2.1_and_5.7_expectations_re_EV_or_WAV_by_own-lease.xlsx.

CNYCA-TLC HV-FHV driver survey, June-July 2024

Q2.1 and Q5.7 (when do you expect to buy an EV)

Q2.1 Please respond to the following question based on the vehicle you primarily drive for Uber or Lyft. Do you own or lease/rent the vehicle you use?

Q 5.7 TLC's Green Rides Initiative requires that Uber and Lyft dispatch 100% of trips to either EVs or WAVs by 2030. When do you plan to replace your vehicle with an EV or WAV (wheelchair accessible vehicle)?

	I own a gas-powered or hybrid car	I own an electric vehicle (EV)	I rent/lease a gas-powered or hybrid car	I rent/lease an EV	Grand Total	
I already drive an EV or WAV	180	273	74	34	561	
I plan to retire or no longer drive a for-hire vehicle before I need to replace my car with an EV or WAV.	261	5	169	12	447	
In 2026	115	10	76	13	214	
In 2027	131	4	52	6	193	
In 2028	121	6	46	6	179	
In 2029	92	3	47	4	146	
In 2030	397	13	151	8	569	
Sometime next year	169	7	203	16	395	
Sometime this year	49	9	93	12	163	
Did not answer	392	60	234	61	747	
Grand Total	1907	390	1145	172	3615	own/rent ICE
Total of those responding who do not already drive EV or WAV, and not planning to retire or cease driving	1074		668	65	1807	1742
plan to drive EV or WAV by 2026	333		372	41		705
2027-2030	741		296	24		1037
plan to drive EV or WAV by 2026	31.0%		55.7%	63.1%		40.5%
2027-2030	69.0%		44.3%	36.9%		59.5%

Supplemental Appendix E
Qualtrics_Survey_Software.pdf.



Default Question Block

Q1.1. The Center for New York City Affairs at The New School is working with TLC to update the driver expenses incorporated into its minimum pay standard for FHV drivers. You are receiving this survey because you are a licensed TLC driver in New York City. Please complete this survey as accurately and completely as possible. Your answers will help us update the analysis of driver expenses.

1. Which of these companies do you drive for? (Please select all that apply.)

- ☐ Uber
- ☐ Lyft
- ☐ I used to drive for Uber or Lyft but don't anymore
- ☐ I have never driven for Uber or Lyft

Q1.2. On average, how many hours per week do you usually drive for Uber and Lyft (together)?

- ☐ Less than 5 hours
- ☐ 5 to less than 10 hours
- ☐ 10 to less than 20 hours
- ☐ 20 to less than 32 hours
- ☐ 32 to less than 40 hours
- ☐ 40 hours to less than 50 hours
- ☐ More than 50 hours

Q1.3. About how long have you driven for Uber or Lyft?

- ☐ Less than 3 months
- ☐ 3 months to less than 6 months
- ☐ 6 months to less than 1 year
- ☐ 1 to less than 3 years
- ☐ 3 to less than 5 years
- ☐ 5 years or more

Q1.4. **In the last year**, about how many miles did you drive your primary vehicle for Uber or Lyft?

Q1.5. **In the last year**, how much did you spend on routine maintenance for your vehicle (such as brakes, tires) not related to collisions or crashes?

Q1.6. How important is driving for Uber or Lyft as your source of income?

- ☐ It is less than 10% of income
- ☐ It is more than 10% but less than half of my income
- ☐ It is more than half but not all of my income
- ☐ It is my sole source of income

Own car

Q2.1. Please respond to the following question based on the vehicle you primarily drive for Uber or Lyft.

Do you own or lease/rent the vehicle you use?

- ☐ I own an electric vehicle (EV)
- ☐ I own a gas-powered or hybrid car
- ☐ I rent/lease an EV
- ☐ I rent/lease a gas-powered or hybrid car

Q2.2. How much did your vehicle cost when you purchased it? (If you own a wheelchair-accessible vehicle, include conversion costs in this number.)

Q2.3. What year did you buy your vehicle?

Q2.4. Was your vehicle new or used?

- ☐ New
- ☐ Used

Q2.5. Why did you buy your vehicle?

- ☐ Primarily to drive for Uber or Lyft
- ☐ Primarily for personal use
- ☐ About equally

Q2.6. Are you still paying off your vehicle?

- ☐ No
- ☐ Yes

Q2.7. How often is each payment for your vehicle?

- ☐ Every week
- ☐ Every 2 weeks
- ☐ Every month
- ☐ Every 2 months
- ☐ Every 3 months
- ☐ Every 6 months
- ☐ Once a year

Q2.8. What is/was the interest rate on your vehicle loan?

Q2.9. What is/was the length in months of your loan?

- ☐ 12 months
- ☐ 24 months
- ☐ 36 months
- ☐ 48 months
- ☐ 60 months

Q2.10. How much is your vehicle payment?

Q2.11. What is or was the source of your loan when you purchased your car?

- ☐ Bank
- ☐ Car dealership
- ☐ Family or friends
- ☐ Garage or Base

Q2.12. If you made a down payment when you purchased your vehicle, what was the amount?

Q2.13. How much do you pay for insurance on **an annual** basis?

Rent or lease

Q3.1. Who do you rent or lease from?

- ☐ A leasing company
- ☐ Another individual who owns a TLC license

Q3.2. What leasing company do you rent or lease from?

- ☐ Buggy
- ☐ American
- ☐ Tower
- ☐ Fast Track
- ☐ Other

Q3.3. Why did you lease your vehicle?

- ☐ Primarily to use to drive for Uber or Lyft
- ☐ Primarily for personal use
- ☐ Equally for Uber/Lyft and personal use

Q3.4. What does your vehicle lease payment include? (check all that apply)

- ☐ Use of the vehicle
- ☐ Insurance
- ☐ Maintenance

Q3.5. How much is your vehicle rental payment per week? Do not include gas costs in this amount. (If you rent daily or by the shift, please calculate based on how many days/shifts you work per week).

EV block

Q4.1. Where do you usually charge your EV battery?

- ☐ At home
- ☐ Publicly available Level 2/slow charger
- ☐ Publicly available DCFC/fast charger
- ☐ Other

Q4.2. How often do you usually charge your vehicle?

- ☐ One time per day
- ☐ More than one time per day
- ☐ Less than one time per day

Q4.3. Do you usually charge your vehicle:

- ☐ Before a shift
- ☐ During or in the middle of a shift
- ☐ After a shift
- ☐ No routine

Q4.4. How long, on average, do you have to wait to use or access a public or commercial charging station?

- ☐ There is usually no wait
- ☐ Usually less than 15 minutes30 minutes

- ☐ More than 15 minutes but less than 30 minutes
- ☐ 30–60 minutes
- ☐ 1 hour or more
- ☐ I am usually able to charge it overnight so I do not have to wait

Q4.5. If you wait with your vehicle while it charges, how long do you wait for the battery to charge?

- ☐ 15 minutes or less
- ☐ 15–30 minutes
- ☐ 30–60 minutes
- ☐ 1–2 hours
- ☐ 2+ hours
- ☐ I am usually able to charge it overnight so I do not have to wait

Demographics

Q5.1. We'd like to ask you a few demographic questions. These questions help us ensure that we're hearing from a diverse group of people.

How old are you?

- ☐ 19-20
- ☐ 21-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65+

Q5.2. How do you identify?

- ☐ Male
- ☐ Female
- ☐ Non-binary / third gender
- ☐ Prefer not to say

Q5.3. What race or ethnicity do you identify with?

- ☐ White
- ☐ Black or African American
- ☐ Hispanic, Latino, Latinx, or Spanish origin
- ☐ American Indian or Alaska Native
- ☐ Asian or Asian American
- ☐ Native Hawaiian or Pacific Islander

- ☐ Other
- ☐ Multiple races

Q5.4. Where were you born?

- ☐ Africa
- ☐ Asia
- ☐ Europe, Canada or Australia
- ☐ Mexico
- ☐ Latin America or the Caribbean
- ☐ Middle East
- ☐ South America
- ☐ United States

Q5.5. What is your home zip code?

Q5.6. In order for us to link to details (make, model, year) for the vehicle you drive, please provide your TLC driver license number. This will be kept strictly confidential.

Q5.7. TLC's Green Rides Initiative requires that Uber and Lyft dispatch 100% of trips to either EVs or WAVs by 2030. When do you plan to replace your vehicle with an EV or WAV (wheelchair accessible vehicle)?

- ☐ Sometime this year
- ☐ Sometime next year
- ☐ In 2026
- ☐ In 2027
- ☐ In 2028
- ☐ In 2029
- ☐ In 2030
- ☐ I already drive an EV or WAV
- ☐ I plan to retire or no longer drive a for-hire vehicle before I need to replace my car with an EV or WAV.

Gift card

Q6.1. As a thank you for participating in this survey, you can enter a sweepstakes for a chance to win one of ten \$100 gift cards. Are you interested in participating in this

sweepstakes?

☐ Yes

☐ No

Q6.2. If yes, what is the best email address to send a gift card link to?

Powered by Qualtrics

Supplemental Appendix F

Revised_11-2_Exhs_12_13_14_appendix_for_Exh_12.xlsx.

NYC EV Charging costs = electricity costs + drivers' time

		units	low parameter ests.		high parameter ests.		mid-pt. of low & high
1 EV charging need and average miles per charge			Model 3		Model Y		
1.1	Useable battery capacity	kWh	57.5		57.5		
1.2	Assume average 80% battery usage per charge	kWh	46		46		
1.3	U.S. EPA kWh/mile rating	kWh/mile	0.25		0.28		
1.4	Miles per average charge	miles	184		164		
1.5	EV Database "real range"	miles	239		208		
2 NYC EV electricity charging costs		weight from survey	units	weighted cost/kWh		weighted cost/kWh	
2.1	Residential rates for home charging	0.25	cost/kWh	\$0.084	\$0.021	\$0.299	\$0.075
2.2	Public Level 2 charging	0.10	cost/kWh	\$0.136	\$0.013	\$0.340	\$0.033
2.3	Public (or private) DCFC (fast charger)	0.65	cost/kWh	\$0.347	\$0.226	\$0.590	\$0.385
2.4	Weighted NYC EV electricity charging costs	1.00			\$0.261	\$0.493	
3 Weighted EV electricity charging costs per mile			electricity cost/mile				
				\$0.065		\$0.138	\$0.102
4 Driver allowance for waiting time for charger access and charging		units					
4.1	Average monthly EV trip miles	miles		1,032		1,548	
4.2	Total monthly miles traveled	miles		1,474		2,211	
4.3	Number of charging events needed per month (@ miles per avg. charge)	number		8.0		13.5	
4.4	Time waiting for charger	hours		0.17		0.60	
4.5	Charging time	hours		0.25		0.37	
4.6	Hourly rate for driver time	\$/hour		\$18.40		\$18.40	
4.7	Per mile allowance for driver time for waiting and charging time	per mile		\$0.033		\$0.075	\$0.054

Appendix with sources for Exhibit 12--EV charging costs

ITEM	Sources informing assumptions and estimates
1 EV charging need and average miles per charge	
Tesla Models Y, Tesla Model 3, Toyota b24X, Kia Niro	Examined data for the four most common EVs in NYC HV-FHV fleet (TLC, July 2024, Table 2, Electrification in Motion, p. 15) and used Tesla Model 3 for the low parameter estimate and Tesla Model Y for the high parameter estimate.
1.1 Useable battery capacity	57.5 kWh for both Tesla models according to EV Database, an independent non-profit seeking to provide real-world operating data on EVs. ev-database.org
1.2 Assume average 80% battery charge	Charging speed slows as the battery gets closer to full to prevent damage to the battery. It is more cost- and time-efficient for drivers to charge until the battery reaches 80%. It can take about as long to charge the last 10% of an EV battery as the first 90%. https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds
1.3 U.S. EPA kWh/mile rating	U.S. Department of Energy, www.fueleconomy.gov
1.4 Miles per average charge	Multiply 80% average battery usage by kWh/mile.
1.5 EV Database "real range"	Strictly for comparison to miles per average charge, EV Database organization's estimate of range in miles in "real world" conditions.
2 NYC EV electricity charging costs	
2.1 Residential rates for home charging	Con Ed residential rates, using off-peak rates for low parameter and peak rates for high parameter. This modeling does not factor in any equipment costs.
2.2 Public Level 2 charging	NYC curbside Level 2 chargers cost \$2.50/hr between 6AM and 9PM and \$1 per hour overnight. EV-Database indicates the Level 2 charging time for both Tesla models is 6.25 hours. The low parameter uses the \$1 overnight rate, the high parameter uses the \$2.50 6AM-9PM rate. Electricity costs are the charging time multiplied by the electric rate divided by the kWh/mile rating.
2.3 Public (or private) DCFC (fast charger)	Low parameter is average of JFK (\$0.20/kWh), DOT municipal garages (\$0.39/kWh) and Revel's lower price point of \$0.45/kWh. High parameter is Revel's Manhattan price point of \$0.59.
2.4 Weighted NYC EV electricity charging costs	
3 Weighted EV electricity charging costs per mile	Electricity charging costs per mile equal the electricity cost/kWh weighted for the three charging modes multiplied by the EPA kWh/mile rating. The midpoint of the low and high electricity costs/kWh is \$0.102.
4 Driver allowance for waiting time for charger access and charging	
4.1 Average monthly EV trip miles	According to the Electricity in Motion report, average monthly EV trip miles = 1,290. The low parameter = 80% of 1,290, and the high parameter equals 120% of 1,290.
4.2 Total monthly miles traveled	Total monthly miles includes miles traveled during cruising and pickup. Derived by dividing trip miles by a .70 distance utilization rate.
4.3 Number of charging events needed per month (@ miles per avg. charge)	This equals the number of total miles traveled divided by miles per average charge.
4.4 Time waiting for charger	Q. 4.4 on the driver survey asked how long drivers wait for access to a charging station. We used the midpoint for each response range (e.g., 22.5 minutes for the 15-30 minute range) and derived a weighted total of 35.9 minutes. Since we expect access waiting time to decline as the city's EV charging infrastructure expands, we used the survey results as the high parameter. A distribution weighted toward shorter ranges was posited to approximate a low parameter weighted value of 10.1 minutes. Expressed in hours these values become 0.17 and 0.60 hours. Drivers are assumed to wait with their vehicles during this waiting time.
4.5 Charging time	65% of drivers use fast-charging stations. EV-Database estimates that Tesla Model 3s require 24 minutes to charge to 80% and that Model Ys take 18 minutes. Drivers likely stay with their vehicles while using a fast-charger. Level 2 charging is much slower, requiring 6-7 hours for an 80% charge. It is assumed that drivers park their car at a curbside charger and leave their vehicle. We assumed that drivers will spend 20 (low) to 40 (high) minutes locating a curbside or other public Level 2 charging facility. For those charging at home a nominal range of 5-10 minutes is assumed to set up charging. As noted above, this modeling does not include the cost of any charging equipment purchased for home use--this nominal time allowance may be seen as a substitute for equipment costs.
4.6 Hourly rate for driver time	A minimal hourly rate for drivers' time would be \$17 (the New York City minimum wage effective January 1, 2025) plus \$1.40 to cover the employer share of payroll taxes on \$17 that an independent contractor driver would pay.
4.7 Per mile allowance for driver time for waiting and charging time	This calculation compensates drivers for 50% of their time waiting for a charger and 100% of the charging time as described above. Compensation is at \$18.40 per hour, with the average waiting times for access and charging multiplied by the number of monthly charging events, and the result divided by monthly mile traveled to put it on a per mile basis.

Exhibit D

1. Updating the TLC’s HV-FHV pay standard’s expense factor

The New York City Taxi and Limousine Commission’s (TLC) minimum pay standard for High-Volume (HV) For-hire Vehicle (FHV) drivers includes time and distance components. (cite TLC website and 2018 report). The distance component is intended to compensate drivers for their vehicle expenses and is expressed as a per mile factor. In the initial pay standard taking effect in February 2019, the per mile factor was \$0.631. **Exhibit 1** shows the expense model from the [January 2019 report](#) that is the basis for the initial \$0.631 per mile factor.

Exhibit 1
2019 Initial HV-FHV Expense Model (non-WAV)

Exhibit 1: 2019 Initial HV-FHV Expense Model (non-WAV)				
expenses amortized over 35,000 annual miles				
Expense Category	Specific Expenditure Item	Annual	Weekly	Per Mile
One-Time--all amortized over 5 years	TLC 24-hour course--one time \$175	\$35.00	\$0.67	\$0.001
	TLC 24-hour course exam--one time \$50	\$10.00	\$0.19	\$0.000
	DMV E class license--one time \$113	\$22.60	\$0.43	\$0.001
	TLC fingerprinting--one time \$88.50	\$17.70	\$0.34	\$0.001
	WAV sensitivity training--one time \$60	\$12.00	\$0.23	\$0.000
	SubTotal	\$97.30	\$1.87	\$0.003
Recurring	TLC driver license--\$252 every 3 years	\$84.00	\$1.62	\$0.002
	TLC drug test	\$26.00	\$0.50	\$0.001
	Vehicle Registration	\$275.00	\$5.29	\$0.008
	TLC and DMV vehicle inspection	\$130.00	\$2.50	\$0.004
	years	\$16.67	\$0.32	\$0.000
	DMV new plates	\$5.00	\$0.10	\$0.000
	DMV vehicle license and plate renewal	\$400.00	\$7.69	\$0.011
	DMV vehicle use tax	\$40.00	\$0.77	\$0.001
	DMV commercial motor vehicle tax	\$400.00	\$7.69	\$0.011
	SubTotal	\$1,376.67	\$26.47	\$0.039
Operating	Gas	\$3,663.64	\$70.45	\$0.105
	Vehicle payment	\$9,608.75	\$184.78	\$0.275
	Commercial insurance	\$4,745.74	\$91.26	\$0.136
	Vehicle maintenance	\$1,659.51	\$31.91	\$0.047
	Vehicle cleaning	\$936.00	\$18.00	\$0.027
	SubTotal	\$20,613.64	\$396.42	\$0.589
TOTAL		\$22,087.61	\$424.76	\$0.631
Source: Parrott, Reich, Rochford and Yang, "The New York City App-Based Driver Pay Standard: Revised Estimates for the New Pay Requirement," Prepared for the NYC TLC, CNYCA, Jan. 2010.				

Commented [RG1]: Noticed this says Jan. 2010 in the citation.

HV-FHV drivers provide individualized transportation services for passengers seeking to travel from point A to point B who are customers of the rideshare companies Uber and Lyft. Drivers provide these services as independent contractors using vehicles owned or rented (or leased) by the drivers. Drivers have significant personal investment in their vehicles, and it is essential for the effective functioning of the HV-FHV market for drivers be compensated fully for their time on the app as well as for all of the vehicle-related expenses they incur.

This report is a comprehensive update of that initial expense model based on an extensive driver survey regarding current expenses, current data on the vehicle fleet, research on the cost of charging electric vehicles (EVs), additional investigation into the costs of renting a TLC-registered vehicle, and related research on vehicle-related costs.

The pay standard regulation adopted in December 2018 included an automatic **cost of living adjustment**. There have been adjustments to both the time and distance components since 2019 in early 2020, 2022, 2023 and 2024. Due to Covid-19, there was not an adjustment in 2021. Generally, the annual adjustments are based on the change in the CPI-W. In 2023, however, since vehicle and gasoline costs rose much faster than the overall CPI in the prior year, the transportation component of the CPI-U was used to adjust the distance component. As **Exhibit 2** indicates, the current per minute and per mile factors effective March 1, 2024, are \$0.338 per trip minute and \$0.789 per trip mile.

(Both factors are divided by utilization to “scale up” pay so that drivers are paid for all of the time they are on the app and available to provide services and for all of the miles they drive during that time.)

Commented [D(2)]: Would “inflationary adjustment” be more accurate because the CPI adjustment covers both per minute (cost of living) and per mile (working expenses)?

Exhibit 2

NYC HV-FHV minimum pay factors set by the TLC					
effective date	per minute	per mile *		per minute	per mile *
				% ch. from prior period	
2/1/2019	0.287	0.631			
3/1/2020	0.291	0.640		1.4%	1.4%
3/1/2022	0.307	0.673		5.5%	5.2%
3/13/2023	0.327	0.762		6.5%	13.2%
3/1/2024	0.338	0.789		3.5%	3.6%
* The transportation component of the regional CPI-U series (the series utilized in the TLC March 1 2023 proposal), increased by 20.7 percent between 2018 and 2022					

Commented [GR3]: Worth noting that these are the non-WAV, in-town factors. I also noticed that this table is missing a rate in place from 2/1/2023 to 3/12/2023 (0.327 and 0.714 respectively).

As Exhibit 1 indicates, the TLC HV-FHV expense model includes three categories of expenses: one-time, recurring and operating. The first two include fees for TLC training programs, vehicle

inspections, and various driver license or vehicle registration fees and taxes. These one-time and recurring expenses are a relatively minor portion of the overall per mile factor. The focus in this memo is on vehicle operating costs for fuel, maintenance, insurance and cleaning as well as payments (loan or lease) that give the driver access to the vehicle and represent depreciation or the wear and tear on the vehicle that erodes its value over time.

Annual cost of living adjustments to the per mile factor do not capture structural changes that have occurred in the industry. Three significant structural changes have occurred that affect driver vehicle cost.

- First, there has been a steady shift from sedans to mid-size SUVs to provide standard (non-premium priced) HV services.
- Second, there has been an increase in the relative importance of Wheelchair-Accessible-Vehicles (WAVs) and electric vehicles (EVs), partly because these vehicles have been the only vehicle types exempt (for policy reasons) from a cap on the number of HV-FHVs that has been in place since August 2018.
- And third, as part of a broader shift on the part of the City of New York to respond to the climate crisis, the TLC adopted a Green Rides Initiative (GRI) in October 2023 that mandates that five percent of all HV-FHV rides in 2024 be in either zero-emission vehicles or WAVs. The mandate rises to 15 percent in 2025, 25 percent in 2026, 40 percent in 2027 and increases by 20 percent a year over the next three years, reaching 100 percent in 2030.

This last factor—the GRI—has already dramatically increased the share of trips by EVs and WAVs. In August, 2024, 19.7 percent of all trips were performed by EVs or WAVs, up from 8.4 percent in April 2023. In August 2024, EVs provided 11 percent of all trips and WAVs 8.4 percent—most of the growth in the combined share resulted from increased EV trips.

This report updates vehicle costs and proposes two per mile factors, one that is a composite per mile factor for non-WAV vehicles (reflecting a combination of gas/hybrid vehicles and EVs and drivers who lease as well as own), and one that is specific to WAVs (**Appendix Exhibit 1** shows the initial WAV expense model implemented in February 2019.) WAVs generally are larger, heavier (as are EVs) and more costly vehicles due to the conversion necessary to make the vehicle wheelchair-accessible, and typically consume more fuel per mile.

2. Analyzing the HV-FHV vehicle fleet and selecting most common models

In order to inform an understanding of the costs of operating vehicles providing HV-FHV services, it is important to understand the characteristics of the HV fleet. The TLC maintains a list of all vehicles registered to provide FHV services, a broad category of service that includes traditional livery car and limousine services as well as HV-FHV services. The FHV list includes information on Vehicle Identification Number (VIN), TLC plate number, WAV-equipped, and

ownership data. Plate numbers were matched to a file containing HV-FHV trip information to identify FHVs on the list that were used for HV-FHV trips for the six months through July 15, 2024. The VINs were used to determine fuel type, make, model, year and vehicle body class. Data were also compiled on the average monthly number of HV-FHV trips performed by each vehicle for the six-month period through January 2024.

Exhibit 3 shows the characteristics of the 86,728 FHVs actively involved in providing HV services at the beginning of 2024. The other 12 percent were minivans (or vans), with over half of those used for WAV services. Over half (52 percent) of all vehicles were either mid- or full-size SUVs while 36 percent were sedans and 12 percent were minivans or vans.

For the purposes of developing a non-WAV and WAV per mile expense factor, vehicles were divided into three groups based on fuel type and WAV status as shown in Exhibit 3. Gas/hybrid non-WAV vehicles accounted for 85 percent of all vehicles, with EVs accounting for eight percent and WAVs 7 percent. (Apparently, there were no electric WAVs in the vehicle registry.) Since the cost and fuel charges differ between gas/hybrids and EVs, operating costs are estimated separately for non-WAVs and blended into an overall weighted average. About one-third of both EVs and non-EVs are rented or leased rather than owned directly by the driver. The overall weighted expense factor also blends EVs and non-EVs by whether they are owned or rented.

Commented [D(4)]: There are no EV WAVs on the market

Exhibit 3

Fuel type, body class, and WAV status of vehicles in the current HV-FHV fleet

<i>vehicle body class</i>	<i>All</i>	<i>body class share</i>	<i>Gas/hybrid: non-WAV</i>	<i>EV: non-WAV</i>	<i>Gas/hybrid: WAV*</i>
Sedan and similar	31,445	36%	30,106	1,339	0
SUV and similar	45,245	52%	39,707	5,525	13
Minivan and Van	10,038	12%	4,120	14	5,904
Revised total	86,728	100%	73,933	6,878	5,917
<i>shares of all vehicles</i>	<i>100%</i>		<i>85%</i>	<i>8%</i>	<i>7%</i>
<i>* apparently there are no electric WAVs</i>					

Source: Authors' analysis of TLC vehicle and trip data.

While not shown separately in Exhibit 3, luxury vehicles constitute nearly 16 percent (13,607) of all non-WAV vehicles used for HV services. We identified luxury models as those that qualify for Uber's premium-priced UberXL or Uber Black services. Passenger fares and driver payments are higher for premium-priced services. Lyft has a similar listing of vehicles for its premium-priced

XL and Black services.¹ Luxury vehicles constitute about 12 percent of all gas/hybrid non-WAV vehicles, and 72 percent of all EVs. Non-WAV minivans that can accommodate more than four passengers also qualify for premium-priced services.

Gas/hybrid, non-luxury, non-minivan vehicles total a little over 62,500 HV-FHVs and constitute the core of the current fleet providing standard Uber and Lyft services. There has been a steady growth in the use of SUVs to provide these core services over the years. This is reflected in the shifting shares of sedans and SUVs by model year. In the current core fleet, 57 percent of the model years through 2019 are sedans but this share declines to 32 percent for the 2020-24 model years. The SUV share of model years through 2019 was 40 percent, rising to 68 percent for 2020-24 model years.

Within the sedan and SUV (which includes crossover or mid-size SUVs) bodyclass categories there are a small number of models that provide the bulk of all trips. Using trip data for the six months through January 2024, six models were identified that provided more than three-fourths (76.5 percent) of all trips performed by model-year vehicles from the past 10 years (2015-24). Exhibit 4 shows these six common vehicle models with weights used to determine the overall gas mileage rating factored into the non-EV expense model (non-WAV).²

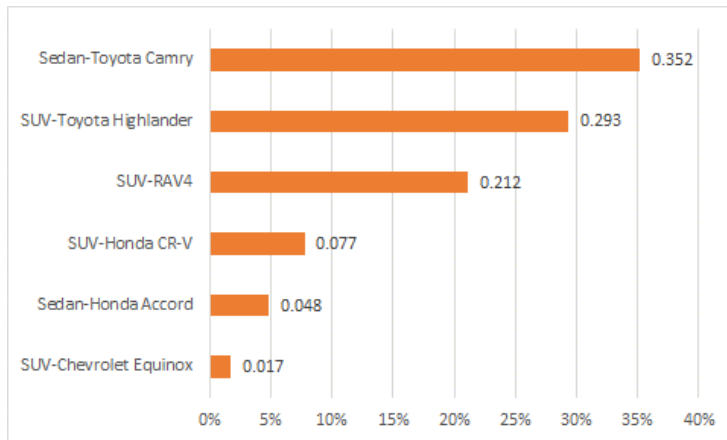
Exhibit 4

Trip-based weights for six most common vehicle models providing HV-FHV non-WAV services

Commented [RG5]: Add make for RAV4

¹ With the exception of a little over 250 Mercedes Metris vehicles, luxury models are not generally used for WAV services.

² Reflecting the shift toward more SUVs, the 50-50 trip weighting between the sedan vs. SUV models was adjusted to a 40 percent combined weight for the two sedan models and a 60 percent combined weight for the four SUV models in Exhibit 4.



Source: Authors' analysis based on TLC vehicle and trip data. The Equinox model was included based on the popularity of its 2022 and 2022 model years. For the other models, underlying weights are for the 2015-24 model years.

Commented [D(6)]: typo

3. 2024 NYC HV-FHV driver survey

This study employed an anonymized and confidential survey hosted on Qualtrics, a leading online survey platform. The Taxi and Limousine Commission sent a link to the survey to its email list of 89,000 active HV drivers. An email invitation to drivers explained that the results of the survey would “update an analysis of driver vehicle expenses to make sure what you are paid for trips reflects current maintenance and vehicle costs.”

Commented [D(7)]: necessary? (and the reference to Qualtrics in the next paragraph)

Commented [D(8)]: define

Qualtrics security and quality filters were activated to ensure data integrity and the survey being indexed by search engines. The survey ran from June 14 to August 2nd, generating 6,757 responses, with between 3,000-4,500 substantially completed responses for various questions. For example, there were 4,288 responses to the type of car owned or rented, for a response rate of 4.8 percent. Survey responses required data cleaning (many drivers, for example, input symbols \$1000 or 1000 dollars or abbreviate interest rates differently, 6.7% versus 0.067). The data were cleaned and standardized; outliers in the top 5 percent and bottom 5 percent of most questions calling for quantitative responses were excluded, as well as responses outside the range of \$120-\$2,500 for monthly vehicle loan payments and responses outside the range of 2011 to 2024 for the year a vehicle was purchased. Responses counts were retained for each individual question.

Driver characteristics and driving experience

As described in the 2018 report, HV-FHV drivers tend to overwhelmingly male and immigrant and rely mainly on their earnings from driving for the passenger services. According to the 2024 survey, 95 percent of drivers are male (compared to 97 percent in 2018), and 91 percent were born outside the United States, and 86 percent are non-white. Forty percent of drivers were born in Asia, 27 percent hail from the Caribbean, Latin America or South America, and 17 percent were born in Africa or the Middle East. Workers tended to be prime-age (78 percent were between ages 25 and 54), with 19 percent 55 or older but only three percent ages 24 or younger. See Exhibit 5.

Exhibit 5
Selected demographic characteristics of HV-FHV drivers

Age	Count	Percentage
19-20	5	0%
21-24	92	3%
25-34	785	23%
35-44	1,124	33%
45-54	725	22%
55-64	469	14%
65+	167	5%
Total	3,367	100%
Gender Identification	Count	Percentage
Male	3,178	95%
Female	154	5%
Non-binary / third gender	6	0%
Prefer not to say	19	0%
Total	3,357	100%
Race/Ethnicity	Count	Percentage
Asian or Asian American	1,213	37%
Hispanic, Latino, Latinx, or Spanish	912	28%
White	470	14%
Black or African American	444	13%
Other	253	8%
American Indian or Alaska Native	9	0%
Native Hawaiian or Pacific Islander	4	0%
Total	3,305	100%
Country of Birth	Count	Percentage
Asia	1,337	40%
Latin America or the Caribbean	723	22%
Africa	424	13%
United States	302	9%
Europe, Canada or Australia	248	7%
Middle East	137	4%
South America	136	4%
Mexico	30	1%
Total	3,337	100%

Drivers responding to the survey largely drive full-time for a for-hire company (65 percent usually drove 40 hours or more per week), have done so for years (56 percent of drivers have

driven for a for-hire company for five years or more), and relied on for-hire income as their main source of income. Eighty percent of drivers reported that driving is their sole source of income, and another 11 percent reported it was more than half but not all of their income). See Exhibit 6.

Exhibit 6

Drivers' weekly hours, longevity, and reliance on for-hire driving as a source of income

Usual Hours Drive for a For-Hire Company per Week		
	Percentage	Count
Less than 5 hours	1%	30
5 to less than 10 hours	7%	304
10 to less than 20 hours	5%	202
20 to less than 32 hours	6%	290
32 to less than 40 hours	16%	719
40 hours to less than 50 hours	30%	1,342
More than 50 hours	35%	1,575
Total	100%	4,462
Average (hours)	42	
Median (hours)	45	
Length of Time Working as a For-Hire Driver		
	Percentage	Count
Less than 3 months	1%	29
3 months to less than 6 months	1%	68
6 months to less than 1 year	7%	303
1 to less than 3 years	22%	1,006
3 to less than 5 years	13%	569
5 years or more	56%	2,479
Total	100%	4,454
Average (months)	53	
Median (years)	5	
Importance of For-Hire Income		
	Percentage	Count
It is less than 10% of income	3%	131
It is more than 10% but less than half	6%	294
It is more than half but not all of my income	11%	469
It is my sole source of income	80%	3,476
Total	100%	4,370

Profile of vehicle type and ownership

Nearly two-thirds (64 percent) of HV-FHV drivers owned their vehicle, and 36 percent rented or leased a vehicle. Eighty-four percent of respondents own or lease a gas or hybrid vehicle compared to 16 percent who own or lease an EV. See Exhibit 7.

Commented [RG9]: Surprised by this – 36% seems high! I did some analysis using my previous script that identified vehicles owned by 14 of the largest leasing companies based on several fields in the licensing database. In August, 14.4% of active drivers performed a trip in a leased vehicle associated with one of those companies. If we scale that up based on the share of survey respondents that said they lease from a company (58%), it's 24.8% – quite a bit less than 36%.

Exhibit 7

Type of Vehicle Driven for For-Hire Work	Percentage	Count
Own a gas-powered or hybrid car	53%	2,268
Own an electric vehicle (EV)	11%	462
Rent/lease a gas-powered or hybrid car	31%	1,343
Rent/lease an EV	5%	215
Total	100%	4,288
	Percentage	Count
Total own	53%	2,268
Total lease	5%	215
Total gas/hybrid (own or lease)	84%	3,611
Total EV (own or lease)	5%	215

The composite HV-FHV expense model developed in this report combines expenses for the four types of vehicles and ownership status shown in Figure 7. The weighting method used in compiling the composite expense picture was based on the shares of trips performed in 2023. Exhibit 8 shows that the trip weights are fairly similar to the survey results.

Exhibit 8

Survey shares of vehicles by fuel and ownership status compared to weights used to compile composite HV-FHV expense model

	Driver survey shares	Weights based on # of trips
Own a gas-powered or hybrid car	53%	58%
Own an electric vehicle (EV)	11%	8%
Rent/lease a gas-powered or hybrid car	31%	29%
Rent/lease an EV	5%	4%
Total	100%	100%

Reflecting the high incidence of high-hour FHV drivers, survey respondents reported a median of 33,000 miles driven in the past year, with fairly slight variation around that figure. See Exhibit 9.

Exhibit 9

Median miles driven last year by type of vehicle and owner status

All drivers	33,000
Standard (non-WAV vehicles)	
Gas/hybrid owners	35,000
EV owners	30,000
Gas/hybrid renters	35,000
EV renters	35,000
WAV vehicles	
Gas/hybrid WAV owners	30,000
Gas/hybrid WAV renters	34,500

High-hour drivers perform a disproportionate share of all trips

The driver survey was sent to all 89,000 active HV-FHV drivers. Completion was voluntary but it is not surprising that a disproportionate share of responses were from drivers logging a high number of weekly hours. As noted in Exhibit 65 percent of survey respondents reported average weekly hours of 40 or more, and another 16 percent recorded that they drove an average of 32-40 hours per week. These high-hour drivers are very committed to this work and heavily rely on it as their main source of income (88 percent of those driving 40+ hours weekly rely on driving as their sole source of income.)

Data that the companies are required to provide to the TLC also demonstrate that high-hour drivers provide a disproportionate share of all trips. According to Exhibit 10, drivers averaging 40 or more weekly hours during 2023 accounted for 43.4 percent of all trips, and grouping all drivers working more than 30 hours together shows that they account for 74 percent of all trips.

Commented [RG10]: Typo

Commented [D(11)]: The hourly figures are based on session time, not trip time, correct?

Exhibit 10

Company data show that high-average weekly hour drivers account for the bulk of trips

average weekly hours	# of drivers	# of trips	share of all drivers	share of all trips
less than 10	9,487	2,617,905	9.5%	1.1%
10 to 20	14,832	15,257,231	14.8%	6.6%
20 to 30	22,325	42,848,315	22.3%	18.5%
30 to 40	25,604	70,388,101	25.6%	30.4%
40 to 50	17,831	60,826,035	17.8%	26.2%
more than 50	10,072	39,807,903	10.1%	17.2%
All drivers	100,151	231,745,490	100.0%	100.0%

Viewed in this light, the high-hour drivers prevalent among survey respondents do reflect drivers who provide the bulk of all trips. At the other end of the spectrum, in the survey eight percent of respondents reported driving fewer than 10 hours a week; the company data indicate that in the universe of all FHV drivers, nearly a quarter (24.3 percent) fall into this category but that these drivers only account for one percent of all trips. Thus, the apparent under-representation of short-hour drives in the survey should not be cause for concern since those drivers provide so few trips and are not representative of a committed FHV driver.

We grouped survey respondents into three buckets by average weekly hours (less than 20, 20-40, and 40+) to examine if there were significant differences depending on the number of hours worked each week as FHV drivers. A mixed picture resulted. On the one hand, both high-hour (40+ weekly hours) and low-hour drivers (less than 20 hours) tended to purchase new vehicles (71 percent and 68 percent, respectively), and both groups reported that they primarily purchased their vehicles to drive for Uber or Lyft by large margins (93 percent and 87 percent. Median insurance costs were also fairly similar (\$4700 annually for high-hour drivers and \$4500 for low-hour drivers.) Immigrants predominated by large margins (91 percent of high-hour drivers and 92 percent of low-hour drivers).

One area of difference had to do with the race/ethnicity breakdown: while there were somewhat similar shares of Asians and whites among high- and low-hour drivers (37-34 percent, and 15-12 percent) Latinx drivers more heavily concentrated among low-hour drivers (32 percent) than among high-hour drivers (26 percent). One area of obvious difference was the relative importance of driving as an income source: 88 percent of high-hour drivers said it was their sole source of income while 58 percent of low-hour drivers responded that way. Perhaps not surprisingly, high-hour drivers more reliant on driving as their sole source of income spent slightly more for their vehicles than low-hour drivers (\$42,000 vs. \$40,000). This could reflect a

Commented [RG12]: Hmm – I wonder if these low hour drivers are low hour by choice? Could be catching new drivers who are either on waitlists or have greater exposure to platform restrictions. Maybe crosstab on driving hours by # of years working on app?

desire to purchase a larger vehicle in order to qualify for premium-priced services that tend to compensate drivers more.

Driver expenses

The active driver survey was the primary source of information on driver expenses. Drivers were asked about whether they were still paying for their vehicle, what their monthly loan payment was, and how much they paid for insurance and maintenance and repairs. The expense section of this report indicates the median survey responses for each of the four categories of vehicle types and owner status.

As a check on the accuracy of monthly payments, the survey also sought information on the vehicle purchase price, amount of down payment, loan duration and interest rates. With this information, the monthly payment could be determined using an auto purchase loan calculator. For example, for gas/hybrid owners of non-WAV vehicles, the median vehicle purchase price was \$40,000, down payment of \$5,000, with a 60-month loan at 7 percent interest. The loan calculator indicates a monthly payment of \$763 (including sales tax in the amount financed), only 3.8 percent higher than the median value reported by drivers of \$735 per month.³ For all vehicle owner-drivers as a group, the median monthly payment is \$809.

Two thirds (66 percent) of respondents were still paying off their vehicle. Of these, the overwhelming majority— 93 percent— said they paid a vehicle payment monthly. About half of respondents who had purchased a vehicle said they had sourced a loan from a bank (48 percent), with only a slightly smaller number receiving a loan from a car dealership (42 percent). Only a small number of respondents said they had received a loan from family or friends (9 percent) or a garage (1 percent).

Similar to drivers who purchased a vehicle, a large majority of drivers said they leased their vehicle primarily to drive for Uber or Lyft (79 percent), while 20 percent said they leased equally for Uber/Lyft and personal use, with only 2 percent indicating that they leased a vehicle primarily for personal use. Additional information on leasing drivers is included in the next section on leasing.

The survey asked a series of questions of EV drivers to ascertain where they charged their vehicles and the ease or difficulty in charging their vehicle batteries. This information will be discussed in the EV section that follows the leasing section below.

³ For EVs, a similar exercise resulted in a loan calculator monthly payment for 72 months of \$1,056, 7.8 percent higher than the median value of \$981 reported in the survey. The median purchase price for EVs was \$59,900 (most were bought new).

4. Lease analysis

We estimate that roughly one-third of HV-FHV drivers lease or rent their vehicles. In examining the TLC’s list of nearly 87,000 FHVs that we determined had been recently used to provide HV services, over 23,500 (more than 27 percent) vehicles were identified as having corporate or business, rather than individual, ownership. That is, ownership was in the name of a corporation, LLC or other form of business. Forty-six business entities were listed as the registered owner of 50 or more vehicles each, topped by American United Transportation (“American”), Inc. with nearly 4,300 vehicles, and Rigo Limo-Auto Corporation with about 2,000 vehicles. However, a business name as the owner is not a definitive indication of business ownership. It also appears that a number of individuals own multiple vehicles. The active driver survey indicated that a slight majority of lease drivers said they rented from “a leasing company” (58 percent), while the remaining 42 percent said they leased from another individual who owns a TLC license. It is not surprising, then, that 36 percent of survey respondents indicated that they rented or leased the vehicle they used to provide FHV services.

Of those drivers renting from a leasing company, survey respondents were divided among multiple leasing companies, led by American (23 percent), Tower (17 percent), Buggy (13 percent), and Fast Track (11 percent). (The remaining 36 percent renting from a leasing company reported “other.”)

Considering that 36 percent of drivers surveyed indicated they rented their vehicles and that at least 27 percent of the vehicles in the TLC fleet registry indicate corporate ownership (and this figure fails to capture the many individual drivers who may own multiple vehicles and rent some out), we will assume in the expense modeling in Section 6 that one-third of all drivers are renters, and two-thirds are owners.

Registration rent

One of the reasons that one-third of drivers rent or lease their vehicles is that the vehicle cap that has been in place means that drivers not already owning a TLC-registered FHV must lease one from a business or individual that owns such a vehicle. An individual seeking to drive for Uber or Lyft cannot go out and purchase a vehicle and have it registered. When the TLC lifted the vehicle cap to expand the number of EVs, many new drivers took the opportunity to acquire an EV that could then be registered as a HV-FHV. In a brief follow-up survey sent to a limited number of leasing drivers, more than three-quarters of respondents indicated that renting a TLC vehicle was the only way they would be able to gain work as a FHV driver.

Respondents to the main driver survey who leased their gas/hybrid vehicles reported a median *weekly* rental payment of \$525; that’s \$27,300 on an annual basis. A portion of the rental or lease payment is rent for the use of a TLC registration itself, rather than payment for the use of the vehicle. This *registration rent* (the amount of which we have not estimated) is a function of the vehicle cap that is part of the regulatory system the TLC uses to ensure that the HV companies adequately compensate drivers.

Renters paying maintenance and insurance costs separate from weekly rent payment

Commented [D(13)]: add that there is, and always has been, an exception for WAVs

Moreover, the already high lease amounts often do not include insurance and maintenance. The driver survey included a question about whether insurance and maintenance were included in the reported weekly lease amount—if not, the driver would need to bear an additional expense on top of the weekly lease or rent payment. Half of leases do not include both insurance and maintenance expenses, about one-quarter do not include insurance and 48 percent do not include maintenance expenses. The inclusion or exclusion of insurance or maintenance was roughly similar for corporate leases compared to leasing from an individual.

Drivers renting or leasing EVs reported that their agreements were less likely to include both insurance and maintenance expenses. Fifty-seven percent of EV lease arrangements did not include both, and more than a third of EV renters or leases paid for insurance separate from their rent or lease payment.⁴ Rent or lease arrangements with an individual (rather than a leasing company) who owned a TLC vehicle license were even less likely to include both insurance and maintenance expenses compared to all EV leasing arrangements.

In light of the fact that significant portions of renters must pay maintenance and insurance costs in addition to their rent payment, we include an allowance of maintenance and insurance for renters in the expense models estimated in Section 6. Those estimates are detailed in that section.

5. EVs, drivers, operating and charging costs

The electrical vehicle market and charging infrastructure are rapidly evolving, and these changes are shaping the costs for using EVs for HV FHV transportation services. There were 11,490 EVs in use for such services in August of this year, lifting the EV share of FHVs in New York City to 13 percent. The number of monthly EV high-volume passenger trips has averaged more than two million for most of 2024 and the August 2024 level reflected a six-fold jump over the number of EV trips in August 2023. Over that period, the EV share of all trips rose from 1.8 percent to 11.0 percent.⁵

Many more manufacturers are producing EVs and while the 2024 pace of EV sales growth has slowed from 2022 and 2023, expectations are that the EV share of the market will steadily rise. The TLC's GRI ensures that there will be significant further EV growth in New York City in coming years. Forty percent of gas/hybrid vehicle owners and renters surveyed expect to acquire an EV over the next two-and-a-half years—if the survey results are an indication, that could mean an additional 20,000-25,000 EVs by the end of 2026.

⁴ The survey included a question on maintenance expense that was asked of drivers regardless of whether they owned or leased, but the question on insurance costs was only included in a battery of questions posed to owners.

⁵ Trip data from the Green Rides dashboard data site accessed through the TLC's online *TLC Factbook*, <https://www.nyc.gov/site/tlc/about/data-and-research.page>. The calculation of EV trip shares includes WAV trips in the denominator.

Commented [RG14]: Maybe an issue with the definition of maintenance

Commented [D(15)]: I am concerned about the accuracy of insurance being separate from lease costs, especially for leasing companies. Hopefully a review of the leases and the lease-specific survey will help shed some light, but right now the inclusion of leasing costs and the assumptions about those costs are my biggest concerns with the report.

Commented [RG16]: typo

There have also been significant investments in New York City's EV charging infrastructure in recent years, and additional investments are in the planning stages. The TLC's recent *Electrification in Motion* report reviews the EV charging landscape and ongoing efforts to further expand it the City Department of Transportation, the New York Power Authority, the City's Economic Development Corporation, the Port Authority and private companies to vastly expand charging capacity at the airports, municipal parking garages, selected curbside stations, and other locations.⁶ The public charging infrastructure is particularly important for the GRI since only about one-quarter of FHV drivers are able to charge at home. The TLC has convened key charging infrastructure actors and has educated drivers about their charging options, including through a new dedicated page on the TLC website.⁷

Compared to gas/hybrid vehicles, EVs in the city's HV fleet tend to be newer and more expensive to own or lease. According to the driver survey, 86 percent of EV owners purchased their cars new and 81 percent purchased them in 2023 or 2024. Of the EVs purchased used, 88 percent were acquired in 2023 or 2024.

As the EV market has become more competitive, EV prices have come down, and as the presence of EVs in the overall market increases, a more extensive used EV market will grow in the years ahead. The U.S. Energy Information Administration reports that the average transaction price for all-electric vehicles in the U.S., not including any government incentives, declined by 1.8 percent from \$57,405 in January 2024 to \$56,371 in June 2024, and that while the average EV price in January 2024 was 21.1 percent higher than the overall average for all light-duty vehicle prices, by June 2024, that differential had eased to 15.9 percent.⁸ There are also federal and state incentives for purchasing EVs as well as incentives to encourage investments in charging stations.

Drivers responding to the survey confirmed that while EVs tend to be more costly, they have lower maintenance costs. Median maintenance costs of \$4200 for EVs compared to \$5000 for gas/hybrids. EV insurance costs are slightly higher but that reflects their higher value. Section 6 of this report will provide an itemized comparison of EV and non-EV expenses.

Estimating drivers' time spent charging EVs

Comparison of fuel costs per mile require an analysis of EV charging costs, including some allowance for the time that drivers spend waiting for a charge.

According to survey responses, a majority of drivers usually charge their vehicles at publicly available DCFC fast chargers (65 percent), followed by those who charge at home (25 percent), and those who use a publicly available Level2/slow charger (10 percent).⁹ Most drivers charge

⁶ New York City Taxi and Limousine Commission, *Electrification in Motion*, October 2024. (include link when available.)

⁷ <https://www.nyc.gov/site/tlc/about/ev-charging-faq.page#/find/nearest>

⁸ U.S. Energy Information Administration, "U.S. share of electric and hybrid vehicle sales increased in the second quarter of 2024," August 26, 2024.

⁹ The responses of drivers who selected "other" were excluded from the shares cited.

only one time per day (66 percent), while just over a quarter charge more than once a day (27 percent), with a small remainder charging less than once a day (7 percent).

Charging station wait times for EV-owners were long. A majority of drivers said they had to wait more than 30 minutes to use a public or commercial charging station (28 percent reported between 30-60 minutes and 24 percent said they usually had to wait over an hour). See Exhibit 11. After waiting to access a charger, the majority of drivers not able to charge at home then must wait while their vehicle batteries charge. The lower panel in Exhibit 11 shows the distribution of time spent waiting while their batteries are charging. Fifty-two percent waited 30-60 minutes for their batteries to charge, 14 percent waited 1-2 hours, and 7 percent waited for more than 2 hours.

Exhibit 11 Survey responses regarding EV charging wait time

Commented [D(17)]: Do we have any other evidence that the "usual" wait--time before plugging in--is so high? Concerned people confused this for time waiting for it to charge after it's been plugged in.

Usual Wait Time to Use a Public or Commercial Charger		
	Percentage	Count
There is usually no wait	10%	48
Usually less than 15 minutes	16%	79
15-30 minutes	13%	66
30-60 minutes	28%	139
1 hour or more	24%	116
I charge overnight	9%	43
Total	100%	491
Time Takes to Charge Vehicle		
	Percentage	Count
15 minutes or less	4%	18
15-30 minutes	13%	63
30-60 minutes	52%	250
1-2 hours	14%	69
2+ hours	7%	34
I charge overnight	10%	50
Total	100%	484

Using the midpoints of these ranges and assuming that drivers charging at home do not have to wait, we estimate that the average time spent waiting for access to a charger was 34 minutes, and that the average time spent waiting for batteries to charge was 49.7 minutes. Thus, drivers spend an average of 1.4 hours waiting to access a charger and to charge their battery per charging event.

Exhibit 12 details the estimation of the costs of electricity and an allowance for drivers' time spent charging an EV. Four steps were involved.

First, based on the weighted kWh/mile efficiency ratings for the EV model commonly used in New York City (the Tesla ModelY) and the battery capacity, we estimated that EVs would travel an average of 154 miles between charging events.

Second, based on the best available data on the electricity costs for the three main forms of charging, and on the weights for the three forms of charging from the survey (65 percent fast charging, 25 percent home charging and 10 percent public Level 2 charging) the weighted EV electricity cost was 37.2 cents per kWh.

Third, given the 0.28 kWh/mile average, the per mile **electricity cost for EV charging came to 10.4 cents.**

Fourth, using the latest TLC data that average EV monthly trip miles (and scaling that up for all monthly miles traveled), we estimate that 14 charging events would be required each month, and at 1.4 hours per event (derived above based on survey responses), that's an average total driver's time per month of 19.6 hours needed for charging per month. Considering that drivers may be able to do other things for part of the time they are waiting during charging events, we assumed that drivers should be reasonably compensated for half of the total time spent charging. Using the \$17/hour state minimum wage in New York City and adding in the employer share of payroll taxes that independent contractor drivers are required to pay, that would result in an **allowance for drivers' time of 8.4 cents per mile** (based on 2,150 total EV miles per month.)

The 10.4 cents per mile for electricity costs and the 8.4 cents per mile for drivers' time total 18.8 cents per mile as the EV per mile charging costs. This is a little over five cents more per mile than fuel costs for gas/hybrid vehicles. These EV cost per mile factors are key inputs into the expense model detailed in Exhibit 13 in the next section.

Commented [D(18)]: This is less than half of the Model Y's advertised range--what assumptions went into this estimate?

Commented [GR19R18]: JP will add detail on assumptions here.

Commented [RG20]: Citations would be helpful; I recommend using Plugshare to research rates.

Exhibit 12

NYC EV charging costs = electricity costs + drivers' time

1 EV charging need and average miles per charge			
Battery capacity (Tesla models Y and 3)	57.5	kWh	
Assume average 75% battery usage per charge	43.125	kWh	
Weighted kWh/mile (NYC EV FHV fleet July 2024)	0.28	kWh/mile	
Miles per average charge	154	miles	
2 NYC EV electricity charging costs			
	cost/kWh	weight from survey	weighted cost/kWh
Home (Con Ed residential, half peak/half off-peak)	\$0.1915	0.25	\$0.048
Public Level 2 (20 miles range/hr x \$1.75/hr)/43.125 kWh	\$0.3125	0.10	\$0.030
Public (or private) DCFC (fast charger)	\$0.4500	0.65	\$0.294
Weighted NYC EV electricity charging costs		1.00	\$0.372
3 Weighted EV electricity charging costs x weighted kWh/mile	\$0.104	per mile	
4 Driver time per month to charge EV and allowance for driver time/mile			
Average monthly EV trip miles	1290	miles	
If distance utilization =0.6, then total EV monthly miles	2150	miles	
# charging events needed per month (@ 154 miles each)	14		
Total time waiting for charger and time while charging per charge	1.4	hours (from survey)	
Hourly rate for driver time @ \$17 + \$1.40/hr for payroll tax	18.4		
50% allowance for driver time per month/monthly miles	\$0.084	per mile	

Commented [RG21]: DCFC rate seems low – further exploration of commercial rates using Plugshare could provide a reality check. Also, should home charging costs include installation/equipment costs?

6. Composite expense model for gas/hybrid vehicles and EVs

HV drivers bear the entire responsibility for providing, maintaining and operating the vehicles they use to perform services for Uber and Lyft passengers. This section explains the details for the vehicle acquisition and operating costs for gas/hybrid vehicles and EVs. In addition to presenting cost estimates separately for gas/hybrid and EVs, cost estimates are presented separately for each type depending on whether the vehicles are owned or rented (or leased). (“Renting” will be used here to refer to either weekly rentals or monthly, or longer-term, leases.) Expenses for these four categories of vehicles and owner/renter are itemized, and then combined them into a single composite expense model (non-WAV).

Commented [D(22)]: owner-drivers

The high-hour drivers well represented in the driver survey provide the overwhelming bulk of Uber and Lyft trips. According to the survey, 65 percent of drivers of gas and hybrid vehicles who own their cars purchased them new and 35 percent acquired used vehicles. Sixty-five percent of drivers acquired their vehicles since 2020.¹⁰

The key operating expense categories include vehicle payment, insurance, maintenance and fuel (the cost of gas for gas/hybrid vehicles and the cost of EV charging for EVs). Vehicle cleaning costs are also estimated and included in overall operating expenses. In addition, licensing, registration and related fees charged to TLC drivers are itemized and included in the overall expense total.

Costs will be presented on a per mile basis assuming drivers log 32,500 miles annually and close to the median annual miles in the survey and the 35,000 annual miles used in the 2018 model. With increased congestion and the decline in New York City speed limits, average speeds have fallen since 2018. At 32,500 miles per year, a HV vehicle will log 162,500 miles over five years, the typical length of an HV driver’s loan, and have very little residual value. This five-year mileage total would be on top of odometer readings that exist for drivers purchasing used vehicles. Some of the used vehicles with considerable mileage when acquired by a HV driver may require replacement prior to loan payoff.

Commented [D(23)]: Decline in speed limits since 2018?

Expressing expenses on a per mile basis amortizes all vehicle and related expenses across a year’s total mileage and is applicable whether the vehicle is used for business or personal use. Incorporating this per mile expense factor into the TLC minimum pay standard ensures that drivers are fairly compensated for all of their HV-related driving.

Per mile gas costs

U.S. Department of Energy fuel economy data were used to determine the miles per gallon rating for city driving for the six common HV vehicles (non-luxury) identified in Exhibit 4.¹¹ The composite result, derived by weighting average model mileage ratings, was 24.9 miles per

¹⁰ The figures in this paragraph are for owners of non-WAV, non-luxury model vehicles that are exclusively used to provide standard Uber and Lyft services.

¹¹ <https://www.fueleconomy.gov/>. The average mpg rating for Honda Accords was 28.9, for Toyota Camrys, 27.3, and: Honda CRV, 27.6; Toyota Highlander, 20.4; Toyota RAV4, 25; and Chevrolet Equinox, 26.

gallon. According to the U.S. Energy Information Administration, the average weekly retail cost of regular gasoline in New York City for the 26 weeks through September 4, 2024, was \$3.40 per gallon.¹²

At \$3.40 per gallon and 24.9 miles per gallon, the average fuel cost for a gas/hybrid vehicle used for HV services is 13.7 cents per mile. (when the final version is produced we will update gas prices through the latest week data are available—this could change the cents per mile figure slightly)

The prior section of the report detailed EV electricity charges and an allowance for drivers' time spent charging an EV.

Gas/hybrid vehicle owners' expenses

As noted earlier in this section, about two-thirds of gas/hybrid vehicle drivers purchased their cars new and two-thirds purchased their vehicles, whether new or used, in the past five years. And, as noted in section 3, two-thirds of drivers are still paying for their vehicles. Gas/hybrid drivers typically finance their vehicles over five years with a median interest rate of seven percent and down payment of \$5,000, according to the survey.

The median purchase cost for a gas/hybrid vehicle was \$40,000: purchased new the median cost was \$50,000 and \$30,000 if purchased used. The median monthly car payment, including both new and used vehicles, is \$735.

Since almost all drivers finance the purchase of their vehicles, the \$5,000 down payment is amortized over 60 months and that monthly amount (\$83) is added to the median monthly payment drivers reported in the survey. Thus, the total vehicle payment for gas/hybrids is \$818.

The median annual insurance premium for gas/hybrid drivers was \$4,548. As insurance rates have risen for FHV drivers in recent years, many drivers have increased their deductible amounts. Generally, auto insurance costs have risen significantly around the country in the past year or two and in New York City, there is the additional risk of insurance cost hikes resulting from the fallout related to the reported insolvency of American Transit Insurance Co., New York City's largest taxi and FHV insurer.¹³

Median annual maintenance costs for gas/hybrid drivers was estimated by drivers responding to the survey at \$5,000.

Commented [D(24)]: Were they really all such round numbers? I guess a lot of respondents estimated themselves and gave a rounded number in their responses?

¹² This figure was down from \$3.51 for the comparable 2023 weeks. In its September 2024 Short-Term Energy Outlook, the U.S. Energy Information Administration projects that retail gasoline prices, on average, will be flat in 2025 compared to 2024. <https://www.eia.gov/outlooks/steo/>

¹³ See <https://www.nytimes.com/2024/09/16/nyregion/american-transit-insurance-uber-lyft-nyc.html>; <https://www.bloomberg.com/news/articles/2024-09-05/nyc-regulator-slams-taxi-insurer-for-decades-of-mismanagement>; and <https://www.bloomberg.com/news/articles/2024-09-03/nyc-risks-taxi-uber-meltdown-as-biggest-insurer-faces-huge-losses>.

Electric vehicle owners' expenses

According to the driver survey, the median cost for a new EV was \$60,000 and about \$40,000 when purchased used. Since most EVs have been purchased new, the median cost overall of an EV was also \$60,000.

Partly because average EV purchase prices have been higher than for gas/hybrid vehicles, and because the EV fleet tends to be newer (2023 was the median purchase year for EVs vs. 2020 for gas/hybrids), the median monthly EV payment is \$950, considerably higher than the \$735 median for gas/hybrids. However, since the median EV down payment was the same \$5,000 but the median loan duration is 72 months rather than 60, the amortized monthly value of the median EV down payment is \$69.

Since an EV has substantially fewer moving parts than the internal combustion engine of a gas/hybrid vehicle, EV maintenance costs generally are considerably lower. EVs have fewer fluids, such as engine oil, there is less brake wear, and the battery, motor and associated electronics in EVs require little to no regular maintenance.¹⁴ Responses from the driver survey indicated that median maintenance costs for EV owners was \$4,200, or 16 percent less than the \$5,000 reported by gas/hybrid owners. Part of this difference results from the fact that gas/hybrid vehicles in the HV fleet are older than EVs.

Median insurance costs for EV owners was reported at \$4,750, slightly higher than the \$4,548 cost for gas/hybrid owners (likely due to the higher median EV purchase cost.)

Gas/hybrid and electric vehicle renters' expenses

As noted in Section 4 above, we estimate that one-third of HV drivers rent their vehicles. The cost of renting a vehicle that is driven as much as most HV vehicles are considerably more costly than the cost of owning. In part, this reflects the need for the renter to pay a "registration rent" and in part from the fact that business and individual owners renting out vehicles seek to make a profit from that, thus, adding a cost dimension on top of depreciation costs.

Despite the fact that there is a sizable 87,000 vehicle HV fleet, there are no economies of scale, such as those experienced by car rental companies or by a company such as UPS that owns the vehicles its drivers use, that can be applied to vehicle costs in the rideshare business model since drivers are required to individually procure the vehicle they use. This total absence of vehicle fleet economies of scale is compounded by the fact that one-third of drivers have to also pay a "registration rent."

The median weekly rent paid by a gas/hybrid driver was \$525, and \$550 by an EV renter. As discussed in Section 4 on leasing, the weekly rental payment is not all-inclusive. Many drivers need to separately pay for maintenance and insurance. From the driver survey, we determined that 73 percent of gas/hybrid renters paid a median of \$3,500 annually for maintenance, and that

Commented [RG25]: Do wonder how incorporating point-of-sale incentives would change the EV side of the model

¹⁴ U.S. Department of Energy, Alternative Fuels Data Center, "Maintenance and Safety of Electric Vehicles," <https://afdc.energy.gov/vehicles/electric-maintenance>.

79 percent of EV renters also paid a median annual amount of \$3,000 for maintenance. For inputs into the expense model, we reduced the portion of drivers paying maintenance to 70 percent for gas/hybrid renters and to 75 percent for EV renters. This resulted in weighted maintenance expenses of \$2,450 for gas/hybrid renters, and \$2,250 for EV renters.

Using results from the driver survey question on the costs that were included in rent payments, the inputs on the insurance cost for gas/hybrid owners was that 25 percent of renters pay a median of \$4,000, resulting in a weighted insurance allowance of \$1,000. Insurance costs for EV renters were estimated assuming 40 percent of renters pay a median of \$4,000 for a weighted insurance allowance of \$1,600.

All of the annual amounts for vehicle payments (including amortized down payments), insurance and maintenance costs for these four categories of drivers are shown in Exhibit 12. Fuel costs and EV charging costs are also itemized.

Vehicle cleaning costs

Since drivers are rated in part based on the cleanliness of their vehicles, it is estimated that drivers spend an average of \$36 per deluxe cleaning every other week for an annual total of \$936.

TLC and DMV licensing, training and vehicle registration costs

Various administrative, training and vehicle registration costs specific to driving for TLC-regulated services in New York should also be included in expenses borne by the driver. See Appendix Exhibit 2 for an itemization of these licensing and registration-related costs that result in a per mile factor of \$0.043.

Exhibit 13 itemizes the expenses discussed above for each of the four vehicle type/ownership status categories. The total annual expenses for a gas/hybrid vehicle owner are \$26,134; amortized over 32,500 annual miles equals a per mile factor of \$0.804. Total annual electric vehicle owner expenses are \$29,612 equating to a per mile factor of \$0.911, nearly 11 cents per mile above the per mile factor for gas/hybrid vehicles.

Informed by median rent costs reported in the survey, the gas/hybrid vehicle renters' annual expenses were estimated at \$37,513, or \$1.154 per mile. The EV renters' annual expenses were estimated at \$40,878, or \$1.258 per mile. These per mile factors for renters are 43.5 percent and 38 percent, respectively, greater than owners' costs.

Exhibit 13**Four 2024 HV-FHV expense models, by fuel type and owned or leased status**

Gas/hybrid, owned				Gas/hybrid, leased			
median year purchased: 2020							
expense item	monthly	annual	per mile	expense item	weekly	annual	per mile
Gas (weighted mpg)	24.9	\$4,444	\$0.137	Gas (weighted 24.9 mpg)		\$4,444	\$0.137
avg NYC gas price 6 mos. to 9/2/24	\$3.405			avg NYC gas price 6 mos. to 9/2/24			
Down payment (amortized over 5 yrs)	\$5,000	\$83	\$1,000	Weekly rent/lease cost	\$525	\$27,300	\$0.840
Monthly payment		\$735	\$8,823				
Total vehicle payment			\$9,823				
Insurance			\$4,548	Insurance: allow 25% pay \$4,000		\$1,000	\$0.031
Maintenance			\$5,000	Maintenance: allow 70% pay \$3500		\$2,450	\$0.075
Vehicle cleaning (\$36 every two weeks)			\$936	Vehicle cleaning		\$936	\$0.029
TLC and DMV licensing and registration fees #			\$1,382	TLC and DMV lic. & regis. Fees #		\$1,382	\$0.043
TOTAL			\$26,134	TOTAL		\$37,513	\$1.154
Electric Vehicles, owned				EVs, leased			
median year purchased: 2023							
expense item	monthly	annual	per mile	expense item	weekly	annual	per mile
EV charging cost *		\$3,380	\$0.104	EV charging cost *		\$3,380	\$0.104
Driver time for charging *		\$2,730	\$0.084	Driver time for charging *		\$2,730	\$0.084
Down payment (amortized over 6 yrs)	\$5,000	\$69	\$833	Weekly rent/lease cost	\$550	\$28,600	\$0.880
Monthly payment		\$950	\$11,400				
Total vehicle payment			\$12,233				
Insurance			\$4,750	Insurance: allow 40% pay \$4,000		\$1,600	\$0.049
Maintenance			\$4,200	Maintenance: allow 75% pay \$3000		\$2,250	\$0.069
Vehicle cleaning			\$936	Vehicle cleaning		\$936	\$0.029
TLC and DMV licensing and registration fees #			\$1,382	TLC and DMV lic. & regis. Fees #		\$1,382	\$0.043
TOTAL			\$29,612	TOTAL		\$40,878	\$1.258
* See Exhibit 12							
# See Appendix Exhibit 2 for itemized details							

Exhibit 14 brings together the expenses for the four categories of drivers into a single, composite per mile expense factor. The composite factor uses the weights indicated in the middle column (e.g., 0.583 for gas/hybrid owned vehicles) that are based on a 12.5 percent EV share and a two-thirds to one-third breakdown for owners compared to renters. The composite per mile expense factor is \$0.934. This value is 18.4 percent greater than the current expense factor that was effective March 1, 2024.

Exhibit 14
Composite 2024 HV-FHV expense model (non-WAVs)

	Per Mile Expense Factor	Weights	Weighted expense factor
Gas/hybrid, owned	\$0.804	0.583	\$0.469
Electric Vehicles, owned	\$0.911	0.083	\$0.076
Gas/hybrid, leased	\$1.154	0.292	\$0.337
EVs, leased	\$1.258	0.042	\$0.052
Composite total expense factor			\$0.934
current expense factor			\$0.789
increase over current			18.4%

To provide an idea of the sensitivity of the overall factor to a rising EV share: a 15 percent EV share would result in a \$0.937 per mile factor (3/10 of a cent higher than for a 12.5 percent EV weight), a 20 percent EV weight would make the composite per mile factor \$0.942, half a cent higher than a 15 percent EV share.)

7. WAV expense model version

Since Toyota Siennas account for 76% of all WAV trips, we will gear our cost estimates to wheelchair ramp-equipped Sienna, and draw payment, maintenance and insurance costs from the survey results (we were able to identify WAV drivers and separate them from non-WAV drivers.)

Exhibit 15 WAV expense model

Tk

Appendix Exhibit 1 2019 Wheelchair-Accessible Vehicle (WAV) Expense Model

2018 Chrysler Grand Caravan, 17 city mpg, 30,000 miles per year

Expense Category	Specific Expenditure Item	Annual	Weekly	Per Mile
One-Time--all amortized over 5 years				
	Vehicle downpayment--\$3,000	\$600	\$11.54	0.020
	TLC 24-hour course--one time \$175	\$35	\$0.67	0.001
	TLC 24-hour course exam--one time \$50	\$10	\$0.19	0.000
	DMV E class license--one time \$113	\$23	\$0.43	0.001
	TLC fingerprinting--one time \$88.50	\$18	\$0.34	0.001
	WAV sensitivity training--one time \$60	\$12	\$0.23	0.000
	SubTotal	\$697	\$13.41	0.023
Recurring				
	TLC driver license--\$252 every 3 years	\$84	\$1.62	0.003
	TLC drug test	\$26	\$0.50	0.001
	Vehicle registration	\$275	\$5.29	0.009
	TLC and DMV vehicle inspection	\$130	\$2.50	0.004
	DMV defensive driving course--\$50 every 3 years	\$17	\$0.32	0.001
	DMV new plates	\$5	\$0.10	0.000
	DMV vehicle license and plate renewal	\$400	\$7.69	0.013
	DMV vehicle use tax	\$40	\$0.77	0.001
	DMV commercial motor vehicle tax	\$400	\$7.69	0.013
	SubTotal	\$1,377	\$26.47	0.046
Operating				
	Gas	\$5,121	\$98.48	0.171
	Vehicle payment (includes \$11,000 modification costs)	\$9,334	\$179.51	0.311
	Commercial insurance	\$4,790	\$92.12	0.160
	Vehicle maintenance	\$2,270	\$43.65	0.076
	Vehicle cleaning	\$936	\$18.00	0.031
	SubTotal	\$22,452	\$431.76	0.748
	TOTAL	\$24,526	\$471.65	0.818

Source: Parrott, Reich, Rochford and Yang, "The New York City App-Based Driver Pay Standard: Revised Estimates for the New Pay Requirement," Prepared for the NYC TLC, CNYCA, Jan. 2010.

Commented [GR26]: Also says 2010.

Appendix Exhibit 2

TLC and DMV licensing and registration-related expenses

annual costs amortized over 32,500 miles

expense item	cost	annual	per mile
One-time costs amortized over five years			
TLC 24-hour course	\$250.00	\$50.00	
TLC 24-hour course exam	\$49.00	\$9.80	
DMV E class license	\$107.50	\$21.50	
TLC fingerprinting	\$90.25	\$18.05	
WAV sensitivity training	\$100.00	\$20.00	
DMV new plates	\$25.00	\$5.00	
DMV commercial vehicle registration title certificate	\$50.00	\$10.00	
Recurring costs (annual unless specified differently)			
TLC driver license--\$252 every 3 years	\$252.00	\$84.00	
TLC drug test	\$34.00	\$34.00	
Vehicle Registration *	\$226.60	\$226.60	
TLC and DMV vehicle inspection (TLC every 2 years)	\$112.00	\$74.50	
DMV defensive driving course--\$50 every 3 years	\$50.00	\$16.67	
DMV commercial vehicle regis. (every 2 years) **	\$194.50	\$97.25	
TLC vehicle license (every two years)	\$550.00	\$275.00	
DMV vehicle use tax	\$40.00	\$40.00	
DMV commercial motor vehicle tax	\$400.00	\$400.00	
Total TLC and DMV licensing and registration		\$1,382.37	\$0.043

* Weighted average of gas/hybrid (\$233.50--85%) and EV (\$187.50 (15%)).

** Fee for a 4,000-4,500-pound vehicle.

See TLC "Get a TLC Drivers License"

<https://www.nyc.gov/site/tlc/drivers/get-a-tlc-drivers-license.page>

Exhibit E

Expense Report Update and response to TLC 10-1-24 comments on our 9-29-24 draft
10-3-24

Submitted by James Parrott

Thanks for your very helpful feedback on the draft. I'll address some of that here. I plan to send you a draft of the WAV section on Oct. 7. I return on November 8 and will plan to have a revised, complete draft to you by **November 15**. We may still need a few days after that to respond to additional feedback and tweak some of the numbers as needed.

1. First, an observation about the Electricity in Motion report. On p. 22 you note that under Uber's \$210 Zero Emissions Incentive (for completing 200 EV rides every 30 days), the company paid out over \$6.5 million in the first half of 2024. If my math is correct, that would be over 30,000 \$210 incentive payouts which works out to 5,000 drivers for 6 months. That would be a very large share of the 10,000 current EVs. Given average monthly trip mileage scaled up to total miles, that would make the per mile value of the Uber incentive about 10 cents. That's significant enough to make note of in the report, but with the caveat that since it's not guaranteed, it won't be factored in to recommended per mile factor. How does that sound? [I emailed Josh Gold to see if he would provide any details on Uber's EV purchase or charging incentives paid out in NYC.]
2. Regarding James' comment (p. 10 of the 9-29 draft) about the survey result that 36% of drivers lease their vehicles: Our analysis of the vehicle file found that 27% of vehicles had an owner that was a business name. In addition, there are some number of drivers who rent from individual owners. On further analysis, it does appear that the survey finding that 42% of renters rent from individual owners is likely overstated. In the lease survey that was only sent to drivers indicating that they lease from individuals, one-quarter of the very small pool of respondents said they owned their vehicles or leased from a corporation. We agree the 36% survey figure is likely overstated but still, given the 27% business ownership figure, we are inclined to say that roughly 30% of drivers lease or rent (down from the one-third figure we used in the 9-29 draft.)
3. Regarding Russell's question on p. 12 regarding whether low-hour drivers are low by choice: It does appear that newer drivers tend to have shorter-hours. While about 7% of all drivers are < 10 hours weekly, 12% of drivers working for < 6 months drive for < 10 hours (however, overall, that's a very small number). Moreover, 75% of short-hour drivers report that they rely on driving for all or more than 50% of their income. That does suggest that short hours might not be by choice. Do you have any sense (data?) of how many drivers are on waitlists?
4. Regarding the question of whether renters pay an additional amount for insurance and maintenance (p. 15): it could be some drivers are confused on this since insurance

costs are often *itemized* on what they are billed for, though they don't necessarily pay an additional amount on top of what they reported as the rent payment. We have 8 lease agreements from a range of companies and lease survey results from 38 drivers and will analyze those in detail and likely make a downward adjustment in those supplemental costs. It is unlikely as James pointed out that the insurance premium would be paid directly by a renter.

5. We will cite the information on the build-out of the charging infrastructure to adjust the survey results on waiting time (pp. 17-18.)
6. On James' question about the 154 miles between charging events (p. 18): I'll look at this further but there is a lot of commentary about the advertised EV range figures rarely holding up, and that stop-and-go driving uses up more battery charge. We will spell out the assumptions regarding the charging costs but not sure those will go down by much (Plugshare does indicate that fast charging costs are higher than the 45 cents initially used.)
7. The City speed limit was reduced to 25 mph from 30, but that was at the beginning of Vision Zero in 2014, so James is right that there hasn't been an across-the-board speed limit reduction since 2018. Although with the passage of Sammy's Law this year, there might be some areas where it is reduced to 20. My general point is that average speeds are lower (likely due to congestion). Our analysis of the company data indicate that Uber session speeds were about 10% slower in 2023 than in 2019. Does that seem right to you?
8. Should we include suggestions on addressing lease regulation, e.g., that driver-owners be prioritized (one vehicle per driver) as vehicle registrations expire? I tend to agree that the multiplicity of models in use make vehicle lease cost regulation problematic. But I can make a case for different measures to prioritize driver owners. There was never a sense that a FHV registration was perpetual was there?

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January 31, 2025

VIA E-MAIL

New York City Taxi & Limousine Commission
33 Beaver Street
New York, NY 10004
tlcrules@tlc.nyc.gov

RE: Proposed Amendments to the Rules Governing Minimum Driver
Payment for High-Volume For-Hire Services

To Whom It May Concern:

We represent Lyft, Inc. ("Lyft") in connection with the proposed amendments to the High-Volume For-Hire Services Minimum Driver Pay Rules announced by the New York City Taxi and Limousine Commission on January 3, 2025. Enclosed, please find Lyft's comments regarding the proposed amendments, as well as the affirmations of Dr. Jonathan Guryan, Ph.D., and Dr. Ray A. Mundy, Ph.D.

Sincerely,

Alexander C. Drylewski

Encl.

January 31, 2025

**Lyft, Inc.’s Comments Regarding the Taxi and Limousine Commission’s Proposed
Amendments To the High-Volume For Hire Services Minimum Driver Pay Rules**

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Lyft, Inc. (“Lyft”) appreciates the opportunity to submit comments in connection with the New York City Taxi and Limousine Commission’s (the “TLC” or the “Commission”) proposed amendments to the rules governing High Volume For Hire Services (“HVFHS”) minimum driver pay (the “Proposed Rules”).

A. Introduction

The Proposed Rules fail to fix or improve the problems in the HVFHS industry that the Commission claims to want to address, and will actually make those problems worse. Ultimately, the TLC reinforces its flawed approach to driver pay by continuing to focus on arbitrary and misguided utilization rate (“UR”) metrics, all while imposing yet another excessive rate increase using methods that will decrease the number of earning opportunities for drivers by making rides less affordable for New Yorkers.

Although the TLC states that it will no longer “automatically calculate and adjust applied utilization rates going forward,” it then notes that it will still “monitor and publish utilization rates and alter such rates through the rulemaking process as needed.”¹ As a result, Lyft will be forced to continue to find ways to control driver supply so as not to incite the TLC to further alter UR factors in a way that increases costs. Making matters even worse, the Proposed Rules then restrict use of the only effective tool that Lyft has at its disposal to attempt to maintain the TLC’s unrealistic UR standards, creating an untenable situation.

Due to the TLC’s misguided focus on UR, Lyft has not onboarded new drivers in New York City since September 2023, and lockouts remain the only effective way to control UR levels. Restricting driver access is not something that Lyft ever wants to do. It is a sentiment that the Company repeats consistently, as the implementation of such practices not only impacts Lyft’s business negatively, but, importantly, also harms drivers and riders who use Lyft’s platform. The HVFHS lockouts are caused by the TLC’s failure to engage on other reasonable, more equitable alternatives that Lyft has raised and continues to propose. Tellingly, no other jurisdiction with minimum driver pay regulations has adopted the TLC’s flawed UR component. Other jurisdictions manage to regulate minimum driver pay in ways that do not factor in UR, and Lyft urges the TLC to reconsider its outlier approach.

In addition to maintaining the TLC’s flawed focus on UR, the Proposed Rules (coupled with the expected Consumer Price Index adjustment that will take effect on March 1, 2025) will impose an eye-popping *6.1% rate hike* at the same time that other cost-increasing measures have taken effect, including congestion surcharges. Rate hikes lead to increased prices for riders, which lead to fewer earning opportunities for drivers, and thus reduced UR and the same pressure for lockouts that the TLC claims to want to avoid.

Lyft supports ensuring that drivers receive pay that accounts for driver costs. If enacted, however, the Proposed Rules would impose dramatic changes on the industry that will harm drivers and riders alike—most notably, by making HVFHS less affordable for New Yorkers and reducing available transportation options.

¹ (Proposed Rules at 6.)

B. Summary of Arguments

As explained below, the Proposed Rules are deeply problematic and insufficiently justified for numerous reasons:

First, the TLC has not properly analyzed whether its proposed amendments will actually achieve their intended purpose. (See **Part C.1** below.) As explained in the accompanying affirmation of Jonathan Guryan, Ph.D. (the “Guryan Affirmation”), the proposed dramatic rate increases will lead to price increases for riders, which in turn will reduce overall rider demand and trip volume, negatively impacting UR and aggregate driver pay. The TLC does not even acknowledge, let alone analyze, this negative feedback loop. This problem is not speculative: since the 3.49% increase to driver pay in March 2024, which was based on the Consumer Price Index for Urban Wage Earners and Clerical Workers for the NY-NJ-PA metro area (“CPI-W”), there has been a 10% *decrease* in overall trip volume on Lyft’s platform in New York City, resulting in a 3.66% *reduction* in aggregate driver earnings. Worse still, the Proposed Rules come in the midst of several other cost-increasing measures, including serial inflation adjustments based on the CPI-W and the Transportation Index, the Metropolitan Transportation Authority’s new congestion toll for HVFHS (which itself came on top of the existing congestion surcharge implemented by the State of New York), and the anticipated “significant increases to insurance premiums due to uncertainty in the for-hire insurance market.”² The TLC needs to end this failed pattern where rate increases lead to higher prices, which leads to declining UR, which leads to implementation measures that restrict driver access, which leads to the threat of further rate increases.

Second, the Proposed Rules’ per-mile expense factor adjustment relies entirely on a fundamentally flawed and unreliable report prepared by James A. Parrott (the “Parrott Report”). (See **Part C.2** below.) The Parrott Report reaches skewed conclusions about driver expenses based on a driver survey that yielded a miniscule response rate of *less than 5%*, and makes faulty assumptions about the HVFHS industry. Tellingly, other, more reliable analyses indicate that the Parrott Report’s proposed per-mile expense factor should be *~43% lower* than proposed.

Third, the proposed amended per-minute UR and new per-mile UR appear to be arbitrary, as the TLC has not articulated any rationale for its chosen URs, or explained how they will achieve its goal of attaining a baseline level of driver compensation. (See **Part D** below.) While the TLC blames low UR rates on continued driver onboarding, Lyft has not onboarded any new drivers in New York City for more than a year. The TLC should conduct a holistic review to understand how the Proposed Rules would interact with other recent changes (e.g., the new congestion toll) to change rider demand and therefore the UR, before hastily pushing through yet another round of misguided UR-focused rules.

Fourth, the Proposed Rules would unfairly restrict HVFHS companies from using lockouts to attempt to increase driver UR on their platforms. (See **Part E** below.) The Proposed Rules mandate that HVFHS companies must give drivers 72-hours’ notice before restricting access or provide platform access to drivers for at least 16 hours at a time. As explained in the accompanying

² (Proposed Rules at 4 (citing Winnie Hu et al., *Looming Insurance Crisis Threatens Taxis and Ubers in New York City*, THE NEW YORK TIMES (Sept. 16, 2024)).)

affirmation of Ray Mundy, Ph.D. (the “Mundy Affirmation”), these restrictions are both impractical and unrealistic, and ignore the rapidly changing dynamics of supply and demand in New York City’s HVFHS market. They also take away the only effective lever that Lyft can use to attempt to increase driver utilization—a stated goal of the Proposed Rules.

Fifth, at base, these new lockout restrictions raise serious legal issues. The lockout restrictions exceed the TLC’s statutory authority, which does not extend to micromanaging the manner in which HVFHS companies attempt to achieve the impractical UR standards set by the TLC. (See **Part E.1** below.) The TLC also has not articulated any rational basis to justify the arbitrary 72-hour notice and 16-hour restrictions, or performed any analysis to understand whether these restrictions are even workable in practice. (See **Part E.2** below.) Even if it had, the lockout restrictions would result in unconstitutional contractual interference and compelled speech that would not survive judicial scrutiny. (See **Part E.3** below.)

Finally, the TLC has not disclosed the data and modeling that support the Proposed Rules, including the purported driver survey results underlying the Parrott Report. (See **Parts C.3** and **E.3** below.) Disclosure of this information is critical to allow industry stakeholders and the public to reach informed conclusions regarding the Proposed Rules. Put simply, rulemaking should not happen in the dark. The TLC should disclose all of the data and information upon which it relied in arriving at Proposed Rules so that stakeholders can review and provide further comments.

In light of these many problems and shortcomings, Lyft requests that the TLC withdraw the Proposed Rules and work with all interested parties to craft sensible rules that take into account the issues and concerns raised below in more detail. At a minimum, these rules should include amendments to remove the UR component from the driver pay formula and a change in the cadence of CPI-W adjustments from annually to once every five years (at a minimum) to better allow HVFHS companies to prepare for such adjustments and respond in a manner that may better help drivers and riders.

New Yorkers deserve a thoughtful and rational approach to regulation of the HVFHS industry and driver pay standards. Unfortunately, the Proposed Rules reflect neither. Lyft stands willing to work with the TLC to achieve its stated goals in a responsible manner.

C. The TLC’s Proposed Driver Expense Adjustment Is Unsupported

The TLC is proposing to increase the per-mile expense factor of the minimum driver pay formula by 3.9% for wheelchair-accessible vehicles (“WAVs”) and 11.9% for non-WAVs—all before accounting for the TLC’s proposed adjustments to the applied UR. The TLC claims that these increases are needed to account for changes to driver expenses due to (i) a “steady shift from sedans to mid-size SUVs,” (ii) an expansion of the market for short-term vehicle rentals caused by the TLC’s moratorium on issuing new for-hire vehicle licenses, and (iii) the increased relative importance of WAVs and electric vehicles (“EVs”) to overall driver costs.³ As explained below, the TLC has failed to conduct sufficient analysis to justify these increases, which will likely harm drivers and riders alike.

³ (Proposed Rules at 3-4.)

1. The TLC Has Not Analyzed Whether the Proposed Rules Would Advance the TLC’s Intended Purpose

The TLC has not conducted any analysis to support the claim that the proposed per-mile rate increases will ensure that “real driver earnings” are not “reduced over time.”⁴ As explained in the Guryan Affirmation, the sudden and dramatic increases in the per-mile rates will inevitably lead to an increase in prices for riders.⁵ These price increases will, in turn, lead to a decrease in demand for rides.⁶ This reduction in demand means fewer trips for drivers, which means lower URs and fewer earning opportunities for drivers. This is the exact opposite of what the TLC claims the Proposed Rules are intended to accomplish. In fact, Lyft’s demand for rides in New York City declined 15% year-over-year between Q4 2023 and Q4 2024, and Lyft anticipates that the full package of rate increases contemplated by the Proposed Rules (which are on top of the new congestion toll) could reduce demand for rides by at least another 4% to 6%. Anticipated cost increases from the looming HVFHS insurance crisis will only amplify these effects.⁷ The TLC does not appear to have considered these issues, or their impact on UR, which are only exacerbated by successive (and continuing) price increases.⁸

Similarly, the frequency of CPI-W adjustments contemplated by the minimum driver pay rules contributes to rapidly increasing rider costs, since Lyft does not have sufficient lead time to prepare for the anticipated increases. Unlike similar adjustments for taxis, which occur every ten years, the CPI-W increases for HVFHS occur annually. Again, the TLC has not considered these issues, let alone analyzed whether they may further *decrease* driver pay. In addition, increased driver pay rates and reduced ride demand will likely result in an oversupply of drivers relative to demand.⁹ This in turn will *decrease* driver utilization—an arbitrary and capricious result that is directly contrary to the TLC’s stated goal of “keeping drivers busier so that they are on income-generating trips for a higher percentage of their working time.”¹⁰

The TLC should conduct the necessary analysis to determine whether the Proposed Rules are in drivers’ best interests. These concerns deserve to be addressed *before* the Proposed Rules go into effect—not after. If the TLC insists on continuing to increase the per-mile and per-minute

⁴ (*Id.* at 3.)

⁵ (*See* Guryan Aff. ¶¶ 52-55.)

⁶ The TLC’s 2018 economic study acknowledges that riders are price sensitive. (*See* James A. Parrott & Michael Reich, *An Earnings Standard for New York City’s App-Based Drivers: Economic Analysis and Policy Assessment*, at 71 (July 2018), available at <https://static1.squarespace.com/static/53ee4f0be4b015b9c3690d84/t/5b3a3aaa0e2e72ca74079142/1530542764109/Parrott-Reich+NYC+App+Drivers+TLC+Jul+2018jul1.pdf>.)

⁷ (*See* Proposed Rules at 4 & n.10.)

⁸ A New York court invalidated the TLC’s previous “cruising cap rules” based on, among other things, the TLC’s failure to properly analyze these kinds of market dynamics. *See Tri-Cty, LLC v. N.Y. City Taxi & Limousine Comm’n*, Index No. 159947/2019, 2019 N.Y. Slip Op. 33706(U), at *3 (Sup. Ct. N.Y. Cnty. Dec. 23, 2019).

⁹ (*See* Guryan Aff. ¶¶ 50-53.)

¹⁰ (Proposed Rules at 5.)

factors of the minimum driver pay formula, it should, at a minimum, reduce the frequency of CPI-W adjustments to at least every five years (or even every ten years, as is the case for taxis).

2. The Parrott Report Is Flawed

The proposed per-mile expense factors are based entirely on the Parrott Report, which itself is based on insufficient data, unfounded assumptions, and methodological flaws.¹¹ Lyft requests that the TLC abstain from increasing the per-mile expense factor until the TLC properly analyzes the driver expenses with a legitimate dataset.

(a) The Parrott Report Relies on an Inadequate Driver Study

The Parrott Report admits its “primary source of information on driver expenses” was a driver survey that the TLC emailed to drivers who performed at least 100 trips between November 2023 and May 2024.¹² While the TLC touts how the survey was sent to “over 89,000 active HV for-hire vehicle drivers,” the survey response rate was miniscule.¹³ Indeed, the survey generated only 6,757 responses, and only 3,000-4,500 of those responses were “substantially complete.”¹⁴ Put differently, only 3.4% to 5.1% of survey recipients substantially completed their surveys. Similarly, the response rate for unspecified “key questions” was only 4% to 5%.¹⁵ Worse still, the Parrott Report excluded “the top 5 percent and bottom 5 percent of most questions calling for quantitative responses,” as well as any responses “outside of the range” of what Mr. Parrott *personally* considered “reasonable”—without disclosing what specifically was excluded and how Mr. Parrott determined what was “reasonable.”¹⁶

The Parrott Report is also flawed because it surveyed a population that does not represent the actual driver population in New York City. The vast majority of survey respondents were full-time drivers who have greater costs than do part-time drivers because they drive more miles per year. Given their reliance on for-hire income as their main source of income, such survey respondents are incentivized to overstate their expenses.¹⁷ Indeed, the Guryan Affirmation shows that the bias reflected in the driver survey responses is statistically significant.¹⁸ Consequently, the results upon which the Parrott Report is based are not representative of New York City’s current driver population. In addition, the Parrott Report fails to consider that drivers may have other uses for their vehicles that provide value (including, for example, additional revenue streams

¹¹ (See Guryan Aff. ¶¶ 22-49.)

¹² (Parrott Report at 2, 16, 25.)

¹³ (Proposed Rules at 4.)

¹⁴ (Parrott Report at 10.) The Parrott Report does not explain its characterization of “substantial completion.”

¹⁵ (*Id.* at 2.)

¹⁶ (*Id.* at 10 n.6.)

¹⁷ (See Guryan Aff. ¶¶ 43-44, 48-49.)

¹⁸ (See *id.* ¶¶ 46-47.)

from providing food-delivery services).¹⁹ The result is a higher per-mile expense factor that lacks objective and verifiable support.

It is puzzling that the Parrott Report relies on the driver survey as the primary source of driver expense data, when the costs of owning and operating the six most common vehicle types listed in the Parrott Report can be estimated directly from publicly available information. By relying primarily on the inadequate and flawed survey underlying the Parrott Report, the driver expense component of the Proposed Rules lacks a rational basis and is arbitrary and capricious.

(b) The Parrott Report's Faulty Assumptions
Resulted in Significantly Overstated Driver Expenses

The Parrott Report makes a number of arbitrary and faulty assumptions, in part in reliance on the skewed results of the driver survey, which contribute to an inflated per-mile expense factor.

(i) ***Erroneous depreciation assumptions***

For example, the Parrott Report understates the residual value of HVFHS vehicles and thereby overstates the per-mile cost of owning and operating a vehicle. Specifically, the Parrott Report amortizes HVFHS vehicles over only five years or six years, depending on whether the vehicles are EVs, and thereby assumes that the vehicles have *no* residual value at that point. However, more than 53.5% of TLC-licensed vehicles on Lyft's platform are more than five years old. And even the TLC assumes that medallion taxis can stay in service for at least seven years. Thus, HVFHS vehicles obviously continue to have economic value after the depreciation periods used in the Parrott Report—a fact confirmed by publicly available data.²⁰ As shown in the Guryan Affirmation, merely adjusting the depreciation periods to seven years (and holding all else equal in the Parrott Report), the proposed per-mile expense factors would drop from \$0.879 to \$0.824 for non-WAVs, and from \$1.061 to \$0.953 for WAVs.²¹

(ii) ***Arbitrary assumptions about HVFHS vehicle renters and overstatement of associated expenses***

The Parrott Report also *assumes* that 30% of drivers rent their vehicles. This assumption is arbitrary and lacks a reasonable basis. The Parrott Report appears to justify its assumption based on its observation that ~27% of vehicles in the New York City HVFHS vehicle fleet “were identified as having corporate or business, rather than individual ownership.”²² This is despite the Parrott Report's express acknowledgment that individual vehicle owners register their vehicles in

¹⁹ (See *id.* ¶¶ 37-39.)

²⁰ (See *id.* ¶¶ 22-26.)

²¹ (See *id.* ¶¶ 21(a)-25.)

²² (Parrott Report at 17.) The Parrott Report also notes that “36 percent of survey respondents indicated that they rented the vehicle they used,” but opines that this reported result is “likely overstate[d].” (*Id.*) As noted above, there are serious issues with the Parrott Report's extensive reliance on the results of the driver survey.

the name of business entities, such as limited liability companies.²³ The Parrott Report fails to reconcile this admission with its conclusions regarding the assumed prevalence of driver rentals.

The Parrott Report also overstates renter-specific expenses. Despite observing that “about 40 percent of drivers who rent said they rented from another individual who owns a TLC license,”²⁴ the Parrott Report fails to account for the fact that rental expenses for certain vehicle rentals result in rental income for vehicle owners, including drivers.²⁵ The Proposed Rules thus essentially double compensate drivers in the aggregate for rental “expenses.” The Parrott Report also recognizes that the percentage of drivers who rent (as opposed to own) their vehicles may be increasing as a result of the TLC’s restrictions on issuing new for-hire vehicle plates.²⁶ The Proposed Rules provide higher per-mile factors for rented vehicles than they do for owned vehicles, and these factors may attain greater weights in the Parrott Report’s formula if drivers continue to shift from owning to renting.²⁷ HVFHS companies and New York City riders should not be the ones funding the for-hire vehicle rental market that is expanding due to the TLC’s policy choices. It is clear that neither the Parrott Report nor the TLC adequately analyzed this issue, and the Proposed Rules fail to account for it or other alternatives, such as the adoption of for-hire vehicle rental price caps like those that exist for taxi rentals.

(iii) Overestimation of EV-associated expenses

The Parrott Report also overstates expenses attributable to EVs, in part based on the Parrott Report’s conclusion that per-mile costs to own and operate an EV are higher than they are for non-EVs.²⁸ As shown in the Guryan Affirmation, this conclusion is contrary to the “widely documented” understanding of EV economics; that is, EVs cost more up front but are cheaper to own in the long run because of lower “fuel” and maintenance costs.²⁹

In addition, although the Parrott Report opines that EV drivers should be compensated for time they spend charging their vehicles, the Parrott Report fails to account for EV drivers who are logged in to HVFHS platforms while they are charging and thus are already being compensated for charging time via the UR component of the minimum driver pay formula.³⁰ The minimum driver pay formula should not double compensate drivers for EV charging time. Notably, the proposed per-mile expense factor does not similarly compensate non-EV drivers for the time spent

²³ (See *id.*)

²⁴ (*Id.*)

²⁵ (See Guryan Aff. ¶¶ 21(b), 40.)

²⁶ (See Parrott Report. at 13.)

²⁷ The Parrott Report notes that its revised expense model “has been designed so that any future updates can be made by TLC staff based on changes in such parameters as the proportions of EV and rented vehicles, or industry-wide changes in insurance and fuel/charging costs.” (*Id.* at 4.)

²⁸ (See *id.* at 3, 22.)

²⁹ (Guryan Aff. ¶¶ 29-36.)

³⁰ (See *id.* ¶¶ 33-35.)

filling up their vehicles with gas. In this regard, the TLC’s proposal to compensate EV drivers for charging time is arbitrary. It also penalizes WAV drivers since, as the Parrott Report acknowledges, “there are no all-electric WAVs.”³¹ Worse still (and likely a product of its reliance on survey data), the Parrott Report overstates the times that drivers actually spend waiting for an available charging station, thereby inflating the proposed per-mile expense factor.³²

The Parrott Report also concedes that it fails to account for potential cost reductions from various governmental and private incentives available to EV drivers, including “[s]tate and federal rebates [that] may be worth several thousands of dollars depending on the vehicle.”³³ The result is an admitted overstatement of EV expenses that likely will be passed on to New York City riders.

(iv) Overstated driver expenses as compared to other studies

Given these erroneous assumptions and the Parrott Report’s extensive reliance on the skewed driver survey results, it is not surprising that the Parrott Report significantly overstates driver expenses. This is especially apparent when the Parrott Report is compared with the independent analysis prepared by HR&A Advisors, Inc. (the “HR&A Report”).³⁴ Compared to the HR&A Report, the Parrott Report has significantly overstated per-mile driver costs, including overestimating the share of drivers who rent (as opposed to own) their vehicles and those who are using an EV.³⁵ The result is an almost 43% *overstatement of the per-mile expense factor*, as reflected in Parrott Report Appendix Exhibit 3:

³¹ (Parrott Report at 3.)

³² (See Guryan Aff. ¶ 36.)

³³ (Parrott Report. at 19.) The Guryan Affirmation describes the charging discounts provided by rideshare companies through partnerships with charging networks. (See Guryan Aff. ¶ 30.)

³⁴ (See HR&A Advisors, Inc., *New York City Uber Driver Earnings and Expenses Study* (Nov. 4, 2024), available at https://www.hraadvisors.com/wp-content/uploads/2024/11/HRA_NYC-Rideshare-Cost-Study_Report_11.04.pdf.)

³⁵ The Parrott Report recognizes that the “main reasons” for the HR&A Report’s lower cost estimates are the lower weights that the HR&A Report attributed to shares of EVs and rented vehicles in deriving the composite per-mile expense factor. (See Parrott Report at 24-25.) This is reason alone to revisit the Parrott Report’s assumptions and the data on which they are based.

Comparison of HR&A and CNYCA Expense Analyses

Summary items, ICE and electric vehicles, per mile expense				
Blended costs for ICE and electric vehicles	HR&A Uber Report		CNYCA	
	owners	renters	owners	renters
TLC license	\$0.005	\$0.005	\$0.042	\$0.008
Vehicle payment	\$0.138		\$0.312	
Down payment			\$0.030	
Monthly payment			\$0.281	
Interest	\$0.028			
Depreciation	\$0.110			
Rental cost		\$0.743		\$0.845
Fuel/battery charging	\$0.136	\$0.136	\$0.138	\$0.138
Insurance	\$0.136		\$0.141	
Maintenance	\$0.101		\$0.137	\$0.021
Vehicle cleaning			\$0.029	\$0.029
Unlimited data plan	\$0.006	\$0.006		
Total costs per mile	\$0.522	\$0.890	\$0.798	\$1.041
Composite per mile factor for both owners and renters	\$0.616		\$0.879	

Comparison of different composite expense weighting

	HR&A Uber Report	CNYCA
Share of drivers renting a vehicle	25.6%	30.0%
Share of drivers using an EV	3.7%	12.5%

While the Parrott Report criticizes the HR&A Report, the Guryan Affirmation corroborates that the Parrott Report significantly overstates calculated driver expenses, most notably with respect to estimated maintenance expenses. For example, based on publicly available estimates from academic studies, annual maintenance expenses for ICE vehicles should be *87 percent lower* than the \$4,500 estimated in the Parrott Report.³⁶

* * * *

In short, the TLC must conduct a more reliable analysis and provide a reasoned and fully informed conclusion about the appropriate per-mile expense factor to employ, if any.

3. The TLC Has Not Disclosed the Information that Supposedly Supports its Per-Mile Rate Increases

While the Parrott Report relies heavily on the results of the TLC’s flawed driver survey, the TLC has not disclosed any material information about the survey, including the questions posed or the answers provided. Indeed, the public has no visibility into, among other things, which survey questions the TLC considered to be “key questions,” what it considered to be a “substantially completed survey,” what, if any, documentation was provided by drivers to substantiate their stated costs, or how the TLC determined if survey responses were “outside the

³⁶ (See Guryan Aff. ¶ 27.)

range of what would be considered reasonable.”³⁷ The result is a “black box” that leaves interested parties in the dark, deprived of the opportunity to fully assess the reliability of the survey results and the modeling or assumptions underlying the Parrott Report’s conclusions, which apparently were adopted in full by the TLC in connection with the proposed amendments to the per-mile expense factor.

D. The TLC Has Not Analyzed the Effects of the Proposed Utilization Rate Reduction

In the Proposed Rules, the TLC proposes to reduce the current applied per-minute UR from 58% to 53.3% and implement a per-mile UR of 68.5%. The TLC has articulated no rationale for its chosen URs or explained how the chosen rates will achieve its professed goal of attaining a baseline level of driver compensation.

Indeed, particularly with respect to the 53.3% per-minute UR, while that UR could increase driver pay per trip in the immediate term, it could result in higher rider costs, which, as discussed above, may lower demand and result in lower trip volume for drivers. As for the per-mile UR, the TLC admittedly lacks the data to form a rational conclusion as to the correct rate, which is why the TLC is proposing geographic data reporting in the Proposed Rules. Thus, the TLC’s proposal of the 68.5% per-mile UR, absent the requisite analysis to arrive at that UR, constitutes arbitrary and capricious rulemaking.

Fundamentally, Lyft continues to believe that the UR component should be removed from the minimum driver pay formula. The past five years have illustrated that the UR component has not been applied in a rational, workable way, and has resulted in problematic and unintended consequences that ultimately harm drivers and riders.

To that end, the TLC’s suggestion that HVFHS companies can “ensur[e] adequate trips” for their drivers is incorrect.³⁸ The only effective way for Lyft to attempt to regulate driver utilization is by controlling driver supply. As Lyft has not onboarded new drivers in New York City for more than a year, it is left with only two primary means to attempt to achieve the TLC’s target URs: (i) implementing driver lockouts or (ii) removing drivers from its platform altogether. As discussed below, the TLC is now attempting to restrict lockouts, and the result may be mass deplatforming of drivers. Of course, zero driver pay for former drivers must be considered when determining overall levels of driver pay.

Given the myriad problems that the UR-based driver pay regime has caused, and will continue to cause, Lyft proposes that the TLC remove the UR component from the minimum driver pay formula and work with industry stakeholders to develop a rational and workable alternative.

E. The TLC’s Proposed Lockout Restrictions Are Unsupported and Unlawful

At the same time that the TLC has imposed a UR-based driver pay standard, it is now seeking to prevent HVFHS companies from using the only effective tool Lyft has left to attempt

³⁷ (Parrott Report at 3, 10 & n.6.)

³⁸ (Proposed Rules at 5.)

to control its URs. Specifically, the TLC is proposing that HVFHS companies must provide 72-hours' notice to any driver of contemplated lockouts (subject to limited exceptions), and that once a driver has logged into a HVFHS platform, a HVFHS company must make the platform available to that driver for at least 16 hours.³⁹

Rider demand dynamically changes throughout a given day and in different parts of the city based on a variety of factors outside of HVFHS companies' control. To effectively maintain a given UR, Lyft must control driver supply to meet that demand. As shown in the Mundy Affirmation, the TLC's proposed restrictions are impractical, ignore the reality and dynamics of rider demand in New York City, and go further than any known regulation in the transportation industry.⁴⁰ Further, the TLC's proposal to regulate the means by which a HVFHS company achieves the UR standards set by the TLC is beyond the scope of the TLC's statutory authority, and the proposed restrictions lack any rational basis and raise serious constitutional concerns.

1. The TLC Lacks Statutory Authority to Promulgate the Proposed Lockout Restrictions

As a threshold matter, the TLC's proposed lockout restrictions exceed its statutory authority. The TLC has authority to "establish a method for determining the minimum payment that must be made to a for-hire vehicle driver for a trip dispatched by a high-volume for-hire service to such driver."⁴¹ In so doing, the TLC is authorized to consider, among other things, "any applicable vehicle utilization standard."⁴² The TLC has adopted such a vehicle utilization standard in the minimum driver pay rules.⁴³

The TLC has not been delegated any authority to dictate *how* a HVFHS company achieves the vehicle utilization standards it has adopted. Nothing in the New York City Charter or the New York City Administrative Code authorizes the TLC to enact rules to "ensure that drivers have reasonable expectations of when they will be able to access [HVFHS] applications and thus reasonable expectations of their working hours and incomes"—the stated purpose of the restrictions.⁴⁴ While Lyft remains willing to work with the TLC to develop workable solutions to ensuring minimum driver pay, it opposes *ultra vires* efforts to micromanage the contractual relationships between HVFHS companies and their drivers.

³⁹ The Proposed Rules do not contemplate any exceptions to this 16-hour mandate. At a minimum, the lockout restrictions should be consistent, and the 16-hour mandate should be subject to the same exceptions as the 72-hour notice mandate (however limited they may be).

⁴⁰ (See Mundy Aff. ¶¶ 12-24.)

⁴¹ NYC Ad. Code § 19-549(b).

⁴² *Id.*

⁴³ See 35 RCNY § 59D-03(j).

⁴⁴ (Proposed Rules at 7.)

2. The TLC Has Not Articulated Justification for the Proposed Lockout Restrictions

The TLC has not articulated any rational basis to justify the arbitrary 72-hour notice requirement and 16-hour mandate. The TLC also does not appear to have performed any analysis to understand the effects of these proposed restrictions.

(a) The 72-Hour Notice Mandate Is Arbitrary and Irrational

The TLC attempts to justify the 72-hour notice mandate in a footnote to the Statement of Basis and Purpose. According to the TLC, the “72-hour notice requirement is similar to New York City’s scheduling requirement for retail workers”—an employer-employee shift industry with entirely different economics than those at play in the HVFHS industry. The 72-hour notice requirement would be impossible to implement because HVFHS companies have no way of predicting rider demand with that level of precision. Thus, in all likelihood, the 72-hour notice requirement will result in large swaths of drivers being unable to drive for extended periods of time—or their removal from a given HVFHS platform entirely. As noted above, this would have the precise effect that the TLC is hoping to mitigate: the degradation of overall driver pay and flexibility. A reduction in supply would also increase rider wait times (and potentially demand as a result) and make it more difficult for underserved communities in so-called “transportation deserts” (e.g., public housing complexes and hospitals at the outer edges of Manhattan, the outer boroughs, etc.) to obtain reliable transportation. Lyft’s data shows that 37% of rides start or end in lower income areas in New York City and that lower income riders are 35% more likely than higher income riders to use Lyft to get to work and twice as likely to use Lyft to get to school. Lyft hopes the TLC is aligned in avoiding that unwanted outcome.

(b) The 16-Hour Mandate Is Arbitrary and Irrational

The TLC again attempts to justify the 16-hour mandate in a footnote. According to the TLC, unspecified and undisclosed “TLC data” shows that “the overwhelming majority of HV drivers work a total of less than 12 hours a day, but will often take breaks during the day to maximize their earnings, for example, working six hours during the morning rush hour, taking a mid-day break, and then six hours during the evening rush hour.”⁴⁵ The TLC has not provided any details about this data or connected it in any meaningful way to the 16-hour mandate.⁴⁶ And if the referenced “data” was derived from the results of the deficient driver survey that yielded the Parrott Report, it cannot justify the TLC’s rulemaking for the reasons discussed above.

3. The Proposed Lockout Restrictions Raise Constitutional Concerns

In addition to exceeding the TLC’s statutory authority, the proposed lockout restrictions raise serious constitutional concerns under both the First Amendment and the Contracts Clause.

⁴⁵ (*Id.* at 7 n.19.)

⁴⁶ A court recently struck down the TLC’s efforts to amend the minimum driver pay rules without explaining the connection between the proposed problem and the implemented solution. *See Uber USA, LLC v. N.Y. City Taxi & Limousine Comm’n*, No. 160451/2022, 2023 WL 187123, at *1 (N.Y. Sup. Ct. N.Y. Cnty. Jan. 10, 2023) (“The TLC explains that X exists and therefore it is doing Y, but it never explains how it gets from X to Y.”).

The First Amendment not only protects the ability to speak freely, but also prohibits the government from compelling the speech of private actors.⁴⁷ By mandating that HVFHS companies make their platforms available to drivers, the Proposed Rules compel HVFHS companies to “speak” by sending drivers data and other information. New York courts have struck down laws on First Amendment grounds where they required private commercial actors to provide third parties with data that they otherwise would not have chosen to provide.⁴⁸

The Contracts Clause of the Constitution “restricts the power of the states to disrupt contractual arrangements.”⁴⁹ The proposed supply restrictions implicate the Contracts Clause because they “undermine[] the contractual bargain” between HVFHS companies and their drivers and interfere with HVFHS companies’ “reasonable expectations.”⁵⁰ Pursuant to Lyft’s Terms of Service, drivers have no guarantee of access to the Lyft platform and data.⁵¹ The TLC’s proposed restrictions effectively foreclose Lyft’s ability to dynamically respond to changing market conditions (e.g., rider demand) to meet the TLC’s UR expectations while significantly curtailing its agreed-upon arrangement with drivers. New York courts have shown a willingness to uphold Contracts Clause challenges to unprecedented state actions that undermine contractual bargains and interfere with the reasonable expectations of contracting parties—particularly when those regulations result in losses to one party for the benefit of another.⁵²

F. Conclusion

Lyft greatly appreciates the TLC’s consideration of these comments. For the reasons discussed above, the Proposed Rules are arbitrary and capricious, lack a reasonable basis, and, in certain respects, exceed the TLC’s authority and are unconstitutional. Lyft hopes the TLC is willing to reconsider the Proposed Rules and work with all interested parties to craft a workable minimum driver pay framework that benefits all New Yorkers.

Lyft would be happy to discuss further any of the comments raised above.

⁴⁷ *Burns v. Martuscello*, 890 F.3d 77, 85 (2d Cir. 2018) (“[B]etween compelled silence and compelled speech, compelled speech is the more serious incursion on the First Amendment.”).

⁴⁸ *See, e.g., DoorDash, Inc. v. City of New York*, Nos. 21 Civ. 7695 (AT), 21 Civ. 10347 (AT), 21 Civ. 10602 (AT), 2024 WL 4276245 (S.D.N.Y. Sept. 24, 2024) (Torres, J.) (holding that city ordinance requiring food delivery platforms to provide restaurants with customer and order details violated the First Amendment).

⁴⁹ *Svein v. Melin*, 584 U.S. 811, 819 (2018).

⁵⁰ *Id.*

⁵¹ *See* Lyft Terms of Service, ¶ 12, <https://www.lyft.com/terms> (last updated Dec. 13, 2024).

⁵² *See, e.g., DoorDash, Inc. v. City of New York*, 692 F. Supp. 3d 268, 289-95 (S.D.N.Y. 2023) (Woods, J.) (concluding that food delivery platforms stated a Contracts Clause claim in challenge to ordinance that capped the commissions the platforms could charge to restaurants).

AFFIRMATION OF JONATHAN GURRYAN, Ph.D.

**PREPARED ON BEHALF OF
LYFT, INC.**

in connection with

*Proposed Amendments to the Rules Governing
Minimum Driver Payment for High-Volume For-Hire Services*

January 31, 2025

1. My name is Jonathan Guryan. I am currently the Lawyer Taylor Professor of Education and Social Policy in the School of Education and Social Policy at Northwestern University.

2. I have been retained by Lyft, Inc. (“Lyft”) to provide this expert affirmation concerning the proposed amendments to the High-Volume For-Hire Services (“HVFHS”) Minimum Driver Pay Rules (the “Proposed Rules”) announced by the New York City Taxi and Limousine Commission (the “TLC”) on January 3, 2025.

I. QUALIFICATIONS AND BACKGROUND

A. Qualifications

3. I graduated from Princeton University with a B.A. in Economics in 1996, and from the Massachusetts Institute of Technology with a Ph.D. in Economics in 2000. In addition, I am a Faculty Fellow at the Institute for Policy Research and a member by courtesy of the Economics Department and the Kellogg School of Management at Northwestern University. I am a labor economist.

4. From 2010 to 2019, I served as an editor of the Journal of Labor Economics, and I currently serve as a reviewer for leading academic economic journals such as the American Economic Review, the Quarterly Journal of Economics, the Journal of Political Economy, the Review of Economics and Statistics and the Review of Economic Studies. In my role as editor, I assessed the scientific quality of academic studies, I chose peer reviewers for studies and based on the advice of these peer reviewers and on my own assessment, I provided editorial guidance to authors and made decisions about whether submitted manuscripts were published.

5. Throughout my career, I have conducted research on a wide range of topics related to labor and other economics. My economic research has been published in leading journals such as the American Economic Review, the Journal of Political Economy, Developmental Psychology, the Journal of Educational Psychology, the Review of Economics and Statistics, and the Annual Review of Economics. I have taught a Ph.D. level course called “Quantitative Methods” on statistical methods and regression

analysis, and an undergraduate level course called “The Economics of Inequality and Discrimination,” both at Northwestern University. In previous years, I have taught graduate-level courses on microeconomics and labor economics at the University of Chicago Booth School of Business. The courses on microeconomics relate to various forms of market competition, the economics of costs, determination of market prices, and consumer and firm behavior.

6. I have provided expert reports and testified at trial and deposition as an expert in economics in several matters, including in the U.S. District Court for the Southern District of New York, the U.S. District Court for the Northern District of Illinois, and the U.S. District Court for the Northern District of California.

7. I am a Faculty Research Fellow at the National Bureau of Economic Research, and the co-Director of the Education Lab at the University of Chicago. In 2009, I was awarded the John T. Dunlop Outstanding Scholar Award, given each year for the best research on domestic labor economics by a scholar within 10 years of completing a Ph.D.

8. In 2019, I filed an expert affidavit in connection with Lyft’s successful challenge to the TLC’s “cruising cap” rules.¹

9. My curriculum vitae is attached as Exhibit 1.

Exhibit 1. Expert CV – See Attached in Appendix I

B. Assignment

10. I have evaluated the December 2024 report prepared by James A. Parrott from the Center for New York City Affairs at The New School, entitled “Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard” (the “Parrott Report”) and examined the economic implications of TLC’s proposed increase in driver pay related to the High-Volume For-

¹ Expert Aff. of Dr. Jonathan Guryan, *Tri-City, LLC v. N.Y. City Taxi & Limousine Comm’n*, Index No. 159947/2019, NYSCEF 41 (Sup. Ct. N.Y. Cnty. Oct. 11, 2019).

Hire Vehicles (“HV-FHVs”) industry as outlined in the Proposed Rules. In preparing this declaration, I have relied on publicly available information, academic literature, and my own expertise.

C. Background

11. The TLC has a minimum pay standard for high-volume for-hire vehicle drivers that includes time, distance, and utilization components.² The time component (the “per-minute cost factor”) is supposed to account for the time drivers spend logged into an HV-FHV platform and compensate drivers at the New York City minimum wage plus an allowance for payroll tax and paid time off.³ The distance component (the “per-mile cost factor”) is supposed to account for expenses associated with operating a ridesharing vehicle such as financing payments, maintenance, fuel, and insurance.⁴ The utilization rate (“UR”) component measures how much of a driver’s on-duty time is spent with a passenger in their car.⁵

12. The Parrott Report purports to develop an updated method to quantify driver vehicle expenses and suggests appropriate modifications to the pay standard’s per-mile cost factor, and the TLC has adopted this proposal in the Proposed Rules. The Parrott Report proposes two per-mile cost factors, one for wheelchair accessible vehicles (“WAVs”) and the other for non-WAVs.

13. The Parrott Report estimates the cost structure for HV-FHV drivers of non-WAVs along two dimensions: owned versus rented vehicles and internal combustion engine (“ICE”) vehicles versus electric vehicles (“EVs”). The cost estimates reflect “acquisition (or rental) costs, insurance, maintenance, and fuel or battery charging

² New York City Taxi and Limousine Commission, “Notice of Promulgation,” December 4, 2018 accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf, p. 3-4.

³ New York City Taxi and Limousine Commission, “Notice of Promulgation,” December 4, 2018 accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf, p. 3.

⁴ New York City Taxi and Limousine Commission, “Notice of Promulgation,” December 4, 2018 accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf, p. 3.

⁵ New York City Taxi and Limousine Commission, “Notice of Promulgation,” December 4, 2018 accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf, p. 4.

costs.”⁶ Cost estimates “were compiled for each of the four vehicle categories and weighted in deriving the composite measure to reflect each category’s share of high-volume trips for 2025. The trip weights for the composite per mile cost factor are owned ICE vehicles (.583); rented ICE vehicles (.292); owned EVs (.083); and rented EVs (.042).”⁷

14. Under the assumption that there are no EV WAVs in the New York City HV-FHV fleet, the Parrott Report estimates the cost structure for HV-FHV drivers of WAVs solely along the owned versus rented dimension “based on 70 percent of WAVs being owned and 30 percent rented.”⁸

15. Even though the time and distance costs components were inflation-adjusted in early 2020, 2022, 2023, and 2024 based on the Consumer Price Index for Urban and Clerical Workers for the NY-NJ-PA metro area (“CPI-W”), the Parrott Report argues that the annual CPI-W adjustment does not take into account the structural changes that took place in the industry in recent years, including the shift from sedans to mid-size SUVs, the increase in the relative importance of WAVs, and the switch towards EVs.⁹ The Parrott Report makes the implicit assumption that these structural shifts increased the cost of operating rideshare vehicles over and above the annual inflation adjustment that is meant to account for costs of transportation workers.¹⁰

16. The Parrott Report relies primarily on survey data from a survey that the TLC sent to HV-FHV drivers who provided at least 100 trips between November 2023

⁶ Parrott Report, p. 3.

⁷ Parrott Report, p. 3.

⁸ Parrott Report, p. 3.

⁹ New York City Taxi and Limousine Commission, “Notice of Public Hearing and Opportunity to Comment on Proposed Rules,” December 26, 2024 accessed at www.nyc.gov/assets/tlc/downloads/pdf/proposed_amendment_of_driver_pay_rules_for_hvfhs.pdf, p. 3; Parrott Report, p. 7.

¹⁰ In 2023, the TLC combined the scheduled CPI-W increase with an additional Transportation Index-based adjustment, leading to a total increase of 13.16 percent in the per-mile rate. *See* New York City Taxi and Limousine Commission, “Notice of Public Hearing and Opportunity to Comment on Proposed Rules,” December 26, 2024 at www.nyc.gov/assets/tlc/downloads/pdf/proposed_amendment_of_driver_pay_rules_for_hvfhs.pdf, p. 3.

and May 2024. Only 4 to 5 percent of survey recipients responded to unspecified “key questions” in the survey, with the majority of respondents driving full-time for a ridesharing company.¹¹ The self-reported results of this driver survey were “the primary source of information on driver expenses for vehicle cost or rent, insurance, and maintenance” used to develop the proposed amended per-mile cost factors.¹²

17. For non-WAV, ICE-owned vehicles, the Parrott Report estimates the per-mile cost to be \$0.782, taking into account the cost of gas, down payment, monthly payment, insurance, maintenance, cleaning, and TLC and DMV licensing and registration fees. For non-WAV, ICE-rented vehicles, the per-mile cost is estimated to be \$1.028, considering the cost of leasing the car, gas, licensing fees, insurance, maintenance, and cleaning. For EV-owned vehicles, the Parrott Report estimates the per-mile cost to be \$0.914, taking into account the cost of charging, driver’s time charging, down payment, monthly payment, insurance, maintenance, cleaning, and TLC and DMV licensing and registration fees. Lastly, the Parrott Report estimates the per-mile cost for EV-rented vehicles to be \$1.133, considering the cost of charging, driver’s time charging, cost of leasing the car, maintenance, cleaning, and licensing fees.¹³

18. For owned WAVs, the Parrott Report estimates the per-mile cost to be \$1.037, taking into account the cost of gas, down payment, monthly payment, insurance, maintenance, vehicle cleaning, and TLC and DMV licensing and registration fees. For rented WAVs, the Parrott Report estimates the per-mile cost to be \$1.118, considering the cost of leasing the car, gas, maintenance, vehicle cleaning, and licensing.¹⁴

19. The Parrott Report assumes that ICE vehicle drivers typically finance their vehicles over five years and EV drivers finance their vehicles over six years.

¹¹ Parrott Report, p. 2.

¹² Parrott Report, p. 2.

¹³ Parrott Report, Exhibit 13.

¹⁴ Parrott Report, Exhibit 15.

Additionally, the Parrott Report assumes that ICE vehicles fully depreciate in five years and EVs fully depreciate in six years.¹⁵

20. Overall, the Parrott Report recommends that the TLC increase the per mile cost factors to \$0.879 per mile for non-WAVs and to \$1.061 for WAVs. This recommendation represents increases of 11.4 percent and 3.9 percent for non-WAVs and WAVs, respectively, over the existing per-mile cost factors in effect since March 1, 2024.¹⁶ Compared to the initial standard set in 2019, the current proposal reflects a 39.3 percent increase for non-WAVs and a 29.7 percent increase for WAVs.¹⁷

II. SUMMARY OF FINDINGS

21. My opinions in this matter can be summarized as follows:

a. The Parrott Report's calculation of the proposed per-mile cost factor is unreliable due to numerous flaws in inputs and assumptions. First, the Parrott Report assumes that the vehicles would have no residual value after five years, in direct contradiction with the TLC's assumption that medallion taxis can stay in service for seven years. Making a single change to the useful life assumption in the Parrott Report to align with the TLC's seven-year useful life assumption for taxis reduces the per-mile cost factor for non-WAVs from \$0.879 to \$0.825 (a 6.2 percent decrease) and for WAVs from \$1.061 to \$0.953 (a 10.2 percent decrease). Second, the Parrott Report relies primarily on survey data to estimate the maintenance costs for ICE vehicles and EVs, which are substantially higher than costs reported in academic papers and publicly available sources. For example, the U.S. Department of Energy and a Consumer Reports study concludes that savings from using EVs range from 40-50 percent. Third, the Parrott Report fails to account for the personal consumptive value of car ownership in its per-mile cost factor as well as drivers' potential other sources of income from car usage.

¹⁵ Parrott Report, p. 26, Exhibit 13.

¹⁶ Parrott Report, pp. 3, 4.

¹⁷ New York City Taxi and Limousine Commission, "Notice of Promulgation," December 4, 2018 accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_income_rules_12_04_2018.pdf, p. 3.

Fourth, the Parrott Report does not include the value received by owners of TLC-licensed vehicles to rent out their vehicles to drivers, which is profitable due to the scarcity of licenses for rideshare vehicles given out by the TLC. (See Section III.A-D.)

b. The Parrott Report’s calculations are based on a flawed survey administered to HV-FHV drivers between November 2023 and May 2024, which resulted in only a 4.8 percent response rate. The response rate was disproportionately biased towards full-time drivers, as acknowledged by the Parrott Report. The Parrott Report did not account for the possibility that survey respondents could manipulate answers for personal gain, a response bias that is well-documented in the academic literature. I demonstrate that full-time drivers are overrepresented among the respondents in a statistically significant way. Since full-time drivers have higher costs and different behaviors when not working as a rideshare driver, the resulting per mile cost estimates could be inflated due to their overrepresentation in the survey responses. The Parrott Report did not include the survey questions or data and did not present any statistical tests to assess the validity of responses. (See Section III.E-G.)

c. Unlike the 2018 Parrott and Reich study (the “2018 Parrott Study”) that analyzed the impact of the proposed minimum pay increase on customers, drivers, and the overall New York City economy, the Parrott Report does not perform any assessment of policy consequences, including whether the proposed per-mile cost factor will increase baseline driver pay. Widely accepted economic principles indicate that raising driver pay raises input costs for rideshare companies, some of which could be passed on to customers who, in turn, will likely reduce the number of trips taken. Furthermore, academic research demonstrates that while a minimum pay increase in the HV-FHV industry would likely increase driver earnings in the short-term, resulting in price increases, an increased supply of drivers in response to increased driver pay could lead to long-run decreases in utilization and even decreases in hourly driver pay. (See Section IV.)

III. PARROTT REPORT'S CALCULATION OF VEHICLE EXPENSES ARE UNRELIABLE GIVEN NUMEROUS FLAWED INPUTS AND ASSUMPTIONS

A. Dr. Parrott's Assumption About Residual Value of Vehicles Is Flawed and Unreliable

22. The Parrott Report assumes that the vehicles used by HV-FHV drivers would have “very little residual value” after five years because a full time “HV vehicle will log 162,500 miles over five years.”¹⁸ The Parrott Report provides no support for this assumption, which contradicts the assumptions made by the TLC for medallion taxis and publicly available data.¹⁹

23. In rules adopted by the TLC on April 23, 2015, the TLC described how many vehicles used for medallion taxi service experienced longer useful lives than they did in the past, and that most medallion taxis are still serviceable after seven years. It stated:

[The] high rates of success at TLC safety and emissions inspections suggest that most vehicles remain in good condition for many years of service. ***Because vehicles perform better today***, regardless of the length of time they are permitted to operate, than when retirement schedules were introduced, ***TLC has adopted a uniform retirement schedule of seven years for all vehicles*** which are Hacked-up after April 20, 2015. ***This change will allow owners to keep vehicles on the road for their full useful lives and correspondingly reduce vehicle expenses, one of the larger expenses of taxicab operation.*** TLC will continue to require the removal from service those vehicles that, regardless of their retirement date, fail to pass TLC's safety and emission inspections. Accompanying this change, TLC has removed all retirement extensions for vehicles Hacked-up after the same date,

¹⁸ Parrott Report, p. 24.

¹⁹ “They further assume that there is negligible residual value in the vehicle after driving 32,500 miles annually for five years of intensive, full-time driving on the streets and highways of New York City with passengers getting into and out of the vehicle several times a day. The resulting wear and tear on a vehicle is substantial, leaving little likelihood of any meaningful resale value. In essence, the practical depreciation from such use is total.” Parrott Report, p. 26.

except the hardship extension provided in §67-19(a) of the TLC rules, *so that all vehicles will retire after seven years.*²⁰

24. The same TLC rule also explained that the TLC repealed a limit to the service life of Black Car service vehicles beginning with model year 2013 and adopted a seven-year life for Black Car service vehicles with model year 2012 or before.²¹ The Parrott Report fails to explain why ridesharing service vehicles would only have a useful life of five years when medallion taxis have a seven-year service life.

25. Using a seven-year useful life would reduce the estimated expense of owning the vehicles, and therefore the overall expense estimate per mile. Exhibit 2, below, shows that increasing the vehicle life assumption to seven years reduces the Parrott Report's composite per-mile cost factor for non-WAVs from \$0.879 to \$0.825, a decrease of more than 6 percent.²² See Appendix II for further details on the calculation. Similarly for WAVs, using a vehicle life assumption of seven years reduces the per-mile

²⁰ New York City Taxi and Limousine Commission, "Notice of Promulgation of Rules," rules adopted April 23, 2015, accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/proposed_rules_drv_veh_owner_reform_package.pdf, pp. 3-4 (emphasis added).

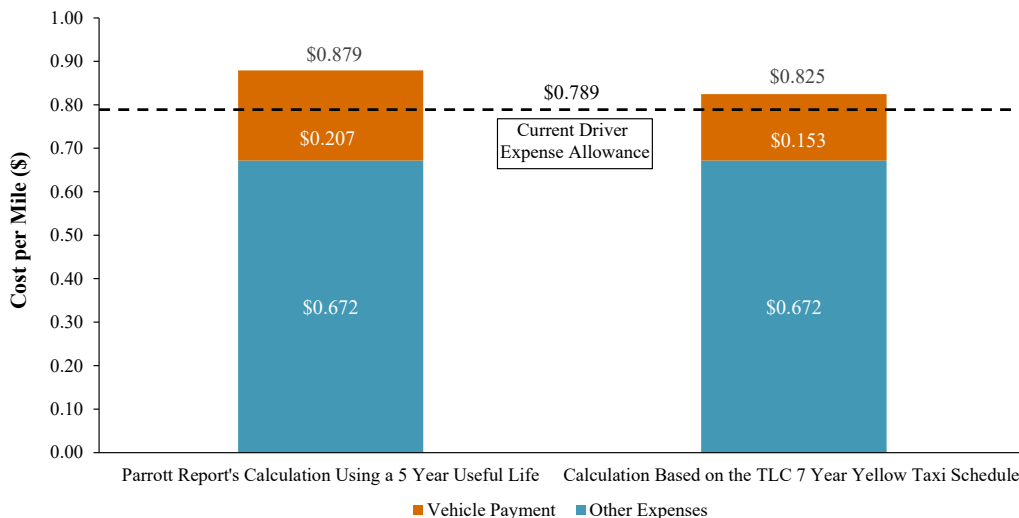
The TLC's update of a medallion taxi's serviceable lifespan to seven years remains current as of October 18, 2024. See, TLC Rules and Local Laws, §67-18 accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/rule_book_current_chapter_67.pdf.

²¹ New York City Taxi and Limousine Commission, "Notice of Promulgation of Rules," rules adopted April 23, 2015 at https://www.nyc.gov/assets/tlc/downloads/pdf/proposed_rules_drv_veh_owner_reform_package.pdf, p. 4.

²² To factor in a longer depreciation period, I multiplied the ICE vehicle and EV payment costs as reported in Exhibit 13 of the Parrott Report by 5/7 and 6/7, respectively, and recomputed the resulting total estimates. For example, the Parrott Report states that the median ICE vehicle driver reported \$8,823 of annual vehicle payments and that these payments would last five years, the car's useful life. If the car lasted seven years, then the total cost of \$8,823*5 should be spread out over seven years, resulting in a yearly cost of \$6,302. For EVs, the Parrott Report states that the median driver reported \$11,400 in annual vehicle payments with a median loan duration of six years. If the car lasted seven years, the total cost of the \$11,400*6 should be spread out over seven years, resulting in a yearly cost of \$9,771.

cost factor from \$1.061 in the Parrott Report to \$0.953, a decrease of more than 10 percent.²³ See Appendix III.

Exhibit 2. Proposed Non-WAV Per-Mile Expense Factor Would Decrease from \$0.879 to \$0.825 Using the TLC's 7 Year Useful Life for Yellow Taxis



Notes and Sources:

- Data are from the Parrott Report dated December 2024.
- The cost per mile is weighted based on drivers who own or rent their vehicle. The Parrott Report uses a 66.6% weight for owned vehicles and a 33.4% weight for rented vehicles.
- Other expenses include the cost of obtaining a TLC license, rental costs, fuel/battery charging, insurance, maintenance, and vehicle cleaning.
- The vehicle payment includes the amortized down payment and monthly payment for an auto loan taken by a driver. This payment is amortized over the useful life of the vehicle. The Parrott Report estimates that the median ICE vehicle purchase price is \$40,000 and is financed over 5 years, and the median electric vehicle purchase price is \$60,000, financed over 6 years. Both types of cars are financed at a 7% interest rate with a \$5,000 down payment.
- The Parrott Report assumes ICE and electric ride-sharing vehicles in New York City will depreciate fully in 5 and 6 years respectively, and amortizes the vehicle payments over the same time periods.
- According to § 67-18 of the TLC Local Rules and Laws, all yellow cabs must be retired 7 years after the vehicle is approved to operate by the TLC.
- The corrected calculation estimates the average cost per mile by amortizing the loan payments for an ICE and electric vehicles over 7 years, while keeping other expenses constant.

26. Data from third-party providers of vehicle values, such as Edmunds.com, also suggest that the useful life of ridesharing vehicles is more than five years. To evaluate the assertion in the Parrott Report that ICE ridesharing vehicles have no value after five years of service, I estimated the value of vehicles of similar types as the ones used in ridesharing services, assuming five years of heavy use in New York City. The Edmunds.com website provides estimates of the value of vehicles based on the make, model, trim level, mileage, vehicle condition, and other vehicle characteristics.²⁴ For

²³ Similarly to non-WAVs, I multiplied the vehicle payment cost over five years as reported in Exhibit 15 of the Parrott Report by 5/7 to get the annual payment cost spread out over seven years. For example, the estimated annual vehicle payment for WAVs of \$14,544 over five years was multiplied by 5/7 to get a \$10,389 annual payment over seven years.

²⁴ Edmunds, "2020 Toyota Camry Value," accessed at <https://www.edmunds.com/toyota/camry/2020/appraisal-value/>.

example, as of January 2025, a five-year old Toyota Camry (the vehicle most commonly used for ridesharing services, according to the Parrott Report) with 162,500 miles of use, in “rough” condition, would be worth between \$9,443 and \$13,628. This means that these cars retained between 37.0 and 42.4 percent of their purchase price after five years, even assuming heavy use.

Exhibit 3. 2020 Toyota Camrys (in Rough Condition with 162,500 Miles) Retain Between 37.0 Percent and 42.4 Percent of their Value

Trim Level	2020 Price¹	Trade-In Value²	Trade-In Value as a Percentage of Price
(1)	(2)	(3)	(4)
			= (3) / (2)
L	\$ 25,380	\$ 9,443	37.2 %
LE	25,925	9,626	37.1
SE	27,125	10,262	37.8
XLE	30,410	11,260	37.0
XSE	30,960	11,757	38.0
TRD	32,125	13,628	42.4

Notes and Sources:

- Data are from the Parrott Report dated December 2024, Toyota Newsroom, and Edmunds appraisal calculator.
- The Parrott Report estimates that an HV vehicle will log 162,500 miles over five years and that a Toyota Camry is the most used vehicle for ride sharing services. The Parrott Report also uses Edmunds and a central Brooklyn zip code to estimate the depreciated value of a car, specifications that are also used in this exhibit.

¹ Price data are from the Toyota Newsroom. All trim levels have a 4-cylinder engine and an 8-speed automatic transmission, except for the TRD, which has 6 cylinders. The price includes the MSRP and the delivery, processing, and handling fee (DPH). The DPH for passenger cars is \$955.

² Trade-in values are calculated using the Edmunds appraisal calculator as of January 22nd, 2025 for the central Brooklyn zip code 11233. The vehicles are assumed to have a midnight black metallic exterior with no additional equipment. The calculation assumes an annual mileage of 32,500 for 5 years, which totals to 162,500 miles. The vehicles are assumed to have never been in an accident and experienced no flood or frame damage. Additionally, the vehicles are assumed to have no interior, exterior, or tire damage, with no maintenance issues. The vehicles are assumed to have one key and no aftermarket modifications.

B. The Parrott Report's Estimates about Cost of Operating Vehicles in New York City Are Contradicted by Public Data Including Academic Studies

a) Publicly Available Estimates of Vehicle Maintenance Costs for ICE and EV Vehicles Demonstrate that the Inputs on Maintenance Used in the Parrott Report Are Likely Inflated

27. The Parrott Report estimates that the annual cost of maintenance for ICE vehicles is \$4,500 and \$4,000 for EVs.²⁵ These estimates are contradicted by publicly available data and estimates from academic studies. For example, CarEdge.com, a consumer information site, estimates that the average annual maintenance and repair costs for a Toyota Camry for the first five years of operation are \$197, \$226, \$273, \$348, and \$411 per year, respectively.²⁶ These estimates are for a vehicle with 21,000 miles per year, the highest annual mileage that the site uses. Even allowing that a full-time ride sharing service driver averages 32,500 miles per year, the Parrott Report assumes that those incremental miles add more than \$3,000 per year to the maintenance and repair costs of the vehicle. In fact, the Parrott Report's estimate for annual maintenance costs (\$4,500) is approximately the same as the 10-year ownership repair and maintenance costs from CarEdge (\$4,555). In addition, Edmunds.com estimates the total maintenance costs for a 2020 Toyota Camry L with 150,000 miles to be \$2,779.²⁷ If we use the Parrott Report's assumption that a full-time ride sharing service driver averages 32,500 miles per year, the annual maintenance costs according to Edmunds.com would be \$602, or 87 percent lower than the Parrott Report's estimate for annual maintenance costs of \$4,500.

28. The Parrott Report's estimates for EV and ICE vehicle maintenance costs are also inconsistent with published academic studies that compared the costs of EV and ICE vehicles, such as Liu et al. (2021).²⁸ Liu et al. use regression models to estimate the maintenance and repair costs for ICE vehicles and EVs by considering vehicle price and

²⁵ Parrott Report, p. 29.

²⁶ CarEdge, "Toyota Camry Maintenance Costs," accessed at <https://caredge.com/toyota/camry/maintenance?m=21000>.

²⁷ Edmunds, "2020 Toyota Camry Maintenance Schedule," accessed at <https://www.edmunds.com/car-maintenance/guide-page.html>.

²⁸ Liu, Zhe, et al., "Comparing total cost of ownership of battery electric vehicles and internal combustion engine vehicles," *Energy Policy* 158 (2021): 112564.

mileage. Using the Parrott Report's estimates of the cost of ICE vehicles, cost of electric vehicles, and annual mileage along with the regression coefficient estimates, the Liu models would predict that the annual maintenance and repair costs of EVs is about 66.4 percent lower than that of ICE vehicles.²⁹ The Parrott Report's estimates of maintenance costs of \$4,500 for ICE vehicles and \$4,000 for EVs, where the maintenance costs for EVs are just 11 percent cheaper, is inconsistent with academic literature and publicly available data, which calls into question the validity of the maintenance costs the Parrott Report uses in its estimation of driver expenses.

b) The Parrott Report's Finding that the Cost of Operating EVs Is Greater than ICE Vehicles Is Contradicted by Publicly Available Estimates

29. The Parrott Report finds that the cost of operating an EV is higher than the cost of operating an ICE vehicle. This opinion is contrary to the widely documented finding that operating an EV is generally less expensive than an ICE vehicle, even if the initial cost of purchasing the EV vehicle is higher. This result has been documented in academic literature, as well as in published consumer guidance reports.

30. First, the Parrott Report estimates that the total fuel cost of operating an ICE vehicle is \$0.130 per mile and that the total charging cost of operating an EV is \$0.198 per mile (\$0.102 per mile in charging costs and \$0.096 per mile in time to

²⁹ The Parrott Report estimates the median cost of a new, non-WAV ICE vehicle to be \$40,000, the median cost of a new EV to be \$60,000, and the annual mileage to be 32,500 miles. Using these values and the Liu regression model coefficients, the annual maintenance and repair costs for ICE vehicles and EVs are estimated to be \$2,319 and \$780, respectively. The intercept of the Liu regression, which represents the average maintenance cost at a vehicle price of zero when all else is held constant, is adjusted for inflation using the TLC's annual rate increases for the driver cost per mile from 2020 to 2024. Liu, Zhe, et al., "Comparing total cost of ownership of battery electric vehicles and internal combustion engine vehicles," *Energy Policy* 158 (2021): 112564.

A 2024 Study by Uber Technologies, Inc. estimated the average maintenance cost per mile of non-hybrid and non-electric vehicles to be \$0.10 per mile and that of EVs to be \$0.08 per mile. The annual maintenance costs of ICE vehicles and EVs according to the Uber study are therefore \$3,282.50 and \$2,632.50, respectively, after applying the 32,500 annual mileage from the Parrott Report. These estimates are still lower than the \$4,000 and \$4,500 maintenance costs for ICE vehicles and EVs in the Parrott Report. Uber Technologies, Inc., "New York City Uber Driver Earnings and Expenses Study: Final Report," dated November 4, 2024.

charge).³⁰ The Parrott Report does not account for charging discounts provided by rideshare companies that would lower his estimates of the cost of operating the EV vehicles. Lyft and Uber provide discounts with charging networks such as EVgo, Electrify America, and EVCS—they also provide discounts for home charging through partnerships with Wallbox.³¹

31. Second, the Parrott Report overstates the maintenance expenses of operating EVs relative to ICE vehicles, resulting in an overall overstatement of driver expenses. The Parrott report acknowledges that the maintenance cost of EVs “generally are considerably lower.”³² EVs have far fewer moving parts and do not need oil changes, for example, as documented in Liu (2021).³³ However, the Parrott Report estimates maintenance costs of \$4,000 per year for EVs and \$4,500 for ICE vehicles. That is, the Parrott Report estimates that maintaining an EV is only about 11 percent less expensive than maintaining an ICE vehicle. These Parrott Report results are based on the undisclosed driver survey data (discussed in greater detail below).

32. By comparison, the U.S. Department of Energy estimates that per-mile expenses are \$0.101 for ICE vehicles and \$0.061 for EVs.³⁴ That is, maintenance costs for EVs are about 40 percent lower than they are for ICE vehicles. Woody et al. (2024)

³⁰ Parrott Report, p. 25.

³¹ For example, Lyft and Uber offer up to 45 percent discounts at charging stations through partnerships with EVgo, and up to \$200 in savings for Wallbox, a home-charging system. Lyft, “Go Electric,” accessed at <https://www.lyft.com/driver/go-electric>. See, also Uber, “The Road to Zero Emissions,” accessed at <https://www.uber.com/us/en/drive/services/electric/>.

³² Parrott Report, pp. 28-29. “Since an EV has substantially fewer moving parts than an internal combustion engine car, maintenance costs generally are considerably lower. EVs have fewer fluids, such as engine oil, there is less brake wear, and the battery, motor, and associated electronics in EVs require little to no regular maintenance.”

³³ Liu, Zhe, et al., “Comparing total cost of ownership of battery electric vehicles and internal combustion engine vehicles,” *Energy Policy* 158 (2021): 112564.

³⁴ “The estimated scheduled maintenance cost for a light-duty battery-electric vehicle (BEV) totals 6.1 cents per mile, while a conventional internal combustion engine vehicle (ICEV) totals 10.1 cents per mile. A BEV lacks an ICEV’s engine oil, timing belt, oxygen sensor, spark plugs and more, and the maintenance costs associated with them.” United States Department of Energy, “FOTW #1190, June 14, 2021: Battery-Electric Vehicles Have Lower Scheduled Maintenance Costs than Other Light-Duty Vehicles,” June 14, 2021, accessed at <https://www.energy.gov/eere/vehicles/articles/fotw-1190-june-14-2021-battery-electric-vehicles-have-lower-scheduled>.

compares the cost of owning an EV and an ICE vehicle in U.S. cities, and the study relies on the U.S. Department of Energy’s estimates of maintenance costs.³⁵ Similarly, a study by Consumer Reports found that EV drivers “are saving 50 percent on their repair and maintenance costs, when averaged over a typical vehicle lifetime.”³⁶

33. Third, the Parrott Report calculates its per-mile cost factor with an “allowance for the time that drivers spend waiting for a charge” in addition to the charging time itself.³⁷ The Parrott Report assumes a weighted time waiting to charge of 0.21 to 0.60 hours and weighted charging time of 0.28 to 0.67 per hour.³⁸ It then uses an hourly rate of \$18.40 to estimate a midpoint cost of waiting and charging time of \$0.096. The Parrott Report states that these assumptions are based on a survey of drivers on their usual wait time to use a public or commercial charger and time it takes to charge a vehicle.³⁹

34. The TLC’s existing formulas purport to compensate drivers for time spent “under-utilized” through the per-hour component of the minimum pay standard. To the extent drivers keep their ridesharing app on while charging the vehicle, the proposed amended minimum pay formula double counts their time by also including charging time in the per-mile cost factor of the minimum pay standard.

35. If we exclude the cost in the Parrott Report for “driver time for charging,” the Parrott Report’s midpoint estimate to charge EVs per mile (\$0.102) is lower than their gasoline cost per mile (\$0.130), which is more consistent with the academic and consumer guidance that the fuel costs of EVs are lower than for ICE vehicles. Changing only this input to the Parrott Report would reduce the total per-mile cost factor for non-

³⁵ Woody, Maxwell, et al., “Electric and gasoline vehicle total cost of ownership across US cities,” *Journal of Industrial Ecology*, Vol. 28 (2024), pp. 194-215.

³⁶ Harto, Chris, “Electric Vehicle Ownership Costs: Today’s Electric Vehicles Offer Big Savings for Consumers,” Consumer Reports, October 2020, accessed at <https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-Ownership-Cost-Final-Report-1.pdf>, p. 3.

³⁷ Parrott Report, p. 20.

³⁸ Parrott Report, Exhibit 12.

³⁹ Parrott Report, p. 20.

WAVs to \$0.867 per mile. Changing this input and correcting the useful life assumption from five years to seven years would reduce the overall composite per-mile cost factor for non-WAVs from \$0.879 to \$0.813 per mile. See Appendix IV and Appendix V.

36. In addition, the Parrott Report potentially overstates charging times based on time drivers purportedly spend waiting for an available charging station, further inflating the per-mile cost factor for EVs. While the Parrott Report claims, based on driver survey data, a weighted time waiting to charge of 0.21 hours to 0.60 hours, a report from December 2021 by the New York State Energy Research and Development Authority states: “There is no evidence that congestion is a significant problem for charging stations While this finding is self-evident for many chargers that are infrequently used, highly used charging station locations also tend to have spare charging capacity, even at peak times.”⁴⁰

C. The Parrott Report Ignored the Personal Benefits of Car Ownership And Income From Non-Rideshare Employment

37. The Parrott Report attributes 100 percent of the cost of a car to its use as a rideshare vehicle despite the fact that there are personal benefits to car ownership, even for full-time drivers. In Buchak’s 2024 study of the rideshare market, these benefits are described as the individuals’ “utility from owning the vehicle for their own durable consumption, capturing for example commuting, errands and recreation.”⁴¹ Using data on Uber drivers and car purchases, this study estimates that the personal consumption value of vehicle ownership is positive and statistically greater than zero.⁴² The author also concludes that it is the prevailing demand for rideshare services that enable a certain portion of low-income drivers to obtain a car in the first place, along with its personal

⁴⁰ NYSERDA, “Cost and Usage Trends for Electric Vehicle Chargers: Evidence from NYSERDA-Funded Level 2 Charging Stations in New York State,” December 2021, p. S-4.

⁴¹ Buchak, Greg, “Financing the Gig Economy,” *The Journal of Finance* Vol. 79, no. 1, 2024: 219-256. <http://dx.doi.org/10.1111/jofi.13292>.

⁴² Buchak, Greg, “Financing the Gig Economy,” *The Journal of Finance* Vol. 79, no. 1, 2024: 219-256. <http://dx.doi.org/10.1111/jofi.13292>.

consumption value, when they would not have otherwise have taken a car loan.⁴³ Another study, Moody et al. (2021), similarly finds that car owners place monetary value on car ownership and “more than half of this value is non-use value – such as the option to travel whenever or wherever needed at a moment’s notice and the status that comes from owning one’s own vehicle – beyond the use value of getting from A to B.”⁴⁴

38. The Parrott Report also ignores other potential sources of income from owning a car for part-time HV-FHV drivers. Publicly available data shows that 59 percent of rideshare drivers in the U.S. also work in food and grocery delivery.⁴⁵ Earnings from other potential jobs requiring vehicle use, such as food delivery, should have been included in the Parrott Report’s because they offset vehicle operation and other costs.

39. By attributing 100 percent of the cost of purchasing a car to its use as a rideshare vehicle and none to any personal consumption value the driver might get from owning the car and none to potential income from non-rideshare employment, the Parrott Report overstates the cost of car ownership for rideshare drivers.

D. The Parrott Report Does Not Account For the Rental Value to Owners of Licensed HV-FHVs

40. The Parrott Report fails to account for potential additional income that drivers who own vehicles can earn by renting them out when not in use by the owner. This is especially important since the TLC issues a limited number of licenses for HV-FHVs, which restricts many new entrants into the market.⁴⁶ The Parrott Report

⁴³ Buchak, Greg, “Financing the Gig Economy,” *The Journal of Finance* Vol. 79, no. 1, 2024: 219-256. <http://dx.doi.org/10.1111/jofi.13292>; see also Harrison, Sara, “Car Loans Are a Hidden Driver of the Ride-Sharing Economy,” accessed at <https://www.gsb.stanford.edu/insights/car-loans-are-hidden-driver-ride-sharing-economy>.

⁴⁴ Moody, Joanna, et al., “The value of car ownership and use in the United States,” *Nature Sustainability* 4, no. 9 (2021): 769-774.

⁴⁵ Gridwise, “Who are rideshare drivers? A demographic breakdown of rideshare drivers in the U.S.,” accessed at <https://gridwise.io/blog/ads/who-are-rideshare-drivers-a-demographic-breakdown-of-rideshare-drivers-in-the-u-s/>.

⁴⁶ TLC, “Chapter 59: For-Hire Service,” updated July 22, 2024, accessed at https://www.nyc.gov/assets/tlc/downloads/pdf/rule_book_current_chapter_59.pdf.

acknowledges the scarcity of new TLC licenses on HV-FHVs.⁴⁷ Renting out the owned HV-FHVs to new drivers would be profitable because the Parrott Report demonstrated that vehicle costs are \$0.840 per mile to renters of ICE vehicles and \$0.880 per mile to renters of EVs, which is 178 percent greater than the \$0.302 cost that he calculated for owners of ICE vehicles and 134 percent greater than the \$0.376 cost that he calculated for owners of EVs.⁴⁸ These potential profits should reduce the Parrott Report’s per-mile cost factors for owned vehicles.

E. The Parrott Report Relied Primarily on Survey Results with Notably Low Response Rates to Estimate Expenses Instead of Publicly Available Data

41. The Parrott Report is based primarily on the results of a survey that the TLC emailed to 89,000 HV-FHV drivers between November 2023 and May 2024.⁴⁹ The survey response rate was between 4 and 5 percent for key questions.⁵⁰ In addition to demographic characteristics, drivers were asked to report their typical weekly usage and their driver expenses, which were then used in his calculation of the per mile component of the minimum pay formula.⁵¹ Even though the survey was purportedly sent to all active drivers, the Parrott Report noted that a “disproportionate share of responses came from drivers logging a high number of weekly hours.”⁵²

42. The Parrott Report does not provide a rationale for relying primarily on a survey even though the author acknowledged in the 2018 Parrott Study that “[t]he TLC maintains extensive data on the taxi and FHV industry that is integral to the analysis in this report. TLC administrative data includes data on all drivers, vehicles, and bases

⁴⁷ The Parrott Report states that “more than three-quarters of respondents indicated that renting a TLC vehicle was the only way they would be able to gain work as a FHV driver” due to the “limit on the issuance of new vehicle licenses that has been in place since 2018.” Parrott Report, p. 17.

⁴⁸ Parrott Report, Exhibit 13.

⁴⁹ Parrott Report, p. 10.

⁵⁰ Parrott Report, p. 2.

⁵¹ Parrott Report, p. 2.

⁵² Parrott Report, p. 14.

(operating locations) that it licenses, as well as data on all trips provided.”⁵³ The 2018 Parrott Study combined TLC data with a representative survey to estimate the driver expenses for HV-FHVs and to conduct economic impact analysis.

43. In addition, academic literature documents that survey participants could have incentives to manipulate their answers for personal gain and thus invalidate the responses of the survey. Wolf and Denison (2023) define an invalid survey response as “a mismeasurement resulting from the interaction between the participant and the survey instrument.”⁵⁴ The validity of the survey refers to the appropriateness of use of the survey results for a particular purpose.⁵⁵

44. Because the survey was administered by the TLC, a governmental agency that the rideshare driver community generally recognizes as one that represents their own interests in mandating the minimum pay standard, the respondents could have inferred that the survey would play a role in formulating this minimum pay. Given that the great majority of the respondents are full time HV-FHV drivers, the Parrott Report did not consider whether respondents had the incentive to inflate the costs in order to potentially influence the minimum pay standard. The Parrott Report does not disclose the survey questions or the underlying data on which much of its analysis is based on, so the validity of the survey is difficult to assess.

45. While the Parrott Report relies almost entirely on survey data to estimate driver expenses, a study conducted by HR&A for Uber (“Uber Report”) to estimate driver expenses relies on publicly available data and data provided by Uber.⁵⁶ For

⁵³ James A. Parrott and Michael Reich, *An Earnings Standard for New York City’s App-Based Drivers: Economic Analysis and Policy Assessment*, at 71 (July 2018), available at <https://static1.squarespace.com/static/53ee4f0be4b015b9c3690d84/t/5b3a3aaa0e2e72ca74079142/1530542764109/Parrott-Reich+NYC+App+Drivers+TLC+Jul+2018jul1.pdf>, p. 15 n.9.

⁵⁴ Wolf, Melissa G., and Alexander J. Denison, “Survey Uses May Influence Survey Responses,” *Assessment* 31, no. 7 (2024): 1378-1397.

⁵⁵ Wolf, Melissa G., and Alexander J. Denison, “Survey Uses May Influence Survey Responses,” *Assessment* 31, no. 7 (2024): 1378-1397.

⁵⁶ HR&A, “New York City Uber Driver Earnings and Expenses Study,” November 4, 2024, accessed at https://www.hraadvisors.com/wp-content/uploads/2024/11/HRA_NYC-Rideshare-Cost-Study_Report_11.04.pdf, p. 1.

example, while the Parrott Report relies on survey data to estimate maintenance costs, the Uber Report relies on data from AAA and Uber.⁵⁷ Additionally, the Parrott Report relies on the survey to estimate the share of EV drivers versus ICE vehicle drivers and renters versus owners, whereas the Uber Report relies on “Uber’s shared data and benchmarked against the TLC’s monthly aggregate reports.”⁵⁸ The Parrott Report acknowledges that companies are “required” to provide certain data to the TLC.⁵⁹ The Parrott Report did not provide a rationale for not utilizing a combination of publicly available data and data from the rideshare companies for its analysis, and instead chose to rely primarily on a survey with a low response rate.

F. Standard Statistical Tests Indicate Response Bias in the Survey Data that the Parrott Report Relied On

46. The Parrott Report’s own exhibits demonstrate stark differences between the driver population and the subset of drivers who responded to the survey. The Parrott Report used 4,462 survey responses to draw conclusions about the entire population of 100,151 New York City HVFHS drivers, a response rate of approximately 4.5 percent.⁶⁰ In the absence of any bias in propensities to respond, both full and part-time drivers should be represented equally within the survey respondent data. That is, drivers who work both low and high hours should exhibit the same representation rate of 4.5 percent. This is not the case: based on analysis I have conducted, only 1.4 percent of the drivers working 10-20 weekly hours are represented, while 15.6 percent of drivers working more than 50 hours are represented in survey responses.⁶¹ A standard statistical test known as Chi-squared, which tests the differences between the actual response rate for the TLC

⁵⁷ Parrott Report, p. 2 and HR&A, “New York City Uber Driver Earnings and Expenses Study,” November 4, 2024, accessed at https://www.hraadvisors.com/wp-content/uploads/2024/11/HRA_NYC-Rideshare-Cost-Study_Report_11.04.pdf, p. 12.

⁵⁸ Parrott Report, Exhibit 7 and HR&A, “New York City Uber Driver Earnings and Expenses Study,” November 4, 2024, accessed at https://www.hraadvisors.com/wp-content/uploads/2024/11/HRA_NYC-Rideshare-Cost-Study_Report_11.04.pdf, p. 4.

⁵⁹ Parrott Report, p. 15.

⁶⁰ This rate is slightly different from the 4.8 percent survey response rate reported in the Parrot Report for various reasons. For example, only 89,000 out of the 100,151 drivers in the data Uber and Lyft reported to the TLC received surveys.

⁶¹ See Parrott Report, Exhibits 6, 10.

Survey and the unbiased representation rate, shows that these differences are statistically significant. In other words, there is a bias in the rate of response of the drivers as compared to the population. See Exhibit 4, below.

Exhibit 4. Chi-Squared Test Confirms Significant Bias of Hours Worked per Week by Survey Respondents to Unbiased Population Data

Hours Worked	Population Data Provided by TLC (Exhibit 10)	Representation Rate in Population Data	Survey Data (Exhibit 6)	Representation Rate in Survey Data	Survey Representation Rate in Population =(4) / (2)	Unbiased Respondent Count =(3) * 4,462	Difference Between Unbiased and Observed =(6) - (4)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0-10	9,487	9.5 %	334	7.5 %	3.5 %	423	89
10-20	14,832	14.8	202	4.5	1.4	661	459
20-40	47,929	47.9	1,009	22.6	2.1	2,135	1,126
40-50	17,831	17.8	1,342	30.1	7.5	794	-548
50+	10,072	10.1	1,575	35.3	15.6	449	-1,126
Total	100,151	100.0 %	4,462	100.0 %	4.5 %	4,462	n.a.

Degrees of Freedom:	4
P-value:	<0.01
Statistically Significant?	Yes

Notes and Sources:

- Data are from Exhibit 6 and Exhibit 10 of the Parrott Report, dated December 2024.

47. The statistically significant nonresponse bias in Dr. Parrott’s own results demonstrates that his per-mile vehicle cost estimates are unreliable. Full-time drivers are disproportionately represented in the survey response data relative to the population of drivers and are also more likely to incur higher vehicle costs due to higher mileage. The resulting cost estimates could be inflated due to the overweighting of their responses. Additionally, full-time drivers have different behavior than part-time drivers such that the over-weighting of their responses will not be representative of the population—for example, part-time drivers might have other uses for their vehicles beyond rideshare services. Even though the Parrott Report notes that full-time drivers accounted for the majority of the trips, this would not justify or explain away the response bias of the survey responses which formed the basis of his cost estimates.⁶²

⁶² The inflation of cost estimates could be further inflated if drivers do not accurately report their weekly driving time on the survey. Dr. Parrott did not perform any analysis of whether the statistically significant difference in drivers’ self-reported hours worked in Exhibit 6 and actual hours worked in Exhibit 10 are driven by potential misreporting.

G. The Parrott Report Fails To Disclose The Survey Questions and Data That He Primarily Relies On, Which Is Common In Peer-Reviewed Academic Publications

48. The Parrott Report does not include information about the questions of the survey on vehicle payment, insurance, maintenance and other costs. Krosnick and Presser (2010) noted that “[t]he heart of a survey is its questionnaire.”⁶³ The literature emphasizes that the accuracy of survey responses can be affected by how the questions are worded as well as by the ordering of both the questions and response alternatives, for example. Finally, academics point out that respondents may not recall the amount of incurred expenses in their survey response unless the question specifically prompts them to search through their past records.⁶⁴

49. Several academic journals consider the survey instrument to be part of the peer-review process. For example, the American Economic Association, the publisher of numerous journals including the *American Economic Review*, requires all manuscript submissions to include the full survey instrument as an appendix.⁶⁵ *Science*, another leading academic journal, has similar requirements for the disclosure of the wording and order of the questions.⁶⁶ The Parrott Report’s lack of transparency about its survey questions and data contradict the guidelines of *Science* and the American Economic Association journals.

⁶³ Krosnick, Jon A. and Stanley Presser, “Chapter 9 Question and Questionnaire Design,” *The Palgrave Handbook of Survey Research*, edited by David L. Vannette and Jon A. Krosnick, 2010. <https://doi.org/10.1007/978-3-319-54395-6>.

⁶⁴ Krosnick, Jon A. and Stanley Presser, “Chapter 9 Question and Questionnaire Design,” *The Palgrave Handbook of Survey Research*, edited by David L. Vannette and Jon A. Krosnick, 2010. <https://doi.org/10.1007/978-3-319-54395-6>.

⁶⁵ American Economic Association, “Policy for Papers Conducting Experiments and Collecting Primary Data,” accessed at <https://www.aeaweb.org/journals/data/policy-experimental-surveys>.

⁶⁶ Science, “*Science* Journals: Editorial Policies,” accessed at <https://www.science.org/content/page/science-journals-editorial-policies>.

IV. THE PARROTT REPORT DID NOT EXAMINE POLICY IMPLICATIONS OR CONSIDER NEGATIVE EFFECTS DOCUMENTED IN LITERATURE

A. The Parrott Report Did Not Conduct an Impact Analysis and Provided No Rationale for Ignoring Policy Implications of its Recommendation for a Significant Increase In Driver Pay

50. Basic economic principles dictate that an increase in minimum driver pay per trip may negatively affect driver pay, opportunities for driver work, prices to consumers, consumer demand and consumer welfare. The Parrott Report does not acknowledge, let alone analyze, these potential follow-on effects of an increase in minimum driver pay.

51. For example, an increase in driver pay could increase the supply of drivers, either by drawing more drivers into the market, or by increasing hours worked by existing drivers. The size of this response would depend on the elasticity of labor supply among rideshare drivers.

52. Driver pay is also part of the cost structure of the rideshare industry. A portion of any increased cost caused by an increase in the minimum pay standard will be passed on to consumers in the form of higher prices. When faced with higher prices, consumers tend to reduce their demand, and the magnitude of the demand response would depend on the elasticity of demand. Furthermore, if the supply of drivers increases in combination with the decrease in demand for ridesharing, then one would expect a decline in utilization as more rideshare drivers wait for rideshare requests from fewer rideshare consumers.

53. It is possible that the resulting decrease in demand from increased consumer prices would be large enough that the increased minimum pay per ride could decrease the aggregate pay for drivers. Whether this would be likely to happen would depend on the magnitudes of the elasticity of consumer demand, the elasticity of labor supply, and the cost structure of the rideshare industry. This series of potential consequences is consistent with predictions of economic theory, findings of empirical studies, and the motivation for and the findings of the Parrott Report.

54. However, the Parrott Report does not include any economic analysis of the impact of increasing driver pay on, among other things, consumer demand or driver utilization. The Parrott Report fails to consider the potential impact of increasing costs on long-run prices to rideshare consumers, driver pay, and the viability of maintaining ride share services for New York City residents, workers, and visitors.

55. Well-established microeconomic principles predict that when the ridesharing companies face an increase in input costs such as labor, both supply and demand will adjust in a way that increases the equilibrium prices for rideshare consumers and also reduce passenger demand for rides.⁶⁷ The effects of the increase in driver pay will depend on various factors, including the elasticity of labor supply and the sensitivity of consumers of ridesharing to changes in prices; i.e., the price elasticity of demand.⁶⁸

56. The price elasticity of demand is the percentage change in quantity demanded of a specific good or service relative to the percentage change in the price of the good or service.⁶⁹ Prior academic literature finds that the price elasticity of demand in the rideshare industry ranges from -0.5 to -1.2. A price elasticity of demand of negative one means that customers respond to a 10 percent price increase with a 10 percent reduction in rides taken. A price elasticity of demand of -0.5 means that customers are relatively less responsive to the same 10 percent price increase with only a 5 percent decrease in rides. For example, estimates of the price elasticity of demand for soft drinks range from -0.8 to -1, while an estimate of the price elasticity of demand for automobile purchases is -1.2.⁷⁰

⁶⁷ Kolmar, Martin, *Principles of Microeconomics*, (Switzerland: Springer International Publishing, 2017, 1st ed.), pp. 74-78.

⁶⁸ Kolmar, Martin, *Principles of Microeconomics*, (Switzerland: Springer International Publishing, 2017, 1st ed.), p. 329.

⁶⁹ Kolmar, Martin, *Principles of Microeconomics*, (Switzerland: Springer International Publishing, 2017, 1st ed.), p. 329.

⁷⁰ Brownell, Kelly D., et al., "The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages," *The New England Journal of Medicine* Vol. 361, no. 16, 2009. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3140416/>; Nicholson, Walter, *Microeconomic Theory: Basic Principles and Extensions*, (United States: Thomson/South-Western, 2010, 10th ed.), p. 454.

57. In an earlier study of the rideshare market, Cohen et al. (2016) used data on approximately 50 million UberX users in the U.S. and measured customers' demand under normal pricing and surge pricing.⁷¹ Across various specifications, they estimate an average price elasticity of demand of -0.57 across all U.S. riders in its data.⁷² The same study estimates a price elasticity of demand of -0.61 for New York City riders, which shows that they are more price sensitive than riders in other cities possibly due to the availability of public transport as an alternative to rideshares. Another study by Castillo (2023) uses a similar approach to measure the response of Houston and Latin American Uber riders to surge pricing and estimated a price elasticity of demand of -0.63.⁷³

58. Recent studies include Christensen and Osman (2023) who conducted a field experiment using data on Egyptian Uber riders and found evidence of “strong demand response” to price reductions, and estimated price elasticities of demand of -0.6 for men and -1.47 for women.⁷⁴ Alvarez and Argente (2024) ran field experiments offering ride discounts to Mexican Uber customers and estimated price elasticity of demand of -1.08 in their primary specification.⁷⁵ Lai (2021) estimated a price elasticity of demand of -1.48 with respect to completed rides.⁷⁶

59. Academics have also studied the labor supply elasticities in the rideshare industry, i.e., how drivers change their work in response to change in wages. Labor supply elasticities have similar interpretations as the price elasticities of demand,

⁷¹ Cohen, Peter, et al., “Using Big Data to Estimate Consumer Surplus: The Case of Uber,” *National Bureau of Economic Research*, No. w22627, September 2016.

⁷² The authors caution that their estimates are only informative about the short-run customer responses to changes in price, rather than the long-run effects which policymakers are most interested in.

⁷³ Castillo, Juan Camilo, “Who Benefits from Surge Pricing?” Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3245533, November 7, 2023.

⁷⁴ Christensen, Peter and Adam Osman, “The demand for mobility: Evidence from an Experiment with Uber Riders,” *Natural Bureau of Economic Research*, No. 31330, June 2023.

⁷⁵ Their data includes Uber users paying with both credit card and cash. The study also reports a price elasticity of -1.45 for a different experiment. The authors also used a natural experiment in Panama and found a price elasticity -0.95. Alvarez, Fernando, and David Argente, “Consumer Surplus of Alternative Payment Methods: Paying Uber with Cash,” *Review of Economic Studies* (2024).

⁷⁶ Lai, Chien-Yu, “Pricing on Two-Sided Market of Ride-Sharing Platform,” PhD diss., University of Chicago, August 2021.

although usually in the opposite direction. For example, a labor supply elasticity of 1 means that drivers work 10 percent more for every 10 percent increase in wages.

60. A study conducted by Chen et al. (2019) of Uber drivers estimates a median labor supply elasticity of 1.92 meaning that the drivers in the data increased their hours by an average of 19.2 percent for a 10 percent increase in average wages.⁷⁷ Buchak (2024)'s estimates using Uber driver data documents a labor supply elasticity of 2.1.⁷⁸ However, there are some papers which suggest that labor supply elasticities in the HV-FHV driver market could be negative. For example, Farber (2005) estimated a labor supply elasticity of -0.688 for New York City cab drivers, which suggests that drivers work less in response to wage increases.⁷⁹ Subsequent work by Motghare (2021) estimated a labor supply elasticity of -0.5 for the same drivers.⁸⁰ Additional research on the rideshare drivers in five U.S. cities found that the labor supply elasticities ranged from -0.38 to -0.67, depending on specification.⁸¹ Despite the broad availability of labor supply estimates from academic research to assess the impact of the driver pay increase on hours worked, the Parrott Report failed to perform any impact analysis of the proposed expense increase on the demand and supply of rideshares in New York.

61. The 2018 Parrott Study acknowledged these microeconomic principles about the effect of minimum pay standards on consumer demand, supply of drivers, and long-term effects on utilization and welfare, and considered the policy implications for utilization rates and consumers using various simulations. For example, the 2018 Parrott Study notes that the minimum pay standard will affect the rideshare industry's dynamics through a "complex process," including, in addition to the mentioned concerns, the

⁷⁷ Chen, M. Keith, et al., "The value of flexible work: Evidence from Uber drivers," *Journal of Political Economy* 127, no. 6 (2019): 2735-2794.

⁷⁸ Buchak, Greg, "Financing the Gig Economy," *The Journal of Finance* Vol. 79, no. 1, 2024: 219-256. <http://dx.doi.org/10.1111/jofi.13292>

⁷⁹ Farber, Henry S., "Is tomorrow another day? The labor supply of New York City cabdrivers," *Journal of Political Economy* 113, no. 1 (2005): 46-82.

⁸⁰ Motghare, Swapnil, "The long-run elasticity of labor supply: New evidence for New York City taxicab drivers," *Labour Economics* Vol. 71, August 2021, 102025.

⁸¹ Kukavica, Anthony, et al., "Beyond Taxis: Reference-Dependence in Rideshare Drivers' Labor Supply," August 31, 2022.

ability of rideshare companies to recruit and retain drivers.⁸² The Parrott Report, however, does not even mention, much less analyze, the potential effects of changing the minimum pay standard on the HV-FHV industry.

B. Academic Research Demonstrates That Increasing Minimum Pay Standard Could Lead to Unintended Negative Long-Run Consequences for Driver Utilization and Consumer Welfare

62. Academic research documents that there may be consequences to an increase in drivers' pay that extend beyond the short-term increase in prices and reduction in consumer demand. There may be long-term effects, as documented in the literature, in the form of a decline in aggregate driver pay and productivity, which would contradict the objectives of the pay standard. Hall et al., (2023) examined the impact of driver pay increases in the HV-FHV market and concluded that "with a higher base fare, the driver's hourly earnings rate rises immediately as drivers make more money per trip. However, the hourly earnings rate begins to decline shortly thereafter. After about 8 weeks, there is no clear difference in the driver's gross average hourly earnings rate compared to before the fare increase."⁸³ Hall et al., (2023) estimates that "a 10% increase in fare raises driver hourly earnings by 0.7%, with a 95% [confidence interval] that includes zero."⁸⁴

63. Hall et al. (2023) explains that minimum pay standards increase the supply of rideshare drivers by showing that utilization (the fraction of an hour worked spent serving passengers) declines significantly with the increase in the fare. They conclude that even though this increase in driver availability leads to decreases in wait times and

⁸² James A. Parrott and Michael Reich, *An Earnings Standard for New York City's App-Based Drivers: Economic Analysis and Policy Assessment*, at 71 (July 2018), available at <https://static1.squarespace.com/static/53ee4f0be4b015b9c3690d84/t/5b3a3aaa0e2e72ca74079142/1530542764109/Parrott-Reich+NYC+App+Drivers+TLC+Jul+2018jul1.pdf>, p. 12.

⁸³ Hall, Jonathan V., John J. Horton, and Daniel T. Knoepfle, "Ride-sharing markets re-equilibrate," No. w30883, *National Bureau of Economic Research*, 2023, pp 2-3.

⁸⁴ Hall, Jonathan V., John J. Horton, and Daniel T. Knoepfle, "Ride-sharing markets re-equilibrate," No. w30883, *National Bureau of Economic Research*, 2023, p. 3.

surge pricing, which consumers found to be valuable, these effects were not sufficiently valuable to compensate them for the overall increase in prices.

64. The Parrott Report has not evaluated the findings of the academic literature regarding the potential negative long-term effects of the proposed increase in driver pay rates on utilization and on consumer welfare.

65. The price-induced reduction in consumer surplus could be further exacerbated by the emergence of congestion regulations. On January 1, 2019, NYC instituted a \$2.75 congestion surcharge for all HV-FHS rides in Manhattan below 96th Street.⁸⁵ Additionally, in early 2025, a new congestion pricing scheme went into effect, which charges riders in HV-FHVs an additional \$1.50 to drive into the Congestion Relief Zone, below 61st street, in Manhattan.⁸⁶ The rideshare companies collect these charges from the customer and remits them to the MTA.⁸⁷ To the extent that the congestion surcharge is permanent and increases rider prices, this could lead to a reduction in demand and consumer surplus.

I affirm this 31st day of January, 2025, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



⁸⁵ NYC TLC, “New York State’s Congestion Surcharge,” accessed at <https://www.nyc.gov/site/tlc/about/congestion-surcharge.page>.

⁸⁶ Ride-sharing companies can enroll in the Per Trip Charge Plan (PTCP) to be exempt from the congestion toll of \$9. Under the PTCP, any trip to, from, or within the Congestion Relief Zone costs an extra \$1.50 for ride-sharing vehicles.

⁸⁷ Metropolitan Transportation Authority, “Taxis and For-Hire Vehicles,” accessed at <https://mta.info/tolls/congestion-relief-zone/taxi-fhv-tolls>.

APPENDIX I - CURRICULUM VITAE

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Employment

Northwestern University, Lawyer Taylor Professor of Education and Social Policy, School of Education and Social Policy, September 2019 – present.

Northwestern University, Professor of Human Development and Social Policy, School of Education and Social Policy, September 2017 – 2019.

Northwestern University, Associate Professor of Human Development and Social Policy and Economics, School of Education and Social Policy, July 2010 – 2017.

Northwestern University, Faculty Fellow, Institute for Policy Research, July 2010 – Present.

Northwestern University, Program Coordinator and Director of Graduate Studies, Human Development and Social Policy program, School of Education and Social Policy, September 2016 – 2019.

Northwestern University, Member by courtesy, Department of Economics and Kellogg School of Management, July 2010 – Present.

Education Lab, University of Chicago Urban Labs, Co-Director and Co-Founder, September 2011 – Present.

University of Chicago Booth School of Business, Associate Professor of Economics, July 2004 – 2010.

Princeton University, Industrial Relations / Education Research Sections Visiting Fellow, September 2006 – June 2007.

University of Chicago Booth School of Business, Assistant Professor of Economics, July 2000 – July 2004.

Education

Massachusetts Institute of Technology, 1996-2000, Ph. D. in Economics.

Princeton University, 1992-1996, A.B. in Economics, *Cum Laude*.

Journal Articles

- “Randomized Evaluation of a School-Based, Trauma-Informed Group Intervention for Young Women in Chicago,” *Science Advances*, 2023, 9(23). (joint with Monica P. Bhatt, Harold A. Pollack, Juan C. Castrejon, Molly Clark, Lucia Delgado-Sanchez, Phoebe Lin, Max Lubell, Cristobal Pinto, Ben Shaver, and Makenzi Summers).
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- “The Effects of Sexism on American Women: The Roles of Norms vs. Discrimination,” *Journal of Human Resources*, 2022, forthcoming (joint with Kerwin Charles and Jessica Pan).
- “Sibling Spillovers,” *Economic Journal*, January 2021, 131(633): 101-128. (joint with Sandra E. Black, Sanni Breining, David N. Figlio, Krzysztof Karbownik, Helena Skyt Nielsen, Jeffrey Roth and Marianne Simonsen).
- “The Effect of Mentoring on School Attendance and Academic Outcomes: A Randomized Evaluation of the Check & Connect Program,” *Journal of Policy Analysis and Management*, Summer 2021, 40(3): 841-882. (joint with Sandra Christenson, Ashley Cureton, Ijun Lai, Jens Ludwig, Catherine Schwarz, Emma Shirey, Mary Clair Turner).
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W.T. Grant Foundation (180140): “The Causes of Truancy and Dropout: A Mixed-Methods Experimental Study in the Chicago Public Schools” (Guryan:PI) 2011-2014.

NICHD (1R01HD067500-01): “A Randomized Study to Abate Truancy and Violence in Grades 3-9” (Guryan:PI) 2010-2015.

Institute for Education Sciences, U.S. Department of Education: “Preventing truancy in urban schools through provision of social services by truancy officers: A Goal 3 randomized efficacy trial (Chicago Public Schools)” (Guryan:PI) 2010-2014.

Smith Richardson Foundation: “Reducing Juvenile Delinquency by Building Non-Cognitive Skills: Experimental Evidence” (Guryan:PI) 2010-2012

University of Chicago Energy Initiative: “Health and Economic Costs of Climate Change” (Guryan:PI) 2008-2009.

W.T. Grant Foundation: “Proposal for multi-district randomized control trial of a voluntary summer reading intervention” (James Kim:PI, Guryan:Co-Investigator), 2007-2008.

National Science Foundation: “The Internet, Subsidies, and Public Schools,” (Austan Goolsbee:PI, Guryan:Co-Investigator), 2003-2007.

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“Can Technology Facilitate Scale? Evidence from a Randomized Evaluation of High Dosage Tutoring,” *NBER Working Paper*, June 2024 (joint with Monica P. Bhatt, Salman A. Khan, Michael Laforest-Tucker and Bhavya Mishra).

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- “Scope Challenges to Social Impact,” *NBER Working Paper 28406* February 2021 (joint with Monica P. Bhatt, Jens Ludwig, and Anuj Shah).
- “The Effect of Mentoring on School Attendance and Academic Outcomes: A Randomized Evaluation of the Check & Connect Program,” *NBER Working Paper 27661* August 2020 (joint with Sandra Christenson, Ashley Cureton, Ijun Lai, Jens Ludwig, Catherine Schwarz, Emma Shirey and Mary Clair Turner).
- “The Effects of Sexism on American Women: The Roles of Norms vs. Discrimination,” *NBER Working Paper 24904*, August 2018 (joint with Kerwin Charles and Jessica Pan).
- “The Economics of Scale-Up,” *NBER Working Paper 23925*, October 2017 (joint with Jonathan M.V. Davis, Kelly Hallberg, and Jens Ludwig).
- “Sibling Spillovers,” *NBER Working Paper 23062*, January 2017 (joint with Sandra E. Black, Sanni Breining, David N. Figlio, Krzysztof Karbownik, Helena Skyt Nielsen, Jeffrey Roth and Marianne Simonsen).
- “The Effect of Mentoring on School Attendance and Academic Outcomes: A Randomized Evaluation of the Check & Connect Program,” *IPR Working Paper 16-18* November 2016 (joint with Sandra Christenson, Amy Claessens, Mimi Engel, Ijun Lai, Jens Ludwig, Ashley Cureton Turner and Mary Clair Turner).
- “Discrimination, Culture and Women's Outcomes in the U.S.” working paper. July 2016 (joint with Kerwin Charles and Jessica Pan).
- “Not Too Late: Improving Academic Outcomes for Disadvantaged Youth,” *IPR Working Paper 15-01* February 2015 (joint with Phillip J. Cook, Kenneth Dodge, George Farkas, Roland G. Fryer Jr., Jens Ludwig, Susan Mayer, Harold Pollack and Laurence Steinberg).
- “Summer Meltdown? Variation in Children's Noncognitive Skills Between School and Summer Months,” unpublished manuscript, August 2016 (joint with Ijun Lai and Ariel Kalil).
- “Can a Scaffolded Summer Reading Intervention Reduce Socioeconomic Gaps in Children’s Reading Comprehension Ability and Home Book Access? Results from a Randomized Experiment,” *IPR Working Paper 15-15* October 2015 (joint with James S. Kim, Lauren Capotosto, David M. Quinn, Helen Chen Kingston, Lisa Foster, and North Cooc).
- “Thinking Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago,” *NBER Working Paper 21178*. May 2015. (Joint with Sarah B. Heller, Anuj K. Shah, Jens Ludwig, Sendhil Mullainathan and Harold A. Pollack).
- “Motivation and Incentives in Education: Evidence from a Summer Reading Experiment,” *NBER Working Paper 20918*. January 2015 (Joint with James S. Kim and Kyung Park).
- “Does Reading During the Summer Build Reading Skills? Evidence from a Randomized Experiment in 463 Classrooms,” *NBER Working Paper 20689*, November 2014 (Joint with James S. Kim and David M. Quinn).

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“Birth Cohort and the Black-White Achievement Gap: The Roles of Access and Health Soon After Birth,” *NBER Working Paper 15078*, June 2009 (joint with Kenneth Y. Chay and Bhash Mazumder).

“Prejudice and the Economics of Discrimination,” *NBER Working Paper 13661*, December 2007 (joint with Kerwin Charles).

“Does Money Matter? Regression-Discontinuity Estimates from Education Finance Reform in Massachusetts,” *NBER Working Paper 8269*, May 2001.

Other Publications

“Overcoming Pandemic-Induced Learning Loss.” In *Building a More Resilient US Economy*, edited by Melissa S. Kearney, Justin Schardin, and Luke Pardue. Washington, DC: Aspen Institute, November 2023 (joint with Jens Ludwig).

“America’s schoolchildren need an ‘Operation Warp Speed’,” *The Hill*, October 2023 (joint with Jens Ludwig).

“Studying Properties of the Population: Designing Studies that Mirror Real World Scenarios” (joint with Jonathan M.V. Davis, Kelly Hallberg, and Jens Ludwig). Forthcoming in *The Scale-Up Effect in Early Childhood and Public Policy: Why Interventions Lose Impact at Scale and What We Can Do About It*, Edited by John List, Lauren Supplee, and Dana Suskind. Routledge.

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“Making Savers Winners: An Overview of Prize-Linked Saving Products,” in Olivia S. Mitchell and Annamaria Lusardi, eds., *Financial Literacy: Implications for Retirement Security and the Financial Marketplace*. Oxford, UK: Oxford University Press, 2011, (joint with Melissa S. Kearney, Peter Tufano and Erik Hurst).

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"Trying to Understand the 2008-2009 Recession: Part 1, Perspective and Causes," *Journal of Lutheran Ethics* 9, March 2009.

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"World Wide Wonder? Measuring the (non-)Impact of Internet Subsidies in Public Schools," *Education Next*, Winter 2006 (joint with Austan Goolsbee).

"Should We Test Prospective Teachers?" *Perspectives on Work*, Winter 2005.

"How Financial Aid Affects Persistence: Comment," in *College Choices: The Economics of Where to Go, When to Go, and How to Pay for It*, Caroline Hoxby, ed., 2004.

Awards and Honors

National Academy of Education, Elected member, 2021-present.

John T. Dunlop Outstanding Scholar Award, awarded by the Labor and Employment Relations Association, 2010.

Centel Foundation/Robert P. Reuss Scholar, Booth School of Business, University of Chicago, 2002-2003.

National Science Foundation, Graduate Research Fellow, 1996-1999.

Litigation Testimony and Expert Reports

Testimony at trial, hearing, and arbitration

"State of Colorado, ex rel. John W. Suthers, Attorney General, and Julie Mead, Administrator, Uniform Consumer Credit Code, v. Center for Excellence in Higher Education, Inc., et al." District Court, Denver City and County, Colorado. Case no. 2014cv34530. Testimony at preliminary injunction hearing.

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“Michael Pizzo v. Adtalem Global Education Inc. et al.” JAMS Ref. Number: 1340015940. Testimony at arbitration hearing.

“Archibald v. DeVry, et al.” JAMS Ref. Number: 1340016080. Testimony at arbitration hearing.

“Tillery v. DeVry Education Group, Inc., et al.” JAMS Ref. Number: 1340016095. Testimony at arbitration hearing.

“Caro v. DeVry Education Group, Inc., et al.” JAMS Ref. Number: 1340015757. Testimony at arbitration hearing.

“Osborne v. DeVry University, et al.” JAMS Ref. Number: 1340017973. Testimony at arbitration hearing.

“Jacobs v. DeVry University, et al.” JAMS Ref. Number: 1340017980. Testimony at arbitration hearing.

“Forsythe v. DeVry Education Group, Inc., et al.” JAMS Ref. Number: 1340016020. Testimony at arbitration hearing.

“Hrinda v. DeVry University, et al.” JAMS Ref No. 1340016074. Testimony at arbitration hearing.

“Perez v. DeVry University, et al.” JAMS Ref No. 1340018384. Testimony at arbitration hearing.

“Smith v. DeVry University, et al.” JAMS Ref No. 1340018381. Testimony at arbitration hearing.

“Haynes v. DeVry University, et al.” JAMS Ref No. 1340017974. Testimony at arbitration.

“Sandra Selden v. Des Moines Area Community College”, Iowa District Court for Polk County, Case No. LACL147358. Testimony at trial.

“Lisa Carvalho v. Santander Bank, N.A.” U.S. District Court, District of Rhode Island. Case 1:19-cv-00287. Testimony at trial.

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“Bonnie Magallon, et al. v. Robert Half International, Inc.” United States District Court for the District of Oregon, Eugene Division. Case No. 6:13-cv-01478-AA. Testimony at evidentiary hearing.

“Massachusetts Coalition for Immigration Reform, et al. v. U.S. Department of Homeland Security, et al.,” United States District Court for the District of Columbia, Case No: 20-cv-3438-TNM. Testimony at trial.

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“Lerman v. Turner, Carter, Kapelke, Kelly and Columbia College Chicago.” U.S. District Court, Northern District of Illinois. 1:10-cv-02169. Deposition.

“Haley v. Cohen & Steers Capital Management.” U.S. District Court, Northern District of California. 4:10-cv-03856-PJH. Deposition.

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“Beth A. Stokes v. John Deere Seeding Group, a subsidiary of Deere & Company a/k/a John Deere Company; and Jim Gunnison.” U.S. District Court for the Central District of Illinois Peoria Division. Case No. 4:12-cv-04054-SLD-JAG. Deposition.

“Thomas E. Perez, Secretary of Labor, United States Department of Labor v. American Future Systems, Inc. d/b/a Progressive Business Publications, a corporation; and Edward Satell, individually and as President of the above referenced corporation.” U.S. District Court for the Eastern District of Pennsylvania. Case no. 12-6171. Deposition.

“People of the State of Illinois, v. Alta Colleges, Inc., et al.” Circuit Court of Cook County, Illinois County Department, Chancery Division. Case no. 12 CH 01587. Deposition.

“Duane Porter, et al., v. Pipefitters Association Local Union 597, U.A.” U.S. District Court for the Northern District of Illinois Eastern Division. Case no. 12-cv-09844. Deposition.

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“Vernon Keith Robinson v. Des Moines Public Schools,” Iowa District Court for Polk County. Case No. LACL136651. Deposition.

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“Ethiopian Airlines Flight ET 302 Crash – Saad Khalaf M Al-Mutairi,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Deposition.

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“Expert Report of Dr. Jonathan Guryan” in “Duane Porter, et al., v. Pipefitters Association Local Union 597, U.A.” U.S. District Court for the Northern District of Illinois Eastern Division. Case no. 12-cv-09844. Expert Report.

“Rebuttal Report in the matter of State of Minnesota by its Attorney General, Lori Swanson v. Minnesota School of Business, Inc, et al.” State of Minnesota, District Court, County of Hennepin, Fourth Judicial District. Court file no. 27-CV-14-12558. Expert Report.

“Report in the matter of Terry Christopher, v. Richard Smykal, Inc. and American Built Systems, Inc.” Circuit Court of the 12th Judicial Circuit, Will County, Illinois. No. 11 L 000526. Expert Report.

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“Report in the matter of Megan and James Gibson v. Prime Healthcare Services, Inc., et al.” Second Judicial District Court of the State of Nevada in and for the County of Washoe. Case No. CV14-10580. Expert Report.

“Report in the matter of Kingston Parnell, et al. v. Centennial Hills Hospital Medical Center, et al.” District Court Clark County Nevada. Case No. A-14-710329-C.

“Report in the matter of Jennifer DiPerna v. The Chicago School of Professional Psychology.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 1:14-cv-0057. Expert Report.

“Report in the matter of Timothy O’Brien, et al., v. Caterpillar Inc.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 14-cv-7229. Expert Report.

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“Report in the matter of Cara Williams, et al., v. Wells Fargo Bank, N.A.” U.S. District Court for the Southern District of Iowa, Central Division. Case No. 4:15-cv-00038. Expert Report.

“Declaration in the matter of Aaron Senne, et al. v. Office of the Commissioner of Baseball, and unincorporated association d/b/a Major League Baseball.” U.S. District Court for the Northern District of California. Case No. 3:14-cv-00608-JCS. Declaration.

“Report in the matter of Brenda Koehler, Kelly Parker, Layla Bolten, & Gregory Handloser v. Infosys Technologies Limited, Inc., and Infosys Public Services, Inc.” U.S. District Court for the Eastern District of Wisconsin. Civil Action No. 2:13-cv-885. Expert Report.

“Report in the matter of State of Colorado, ex rel. John W. Suthers, Attorney General, and Julie Mead, Administrator, Uniform Consumer Credit Code, v. Center for Excellence in Higher Education, Inc., et al.” District Court, Denver City and County, Colorado. Case number: 2014cv34530. Expert Report.

“Declaration of Jonathan Guryan in Support of Defendant’s Opposition to Motion to Certify Class.” Nathan Surrett et al. v. Western Culinary Institute, LTD and Career Education Corporation. Circuit Court for the State of Oregon for the County of Multnomah. Case No. 0803-03530.

“Report in the matter of Michael Allard v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0003-0905. Expert Report.

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“Report in the matter of Jorge Valencia v. U.S. Bank National Association.” U.S. District Court for the Southern District of Iowa, Central Division. Case No. 4:18-cv-00056. Expert Report.

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“Report in the matter of Jared Mode, et al. v. S-L Distribution Company, LLC, S-L Distribution Company, INC., and S-L Routes, LLC.” U.S. District Court, Western District of North Carolina. Case No. 3:18-cv-00150. Expert Report.

“Report in the matter of Sandra Selden v. Des Moines Area Community College”, Iowa District Court for Polk County, Case No. LACL147358. Expert Report.

“Declaration of Jonathan Guryan in support of Defendant and Counter-Claimant XPO Logistics Cartage, LLC’s opposition to Plaintiffs and Counter-Defendants’ special motion to strike counterclaims (Anti-SLAPP)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Declaration.

“Report in the matters of Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action) and Victor Cortez Arrellano v. XPO Port Services Inc. (Consolidated Action).”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Declaration of Jonathan Guryan in support of Defendant and Counter-Claimant XPO Port Services Inc.’s opposition to Plaintiffs and Counter-Defendants’ special motion to strike counterclaims (Anti-SLAPP)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Declaration.

“Rebuttal Report in the matter of Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Supplemental Report in the matter of Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Supplemental Report in the matter of Victor Cortez Arrellano, et al. v. XPO Port Services Inc. (Consolidated Action)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Report in the matter of Mark Brackey, et al. v. Winnebago Industries, Inc., John Breuklander, and Gary McCarthy.” Iowa District Court for Winnebago County. Case No. LACV018026. Expert Report.

“Report in the matter of Klayton Fennell v. Comcast Cable Communications Management, LLC and Comcast Corporation.” U.S. District Court, Eastern District of Pennsylvania, Case No. 19-4750. Expert Report.

“Rebuttal Report in the matter of Carzanna Jones and Heynard L. Paz-Chow, on behalf of themselves and all others similarly situated, v. David Uejio, in his official capacity as Acting Director, and Consumer Financial Protection Bureau.” U.S. District Court, District of Columbia, Case No. 18-cv-2132-BAH (D.D.C.). Expert Report.

“Report in the matter of Jessica Smith, v. DeVry University, et al.” JAMS Ref. Number 1340018381. Expert Report.

“Report in the matter of Gwendolyn Haynes, v. DeVry University, et al.” JAMS Ref No. 1340017974.” Expert Report.

“Rebuttal Report in the matter of Aaron Senne, et al. v. Office of the Commissioner of Baseball, et al.” U.S. District Court for the Northern District of California. Case No. 3:14-cv-00608-JCS. Expert Report.

“Report in the matter of Ultima Services Corporation v. U.S. Department of Agriculture, et al.” U.S. District Court, Tennessee Eastern District. Case No. 2:20-cv-00041. Expert Report.

“Report in the matter of Cecil Thomas and John Dean, et al. v. TXX Services, Inc. and Patricia Dougan Hunt.” United States District Court, Eastern District of New York. 13 CV 2789. Expert Report.

“Report in the matter of Sydney Dillard v. DePaul University.” United States District Court for the Northern District of Illinois. Case No. 1:20-cv-7760. Expert Report.

“Report in the matter of Catherine Rose Jochims v. Hartley-Melvin-Sanborn Community School District,” Case No. LAC025330. Expert Report.

“Report in the matter of Van Bawi Ceu, et al. v. Maw Zah, Hyundai Motor Company, et al.,” Iowa District Court for Dallas County. Docket No. 2021CP1002816. Expert Report.

“Report in the matter of Najera v. John Vianney Johnson, Uber Technologies, Inc., Raiser LLC, Lyft, Inc.” Superior Court of the State of California, County of Orange, Central Justice Center. Case Number 30-2018-01006 334-CU-PA-CJC. Expert Report.

“Supplemental Report in the matter of Mark Brackey, et al. v. Winnebago Industries, Inc., John Breuklander, and Gary McCarthy.” Iowa District Court for Winnebago County. Case No. LACV018026. Expert Report.

“Report in the matter of Vernon Keith Robinson v. Des Moines Public Schools,” Iowa District Court for Polk County. Case No. LACL136651. Expert Report.

“Report in the matter of *In re DeVry, University*,” Before the Office of Hearings and Appeals, United States Department of Education, Docket No. 22-54-BD. Expert Report.

“Report in the matter of Joyce DeLucca v. Hayfin Capital Management LLC,” American Arbitration Association, AAA No. 01-22-0004-0911. Expert Report.

“Report in the matter of Bonnie Magallon, et al. v. Robert Half International, Inc.” United States District Court for the District of Oregon, Eugene Division. Case No. 6:13-cv-01478-AA. Expert Report.

“Report in the matter of Massachusetts Coalition for Immigration Reform, et al. v. U.S. Department of Homeland Security, et al.,” United States District Court for the District of Columbia, Case No: 20-cv-3438-TNM. Expert Report.

“Declaration of Dr. Jonathan Guryan,” State of Minnesota County of Hennepin District Court Fourth Judicial District, in “State of Minnesota, by its Attorney General, Keith Ellison, v. Shipt, Inc.,” Court File No. 27-CV-22-15991. Declaration.

“Report in the matter of General Motors LLC, General Motors Company v. Alphons Iacobelli, FCA US LLC, Fiat Chrysler Automobiles, N.V., Jerome Durden,” State of Michigan in the Circuit Court for the County of Wayne. Civil Action No. 20-011998-CB. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Saad Khalaf M Al-Mutairi,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Elizabeth Minwuyelet,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Anne Mukui Musyoki,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Antoine Lewis,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-04964. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Jonathan Seex,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-04964. Expert Report.

“Declaration of Dr. Jonathan Guryan,” State of Minnesota, by its Attorney General, Keith Ellison v. Shipt, Inc., State of Minnesota District Court, County of Hennepin, Fourth Judicial District, Court File No. 27-CV-22-15991. Declaration.

Other Reports

Oral presentations

Presentation of research findings to staff for Senator Tom Harkin.

Presentation of research findings to staff for Congressman George Miller.

Presentation of research findings to Congressional Black Caucus and Congressional Hispanic Caucus.

Presentation of research findings to senior staff, U.S. Department of Education.

Presentation of research findings to U.S. Secretary of Education, Arne Duncan.

Presentation of research findings to OIRA, Office of Management and Budget.

Written reports

“Report on Gainful Employment.” Prepared for the Career College Association.

“Comment on the proposed rule regarding Gainful Employment described in the NPRM released by the Department of Education on July 26, 2010.” Public comment submitted to U.S. Office of Management and Budget commenting on pending regulation.

Professional Activities

Editor, *Journal of Labor Economics*, December 2011 – 2020.

Member, AEA Committee on the Status of Women in the Economics Profession (CSWEP), November 2018 – 2021.

Research Associate, National Bureau of Economic Research. September 2010 – present.

Faculty research fellow, National Bureau of Economic Research, September 2000 – September 2010.

Northwestern University, Faculty Senate Representative, 2022 – present.

Northwestern University, School of Education and Social Policy, Executive Committee, September 2016 – 2022, Executive Committee, co-chair, 2024 – present.

Northwestern University, Institute for Policy Research, Executive Committee, September 2012 – June 2019.

Board Member, Communities in Schools of Chicago, 2017 – present.

Co-Chair, J-PAL State and Local Innovation Initiative. 2015 – 2018.

Faculty Affiliate, Population Research Center, NORC, December 2000 – present.

Associate Editor, *Labour Economics*, 2010 – 2018.

Research Consultant, Federal Reserve Bank of Chicago.

University of Chicago Crime Lab, Faculty Affiliate.

Invited Participant, Young Faculty Leaders Forum, Harvard University.

Referee: *American Economic Review*, *Quarterly Journal of Economics*, *Journal of Political Economy*, *Review of Economic Studies*, *Journal of Public Economics*, *Journal of Labor Economics*, *Review of Economics and Statistics*, *American Economic Journal: Applied Economics*, *American Economic Journal: Economic Policy*, *Journal of Policy Analysis and Management*, *National Tax Journal*, *Economics of Education Review*, *European Economic Review*, *Journal of Human Resources*, *Regulation and Governance*, *Education Next*, *Education Finance and Policy*, *British Journal of Industrial Relations*, *Journal of Law and Economics*.

Teaching:

Northwestern University, School of Education and Social Policy: Quantitative Methods II. The Economics of Inequality and Discrimination.

University of Chicago Booth School of Business: The Employment Relationship, Microeconomics.

APPENDIX II

Comparison of the Parrott Report After Correcting the Amortization Period for Non-WAV Financing Payments

Blended Costs for ICE and Electric Vehicles ¹	Parrott Report		Corrected Calculation With the 7 Year Useful Life from TLC Local Rules and Laws	
	Owners	Renters	Owners	Renters
(1)	(2)	(3)	(4)	(5)
TLC License ²	\$ 0.042	\$ 0.008	\$ 0.042	\$ 0.008
Vehicle Payment ³	0.312	n.a.	0.229	n.a.
<i>Down Payment</i>	0.030	n.a.	0.022	n.a.
<i>Monthly Payment</i>	0.281	n.a.	0.207	n.a.
Rental Cost ⁴	n.a.	0.845	n.a.	0.845
Fuel/Battery Charging ⁵	0.138	0.138	0.138	0.138
<i>Fuel Cost</i>	0.130	0.130	0.130	0.130
<i>EV Charging Cost</i>	0.102	0.102	0.102	0.102
<i>Driver Time for Charging</i>	0.096	0.096	0.096	0.096
Insurance ⁶	0.141	n.a.	0.141	n.a.
Maintenance ⁷	0.137	0.021	0.137	0.021
Vehicle Cleaning ⁸	0.029	0.029	0.029	0.029
Total Costs per Mile⁹	\$ 0.798	\$ 1.041	\$ 0.716	\$ 1.041
Weighted Average Cost per Mile¹⁰	\$ 0.879		\$ 0.825	
Change from Current Cost per Mile (0.789)	11.4%		4.5%	

Notes and Sources:

- Data are from the Parrott Report dated December 2024 and Chapter 67 of the TLC Local Rules and Laws updated October 18, 2024.

¹ The Parrott Report uses an 87.5% weight for ICE vehicles and a 12.5% weight for EVs.

² The TLC License cost includes licensing, administrative, training, and vehicle registration costs specific to driving for TLC-regulated services in New York City.

³ The vehicle payment includes the down and monthly payment for an auto loan taken to purchase a ride-sharing vehicle. The Parrott Report estimates that the median ICE vehicle purchase price is \$40,000 and is financed over 5 years, and the median electric vehicle purchase price is \$60,000, financed over 6 years. Both types of cars are financed at a 7% interest rate with a \$5,000 down payment. The Parrott Report assumes ride-sharing ICE vehicles and EVs in New York City will depreciate fully in 5 and 6 years respectively and amortizes the vehicle payments over the same time periods. According to § 67-18 of the TLC Local Rules and Laws, all yellow cabs must be retired 7 years after the vehicle is approved to operate by the TLC. The corrected calculation estimates the average cost per mile by amortizing the loan payments for an ICE and electric vehicles over 7 years, while keeping other expenses constant.

⁴ The Parrott Report estimates that the median weekly rents paid by ICE vehicle and EV drivers are \$525 and \$550 respectively.

⁵ The Parrott Report estimates the average fuel cost for an ICE vehicle as 13.0 cents per mile. They estimate the cost of charging an EV, including an allowance for time spent waiting for a charge, to be 19.8 cents per mile. The total fuel/battery charging cost is a weighted average of the fuel cost and the battery charging costs.

⁶ The Parrott Report estimates the per mile insurance costs for ICE vehicle and EV drivers to be 14.0 cents and 14.6 cents respectively.

⁷ The Parrott Report estimates the per mile maintenance costs for ICE and EV drivers who own their vehicles to be 13.8 cents and 12.3 cents respectively. They estimate that 20% of drivers who rent their vehicles pay for maintenance, which is a median of \$3,500 for ICE vehicles and \$3,000 for electric vehicles.

⁸ The Parrott Report estimates that drivers spend \$936 annually on deluxe cleaning.

⁹ The Parrott Report assumes that on average, ride-sharing drivers log 32,500 miles annually.

¹⁰ The Parrott Report uses a 66.6% weight for owned vehicles and a 33.4% weight for rented vehicles.

APPENDIX III

Comparison of the Parrott Report After Correcting the Amortization Period for WAV Financing Payments

Costs ¹	Parrott Report		Corrected Calculation With the 7 Year Useful Life from TLC Local Rules and Laws	
	Owners	Renters	Owners	Renters
(1)	(2)	(3)	(4)	(5)
TLC License ²	\$ 0.043	\$ 0.008	\$ 0.043	\$ 0.008
Vehicle Payment ³	0.540	n.a.	0.386	n.a.
<i>Down Payment</i>	0.092	n.a.	0.066	n.a.
<i>Monthly Payment</i>	0.448	n.a.	0.320	n.a.
Rental Cost ⁴	n.a.	0.960	n.a.	0.960
Fuel Costs ⁵	0.092	0.092	0.092	0.092
Insurance ⁶	0.160	n.a.	0.160	n.a.
Maintenance ⁷	0.166	0.022	0.166	0.022
Vehicle Cleaning ⁸	0.036	0.036	0.036	0.036
Total Costs per Mile⁹	\$ 1.037	\$ 1.118	\$ 0.883	\$ 1.118
Weighted Average Cost per Mile¹⁰	\$ 1.061		\$ 0.953	
Change from Current Cost per Mile (1.021)		3.9%		-6.7%

Notes and Sources:

- Data are from the Parrott Report dated December 2024 and Chapter 67 of the TLC Local Rules and Laws updated October 18, 2024.

¹ According to the Parrott Report, there are no all-electric ride-sharing WAVs. The Parrott Report estimates that three-quarters of WAV trips are made by wheelchair-equipped hybrid Toyota Siennas, and estimates the expenses for this make and model.

² The TLC License cost includes licensing, administrative, training, and vehicle registration costs specific to driving for TLC-regulated services in New York City.

³ The vehicle payment includes the down and monthly payment for an auto loan taken to purchase a ride-sharing vehicle. The Parrott Report calculates the monthly payment based on a 5 year loan for a \$70,000 purchase with a \$15,000 down payment. The Parrott Report amortizes the down payment over 5 years. According to § 67-18 of the TLC Local Rules and Laws, all yellow cabs must be retired 7 years after the vehicle is approved to operate by the TLC. The corrected calculation estimates the average cost per mile by amortizing the loan and down payments over 7 years, while keeping other expenses constant.

⁴ The Parrott Report estimates that WAV drivers who rent their vehicle pay \$600 weekly.

⁵ The Parrott Report assumes the price of fuel to be \$3.23 per gallon and the efficiency of a hybrid Toyota Sienna to be 35 miles per gallon.

⁶ The Parrott Report estimates WAV drivers to spend \$5,200 on insurance annually.

⁷ The Parrott Report estimates WAV drivers to spend \$5,400 on maintenance annually.

⁸ The Parrott Report estimates that WAV drivers spend \$1,170 annually on deluxe cleaning.

⁹ The Parrott Report assumes that WAV drivers log 32,500 miles annually.

¹⁰ The Parrott Report estimates that 70% of WAV drivers own their vehicles and 30% of drivers rent their vehicles.

APPENDIX IV

Comparison of the Parrott Report After Removing the EV Charging Wait Time Cost

Blended Costs for ICE and Electric Vehicles ¹	Parrott Report		Corrected Calculation Without Driver Time For Charging Costs	
	Owners	Renters	Owners	Renters
(1)	(2)	(3)	(4)	(5)
TLC License ²	\$ 0.042	\$ 0.008	\$ 0.042	\$ 0.008
Vehicle Payment ³	0.312	n.a.	0.312	n.a.
<i>Down Payment</i>	0.030	n.a.	0.030	n.a.
<i>Monthly Payment</i>	0.281	n.a.	0.281	n.a.
Rental Cost ⁴	n.a.	0.845	n.a.	0.845
Fuel/Battery Charging ⁵	0.138	0.138	0.126	0.126
<i>Fuel Cost</i>	0.130	0.130	0.130	0.130
<i>EV Charging Cost</i>	0.102	0.102	0.102	0.102
<i>Driver Time for Charging</i>	0.096	0.096	0.000	0.000
Insurance ⁶	0.141	n.a.	0.141	n.a.
Maintenance ⁷	0.137	0.021	0.137	0.021
Vehicle Cleaning ⁸	0.029	0.029	0.029	0.029
Total Costs per Mile⁹	\$ 0.798	\$ 1.041	\$ 0.786	\$ 1.029
Weighted Average Cost per Mile¹⁰	\$ 0.879		\$ 0.867	
Change from Current Cost per Mile (0.789)	11.4%		9.9%	

Notes and Sources:

- Data are from the Parrott Report dated December 2024 and Chapter 67 of the TLC Local Rules and Laws updated October 18, 2024.

¹ The Parrott Report uses an 87.5% weight for ICE vehicles and a 12.5% weight for EVs.

² The TLC License cost includes licensing, administrative, training, and vehicle registration costs specific to driving for TLC-regulated services in New York City.

³ The vehicle payment includes the down and monthly payment for an auto loan taken to purchase a ride-sharing vehicle. The Parrott Report estimates that the median ICE vehicle purchase price is \$40,000 and is financed over 5 years, and the median electric vehicle purchase price is \$60,000, financed over 6 years. Both types of cars are financed at a 7% interest rate with a \$5,000 down payment. The Parrott Report assumes ride-sharing ICE vehicles and EVs in New York City will depreciate fully in 5 and 6 years respectively and amortizes the vehicle payments over the same time periods.

⁴ The Parrott Report estimates that the median weekly rents paid by ICE vehicle and EV drivers are \$525 and \$550 respectively.

⁵ The Parrott Report estimates the average fuel cost for an ICE vehicle as 13.0 cents per mile. They estimate the cost of charging an EV, including an allowance for time spent waiting for a charge and charging, to be 19.8 cents per mile. The total fuel/battery charging cost is a weighted average of the fuel cost and the battery charging costs. The corrected calculation does not include the allowance for time spent waiting for a charge or for charging the vehicle, yielding an EV charging cost of 10.2 cents per mile.

⁶ The Parrott Report estimates the per mile insurance costs for ICE vehicle and EV drivers to be 14.0 cents and 14.6 cents respectively.

⁷ The Parrott Report estimates the per mile maintenance costs for ICE and EV drivers who own their vehicles to be 13.8 cents and 12.3 cents respectively. They estimate that 20% of drivers who rent their vehicles pay for maintenance, which is a median of \$3,500 for ICE vehicles and \$3,000 for electric vehicles.

⁸ The Parrott Report estimates that drivers spend \$936 annually on deluxe cleaning.

⁹ The Parrott Report assumes that on average, ride-sharing drivers log 32,500 miles annually.

¹⁰ The Parrott Report uses a 66.6% weight for owned vehicles and a 33.4% weight for rented vehicles.

APPENDIX V

Comparison of the Parrott Report After Correcting the Amortization Period for Non-WAV Financing Payments And Removing the EV Charging Wait Time Cost

Blended Costs for ICE and Electric Vehicles ¹	Parrott Report		Corrected Calculation With the 7 Year Useful Life Assumption and Removing Driver Time for Charging	
	Owners	Renters	Owners	Renters
	(1)	(2)	(3)	(4)
TLC License ²	\$ 0.042	\$ 0.008	\$ 0.042	\$ 0.008
Vehicle Payment ³	0.312	n.a.	0.229	n.a.
Down Payment	0.030	n.a.	0.022	n.a.
Monthly Payment	0.281	n.a.	0.207	n.a.
Rental Cost ⁴	n.a.	0.845	n.a.	0.845
Fuel/Battery Charging ⁵	0.138	0.138	0.126	0.126
Fuel Cost	0.130	0.130	0.130	0.130
EV Charging Cost	0.102	0.102	0.102	0.102
Driver Time for Charging	0.096	0.096	0.000	0.000
Insurance ⁶	0.141	n.a.	0.141	n.a.
Maintenance ⁷	0.137	0.021	0.137	0.021
Vehicle Cleaning ⁸	0.029	0.029	0.029	0.029
Total Costs per Mile⁹	\$ 0.798	\$ 1.041	\$ 0.704	\$ 1.029
Weighted Average Cost per Mile¹⁰	\$ 0.879		\$ 0.813	
Change from Current Cost per Mile (0.789)		11.4%		3.0%

Notes and Sources:

- Data are from the Parrott Report dated December 2024 and Chapter 67 of the TLC Local Rules and Laws updated October 18, 2024.

¹ The Parrott Report uses an 87.5% weight for ICE vehicles and a 12.5% weight for EVs.

² The TLC License cost includes licensing, administrative, training, and vehicle registration costs specific to driving for TLC-regulated services in New York City.

³ The vehicle payment includes the down and monthly payment for an auto loan taken to purchase a ride-sharing vehicle. The Parrott Report estimates that the median ICE vehicle purchase price is \$40,000 and is financed over 5 years, and the median electric vehicle purchase price is \$60,000, financed over 6 years. Both types of cars are financed at a 7% interest rate with a \$5,000 down payment. The Parrott Report assumes ride-sharing ICE vehicles and EVs in New York City will depreciate fully in 5 and 6 years respectively and amortizes the vehicle payments over the same time periods. According to § 67-18 of the TLC Local Rules and Laws, all yellow cabs must be retired 7 years after the vehicle is approved to operate by the TLC. The corrected calculation estimates the average cost per mile by amortizing the loan payments for an ICE and electric vehicles over 7 years, while keeping other expenses constant.

⁴ The Parrott Report estimates that the median weekly rents paid by ICE vehicle and EV drivers are \$525 and \$550 respectively.

⁵ The Parrott Report estimates the average fuel cost for an ICE vehicle as 13.0 cents per mile. They estimate the cost of charging an EV, including an allowance for time spent waiting for a charge and charging, to be 19.8 cents per mile. The total fuel/battery charging cost is a weighted average of the fuel cost and the battery charging costs. The corrected calculation does not include the allowance for time spent waiting for a charge or for charging the vehicle, yielding an EV charging cost of 10.2 cents per mile.

⁶ The Parrott Report estimates the per mile insurance costs for ICE vehicle and EV drivers to be 14.0 cents and 14.6 cents respectively.

⁷ The Parrott Report estimates the per mile maintenance costs for ICE and EV drivers who own their vehicles to be 13.8 cents and 12.3 cents respectively. They estimate that 20% of drivers who rent their vehicles pay for maintenance, which is a median of \$3,500 for ICE vehicles and \$3,000 for electric vehicles.

⁸ The Parrott Report estimates that drivers spend \$936 annually on deluxe cleaning.

⁹ The Parrott Report assumes that on average, ride-sharing drivers log 32,500 miles annually.

¹⁰ The Parrott Report uses a 66.6% weight for owned vehicles and a 33.4% weight for rented vehicles.

AFFIRMATION OF RAY A. MUNDY, Ph.D.

**PREPARED ON BEHALF OF
LYFT, INC.**

in connection with

*Proposed Amendments to the Rules Governing
Minimum Driver Payment for High-Volume For-Hire Services*

January 31, 2025

I, Ray A. Mundy, Ph.D., do hereby affirm as follows:

1. I am Director Emeritus of the Center for Transportation Studies of the University of Missouri-St. Louis, and Professor Emeritus of the University of Tennessee, Knoxville.

2. I have been retained by Lyft, Inc. (“Lyft”) to provide this expert affirmation concerning the New York City Taxi and Limousine Commission’s (the “TLC”) proposed amendments to the High-Volume For-Hire Services (“HVFHS”) Minimum Driver Pay Rules (the “Proposed Rules”), which the TLC announced on January 3, 2025.

I. Education and Qualifications

3. I received my B.A. in General Business, from Bowling Green State University in 1966, my M.B.A. in Management from Bowling Green State University in 1967 with a minor in Statistics, and my Ph.D. in Transportation and Logistics from Pennsylvania State University in 1973 with minors in Marketing, Management, and Social Psychology.

4. I was the Barriger Endowed Professor at the Center for Transportation Studies of the University of Missouri-St. Louis from 2000 until 2018. Prior to that, I was the Taylor Distinguished Professor of Logistics and Transportation at the University of Tennessee. I also taught at Bowling Green State University, Eastern Michigan University, Lycoming College and Pennsylvania State University. Most recently, I taught courses in Domestic Transportation and Supply Chain Management for both the graduate and undergraduate levels at the University of Missouri-St. Louis. Over the years, I have also taught courses such as Executive in Residence, Introduction to Business, Introduction to Logistics, Introduction to Transportation, Management, Marketing, National Transportation Policy, Organizational Development, Organizational Theory, Personnel, Process Management, Production, Statistics, Traffic Management and Urban Transportation. A true and correct copy of my curriculum vitae is attached hereto as **Exhibit A**,

which details my education, academic experience, instructional responsibilities, publications, scholarly research, honors, grants, awards, work in review and development, presentations, reports and service activities.

5. I have conducted a full range of economic, regulatory, managerial and physical studies specifically aimed at the private sector transportation industry, including taxicabs and ridesharing. I have completed over 35 taxi and limousine regulatory studies for U.S. and Canadian cities and airports. As part of these studies, I have interviewed hundreds, if not over a thousand, for-hire drivers in the ground transportation industry. I have lectured and published widely in this field.

6. My major areas of service and studies are in the following types of analyses:

- Analysis of administrative/regulatory options available to managing private for hire vehicles: Analysis of federal, state, and local transportation legislation as it applies to a specific airport or city. State and local laws, regulations, and ordinances are not uniform and often must be altered to initiate new types of private transportation industry services such as ride-hailing and other forms of app-based transportation access services.
- Evaluating current operations: Analysis of the current performance of existing taxi, limousine, and app-based operations, their economic conditions, administrative procedures, and regulatory environment. Studies include all forms of private sector transportation industry vehicles including taxi, sedan (black car), van, limousine, minibuss, and bus in all

forms of operating modes - demand responsive, door-to-door shared-ride and premium ride, and line haul.

- Simulation of vehicles necessary to serve demand: Analysis of rider demand, number, and operational configuration of vehicles necessary to service that demand in whatever waiting time the city or airport administration would set.
- Development of remote private sector transportation industry terminals: Analysis of effects that the evolution of remote airport private sector transportation industry terminals would have on airport revenues, traffic congestion, curb utilization, and parking.
- Curb prioritization and concession fees: Analysis of appropriate fees to charge various private sector transportation industry and app-based transportation access services providers given industry and local regulatory practices and how these services should be offered and marketed on the airport curb.

7. I maintain a comprehensive specific knowledge of the city and airport private sector transportation industry through my position as Director Emeritus of the Center for Transportation Studies at the University of Missouri - St. Louis and through my affiliation as Senior Advisor for the Airport Ground Transportation Association (“AGTA”). In this capacity, I advise and support two national conferences each year, one dedicated to the administration and regulation of airport private sector transportation and a second on managerial aspects of the private sector transportation serving airports.

8. I have published articles on taxicab simulation, remote airport private sector transportation industry terminals, and management of the airport private sector transportation industry. My book regarding taxis was published in 2010: Taxi! Urban Economies and the Social and Transport Impacts of the Taxicab by James Cooper, Ray Mundy and John Nelson (Ashgate Publishing).

9. My most recent publication regarding taxis and ride-hailing was in March 2018. It was a U.S. Department of Transportation research report entitled “*Why TNCs Will Be Regulated Like Taxis, Historically Speaking*,” <https://intrans.iastate.edu/research/completed/why-tncs-will-be-regulated-like-taxis/>.

10. Listed below is a true and correct summary of the related projects I have undertaken within the past 20 years regarding the regulated ground transportation industry. Copies are available from the cities or airports.

- Testifying expert, *Metro. Taxicab Bd. of Trade v. City of New York*, 633 F. Supp. 2d 83 (S.D.N.Y. 2009) (testified as a transportation and logistics specialist and discussed the history of taxicab lease caps in New York City and how tying lease caps to the use of hybrid vehicles would affect the purchasing decisions of Fleet Owners).
- Seattle, Washington (2013) – City/County Taxi/FHV Demand Study
- Houston, Texas (2013) – City Taxi Study
- Austin, Texas (2012) – City Taxi Study
- San Antonio, Texas, (2011) – City Taxi Study
- Saskatoon, Saskatchewan, Canada (2010) – City Taxi Study
- Regina, Saskatchewan, Canada (2010)

- Winnipeg, Manitoba, Canada (2009) – City Taxi Study
- Anaheim, Calif. (2009) – City Taxi Study
- San Diego, California – Expert Witness, Taxi Driver Classification
- Winnipeg, Canada (2009) – City Taxi Study
- LAX Taxi Dispatch System (2008)
- Denver, Colorado (2008) – City Taxi Study
- Anchorage, Alaska (2008) – City Referendum on Taxi Deregulation Study
- Coachella Valley (Palm Springs) (2007) – Area Wide Taxi Study
- City of Hampton, Va. (2007) – City Taxi Study
- Salt Lake City (2005 - 2009) – City Taxi Study
- Miami-Dade County Taxi Study (2006) – City Taxi Study
- San Francisco Int'l Airport (2006) – Analysis of Airport Taxi Incentives
- Ft. Meyers – Exclusive Airport Taxi Concession (2006)
- Hillsborough County – Expert Witness, Taxi/Limo Suit (2005)
- Taxi Seminar Series – TLPA 2004-05 – Developer & Director
 - Maintenance
 - Marketing
 - Technology
- City of Dallas (2003) – City Taxi Study
- Indianapolis Airport (2003) – Analysis of Taxi Operations
- Raleigh/Durham Airport (2002) – Analysis of Taxi Operations
- City of Orlando (2001) – City Taxi Study
- DFW Airport (2000) – Analysis of Curb Placement for Taxis

- City of Portland, Maine (1999) – Airport Taxi Analysis
- MSP Airport (1999) – Airport Taxi Analysis

II. Assignment

11. I was asked to review and evaluate the Proposed Rules, including specifically the proposed amendments to (i) require HVFHS companies to provide 72-hours’ notice to any driver who the companies will not permit to log into a HVFHS application to accept trips on a given day and (ii) prevent an HVFHS company from logging a driver off a HVFHS application for at least 16 hours once the driver has logged on to the application.¹ I also examined the analysis employed by the TLC to develop the proposed amendments to the per-mile expense factor of the minimum driver pay formula, which was based primarily on the results of a “driver survey” conducted by the TLC.² While I find numerous aspects of the Proposed Rules to be flawed, untested, and highly likely to create unintended consequences, I limit my discussion below to these two particular issues.

III. The Proposed Lock-Out Restrictions Are Arbitrary, Unworkable, and Ignore the Rapidly Changing Dynamics of New York City’s HVFHS Market

12. Since the TLC adopted the minimum driver pay formula in 2018, the TLC’s focus has been on higher utilization rates (“UR”), or “keeping drivers busier so that they are on income-generating trips for a higher percentage of their working time.”³ The TLC has thus included UR a component of its driver pay formula under the theory that drivers should be compensated for time that they are available to work on a HVFHS platform, but not actively transporting a rider.

¹ (See Proposed Rules at 7.)

² (*Id.* at 4.)

³ (*Id.* at 5.)

13. Rider demand dynamically changes throughout a given day and in different parts of New York City based on a variety of factors outside of HVFHS companies' control. To effectively maintain a given UR, HVFHS companies must attempt to control driver supply. They can do so by (i) controlling the number of drivers who are permitted to begin driving on their platforms, (ii) removing drivers from their platforms, or (iii) utilizing "lockouts," or periods where enrolled drivers cannot login to their platforms. Despite the TLC's efforts to restrict new driver entrants into the HVFHS market through the regulation of available HVFHS licenses and plates for new HVFHS vehicles, the TLC still appears dissatisfied with HVFHS UR and the efforts by HVFHS companies to achieve the utilization standards it has set, such as the use of driver lockouts.

14. Purportedly "to minimize the incentive for lockouts, help ensure the efficient operation of the for-hire market and prevent TLC's minimum pay rules from being degraded,"⁴ the TLC is proposing two lockout restrictions in the Proposed Rules. First, HVFHS companies "would be required to provide 72-hours' notice to any driver who the company will not permit to log into the application to accept trips on a given day."⁵ Second, under the Proposed Rules, "once a HV company has permitted a driver to log into the application to accept trips, the HV company may not log the driver off for the next 16 hours except in certain limited circumstances."⁶

15. The TLC claims that the proposed lockout restrictions are "primarily intended to ensure that drivers have reasonable expectations of when they will be able to access the

⁴ (*Id.* at 7.)

⁵ (*Id.*)

⁶ (*Id.*)

applications and thus reasonable expectations of their working hours and incomes” and to eliminate “mid-shift lockouts” entirely.⁷ The TLC has justified these restrictions with reference to “New York City’s scheduling requirement for retail workers” and the TLC’s conclusion, based on unspecified “TLC data,” that “the overwhelming majority of HV drivers work for a total of less than 12 hours a day, but will often take breaks during the day to maximize their earnings, for example working six hours during the morning rush hour, taking a mid-day break, and then six hours during the evening rush.”⁸

16. These two proposed requirements are completely unprecedented. I have worked for over four decades in the field of transportation regulation at the federal, state, and local levels and have never seen or heard of any transportation regulatory body that has attempted to regulate for-hire drivers like shift workers and micromanage the business affairs of HVFHS companies. The proposed lockout restrictions appear to be based on the TLC’s fundamental misunderstanding of the HVFHS industry and will harm all market participants, including HVFHS companies, riders, and even the drivers they are intended to benefit.

17. A key pillar of the HVFHS industry, including in New York City, is flexibility. Drivers are drawn to the autonomy that the HVFHS industry provides, including the opportunity to develop and implement a business plan specifically tailored to each driver’s needs, goals, personal and familial obligations, and expectations. For example, some drivers want to be able to take their children to school, which would be difficult with a typical 9:00 a.m. to 5:00 p.m. job. Others want a schedule that varies by day of the week in order to achieve whatever personal objectives a driver might have or that allows them to work additional jobs. Drivers are free to

⁷ (Id.)

⁸ (Id. nn. 18-19.)

accept or reject ride requests, to drive when and where they choose, to take breaks or personal time when they wish, and to use their vehicles for personal business—all while remaining logged in to HVFHS platforms just in case there might be an earning opportunity to provide a ride to a rider in need.

18. Similarly, riders rely on the industry around the clock for access to transportation to major transit stations, childcare centers, places of work, airports, train and bus terminals, medical centers, grocery stores, schools, hotels and resorts, restaurants, theaters, theme parks, and military bases. This is especially true in New York City where car ownership is low, parking is difficult, and public transportation may not be readily accessible—particularly in so-called “transportation deserts” on the outer edges of Manhattan and in the outer boroughs.

19. HVFHS companies uniquely bridge the gap between driver supply and rider demand. For this reason, HVFHS quickly became the dominant mode of transportation in New York City. Indeed, according to TLC data, there are now on average more than five times the number of HVFHS than there are medallion taxis on the streets daily.

20. The TLC’s proposed lockout restrictions would dismantle the HVFHS market as it currently exists. Outside of New York City, the default is for HVFHS platforms to be available to all drivers at all times, giving drivers flexibility to log on and off at their convenience. The TLC’s UR standards have forced HVFHS companies to implement lockouts at certain times, but the default is still for the platforms to be open outside of those times. In other words, the companies keep the platforms open by default but occasionally restrict access as needed to satisfy the TLC’s UR standards. If the TLC’s proposed restrictions on lockouts are implemented, the default would likely become the reverse: companies would likely have to keep the platforms closed by default, and would no longer be able to tailor lockouts to market

conditions, which means the lockouts would likely become both longer and broader. Moreover, in order to maximize earning opportunities while they have access, drivers may prioritize driving in high-density areas, where trips are shorter, more frequent, and more profitable in the aggregate, thereby reducing transportation options for riders in historically underserved communities.

21. The proposed lock-out restrictions also risk de-platforming the 40-45% of HVFHS drivers who operate part-time,⁹ since they work on unpredictable schedules, and therefore thrive on the flexibility traditionally provided by the HVFHS industry. Full-time drivers are more likely to be available to log on when lockouts are lifted. Thus, the Proposed Rules risk eliminating significant supply from the New York City driver pool, who may pursue other earning opportunities that provide them the flexibility on which they currently depend in the HVFHS industry because, despite having “expectations of when they will be able to access the applications,”¹⁰ these drivers will not be able to drive when they want.

22. In addition, once drivers log in, there is no way to predict when or for how long these drivers will drive during their 16-hour “shift.” It is possible that certain times will see significant undersupply of drivers relative to demand (and thus increased wait times and higher pricing), while other times will see significant oversupply of drivers relative to demand (and thus low driver UR). In both instances, drivers and riders are the losers.

23. The 16-hour requirement also directly conflicts with current safety protocols that the TLC has in place. Current TLC regulations prevent HVFHS companies from dispatching

⁹ (Driver Pay, NYC Taxi & Limousine Commission, <https://app.powerbigov.us/view?r=eyJrIjojY2FlbnJlI3YwQTMkZOS00MjliLTk0MTQtODc2NzU4OTYwNjFiIiwidCI6IjMyZjU2ZmM3LTVMODEtNGUyMi1hOTViLTE1ZGE2NjUxM2JlZiJ9&pageName=ReportSection28c004ce23fc37acd783.>)

¹⁰ (Proposed Rules at 7.)

drivers for more than 10 hours within a 24-hour period unless the driver has taken an eight-consecutive-hour break.¹¹ The TLC has not explained how HVFHS companies are supposed to comply with both the break rule and the 16-hour rule when drivers meet the 10-hour threshold within the 16-hour window. Additionally, given the limitations on available earning opportunities that are inherent in the scheme contemplated by the TLC, drivers may be incentivized to drive as much (or as fast) as possible to maximize their driving windows, even if they are tired, creating potentially unsafe situations for drivers, riders, and others on New York City streets.

24. In short, in my opinion, the proposed lockout restrictions are antithetical to their stated purpose and will only harm drivers and riders in New York City.

IV. The Flawed Parrott Report’s “Driver Survey,” Used by the TLC in Support of the Proposed Rules Does Not Reflect the Realities of the Ridesharing Industry

25. The Proposed Rules also contemplate increasing the per-mile expense factor of the minimum driver pay formula to account for purportedly increased driver expenses.¹² In support of the proposed amended per-mile expense factor, the TLC relied exclusively on a study conducted by James A. Parrott from the Center for New York City Affairs at The New School, entitled “Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard” (the “Parrott Report”). The Parrott Report conducted a survey of 89,000 drivers regarding their current expenses, vehicle fleets, and other vehicle-

¹¹ 35 RCNY § 59B-18(e)(ii).

¹² (Proposed Rules at 2.)

related costs.¹³ Only 8% of ride-hailing app drivers responded to the survey, and only roughly half of those responses were usable by even the Parrott Report's estimation (4-5%).¹⁴

26. The survey in the Parrott Report fails to meet minimum standards for wide circulation or publication in a reputable transportation journal. The survey utilizes a small convenience sample—that is, it does not conduct *random* sampling and instead uses the most easily available information to draw conclusions. Statisticians often note how incorrect it is to generalize this type of sample to a broader population, yet the TLC provides no support for doing so here. To validate the Parrott Report's survey findings, the TLC could have interviewed a random sample of drivers (~100 individuals) to see if their answers to the survey were similar to those found in the convenience sample. It would have been relatively easy and cost effective to do so. Only then could any generalizations to the population of ridesharing drivers be made.

27. Notably, the survey does not break down driver responses by HVFHS company, nor does it adequately control for the number of full-time versus part-time drivers in New York City. In my opinion, the Proposed Rules are inconsistent with expected hallmarks of thoughtful and transparent administrative rulemaking, and should not serve as the basis for sweeping changes that will have a broad impact on HVFHS drivers and riders alike.

I affirm this 31st day of January, 2025, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.

By: 
Ray A. Mundy, Ph.D.

¹³ (See Parrott Report at 2.)

¹⁴ (See *id.*)

EXHIBIT A
Curriculum Vitae

COMPREHENSIVE VITA

Ray A. Mundy, Ph.D
Transportation Professor Emeritus
University of Tennessee, Knoxville
314-225-7039

I. EDUCATIONAL BACKGROUND

- | | |
|------|--|
| 1973 | Ph.D. in Transportation and Logistics, Pennsylvania State University
Minor: Marketing, Management, Social Psychology

<u>Dissertation:</u> "U.S. and Canadian Urban Mass Transportation
Systems: A Comparative Empirical Analysis" |
| 1967 | M.B.A. in Management, Bowling Green State University
Minor: Statistics |
| 1966 | B.A. in General Business, Bowling Green State University |

ACADEMIC EXPERIENCE

- | | |
|-------------|---|
| 2000 – 2020 | Barriger Endowed Professor of Logistics & Transportation and
Director, Center for Transportation Studies, University of Missouri-St. Louis |
| 1996 - 2000 | Taylor Distinguished Professor of Logistics and Transportation, The
University of Tennessee, Knoxville |
| 1982 – 1996 | Professor, The University of Tennessee |
| 1977 – 1982 | Associate Professor. The University of Tennessee |
| 1973 – 1977 | Assistant Professor of Marketing and Transportation, The University
of Tennessee |
| 1970 – 1973 | Research Assistant, Pennsylvania State University

Graduate Assistant, Department of Transportation and Logistics,
Pennsylvania State University

Teaching Assistant, Department of Management, Pennsylvania State
University |

1969 - 1970	Faculty Member, Department of Business Administration, Lycoming College <i>Taught senior-level courses in Management, Organizational Theory, Business Policies, and supervised local undergraduate research efforts.</i>
1968 - 1969	Faculty Member, Department of Management, Eastern Michigan University <i>Taught courses in Principles of Management and Personnel Management.</i>
1967 - 1968	University Faculty Member, Department of Management, Bowling Green State <i>Coordinated and taught Master Lecture in Introduction to Business, Master Lecture size of approximately 300 students per semester. Supervised the teaching of five graduate students. Taught senior level courses in Problems of Production and Personnel, and Marketing.</i>
1966 - 1967	Graduate Teaching Assistant, Bowling Green State University

II. INSTRUCTIONAL RESPONSIBILITIES

A. COURSES TAUGHT

Dr. Mundy has gained considerable teaching experience from his association with several universities. He was a faculty member at Bowling Green State University, Eastern Michigan University, Lycoming College and Pennsylvania State University and the faculty at The University of Tennessee before joining the University of Missouri at St. Louis as Barriger Endowed Professor of Transportation and Logistics, Founder and Director of the Center for Transportation Studies.

Teaching responsibilities at The University Missouri-St. Louis included the following areas:

- Domestic Transportation
- Supply Chain Management

The above courses have been taught at both graduate and undergraduate levels.

Other courses taught:

- Executive in Residence
- Introduction to Business
- Introduction to Logistics
- Introduction to Transportation
- Management
- Marketing
- National Transportation Policy
- Organizational Development
- Organizational Theory
- Personnel
- Process Management
- Production
- Statistics
- Traffic Management
- Urban Transportation

Outside the university, Dr. Mundy has developed a number of Executive Development courses for individual firms and industries. These courses have been taught multiple times and would include text length treatment of such topics as:

- Work Process Flow
- Continuous Improvement
- Statistical Process Control
- Transportation Management
- Supply Chain Management

B. COURSE DEVELOPMENT AND TEACHING CREATIVITY

In nearly 50 years of university teaching, Dr. Mundy has prepared numerous courses and participated in many course revisions. Over the years, he has developed an Introduction to Logistics & Transportation graduate course; an Integrated Supply Chain graduate course; and a Supply Chain Software “Tools” graduate course. A research paper describing this last course received the “Plowman Award” for the discipline’s outstanding paper of 1997.

C. INDEPENDENT STUDIES, DISSERTATION AND THESIS DIRECTION

1. INDEPENDENT STUDIES

Supervised approximately 65 independent study projects concerning all aspects of Transportation and Logistics beginning in 1974 and continuing to the present

day. These independent student projects were at the undergraduate, masters, and Ph.D. levels.

2. Ph.D DISSERTATION AND THESIS DIRECTION

- 2014 North, Jeremy. *Network Flexibility for Recourse Considerations in Bi-Criteria Facility Location*
- 2014 Boyce, Wesly. *Supply Chain Relationships: Is Collaboration Reality?*
- 1999 Pappau, Madhav. *The Three Faces of Inter-Organizational Relationships: Toward a Theory of Logistics Relationships, Strategy, and Inter-Organizational Learning*
- 1998 Whitaker, Jonathan. *Contracts for Logistics Transportation Services: Comparing Contract Content Strategic Positioning*
- 1997 Kellar, Gregory. *Cost Allocation Pricing (Cap) In the Motor Carrier Industry*
- 1995 Gibson, Brian. *Utilization and Value In the Purchase of Industrial Transportation Services*
- 1984 Gourdin, Kent Neill. *An Analysis of National Aviation Policy With Respect to America's Strategic Airlift Capability*

D. TEACHING HONORS, GRANTS AND AWARDS

- 2000 – 2019 Barriger Endowed Professor of Transportation and Logistics
- 1999 - 2001 John Deere Senior Research Fellow
- 1996 – 1999 Taylor Distinguished Professor
- 1995 – 1996 University of Tennessee, Knoxville College of Business Regan Faculty Scholar

E. CONTINUING EDUCATION

- 1996 - 1998 Taiwan MBA Program (two week seminar in Work Process Management)

III. RESEARCH:

- A. INDUSTRY RESEARCH PROJECTS directed and authored by Dr. Mundy. Available from cities, airports, and entities noted.

- **Seattle, Washington (2013) City/County Taxi Demand Study**

- **Houston, Texas (2013) City Taxi Study**
- **Austin, Texas (2012) City Taxi Study**
- **San Antonio, Texas, (2011) City Taxi Study**
- **Saskatoon, Saskatchewan, Canada (2010) City Taxi Study**
- **Regina, Saskatchewan, Canada (2010)**
- **Winnipeg, Manitoba, Canada (2009) City Taxi Study**
- **Anaheim, Calf. (2009) – City Taxi Study**
- **San Diego, California – Expert Witness, Taxi Driver Classification**
- **Winnipeg, Canada (2009) – City Taxi Study**
- **LAX Taxi Dispatch System (2008)**
- **Denver, Colorado (2008) – City Taxi Study**
- **Anchorage, Alaska (2008) – City Referendum on Taxi Deregulation Study**
- **Coachella Valley (Palm Springs) (2007) – Area Wide Taxi Study**
- **City of Hampton, Va. (2007) - City Taxi Study**
- **Salt Lake City (2005 - 2009) - City Taxi Study**
- **Miami-Dade County Taxi Study (2006) - City Taxi Study**

- **San Francisco Int'l Airport (2006) – Analysis of Airport Taxi Incentives**
- **Ft. Meyers – Exclusive Airport Taxi Concession (2006)**
- **Hillsborough County – Expert Witness, Taxi/Limo Suit (2005)**
- **Taxi Seminar Series – TLPA 2004 - 2005 – Developer & Director**
 - **Maintenance**
 - **Marketing**
 - **Technology**
- **City of Dallas (2003) - City Taxi Study**
- **Indianapolis Airport (2003) – Analysis of Taxi Operations**
- **Raleigh/Durham Airport (2002) – Analysis of Taxi Operations**
- **City of Orlando (2001) - City Taxi Study**
- **DFW Airport (2000) – Analysis of Curb Placement for Taxis**
- **City of Portland, Maine (1999)- Airport Taxi Analysis**
- **MSP Airport (1999) – Airport Taxi Analysis**

B. REFEREED ARTICLES & PUBLISHED RESEARCH REPORTS, PRESENTATIONS

“Using History to Develop Future Regulation of TNCs and Autonomous Taxis” **Mundy, Ray, A.**, Public Private Partnerships and Deregulation in Transportation, with Springer Science, Publisher. Book Chapter forthcoming 2021

“Women in North American Railroad Operational Roles: Opportunities and Challenges” Rust, Daniel; **Mundy, Ray A**, [Research in Transportation Economics](#), [Volume 84](#), December 2020, 100917

“The airport ground transportation industry during COVID-19”
Ray A. Mundy, *Executive Director, Airport Ground Transportation*
Journal of Airport Management, November, 2020

“Cost Benefit Analysis: Substituting the Subsidized Essential Air Services with a Subsidized Ground Transportation Service” Ken Bao, Abby Wood, **Ray A. Mundy**, MTC Report, 2016

Readings in Modern Railroad Management, Volumes One, Two, and Three, **Ray A. Mundy** and Daniel Rust, (2014) Bookpatch Publishing, 762 pages.

“Airport Drop-Off Charges in Great Britain: Will they come to the United States? Emma J. Nix, **Ray A. Mundy**, MTC Report, 2016

Taxi! Urban Economies and the Social and Transport Impacts of the Taxicab. James Cooper, **Ray Mundy** and John Nelson (2010) Ashgate Publishing, 208 pages.

Mundy, Ray, (April, 2016), “Trends in the Airport Ground Transportation Industry – Implications for the Taxi Industry” presented at the Australian Taxi Association’s Annual Meeting, Gold Coast, Queensland, Australia

Mundy, Ray, (April, 2016), “Impact of TNCs on Airports” presented at the AGTA Spring AGTA Conference, Los Angeles, Calif.

“St. Louis Metropolitan Taxi Commission Report on Regulation” **Ray A. Mundy**, Midwest Transportation Consortium, Iowa State University, DOT Report, 2015.

“Mass Transit Sustainability on the St. Louis Region”, **Ray A. Mundy**, Daniel L. Rust, Sareema Koirala Phillips, Sidra Naseer, Maria Gabriela Rodriguez Paez, Elizabeth Snowden, MTC Report, 2015.

Mundy, Ray, (September, 2015), “Should Airports Set Maximum Rates for TNCs?” presented at the AGTA Fall Conference, Minneapolis, MN.

Mundy, Ray, (April, 2015), “Should Private Vehicles Pay for the Use of Airport Curbs?” presented at the AGTA Spring Conference, Miami, Florida.

Mundy, Ray, (September, 2014), “Does TNC Control Make Their Drivers Employees?” presented at the AGTA Fall Conference, Phoenix, Arizona

Mundy, Ray, (April, 2014), “How Should Airports React to TNCs?” presented at the AGTA Spring Conference, Clearwater, Florida.

Mundy, Ray, (April, 2013), “Can Small Airports Support Shared Ride Van Service?” presented at the AGTA Fall Conference, St. Louis, MO

Bao, Ken; Wood, Abby, and **Ray Mundy** (2015) “Cost-Benefit Analysis: Substituting Ground Transportation for Subsidized Essential Air Services” U.S. Department of Transportation Office of the Assistant Secretary for Research and Technology 1200 New Jersey Avenue, SE, Washington, D.C.

Nix, Emma and **Ray Mundy** (2015) “Airport Drop-Off and Pick-Up Charges in Great Britain: Will They Come to the United States?” U.S. Department of Transportation Office of the Assistant Secretary for Research and Technology 1200 New Jersey Avenue, SE, Washington, D.C.

Nix, Emma and **Ray Mundy** (2015) “Economic Benefits of Additional Rail Bridge Capacity: A Case Study on the Benefits of Replacing the Merchants Bridge Main Spans at Saint Louis” U.S. Department of Transportation Office of the Assistant Secretary for Research and Technology 1200 New Jersey Avenue, SE, Washington, D.C.

Mundy, Ray A.; Rust, Daniel L Phillips, Sareema Koirala; Nasser, Sidra; Páez, María Gabriela Rodríguez; and Snowden, Elizabeth, (2015) “Mass Transit Sustainability in the Saint Louis Region” U.S. Department of Transportation Office of the Assistant Secretary for Research and Technology 1200 New Jersey Avenue, SE, Washington, D.C.

Earlier Works:

L. Douglas Smith, James Campbell, and **Ray Mundy** (2006), “Modeling Net Rates for Expedited Freight Services,” Transportation Research E,

L. Douglas Smith, James F. Campbell and **Ray Mundy** (2003), “Basing Rate Adjustments for Motor Carriers on Statistical Evidence.” Journal of Transportation Management, Vol.15, No. 1, pp. 1-13. (33%)

Smith, Carlo D., C. John Langley, and **Ray Mundy** (1998), “Removing the Barriers Between Education and Practice: Tools and Techniques for Logistics Management.” Journal of Business Logistics, Vol. 19, No. 2, pp. 173-195. [33%]

- Rutner, Stephen, **Ray Mundy**, and Jonathan Whitaker (Spring 1997), "Alternatives for Reducing Delays at the United States' Busiest Airports." Transportation Journal, Vol. 36, No. 3, pp. 18-25. [33%]
- Gibson, Brian, Stephen Rutner, and **Ray Mundy**, (Spring 1996), "Building Successful Alliances: Are Shippers Doing Their Part?" Transportation Quarterly, Vol. 50, No. 2, pp. 35-46. [33%]
- Rutner, Stephen M., and **Ray Mundy** (1996), "Airport Ground Transportation Management: Moving Towards The Turn Of The Century." Transportation Planning and Technology, Vol. 20, No. 1, pp. 83-92. [50%]
- Kellar, Greg, Bart Jennings, Harry Sink, and **Ray Mundy**, (1995), "Teaching Transportation with an Interactive Method." Journal of Business Logistics, Vol. 16, No. 1, pp. 251- 279. [25%]
- Gibson, Brian, **Ray Mundy**, and Harry Sink (1995), "Supplier Certification: Application to the Purchase of Industrial Transportation Services." Logistics and Transportation Review, Vol. 31, No. 1, pp. 63-74. [25%]
- Mundy, Ray**, Brian Gibson, Gregory M. Kellar, and Edwin P. Patton (1994), "Meeting the Challenges of Carrier Management Through Continuous Improvement." Journal of Transportation Management, Vol 6, No. 2, pp. 81-110. [50%]
- Gibson, Brian J., Harry L. Sink, and **Ray Mundy** (December 1993), "Shipper-Carrier Relationships and Carrier Selection Criteria." Logistics and Transportation Review, Vol. 29, No. 4, pp. 371-382. [33%]
- Mundy, Ray** (February 1992), "Evolucion del Problema de Embarques Pequens." Logistica Internacional. [100%]
- Mundy, Ray**, Randle Heide, and Charles Tugman (1992), "Applying Statistical Process Control Methods in Railroad Freight Classification Yards." Transportation Research Record, No.1341, pp. 53-62. [50%]
- Mundy, Ray** (1992), "The Evolution of Ground Transportation Management as a Major Airport Function." Transportation Research Record, No.1373, pp. 17-25. [100%]
- Mundy, Ray** (1988), "Measuring Airport Landside Capacity." National Academy of Sciences, Transportation Research Record, Special Report. [100%]
- Mundy, Ray** and C. John Langley (1986), "Analyzing the Financial Impact on Airports of Remote Airport Ground Transportation Terminals." Transportation Research Record, No. 1094. [50%]
- Mundy, Ray**, C. John Langley, and Lauri Stulberg (1986), "Determination of the Appropriate Number of Taxicabs to Serve an Airport." Transportation Research Record, No.1025. [50%]

- Mundy, Ray**, D. Bloomberg, and K. Williamson (1985), “Why the Market Segmentation Concept Works.” Directions, p. 26-32. [50%]
- Mundy, Ray** (1985), “Taxicab Fleet Optimization at Major U.S. Airports.” Transportation Research Record, No.1024, Airport Operations. [100%]
- Mundy, Ray** (1982), “An Analysis of the New Orleans Airport Ground Transportation System and Its Future Potential for Travel and Tourism.” Transportation Research Record, No. 840: Airport Landside Operations and Air Service, pp. 7-15. [100%]
- Mundy, Ray** (1981), “Management of Public Transportation Systems in the 1980’s; the Emergency of Paraprivate Transportation.” Transportation Research Record, No. 797. [100%]
- Mundy, Ray**, Kenneth W. Heathington, and Jo Lynn Cunningham (1978), “Management of Interdisciplinary Research in Universities: The State of the Art.” Educational Researcher, Vol. 7, No. 1. [50%]
- Mundy, Ray**, C. John Langley, and Thomas E. Gibson (1977), “Industry Evaluation of a Transportation/Logistics Curriculum.” Transportation Journal, Vol. 17, No. 1, pp. 33-39. [50%]
- Mundy, Ray**, (1977), “Mass Transit Guidelines Versus a Consumer Orientation in Public Transportation Systems.” Transportation Research Record, No.625. [100%]
- Cravens, David W., **Ray Mundy**, and Kenneth W. Heathington (1976), “Organizing for Interdisciplinary Research in a University Setting.” Journal of the Society of Research Administrators, Vol. VIII, No. 1. [33%]
- Mundy, Ray**, (1976), “The Economic Use of Subsidies for Urban Mass Transportation.” Transportation Technology and Planning, Vol. 5 , pp. 123-133. [100%]

A.1 WORK IN REVIEW AND DEVELOPMENT

Mundy, Ray, “Landside Management in Airports Today,”

Mundy, Ray, “Logistics/Transportation Education at the U.S. Universities.”

Mundy, Ray, “Airport Ground Transportation of the Future”

C. BOOKS

Readings In Modern Railroad Management, Volume One, Ray A. Mundy and Daniel Rust, (2014) Bookpatch Publishing, 276 pages.

Taxi! Urban Economies and the Social and Transport Impacts of the Taxicab. James Cooper, Ray Mundy and John Nelson (2010) Ashgate Publishing, 208 pages.

Marketing and Market Segmentation for Airport Ground Transportation. Mundy, Ray A., Mark Michener, and Steve Sturr (1998) Knoxville, TN., Graphic Creations Publishing, 96 pages.

D. APPLIED SCHOLARSHIP AND NONREFERRED ARTICLES

1. APPLIED SCHOLARSHIP

a. INDUSTRY NEWSLETTERS

Mundy, Ray (1977-Present), Airport Ground Transportation News, “Insights” Editor, published monthly by the Airport Ground Transportation Association, [circulation: 500]

Mundy, Ray (1977-Present), Airport Ground Transportation News, “Curbs” Editor, published weekly by the Airport Ground Transportation Association, [circulation: 500]

b. BUSINESS CASE

Mundy, Ray (1982), “Southeastern Contract Carrier.” Business case distributed by Harvard Business School Case Clearinghouse: Case #9-583-600.

c. PRESENTATIONS, REPORTS AND PROCEEDINGS

Mundy, Ray (2010) “Airport Ground Transportation at the Crossroads *What will our federal government require of us?*” presented at the semi-annual AGTA Conference, Alexandria, VA

Mundy, Ray (2009) “Cost of Converting to Accessible Taxicabs,” presented at the 91st Annual TLPA Convention & Trade Show, Vegas, NV

Mundy, Ray (2009) “Creating and Monitoring, The Safe and Sustainable Curb,” Presented at the semi-annual AGTA Conference, Seattle, WA

Mundy, Ray (2008) "Holding On," presented at the semi-annual AGTA Conference, New Orleans, LA

Mundy, Ray (2009) "Legal, Social and Political Compliance Issues in the Provision of Airport Ground Transportation," presented at the semi- annual AGTA Conference, Atlanta GA

Mundy, Ray (2008) "The Ground Transportation "Concessioned" Airport," presented at the semi-annual AGTA Conference, Salt Lake City, UT

Mundy, Ray (2007) Eurocab 2007, Vienna, Austria

Mundy, Ray & Rust Daniel (2007) Transportation Research Forum a conference by the Missouri Transportation Institute

Mundy, Ray (2007) "Accent on the Positive," presented at the semi-annual AGTA Conference, Fort Lauderdale, FL

Mundy, Ray (2007) "Advanced Computing Applications: Delivery of Flexible Transport Services," a presentation to Transportation. Research Board Conference, Washington D.C.

Mundy, Ray (2006) "Supply Chain Management Today," a presentation to the ITW Logistics Council Meeting, St. Louis, MO

Mundy, Ray (2006) "Religious Beliefs and the Airport Curb," presented at the semi-annual AGTA Conference, Denver, CO

Mundy, Ray (2006) "Current trends of Airport Authorities Awarding Contracts," presented at Groundnet meeting, Paris, France.

Mundy, Ray; Schillinger, Debbie; Doughty, Matthew; Tiwari, Gaurav, (2006) "Using Independent Contractor Drivers," a report for Taxi, Limosine, Paratransit Association.

Mundy, Ray, (April, 2006) "The Next Step in Standardizing Quality Airport Ground Transportation," presentated at the semi-annual AGTA Conference, San Francisco, CA

Mundy, Ray, Campbell, James, (2005) "Management Systems for Inland Waterway Traffic Control," Volume I: *Identification and Evaluation of Alternatives for Managing Lock Traffic on the Upper Mississippi River*, Final report, Center for Transportation Research and Education, Iowa State University, Ames, IA

- Mundy, Ray, and Campbell, James, (2005) "Management Systems for Inland Waterway Traffic Control," Volume II: *Vessel Tracking for Managing Traffic on the Upper Mississippi River*, Final report, Center for Transportation Research and Education, Iowa State University, Ames, IA
- Sweeney, Donald, Campbell, James and Mundy, Ray, (2005) "Teaching with Commercial Logistics on Supply Chain Software," *Proceedings of the Thirty-Fourth Annual Supply Chain Management Educators Conference*, San Diego, CA
- Mundy, Ray, (October, 2005) "Utilizing University Research and Industry Commercial Software to Analyze Supply Chain Metrics," presented at CSCMP Annual Conference, San Diego, CA
- Mundy, Ray, (September, 2005) "U.S. Federal, State and Local Ground Transportation Regulations," presented at semi-annual AGTA Conference, Toronto, Canada
- Mundy, Ray, (April, 2005), "Airport Landside Managers' Profile Study," presented at the semi-annual AGTA conference, Miami, FL
- Mundy, Ray, (February, 2005) Educating 3PL Managers, International Symposium on Education and Training of Human Resources in Transportation and Logistics Industries. Tokyo, Japan
- Mundy, Ray, (February, 2005), "Logistics Education at the U.S. Universities," presented at Policy Research Institute of Land, Infrastructure and Transport, Tokyo, Japan
- Mundy, Ray, (January, 2005), "Airport Access, Curbside Modeling, and Conflict: Getting it Right Outside the Door," presented at Transportation Research Board annual meeting, Washington, D.C.
- Mundy, Ray, (November, 2004), "Regulations that Foster Quality Service from Transportation Companies," presented at TLPA conference, Orlando, FL
- Mundy, Ray, (November, 2004), "Airports and Buses in 2004," presented at California Bus Association annual meeting, Reno, NV
- Mundy, Ray, (October, 2004), "Network Management in Supply Chains," presented at Council of Logistics Management Annual conference, Philadelphia PA
- Mundy, Ray (October, 2004), "Using Six Sigma to Measure and Improve Supply Chain Performance," presented at The Supply Chain Performance Management Summit, Las Vegas, NV

Mundy, Ray, (September, 2004), “Cooperation and Coordination Equals Successful Airport Ground Transportation,” and Curbside Liability – Is Your Airport Curb Design Lawsuit Proof?”, presented at the semi- annual AGTA conference in Chicago, IL

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Mundy, Ray (May, 2004), “Intermodal Rail-Truck Trans: An assessment of Potential Using Total Logistics Costs,” presented at Beijing Jiaotong University, Beijing, China

Mundy, Ray, (April, 2004), “Airport Fees and Fares: A 2004 Update” presented at semi-annual AGTA Conference, Phoenix AZ

Mundy, Ray, (February, 2004), “Bus Transportation Update” presented at 68th Annual Trailways Conference, San Deigo, CA

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Mundy, Ray, (January, 2004), “Using Six Sigma” presenter Council of Logistics Management, Green Bay, WI.

Mundy, Ray, (November 2003), “Dealing with the Media,” presented at TLPS conference, Baltimore, MD

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Mundy, Ray (September, 2003), “Assuring Safety and Security in Airport Ground Transportation,” and “Reduce the Cost of Airport Ground Transportation – Do More with Less!” presented at AGTA semi-annual conference, Washington, D.C.

Mundy, Ray, (September, 2003), “New and Emerging Options in Dispatch Technology,” presented at TLPA conference, San Diego, CA

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Mundy, Ray (2004), “Technology Transfer from Private to Public Transportation, report to Greater Cities’ Transportation Initiative.

Mundy, Ray, (June, 2003), “Industry View: “Small” Bus Perspective,” presented at Bus Crash Prevention meeting, Alexandria VA

Mundy, Ray, (June, 2003), "School Bus Video Monitoring," presented at FMCSA, Jefferson City, MO

Mundy, Ray (May, 2003), "Human Resource," presented at TLPA conference in Orlando, Florida

Mundy, Ray, (May, 2003), "Human Resources," presented at TLPA conference, Orlando, FL

Mundy, Ray, (2003), "Travel Information Systems at the User Level," report to Greater Cities' Transportation Initiative.

Mundy, Ray, (2003), "Measurement Standards for ADA Services," report to Greater Cities' Transportation Initiative.

Mundy, Ray, May, 2002), "Does Six Sigma Apply to You?" presented at The Logistics & e-Supply Chain Forum, aboard the QE2

Mundy, Ray, (April, 2002), "Transportation – A Whole New Point of View," presented at Warehousing Education & Research Council annual conference, Chicago, IL

Mundy, Ray, (December, 2002), "Dealing with the Media," presented at TLPA conference, Washington D.C.

Mundy Ray, (October, 2001), "Dealing with the Media," presented at TLPA conference, Pheonix, AZ

Mundy, Ray, (September, 2002), "Responding to New Rules," presented at AGTA conference, Dallas, TX and St. Louis, MO

Mundy, Ray, (May, 2002), "Sales & marketing Course," presented at TLPA conference, Orlando, FL

Mundy, Ray, (May, 2001), "Maintenance Course," presented at TLPA conference, Pomona, CA

Mundy, Ray, (2001), "American Transportation at the Crossroads, a New Century of Opportunity," presented at Mercantile Library Luncheon seminar series, UMSL St. Louis, MO

Mundy, Ray, (October, 2001), "Current Issues in Airport Ground Transportation," presented at annual meeting of the American Association of Airline Executives

Mundy, Ray (October, 2001), "Evolving from a Logistics to a Supply Chain Corporate Culture," presented at Brazilian Logistics Congress, Brazil Expo

Mundy, Ray (2001), "Continuous Improvement in Supply Chain Management," presented at Tennessee Logistics' Education Development Program, Knoxville, TN

Pappu, Madhav, Mundy Ray, and Paswan, Audhesh, (April, 2001) "New Channel Dynamics: An Investigation of Traditional and Web-Based Transportation Brokerage Services" 10th International Annual IPSERA Conference, Jonkoping International Business School, Sweden.

Mundy, Ray (2000), "Forging a Research Alliance for Private Sector Provision of Public Transportation" presented at the International Association of Transportation Regulators Annual Meeting, Nashville, TN

Mundy, Ray (November 1, 2000), "From Transportation Through Logistics to Supply Chain Manager" presented at the St. Louis Council of Logistics Management Meeting, St. Louis, MO

Mundy, Ray (1997), "Third Party Logistics: Background, Pros and Cons," presented at the Packaging Transportation and Safety Special Interest Group Annual Meeting, Department of Energy, Washington D.C.

Mundy, Ray (1994), SPC Handbook BNQ '90s. Burlington Northern Railroad Press, Publication #16509.

Mundy, Ray (1994), A review of Open Taxi Operations and Ground Transportation at Hawaii State Airport, Project No. ES 1042-94, TTLF. September.

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Mundy, Ray (1992), Ground Transportation Management Plan. Prepared for the Kansas City International Airport, Tennessee Transportation and Logistics Foundation. June.

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Mundy, Ray (1987), "Development of a Shared-Ride Limousine Business Plan. Prepared for Washington National Airport." TTLF. April.

Mundy, Ray (1987), "Measuring Airport Landside Capacity." TRB Special Report No. 215.

- Mundy, Ray and Laurie Stulberg (1984), "Phase III Report – Overall Analysis and Recommendation." Analysis of Detroit Metropolitan Airport Ground Transportation Alternatives, Costs, and Practices.
- Mundy, Ray (1984), Marketing for Competitive Global Markets – A Handbook. Participant handbook used for Distinguished Visitor Seminar series presented at University of Auckland.
- Mundy, Ray (1983-84), "The Effect of Global Markets on Australia's Industrial Future." Deakin University, School of Management Seminar Series.
- Mundy, Ray and Laurie Stulberg (1983), "Phase I Report – Downtown Detroit Bus Service." Analysis of Detroit Metropolitan Airport Ground Transportation Alternatives.
- Mundy, Ray and Laurie Stulberg (1983), "Phase II Report – Republic Airline Proposal for Intermodal Bus Service." Analysis of Detroit Metropolitan Airport Ground Transportation Alternatives.
- Mundy, Ray (1982), "The U.S. Ridesharing Experience." Presented at the Annual Meeting of the Transportation Research Board.
- Mundy, Ray, Robert B. Woodruff, David J. Barnaby, and G.E. Hills (1980), Market Opportunity Analysis for Short-Range Public Transportation Planning-Methodology and Demonstration of a Market Opportunity Analysis. NCHRP Report 212. Prepared for Short-Range Urban Public Transportation Planning.
- Mundy, Ray, D.W. Cravens, J.L. McGhee, K. W. Heathington, D.Q. Wickham, Frank W. Davis, Jr., G.E. Byrne, and F. J. Wegmann (1979), "Market Opportunity Analysis for Short-Range Public Transportation Planning – Goals and Policy Development, Institutional Constraints, and Alternative Organizational Arrangements." NCHRP Report 211.
- Mundy, Ray, Grace E. Byrne, Kenneth W. Heathington, and Frederick J. Wegman (1978), "Improving Public Transportation Systems Management at the Local Level of Government." University of Tennessee Transportation Center.
- Mundy, Ray and Gerald E. Hills (1978), "Private Enterprise in Urban Transportation Systems." University of Tennessee Transportation Center.
- Mundy, Ray (1978), "Public Transportation Management, A Challenge to Transit." Presented at the Short Course on Public Transit at the University of Alberta, Edmonton, Canada.
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of Management in Bloomington, Indiana.
- McGhee, Jerrie, Ray Mundy and David W. Cravens (1978), "Short-Range Public
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- Cravens, David W., Ray Mundy, Kenneth W. Heathington, and Jo Lynn Cunningham (1977),
"Management of Interdisciplinary Research in Universities: Current Practices,
Problems, and Processes."
- Mundy, Ray, Robert B. Woodruff, and David J. Barnaby (1977), "Methodology and
Demonstration of a Market Opportunity Analysis for Short-range Urban Public
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University." Paper presented at the National ORSA/TIMS Conference in Atlanta,
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Area Public Transportation Study." (Parts II and I.). Transportation Center, The
University of Tennessee.
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Mundy, Ray and Keith M. Thelen (1976), "Can Urban Areas Afford Traditional Transit Labor Contracts?" Prepared for the Transportation Research Forum.

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Mundy, Ray, Kenneth Heathington, Thomas Bell, David Cravens, Thomas C. Hood, Ross E. Robson, Robert L. Wilson, Douglas Q. Wickham, and Robert B. Woodruff (1975), "Evaluation Procedures for Public Transportation Service." BMT-UT-10.

Mundy, Ray (1975), "The Management of Large-Scale Interdisciplinary Research Projects." Paper presented at the 1975 conference of Research Management Improvement Programs, Fort Collins, Colorado.

Mundy, Ray, Kenneth W. Heathington, and David W. Cravens (1975), "The Application of Small Group Theory to the Management of Interdisciplinary Research." Presented at the ORSA/TIMS meeting in Chicago, Illinois; working paper by the Transportation Center, The University of Tennessee, Knoxville.

- Cravens, David W., Kenneth Heathington, and Ray Mundy (1975), "Conceptual Framework for Research on the Management of Interdisciplinary Research." Presented at the ORSA/TIMS meeting in Chicago, Illinois; working paper by the Transportation Center, The University of Tennessee, Knoxville.
- Mundy, Ray and C. John C. Langley, Jr. (1975), Public Warehousing as a Community Distribution Center in Sevierville, Tennessee. U.T. Technical Assistance Center.
- Mundy, Ray (1974), "Managerial Recruitment and Selection Policies in Urban Mass Transportation Systems." Paper presented at the National ORSA/TIMS Conference, San Juan, Puerto Rico.
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- Mundy, Ray (1974), "Managerial Goals in the Urban Mass Transit Industry." Paper presented to the Transportation Research Board Subcommittee on Transit Goals, Washington, D.C.
- Mundy, Ray (1974), U.S. and Canadian Urban Mass Transportation Systems. Published by the National Technical Information Service Bureau of the Federal Government, January.
- Mundy, Ray (1973), Marketing Urban Mass Transportation – 1973. Published by the National Technical Information Service Bureau of the Federal Government, November.
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2. NONREFEREED ARTICLES

- Pappu, Madhav, Mundy Ray and Paswan, Audhesh, "New Channel Dynamics: An Investigation of Traditional and Web-Based Transportation Brokerage Services," Conference Proceedings of the 10th International Annual IPSERA Conference, p: 967 – 076, 2001

Rutner, Stephen M., and Ray Mundy (1996), "Hubs vs. Hub-Nots: A comparison of Various U.S. Airports." Journal of Air Transportation World Wide, Vol. 1, pp. 81-90. [50%]

Gibson, Brian, Ray A. Mundy, Stephen M. Rutner, and Harry Sink (1995), "Transportation Purchasing Strategy: A Survey of U.S. Industrial Shippers." Reprint of previous article for the American Society of Transportation and Logistics, Inc., Transportation Systems Review Guide. [25%]

Mundy, Ray and Brian J. Gibson (1993), "Transportation Purchasing." Transportation Executive Update, Vol. 7, No. 2. [50%]

Gibson, Brian J. and Ray Mundy (1993), "Strategy Workshop: How Shippers Shop For Truck Service." Transport Topics, No. 3008. [50%]

Mundy, Ray, J. Morse, and R. Passarella (1986), "Applying SPC in Service Industries." Survey of Business, The University of Tennessee, Vol. 21, No. 3. [50%]

Mundy, Ray (1976), "Exclusive Survey on Job Outlook." Traffic Management, Vol. 15, No. 5, pp. 48-52. [100%]

Mundy, Ray (1975), "Aid of Mass Transit." Tennessee Survey of Business. [100%]

I. BOOK CHAPTERS, BOOK REVIEWS, PROCEEDINGS, ABSTRACTS AND OTHER WORK

1. BOOK CHAPTERS

Mundy, Ray and Frank W. Davis, Jr., George Gray, and Lester Hoel, Ed. (1978), "Public Transportation Marketing." Chapter 22, Urban Transportation Management, Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

2. BOOK REVIEW

Running on Empty by Lester R. Brown, Christopher Flavin, and Colin Norman. In Journal of Consumer Affairs, p. 86, Spring 1981.

3. REFEREED PROCEEDINGS

Mundy, Ray, Campbell, James, Smith, L. Douglas, (April, 2006) "Modeling Net Charges for Expedited Freight Services," presented at Precision Services Institute, Hawaii (pp: 558-560)

- Whitaker, Jonathan, and Ray Mundy (1999), The Material Elements of the Logistics “2000 and Beyond” Contract. Proceedings of the Council of Logistics Educator’s Conference, Toronto, Ontario, Canada. [50%]
- Gibson, Brian J., and Ray Mundy (1998), “Managing Logistics Service Providers.” Journal of Transportation Law, Logistics, and Policy, Vol. 65, No. 4, pp. 440-446. [50%]
- Smith, Carlo D., Ray Mundy, and C. John Langley (1997), “Removing the Barriers Between Education and Practice: Tools and Techniques for Logistics Management.” Proceedings of the Twenty-Sixth Annual Transportation and Logistics Educators Conference, Ohio State University, pp. 43. (Recipient of the Plowman Award for Outstanding paper in 1997.) [33%]
- Mundy, Ray and Brian J. Gibson (1997), “Managing Relationships for Continuous Improvement: A Study of Contract Logistics Customers’ Activities.” Proceedings of the Council of Logistics Management Annual Conference, Oak Brook, Illinois. [50%]
- Rutner, Stephen M., Ray Mundy, and Brian Gibson (1996), “Carrier Selection and Evaluation: Assessing the Influence of the Partnersshipping Strategy.” Proceedings of the Annual Academy of Marketing Theory & Practice Annual Conference. [33%]
- Mundy, Ray (1996), “Regulation of Taxicab Services at U.S. Airports.” Proceedings of International Association of Transportation Regulator (IATR) Annual Meeting, Strasbourg, France, IATR, Toronto, Canada. [100%]
- Rutner, Stephen M., Ray Mundy, and Brian J. Gibson (1996), “The Partnersshipping Strategy: Are Shippers’ Purchasing Practices Promoting Mutual Success?” Proceedings of the Association of Marketing Theory and Practice, Statesboro, Georgia. [33%]
- Mundy, Ray (1995), “Franchising Public Taxi Operations.” (Working Paper presented at the Proceedings of the 1995 International Conference on Taxi Regulation, Nassau, Bahamas. [100%]
- Gibson, Brian, Gregory M. Kellar, Edwin P. Patton, and Ray A. Mundy (1995), “Activity-Based Costing: Concepts and Methodology For Carrier Management Courses.” Proceedings of the 24th Annual Transportation and Logistics EducatorsConference, ed. James M. Masters, Cincinnati, Ohio, pp. 1-36. [25%]
- Kellar, Greg, Ray Mundy, Bart Jennings, and Harry Sink (1994), “Teaching Transportation With an Interactive Method.” Proceedings of the Council of Logistics Management Conference and presented at the annual Educator’s Conference, Oak Brook, Illinois. (Recipient of the Plowman Award for Outstanding Paper in 1994.) [25%]
- Kellar, Gregory M., Ray Mundy, Brian Gibson, and Edwin P. Patton (1994), “Costing Concepts, Methods, and Teaching for Carrier Management Courses.” Proceedings at the Council of Logistics Management Educator’s Conference. [25%]

4. NONREFEREED PROCEEDINGS

- Mundy, Ray and Brian J. Gibson (1995), "Developing an Effective Logistics Benchmarking Program." Proceedings of the Council of Logistics Management Annual Conference, Oak Brook, Illinois. [50%]
- Mundy, Ray, Brian J. Gibson, and Stephen M. Rutner (1995), "Forging Rail and Motor Alliances With or Without Lawyers." Proceedings of the Association for Transportation Law, Logistics and Policy. [50%]
- Mundy, Ray, Brian Gibson, Gregory Kellar, and Edwin P. Patton (1994), "A Framework for the Continuous Improvement of Transportation Service and Cost." Presented at the Annual Conference of Delta Nu Alpha, Boston, Massachusetts. [50%]
- Mundy, Ray, Brian J. Gibson, Stephen M. Rutner, and Harry L. Sink (1993), "Current Strategies in Transportation Purchasing: A National Survey of Industrial Shippers." Proceedings at the Council of Logistics Management Annual Conference, Oak Brook, Illinois. [50%]
- Mundy, Ray (1993), "An Open Letter to NATR." Proceedings of the National Association of Transportation Regulators' Annual Meeting (Keynote address), Orlando, Florida. [100%]
- Mundy, Ray, Brian Gibson, and Harry Sink (1993), "Quality Process for Railroad Customer Partnerships." Proceedings of the American Association of Railroads Annual Meeting, Washington, D.C. [50%]
- Mundy, Ray and Brian Gibson (1992), "An Investigation of Transportation Purchasing Behavior and Vendor Certification Programs." Proceedings of the Council of Logistics Management Annual Conference, Oak Brook, Illinois, pp. 563-575. [50%]
- Mundy, Ray and Kate Vitasek (1992), "Direct Marketing in the Motor Carrier Industry: Can It Work?" Proceedings of the Atlantic Marketing Association Annual Conference. [50%]
- Mundy, Ray (1990), "Sourcing – Small Buys and Small Shipments." Proceedings of the Council of Logistics Management Conference, Vol. II., Oak Brook, Illinois. [100%]
- Mundy, Ray (1989), "Innovation Carrier Sourcing: Transportation Partnership." Proceedings of the Council of Logistics Management, Vol. II, Oak Brook, Illinois. [100%]
- Mundy, Ray (1989), "The Effect of the Americans with Disabilities Act on Ground Transportation in the U.S." Congressional Record, presented before the House Sub Committee on Commerce & Transportation. [100%]

- Mundy, Ray and J. Palmquist (1988), "Western Management Process – Are Dramatic Changes Needed?" Proceedings of the Council of Logistics Management, Oak Brook, Illinois, Vol. 1, pp. 141-157. [50%]
- Mundy, Ray (1984), "Private Enterprise Participation in Public Transportation." Proceedings of the Conference on Private Transit Operators and the Public Sector, Sponsored by U.S. D.O.T. Urban Mass Transportation Administration, Teaneck, New Jersey. [100%]
- Mundy, Ray (1983), "Managing and Evaluating Carrier Pricing." Logistics Resource Forum, #3, Published by Logistics Resources, Inc., Cleveland, Ohio. [100%]
- Mundy, Ray (1982), "Public Transit in Small Cities and Countries." Urban Data Service Report, Volume 14, No. 5, Washington, D.C., International City Management Association. [100%]
- Mundy, Ray (1982), "The Airport Ground Transportation Industry: Past, Present, and Future." Bus Ride Magazine, Friendship Publications, Inc. [100%]
- Mundy, Ray (1982), "Overcoming Barriers to Private Sector Transportation Contracting with Public Agencies." Federal D.O.T. Office of Information Technology Sharing, D.O.T. Publication. [100%]
- Mundy, Ray. "Improved Consolidation of Transportation Through the Brokerage Approach." Proceedings of the Second Annual Conference on Coordinated Transportation, Pennsylvania Association for Consolidated Transportation. Published by the Pennsylvania Department of Human Services and the Pennsylvania Department of Transportation. [100%]
- Mundy, Ray (1981), "Should There be Federal Regulations Without Federal Funds?" Proceedings of the South Carolina Conference on Public Transportation, Myrtle Beach, South Carolina. [100%]
- Mundy, Ray (1980), "Myths of Mass Transit and Implications of the Transportation Energy Efficiency Study of Union Carbide at Oak Ridge." Proceedings of the Energy Conservation Seminar, Union Carbide Corporation, Oak Ridge, Tennessee. [100%]
- Mundy, Ray (1980), "Integrated Paratransit and Marketing Innovations." Proceedings of Strategies for the 1980's University Research Conference, U.S. Department of Transportation, Washington, D.C. [100%]
- Mundy, Ray (1979), "Brokering Public Transportation Service in Non-urbanized and Rural Areas." Proceedings of The Fourth National Conference on Rural Public Transportation. Published by the U. S. Department of Transportation and the Transportation Research Board. [100%]

- Mundy, Ray (1978), "Service and Performance Indicators." Proceedings of the Consumer-Related Issues in Public Transit: Workshop, U.S. Department of Transportation, UMTA Office of Policy. [100%]
- Langley, C. John Jr. and Ray Mundy (1978), "Transportation/Logistics Curriculum Evaluation: Academic Versus Industry Representative Responses." Proceedings of the Workshop on Developing Logistics Education Programs, Virginia Polytechnic Institute State University, Arlington, Virginia, pp. 48-55. [50%]
- Mundy, Ray (1976), "Impact of Outside Policies and Funding on Research." Proceedings of the Conferences on The Management of Large-Scale Interdisciplinary Research, The University of Tennessee Transportation Center, pp. 73-85. [100%]
- Heathington, K. W., D.W. Cravens, J.A. Spencer, and Ray Mundy (1976), "Major Conference Issues/Implications." Proceedings of the Conference on The Management of Large-Scale Interdisciplinary Research, The University of Tennessee Transportation Center, July, pp. 7-9. [25%]
- Mundy, Ray, K.W. Heathington, D.W. Cravens, and J.A. Spencer (1976), "Management of Large-Scale Interdisciplinary Research: Conference Overview." Proceedings of the conference on The Management of Large Scale Interdisciplinary Research, The University of Tennessee Transportation Center. [50%]
- Mundy, Ray (1975), "Integration of Paratransit and Conventional Transit: Problems and Positive Directions." Proceedings of the First National Paratransit Conference, Williamsburg, Virginia. [100%]
- Mundy, Ray (1975), "The Expendable Assistant Professor in Interdisciplinary Research." Proceedings of the 1975 National Association of University Bureaus of Business and Economic Research Meetings, Williamsburg, Virginia. [100%]
- Mundy, Ray, D.W. Cravens, and Robert B. Woodruff (1975), "Potential for Marketing Management Applications in Public Transportation Planning." Proceedings of the 1974 American Marketing Association Conference, pp. 274-279. [50%]
- Mundy, Ray (1974), "Internal Organization and Decision Making of Urban Transit Systems." Proceedings of the 1974 American Institute of Decision Sciences Meeting, Atlanta, Georgia. [100%]

J. RESEARCH HONORS, GRANTS, AWARDS

As Associate Director of The University of Tennessee's Transportation Research Center (1976-81) Dr. Mundy directed several major research projects including a detailed study of 42 transit properties in the U.S. and Canada, an analysis of training programs needed in the transit industry, and an analysis of the marketing management practices within the U.S. transit industry. Dr. Mundy was a major investigator on the \$1,000,000 UMTA demonstration project entitled "Implementation of a Public Transportation Brokerage Service Serving Knoxville,

Tennessee.” Projects directed by Dr. Mundy include the \$500,000 National Cooperative Highway Research Project 8-16 “Guidelines for Public Transportation Levels of Service and Evaluation,” the \$300,000 Urban Mass Transportation's nationwide training program entitled, “Dissemination of the Brokerage Concept,” and the \$130,000 Department of Transportation's University Research project utilizing non-print media to aid decision makers in planning urban transportation. Dr. Mundy has directed the public service activities of the Tennessee Transportation Brokerage Program, the Knoxville Commuter Pool, the Knoxville Area Vanpooler's Association, and the Knoxville Service and Fare Demonstration Project. His research and technical assistance projects were funded at an annual rate of between \$300,000 and \$500,000.

While at the University of Tennessee, Dr. Mundy has also directed and participated in research efforts in a number of related research areas. Such studies include an analysis of the management of interdisciplinary research programs in U.S. universities, funded by the National Science Foundation; warehousing for country-wide applications; private trucking fleet ownership and common carrier pricing strategy analysis; commuter express bus services; and an analysis of the management manpower, operations and marketing activities of all publicly owned transit systems in the State of Tennessee. More recently Dr. Mundy has completed a number of research projects in the Airport Ground Transportation Industry. Such efforts included detailed analysis of operations at the New Orleans, New York, Portland, Indianapolis, Kansas City, San Antonio, Detroit, and Honolulu airports. More recently his research and industry management development programs involve the determination of quality tools and their application in the U.S. rail and motor carrier industry. Toward this end he has developed several executive-training programs for the industry. Current research involves the study of Transportation Vendor Certification programs and analysis of continuous improvement activities within supply chains. Several Ph.D. dissertations have already been developed from this work..

IV. SERVICE ACTIVITIES

A. PROFESSIONAL OFFICES HELD

- Chairman (1982), Transportation Research Board's Committee on Intercity Bus Transportation
- Chairman (1980), Transportation Research Board's Subcommittee on Labor
- Examiner (1976-78), American Society of Traffic and Transportation

B. CONFERENCE RESPONSIBILITIES

- Chairman (1996), Air Cargo Intermodal Conference, Boston, Massachusetts
- Chairman (1977 - Present), Bi-Annual Meetings of Airport Ground Transportation Association

C. INVITED ACTIVITIES

- Editor, Special Edition of International Transportation Planning and Technology Journal – dedicated to private/public transportation
- Distinguished Marketing Professor (Summer, 1983), University of Auckland, New Zealand.

D. REFEREEING

- International Journal of Transportation Planning and Technology
- Journal of Transportation Management

E. EDITORIAL RESPONSIBILITIES

Editor (1977-Present), Airport Ground Transportation News, “Insights”
Editor, published monthly by the Airport Ground Transportation Association,
[circulation: 500]

Editor (1977-Present), Airport Ground Transportation News, “Curbs” published
by the Airport Ground Transportation Association, [circulation: 500]

F. CAMPUS/SYSTEM SERVICE While at UTK and UMSL

Dr. Mundy has served on a variety of committees at the university, college and department levels. At the university level he served on a Campus Transportation Committee, headed by the Vice Chancellor of Business and Finance, and was Chairman of the Search Committee for a new Director of The University of Tennessee Transportation Center. Dr. Mundy has been a member of the University of Tennessee’s Faculty Senate and served on the Faculty Senate Executive Committee. He was chairman of the University Faculty Affairs Committee for five years. In this capacity he has participated in the development of a formal grievance procedure for university faculty.

G. SCHOOL OF BUSINESS SERVICE

Within the College of Business Administration he has served on the Teaching and Learning Improvement Committee and the Graduate Policies Committee. He has served as the departmental representative to the library, the College Management Development program, and the Center of Business and Economic Research. At the department level, Dr. Mundy is currently directing the Executive-In-Residence Program, which he initiated and is the L & T MBA advisor. Upon returning to the faculty, Dr. Mundy revamped the L & T MBA program, which at the time consisted of only one student. Today, the program has grown to graduate between 35 and 40 students annually. Practitioners now rank the Logistics program at the University of Tennessee among the leading academic programs in North America.

Since coming to the University of Missouri – St. Louis, he has developed the Universities’ Center for Transportation Studies to support graduate level of research in the transportation field. From 2000 to 2019, over 65 graduate research assistants

were support by his Center. His current research interests and research include the enhancement of airport ground transportation operations, the practice of continuous improvement within private transportation firms, intermodal transportation, motor carrier autonomous vehicles, and the local regulation of ground transportation firms. Since inception of the Center for Transportation Studies, Dr. Mundy has generated in excess of \$ 2,000,000 in grants.

H. SERVICE HONORS, GRANTS, AWARDS

- Senior Research Fellow, John Deere, Inc., 1999
- U.S. Department of Transportation's Service Award, 1996
- School of Business, Reagan Scholar Award, 1994-1996
- Taylor Distinguished Professorship, 1996

I. COMMUNITY SERVICE

- President, University Faculty Swim Club, 1994

J. CONSULTING

Dr. Mundy, working as a consultant, has performed numerous transportation research projects. Dr. Mundy has been active in the role of a general consultant to several private and public transportation firms, the Federal Government, states and municipal governments. Dr. Mundy has lectured in the Department of Energy's Federal Ridesharing Training Program and directed the development of offices set up to develop and administer ridesharing programs. Past projects have involved consultations with the Federal Department of Energy, the City of Richmond, Virginia, the World Bank, the International City Managers Association, the New York Port Authority, the Economic Opportunity Alliance of Atlanta, Georgia, the Irregular Route Motor Carrier Conference, and the numerous US Airports.

Dr. Mundy has developed and administered a series of 1, 2, and 4-day quality seminars offered to Transportation and Logistics firms. Recent courses have been offered to firms such as Burlington Northern Railroad, Norfolk Southern, CSX, Sea Land, Burlington Motor Carriers, Arkansas Freightways, American Association of Railroad, the American Short Lines Railroad Association, Ryder Integrated Logistics, and TNT.

Dr. Mundy maintains an active lecture/participant role at regional and national transportation meetings. Speaking engagements include keynote presentations at the National Association of Transportation Regulators Annual Meeting (Strausberg, France), presentations at the Transportation Research Forum (TRF) meetings (Washington, D.C.), Council of Logistics Management Transportation and Logistics Educators Conference (Washington, D.C.), International Association of Rail Freight Claims and Adjusters Meeting (Seattle), American Shortline Railroad Association Annual Meeting (Washington, D.C.), the North American Airport Council

International Annual Meeting (Orlando, Florida), the Australian Taxicab Association (Hobarth, Tasmainia), and the IV International Conference Modern Taxi Novosibirsk, Russia.

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March 5, 2025

VIA E-MAIL

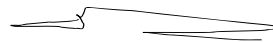
New York City Taxi & Limousine Commission
33 Beaver Street
New York, NY 10004
tlcrules@tlc.nyc.gov

RE: Proposed Amendments to the Rules Governing Minimum Driver
Payment for High-Volume For-Hire Services

To Whom It May Concern:

We represent Lyft, Inc. ("Lyft") in connection with the proposed amendments to the High-Volume For-Hire Services Minimum Driver Pay Rules announced by the New York City Taxi and Limousine Commission on January 3, 2025. Enclosed, please find Lyft's supplemental comments regarding the proposed amendments, as well as the affirmation of Dr. Jonathan Guryan, Ph.D.

Sincerely,



Alexander C. Drylewski

Encl.

Lyft, Inc.’s Supplemental Comments Regarding the Taxi and Limousine Commission’s Proposed Amendments to the High-Volume For-Hire Services Minimum Driver Pay Rules

A. Introduction

Lyft, Inc. (“Lyft”) submits these supplemental comments in response to the New York City Taxi and Limousine Commission’s (“TLC”) proposed amendments to the rules governing High-Volume For-Hire Service (“HVFHS”) minimum pay (the “Proposed Rules”), the comment period for which was extended to March 5, 2025. Lyft stands by the serious concerns raised in its initial comments, submitted on January 31, 2025 (the “Initial Comments”),¹ and the further remarks provided orally and in writing from Lyft’s Chief Policy Officer. Lyft submits these supplemental comments to detail additional concerns that have come to light since Lyft submitted its Initial Comments.

First, the TLC’s recent disclosure of certain documents pursuant to a New York Freedom of Information Law (“FOIL”) request made by Lyft raises more questions than answers, and further confirms that the Parrott Report and driver survey are fatally flawed and fundamentally unreliable as a basis for determining driver expense reimbursement rates. In turn, the TLC’s proposed per-mile expense factors—which rely on the Parrott Report’s conclusions—are arbitrary and capricious and lack a reasonable basis. Furthermore, the TLC’s disclosure is materially incomplete, depriving interested parties of the information necessary to fully evaluate the Proposed Rules and their potential effects. The records that the TLC produced confirm that the TLC failed to conduct critical analyses—including, for example, the extent to which the Proposed Rules will increase costs for New York riders and reduce overall rider demand and trip opportunities for drivers. The Proposed Rules are too important, and the adverse consequences too severe, for the TLC to be engaging in “pass first and analyze later” guesswork on these issues.

Second, after the close of the initial comment period, the TLC’s expert, James Parrott, personally engaged in overt public-facing and misleading advocacy in favor of the Proposed Rules. On February 4, Dr. Parrott published an opinion piece in the New York Daily News titled “Uber & Lyft put the brakes on drivers” (the “Parrott Op-Ed”), deriding HVFHS companies’ efforts to comply with the TLC’s minimum pay rules and unrealistic UR standards as “cynical labor practice[s] that flaunt[] corporate power over workers.”² This advocacy from the TLC’s expert is problematic in several respects. For one, it calls into serious question whether the Proposed Rules were the product of independent, informed, and reasoned decision-making. Rather than an unbiased economist “commissioned” by the TLC to “quantify vehicle expenses and suggest appropriate modifications to the pay standard’s per mile trip distance component for HV-FHV and wheelchair-accessible trips,”³ Dr. Parrott instead appears to be a staunch policy advocate and a key stakeholder behind the TLC’s unprecedented micromanagement of HVFHS companies in New York City. Worse still, the Parrott Op-Ed discloses purported analyses and views in support of the

¹ Unless otherwise indicated, all capitalized and abbreviated terms have the meanings ascribed to them in the Initial Comment.

² The Parrott Op-Ed is available at <https://www.nydailynews.com/2025/02/04/uber-lyft-put-the-brakes-on-drivers/>.

³ (Parrott Report at 1.)

Proposed Rules that do not appear anywhere in the administrative record, the Proposed Rules themselves, or the TLC’s explanations of the Proposed Rules. While the TLC has disclaimed any involvement in the Parrott Op-Ed’s creation or contents, Dr. Parrott’s personal views and supposed analyses undoubtedly infected the Proposed Rules. And yet, those views have been shielded from full public assessment and scrutiny. This flawed process embodies the definition of unreasonable rulemaking.

For the reasons discussed herein and in Lyft’s Initial Comment, Lyft requests that the TLC withdraw the Proposed Rules and work with all interested parties to craft rational, justifiable rules that support the TLC’s policy objectives without harming New York City riders and drivers, and the HVFHS industry as a whole.

B. TLC Records Confirm Lyft’s Concerns with the Proposed Rules and the Foundation on Which They Were Developed

Shortly after the TLC announced the Proposed Rules, Lyft (through its counsel) requested records from the TLC pursuant to FOIL in order to evaluate the Proposed Rules. Less than 24 hours before the scheduled public hearing on the Proposed Rules, the TLC produced records responsive to Lyft’s FOIL request. Even then, the TLC’s production was materially incomplete, as it failed to include, among other things: (i) records reflecting the assumptions for the hard-coded inputs in the “expense model” developed by Dr. Parrott and adopted wholesale by the TLC in the Proposed Rules;⁴ (ii) the “TLC data” purportedly used to justify the “16-hour lockout” restrictions;⁵ (iii) a complete summary of the driver survey results that served as the “primary source of information on driver expenses;”⁶ and (iv) communications with the TLC concerning the Proposed Rules, the Parrott Report, and the driver survey.

In addition to being incomplete, the TLC’s response to Lyft’s FOIL request confirms that the Proposed Rules bear none of the hallmarks of reasoned rulemaking. Indeed, the TLC has disclosed that it “does not possess or maintain” the actual survey results that were used to develop the proposed per-mile expense factors, and instead appears to possess only an incomplete summary of the results.⁷ It thus remains unclear how, or even whether, the TLC vetted the survey results to inform its rulemaking, if the TLC knows which survey responses were included in the Parrott Report’s analysis, or how Dr. Parrott used those responses to develop the amended per-mile expense factors.⁸ The TLC has failed to produce any records showing how Dr. Parrott excluded “the top 5 percent and bottom 5 percent of most questions calling for quantitative responses,” as well as any responses he personally deemed “outside the range” of “reasonable.”⁹ Indeed, it seems

⁴ (See Proposed Rules at 4.)

⁵ (See Proposed Rules at 7 n.19.)

⁶ (E.g., Parrott Report at 2.)

⁷ (Ex. A at 2, 4.)

⁸ (See Initial Comments at 5 & nn.12-16 (describing arbitrariness of Dr. Parrott’s use of the survey results).) For example, one driver indicated driving 250,000 miles in the past year, or over 680 miles per day.

⁹ (Parrott Report at 9 n.6.)

that both the TLC and the public have been left in the dark by the process and analyses that resulted in the TLC's proposed per-mile expense factor.¹⁰

The FOIL production also reveals serious flaws in how the driver survey was conducted. The survey explicitly informed drivers at the outset that the results would be used by the TLC "to update the driver expenses incorporated into its minimum pay standard for FHV drivers." As explained in the accompanying Supplemental Affirmation of Jonathan Guryan, Ph.D. ("Supp. Guryan Aff."), this injected significant bias and unreliability into the survey and its results.¹¹ Unsurprisingly, the Parrott Report vastly overstates driver expenses in relation to more reliable analyses, such as the HR&A Report.¹²

In addition, the TLC's FOIL production confirms that the proposed per-mile UR lacks a reasoned basis. In a document purportedly supporting this aspect of the Proposed Rules, the TLC included the following "data caveat":

The distance UR we calculate from breadcrumb data comes from measuring how far drivers traveled between consecutive one-minute points. The distance the driver traveled in any given time period can be obtained by adding up these small 1 minute distances. Dual-apping is also factored in using the same allocation methods applied in the time UR, as we get distinct breadcrumbs for each company.

It is worth mentioning that missing breadcrumb data can affect the UR calculation. Some trips or sessions may lack pings from the breadcrumb data. ***Further analysis is needed to determine how often and how severely data is missing, and whether trips/sessions with poor coverage should be excluded. Also, we don't receive any breadcrumb data for out of town trips. Because of these gaps, we can't be entirely sure how well the UR we've calculated reflects real-world conditions.*** We are also characterizing the error in the breadcrumb measurements, and are working on calibrating the breadcrumb estimates with known miles traveled from the trip and session data.

While we know there are some gaps and limitations, the numbers we have now give us the best possible estimate of the distance UR from the available breadcrumb data. ***More time, investigation, and refinements to our methods could help confirm these results and improve the accuracy of the UR calculation.***

This admission is further proof that the proposed per-mile expense factor is the product of arbitrary and capricious rulemaking.

Finally, conspicuously absent from the TLC's FOIL production is any suggestion that the TLC even considered (let alone sufficiently analyzed) significant aspects of the Proposed Rules. For example, there is no indication that the TLC considered the consequences of its proposed

¹⁰ (See Initial Comments at 9-10.)

¹¹ (See Supp. Guryan Aff. ¶¶ 3, 5(a)-(b), 6-8.)

¹² (See Initial Comments at 5-9.)

driver pay hikes, including whether the dramatic increases will reduce overall rider demand and trip volume, ultimately negatively affecting overall driver pay in direct contradiction to the TLC's stated goals. Nor does it appear that the TLC has analyzed these critical issues in conjunction with other cost-increasing measures in New York, including congestion tolls and insurance premium increases.¹³ While the TLC appears to have considered total trip pay for a 7.5-mile trip lasting 30 minutes using various per-mile and per-minute utilization rates (holding the "revised per mile" expense factor fixed at \$0.874), the TLC does not appear to have conducted any second-order analysis regarding the effects of the increase in driver pay on rider demand, trip volume and driver pay in the aggregate. The TLC's disclosed materials also do not provide any support or rationale for its proposed lock-out restrictions. These deficiencies render the Proposed Rules arbitrary and capricious.

C. Dr. Parrott's Bias Has Tainted the Rulemaking Process

Dr. Parrott's public advocacy in favor of increased driver pay in New York City further heightens Lyft's concerns regarding the propriety of the Proposed Rules. As reflected in the Parrott Op-Ed, Dr. Parrott appears to view HVFHS companies with hostility and is a staunch policy advocate rather than an impartial and independent expert. This bias undermines not only Dr. Parrott's expert work on these issues, but also the propriety of the process through which the TLC arrived at its conclusions.

For example, according to the Parrott Op-Ed, Dr. Parrott believes that HVFHS companies can and should shoulder the burden of driver pay increases.¹⁴ In this regard, Dr. Parrott opined that "[i]f Uber is concerned that rising fares are discouraging passengers," Uber should simply "lower its take."¹⁵ Dr. Parrott's view with respect to Lyft is presumably the same. This simplistic view of the issue lacks any objective backup or support, and indeed ignores established academic literature regarding the broader economic effects on an industry subjected to minimum wage increases.¹⁶ It is also contrary to Dr. Parrott's own conclusions from 2018, in which he acknowledged that increases to minimum driver pay would increase rider fares by "about three to five percent" and increase rider wait times.¹⁷ Likewise, in a 2020 study that provided "preliminary research findings concerning the effects of [the TLC's] minimum driver pay standard," Dr. Parrott

¹³ (See Initial Comments at 2, 4.)

¹⁴ The TLC has stated that the Parrott Op-Ed was "independent of the TLC," and that the TLC lacks records concerning it. (See Ex. B at 1-2.)

¹⁵ (Parrott Op-Ed.)

¹⁶ (See Supp. Guryan Aff. ¶¶ 3, 5(c)-(d), 9-20.)

¹⁷ (James A. Parrott & Michael Reich, *An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment*, at 13, The New School Center for New York City Affairs (July 2018), available at <https://static1.squarespace.com/static/53ee4f0be4b015b9c3690d84/t/5b3a3a946d2a73a677f855b9/1530542742060/Parrott-Reich+NYC+App+Drivers+TLC+Jul+2018jul1.pdf>.)

While many of Dr. Parrott's 2018 calculations are likely outdated for many reasons, including fundamental differences in the New York City HVFHS market today, Dr. Parrott ignores his prior acknowledgment that increased driver pay inevitably will result in increased rider fares.

concluded that passenger “fares increased year over year in June 2019 by 5.9 percent in New York City,” consistent with his 2018 “predict[ion] that fares would increase about 5 percent.”¹⁸ To the extent Dr. Parrott is relying on some other, undisclosed analysis to support his new views, that analysis does not appear anywhere in the TLC’s administrative record for the Proposed Rules. In fact, the TLC has expressly disclaimed any involvement with the Parrott Op-Ed.¹⁹

Dr. Parrott’s strong personal views regarding HVFHS companies and increased driver pay undoubtedly contributed to the Parrott Report’s overstated per-mile expense factor and ultimately infected the TLC’s conclusions regarding the Proposed Rules. This is particularly apparent considering the shaky foundation on which the expense factor is based (i.e., the flawed driver survey) and the discretion afforded to Dr. Parrott to filter survey results (including in ways the TLC apparently had no input into, or understanding and documentation of). Indeed, Dr. Parrott appears willing to twist his analyses to confirm his conclusions. For example, in his written hearing testimony, Dr. Parrott presented an apples-to-oranges rebuttal to the argument that his use of an unsupportable five-year depreciation period for ICE vehicles resulted in an inflated per-mile expense factor. Specifically, Dr. Parrott argued that “using *average* instead of median survey results for purchase price and down payment with a *six-year* amortization would *increase* the per mile factor by about three-tenths of a cent.”²⁰ Yet Dr. Parrott ignores that his report used *median* figures over a five-year depreciation period to calculate the proposed per-mile expense factor—not average figures.²¹ Depending on how Dr. Parrott excluded outliers in the survey response data, average figures could be significantly higher than median figures.²²

* * *

New York City’s drivers, riders, and HVFHS companies deserve an independent, thoroughly analyzed, and reasoned approach to the driver pay issues that the Proposed Rules seek to address. Lyft appreciates the TLC’s consideration of these comments, the hearing testimony, and the Initial Comments, and continues to stand ready to work with the TLC and other interested stakeholders to craft workable and rational rules.

¹⁸ (Dimitri Koustas, James Parrott & Michael Reich, *New York City’s Gig Driver Pay Standard: Effects on Drivers, Passengers, and the Companies*, at 1, 11, The New School Center for New York City Affairs (December 2020), available at https://static1.squarespace.com/static/53ee4f0be4b015b9c3690d84/t/5fcfc3dda8cbdc2f053a82fc/1607451614588/DriverReport_Dec8th.pdf.)

¹⁹ (Ex. B at 1-2.)

²⁰ (Ex. C at 4 (emphasis added).)

²¹ (See, e.g., Parrott Report at 25 (“Since almost all drivers finance the purchase of their vehicles, and report a down payment, the *median* \$5,000 down payment is amortized over 60 months. The resulting monthly amount (\$83) is added to the *median* monthly payment drivers reported in the survey.” (emphasis added)).)

²² (See, e.g., *supra* note 8.)

SUPPLEMENTAL AFFIRMATION OF JONATHAN GURYAN, Ph.D.

**PREPARED ON BEHALF OF
LYFT, INC.**

in connection with

*Proposed Amendments to the Rules Governing
Minimum Driver Payment for High-Volume For-Hire Services*

March 5, 2025

I. BACKGROUND AND ASSIGNMENT

1. My name is Jonathan Guryan. I am currently the Lawyer Taylor Professor of Education and Social Policy in the School of Education and Social Policy at Northwestern University.

2. I have been retained by Lyft, Inc. (“Lyft”) to provide this supplemental affirmation concerning the proposed amendments to the High-Volume For-Hire Services (“HVFHS”) Minimum Driver Pay Rules (the “Proposed Rules”) that the New York City Taxi and Limousine Commission (the “TLC”) announced on January 3, 2025. The Proposed Rules were based in part on the December 2024 report prepared by James A. Parrott, entitled “Revised Expense Model for the NYC Taxi and Limousine Commission’s High-Volume For-Hire Vehicle Minimum Pay Standard” (the “Parrott Report”).

3. My initial affirmation dated January 31, 2025 (the “Guryan Affirmation”) assesses the Parrott Report’s method to estimate the distance component (the “per-mile cost factor”) of the TLC’s minimum driver pay standard for HVFHS trips and his recommendation of \$0.879 per mile for non-WAVs and \$1.061 per mile for WAVs.¹ The affirmation highlights numerous flawed assumptions that inflated his estimates, including the assumption that owned vehicles would have no residual value after five years—an assumption that is inconsistent with the TLC’s seven-year useful life assumption for the depreciation of medallion taxis.² The Parrott Report also relies on survey data with low response rates and a response bias that is skewed towards full-time drivers. Finally, the Guryan Affirmation highlights the failure of the Parrott Report to analyze the effects of the Proposed Rules on fare prices, rider demand, and aggregate driver pay.

4. On February 4, 2025 (after I had submitted my initial affirmation), the TLC produced additional materials in response to Lyft’s New York Freedom of

¹ I understand that Dr. Parrott has subsequently revised his estimate for non-WAVs to \$0.871 per mile after correcting for numerical errors.

² New York City Taxi and Limousine Commission, “Notice of Promulgation of Rules,” rules adopted April 23, 2015, accessed at www.nyc.gov/assets/tlc/downloads/pdf/proposed_rules_drv_veh_owner_reform_package.pdf, pp. 3-4

Information Law (“FOIL”) request. The additional materials, which I refer to as the “FOIL Materials,” appear to include some of the data underlying Dr. Parrott’s proposed per-mile cost factor. In addition, I reviewed the Op-Ed Dr. Parrott authored in the New York Daily News on February 4, 2025. I submit this supplemental affirmation based on my assessment of the FOIL Materials, publicly available information, academic literature, and my own expertise.

II. SUMMARY OF OPINIONS

5. My opinions in this matter can be summarized as follows:
 - a. The FOIL Materials further confirm that Dr. Parrott’s proposed per-mile cost factor is based on biased survey responses. In the TLC survey included in the FOIL Materials, the respondents were informed that their answers would be incorporated in the TLC’s plan to update its minimum pay standard. The survey further confirms that the results could have response bias, since the respondents understood the purpose of the survey and how it would be used to determine minimum pay. The resulting bias of the survey responses is documented in the academic literature. See Section III.A.
 - b. The TLC’s own data confirms that full-time drivers are over-represented in the survey responses. The FOIL Materials show that the average survey respondent drove 31,823 to 34,627 miles annually, while the estimated average annual mileage across the drivers using actual data from TLC’s trip record data for HVFHS drivers is 21,365 miles. This comparison shows that the survey data underlying the Parrott Report is more likely to be based primarily on the responses of full-time drivers. See Section III.B.
 - c. In an Op-Ed column in the New York Daily News on February 4, 2025, Dr. Parrott presents claims to refute Uber’s argument that if driver pay increases, then the price of the fare for consumers will also increase. He then proceeds to suggest that Uber should reduce its share of the fares if the company is concerned about the increase in prices for consumers. Dr. Parrott’s argument is flawed, as it ignores the predictions of standard economic theory.

Economic theory predicts that increases in wages are likely to be passed on—at least in part—in the form of higher prices to consumers. As input costs increase, there are pressures for firms to pass on at least some of these increases through higher prices. See Section IV.A.

- d. The Parrott Report and Dr. Parrott’s February 4, 2025 Op-Ed column disregard the academic literature as well as Dr. Parrott’s own study that show that increased minimum pay could lead to higher prices for New York City passengers. Empirical academic articles quantify the impact of increases in sales taxes, as well as the minimum wage, across a variety of industries such as restaurants and supermarkets. The empirical literature documents that wage increases have been fully or almost fully passed on to customers through higher prices. The literature is consistent with Dr. Parrott’s own academic paper, which found a 5.9 percent increase in passenger fares in New York City in the period surrounding the February 2019 minimum pay mandate. See Section IV.B.

III. DR. PARROTT’S BACKUP FILES & ADDITIONAL PRODUCTION FURTHER CONFIRM THAT THE PARROTT REPORT RELIED ON UNRELIABLE SURVEY DATA

A. The Additional Files Underlying the Parrott Report Confirmed Concerns About Response Bias as Respondents Received Salient Reminders that Their Responses Will be Used in Updating the Minimum Pay Standard

6. The Parrott Report “did not consider whether respondents had the incentive to inflate the costs in order to potentially influence the minimum pay standard.”³ The file in the survey questions that contains the FOIL Materials includes an opening statement about the purpose of the survey and informs the respondents that, “The Center for New York City Affairs at The New School is working with TLC to update the driver expenses incorporated into its minimum pay standard for FHV drivers *Your*

³ Guryan Affirmation, ¶ 44.

*answers will help us update the analysis of driver expenses.”*⁴ The Parrott Report ignores that survey respondents had incentives to inflate their cost estimates given that the survey informed them of the purpose of the survey and that their responses could lead to a higher minimum pay for HVFHS drivers. The incentive to inflate the responses is a type of bias in surveys that has been documented in academic studies, such as Wolf and Denison (2023).⁵

B. The TLC’s Own Data Confirms the Survey Response Bias Underlying the Parrott Report’s Data

7. In the Guryan Declaration, I note that the Parrott Report uses 4,462 survey responses out of 89,000 survey recipients to draw conclusions about the entire population of New York City HVFHS drivers, for a response rate of approximately 4.5 percent.⁶ I demonstrate that full-time drivers were over-represented in the survey responses compared to the population of all New York City drivers and the resulting response bias was statistically significant (see Exhibit 4 in the Guryan Declaration).

8. The response bias in favor of full-time drivers is confirmed by the TLC’s own data. According to the survey responses in the FOIL Materials, the average miles driven in the past year was 31,823 for electric vehicle (“EV”) owners and 34,627 for internal combustion engine (“ICE”) vehicle owners.⁷ These estimates seem to be biased upwards, as they are based on the responses of mostly full-time drivers and are notably higher than estimates of all drivers from other TLC sources. According to the TLC’s own trip level data, the total distance for HVFHS passenger trips in 2023 was about 1.2 billion miles.⁸ Using the Parrott Report’s estimate of 100,151 drivers in NYC in 2023, the

⁴ Italics not in original. TLC, “Qualtrics Survey Software,” June 13, 2024.

⁵ The article concluded that “nearly all participants [in the survey] reflect on the intended uses of an assessment when responding to items and most decline to respond or modify their responses if they are not comfortable with the way the results will be used.” Wolf, Melissa G., and Alexander J. Denison, “Survey Uses May Influence Survey Responses,” *Assessment* 31, no. 7 (2024): 1378-1397, p. 1.

⁶ Guryan Affirmation, ¶46.

⁷ TLC, “Driver survey selected results EV owners vs non owners 8-5-24.xlsx.”

⁸ TLC, “TLC Trip Record Data,” accessed at <https://www.nyc.gov/site/tlc/about/tlc-trip-record-data.page>. See Appendix I.

average yearly mileage is 11,751 for passenger trips.⁹ In addition, using data from the TLC Factbook, I estimate the industrywide average utilization rate in 2023 to be approximately 55 percent, which means that the yearly average total mileage (including searching for a rider, driving to a rider, and driving a rider to a destination) for drivers is 21,365.¹⁰ This demonstrates that the per-mile cost factor estimated by the Parrott Report is notably biased upwards, likely because the majority of the respondents are full-time drivers.

IV. THE PARROTT REPORT AND SUBSEQUENT OP-ED IGNORED THE POTENTIAL PASS-THROUGH EFFECTS OF INCREASED MINIMUM PAY

A. The Parrott Report and Dr. Parrott's Subsequent Op-Ed Ignored Predictions of Standard Economic Theory

9. In an Op-Ed column in the New York Daily News on February 4, 2025, Dr. Parrott presents claims to refute Uber's argument that if driver pay increases, then the price of the fare for consumers will also increase.¹¹ He then proceeds to suggest that Uber should reduce its share of the fares if it is concerned about the increase in the prices for consumers. Dr. Parrott's argument ignores the predictions of standard economic theory, empirical evidence from the academic literature, and Dr. Parrott's own 2020 study.

⁹ I rely on Exhibit 10 in the Parrott Report for an estimate of the total number of HV-FHV drivers in NYC of 100,151. The average yearly mileage of 11,751 is calculated as the total distance for HV-FHV passenger trips divided by the total number of HV-FHV drivers in NYC: $1,176,855,184 / 100,151 = 11,751$.

¹⁰ The TLC defines the utilization rate as the total time transporting passengers divided by the total time logged into the app. The TLC Factbook provides monthly utilization rate data for the industry from April 2023 to the present. To estimate the 2023 utilization rate, I calculate the average monthly utilization rate from April to December 2023 as approximately 55 percent. The yearly average total mileage is calculated by dividing the yearly average mileage for passenger trips by the utilization rate: $11,751 / 55\% = 21,365$. For the purpose of this calculation, I assume that the percentage of time utilized is similar to the percentage of miles driven with and without a passenger. TLC Factbook, accessed at <https://www.nyc.gov/site/tlc/about/data-and-research.page>.

¹¹ Parrott, James A., "Uber and Lyft put the brakes on drivers," New York Daily News, February 4, 2025, accessed at <https://www.nydailynews.com/2025/02/04/uber-lyft-put-the-brakes-on-drivers/>.

10. According to standard economic models, increases in wages are likely to be passed on—at least in part—in the form of higher prices to consumers.¹² As input costs increase, firms tend to look to pass on these cost increases through higher prices. An increase in labor costs, which is a variable cost, increases the marginal cost of production for a firm.¹³ In this case, the increase in labor costs for a rideshare company could be passed on in the form of higher prices for consumers.

11. The ability of a business to pass increased costs onto consumer prices tends to be mitigated by the elasticity of demand it faces. As explained by Clemens (2021) in a study of the effect of minimum wage increases: “If the demand for a firm’s output is not perfectly elastic, it can raise prices while losing some, but not all of its customers. A price increase in response to a minimum wage increase is often called pass-through: that is, the minimum wage’s cost passes through the firm to its customers. A firms’ ability to adjust prices depends on the elasticity of demand for its goods and/or services. This depends in turn, on the scope of the market. Firms that produce widely traded goods or services may face large demand elasticities and thus have little capacity to raise prices. By contrast, firms that produce ‘non-tradable’ goods and services may face smaller demand elasticities and have more substantial scope for passing cost increases to consumers.”¹⁴

12. There are various economic reasons why the expected increase in consumer prices following an increase in the cost of labor may be mitigated, including, for example, the sensitivity of marginal costs with respect to output, the sensitivity of consumer demand to changes in prices, among other factors. In the HVFHS industry, the ability of a rideshare company to pass-through increased labor costs from minimum pay increases depends on, among other things, how likely customers are to substitute to a

¹² Varian, Hal R., *Intermediate Microeconomics: A Modern Approach*, (New York: W. W. Norton & Company, Inc., 1996, 4th ed.), pp. 368-369.

¹³ Variable costs are costs that vary with the quantity produced (in this case, rides taken). See Kolmar, Martin, *Principles of Microeconomics*, (Switzerland: Springer International Publishing, 2017, 1st ed.), p. 195.

¹⁴ Clemens, Jeffrey, “How do firms respond to minimum wage increases? understanding the relevance of non-employment margins,” *Journal of Economic Perspectives* 35, no. 1 (2021): 51-72, pp. 54-55.

different rideshare company or alternate modes of transportation, such as yellow taxis and public transport.

13. In a study of the effect of minimum wages on prices, Aaronson (2001) explains, “[E]mpirically, it is not surprising that pass-through predictions vary across industries and, even within industries, over time and across studies. Consequently, the impact of an industry-wide cost change, such as a minimum-wage hike, on price behavior is very much an empirical issue.”¹⁵ In other words, each industry faces different demand for their products, market structure, substitution possibilities and, as such, would face different pass-through effects from increased minimum wages.

14. In summary, the academic literature predicts that increases in minimum pay could have a pass-through effect on prices. Academics have conducted numerous empirical studies to quantify the magnitude of the price pass-through. In the following subsection, I discuss some of the empirical evidence that quantifies the amount of price pass-through. The findings from these studies vary by industry and time period but document that there are pass-through effects ranging from full pass-through to prices to positive but less than full pass-through of minimum wages and other cost increases.

B. The Parrott Report and Op-Ed Ignored Empirical Evidence from the Academic Literature on Pass-throughs

15. There is extensive empirical literature that has examined the extent to which increases in the cost of inputs are passed on to customers through higher prices. Academic studies that examined the impact of increases in sales taxes, which play a similar role as labor costs in firms’ production costs, tend to find evidence of full pass-through of increases in sales taxes to consumers resulting in higher prices. The studies directly studying the price pass-through of labor costs examine how prices change following the adoption of minimum wage increases. These studies quantify the effect on consumers by comparing prices for states or other local jurisdictions affected by minimum wage increases to those jurisdictions that are unaffected. Many of these studies

¹⁵ Aaronson, Daniel, “Price Pass-Through and the Minimum Wage,” *The Review of Economics and Statistics* 83, no. 1 (February 2001): 158-169, p. 159.

focus on worker pay in the restaurant or retail industries. Studies have quantified the price pass-through of labor costs taking into account demand elasticities for the product. Collectively, the academic studies, including one article by Dr. Parrott, find that increases in minimum wages are passed through to prices in part or in full in a statistically significant way. In many settings, these increases are passed through entirely for the customer to pay.

16. For example, Poterba (1996) examined whether state and local retail taxes are fully passed on to consumers in the form of higher prices. The results for the postwar period show that retail prices have increased by the same amount as the increase in taxes, while during the Depression Era, retail prices increased by about two-thirds of the tax increase.¹⁶ Besley and Rosen (1999) examined the extent to which differences in tax rates in different U.S. cities are reflected in higher prices for consumers. For some commodities, the authors found that the after-tax price increases by the same amount as the tax, while for other products, taxes are over-shifted; i.e., the increase in tax revenues of one dollar per unit increases the price by more than one dollar.¹⁷

17. In addition, there is extensive literature that examines the impact of increases in minimum wages on employment and consumer prices. In their landmark study of the fast-food industry in New Jersey and Pennsylvania, Card and Krueger (1994) found no evidence of decreased employment and mixed evidence of pass-through to consumers as a result of an increase in minimum wage.¹⁸ Several follow-up studies of the

¹⁶ The study looks specifically at retail prices for clothing and personal care products. Poterba, James M., "Retail Price Reactions to Changes in State and Local Sales Taxes," *National Tax Journal* 49, no. 2 (1996).

¹⁷ Besley, Timothy J. and Harvey S. Rosen, "Sales Taxes and Prices: An Empirical Analysis," *National Tax Journal* 52, no. 2 (June 1999): 157-178.

¹⁸ For example, prices rose about 3.2 percent faster in New Jersey, where minimum wage increased, compared to Pennsylvania as the control group. Within New Jersey, the stores that were most affected by the minimum wage increase did not exhibit significantly different price changes from the other stores. Card, David, and Alan B. Krueger, "Minimum wages and employment: a case study of the fast-food industry in New Jersey and Pennsylvania," *American Economic Review* 84, no. 4 (1994): 772-793.

fast-food industry, however, have found evidence of substantial pass-through of minimum wages to consumer prices.¹⁹

18. More recent studies using more detailed data show substantial increases in consumer prices as a result of an increase in minimum wage. For example, Harasztosi and Lindner (2019) found that 75 percent of minimum wage increases are paid by consumers, while companies absorb the remaining 25 percent.²⁰ The study found that firms employing minimum wage workers experienced an increase in labor costs, which was largely absorbed by higher output prices.²¹ Renkin, et.al, (2022) estimated the pass-through of minimum wage increases to the prices of U.S. grocery and drug stores. Renkin, et. al estimated that a 10 percent minimum wage hike translates to a 0.36 percent increase in prices at grocery and drug stores. This magnitude is consistent with a full pass-through of cost increases to consumer prices.²² This study concluded that consumers, not the firms or the workers, end up bearing the bulk of the cost of the increase in minimum wage.²³ The evidence of almost complete pass-through of minimum

¹⁹ Ashenfelter, Orley and Stepan Jurajda, “Minimum Wages, Wages, and Price Pass-Through: The Case of McDonald’s Restaurants,” *Journal of Labor Economics* 40, no. S1 (April 2022). See, also, Aaronson, Daniel, “Price Pass-Through and the Minimum Wage,” *The Review of Economics and Statistics* 83, no. 1 (February 2001): 158-169. See, also, Aaronson, Daniel, Eric French, and James MacDonald, “The Minimum Wage, Restaurant Prices, and Labor Market Structure,” *Journal of Human Resources* 43, no. 3 (2008): 688-720.

²⁰ Harasztosi, Peter, and Attila Lindner, “Who Pays for the Minimum Wage?” *American Economic Review* 109, no. 8 (2019): 2693-2727.

²¹ Harasztosi, Peter, and Attila Lindner, “Who Pays for the Minimum Wage?” *American Economic Review* 109, no. 8 (2019): 2693-2727.

²² Renkin, Tobias, Claire Montialoux, and Michael Siegenthaler, “The Pass-Through of Minimum Wages Into U.S. Retail Prices: Evidence From Supermarket Scanner Data,” *Review of Economics and Statistics* 104, no. 5 (September 2022): 890-908. The study does not find evidence that demand for grocery products changed or that stores reduced employment following a rise in minimum wage. Another study using data similar to Renkin et al. finds a 0.6 to 0.8 percent increase in grocery store prices from a 10 percent increase in minimum wage. See Leung, Justin H, “Minimum Wage and Real Wage Inequality: Evidence From Pass-Through to Retail Prices,” *Review of Economics and Statistics* 103, no. 4 (2021): 754-769.

²³ Renkin, Tobias, Claire Montialoux, and Michael Siegenthaler, “The Pass-Through of Minimum Wages Into U.S. Retail Prices: Evidence From Supermarket Scanner Data,” *Review of Economics and Statistics* 104, no. 5 (September 2022): 890-908, p, 890.

wage laws to prices is confirmed by recent literature surveys by Dube and Lindner (2024) and Kline (2025).²⁴

19. Dr. Parrott’s claims also appear to contradict his own research on the effects of a minimum pay increase on consumer prices. For example, a 2018 study co-authored by Dr. Parrott predicted that increases to minimum driver pay could increase rider fares by “about three to five percent.”²⁵ An academic article that Dr. Parrott co-authored in 2020 confirmed the 2018 study’s predictions and found that the TLC’s minimum pay mandate, which went into effect February 2019, was associated with increases in fares.²⁶ Specifically, the 2020 study found that passenger fares increased by an average of 5.9 percent, on average, from June 2018 to June 2019.²⁷ The 2020 study further reported that the fare increase was most pronounced for routes most affected by the pay standard, which suggests that the minimum pay standard could be the underlying reason for the fare increase.²⁸

20. Dr. Parrott’s 2020 paper also found that rideshare companies’ commission percentage declined around the introduction of the TLC’s minimum pay mandate, with the largest declines occurring for weekday off-peak trips when the pay mandate is most

²⁴ Kline, Patrick M., “Labor Market Monopsony: Fundamentals and Frontiers,” Working Paper No. 33467, National Bureau of Economic Research, February 2025. “Though Card and Krueger (1994)’s specifications estimating price passthrough from variation in store specific exposure were statistically insignificant, several modern studies utilizing higher powered research designs confirm that exposure to minimum wage hikes yield substantial increases in product prices,” at p. 54. See, also, Dube, Arindrajit, and Attila Lindner, “Minimum wages in the 21st century,” *Handbook of Labor Economics* 5 (2024): 261-383, see Table 4.

²⁵ James A. Parrott and Michael Reich, *An Earnings Standard for New York City’s App-Based Drivers: Economic Analysis and Policy Assessment*, at 13 (July 2018), available at <https://static1.squarespace.com/static/53ee4f0be4b015b9c3690d84/t/5b3a3aaa0e2e72ca74079142/1530542764109/Parrott-Reich+NYC+App+Drivers+TLC+Jul+2018jul1.pdf>.

²⁶ Koustas, Dimitri, James Parrott, and Michael Reich, “New York City’s Gig Driver Pay Standard: Effects on Drivers, Passengers, and the Companies,” Center for New York City Affairs at the New School, December 2020.

²⁷ Koustas, Dimitri, James Parrott, and Michael Reich, “New York City’s Gig Driver Pay Standard: Effects on Drivers, Passengers, and the Companies,” Center for New York City Affairs at the New School, December 2020, p. 8.

²⁸ Koustas, Dimitri, James Parrott, and Michael Reich, “New York City’s Gig Driver Pay Standard: Effects on Drivers, Passengers, and the Companies,” Center for New York City Affairs at the New School, December 2020, p. 8.

likely to affect a large portion of trips.²⁹ These results contradict Dr. Parrott's arguments in his Op-Ed column, where he claims if a rideshare company is "concerned that rising fares are discouraging passengers, it has wide latitude to lower its take."³⁰ Dr. Parrott's 2020 paper shows that even if a rideshare company reduced its share of the passenger fares, some of the minimum pay increases may still be passed on to customers through fare increases.³¹

I affirm this 5th day of March, 2025, under the penalties of perjury under the laws of New York, which may include a fine or imprisonment, that the foregoing is true, and I understand that this document may be filed in an action or proceeding in a court of law.



Jonathan Guryan

²⁹ Koustas, Dimitri, James Parrott, and Michael Reich, "New York City's Gig Driver Pay Standard: Effects on Drivers, Passengers, and the Companies," Center for New York City Affairs at the New School, December 2020, p. 12.

³⁰ Parrott, James A., "Uber and Lyft put the brakes on drivers," New York Daily News, February 4, 2025, accessed at <https://www.nydailynews.com/2025/02/04/uber-lyft-put-the-brakes-on-drivers/>.

³¹ Koustas, Dimitri, James Parrott, and Michael Reich, "New York City's Gig Driver Pay Standard: Effects on Drivers, Passengers, and the Companies," Center for New York City Affairs at the New School, December 2020, p. 5.

APPENDIX I

Monthly Mileage for HVFHS Drivers in 2023

<u>Month</u>	<u>Miles Driven¹</u>
(1)	(2)
January	89,995,432
February	86,478,929
March	100,810,703
April	96,124,998
May	102,288,055
June	99,433,729
July	98,240,789
August	95,838,653
September	101,114,141
October	103,382,576
November	98,531,035
December	104,616,144
Total	1,176,855,184

Notes and Sources:

- Data are from the TLC High Volume FHV Trip Records.

¹ Miles driven is calculated as the sum of the "trip_miles" column for all observations for a given month-year. The "trip_miles" column is the total miles driven during an HVFHS trip.

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Employment

Northwestern University, Lawyer Taylor Professor of Education and Social Policy, School of Education and Social Policy, September 2019 – present.

Northwestern University, Professor of Human Development and Social Policy, School of Education and Social Policy, September 2017 – 2019.

Northwestern University, Associate Professor of Human Development and Social Policy and Economics, School of Education and Social Policy, July 2010 – 2017.

Northwestern University, Faculty Fellow, Institute for Policy Research, July 2010 – Present.

Northwestern University, Program Coordinator and Director of Graduate Studies, Human Development and Social Policy program, School of Education and Social Policy, September 2016 – 2019.

Northwestern University, Member by courtesy, Department of Economics and Kellogg School of Management, July 2010 – Present.

Education Lab, University of Chicago Urban Labs, Co-Director and Co-Founder, September 2011 – Present.

University of Chicago Booth School of Business, Associate Professor of Economics, July 2004 – 2010.

Princeton University, Industrial Relations / Education Research Sections Visiting Fellow, September 2006 – June 2007.

University of Chicago Booth School of Business, Assistant Professor of Economics, July 2000 – July 2004.

Education

Massachusetts Institute of Technology, 1996-2000, Ph. D. in Economics.

Princeton University, 1992-1996, A.B. in Economics, *Cum Laude*.

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W.T. Grant Foundation (180140): “The Causes of Truancy and Dropout: A Mixed-Methods Experimental Study in the Chicago Public Schools” (Guryan:PI) 2011-2014.

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Institute for Education Sciences, U.S. Department of Education: “Preventing truancy in urban schools through provision of social services by truancy officers: A Goal 3 randomized efficacy trial (Chicago Public Schools)” (Guryan:PI) 2010-2014.

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Awards and Honors

National Academy of Education, Elected member, 2021-present.

John T. Dunlop Outstanding Scholar Award, awarded by the Labor and Employment Relations Association, 2010.

Centel Foundation/Robert P. Reuss Scholar, Booth School of Business, University of Chicago, 2002-2003.

National Science Foundation, Graduate Research Fellow, 1996-1999.

Litigation Testimony and Expert Reports

Testimony at trial, hearing, and arbitration

"State of Colorado, ex rel. John W. Suthers, Attorney General, and Julie Mead, Administrator, Uniform Consumer Credit Code, v. Center for Excellence in Higher Education, Inc., et al." District Court, Denver City and County, Colorado. Case no. 2014cv34530. Testimony at preliminary injunction hearing.

"State of Minnesota by its Attorney General, Lori Swanson v. Minnesota School of Business, Inc, et al." State of Minnesota, District Court, County of Hennepin, Fourth Judicial District. Court file no. 27-CV-14-12558. Testimony at trial.

"Kenneth Martin, Aaron Truesdell, and Johnny Tejada, v. F.E. Moran Inc., Fire Protection of Northern Illinois." U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 13 C 3526. Testimony at Daubert hearing.

"Kenneth Martin, Aaron Truesdell, and Johnny Tejada, v. F.E. Moran Inc., Fire Protection of Northern Illinois." U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 13 C 3526. Testimony at trial.

"State of Colorado, ex rel. John W. Suthers, Attorney General, and Julie Mead, Administrator, Uniform Consumer Credit Code, v. Center for Excellence in Higher Education, Inc., et al." District Court, Denver City and County, Colorado. Case no. 2014cv34530. Testimony at trial.

“Michael Allard v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0003-0905. Testimony at arbitration hearing.

“David Kirk v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0002-4460. Testimony at arbitration hearing.

“Michael Reynaud and Fiona Reynaud v. Ogletree, Deakins, Nash, Smoak & Stewart, P.C.; Technicolor Creative Services USA, Inc.” Superior Court of the State of California, County of Los Angeles, Central Branch. Case No. BC632972. Testimony at trial.

“State of Minnesota by its Attorney General, Lori Swanson v. Minnesota School of Business, Inc, et al.” State of Minnesota, District Court, County of Hennepin, Fourth Judicial District. Court file no. 27-CV-14-12558. Testimony at trial.

“PECO Pallet, Inc. v. Northwest Pallet Supply Co.” U.S. District Court for the Northern District of Illinois Eastern Division. Civil Action No. 1:15-cv-06811. Testimony at trial.

“Whitney Ashby. v. Western Culinary Institute, LTD and Career Education Corporation.” American Arbitration Association. Testimony at arbitration hearing.

“Michael Pizzo v. Adtalem Global Education Inc. et al.” JAMS Ref. Number: 1340015940. Testimony at arbitration hearing.

“Archibald v. DeVry, et al.” JAMS Ref. Number: 1340016080. Testimony at arbitration hearing.

“Tillery v. DeVry Education Group, Inc., et al.” JAMS Ref. Number: 1340016095. Testimony at arbitration hearing.

“Caro v. DeVry Education Group, Inc., et al.” JAMS Ref. Number: 1340015757. Testimony at arbitration hearing.

“Osborne v. DeVry University, et al.” JAMS Ref. Number: 1340017973. Testimony at arbitration hearing.

“Jacobs v. DeVry University, et al.” JAMS Ref. Number: 1340017980. Testimony at arbitration hearing.

“Forsythe v. DeVry Education Group, Inc., et al.” JAMS Ref. Number: 1340016020. Testimony at arbitration hearing.

“Hrinda v. DeVry University, et al.” JAMS Ref No. 1340016074. Testimony at arbitration hearing.

“Perez v. DeVry University, et al.” JAMS Ref No. 1340018384. Testimony at arbitration hearing.

“Smith v. DeVry University, et al.” JAMS Ref No. 1340018381. Testimony at arbitration hearing.

“Haynes v. DeVry University, et al.” JAMS Ref No. 1340017974. Testimony at arbitration.

“Sandra Selden v. Des Moines Area Community College”, Iowa District Court for Polk County, Case No. LACL147358. Testimony at trial.

“Lisa Carvalho v. Santander Bank, N.A.” U.S. District Court, District of Rhode Island. Case 1:19-cv-00287. Testimony at trial.

“Joyce DeLucca v. Hayfin Capital Management LLC,” American Arbitration Association, AAA No. 01-22-0004-0911. Testimony at arbitration hearing.

“Bonnie Magallon, et al. v. Robert Half International, Inc.” United States District Court for the District of Oregon, Eugene Division. Case No. 6:13-cv-01478-AA. Testimony at evidentiary hearing.

“Massachusetts Coalition for Immigration Reform, et al. v. U.S. Department of Homeland Security, et al.,” United States District Court for the District of Columbia, Case No: 20-cv-3438-TNM. Testimony at trial.

Deposition testimony

“Lerman v. Turner, Carter, Kapelke, Kelly and Columbia College Chicago.” U.S. District Court, Northern District of Illinois. 1:10-cv-02169. Deposition.

“Haley v. Cohen & Steers Capital Management.” U.S. District Court, Northern District of California. 4:10-cv-03856-PJH. Deposition.

“Midwest Fence Corporation v. U.S. Department of Transportation, et al.” U.S. District Court, Northern District of Illinois, Eastern Division. Case no. 10-cv-5627. Deposition.

“Jeffrey G. Gerasi v. Gilbane Building Company, Inc., AT&T, Services Inc., and Johnson Controls, Inc.” Circuit Court of Cook County, Illinois. Case no. 08 L 7258. Deposition.

“Midwest Fence Corporation v. U.S. Department of Transportation, et al.” U.S. District Court, Northern District of Illinois, Eastern Division. Case no. 10-cv-5627. Deposition.

“Beth A. Stokes v. John Deere Seeding Group, a subsidiary of Deere & Company a/k/a John Deere Company; and Jim Gunnison.” U.S. District Court for the Central District of Illinois Peoria Division. Case No. 4:12-cv-04054-SLD-JAG. Deposition.

“Thomas E. Perez, Secretary of Labor, United States Department of Labor v. American Future Systems, Inc. d/b/a Progressive Business Publications, a corporation; and Edward Satell, individually and as President of the above referenced corporation.” U.S. District Court for the Eastern District of Pennsylvania. Case no. 12-6171. Deposition.

“People of the State of Illinois, v. Alta Colleges, Inc., et al.” Circuit Court of Cook County, Illinois County Department, Chancery Division. Case no. 12 CH 01587. Deposition.

“Duane Porter, et al., v. Pipefitters Association Local Union 597, U.A.” U.S. District Court for the Northern District of Illinois Eastern Division. Case no. 12-cv-09844. Deposition.

“Randy C. Axelrod, v. Anthem, Inc. and All of its Affiliates, Wellpoint, Inc., and Amgen Inc.” Marion Superior Court, County of Marion, State of Indiana. Cause No. 49D03-0710-PL-042057. Deposition.

“Terry Christopher, v. Richard Smykal, Inc. and American Built Systems, Inc.” Circuit Court of the 12th Judicial Circuit, Will County, Illinois. No. 11 L 000526. Deposition.

“Jennifer DiPerna v. The Chicago School of Professional Psychology.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 1:14-cv-0057. Deposition.

“Timothy O’Brien, et al., v. Caterpillar Inc.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 14-cv-7229. Deposition.

“Kenneth Martin, Aaron Truesdell, and Johnny Tejada, v. F.E. Moran Inc., Fire Protection of Northern Illinois.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 13 C 3526. Deposition.

“Brenda Koehler, Kelly Parker, Layla Bolten, & Gregory Handloser v. Infosys Technologies Limited, Inc., and Infosys Public Services, Inc.” U.S. District Court for the Eastern District of Wisconsin. Civil Action No. 2:13-cv-885. Deposition.

“State of Colorado, ex rel. John W. Suthers, Attorney General, and Julie Mead, Administrator, Uniform Consumer Credit Code, v. Center for Excellence in Higher Education, Inc., et al.” District Court, Denver City and County, Colorado. Case no. 2014cv34530. Deposition.

“Michael Reynaud and Fiona Reynaud v. Ogletree, Deakins, Nash Smoak & Stewart, P.C.; Technicolor Creative Services USA, Inc.” Superior Court of the State of California, County of Los Angeles, Central Branch. Case No. BC632972. Deposition.

“Jens Boy v. Zimmer, Inc.; Zimmer Dental, Inc. et al” Superior Court of the State of California, County of San Diego. Case No. 37-2016-00002761-CU-DF-CTL. Deposition.

“PECO Pallet, Inc. v. Northwest Pallet Supply Co.”, U.S. District Court for the Northern District of Illinois Eastern Division. Civil Action No. 1:15-cv-06811. Deposition.

“Robert Bosch LLC and Bosch Brake Components LLC v. Nucap Industries Inc. and Nucap US Inc.,” U.S. District Court for the Northern District of Illinois. Civil Action No. 15-cv-02207. Deposition.

“Brian Chan, et al. v. Big Geyser, Inc., Lewis Hershkowitz, Gerard A. Reda, Lynn Hershkowitz, Steven Hershkowitz, Eric Celt, Ron Genovese, Mike Wodiska, Kayte Mooney, and Dennis Tompkins.” U.S. District Court for the Southern District of New York. Case No. 17-cv-6473. Deposition.

“Tillery v. DeVry Education Group, Inc., et al.” JAMS Case No. 1340016095. Deposition.

“Monae v. Cook County Sheriff’s Office, et al.” and “Simpson v. Cook County Sheriff’s Office, et al.” U.S. District Court for the Northern District of Illinois. Case Nos. 18-cv-0424 and 18-cv-0553. Deposition.

“Zdzislaw Stoch v. John Crane, Inc.” Circuit Court of Cook County Illinois. Case No. 2016-L-009400. Deposition.

“Lisa Carvalho v. Santander Bank, N.A.” U.S. District Court, District of Rhode Island. Case 1:19-cv-00287. Deposition.

“Nicholas Vichio v. US Foods, Inc.” U.S. District Court, Northern District of Illinois. Case No. 18-cv-8063. Deposition.

“Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action) and Victor Cortez Arrellano v. XPO Port Services Inc. (Consolidated Action).”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Deposition.

“Aaron Senne, et al. v. Office of the Commissioner of Baseball, et al.” U.S. District Court for the Northern District of California. Case No. 3:14-cv-00608-JCS. Deposition.

“Ultima Services Corporation v. U.S. Department of Agriculture, et al.” U.S. District Court, Tennessee Eastern District. Case No. 2:20-cv-00041. Deposition.

“Najera v. John Vianney Johnson, Uber Technologies, Inc., Raiser LLC, Lyft, Inc.” Superior Court of the State of California, County of Orange, Central Justice Center. Case Number 30-2018-01006 334-CU-PA-CJC. Deposition.

“Sydney Dillard v. DePaul University.” United States District Court for the Northern District of Illinois. Case No. 1:20-cv-7760. Deposition.

“Bonnie Magallon, et al. v. Robert Half International, Inc.” United States District Court for the District of Oregon, Eugene Division. Case No. 6:13-cv-01478-AA. Deposition.

“Vernon Keith Robinson v. Des Moines Public Schools,” Iowa District Court for Polk County. Case No. LACL136651. Deposition.

“Massachusetts Coalition for Immigration Reform, et al. v. U.S. Department of Homeland Security, et al.,” United States District Court for the District of Columbia, Case No: 20-cv-3438-TNM. Deposition

“General Motors LLC, General Motors Company v. Alphons Iacobelli, FCA US LLC, Fiat Chrysler Automobiles, N.V., Jerome Durden,” State of Michigan in the Circuit Court for the County of Wayne. Civil Action No. 20-011998-CB. Deposition.

“Ethiopian Airlines Flight ET 302 Crash – Saad Khalaf M Al-Mutairi,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Deposition.

“Ethiopian Airlines Flight ET 302 Crash – Elizabeth Minwuyelet,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Deposition.

“Ethiopian Airlines Flight ET 302 Crash – Anne Mukui Musyoki,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Deposition.

“Ethiopian Airlines Flight ET 302 Crash – Antoine Lewis,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-04964. Deposition.

“Ethiopian Airlines Flight ET 302 Crash – Jonathan Seex,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-03392. Deposition.

Written testimony

“Lerman v. Turner, Carter, Kapelke, Kelly and Columbia College Chicago.” U.S. District Court, Northern District of Illinois. 1:10-cv-02169. Expert report.

“Haley v. Cohen & Steers Capital Management.” U.S. District Court, Northern District of California. 4:10-cv-03856-PJH. Expert report.

“Haley v. Cohen & Steers Capital Management.” U.S. District Court, Northern District of California. 4:10-cv-03856-PJH. Declaration.

“Report in the Matter of McMenimen & Associates, Inc. vs. In-Store Marketing Institute, Inc.” U.S. District Court, Eastern District of Wisconsin. 2:11-cv-01095-WEC. Expert report.

“Report in the Matter of Robert G. Blatz v. CubeSmart Trust, et al.” Court of Common Pleas for Chester County, Pennsylvania. 2011-08499. Expert report.

“Report in the Matter of Gary Van Poperin, et al. vs. Hewlett-Packard Company, Inc.” U.S. District Court, Eastern District of Michigan. 10-cv-11110. Expert Report.

“Report in the Matter of Midwest Fence Corporation v. U.S. Department of Transportation, et al.” U.S. District Court, Northern District of Illinois, Eastern Division. Case no. 10-cv-5627. Expert Report.

“Report in the Matter of Jeffrey G. Gerasi v. Gilbane Building Company, Inc., AT&T, Services Inc., and Johnson Controls, Inc.” Circuit Court of Cook County, Illinois. Case no. 08 L 7258. Expert Report.

“Report in the matter of Beth A. Stokes v. John Deere Seeding Group, a subsidiary of Deere & Company a/k/a John Deere Company; and Jim Gunnison.” U.S. District Court for the Central District of Illinois Peoria Division. Case no. 4:12-cv-04054-SLD-JAG. Expert Report.

“Expert Report in the Matter of Thomas E. Perez, Secretary of Labor, United States Department of Labor v. American Future Systems, Inc. d/b/a Progressive Business Publications, a corporation; and Edward Satell, individually and as President of the above referenced corporation.” U.S. District Court for the Eastern District of Pennsylvania. Case no. 12-6171. Expert Report.

“Report in the matter of People of the State of Illinois, v. Alta Colleges, Inc., et al.” Circuit Court of Cook County, Illinois County Department, Chancery Division. Case no. 12 CH 01587. Expert Report.

“Report in the matter of State of Colorado, ex rel. John W. Suthers, Attorney General, and Julie Mead, Administrator, Uniform Consumer Credit Code, v. Center for Excellence in Higher Education, Inc., et al.” District Court, Denver City and County, Colorado. Case no. 2014cv34530. Expert Report.

“Report in the matter of Joseph Dohl and Patricia Davis, v. Sunrise Mountainview Hospital, Inc., et al.” District Court, Clark County, Nevada. Case no. A698672. Expert Report.

“Expert Report of Dr. Jonathan Guryan” in “Duane Porter, et al., v. Pipefitters Association Local Union 597, U.A.” U.S. District Court for the Northern District of Illinois Eastern Division. Case no. 12-cv-09844. Expert Report.

“Rebuttal Report in the matter of State of Minnesota by its Attorney General, Lori Swanson v. Minnesota School of Business, Inc, et al.” State of Minnesota, District Court, County of Hennepin, Fourth Judicial District. Court file no. 27-CV-14-12558. Expert Report.

“Report in the matter of Terry Christopher, v. Richard Smykal, Inc. and American Built Systems, Inc.” Circuit Court of the 12th Judicial Circuit, Will County, Illinois. No. 11 L 000526. Expert Report.

“Report in the matter of Randy C. Axelrod, v. Anthem, Inc. and All of its Affiliates, Wellpoint, Inc., and Amgen Inc.” Marion Superior Court, County of Marion, State of Indiana. Cause No. 49D03-0710-PL-042057. Expert Report.

“Report in the matter of Megan and James Gibson v. Prime Healthcare Services, Inc., et al.” Second Judicial District Court of the State of Nevada in and for the County of Washoe. Case No. CV14-10580. Expert Report.

“Report in the matter of Kingston Parnell, et al. v. Centennial Hills Hospital Medical Center, et al.” District Court Clark County Nevada. Case No. A-14-710329-C.

“Report in the matter of Jennifer DiPerna v. The Chicago School of Professional Psychology.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 1:14-cv-0057. Expert Report.

“Report in the matter of Timothy O’Brien, et al., v. Caterpillar Inc.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 14-cv-7229. Expert Report.

“Report in the matter of Kenneth Martin, Aaron Truesdell, and Johnny Tejada, v. F.E. Moran Inc., Fire Protection of Northern Illinois.” U.S. District Court for the Northern District of Illinois, Eastern Division. Case No. 13 C 3526. Expert Report.

“Report in the matter of Cara Williams, et al., v. Wells Fargo Bank, N.A.” U.S. District Court for the Southern District of Iowa, Central Division. Case No. 4:15-cv-00038. Expert Report.

“Declaration in the matter of Aaron Senne, et al. v. Office of the Commissioner of Baseball, and unincorporated association d/b/a Major League Baseball.” U.S. District Court for the Northern District of California. Case No. 3:14-cv-00608-JCS. Declaration.

“Report in the matter of Brenda Koehler, Kelly Parker, Layla Bolten, & Gregory Handloser v. Infosys Technologies Limited, Inc., and Infosys Public Services, Inc.” U.S. District Court for the Eastern District of Wisconsin. Civil Action No. 2:13-cv-885. Expert Report.

“Report in the matter of State of Colorado, ex rel. John W. Suthers, Attorney General, and Julie Mead, Administrator, Uniform Consumer Credit Code, v. Center for Excellence in Higher Education, Inc., et al.” District Court, Denver City and County, Colorado. Case number: 2014cv34530. Expert Report.

“Declaration of Jonathan Guryan in Support of Defendant’s Opposition to Motion to Certify Class.” Nathan Surrett et al. v. Western Culinary Institute, LTD and Career Education Corporation. Circuit Court for the State of Oregon for the County of Multnomah. Case No. 0803-03530.

“Report in the matter of Michael Allard v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0003-0905. Expert Report.

“Report in the matter of David Kirk v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0002-4460. Expert Report.

“Report in the matter of Denise Holtz v. General Mills, Inc.” American Arbitration Association. Expert Report.

“Report in the matter of Michael Murray v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0003-2050. Expert Report.

“Report in the matter of James Heflin v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0004-0321. Expert Report.

“Report in the matter of Peggy Maxe v. General Mills, Inc.” American Arbitration Association. Case No. 01-17-0005-2225. Expert Report.

“Report in the matter of PECO Pallet, Inc. v. Northwest Pallet Supply Co.” U.S. District Court for the Northern District of Illinois Eastern Division. Civil Action No. 1:15-cv-06811. Expert Report.

“Rebuttal Report in the matter of PECO Pallet, Inc. v. Northwest Pallet Supply Co.” U.S. District Court for the Northern District of Illinois, Eastern Division. Civil Action No. 1:15-cv-06811. Expert Report.

“Expert report in the matter of Robert Bosch LLC and Bosch Brake Components LLC v. Nucap Industries Inc. and Nucap US Inc.” U.S. District Court for the Northern District of Illinois. Civil Action No. 15-cv-02207. Expert Report.

“Expert rebuttal report in the matter of Robert Bosch LLC and Bosch Brake Components LLC v. Nucap Industries Inc. and Nucap US Inc.” U.S. District Court for the Northern District of Illinois. Civil Action No. 15-cv-02207. Expert Report.

“Report in the matter of Brian Chan, et al. v. Big Geyser, Inc., Lewis Hershkowitz, Gerard A. Reda, Lynn Hershkowitz, Steven Hershkowitz, Eric Celt, Ron Genovese, Mike Wodiska, Kayte Mooney, and Dennis Tompkins.” U.S. District Court for the Southern District of New York. Case No. 17-cv-6473. Expert Report.

“Report in the matter of Darryl Williams and Howard Brooks, et al. v. Jani-King of Philadelphia, Inc., Jani-King, Inc., and Jani-King International, Inc.” U.S. District Court for the Eastern District of Pennsylvania. Case No. 09-1738-RBS. Expert Report.

“Report in the matter of Jorge Valencia v. U.S. Bank National Association.” U.S. District Court for the Southern District of Iowa, Central Division. Case No. 4:18-cv-00056. Expert Report.

“Expert Affidavit of Dr. Jonathan Guryan.” Supreme Court of the State of New York, County of New York. Index No. 159947/2019. Affidavit filed in Tri-City, LLC, Endor Car and Driver, LLC, Lyft, Inc. v. New York City Taxi & Limousine Commission.

“Reply Affidavit of Dr. Jonathan Guryan.” Supreme Court of the State of New York, County of New York. Index No. 159947/2019. Affidavit filed in Tri-City, LLC, Endor Car and Driver, LLC, Lyft, Inc. v. New York City Taxi & Limousine Commission.

“Report in the matter of John W. Brennan v. Arthur D. Little, Inc.” Superior Court, Commonwealth of Massachusetts. CA No.: 1884-cv-02845. Expert Report.

“Expert Rebuttal Report of Jonathan Guryan, Ph.D.” U.S. District Court for the Northern District of Illinois. Case Nos. 18-cv-0424 and 18-cv-0553. Monae v. Cook County Sheriff’s Office, et al. and Simpson v. Cook County Sheriff’s Office, et al. Expert Report.

“Report in the matter of Omotola Owioye, v. Adtalem Global Education Inc. et al.” JAMS Ref. Number 1340015799. Expert Report.

“Report in the matter of Michael Pizzo, v. Adtalem Global Education Inc. et al.” JAMS Ref. Number 1340015940. Expert Report.

“Report in the matter of Zdzislaw Stoch v. John Crane, Inc.” Circuit Court of Cook County Illinois. Case No. 2016-L-009400. Expert Report.

“Report in the matters of Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action) and Victor Cortez Arrellano v. XPO Port Services Inc. (Consolidated Action).” Superior Court State of California, County of Los Angeles. Case No. BC655393. Expert Report.

“Report in the matter of Lisa Carvalho v. Santander Bank, N.A.” U.S. District Court, District of Rhode Island. Case 1:19-cv-00287. Expert Report.

“Report in the matter of Nicholas Vichio v. US Foods, Inc.” U.S. District Court, Northern District of Illinois. Case No. 18-cv-8063. Expert Report.

“Report in the matter of Mitchell Clements v. WP Operations LLC”, U.S. District Court, Western District of Wisconsin, Case No. 19-cv-1051-wmc. Expert Report.

“Report in the matter of Jared Mode, et al. v. S-L Distribution Company, LLC, S-L Distribution Company, INC., and S-L Routes, LLC.” U.S. District Court, Western District of North Carolina. Case No. 3:18-cv-00150. Expert Report.

“Report in the matter of Sandra Selden v. Des Moines Area Community College”, Iowa District Court for Polk County, Case No. LACL147358. Expert Report.

“Declaration of Jonathan Guryan in support of Defendant and Counter-Claimant XPO Logistics Cartage, LLC’s opposition to Plaintiffs and Counter-Defendants’ special motion to strike counterclaims (Anti-SLAPP)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Declaration.

“Report in the matters of Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action) and Victor Cortez Arrellano v. XPO Port Services Inc. (Consolidated Action).”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Declaration of Jonathan Guryan in support of Defendant and Counter-Claimant XPO Port Services Inc.’s opposition to Plaintiffs and Counter-Defendants’ special motion to strike counterclaims (Anti-SLAPP)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Declaration.

“Rebuttal Report in the matter of Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Supplemental Report in the matter of Angel Omar Alvarez, et al. v. XPO Logistics Cartage LLC (Consolidated Action)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Supplemental Report in the matter of Victor Cortez Arrellano, et al. v. XPO Port Services Inc. (Consolidated Action)”, U.S. District Court, Central District of California, Case No. 2:18-cv-08220-RGK-E. Expert Report.

“Report in the matter of Mark Brackey, et al. v. Winnebago Industries, Inc., John Breuklander, and Gary McCarthy.” Iowa District Court for Winnebago County. Case No. LACV018026. Expert Report.

“Report in the matter of Klayton Fennell v. Comcast Cable Communications Management, LLC and Comcast Corporation.” U.S. District Court, Eastern District of Pennsylvania, Case No. 19-4750. Expert Report.

“Rebuttal Report in the matter of Carzanna Jones and Heynard L. Paz-Chow, on behalf of themselves and all others similarly situated, v. David Uejio, in his official capacity as Acting Director, and Consumer Financial Protection Bureau.” U.S. District Court, District of Columbia, Case No. 18-cv-2132-BAH (D.D.C.). Expert Report.

“Report in the matter of Jessica Smith, v. DeVry University, et al.” JAMS Ref. Number 1340018381. Expert Report.

“Report in the matter of Gwendolyn Haynes, v. DeVry University, et al.” JAMS Ref No. 1340017974.” Expert Report.

“Rebuttal Report in the matter of Aaron Senne, et al. v. Office of the Commissioner of Baseball, et al.” U.S. District Court for the Northern District of California. Case No. 3:14-cv-00608-JCS. Expert Report.

“Report in the matter of Ultima Services Corporation v. U.S. Department of Agriculture, et al.” U.S. District Court, Tennessee Eastern District. Case No. 2:20-cv-00041. Expert Report.

“Report in the matter of Cecil Thomas and John Dean, et al. v. TXX Services, Inc. and Patricia Dougan Hunt.” United States District Court, Eastern District of New York. 13 CV 2789. Expert Report.

“Report in the matter of Sydney Dillard v. DePaul University.” United States District Court for the Northern District of Illinois. Case No. 1:20-cv-7760. Expert Report.

“Report in the matter of Catherine Rose Jochims v. Hartley-Melvin-Sanborn Community School District,” Case No. LAC025330. Expert Report.

“Report in the matter of Van Bawi Ceu, et al. v. Maw Zah, Hyundai Motor Company, et al.,” Iowa District Court for Dallas County. Docket No. 2021CP1002816. Expert Report.

“Report in the matter of Najera v. John Vianney Johnson, Uber Technologies, Inc., Raiser LLC, Lyft, Inc.” Superior Court of the State of California, County of Orange, Central Justice Center. Case Number 30-2018-01006 334-CU-PA-CJC. Expert Report.

“Supplemental Report in the matter of Mark Brackey, et al. v. Winnebago Industries, Inc., John Breuklander, and Gary McCarthy.” Iowa District Court for Winnebago County. Case No. LACV018026. Expert Report.

“Report in the matter of Vernon Keith Robinson v. Des Moines Public Schools,” Iowa District Court for Polk County. Case No. LACL136651. Expert Report.

“Report in the matter of *In re DeVry, University*,” Before the Office of Hearings and Appeals, United States Department of Education, Docket No. 22-54-BD. Expert Report.

“Report in the matter of Joyce DeLucca v. Hayfin Capital Management LLC,” American Arbitration Association, AAA No. 01-22-0004-0911. Expert Report.

“Report in the matter of Bonnie Magallon, et al. v. Robert Half International, Inc.” United States District Court for the District of Oregon, Eugene Division. Case No. 6:13-cv-01478-AA. Expert Report.

“Report in the matter of Massachusetts Coalition for Immigration Reform, et al. v. U.S. Department of Homeland Security, et al.,” United States District Court for the District of Columbia, Case No: 20-cv-3438-TNM. Expert Report.

“Declaration of Dr. Jonathan Guryan,” State of Minnesota County of Hennepin District Court Fourth Judicial District, in “State of Minnesota, by its Attorney General, Keith Ellison, v. Shipt, Inc.,” Court File No. 27-CV-22-15991. Declaration.

“Report in the matter of General Motors LLC, General Motors Company v. Alphons Iacobelli, FCA US LLC, Fiat Chrysler Automobiles, N.V., Jerome Durden,” State of Michigan in the Circuit Court for the County of Wayne. Civil Action No. 20-011998-CB. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Saad Khalaf M Al-Mutairi,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Elizabeth Minwuyelet,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Anne Mukui Musyoki,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-2170. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Antoine Lewis,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-04964. Expert Report.

“Report in the matter of Ethiopian Airlines Flight ET 302 Crash – Jonathan Seex,” United States District Court for the Northern District of Illinois Eastern Division. Case No. 1:19-cv-03392. Expert Report.

“Declaration of Dr. Jonathan Guryan,” State of Minnesota, by its Attorney General, Keith Ellison v. Shipt, Inc., State of Minnesota District Court, County of Hennepin, Fourth Judicial District, Court File No. 27-CV-22-15991. Declaration.

“Affirmation of Jonathan Guryan, Ph.D.” Prepared on behalf of Lyft, Inc., in connection with Proposed Amendments to the Rules Governing Minimum Driver Payment for High-Volume For-Hire Services. New York City Taxi & Limousine Commission. Declaration.

Other Reports

Oral presentations

Presentation of research findings to staff for Senator Tom Harkin.

Presentation of research findings to staff for Congressman George Miller.

Presentation of research findings to Congressional Black Caucus and Congressional Hispanic Caucus.

Presentation of research findings to senior staff, U.S. Department of Education.

Presentation of research findings to U.S. Secretary of Education, Arne Duncan.

Presentation of research findings to OIRA, Office of Management and Budget.

Written reports

“Report on Gainful Employment.” Prepared for the Career College Association.

“Comment on the proposed rule regarding Gainful Employment described in the NPRM released by the Department of Education on July 26, 2010.” Public comment submitted to U.S. Office of Management and Budget commenting on pending regulation.

Professional Activities

Editor, *Journal of Labor Economics*, December 2011 – 2020.

Member, AEA Committee on the Status of Women in the Economics Profession (CSWEP), November 2018 – 2021.

Research Associate, National Bureau of Economic Research. September 2010 – present.

Faculty research fellow, National Bureau of Economic Research, September 2000 – September 2010.

Northwestern University, Faculty Senate Representative, 2022 – present.

Northwestern University, School of Education and Social Policy, Executive Committee, September 2016 – 2022, Executive Committee, co-chair, 2024 – present.

Northwestern University, Institute for Policy Research, Executive Committee, September 2012 – June 2019.

Board Member, Communities in Schools of Chicago, 2017 – present.

Co-Chair, J-PAL State and Local Innovation Initiative. 2015 – 2018.

Faculty Affiliate, Population Research Center, NORC, December 2000 – present.

Associate Editor, *Labour Economics*, 2010 – 2018.

Research Consultant, Federal Reserve Bank of Chicago.

University of Chicago Crime Lab, Faculty Affiliate.

Invited Participant, Young Faculty Leaders Forum, Harvard University.

Referee: *American Economic Review*, *Quarterly Journal of Economics*, *Journal of Political Economy*, *Review of Economic Studies*, *Journal of Public Economics*, *Journal of Labor Economics*, *Review of Economics and Statistics*, *American Economic Journal: Applied Economics*, *American Economic Journal: Economic Policy*, *Journal of Policy Analysis and Management*, *National Tax Journal*, *Economics of Education Review*, *European Economic Review*, *Journal of Human Resources*, *Regulation and Governance*, *Education Next*, *Education Finance and Policy*, *British Journal of Industrial Relations*, *Journal of Law and Economics*.

Teaching:

Northwestern University, School of Education and Social Policy: Quantitative Methods II. The Economics of Inequality and Discrimination.

University of Chicago Booth School of Business: The Employment Relationship, Microeconomics.

EXHIBIT A

From: TLCmail2, TLCmail (TLC)
To: Fredmonski, Christopher R (NYC)
Subject: [Ext] Re: [EXTERNAL] FOIL Request
Date: 2/18/2025 12:55:00 PM
CC: Drylewski, Alexander C (NYC)
BCC:

Message:

Good afternoon,

Thank you for providing the parameters for the email collection. Additionally, we will review the other issues raised with respect to the records previously produced.

Thank you,

Latifah Williams
New York City Taxi and Limousine Commission (TLC)
Legal Affairs
33 Beaver Street, 22nd Floor
New York, NY 10004
tel: 212-676-1135
fax: 212-313-3027
email: foil@tlc.nyc.gov

Unauthorized disclosure of legally privileged or otherwise confidential information is prohibited by law. If you have received this e-mail in error, please notify the sender immediately and delete all records of this e-mail.

From: Fredmonski, Christopher R <Christopher.Fredmonski@skadden.com>
Sent: Tuesday, February 11, 2025 12:05 PM
To: TLCmail2, TLCmail (TLC) <foil@tlc.nyc.gov>
Cc: Drylewski, Alexander C <Alexander.Drylewski@skadden.com>
Subject: RE: [EXTERNAL] FOIL Request

You don't often get email from christopher.fredmonski@skadden.com. [Learn why this is important](#)

Ms. Williams,

Thank you for your email and production of records. We have included some answers to the TLC's questions and follow up points below. If a call would be helpful to discuss, please let us know.

Email Search Parameters – Request Nos. 6, 9, 11, 12

In connection with Request Nos. 6, 9, 11, and 12, the TLC requested search parameters to perform an email collection of responsive records. We are interested in pursuing this portion of the Requests, and propose the following custodians and date ranges:

- **Custodians:** David Do, James, DiGiovanni, Russell Glynn, Maya Zamek, Kenneth Chan, Sarah Kaufman, Kenneth Mitchell, Thomas Sorrentino, Elisa Velazquez, Paul Bader, Andrea Bierstein, Aisha Richard, Evan Hines, Ira Goldapper, Malcolm Cain, Amit Agarwal, and Tanya Scott.

- **Date ranges:** January 2, 2024, to February 11, 2025.

We reserve the right to request record searches of additional custodians and date ranges depending on the results of these searches.

Production Deficiencies – Request Nos. 2 and 12

The TLC states that it “granted” Request No. 2. We did not receive, however, the “TLC data” referenced in footnote 19 of the Proposed Amendments in connection with the proposed 16-hour lockout protections. We also did not receive records reflecting the “assumptions” for the hard-coded inputs in the “composite expense model.” If the TLC believes that these records have been produced, please identify the file names. If they have not been produced, please produce them or confirm that they do not exist.

For Request No. 12, the TLC states that it “does not possess or maintain all survey results,” but that “the survey results summary is attached.” The produced “Driver survey selected results EV owners vs nonEV owners 8-5-24.XLSX” file appears to be only a partial summary of the survey results. Please produce a complete survey results summary, or confirm that no such record exists. Also, please explain why the TLC “does not possess or maintain” the survey results.

Thank you,

Chris

Christopher R. Fredmonski
Skadden, Arps, Slate, Meagher & Flom LLP
 One Manhattan West | New York | New York | 10001-8602
 T: +1.212.735.3275 | F: +1.917.777.3275
christopher.fredmonski@skadden.com

From: TLCmail2, TLCmail (TLC) <foil@tlc.nyc.gov>
Sent: Tuesday, February 4, 2025 1:40 PM
To: Fredmonski, Christopher R (NYC) <Christopher.Fredmonski@skadden.com>
Cc: Drylewski, Alexander C (NYC) <Alexander.Drylewski@skadden.com>
Subject: [Ext] Re: [EXTERNAL] FOIL Request

Good afternoon,

The Taxi and Limousine Commission (TLC) hereby acknowledges receipt of your Freedom of Information Law (FOIL) request dated January 9, 2025. The responses are as follows:

1. The complete administrative record for the Proposed Amendments and Notice of Public Hearing, including but not limited to the “transcript of the record of the proceedings under consideration” as that term is used in CPLR 7804(e). Pursuant to § 87(2) of the New York State Public Officers Law (POL) your request has been partially granted. Copies of proposed amendments, notices of public hearings, as well as transcripts and video recordings after each public hearing are publicly available on the TLC website located at the following link: <https://www.nyc.gov/site/tlc/about/commission-meetings.page>. Public comments pertaining to public hearings are available once the period for submitting comments has closed.

2. All records reviewed, considered, or relied upon by the TLC in connection with developing the Proposed Amendments. For the avoidance of doubt, this includes, without limitation: (i) the "composite expense model" underlying or used to develop the proposed per-mile expense factors, as well as records reflecting the model's inputs, assumptions, calculations, results, and outputs; (ii) the data and analyses used to calculate the proposed utilization rates; and (iii) the "TLC data" referenced in footnote 19 of the Proposed Amendments in connection with the proposed 16-hour lockout protections.
Pursuant to § 87(2) of the POL your request has been granted. The response is attached.
3. All records provided to the TLC in connection with the TLC's development of the Proposed Amendments."
Pursuant to § 87(2) of the POL your request has been granted. The response is attached.
4. All records reflecting alternative drafts or versions of the Proposed Amendments considered by the TLC.
Pursuant to § 87(2)(g)(iii) of the POL your request has been denied. "Alternative drafts or versions of the Proposed Amendments" are not final agency policy or determinations.
5. All reports, analyses, memos, or other documents, including all drafts and versions of each, drafted, prepared, or otherwise created by or for the TLC in connection with developing the Proposed Amendments.
Pursuant to § 87(2) of the POL your request has been granted. The response is attached.
6. All communications regarding the Proposed Amendments including but not limited to Commissioner David Do or any employee of the TLC within the Policy and External Affairs and/or Legal Affairs Department.
This portion of your request requires an email search to determine if there are any responsive records, and if they can be disclosed. If you are interested in pursuing this, your request can be added to the queue. Given various constraints, your email collection would be completed and redacted pursuant to the relevant FOIL provisions in approximately 150 business days. Please respond to this email by February 21, 2025 to confirm if you are interested in pursuing this portion of the request. If you are, please provide: 1) date parameters for the search, 2) a list of email custodians (if you need a copy of the TLC organizational chart to choose, please let us know), and 3) key words, if any.
7. Records sufficient to identify each outside expert and/or consultant involved in developing the Proposed Amendments.
Pursuant to § 87(2) of the POL your request has been granted. The response is attached.
8. Records sufficient to identify the compensation earned by any outside expert and/or consultant involved in developing the Proposed Amendments, including but not limited to James A. Parrott, Center for New York City Affairs at The New School.
Pursuant to § 87(2) of the POL your request has been granted. The response is attached.
9. All communications between the TLC and any outside expert or consultant retained in connection with developing the Proposed Amendments, including but not limited to James Parrott.
This portion of your request requires an email search to determine if there are any responsive records, and if they can be disclosed. If you are interested in pursuing this, your request can be added to the queue. Given various constraints, your email collection would be completed and redacted pursuant to the relevant FOIL provisions in approximately 150 business days. Please respond to this email by February 21, 2025 to confirm if you are interested in pursuing this portion of the request. If you are, please provide: 1) date parameters for the search, 2) a list of

email custodians (if you need a copy of the TLC organizational chart to choose, please let us know), and 3) key words, if any.

10. All communications between the TLC and any outside experts or consultants considered by the TLC, but not retained, in connection with developing the Proposed Amendments.

Please be advised there were no "outside experts or consultants considered by the TLC, but not retained, in connection with developing the Proposed Amendments." Therefore, there is no record to provide.

11. All records, correspondence, and drafts relating to the "Revised Expense Model for the NYC Taxi and Limousine Commission's High-Volume For-Hire Vehicle Minimum Pay Standard" by James Parrott, dated December 2024 ("Parrot Report").

Pursuant to § 87(2) of the POL your request has been partially granted. The response is attached.

The portion of your request seeking correspondence requires an email search to determine if there are any other responsive records, and if they can be disclosed. If you are interested in pursuing this, your request can be added to the queue. Given various constraints, your email collection would be completed and redacted pursuant to the relevant FOIL provisions in approximately 150 business days. Please respond to this email by February 21, 2025 to confirm if you are interested in pursuing this portion of the request. If you are, please provide: 1) date parameters for the search, 2) a list of email custodians (if you need a copy of the TLC organizational chart to choose, please let us know), and 3) key words, if any.

12. All records relating to the driver survey employed by the study referenced in the Parrott Report, including survey questions, survey results, any analysis of survey results, criteria and process for the referenced "data cleaning and the removal of outliers," and correspondence regarding the survey.

Pursuant to § 87(2) of the POL your request has been partially granted. The response is attached. Please be advised that the TLC does not possess or maintain all survey results. However, the survey results summary is attached. Additionally, the TLC does not possess or maintain any records relating to the "criteria and process for the referenced "data cleaning and the removal of outliers."

Lastly, the portion of your request seeking correspondence requires an email search to determine if there are any other responsive records, and if they can be disclosed. If you are interested in pursuing this, your request can be added to the queue. Given various constraints, your email collection would be completed and redacted pursuant to the relevant FOIL provisions in approximately 150 business days. Please respond to this email by February 21, 2025 to confirm if you are interested in pursuing this portion of the request. If you are, please provide: 1) date parameters for the search, 2) a list of email custodians (if you need a copy of the TLC organizational chart to choose, please let us know), and 3) key words, if any.

If you have any questions pertaining to your request, please feel free to call our office at the number below referring to FOIL #2501140359.

Thank you,

Latifah Williams
New York City Taxi and Limousine Commission (TLC)
Legal Affairs
33 Beaver Street, 22nd Floor
New York, NY 10004
tel: 212-676-1135
fax: 212-313-3027
email: foil@tlc.nyc.gov

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From: Fredmonski, Christopher R <Christopher.Fredmonski@skadden.com>

Sent: Thursday, January 9, 2025 3:40 PM

To: TLCmail2, TLCmail (TLC) <foil@tlc.nyc.gov>

Cc: Drylewski, Alexander C <Alexander.Drylewski@skadden.com>

Subject: [EXTERNAL] FOIL Request

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Good afternoon,

Please see the attached request. The New York Freedom of Information Law requires a response within five business days. Please let us know if there is any information that we can provide that will expedite your response to these requests.

Best regards,

Chris

Christopher R. Fredmonski
Skadden, Arps, Slate, Meagher & Flom LLP
One Manhattan West | New York | New York | 10001-8602
T: +1.212.735.3275 | F: +1.917.777.3275
christopher.fredmonski@skadden.com

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Further information about the firm, a list of the Partners and their professional qualifications will be provided upon request.

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Further information about the firm, a list of the Partners and their professional qualifications will be provided upon request.

=====

EXHIBIT B

From: Fredmonski, Christopher R (NYC)
To: 'TLCmail2, TLCmail (TLC)'
Subject: RE: [Ext] Re: [EXTERNAL] FOIL Request
Date: 2/18/2025 2:19:00 PM
CC: Drylewski, Alexander C (NYC)
BCC:

Message:

Thank you, Ms. Williams. We are interested in pursuing the email-collection portion of Request 1.

Best regards,
Chris

Christopher R. Fredmonski
Skadden, Arps, Slate, Meagher & Flom LLP
One Manhattan West | New York | New York | 10001-8602
T: +1.212.735.3275 | F: +1.917.777.3275
christopher.fredmonski@skadden.com

From: TLCmail2, TLCmail (TLC) <foil@tlc.nyc.gov>
Sent: Tuesday, February 18, 2025 1:40 PM
To: Fredmonski, Christopher R (NYC) <Christopher.Fredmonski@skadden.com>
Cc: Drylewski, Alexander C (NYC) <Alexander.Drylewski@skadden.com>
Subject: [Ext] Re: [EXTERNAL] FOIL Request

Good afternoon,

The Taxi and Limousine Commission (TLC) hereby acknowledges receipt of your Freedom of Information Law (FOIL) request dated February 11, 2025. The responses are as follows:

1. All communications regarding the Parrott Op-Ed between the TLC and any outside expert or consultant retained in connection with developing the Proposed Amendments, including but not limited to James A. Parrott, Center for New York City Affairs and The New School.
 - a. Email Custodians: David Do, James, DiGiovanni, Russell Glynn, Maya Zamek, Kenneth Chan, Sarah Kaufman, Kenneth Mitchell, Thomas Sorrentino, Elisa Velazquez, Paul Bader, Andrea Bierstein, Aisha Richard, Evan Hines, Ira Goldapper, Malcolm Cain, Amit Agarwal, and Tanya Scott.
 - b. Date Ranges: January 3, 2025, to February 4, 2025.
 - c. We reserve the right to request record searches of additional custodians and date ranges depending on the results of these searches.
2. Please be advised that there are likely no "communications regarding the Parrott Op-Ed between the TLC and any outside expert or consultant...including but not limited to James A. Parrott, Center for New York City Affairs and The New School." This op-ed was independent of the TLC. Nonetheless, if you are interested in pursuing this email collection, your request can be added to the queue. Given various constraints, your email collection would be completed and redacted pursuant to the relevant FOIL provisions in approximately 150 business days. Please respond to this email by March 7, 2025, to confirm if you are interested in pursuing this portion of the request.

2. All records reflecting alternative drafts or versions of the Parrott Op-Ed considered or reviewed by the TLC, including any comments or revisions made by the TLC to said alternative drafts or versions of the Parrott Op-Ed.

Please be advised there are no "alternative drafts or versions of the Parrott Op-Ed considered or reviewed by the TLC." This op-ed was independent of the TLC. Thus, there is no record to provide.

3. All records reviewed, considered, or relied upon by the TLC or James A. Parrott in connection with the drafting and publishing of the Parrott Op-Ed. For the avoidance of doubt, this includes, without limitation, any data files sent to James A. Parrott in connection with the publishing of the Parrott Op-Ed.

Please be advised the TLC did not review, consider, rely upon, or share any records or data files with James A. Parrott in "connection with the drafting and publishing of the Parrott Op-Ed." This op-ed was independent of the TLC. Thus, there is no record to provide.

4. All records or communications relating to, or forming the basis of, James A. Parrott's following assertions in the Parrott Op-Ed:
 - a. "From the second half of 2019, the first year of the pay standard, to the second half of 2021 as the city was emerging from the pandemic, per trip passenger fares and driver pay (including bonuses) rose in tandem, with Uber's take rising 10% faster."
 - b. "[O]ver the next two years from the second half of 2021 to the second half of 2023, passenger fares rose by 14% while driver pay per trip was flat. On the other hand, Uber's share of the passenger fare (which Uber calls its 'take,' the source of its profits), soared by 128%. Average fares rose by \$3.14 with all of that going into Uber's pocket and not a cent going to drivers.
5. Please be advised that there are no records or communications related to the above referenced assertions in the Parrot Op-Ed. This op-ed was independent of the TLC. Thus, there is no record to provide.

You may file an appeal concerning the information in your request which does not exist within thirty (30) days of the date of this letter in writing to Ms. Sherry Eluto, General Counsel, at the address below.

If you have any questions pertaining to your request, please feel free to call our office at the number below referring to FOIL #2502181257.

Thank you,

Latifah Williams
New York City Taxi and Limousine Commission (TLC)
Legal Affairs
33 Beaver Street, 22nd Floor
New York, NY 10004
tel: 212-676-1135
fax: 212-313-3027
email: foil@tlc.nyc.gov

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From: Fredmonski, Christopher R <Christopher.Fredmonski@skadden.com>
Sent: Tuesday, February 11, 2025 9:04 PM
To: TLCmail2, TLCmail (TLC) <foil@tlc.nyc.gov>
Cc: Drylewski, Alexander C <Alexander.Drylewski@skadden.com>
Subject: [EXTERNAL] FOIL Request

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Good evening,

Please see the attached request. The New York Freedom of Information Law requires a response within five business days. Please let us know if there is any information that we can provide that will expedite your response to these requests.

Best regards,

Chris

Christopher R. Fredmonski

Skadden, Arps, Slate, Meagher & Flom LLP

One Manhattan West | New York | New York | 10001-8602
T: +1.212.735.3275 | F: +1.917.777.3275
christopher.fredmonski@skadden.com

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Further information about the firm, a list of the Partners and their professional qualifications will be provided upon request.

=====

EXHIBIT C



Center for
New York City
Affairs

**Testimony Submitted to the
New York City Taxi and Limousine Commission**

**Hearing on
the Proposed Rules Governing
Minimum Driver Payment for High-Volume For-Hire Services**

February 5, 2025

**James A. Parrott, PhD
Senior Advisor and Senior Fellow
Center for New York City Affairs at The New School**

Good morning Commissioner Do and Members of the Taxi and Limousine Commission (TLC). My name is James Parrott, Senior Advisor and Senior Fellow at the Center for New York City Affairs at The New School. Thank you for the opportunity to testify on the rule changes affecting high-volume for hire vehicle (HVFHV) driver minimum pay.

Along with Professor Michael Reich of the University of California, Berkeley, I was co-author of the 2018 and 2019 studies that were the basis for the New York City HVFHV minimum pay standard.¹ Professor Reich and I also prepared similar reports for the City of Seattle in 2020 and the State of Minnesota in 2024.²

¹ James Parrott and Michael Reich, An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment, Report for the New York City Taxi and Limousine Commission, Center for New York City Affairs, July 2018. <http://www.centrernyc.org/an-earnings-standard>; and James Parrott, Michael Reich, Jason Rochford, and Xingxing Yang, The New York City App-based Driver Pay Standard: Revised Estimates for the new Pay Requirement, Report for the New York City taxi and Limousine Commission, Center for New York City Affairs, January 2019. https://www.centrernyc.org/the-new-york-city-app-based-driver-pay-standard-revised?mc_cid=80c36c5e43&mc_eid=f076c27c0e

² James Parrott and Michael Reich, A Minimum Compensation Standard for Seattle TNC Drivers, Report for the City of Seattle, Center for New York City Affairs, July 2020; James Parrott and Michael Reich, Transportation Network Company Driver Earnings Analysis and Pay Standard Options, Prepared for the Minnesota Department of Labor and Industry, March 8, 2004. https://www.dli.mn.gov/sites/default/files/pdf/TNC_driver_earnings_analysis_pay_standard_options_report_030824.pdf

The pay standard proposed for New York City, and adopted by the Commission in December 2018, included per-minute and per-mile components to ensure that drivers were compensated for all of their time on the app and also provided reasonable compensation for their vehicle-related capital and operating costs.

Last year the TLC commissioned me to prepare an analysis of how the composition of driver expenses had changed since the inception of the pay standard. My report is discussed in the TLCs's January 3, 2025 Notice of Proposed Rules and is available on the TLC's website.³ The HV-FHV vehicle fleet has evolved considerably since the inception of the New York City pay standard in 2019. There are many more SUVs of various sizes (52 percent of the total) and electric vehicles (EVs), and the TLC is phasing in a policy that will require all HVFHV to be either electric or wheelchair-accessible vehicles (WAVs) by 2030. My report included an analysis of the electricity costs and driver time involved in charging EVs and the costs of short-term vehicle rentals in developing a composite expense model reflecting the types of vehicles and ownership or rental status of drivers. The expense factor for wheelchair-accessible vehicles was also updated.

Uber and Lyft drivers provide HVFHV services as independent contractors using vehicles that they own or rent. Drivers have significant personal investment in their vehicles, and it is essential for the effective functioning of the HVFHV market for drivers to be compensated fully for their time on the app as well as for all of the vehicle-related expenses they incur.

My report is based on an extensive survey of drivers regarding current expenses, current data on the vehicle fleet, research on the cost of charging electric vehicles (EVs), additional investigation into the costs of renting a TLC-registered vehicle, and research on vehicle-related costs.

The demographics and driving characteristics of survey respondents fairly represent the universe of all HVFHV drivers. Depending on the question, the survey response rate was in the 4-5 percent range. Survey responses indicated that 95 percent of drivers are male, 91 percent were born outside the United States, and 86 percent are non-white.⁴

Those responding to the survey largely drive full-time for Uber or Lyft (81 percent usually drove 32 hours or more per week), have done so for years (56 percent have driven for an HVFHV

³ James A. Parrott, Revised Expense Model for the NYC Taxi and Limousine Commission's High-volume For Hire Vehicle Minimum Pay Standard, Report for the New York city Taxi and Limousine Commission, December 2024. [/https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf](https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf)

⁴ Forty percent of drivers were born in Asia, 27 percent hail from the Caribbean, Central or South America, and 17 percent were born in Africa or the Middle East. Workers tended to be prime-age (78 percent were between ages 25 and 54), with 19 percent 55 or older. Only three percent were aged 24 or younger.

company for five years or more), and 80 percent reported that driving is their sole source of income).

The high proportion of survey respondents who drive full-time lines up with TLC trip data showing that three-quarters of all trips in 2023 were provided by those who drive 30 or more hours weekly. The distribution of responses by ownership status and vehicle type (internal combustion engine, hereafter referred to as “ICE”, or EV) also lined up with 2023 trip patterns.

The driver survey was the primary source of information on driver expenses for vehicle cost or rent, insurance, and maintenance. Median and average responses were considered in tandem with other research on vehicle costs. Fuel costs for ICE vehicles were estimated using government vehicle mileage ratings and average gas costs for the previous six months. EV charging costs were derived by using survey data on charging mode and times, official data on electricity costs, and industry sources on charging times.

My report recommends a composite per mile cost reflective of vehicle cost structures along two dimensions: owned vs. rented, and internal combustion engine (ICE) vs. electric (EV) vehicles. Cost structures reflecting acquisition (or rental) costs, insurance, maintenance, and fuel or battery charging costs were compiled for each of four vehicle categories and weighted to reflect each category’s projected share of high-volume trips for 2025. The trip weights for the composite per mile cost factor are owned ICE vehicles (.6125), rented ICEs (.2625), owned EVs (.0875), and rented EVs (.0375).

The updated expense method described above resulted in a composite factor of \$0.871 per mile.⁵ While this is 10.4 percent greater than the current per mile factor in effect since March 1, 2024, for a typical 30-minute, 7-mile passenger trip, this would yield an overall trip minimum pay increase of 3.8 percent (based on the utilization rates in the current rules and before any CPI adjustment for 2025).

Since most WAVs in current use are hybrids (there are no all-electric WAVs), the WAV-specific composite per mile factor is \$1.061 based on 70 percent of WAVs being owned and 30 percent rented. This is four cents, or 3.9 percent greater than the current WAV per mile factor.

The expense factor is geared to full-time drivers who provide the bulk of all HVFHV trips and who purchased a vehicle for the purpose of driving for hire, as 93 percent reported in our driver

⁵ The initial December 27 version of the report posted to the TLC website indicated a 0.879 per mile factor. The corrected composite amount is \$0.871.

survey. The average full-time driver logs 32,500 miles annually and the median owner-driver typically finances the purchase of their vehicles over five years. While the HVFHV companies reportedly may try to make an issue out of the five-year amortization assumption, a closer look at the survey data reveals that those concerns are baseless. The modal (most common) survey response for ICE vehicle drivers was 72 months (six years) and using average instead of median survey results for purchase price and down payment with a six-year amortization would increase the per mile factor by about three-tenths of a cent.

The companies' data on model years of vehicles in use presented to the TLC does not indicate anything definitively since they did not include data on average odometer readings, how long vehicles had been used for HVFHV services, or how intensively they had been used (e.g., used by full- or part-time drivers). As noted in our report, 35 percent of drivers purchased a used vehicle and 35 percent acquired their vehicles before 2021.⁶ Thus, some drivers purchasing their cars in 2017 or 2018 may still be paying for their vehicles, and for those full-time drivers who acquired a vehicle in 2020 or earlier and have been using it intensively since, the vehicle likely has a very high odometer reading and minimal resale value. Older vehicles, particularly those with high mileage, typically incur higher maintenance costs.⁷

The rationale in my report for amortizing vehicle purchase costs over five (or six) years is that a vehicle driven in New York City for five or six years at 32,500 miles a year amounts to 162,500 to 195,000 miles and given that vehicles used for HVFHV services incur greater wear and tear (frequent starting and stopping and passengers constantly getting in and out of the back seat), these vehicles likely have relatively minor residual resale value. That does not mean they do not have use value for providing passenger services, it just means that they could have high maintenance costs and have limited market resale value.

IRS rules allow for drivers to continue using the standard IRS business mileage rate on their tax returns even after a vehicle may be fully depreciated.⁸ Clearly, the IRS recognizes that vehicles have use value for drivers after being fully depreciated. It is very deceptive for Uber to say the TLC is limiting the use of older vehicles.⁹

For the 30 percent of vehicles that are rented, it costs 25-30 percent more to rent a vehicle than to own one for use in providing HV-FHV services. This differential largely stems from the 20.875

⁶ Parrott, Revised Expense Model, December 2024, p. 23.

⁷ For example, the survey data indicate that the average annual maintenance for drivers of vehicles purchased used was \$5,200 and the average for the quartile of drivers with the highest maintenance expenses was \$10,300 per year.

⁸ Internal Revenue Service, Travel, Gift, and Car Expenses, Publication 463, p. 35. <https://www.irs.gov/pub/irs-pdf/p463.pdf>

percent sales tax on short-term vehicle rentals, higher insurance costs, and a “registration rent” that is a function of the costs and administrative burden of getting a vehicle licensed by TLC and the agency’s limitation on the issuance of new vehicle licenses.

Uber recently commissioned the New York City-based consulting firm HR&A to prepare a report on the expense of for-hire vehicle drivers in New York City.¹⁰ Their report derives an overall per-mile expense amount that is 29 percent less than my estimate. The main reasons for this lower estimate are that HR&A uses lower weights for the shares of EVs and rented vehicles in deriving the composite per mile factor. While my analysis and the HR&A report find similar results for fuel and charging expenses, and for insurance, the HR&A report uses an extremely flawed method to estimate vehicle costs.¹¹

My analysis draws heavily from an extensive survey of what drivers are actually paying each month. I annualize these payments and amortizing their down payment and dividing by 32,500 annual miles to fairly represent the costs to the driver of driving for-hire. The HR&A analysis ignores the effect of intensive vehicle use common among HVFHV drivers and disregards the resulting high mileage after five or six years of intensive use in overstating the residual resale value a vehicle might have.

The HR&A Uber study concludes that depreciation costs in their composite model average 11.0 cents per mile, far less than the national average of 33 cents per mile depreciation included in the \$0.70 IRS per mile allowance for 2025 for personal vehicles used for business purposes.¹² My estimated vehicle payment cost of 31.2 cents per mile is fairly close to the 33 cents per mile IRS depreciation factor, but it is 20 cents more than the Uber figure.¹³

Thank you for the opportunity to testify today.

#

¹⁰ HR&A, *New York City Uber Driver Earnings and Expenses Study*, Final Report, for Uber Technologies, Inc., November 4, 2024.

¹¹ Other differences involve the HR&A Uber report discounting interest costs that owners who have fully paid for their vehicles might have made, thus ignoring the prior investments made by 27 percent of drivers who indicated in an Uber survey that they were not actively making car payments on their vehicles; and excluding any allowance for drivers’ time spent charging their EVs (either time spent waiting for access to a public charger or waiting for their vehicles to charge). For a side-by-side comparison of the HR&A Uber and our expense analysis, and a comparison of each report’s composite weighting factors, see Appendix Exhibit 3 in my report.

¹² See <https://www.irs.gov/newsroom/irs-increases-the-standard-mileage-rate-for-business-use-in-2025-key-rate-increases-3-cents-to-70-cents-per-mile>, and IRS Note 2025-5, <https://www.irs.gov/pub/irs-drop/n-25-05.pdf>

¹³ It is ironic to say the least, that Uber urges drivers to use the IRS business mileage rate (67 cents for 2024) in calculating expenses that can reduce a driver’s taxable income when they subscribe to a much lower mileage rate when it comes to minimum pay regulations. <https://www.uber.com/us/en/drive/tax-information/>.



Jerry Golden, Chief Policy Officer's Testimony

**New York City Taxi and Limousine Commission February 4, 2025 Hearing on
Proposed Minimum Driver Pay Regulations**

I'm Jerry Golden and, since September of last year, the Chief Policy Officer at Lyft.

Lyft appreciates the opportunity to address the TLC's proposed amendments to the rules governing High-Volume For-Hire Services and minimum driver pay. Lyft supports driver pay minimums, and is proud of our earning commitment that guarantees drivers keep 70% of rider fares after external fees.

However well intentioned, the proposed rules fail to solve the issues they claim to address and, in fact, worsen them. They reinforce a flawed approach to driver pay that pressures rideshare companies to use lockouts to maintain a utilization rate.

I want to emphasize that restricting driver access is not something Lyft ever wants to do. It's bad for our customers – the drivers and the riders who use Lyft's platform – and so it is bad for Lyft. We only do it as a consequence of pressure from the Commission's rules.

The proposed rules also rely on a deeply-flawed, biased report by James Parrott that inaccurately inflates expense reimbursement rates, thereby further contributing to higher fares. This comes on top of the new congestion fee that has already raised prices this year and the already-announced March Consumer Price Index increase of almost 4%. Note that NYC already has some of the highest rideshare fares in the nation.

These excessive cost increases inevitably perpetuate a vicious cycle of still higher prices and therefore less demand, fewer rides available for drivers, and lower driver utilization rate and pressure to use lockouts

These are not theoretical points.

- Lyft rides were already down mid-teens year over year in NYC in the fourth quarter of 2024, despite Lyft rides increasing nationwide throughout this same period.
- If you factor in the additional rate hike based on the flawed Parrott report and the March CPI increase, we estimate approximately a 4-6% further decrease in rides, and we would have to remove the equivalent of over 1,200 full time drivers to maintain 2024 utilization rates.



And it's not just drivers who suffer. Thirty-seven percent (37%) of Lyft rides in NYC start or end in lower income areas. Lower income riders are 35% more likely than higher income riders to use Lyft to get to work, and twice as likely to use Lyft to get to school or job interviews.¹ These are the rides that fall off most when costs go up.

Among the many flaws of the study used to justify these higher costs:

- It relies on responses from an unreasonably tiny sample size – just a few thousand drivers, or likely less than 5% of the NYC rideshare driver population,
- It depreciates the value of cars too rapidly, claiming they are worth \$0 after 5 years, even though more than half of vehicles on Lyft's platform that gave a ride in the past year are 5 years old or older,
- It over-represents both renters and fulltime drivers, both populations that tend to report higher expenses, and thereby skewing the expense calculation.

And there are many more such flaws detailed in our written comments.

Despite these obvious issues, the Commission is rushing forward with the proposed rules. Other jurisdictions (such as MN, MA, and the rest of NY State) manage to regulate minimum driver pay without factoring in utilization in this manner. Lyft proposes that the TLC work with stakeholders to develop a rational and workable alternative that poses less harm to drivers and riders.

It is in this spirit that Lyft submits its comments and respectfully requests the Commission to reconsider these proposed rules.

¹ Statistics taken from [2024 Lyft Economic Impact Report for NYC](#). Lower income riders means incomes below \$50,000 annually; higher income means over \$100,000 annually.



HAITIAN-AMERICANS UNITED FOR PROGRESS, INC.

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Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver St.
22nd Fl.
New York, NY 10004

To whom it may concern:

We are Haitian Americans United for Progress, a non-profit community organization dedicated to empowering immigrants and refugees. Founded by and for the Haitian community in the 1970s, we support all New Yorkers in need. And as an organization intimately familiar with the uphill battles refugees and immigrants face daily, we ask Mayor Adams and the TLC to consider finding alternate paths for funding that do not exacerbate the cost of living crisis.

Our hearts break as we work around the clock to help Haitians who have fled their home country with little more than the clothes on their backs during immense violence and political instability. New arrivals are streaming into New York City, and they need housing, food, clothing, employment, and support navigating this city's bureaucratic systems. These refugees and immigrants are exactly the population New York has always promised a home to, and the Adams administration has vowed to make New York a place they can afford to stay and rebuild their lives.

The TLC's proposed price hike – on the heels of the implementation of congestion pricing – is another weight for families struggling to keep their heads above the water. Even as millions of us use our subways, we cannot pretend they are always reliable, local, or safe. FHV rides are not a luxury but a lifeline for the mother with her own mother and her three children and their papers struggling to find a way from one of the inner Brooklyn neighborhoods yellow taxis rarely venture to a government office in Midtown.

Until the city can guarantee the infrastructure for more subways, buses, and yellow cabs to venture deeper into Brooklyn will be built, we ask the TLC to reconsider its pay increase and consider alternate methods of supporting FHV drivers. We can offer our community vouchers, but that is money that would be better spent on healthcare, English classes, or job fairs.

Thank you for your consideration,

By: _____
Elsie Saint Louis
CEO/ Executive Director



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January 24, 2025

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TLC Commissioner David Do
NYC Taxi & Limousine Commission
33 Beaver Street
New York, NY 10004

To NYC Taxi & Limousine Commission Commissioner David Do:

We write with concerns about elements of the recently proposed new driver pay rules. As leaders of our respective Chambers of Commerce in New York, we play a critical role in the health of each borough's economy. Our goal is to build coalitions and advocate for policies that help our communities' economic agenda. Our efforts are focused on improving the lives of everyday New Yorkers.

The rideshare industry, specifically its riders and drivers, are a part of that economic ecosystem, and their success plays an important role in the overall health of the City.

Over the past six years, the City and State have taken several steps to regulate the rideshare industry. While the intent of these regulations were noble, many of these policies have turned out to have unintended consequences that have harmed drivers and riders alike. Now is not the time to double down on those outdated policies but rather it is the time to reevaluate our approach to ensuring proper protections in the ridesharing industry for New Yorkers.

With the recent congestion pricing fee, rideshare costs have already increased this year, and the regular March CPI increase will push costs up further. We are concerned that additional rate hikes embodied in the TLC's newly proposed rules will hurt both riders and drivers, dampening demand, limiting earning opportunities and minimizing transportation options.

The City's pay formula also has a fundamental flaw – tying driver pay to the industry's utilization rate and putting the onus on the rideshare companies to hit those rates. This has resulted in the lockout and the new rules continue to incentivize the companies to lock drivers out.

While it's convenient to say the companies just don't want to pay their drivers more, that ignores the obvious crisis we find ourselves in. The reality is rideshare has gotten less affordable, and is likely to only get more expensive if trends continue.

These increased costs are not just having an impact on the companies' bottom line. Real New Yorkers, many of them living in the outer-boroughs or coming from low-income communities, have been priced out of being able to afford the service. Dwindling ridership means fewer rides for drivers, meaning less overall pay for them. And because of the way the current and proposed new pay laws are written, this decline in ridership means prices will likely further rise due to an additional driver pay rate increase - starting the whole cycle over.



THE NEW BRONX CHAMBER *of* COMMERCE, INC.

The new proposed rules maintain this flaw. No other jurisdiction in the country uses utilization in this way, and only in NYC do we see these lockouts.

It doesn't need to be this way. Several places, including the rest of New York State, protect drivers through minimum pay policies and no other location risks the kind of economic death spiral we find ourselves in. Rather than doubling down on a flawed policy, we must take the learnings of the past six years to update and improve upon the approach. That starts by decoupling the industry's utilization rate from driver pay. That way we can still ensure drivers are paid fairly without unnecessary and harmful restrictions.

Drivers earn more money by giving more rides. That means we need to strike a balance that pays drivers fairly and keeps rides affordable. Well-paying rides don't help drivers if no one can afford to take them.

Following last year's election, it's clear New Yorkers have had enough with the rising pricing of living here. Let's heed their call to action by rethinking how we approach regulating the rideshare industry. In doing so, we can make progress in helping New Yorkers afford to get around without sacrificing proper protections for drivers.

Sincerely,

Lisa Sorin
Bronx Chamber of Commerce President

NYC Taxi & Limousine Commission
33 Beaver Street
New York, NY 10004

Dear Commissioners,

As long-time residents and community leaders of Cooper Park Houses, we are writing to share our concerns about the proposed minimum pay increase for for-hire vehicle (FHV) drivers. While we deeply respect the hardworking drivers who keep our city moving — many of whom are also our neighbors or fellow NYCHA residents — we are concerned about how these changes will affect affordability for riders like us who rely on these services daily.

For senior and vulnerable populations, FHVs are not a luxury but a lifeline. We rely on Uber and similar services to travel to medical appointments; these rides are critical to our independence and maintaining our well-being. However, the recent implementation of congestion pricing now means trips in the zone pay \$4.25 in congestion fees, adding a significant financial strain.

An additional fare increase tied to a minimum pay adjustment for drivers would make FHVs even less accessible to low-income residents, especially those on fixed incomes like many living in NYCHA housing. We are already shouldering the costs of rising essentials such as groceries and utilities, and a more costly ride may force us to choose an urgent doctor's appointment or meals for a week.

It risks leaving many of us having to choose between viable transportation options and risking unreliable and sparse local public transit options, creating barriers to accessing basic services.

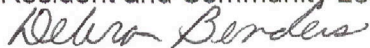
We understand the importance of ensuring fair pay for drivers, many of whom are immigrants and members of our community. However, we urge the Commission to recognize FHV services are a lifeline for the medical needs of FHV users like ourselves, and consider alternative approaches that do not disproportionately affect riders.

We ask the Commission to carefully weigh the impact this policy could have on communities like ours and prioritize affordability alongside fairness.

Sincerely,

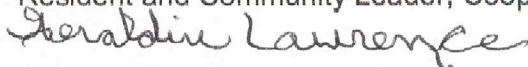
Debra Benders

Resident and Community Leader, Cooper Park Houses



Geraldine Lawrence

Resident and Community Leader, Cooper Park Houses





Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver St.
22nd Fl.
New York, NY 10004

Dear Commission:

We are Porez Luxama and Jean H. Similien, the Executive Directors of Life of Hope and Progressive Community Center. Longtime partners, the organizations we head are community-based institutions dedicated to supporting young people, immigrants and at-need families across Brooklyn, especially Central Brooklyn's communities. In valuing the essential contributions of for-hire vehicle drivers — many of whom are a part of the communities we serve — we urge the City to ensure affordability for riders while contemplating minimum pay increases for drivers.

Our neighborhoods rely heavily on FHV as a dependable and flexible means of transportation. The recent implementation of congestion pricing — now equaling \$4.25 in fees on for-hire vehicle trips within the zone, where many in my community work — is compounding local financial stress. For families juggling multiple jobs, young people traveling for school or internships or seniors attending medical appointments, even small increases in fares and fees can lead to increased financial hardship.

We understand the need to ensure drivers earn fair and sustainable wages. Many FHV drivers are immigrants working tirelessly to provide for their families, and we stand firmly in support of their well-being. Given that this is the sixth increase in five years, we unfortunately have no shortage of evidence to pull from. What we have seen each time is that rate increases are simply passed onto riders, continuing the cycle of straining everyday New Yorkers on essentials. We believe there are alternative pathways to achieving fair wage increases — ones that don't place the burden squarely on riders.

We urge the Commission to engage in a comprehensive and collaborative dialogue with stakeholders — including in our Central Brooklyn community — to craft policies that promote equity for all. Rider affordability and driver pay are not competing goals, but interconnected priorities that require thoughtful and inclusive solutions.

Thank you for considering this perspective. We remain ready to collaborate toward an equitable transportation system for every New Yorker.

Sincerely,

A handwritten signature in blue ink, appearing to read 'P. Luxama', written over a horizontal line.

Porez Luxama
Executive Director
Life of Hope

A handwritten signature in blue ink, appearing to read 'Jean H. Similien', written over a horizontal line.

Jean H. Similien
Executive Director
Progressive Community Center



Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver St.
22nd Fl.
New York, NY 10004

To whom it may concern:

My name is Pastor Steffie Bartley. In addition to being a board member of the National Action Network, I am NAN's Northeast Regional Director and the senior pastor of New Hope Baptist Church in Elizabeth, New Jersey. I am writing in opposition to the TLC's proposed rate hike for for-hire vehicles.

As you know, New Jersey and New York are locked in an acrimonious fight over congestion pricing, which will see a \$9 fee added to all individual drivers and \$1.25 to \$1.50 for yellow taxis and app-based FHV's, which drive in Manhattan south of 61st street. Congestion pricing is nothing new—it's been debated since Michael Bloomberg was mayor, more than a decade ago. I may be a proud Garden State resident, but I know so many of us are daily commuters to our neighboring New York, and I know so many of us are struggling.

I oversee NAN Newark Tech World, the Harlem NAN Tech Lab and the NAN Tech Bus, so I know firsthand how important technology and collaboration is when solving societal issues. That after all this the only plan New York officials could come up with to ease gridlock being a system of fees on car drivers and riders feels like a disservice to that classic New York ingenuity and innovation. We ought to see more public-private partnerships and out-of-the-box solutions in addressing public transit difficulties.

After several months of brutal NJ Transit [failures](#), FHV's are often a last resort. Punishing riders with even more expensive fares on top of congestion pricing is a failure of thinking bigger and better to help all of us on both sides of the bridges and tunnels.

Please reconsider your proposal. Now is simply not the time.

Thank you,

Pastor Steffie Bartley

Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver St.
22nd Fl.
New York, NY 10004

To whom it may concern:

I write to you on behalf of Mobilizing Preachers and Communities New York (MPAC-NY) to express concern about the proposed price increase for for-hire rides.

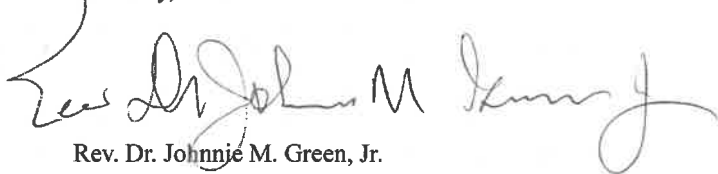
While MPAC has and will continue to support FHV drivers, we urge the Commission to consider the impact this policy will have on low- and middle-income New Yorkers whose wages are not growing fast enough to cover the costs of basic needs. At a time where affordability is a critical issue for many in our communities, we shouldn't make it harder for people to get where they need to go.

As you are well aware, congestion pricing recently went into effect, introducing an additional \$1.25 fee for taxis and a \$1.50 fee for Ubers and Lyfts within the congestion zone. This additional surcharge has already brought the total fees riders and commuters pay to \$4.25 before factoring in base fares, services fees and tips. A cost increase – however well-intentioned – risks further inflating fares, disproportionately affecting low-income riders who rely on these services for essential transportation and who typically reside in outer borough transit deserts.

We strongly encourage the Commission to explore alternative measures to support drivers without further burdening riders. Ensuring driver pay and rider affordability are not mutually exclusive goals – but achieving this balance requires creative, stakeholder-driven collaboration and solutions.

In a city that prides itself on being accessible for every New Yorker, we must prioritize policies that protect equitable access to transportation for all, not a select few. We urge the Commission to reconsider this proposal with rider affordability in mind and engage with all stakeholders to create a sustainable path forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Rev. Dr. Johnnie M. Green, Jr.", written over a horizontal line.

Rev. Dr. Johnnie M. Green, Jr.

**Testimony of Andrew Greenblatt, Policy Director
Independent Drivers Guild (IDG)
Before the Taxi and Limousine Commission
February 5, 2025**

Good morning, Commissioner Do and the Taxi and Limousine Commission members. My name is Andrew Greenblatt, and I am the Policy Director of the Independent Drivers Guild, otherwise known as IDG. Thank you for this opportunity to testify regarding the proposed minimum driver pay and lockout regulations.

The IDG is a nonprofit affiliate of the International Association of Machinists and Aerospace Workers (IAMAW). Our organization represents over 140,000 for-hire vehicle drivers in New York State and 300,000 in Connecticut, New Jersey, Florida, and Illinois. The IAMAW is the only union to successfully organize black car workers in New York City and has been doing so for over twenty years.

I would like to thank the Commission and your staff for taking the issue of driver pay and expenses seriously. The proposed regulations and the study that informs them show a deep understanding of the underlying issues. Overall, the outcome will improve the lives of drivers. Specifically, on average, drivers can expect a pay increase of over 6%. This money is desperately needed as drivers continue to suffer from the setbacks last year's lockouts inflicted on them. Right now, across the city, New York's Uber and Lyft drivers are making less than minimum wage. Acting swiftly to raise the minimum rates is necessary. New York cannot allow billion-dollar app companies to skirt our laws and exploit our people.

Furthermore, the decision to use data from BEFORE the lockouts began to calculate the utilization rate is fair and should discourage the app companies from trying something like that again. In short, the companies locked out drivers in the hope that they could manipulate the data and hide from the TLC the actual amount of wait time drivers face. Had the TLC fallen for it, they would have calculated a false utilization rate, thus pushing driver pay below the state's minimum wage. We applaud the TLC for exposing this con and showing the app companies that, despite their tricks, they must pay drivers a fair wage. We also applaud the TLC

for making it more difficult for companies to lockout drivers in the future, and to collect more accurate data about those lockouts.

So, while the IDG appreciates that the proposed rules will improve drivers' lives, we are sorry to see that several flaws remain in the way the TLC regulates the industry, and thus how it calculates pay and prevents lockouts. The biggest problem remains the one that the TLC has failed to fix since the inception of the minimum pay standards. To prevent the utilization rate from spiraling down as drivers are attracted to higher pay, the TLC should limit the number of TLC driver's licenses for high-volume FHV drivers. The TLC could let all other TLC license holders continue to drive for the other classes of vehicles, including yellow cabs and small bases. Instead, the TLC continues to try to defend the utilization rate with a patchwork of rules and regulations intended to discourage drivers from entering the industry, or to encourage the app companies to stop dispatching new drivers. Each of these attempts leads to serious negative, if unintended, consequences.

The worst unintended consequence has been lockouts. Given their unequal market share, Uber and Lyft face different challenges in the marketplace. An industry-wide utilization rate unintentionally encourages Lyft to onboard new drivers to reduce wait times for passengers, putting Uber at a disadvantage. A company-by-company utilization rate forces Lyft to maintain a smaller workforce, including through lockouts, thus increasing wait times and putting them - and any newcomer - at a competitive disadvantage. A single pool of drivers regulated by the TLC would give all players a level playing field and would force them to compete on pay, fees, and innovation. This latest attempt to reset the utilization rate will work for a short time before the stresses of one bad rule for two very different companies once again lead to failure. Only a cap on new drivers entering the market will end lockouts for good.

A second devastating consequence has been the limit the TLC places on license plates. This second means to indirectly limit the number of drivers on the road has created a thriving rental and lease market for vehicles with the proper plates. According to your Driver Expense Report from December 2024, one-third of drivers are forced to lease or rent their vehicles. Your rules prevent them from

owning their own. That report goes on to measure the carnage your rules impose on drivers. For non-WAV vehicles, drivers pay an additional 14.9 cents per mile in expenses when they lease a vehicle then what would be covered by your proposed rate increase. (\$1.028/mile expenses vs. \$.879/mile covered by the proposal) This is not a small amount of money. Your report points out that drivers of non-WAV vehicles who lease drive, on average, 35,000 miles per year. That means that because of your limits on license plates and the expense reimbursement rate you propose, the average driver will earn \$5,215 LESS THAN MINIMUM WAGE each year AFTER the higher rates are adopted.

The Commission has excused the fact that your rules impoverish a third of the app drivers by pointing out that the rules are only intended to bring drivers to a minimum wage *on average*. This case is different. Other than this issue, most of the difference in driver pay revolves around the driver's choices. A driver who goes to busy areas at busy times can expect to earn more than one who doesn't. Other issues come down to luck. Having your last trip end just as your next trip starts nearby is a stroke of luck the TLC can't control. However, being unable to purchase a vehicle is a problem *created* by the TLC. Then, by setting a pay rate below the costs these drivers are forced to pay, the TLC chooses to impoverish these drivers. This is doubly true, given that a smarter policy path would be to limit the number of driver's licenses instead of plates.

We once again urge the TLC to eliminate the plate limit and impose a cap on drivers' licenses for HV-FHV drivers. This would end lockouts for good AND allow every driver to own their vehicle and keep costs down. This would benefit drivers, passengers, and app companies. It's time to fix this "original sin" in the pay standards.

The report, and thus the proposed rules, ignore other expenses drivers pay and, therefore, sets the rates too low. The report counts the costs of cleaning supplies, car maintenance, and license renewals. But it does not count the time needed to clean a car, take it to the shop, or get a drug test and fill out paperwork. All that time is "work time" and should be compensated for.

Tickets are another expense the TLC ignores. Some tickets are due to choices drivers make. A speeding ticket should not be included in rate-setting. But most drivers also face tickets for picking up and dropping off in the bike lanes and bus lanes they are assigned to operate by their app company. A driver who arrives at a pickup location, realizes it is illegal, and then cancels would face a penalty from the app company that could include being deactivated. The TLC plays a more direct role in many of these tickets by fining drivers when cyclists or others send pictures of cars in bike lanes while serving passengers. The TLC could, instead, become part of the solution. You could require the app companies to include bike and bus lanes in their apps and require passengers to be picked up and dropped off nearby. The TLC could require app companies to pay the fines when they send a driver to do an illegal pickup or drop-off. At the very least, you could acknowledge that it is not the driver making this choice and include the fines as part of the formula for rate setting.

We would also like to highlight two other recommendations to make pay more equitable for drivers. First, the TLC should set a minimum amount app companies must pay drivers for every trip. In recent weeks, drivers have been paid less than four dollars for trips in New York City. Given that drivers must go and pick up the passengers and then drive them to their destination, we recommend that the TLC set a minimum payment to drivers at \$10/trip, or the per-minute/per-mile rate, whichever is greater.

Finally, the TLC should set a minimum fare split between what the driver keeps and what the app company keeps. We recommend that the minimum ratio be 80:20 driver:app company. Government-imposed fees would, of course, be paid first before the split.



THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BRAD LANDER

Comments of New York City Comptroller Brad Lander

**New York City Taxi and Limousine Commission hearing
on its rules governing minimum driver payment for high-volume for hire services**

February 4, 2025

I am writing to express my support for the Taxi and Limousine Commission's (TLC) proposed rule regarding the minimum driver payment for high-volume for hire services, specifically the amendments to the calculations for the utilization rate and the minimum per-mile rate.

First, regarding the utilization rate, the new calculations rectify the ongoing issue of driver lockouts, which I have previously raised as an issue to the TLC. Over the summer of 2024, High-Volume For-Hire Services (HVFHS), such as Uber and Lyft, locked drivers out from their platforms with no advance notice or reason provided to the drivers. As the TLC has recognized and investigationsⁱ have revealed, the lockouts were done to artificially alter utilization rates by making drivers who were locked out of the application appear to the TLC as available. By cutting off the ability to work, these lockouts caused economic distress for rideshare drivers. Many drivers rely on daily earnings for basic living expenses, along with car leasing and ownership costs, which are required for the job.ⁱⁱ Accordingly, I support the TLC's proposal to exclude the data that was corrupted by the lockouts in utilization rate calculations by instead using data from May 2023 through April 2024, the most recent twelve-month period prior to the lockouts.ⁱⁱⁱ

Furthermore, by moving away from automatic utilization rate calculations the TLC is taking an important step towards disincentivizing lockouts. In addition, by requiring 72 hours advance notice before a lockout occurs, the proposed rule will allow drivers to plan accordingly. In the summer of 2024, by contrast, drivers learned they were locked out at the moment they planned to commence work. By using utilization rates, the original minimum pay law was intended to ensure that drivers could be adequately compensated without rides becoming overly expensive or inaccessible for consumers. The utilization rates incentivized HVFHS to dispatch more rides per driver. The use of lockouts hurts drivers by denying them access to work, as well consumers by reducing the number of rides available.

Second, it is appropriate that the proposed new minimum per-mile rate, \$0.879 and \$1.061 per mile for non-wheelchair accessible vehicles (WAVs) and WAVs, respectively, was based on a commissioned study by the leading expert on the subject, Dr. James Parrot. As is required by law, the rate factored in costs in driver expenses, taking a dynamic view of the changing industry by placing emphasis on costs of acquiring and operating electric vehicles and short-term vehicle rentals. This driver cost analysis was both comprehensive and consistent with the intent of the original minimum driver pay law.^{iv}

In conclusion, I encourage the TLC to move forward with enacting this proposed rule.

ⁱ Lung, Natalie et al. “How Uber and Lyft Used a Loophole to Deny NYC Drivers Millions in Pay.” Bloomberg, October 10, 2024, <https://www.bloomberg.com/graphics/2024-uber-lyft-nyc-drivers-pay-lockouts/>

ⁱⁱ Anderson, Renee. “Uber drivers in NYC say they're being locked out of the app and losing money.” CBS News New York, June 26th, 2024, <https://www.cbsnews.com/newyork/news/uber-driver-lockout-protest-new-york/>

ⁱⁱⁱ Fadulu, Lola. “Uber and Lyft Found a Loophole in a Driver Pay Law. Drivers Pushed Back.” New York Times, Dec. 13, 2024, <https://www.nytimes.com/2024/12/13/nyregion/uber-lyft-lockouts-wages-nyc.html>

^{iv} Parrott, James and Reich, Michael. “An Earnings Standard for New York City’s App-Based Drivers: Economic Analysis and Policy Assessment.” Center for New York City Affairs <https://www.centrernyc.org/an-earnings-standard>

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New York City Taxi & Limousine Commission
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February 4, 2025

Dear Chair Do and Commissioners,

The TLC Driver Pay Rules represent a rather modest policy goal; when the TLC passed its initial version of the rule in 2018, TLC intended that drivers would be paid roughly in line with the minimum wage, for all time at work, including time spent waiting to receive fares, plus expenses. This is not an extravagant pay standard, yet at every turn since their initial passage, the High-Volume For-Hire Vehicle (“HVFHV”) companies have sought to chip away at them. In doing so, the companies are quite simply fighting to ensure that their drivers are paid below the minimum wage. Such attempts have been made through lobbying, threats, misinformation, and work lockouts. These attempts by one of the country’s largest corporations to intimidate regulators and drivers into accepting sub-minimum wage pay have been cynical, deceptive, and immoral. This rule package represents a strong rebuke to these tactics, and at the same time makes concessions to the companies’ arguments around per-mile utilization; they should be passed without concession to the companies’ attempts to render TLC drivers’ work a sub-minimum wage job.

Background

In the initial 2018 rule package, TLC took multiple steps to ensure that the pay standard would not lose value over time, including indexing the pay rates to inflation, and tying driver pay to the overall utilization rate, or the amount of time all HVFHVs drivers in the City spend with passengers out of all of the time they are available to work. In the study that served as the basis for the pay rule, professors Parrott & Reich noted that inclusion of the utilization rate within the pay formula was designed to “serve as a basis for computing total driver working time.”¹ So, while inflation may go up or down, or utilization may increase or decrease, in either case TLC had accounted for these factors such that the value and spending power of drivers’ take-home pay would not suffer for these changes.

Nonetheless, it did not take long for the companies to begin trying to game the rules and undermine their purpose. After failing to stop the pay rules in litigation, Lyft began by proposing that it would lock drivers out of its app in times and areas of low demand. Uber responded in kind. These practices, which begin at the end of 2019, remained in place until the COVID-19 shutdowns of March 2020 rendered them moot, and both companies stopped the practice of locking drivers out.

¹ James Parrott and Michael Reich, *An Earnings Standard for New York City’s App-Based Drivers* (July 2018), at 38.

As passenger demand returned post-COVID, so did drivers, yet business did not return in proportion to the size of the HVFHV fleet, with vehicles and drivers still out-pacing demand compared to pre-pandemic numbers. Thus, while the fleet was operating at 58% utilization pre-pandemic, these numbers have since declined.² This trend continued, peaking after the TLC unlawfully reinstated the Electric Vehicle exemption to the FHV license cap, which led to the unlimited licensing of approximately 10,000 new FHVs until the reinstatement was enjoined by a temporary restraining order. In this environment, the number of active daily FHVs reached an all-time high in May 2024.

Despite the fact that drivers were less busy than they were pre-pandemic, at Uber's urging, in 2023 rule amendments the TLC established a range for acceptable utilization rates, during which TLC would not increase drivers pay, even if utilization decreased to as low as 53%. This means, that if actual utilization is 53%, drivers are being paid 8.6% less³ than they would have if the actual utilization rate were applied and they were being compensated for all their time engaged in driving and available to receive dispatches. This is a remarkable departure from rules that were designed to ensure that driver pay never loses value relative to inflation, nor to declines in business. Notably, when the TLC was considering this rule package, Uber strongly implied that with the compromise of a flexible utilization band of 53-58%, the company would not engage in lockouts.⁴ Instead, Uber got the rule it wanted, drivers got less pay as real utilization declined, and then Uber locked drivers out of the app anyway.

Uber began engaging again in highly disruptive lockouts in May and June 2024, leaving drivers struggling to get sufficient work, and spending hours clogging the streets while locked out and waiting to be allowed back online. Lyft followed suit shortly thereafter.⁵ When drivers are attempting to log in to an HVFHV app, or attempting to stay logged in after a trip, they have "made themselves available to accept dispatches" under the plain language of TLC's utilization rate rules⁶ and should be counted as such; however, Uber and Lyft took advantage of a loophole in the data TLC collects to make it appear that locked out drivers were not available for the purposes of the utilization rate because they were not logged into the app. This manipulation artificially inflated Uber's utilization rate to above 60%, the highest monthly rate on record.⁷

² See *Taxi and Ridehailing Usage in New York City* (website), available at <https://toddschneider.com/dashboards/nyc-taxi-ridehailing-uber-lyft-data/> (Date accessed: Sept. 3, 2024) (Showing decrease in ridehailing daily trips per active vehicle and trips per vehicle per active hour in pre-pandemic months compared to 2024 data).

³ Compare a \$10 fare divided by 0.58 (\$17.24) with a \$10 fare divided by 0.53 (\$18.87).

⁴ In pushing for the utilization rule to be amended providing a range of permissible utilization from 53-58%, Uber implied that there would be no need for lockouts with a utilization rate range such as that eventually adopted by the TLC, testifying that "there's no concerns about falling below 53 percent." Transcript of TLC Hearing (Mar. 1, 2023), at 41:11-13.

⁵ See "Uber NYC Lockouts Have Arrived," Automarketplace, available at <https://automarketplace.substack.com/p/uber-nyc-lockouts-have-arrived> (May 16, 2024). See also "Lyft Announces NYC Lockouts, Says Uber Trying to Monopolize Lockouts," Automarketplace, available at <https://automarketplace.substack.com/p/lyft-announces-nyc-driver-lockouts> (June 14, 2024).

⁶ 35 R.C.N.Y. § 59D-03(j).

⁷ See *TLC Factbook*, at page 5 of 7, available at <https://app.powerbigov.us/view?r=eyJrIjoieY2FiNjI3YWQzMkZOS00MjliLTk0MTQ0ODc2NzU4OTYwNjFiliwid>

Uber and Lyft's decisions to lock out drivers subverts the purpose of the minimum driver pay rule and in doing so, significantly decreases drivers' pay in the short-run and in the long-run. In the short-run, drivers are simply unable to earn when they spend hours of the workday locked out from access to the app; this either means drivers earning less in the hours they're available to work, or if drivers have the option of staying on the road longer, they're working longer hours for the same pay. If, for example, a driver who is locked out for two hours a day needs to be on the streets for 12 hours a day in order to get six hours of trip time, this driver is working longer hours for the same pay, even if Uber and Lyft are not reporting locked-out waiting time to the TLC as time when drivers are available for dispatch.

In the long-run, lockouts result in an underreporting of drivers' true utilization rate, in the aggregate, leading to artificially low pay rates; because such decreases in utilization are not recorded, the rules no longer function to increase pay rates when drivers are less busy, as they were intended to do. The effect is significant: when drivers are being paid at an assumed 58% utilization rate but, in reality they are only busy 53% of the time, this amounts to a loss of around 15% of driver net income.⁸ Without pay rates adjusting to account for such a decrease, TLC has merely sanctioned a pay cut, allowing its signature achievement to be hollowed out such that its regulatory language may discuss enforceable "minimum pay" standards for all time at work, but ultimately fails to uphold the rules' initial purpose of ensuring fair pay for time that drivers spend at work.

While TLC rules require the utilization rate to account for all time drivers "made themselves available to receive a dispatch," TLC rules do not currently require the collection of the necessary data to understand the extent to which drivers had been locked out and were attempting to be logged in and receive dispatches, either in the middle of a shift, or the beginning of a shift. So, while TLC was able to determine that Uber and Lyft were subverting the pay standard by locking drivers out, they lacked sufficient information to understand the extent to which this harmed driver pay. Such manipulation of the utilization rate by the companies rendered TLC recorded utilization data for the lockout period incorrect and of no value in setting the pay rate to be applied in 2025.

As with much remedial legislation, regulated parties attempt to evade its purpose by probing for and exploiting loopholes. TLC's response in this rulemaking package is an attempt to address the companies' attempt to undermine the driver pay rules by patching up these loopholes to ensure the proper operation of its rules.

In the fall of 2024, NYTWA submitted a petition to initiate rulemaking that sought nothing more than secure enforcement of the pay standard approved by the TLC in 2018, as adjusted for

[CI6IjMyZjU2ZmM3LTVmODEtNGUyMi1hOTViLTE1ZGE2NjUxM2JlZiJ9&pageName=ReportSection28c004ce23fc37acd783](#) (Date accessed: Feb. 4, 2025).

⁸ Assuming a baseline utilization rate of 58% (the rate upon which payments are currently based) a decrease from 58% to 53% utilization represents an 8.6% decrease in fare-generating time, and accordingly an 8.6% decrease in gross pay. Because drivers bear their own expenses, a driver who may annually earn \$70,000 in fare revenue, may incur \$30,000 in annual expenses (vehicle payments, commercial insurance, fuel, licensing costs, maintenance). Thus, the difference between gross pay of \$70,000, reduced by 8.6% (\$63,980), means a diminution in take home pay from \$40,000 to \$33,980, or a 15.05% decrease in take home pay.

inflation, to ensure that drivers were paid for *all time at work*. In relevant part, the NYTWA proposed that TLC calculate the actual utilization rate based on the latest period in which TLC's data on utilization was not manipulated by lockouts, and proposed a method to accurately measure utilization even if lockouts were imposed. The TLC has incorporated parts of NYTWA's petition into this rulemaking package; while the rulemaking package differs in form, it seems to share the intent of aiming to disincentivize future lockouts, and to not allow last year's lockouts to skew this year's driver minimum pay rate calculation. NYTWA broadly supports this rule package, as described below, and urges the TLC to make the following amendments and additions outlined in detail below.

I. THE TLC'S PROPOSED ADJUSTMENTS TO THE PER-MILE RATE ACCURATELY ACCOUNT FOR MOST TLC DRIVER EXPENSES.

A. *TLC's Proposed Revisions to the Mileage Rate Are In Line with Its Past Practice and the IRS' Established, National Standard for Measuring Vehicle Depreciation*

The NYTWA called for and supports TLC's use of an updated study to more accurately account for driver expenses, such as the shift to a fleet that now consists of larger vehicles and many electric vehicles, as well as increased vehicle rental costs. The proposal for a new per-mile rate, based on the 2024 Parrott Report, relies on a revised methodology but produces a per-mile rate that is not all that different from the current rate after applying a revised per-mile utilization formula. Notably, although accounting for some costs that outpace general vehicle expenses, the 2024 Parrott Report ultimately arrived at a per-mile value to vehicle depreciation that is even lower than the IRS rate for standard mileage reimbursement.⁹

Similar to the IRS' calculation of per-mile reimbursement, Parrott factors in insurance, fuel, and maintenance costs, among other costs, but the largest portion of the rate is for the cost of the vehicle, or depreciation. Consistent with Parrott's practice in 2018, which led to the initial calculation of TLC's minimum driver pay rates, expenses for the purchase of a vehicle are accounted for based on a 5-year depreciation schedule and account for the full cost of the vehicle.¹⁰ Parrott's re-calculation of the rate in 2024 raises the overall mileage rate, yet, following roughly the same methodology as his 2018 report, still allocates less per mile to depreciation than the IRS rate.

Parrott's methodology, which attributes the full-cost of the vehicle over five years, is completely consistent with longstanding standard IRS practice for depreciation. The IRS treats vehicles as five-year property, meaning they are fully depreciated after five years.¹¹ The same approach to salvage or potential excess value is taken with regard to use of the standard mileage rate; in seeking a fair, workable, and standardized approach to vehicle reimbursement, the IRS explicitly

⁹ See 2024 Parrott Report, at 27, available at https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf (Date accessed: Feb. 4, 2025).

¹⁰ 2024 Parrott Report, at 3, 24; *compare, e.g.*, 29 U.S.C. § 168(e)(3)(B)(i), discussed at more length *infra*.

¹¹ 29 U.S.C. § 168(e)(3)(B)(i). See also *IRM 1.35.6.4.9(2)*, available at https://www.irs.gov/irm/part1/irm_01-035-006 (Date accessed: Jan. 28, 2025) ("purchased vehicles are capitalized and depreciated over a five-year useful life.") Under IRS' standard depreciation method, salvage (the resale value of a depreciated property) is not accounted for. 29 U.S.C. § 168(b)(4) (declaring, under ACRS depreciation, "salvage value shall be treated as zero.")

instructs taxpayers who may have, over the life of a vehicle, exceeded total depreciation to continue using the full mileage reimbursement rate, even though this rate continues to account for depreciation: “If your basis is reduced to zero (but not below zero) through the use of the standard mileage rate, and you continue to use your car for business, no adjustment (reduction) to the standard mileage rate is necessary.”¹² That is, through MACRS¹³ or the per-mile reimbursement rate, the IRS sanctions exactly the treatment of vehicle expenses used in business that Uber, through its hired economists HR&A, finds so objectionable.

B. Uber's Objections to the TLC's Proposed Revisions to the Per-Mile Rate are Irrational, Based on a Flawed Study that Repeatedly Undercounts Drivers' Expenses, And Is Unmoored From Decades of Federal Tax Law and Practice.

The NYTWA is surprised to see Uber take such a strong stand against the method of depreciation used by the IRS, as Uber speaks approvingly of it as an appropriate standard for drivers to calculate their own expenses for tax purposes, on a national level. Currently, Uber’s website informs drivers that “[t]he IRS provides 2 vehicle tax deduction methods to determine how much you can deduct from your taxable income. You can choose which would be best for you,” before providing information about the standard mileage and actual expense methods.¹⁴ While, all of a sudden Uber has decided that it may not like this method, it represents standard practice in calculating vehicle expenses for at least the last 40 years. If Uber has such objections, they would more properly be raised with Congress than with the TLC, which is in a far weaker position to alter 40+ years of standard, nationwide practice in vehicle reimbursement methodologies.

Nonetheless, it appears that Uber, having faced significant backlash for locking out drivers in order to manipulate TLC’s utilization rate data and game the driver pay rules, is now seeking another path to diminish driver pay. Despite TLC’s measured and modest approach to the assessment of the per-mile rate, Uber has, through a report released in conjunction with its consultants HR&A, proposed cutting the current per-mile reimbursement rate by 22%-- 30% below the rate proposed in this rule package. While Uber’s HR&A report is riddled with flawed methods and assumptions,¹⁵ it largely derives its low reimbursement rate from a sloppy and flawed revisionist accounting of vehicle acquisition and depreciation costs. For example, HR&A’s proposal also assumes a 60 month loan term, but asks to account for all those drivers not currently making payments based on an undisclosed Uber survey, by weighting the vehicle cost factor to account for them. But, as it is merely taking a snapshot of driver expenses at one

¹² IRS Publication 463: *Travel, Gift, and Car Expenses* (2023), at 35, available at <https://www.irs.gov/pub/irs-pdf/p463.pdf> (Date accessed: Jan. 31, 2025).

¹³ See generally IRS Publication 463, *supra*, at 22-35.

¹⁴ *Your guide to tax season* (website), available at <https://www.uber.com/us/en/drive/tax-information/> (Date accessed: Feb. 3, 2025). See also *Tax Season. Simplified.* (website), available at <https://www.lyft.com/driver/taxes/us> (Date accessed: Feb. 3, 2025) (also directing drivers to the standard mileage and actual expense methods).

¹⁵ For just a few examples, the vehicle expense formula HR&A proposes fails to account for EV charging time; it sources vehicle cost data based merely on Manufacturer's Suggested Retail Price ("MSRP"), which excludes sales tax (which amounts to \$3,550 for a \$40,000 vehicle), and cannot reflect actual costs during a period in which many were paying above MSRP for vehicles (See <https://www.cnn.com/2022/02/19/business/car-buyers-sticker-shock/index.html>); and estimates FHV rental costs to “average” lower than the lowest advertised rates at major NYC FHV rental fleets.

point in time, the HR&A report doesn't say if some drivers didn't make payments because, *e.g.*, they had loan terms shorter than 60 months at higher costs; in such cases an earlier payoff should not be factored in as no payment, it doesn't at all follow that such drivers should be factored out of the expense equation entirely; whether some drivers have different payment schedules does not implicate whether or not the payments they have received via TLC's per-mile rate is adequate to reimburse those costs. Ultimately, whereas the IRS treats the typical useful life of a vehicle for business purposes as five years, and designates 33 cents of its 70-cent per-mile rate as covering depreciation, **the HR&A report allocates only 11 cents to vehicle costs—one third of the benchmark IRS rate.** This level of undervaluation is patently absurd—akin to proposing re-adjustment of the federal minimum wage from \$7.50 to \$2.50.

Through its contracted consultants, under the guise of a serious economic analysis, Uber is proposing a manipulated and artificially lowered number in order to claim that TLC should reach a reasonable compromise between their numbers and Uber's and further lower the rate. No serious study would use MSRP as a basis for vehicle cost and ignore thousands of dollars drivers spend on sales tax,¹⁶ or market conditions reflected in driver responses. Having failed in its effort to avoid paying the full amount for drivers' time required under the rules by manipulating data through lockouts, Uber is now trying to avoid paying the full amount for drivers' miles, by manipulating data on expenses.

The TLC, in line with IRS practice, used a five-year assumption of useful life in its initial calculation of the mileage rate that has been in effect since 2019; the companies have never previously objected to this understanding of a vehicle's useful life. **That is, nothing has changed about how the Parrott report treats vehicle cost reimbursement over time.** Despite this, HR&A's proposal asks to account for all those drivers not currently making payments based on an undisclosed Uber survey, by weighting the vehicle cost factor to account for them. The HR&A Report further wants resale value to be deducted from its depreciation formula; in doing so, the HR&A report suggests that Uber would rather TLC make unfounded assumptions of how many years vehicles have been in service based on their model year, and how much a driver could receive for resale after retirement from years of city driving in TLC use than use the five year IRS standard TLC has been using since the inception of the pay rules.

It is fairly clear that Uber is trying to test the TLC to see if it will become its partner in using the regulatory process to bless the sub-minimum wage rates that Uber has been trying to pay since it began lockouts, now through reducing driver pay in another novel method. The Parrott report sets a firmly rational method for calculating driver expenses in line with economic norms and the federal government's approach to per-mile expenses; TLC should not be intimidated into taking the bait.

While HR&A and Uber propose speculation¹⁷ of numerous factors in vehicle costs that could vary widely among drivers, Congress notably and deliberately rejected attempts to account for

¹⁶ The use of MSRP seems especially odd here, considering that Uber claims to have surveyed drivers about vehicle costs, but apparently did not ask them about sales price. See HR&A Report, at 8.

¹⁷ Uber would rather TLC make unfounded assumptions of how many years vehicles have been in service and how many miles they have based on their model year, given their suggestion that they will have to stop dispatching to cars older than five years. The assumption that a vehicle's life can be judged by its model year would be especially

salvage in computing depreciation going back to 1981. Among other reasons, Congress noted the fact that individualized argument and assessment of property's salvage value or lack of it simply were not conducive to practical application of depreciation standards to a broad class of tax payers. The same is true with respect to mileage reimbursements generally or in the TLC context: the goal is to create a fair standard that covers drivers' costs and leaves them in a position to afford a new vehicle when the useful life ends. With tax reforms passed in the 1980s Congress sought to simplify depreciation procedures, where determinations around a property's useful life and possible salvage value were "too complex", "inherently uncertain" and engendered "unproductive disagreements between taxpayers and the Internal Revenue Service."¹⁸

The IRS mileage reimbursement rate is a longstanding and generally accepted method for calculating average vehicle expenses for workers or business owners who use their vehicles in the course of business. That the Parrott report hews close to its method for determining depreciation, although lower, as a result of careful study based on actual driver survey data rather than simply googling MSRPs and Kelly Blue Book values as HR&A seem to have done, shows that the Parrott study is a serious assessment of what costs FHV drivers actually incur, in line with metrics used by the IRS, such as the 5-year vehicle life.¹⁹ By contrast, the HR&A's 11 cent/mile depreciation proposal seems designed without regard to actual driver expenses or generally accepted reimbursement standards, to set up a number that is so low that it could force TLC to negotiate on a reduction.

C. Despite Uber's Threats to Drivers, Nothing in the TLC's Proposed Revisions Requires or Even Incentivizes Uber to Stop Dispatching to Drivers Whose Vehicles are More than Five Years Old

Before this hearing, Uber sent out a message to its drivers, shown below, implying that the proposed revisions require them to stop dispatching to vehicles that are five years or older. This is patently false.

suspect in recent years given that, during the COVID-19 pandemic, thousands of drivers placed their FHV's in storage and did not use them in business for upwards of two years. *See infra*.

¹⁸ *Liddle v. Commissioner*, 65 F.3d 329, citing the ERTA's reforms to the tax code; *see also True v. United States*, 1997 U.S. Dist. LEXIS 18751 (Dist. Wyo. Nov. 2, 1997) ("Congress sought to simplify the depreciation rules by eliminating the need to adjudicate matters such as useful life and salvage value, which are inherently uncertain and result in unproductive disagreements between taxpayers and the Internal Revenue Service").

¹⁹ *See* IRM 1.35.6.4.9(2), available at https://www.irs.gov/irm/part1/irm_01-035-006 (Date accessed: Jan. 28, 2025) ("purchased vehicles are capitalized and depreciated over a five-year useful life."); *see also Depreciation: Frequently Asked Questions* (website), available at https://www.irs.gov/irm/part1/irm_01-035-006 (Date accessed: Jan. 28, 2025). Compared to the average vehicle used for business, this is all the more so considering the increased wear and tear to be brought on by exclusively driving in city conditions, on New York's weathered streets, and the wear brought on by thousands of passengers over the course of a vehicle's life.



Tell the TLC Not to Force You Offline

New rules could impact cars older than 5 years

On Wednesday, February 5, the Taxi and Limousine Commission (TLC) will hold a hearing to consider new rules for the for-hire vehicle industry. TLC's cost study and corresponding rules assume there is no value in a vehicle 5 years or older. We know that's not true, and drivers like you continue driving vehicles, and earning with vehicles, well beyond 5 years. However, if this rule passes, Uber may no longer dispatch vehicles 2019 or older (and may update their vehicle year annually). This means in 2025 you may need a vehicle with a 2020 model year or newer.

The TLC needs to hear from drivers directly. Tell the TLC your vehicle has value, and is your tool for earning a living, way beyond 5 years. Tell the TLC they must reconsider this rule immediately and not take any action that will force you to buy a new car every five years.

Email the TLC →

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The depreciation timeframe in both Parrott reports and in IRS depreciation methodologies are not about vehicle age, but about years in service for business use. With this understanding, Uber's misrepresentations and threats that it would stop dispatching to vehicles over five years old is utterly irrational, as the notion that a vehicle is depreciated over five years has nothing to do with its model year. The Parrott report creates an assumption of how vehicles expenses should be reimbursed, on a per-mile assessment that assumes average mileage over a five-year schedule; **nothing about Parrott's 2024 report ensures full reimbursement of vehicle costs within five years—instead, the model assumes that at the rate of depreciation paid, a driver will reach full depreciation in five years when driving the assumed average number of miles per year.** Such depreciation assumptions do not operate on a strictly temporal basis. A car that was in storage for two years during COVID would, driving the average annual miles, reach full depreciation based on this formula's spread, in 7 years, even though it would be older than 5 years at that point. Similarly, a half-time driver would take 10 years to fully depreciate the vehicle. Accordingly, Uber's misrepresentations regarding the TLC's proposed rules requiring 5 year old vehicles to be removed from service are completely baseless.

TLC is certainly not saying that 5 year old vehicles have no value, as Uber claims, and nothing in the proposed revision requires or even incentivizes Uber to require drivers to have vehicles that are less than five years old. Uber would not save any money by requiring drivers to use newer vehicles, nor would it benefit in any other way. Indeed, as Uber's HR&A-based arguments rely heavily on implied salvage value to diminish the applied reimbursement for depreciation, it would follow that Uber would just then argue that vehicles retired consistently after 5 years are all entitled to higher salvage value, which would in Uber's view justify diminished depreciation reimbursement in any case. These arguments make no economic sense, and indeed, seem intended only to scare drivers. All this is about is Uber misrepresenting the TLC's proposals to scare drivers into acting against their own interests.

At base, Uber's argument is that despite the fact that such methodology is used by employers and taxpayers almost universally, Uber wants TLC to pass a special rule just for HVFHVs so they can pay drivers less for depreciation than any other worker in America receives for using their own vehicle. Regulated parties may disagree, or promote alternative methods, but it cannot reasonably be said that the adoption of a universally accepted standard for reimbursements is irrational. When it comes down to it, TLC's depreciation model is in line with standard IRS practice for depreciation and reimbursement for 40+ years. It is unquestionably a rational decision for TLC to continue to use it.

D. TLC's Use of a Five-Year Depreciation Schedule is Consistent with its Goal of Approximating Minimum Wage Compliance for HVFHV Drivers.

The TLC's driver pay rule has sought to create an industry-tailored approximation of the minimum wage. In doing so, the TLC has consistently relied on universally accepted metrics, used by government agencies to determine workable rates for a driver pay rule: the per-minute rate increases in line with the federal government's measure of the Consumer Price Index for the NY/NJ area; depreciating vehicles on a five-year schedule in line with IRS practice; the baseline for driver pay standard was built off of New York state's then- \$15/hour minimum wage. Uber's attempts to attack the application of a decades-old federally accepted standard for useful vehicle life at the TLC are better addressed to the IRS to overhaul its longstanding practice; surely TLC's use of the IRS' depreciation schedule is a rational one.

Essentially, the HR&A reports main objection to TLC's practice for mileage reimbursement is that its assessment of vehicle depreciation is excessive. However, this use of a per-mile reimbursement rate is totally in line with TLC's initial goal of ensuring payment in line with the minimum wage and expenses. Employers who do not pay their employees the minimum wage plus their vehicle expenses, calculated by the IRS mileage reimbursement rate have violated the minimum wage; TLC's rules seek to do no more than apply this standard to the HVFHV workforce.²⁰ Any argument against this reimbursement schedule is essentially an argument for TLC to pass rules that let it violate the applicable minimum wage in this workforce.

²⁰ See, e.g., *Lopez v. Cajmant LLC*, 2020 U.S. Dist. LEXIS 200066, 2020 WL 9814059, 15-cv-593(ENV)(RER) (E.D.N.Y. Oct. 26, 2020), *adopted* Nov. 11, 2020, at *15-16 (finding use of the IRS standard mileage reimbursement rate "reasonable" to calculate damages for mileage reimbursement.); see also *Zellagui v. MCD Pizza, Inc.* 59 F. Supp.3d 712 (E.D. Penn. 2014) (finding the use of the IRS mileage reimbursement rate to be a "reasonable" measure of class of delivery drivers' expenses in federal minimum wage action).

E. The Cost of TLC Driver Licensing Courses and the Time Spent Charging EVs Should be Incorporated Into Assessments of Driver Expenses

While the Parrott Report largely captures drivers' expenses a few details have been left out. The report does not account for the expense of the recently added TLC driver license renewal course.

The NYTWA notes that the Parrott report anticipates reductions in charging wait time in the future as charging infrastructure proliferates. However, to the extent that all HVFHV trips will transition to EVs in the coming years as a result of the Green Rides Initiative (and EV adoption among non-TLC vehicles will likely increase), it's uncertain whether the proliferation of charging infrastructure will outpace EV adoption to the extent that charger waiting time will actually decrease. At the very least, the TLC should flag this data point for particular attention in the coming years.

II. THE PROPOSED RULE REGARDING UTILIZATION RATE ADJUSTMENTS SHOULD LARGELY DISINCENTIVIZE LOCKOUTS

Last fall, the NYTWA submitted a petition to initiate rulemaking to close loopholes in the utilization portion of the driver pay rule and address Uber and Lyft's attempt to game the system by providing corrupted data to TLC. NYTWA proposed rules that would have, in part:

1. Required TLC to re-calculate the utilization rate based on a time period from before Uber and Lyft reinstated lockouts and corrupted utilization data;
2. Closed loopholes in the TLC's utilization rules to ensure that all time drivers made themselves available to work would be counted as such, even if drivers had been involuntarily locked out of the apps;
3. Clarified data reporting requirements; and
4. Eliminated utilization "bands" and returned to an assessment of actual utilization rate, on an every-other-year basis, to disincentivize gamesmanship on utilization rate.

While TLC did not adopt NYTWA's proposals whole cloth, we are pleased to see that some have been adopted in whole and others in part.

First, the NYTWA is heartened to see that the TLC has adopted NYTWA's recommendation to apply the actual utilization rate from the last period for which unmanipulated utilization data exists. This step will allow for a more accurate assessment of utilization than is possible with the 2024 data, which was corrupted by the companies' pattern of lock outs, which made it impossible for TLC to receive data on all time that drivers made themselves available to receive dispatches. This change corrects that, and also sends a strong message that TLC will not simply acquiesce to HVFHV's services to manipulate utilization data in their favor. Indeed, such a step is necessary, as the use of such manipulated data in setting a utilization rate, which does not present the necessary information required to calculate utilization as defined in TLC rules, would itself have been an irrational decision.

The TLC's proposed elimination of the automatic annual updating of the utilization rate should also serve to disincentivize gamesmanship around the utilization rate. With no assured reassessment of the UR, companies would likely feel less of a need to lock out drivers for

marginal gains of 1 or 2% if such a manipulated “increase” in the utilization rate, as currently measured, would not lead to a re-setting of the rate, and per-trip savings for the HVFHV services. That said, NYTWA has some concerns that creating no schedule for re-assessment could, conversely, allow companies to over-hire without having to compensate drivers for any decrease in utilization below the 53% mark to be applied in this rulemaking. For this reason, adequate data must be made easily accessible so that stakeholders can make informed decisions about how and when TLC should be petitioned to make any adjustments to the pay formula, including the UR, if necessary.

Further, to disincentive any future manipulation of the UR through lockouts, the TLC should make clear that no upward adjustments to the UR will be made after any year in which there have been lockouts.

Layoff Notices

The NYTWA understands that the TLC’s intent regarding the requirement for 72-hour advance notice before any lockout is to limit the amount of surprise and chaos caused by lockouts if companies still choose to implement them. While hopefully, the broader adjustments to utilization rate calculation would sufficiently disincentivize lockouts, the 72-hour notice provisions would provide some measure of certainty for drivers who would, if they had not received such a notice, be secure in the knowledge that they could go to work on any given day. For drivers who do receive such a notice, they would at least be able to avoid the loss of time and mileage expenses incurred by going to work only to find themselves unable to receive dispatches, and to have enough forewarning to plan for other work on that day, if possible, and avoid incurring childcare costs, or else make other plans.

Importantly, the proposed amendments also ensure that once a driver is allowed access to an app they should be able to log in for the next 16 hours; this ensures that any driver who might plan on a full shift will be able to complete one.

III. TLC MUST TAKE OTHER STEPS TO CREATE A FAIR PAY STRUCTURE: PAY RULES, IN ISOLATION, WILL NOT CREATE EQUITABLE PAY FOR ALL DRIVERS

A. TLC Must Take Responsibility for the Role of FHV Oversaturation in Declining Utilization

While NYTWA supports TLC’s utilization rate related rule amendments, further safeguards are needed to ensure that HVFHV utilization is maintained at a sustainable level. Without an expanding pool of vehicles and drivers, the HVFHV services would be limited in their ability to over-hire and create the oversaturation that leads to declining utilization.

At a time when the utilization rate had declined significantly against the previous 58% benchmark, The addition of thousands of new FHV licenses has contributed to oversaturation’s resurgence. In order to avoid this pattern from recurring, TLC should amend Rule 59A-06 to prohibit the issuance of any FHV licenses that may be used in HVFHV service after any year in which an HVFHV service has engaged in lockouts.

B. The TLC Must Finally Take Action to Regulate FHV Lease Rates and End the Exploitation of FHV Renters

Since 2018, NYTWA has been calling, over and over, for the establishment of FHV lease caps in TLC rules, yet TLC has refused to do anything about exorbitant lease rates. While TLC has acknowledged the exploitative nature of FHV rentals, it did so only to the extent that it cynically relied on the “predatory” nature and cost of FHV leases as a pretext for unlawfully lifting the limits on FHV licenses, without rulemaking, any rational reason, or even limiting applicants for new FHV licenses to only renters. The only thing this accomplished was creating an expanding pool of FHVs that led to oversaturation, widespread lockouts from both Uber and Lyft, and decreased driver earnings for all drivers.

FHV rentals existed before Local Law 147 of 2018 capped FHV license issuance, and have continued to exist since then. TLC knows that regardless of FHV license availability, there will always be thousands of drivers who need to or choose to lease rather than to own FHVs. These drivers are likewise entitled to meaningful pay and expense regulation, just as other FHV drivers and taxi lease drivers.

If TLC believes that such leases are predatory, it should do something about them, just as it has for decades with taxi lease costs. As the 2024 Parrott report notes, renters are spending significantly more for vehicle expenses than FHV owners. In order for the TLC pay rules to help bring vehicle renters closer to the goal of the pay rules’ target minimum wage, lease expenses must be fairly regulated, or else renters will lag so far behind the pay rates’ goals that TLC is allowing for the creation of a second-class tier of driver pay. This is unacceptable; the TLC must establish FHV lease caps.

Further, the NYTWA calls upon the TLC to support NYTWA’s campaign to end the assessment of rental car taxes on short-term taxi and FHV rentals. When drivers lease taxis and FHVs to go to work, they are simply not engaged in the type of consumer rental car transaction that the law currently classifies such leases as. This is a legal absurdity that must be remedied in Albany; the NYTWA proposes such amendments to state law and hopes TLC will echo our call.

C. TLC Should Institute a Minimum Driver Payment for Each Trip

Prior to the passage of the TLC pay rules, Uber maintained a minimum fare policy. The more time passes, the more Uber—and, more recently, Lyft—lowers the drivers’ share of the minimum fare. In 2013, the minimum fare for UberX in New York was \$12, leaving drivers with \$9.60. From 2014 to 2017, the same minimum fare was \$8,²¹ leaving even newer drivers who paid a higher, 25% commission, with \$6 in take-home pay.²²

²¹ See <https://uber.com/cities/new-york> (Archived Aug. 2, 2014), available at <https://web.archive.org/web/20140802131924/https://www.uber.com/cities/new-york> (Date accessed: Jan. 27, 2025).

²² This occurred during a time period during which drivers took home even less because Uber was unlawfully deducting sales tax and the Black Car Fund surcharge from the driver’s portion of the fare. That said, drivers who had signed up earlier, paid only a 20% commission and took an even larger share of such fares.

For roughly the last six years, Uber essentially froze its minimum payment to drivers at an amount roughly in line with its 2014-2017 practice, paying drivers \$5.39 for short trips, even where TLC rules would not require such a payment.

Very short trips, while paid at the TLC pay rates, represent a lost opportunity for higher earnings, as drivers lose out on the opportunity for longer trips with higher fares. This is especially true relative to the amount of dispatch time required to reach these shorter fares, which does not differ from any other trip. Because the TLC driver pay rule does not actually require payment for all time at work, as the minimum wage law does, such short trips can reduce a driver's daily or weekly earnings. Having recognized this, Uber always implemented a minimum fare to insulate drivers from the reduced take home pay of short trips.

While Uber's short trip pay had not increased in years, it was reduced in late 2024 yet again to \$4, 50% less than it was in 2014, without accounting for inflation.

Accepting the wisdom of Uber's \$6 minimum take-home fare in 2014, and adjusting for inflation, drivers would be receiving roughly \$8. Accordingly, TLC should establish an \$8 minimum driver payment for all HVFHV trips.

D. The TLC Should Increase Rates for Out-of-Town Trips in Line with Rate 4 on the Taximeter

Out-of-town rates for HVFHV drivers remain far too low; while taxi drivers receive double the metered rate on trips to Nassau and Westchester counties, HVFHV trips that extend beyond the city limits are paid at approximately 1.16 times the normal rate. This rate is arbitrarily low, and fails to adequately compensate drivers for empty time spent returning from beyond the City's borders, in the way that TLC's Rate 4 does for taxi and SHL drivers.

- We understand that, like taxicab drivers, Lyft drivers are incapable of receiving pick-ups in Nassau or Westchester; all miles spent returning to the City are not compensated for adequately by a 16% premium on out-of-town miles.
- Uber drivers may receive pick-ups in Nassau and Westchester that end in the City, but of course they will often not.
 - Nonetheless, UberX trips dispatched in Nassau and Westchester are paid at a mileage rate of \$0.71/mile, that is only 52.2% of the current TLC per-mile rate, and a per-minute rate of \$0.22/minute, that is only 37.7% of the current TLC per-minute rate.²³ Despite historic increases in inflation, and two CPI-based increases to the TLC pay rates, the per-mile rate has not increased since the NYTWA last submitted comment on this issue, looking at trip records from the fall of 2022.
 - Notably, when an Uber trip performed by a TLC-licensed driver begins in Nassau or Westchester, the deflated suburban rates remain in effect for the entirety of the trip, such that, if, for example, a 35-mile long trip begins in Yonkers but ends in

²³ While these trips include a small "flag drop" charge that is no longer part of Uber's New York City pay formula, the cumulative driver pay for such trips still represents, e.g., approximately 60% of the cumulative in-town TLC pay rate.

Brooklyn, a driver is paid at the lower rates for the entire trip, even though roughly 90% of the time and distance of this trip may be in New York City.

Notably, Uber has recently scaled back its out-of-town pay for trips that begin in New York City, but end in New Jersey. Previously, Uber added a \$20 surcharge to these trips that was paid to the driver, that covered the Hudson River toll cost, and gave drivers extra pay for heading back empty, often including a longer uncompensated wait at the return bridge or tunnel trip. This surcharge dates back to at least 2013, when toll rates were \$8.25 or \$10.25.²⁴ While the surcharge never increased as driver pay and toll rates increased, Uber has now eliminated the surcharge outright, merely reimbursing the tolls as it would on any other trip. Again, Uber's rollback of longstanding driver payments makes it all the more important that TLC pay rules provide fair and adequate pay on all trips.

TLC must increase the out-of-town pay rates to double the in-town rates for all miles beyond the city limits to ensure fare pay for TLC-licensed drivers, who will not be able to earn fair pay, if anything, while returning to New York City.

E. The TLC Must Provide Increased Per-Mile Rates for Luxury Vehicles.

While previously TLC rules contained a placeholder at §59D-22(a)(1)(i) for setting minimum rates of driver pay for luxury rides, TLC eliminated the placeholder provision in subsequent rulemaking. TLC should reinstate this sub-section and formulate a minimum payment rate specific to the expenses and qualifications associated with HVFHV luxury vehicle drivers. Drivers of luxury vehicles face significantly higher costs, including increased costs for purchasing or leasing a vehicle and increased gas costs, that are not adequately compensated by the general pay formula.

Although HVFHV services pay rates for luxury rides that are higher than the TLC-regulated pay rates that the companies treat as their floor for payments for basic service, in the absence of regulation, luxury trip pay rates have not increased in line with the basic TLC pay floor. So, when rates for UberX drivers, for example, increase annually in line with inflation, or are adjusted after rulemaking such as this one, Uber is under no obligation to make proportional increases to its luxury rates. In fact, when base TLC-regulated rates have gone up in the recent years, luxury rates have not gone up; for example, rates for Uber Black service have been frozen since at least January 2023. This leaves drivers who risked more to buy luxury vehicles with the promise of higher fares with declining pay relative to inflation and increased operating expenses.

CONCLUSION

The promise of the initial driver rule that TLC touted in 2018, and to which even Uber did not object, was to pay drivers a minimum wage equivalent, plus expenses for all time at work. To allow the rule to achieve anything less is to give away the power to determine driver minimum

²⁴ See 2013 Manhattan River Crossings (NYC DOT Website), at 64, available at <https://www.nyc.gov/html/dot/downloads/pdf/manhattan-river-crossings-2013.pdf> (Date accessed: Feb. 3, 2025)

pay to the companies' manipulations of it. The TLC is capable of much more, and the restoration of the rules' proper function is the least that drivers deserve.

Respectfully submitted,

/s/ Zubin Soleimany

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March 5, 2025

Dear Chair Do and Commissioners,

The New York Taxi Workers Alliance submits these comments to supplement our prior comments regarding the proposed changes to TLC's Minimum Driver Pay Rules. In large part, these rules do two main things: 1.) Adjust the calculation of the Driver Pay Rules' per-mile rate to account for a more recent re-evaluation of HVFHV drivers' expenses, and 2.) Amend the utilization rate portion of the rule to accurately reflect the actual utilization rate of the HVFHV fleet. It has long been understood that, after an analysis of the relevant data, "TLC can tweak the formula as economic forces change." *Tri-City LLC v. New York City Taxi and Limousine Commission*, 2019 N.Y. Misc. LEXIS 12703, *29-30 (Sup. Ct. N.Y. Co. Apr. 30, 2019), affirmed 189 A.D.3d 652 (1st Dep't 2020). Given changes to the composition of the HVFHV vehicle fleet and the HVFHV services' attempts to manipulate their utilization rate to decrease driver pay, TLC is doing exactly what the Court anticipated it would: tweaking the pay formula to respond to changing industry forces.

In earlier submitted comments, Uber takes issue with the methodology used to reach the revised pay standard in the 2024 Parrott report, yet ironically seeks to support its position with its own report, which itself does not live up to the methodological standards to which Uber seeks to hold the Parrott Report.

While Uber implies that it will have to raise prices on riders as a result of the proposed rules, they fail to explain why this would be the case, and provide no insight into how increased driver pay would translate to higher customer prices, rather than, for example, a slight decrease to the companies' take rates, which have ballooned in recent years. Uber controls the levers regarding customer pricing, and could as easily reduce its take rate as it increased it in recent years, independently of any changes to the TLC-mandated pay rates. In any case, by now Uber has severely undermined its credibility regarding how its operations must or can adapt to TLC pay regulations; this much was made clear when it claimed that lockouts were a necessary response to driver pay rules, and then engaged in surge pricing at the same time and place as driver lockouts.¹

¹ See Natalie Lung et al., *How Uber and Lyft Used a Loophole to Deny NYC Drivers Millions in Pay*, Bloomberg (Oct. 10, 2024), available at <https://www.bloomberg.com/graphics/2024-uber-lyft-nyc-drivers-pay-lockouts/>.

Uber and Lyft argue repeatedly that the proposed rules create higher costs that will lead to higher prices and harm riders. It is worth noting here that HVFHVs are already paying significantly higher rates in Seattle, where Uber has never implemented lockouts. In Seattle, Uber and Lyft are already paying \$1.59/mile, \$0.68/minute, and a minimum fare of \$5.95. Any argument that the companies can't afford to pay New York City drivers these pay rates at scale in a city with more than ten times the population of Seattle is somewhat incredible. Further, it's unclear why the companies believe a marginal increase to driver pay² would come at the expense of riders. Riders have been bearing the costs of the companies' decision to increase the share that they take home even without any regulatory increase to the pay rules; given that Uber's take rate increased 128% between 2021 to 2023, they could easily absorb the additional 2.2% increase in driver pay the proposed rules would create.³

The Proposed Utilization Rate Adjustments

TLC proposed amendments to the utilization rate portion of the driver pay rules ground the rule back in real data. While Uber claims that the selection of the date range for the assessment of utilization rate is arbitrary, it is plainly based on the last 12-month period in which HVFHV companies were not manipulating utilization data. The period is 12 months, in line with the pre-existing requirements of the utilization rule, and captures the full range of utilization in an industry with seasonal fluctuations.

TLC's decision to disregard utilization data from the lockout periods is a rational response to the HVFHV services' lockouts. To the contrary, it would be irrational for TLC to move forward a re-assessment of the utilization rate based on data it knows to be flawed. As described in our previous comment, the UR is intended to measure the time that drivers are engaged in transporting passengers out of the total time they "have made themselves available to accept dispatches."⁴ When drivers are locked out mid-shift when they have been working and wish to continue working, that is time that they have made themselves available for dispatch, but is not being reported to the TLC as such during lockouts. Were TLC to move forward with a re-calculation of the utilization rate based on such data, which plainly does not comport with the definition of utilization rate in TLC rules, such an action would itself be subject to legal challenge.

TLC's decision to use prior UR data from the pre-lockout period is the only rational choice it can make when the last 12 months' data has been corrupted and cannot be cleaned, and

² Applying the proposed rates to the TLC's sample trip of 30 minutes and 7.5 miles yields driver pay of \$29.38, just 2.2% higher than the \$28.76 required under rates effective as of March 1, 2025.

³ See James Parrott, NY Daily News, *Uber & Lyft put the brakes on drivers* (Feb. 4, 2025), available at <https://www.nydailynews.com/2025/02/04/uber-lyft-put-the-brakes-on-drivers/> ("From the second half of 2019, the first year of the pay standard, to the second half of 2021 as the city was emerging from the pandemic, per trip passenger fares and driver pay (including bonuses) rose in tandem, with Uber's take rising 10% faster...However, over the next two years from the second half of 2021 to the second half of 2023, passenger fares rose by 14% while driver pay per trip was flat. On the other hand, Uber's share of the passenger fare (which Uber calls its 'take,' the source of its profits), soared by 128%. Average fares rose by \$3.14 with all of that going into Uber's pocket and not a cent going to drivers.")

⁴ 35 R.C.N.Y. § 59D-03(j).

is in line with analogous precedents. For example, where employers don't keep accurate payroll records, reliable employee records may be substituted for proof of hours worked,⁵ or where employers fail to accurately report wages for the purposes of unemployment insurance.⁶ Here, the denominator for the utilization rate is "time [...] that all Drivers [...] have made themselves available to accept dispatches[.]" 35 RCNY § 59D-03(j). During the lockout periods, there was no data provided to TLC that accurately reflects the time that drivers make themselves available to receive dispatches. Accordingly, it is a rational decision for TLC to base its utilization rate assessment on the last 12-month period for which accurate data was available.

Although Uber's comment lays the blame for the increase in driver expenses on other TLC initiatives such as imposing caps on new FHV licenses, altering those caps, and imposing an electric vehicle mandate that will progressively apply to the entire HVFHV fleet over the next five years, such arguments are irrelevant to whether or not drivers should be fairly compensated for their expenses and all their time at work. The goal of the HVFHV driver pay rule is to pay drivers the approximate equivalent of a minimum wage, regardless of market circumstances. Uber's argument that TLC has taken regulatory action which Uber believes drove up costs is rather ironic considering the examples Uber cites: the imposition of the cap on FHV licenses and the transition to an all-EV HVFHV fleet within five years. Without a cap on FHV licenses prior to 2018, an unlimited number of new drivers entered the market, leading to the oversaturation that left 85% of drivers making below the minimum wage, and to the establishment of the cap and FHV driver pay rules. Absent the cap, increased numbers of FHV on the road would cause utilization to fall even lower, leading to higher per-trip payments by HVFHV services. As to the transition to an all-EV HVFHV fleet by 2030, while this is required by TLC regulation, Uber had independently established this goal as company policy for US, Canada, and Europe three years before these rules were passed.⁷

Elimination of Annual Utilization Rate Adjustments

Uber's comments criticize the proposed rules for eliminating the annual re-adjustment of the utilization rate, which TLC proposes as a way to disincentivize HVFHV services from gaming the driver pay rules by locking out drivers to achieve a higher *measured* utilization rate within a given year. The NYTWA share some of these concerns, as a freeze in the utilization rate could potentially prejudice drivers if the actual utilization rate continues to fall below 53.3% but drivers are not compensated for reduced utilization with a future adjustment. Such a disagreement on the best policy, though, does not render TLC's proposal arbitrary, and certainly nothing in city law would require TLC to maintain an annual adjustment. Here, where gamesmanship around the pay rules led to disruptive lockouts that devastated driver pay, this

⁵ See, e.g., *Tyson Foods, Inc. v. Bouaphakeo*, 577 U.S. 442, at 443 (2016).

⁶ See, e.g., N.Y.L.L. § 571, requiring that, if an employer files an incomplete or insufficient return, "the commissioner [of Labor] shall determine the amount of contribution due from such employer and the amount of wages paid by such employer on the basis of such information as may be available."

⁷ Dara Khosrowshahi, *Driving a Green Recovery* (Sept. 8, 2020), available at <https://www.uber.com/newsroom/driving-a-green-recovery/> (Date accessed: Feb. 27, 2025).; see also Minutes of TLC Hearing (Sept. 20, 2023), available at https://www.nyc.gov/assets/tlc/downloads/About/commission_meeting_transcript/transcript_09_20_23.pdf; testimony of Julian Kline of Tech:NYC, at 46:20-23 (noting, at hearing concerning proposed rules requiring all-electric HVFHV fleet by 2030 that "Earlier this year, rideshare providers Uber and Lyft, committed to converting their fleets to be entirely electric vehicles or wheelchair accessible by 2030.").

approach is a rational response to disincentivize lockouts, even if it is not the NYTWA's preferred method.

Uber's arguments around "due process" and the timing of the proposed change to measuring utilization ring hollow considering Uber's prior lobbying to keep the applied UR at 58% even when the measured UR would likely have been lower based on the period preceding that rule change.⁸ Uber had no issue with seeking a higher rate that drivers had no notice would be approaching during the year prior, when in reality utilization had decreased and would have entitled drivers to a higher pay rate absent the change that Uber lobbied for.⁹

Uber got the change it wanted, told drivers that doing so would mean they should not lock out drivers, and then ended up locking them out anyway. In short, Uber has proven that it will not keep its word around lockouts even when it got the version of the UR rule that it wanted. Given the company's clear disregard for the language and intent of the rule, as well as their own statements that they would not lock out drivers if they got the rule they wanted, it is certainly a rational response for TLC to amend the pay rules to eliminate the rule structure that incentivized these lockouts even when it had already been amended to favor HVFHV services.

This utilization framework, wherein an agency assesses the workforce's utilization while setting an initial rate, but does not include a provision for routine evaluation and re-setting of the utilization rate has been used in other jurisdictions. For example, in both Seattle and Minnesota, driver pay rates were rooted in rates set by accounting for the amount of engaged time out of the amount of total on-app time, and scaling up the pay rate for engaged time by accounting for such empty time.¹⁰ The NYTWA understands that Uber has not challenged these methodologies elsewhere.

While we share concerns about the potential for the applied utilization rate not lining up with the actual utilization rate, TLC practice in the past five years indicates that should the applied UR become too far out of step with actual UR, the TLC can make corrections through rulemaking, just as it is doing in this rulemaking. Similarly, TLC adjusted the mileage rate through rulemaking when the general CPI-W failed to keep up with the pace of vehicle operating expenses in 2022. Given that Uber lobbied for rules that allowed for a 5% buffer zone or "band" around the utilization rate that worked only to Uber's benefit, we doubt that Uber has any sincere legal objection to a UR framework that doesn't apply the exact measured utilization rate.

⁸ See, e.g., Transcript of TLC Hearing (Mar. 1, 2023), at 36:18-23. ("I believe the band mechanism that the TLC proposed back in November would have protected the utilization rate.")

⁹ See Notice of Promulgation and Statement of Basis and Purpose for FHV Driver Pay Rules (Oct. 6, 2022). In this rule package, the TLC first proposed that the utilization rate only be adjusted if it fell below 52% or above 64%; Uber lobbied for the implementation of this policy at the March 1, 2023 hearing, see n. 8, *supra*.

¹⁰ See James A. Parrott, Michael Reich, and Xingxing Yang, *The Economic Situation of Gig Passenger Drivers in Minnesota*, IRLE Working Paper #105-24 (Oct. 2024), at 12, available at <https://irle.berkeley.edu/wp-content/uploads/2024/10/The-Economic-Situation-of-Gig-Passenger-Driver-in-Minnesota-IRLE-Working-Paper.pdf> ("To pay drivers for their entire on-app time and for all the miles they drive during on-app time, we then scaled up the respective per minute and per mile components that would be applied to the time and distance of a TNC passenger trip. Scaling up the per minute pay rate involves dividing by the P3 share of on-app time; scaling up the per mile expense rate involves dividing by the P3 share of total miles driven during all three of the time segments for each trip," and noting at n. 22 that "[d]river compensation standards in New York City and Seattle used similar scaling factors, based on local conditions.").

TLC's Proposed Change to the Per-Mile Rate

Uber attempts to argue that the proposed mileage rate changes seek an increase by “changing the pre-existing methodology for calculating the ‘composition’ of driver expense.” This does not appear to be the case. While elements that compose the total cost of driver expenses have changed from the initial Parrott and Reich report in 2018, the methodology for calculating such expenses does not appear to have changed.

Uber and Lyft's attempts to find flaws in the Parrot 2024 report similarly fall flat: for example, both Uber and Lyft take exception with the report's assumption that 30% of drivers are renters. While both Uber and Lyft cherry-pick data points and analysis to attempt to paint the analysis as irrational or arbitrary, their attempts are plainly disingenuous, and all of the issues they raise are squarely addressed by the Parrot 2024 report. Uber, for example, claims there is no evidence of individuals (and not corporations) engaging in informal leasing arrangements with drivers, despite the fact that 40% of drivers who reported that they were renters in the driver survey report being in such an arrangement.¹¹ Uber and Lyft's comments are replete with this level of superficial and disingenuous analysis, which they then use to justify their own proposed policy initiatives. Of course, any alternative policies are irrelevant; the TLC is not required to adopt Uber and Lyft's preferred approaches. A few examples are highlighted below.

Vehicle Depreciation

The initial Parrot report assumed vehicle purchase costs over a five year period, just as the 2024 report does. It is unclear why, six years into this regulatory framework, Uber is only now objecting to this method of assessing depreciation. Uber's initial comment attacks what it calls “demonstrably false assumptions about vehicle depreciation rates” yet as discussed in NYTWA's initial comment, the TLC pay rule formula is intended as an average of costs to create a fair standard for remuneration that approximates the minimum wage. As a generally applied reimbursement standard, it cannot possibly create a perfect accounting of actual expenses for any vehicle. This 5-year approach to vehicle depreciation that does not attempt to account for salvage value is consistent with decades-long IRS practice that aims to create a broad, generally applicable standard for vehicle expense reimbursement— not a perfect accounting for every individual situation. And again, to be perfectly clear, this method does not, as Uber insists on falsely repeating, mean that vehicles have no value or that reimbursement occurs on a five-year schedule, but merely keys reimbursement to the *number of miles* assumed to be driven over five years by the typical HVFHV driver. Notably, Parrot's 2024 report's ultimate assessment of per mile vehicle depreciation is still lower than IRS' per mile depreciation rate – even as the 2024 Parrot report accounts for factors that both Uber and Lyft contest, like the shift in the fleet from sedans to SUVs.

Beyond this, the same methodology is standard practice in other municipalities that have passed driver pay rules. Seattle based its driver pay rate on a study that fully depreciated a vehicle over a four-year period.¹²

¹¹ Compare Uber's February 5, 2025 Comment at 17 to the 2024 Parrot Report at 18.

¹² See James A. Parrott and Michael Reich, *A Minimum Compensation Standard for Seattle TNC Drivers* (July 2020), at 43-44, available at https://www.seattle.gov/documents/Departments/LaborStandards/Parrott-Reich-Seattle-Report_July-2020%280%29.pdf (Date accessed Feb. 28, 2025).

Electric Vehicle Charging Costs

Uber's and Lyft's comments both oppose the treatment of EV charging time as compensable time to be factored into the rule's per-minute rate.¹³ Their position is inconsistent with basic standards in minimum wage law regarding what should and should not count as compensable time.

For example, under the Fair Labor Standards Act, activity is considered compensable time if it is "integral and indispensable" to an employee's "principal activities"-- that is, essentially whether it is an activity "with which the employee cannot dispense if he is to perform his principal activities." *Integrity Staffing Sols., Inc. v. Busk*, 574 U.S. 27, 37 (2014). Like butchers who can't work effectively without sharpening their knives, or those who can't perform their duties until their computers boot up (both considered compensable time), HVFHV drivers of EVs cannot perform their principal activity of transporting passengers unless their vehicles are charged.

Lyft seems to confuse the issue, arguing that drivers would double dip by having charging time compensated in the per-mile component of the rule, and further as under-utilized time in the per-minute component. Such an argument speculates that drivers would remain on-app while waiting for a charger or while charging. Such assumptions are unwarranted: if a driver needs to charge their vehicle, they are not in a position to travel without adequate charge and it would make little sense to attempt to accept dispatches. Drivers who would remain online but not accept dispatches will be logged off under current policies, and subject to further discipline and loss of privileges.¹⁴

Regarding waiting time for chargers, it is not clear why the Parrott report states that waiting times for chargers are anticipated to decline, as the report does not show a trend that charger installation is outpacing EV uptake. Even with this shortcoming, while Uber attacks the driver-reported data as "imprecise and unreliable" that is inconsistent "with other sources," such data reflects drivers' experiences. The "other sources" Uber cites appears to be data from only one network of chargers, Revel, while several others are available, and driver surveys would reasonably reflect experiences with broader groups of chargers. Revel only has 64 fast chargers; what are the waiting times at other chargers?; how often are those available?; Uber's comment does not say, presenting only cherry-picked data for one charger vendor in a city with tens of thousands of electric vehicles. Uber's reported data from Revel is merely another form of data that is "inconsistent with other sources" such as drivers' own reporting, and is surely not entitled to any more deference than driver survey data. *See Tri-City LLC v. New York City Taxi and Limousine Commission*, 2019 N.Y. Misc. LEXIS 12703, at *22 (Sup. Ct. Apr. 30, 2019) (upholding TLC driver pay rules where the TLC relied on, *inter alia*, driver survey responses to assess expenses, even when some conflicting data was provided by Petitioner).

¹³ See Uber's February 5, 2025 Comment at 14, Lyft's January 31, 2025 Comment at 7.

¹⁴ "Understanding acceptance and cancellation rates," available at <https://www.uber.com/blog/understanding-acceptance-and-cancellation-rates/#:~:text=To%20achieve%20and%20maintain%20higher,for%20other%20promotions%20or%20incentives.> (Date Accessed: March 5, 2025); see also "Acceptance Rate," available at <https://help.lyft.com/hc/it/all/articles/115013077708-Acceptance-rate> (Date Accessed: March 5, 2025).

CONCLUSION

The promise of the initial driver pay rule that TLC touted in 2018, and to which even Uber did not object, was to pay drivers a minimum wage equivalent, plus expenses, for all time at work. To allow the rule to achieve anything less is to relenquish the power to determine driver minimum pay to the companies' manipulations of the rule. The TLC is capable of much more, and the restoration of the rules' proper function is the least that drivers deserve.

Respectfully submitted,

/s/ Zubin Soleimany

Zubin Soleimany

Senior Staff Attorney

New York Taxi Workers Alliance



TAXI DRIVER UNION OF NEW YORK

UNION DE TAXISTAS DE NEW YORK

432 Thieriot Ave. Bronx NY 10473 / Tel.: 347-707-3029

Good Morning Commissioner David, Sub-commissioners and those presents today. My name is Adalgisa Payero-Diarra, President of UTANY. Today, I'm here to express my support for the raise that we drivers so desperately need. Our industry is still struggling due to last year's lockout and the great losses in our earnings that we faced for more than four months. Getting this raise will not cover the losses, but will help a little bit moving forward. Now my next concern is the fact that a five year life span for vehicles wants to be implemented which will create a greater hardship to drivers and their families. With the economy right now many drivers like myself can not afford to get a new vehicle and take on a debt of 60-70,000 or more depending on the vehicle we choose. Many of our cars by the time we finish paying it have depreciated more than we wish. Being able to work with our cars after we finished paying them helps a little bit compared to the struggles that paying a car brings to anyone. We ask Commissioner David and the sub-commissioners and all parties involved in this decision to not create more hardship for drivers, but to look for other ways to help this industry to survive and drivers to give a better life to their families.

Thank you for the time to speak.

Adalgisa Payero-Diarra
UTANY-President



Center for
New York City
Affairs

**Testimony Submitted to the
New York City Taxi and Limousine Commission**

**Hearing on
the Proposed Rules Governing
Minimum Driver Payment for High-Volume For-Hire Services**

February 5, 2025

**James A. Parrott, PhD
Senior Advisor and Senior Fellow
Center for New York City Affairs at The New School**

Good morning Commissioner Do and Members of the Taxi and Limousine Commission (TLC). My name is James Parrott, Senior Advisor and Senior Fellow at the Center for New York City Affairs at The New School. Thank you for the opportunity to testify on the rule changes affecting high-volume for hire vehicle (HVFHV) driver minimum pay.

Along with Professor Michael Reich of the University of California, Berkeley, I was co-author of the 2018 and 2019 studies that were the basis for the New York City HVFHV minimum pay standard.¹ Professor Reich and I also prepared similar reports for the City of Seattle in 2020 and the State of Minnesota in 2024.²

¹ James Parrott and Michael Reich, An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment, Report for the New York City Taxi and Limousine Commission, Center for New York City Affairs, July 2018. <http://www.centrernyc.org/an-earnings-standard>; and James Parrott, Michael Reich, Jason Rochford, and Xingxing Yang, The New York City App-based Driver Pay Standard: Revised Estimates for the new Pay Requirement, Report for the New York City taxi and Limousine Commission, Center for New York City Affairs, January 2019. https://www.centrernyc.org/the-new-york-city-app-based-driver-pay-standard-revised?mc_cid=80c36c5e43&mc_eid=f076c27c0e

² James Parrott and Michael Reich, A Minimum Compensation Standard for Seattle TNC Drivers, Report for the City of Seattle, Center for New York City Affairs, July 2020; James Parrott and Michael Reich, Transportation Network Company Driver Earnings Analysis and Pay Standard Options, Prepared for the Minnesota Department of Labor and Industry, March 8, 2004. https://www.dli.mn.gov/sites/default/files/pdf/TNC_driver_earnings_analysis_pay_standard_options_report_030824.pdf

The pay standard proposed for New York City, and adopted by the Commission in December 2018, included per-minute and per-mile components to ensure that drivers were compensated for all of their time on the app and also provided reasonable compensation for their vehicle-related capital and operating costs.

Last year the TLC commissioned me to prepare an analysis of how the composition of driver expenses had changed since the inception of the pay standard. My report is discussed in the TLCs's January 3, 2025 Notice of Proposed Rules and is available on the TLC's website.³ The HV-FHV vehicle fleet has evolved considerably since the inception of the New York City pay standard in 2019. There are many more SUVs of various sizes (52 percent of the total) and electric vehicles (EVs), and the TLC is phasing in a policy that will require all HVFHV to be either electric or wheelchair-accessible vehicles (WAVs) by 2030. My report included an analysis of the electricity costs and driver time involved in charging EVs and the costs of short-term vehicle rentals in developing a composite expense model reflecting the types of vehicles and ownership or rental status of drivers. The expense factor for wheelchair-accessible vehicles was also updated.

Uber and Lyft drivers provide HVFHV services as independent contractors using vehicles that they own or rent. Drivers have significant personal investment in their vehicles, and it is essential for the effective functioning of the HVFHV market for drivers to be compensated fully for their time on the app as well as for all of the vehicle-related expenses they incur.

My report is based on an extensive survey of drivers regarding current expenses, current data on the vehicle fleet, research on the cost of charging electric vehicles (EVs), additional investigation into the costs of renting a TLC-registered vehicle, and research on vehicle-related costs.

The demographics and driving characteristics of survey respondents fairly represent the universe of all HVFHV drivers. Depending on the question, the survey response rate was in the 4-5 percent range. Survey responses indicated that 95 percent of drivers are male, 91 percent were born outside the United States, and 86 percent are non-white.⁴

Those responding to the survey largely drive full-time for Uber or Lyft (81 percent usually drove 32 hours or more per week), have done so for years (56 percent have driven for an HVFHV

³ James A. Parrott, Revised Expense Model for the NYC Taxi and Limousine Commission's High-volume For Hire Vehicle Minimum Pay Standard, Report for the New York city Taxi and Limousine Commission, December 2024. [/https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf](https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf)

⁴ Forty percent of drivers were born in Asia, 27 percent hail from the Caribbean, Central or South America, and 17 percent were born in Africa or the Middle East. Workers tended to be prime-age (78 percent were between ages 25 and 54), with 19 percent 55 or older. Only three percent were aged 24 or younger.

company for five years or more), and 80 percent reported that driving is their sole source of income).

The high proportion of survey respondents who drive full-time lines up with TLC trip data showing that three-quarters of all trips in 2023 were provided by those who drive 30 or more hours weekly. The distribution of responses by ownership status and vehicle type (internal combustion engine, hereafter referred to as “ICE”, or EV) also lined up with 2023 trip patterns.

The driver survey was the primary source of information on driver expenses for vehicle cost or rent, insurance, and maintenance. Median and average responses were considered in tandem with other research on vehicle costs. Fuel costs for ICE vehicles were estimated using government vehicle mileage ratings and average gas costs for the previous six months. EV charging costs were derived by using survey data on charging mode and times, official data on electricity costs, and industry sources on charging times.

My report recommends a composite per mile cost reflective of vehicle cost structures along two dimensions: owned vs. rented, and internal combustion engine (ICE) vs. electric (EV) vehicles. Cost structures reflecting acquisition (or rental) costs, insurance, maintenance, and fuel or battery charging costs were compiled for each of four vehicle categories and weighted to reflect each category’s projected share of high-volume trips for 2025. The trip weights for the composite per mile cost factor are owned ICE vehicles (.6125), rented ICEs (.2625), owned EVs (.0875), and rented EVs (.0375).

The updated expense method described above resulted in a composite factor of \$0.871 per mile.⁵ While this is 10.4 percent greater than the current per mile factor in effect since March 1, 2024, for a typical 30-minute, 7-mile passenger trip, this would yield an overall trip minimum pay increase of 3.8 percent (based on the utilization rates in the current rules and before any CPI adjustment for 2025).

Since most WAVs in current use are hybrids (there are no all-electric WAVs), the WAV-specific composite per mile factor is \$1.061 based on 70 percent of WAVs being owned and 30 percent rented. This is four cents, or 3.9 percent greater than the current WAV per mile factor.

The expense factor is geared to full-time drivers who provide the bulk of all HVFHV trips and who purchased a vehicle for the purpose of driving for hire, as 93 percent reported in our driver

⁵ The initial December 27 version of the report posted to the TLC website indicated a 0.879 per mile factor. The corrected composite amount is \$0.871.

survey. The average full-time driver logs 32,500 miles annually and the median owner-driver typically finances the purchase of their vehicles over five years. While the HVFHV companies reportedly may try to make an issue out of the five-year amortization assumption, a closer look at the survey data reveals that those concerns are baseless. The modal (most common) survey response for ICE vehicle drivers was 72 months (six years) and using average instead of median survey results for purchase price and down payment with a six-year amortization would increase the per mile factor by about three-tenths of a cent.

The companies' data on model years of vehicles in use presented to the TLC does not indicate anything definitively since they did not include data on average odometer readings, how long vehicles had been used for HVFHV services, or how intensively they had been used (e.g., used by full- or part-time drivers). As noted in our report, 35 percent of drivers purchased a used vehicle and 35 percent acquired their vehicles before 2021.⁶ Thus, some drivers purchasing their cars in 2017 or 2018 may still be paying for their vehicles, and for those full-time drivers who acquired a vehicle in 2020 or earlier and have been using it intensively since, the vehicle likely has a very high odometer reading and minimal resale value. Older vehicles, particularly those with high mileage, typically incur higher maintenance costs.⁷

The rationale in my report for amortizing vehicle purchase costs over five (or six) years is that a vehicle driven in New York City for five or six years at 32,500 miles a year amounts to 162,500 to 195,000 miles and given that vehicles used for HVFHV services incur greater wear and tear (frequent starting and stopping and passengers constantly getting in and out of the back seat), these vehicles likely have relatively minor residual resale value. That does not mean they do not have use value for providing passenger services, it just means that they could have high maintenance costs and have limited market resale value.

IRS rules allow for drivers to continue using the standard IRS business mileage rate on their tax returns even after a vehicle may be fully depreciated.⁸ Clearly, the IRS recognizes that vehicles have use value for drivers after being fully depreciated. It is very deceptive for Uber to say the TLC is limiting the use of older vehicles.⁹

For the 30 percent of vehicles that are rented, it costs 25-30 percent more to rent a vehicle than to own one for use in providing HV-FHV services. This differential largely stems from the 20.875

⁶ Parrott, Revised Expense Model, December 2024, p. 23.

⁷ For example, the survey data indicate that the average annual maintenance for drivers of vehicles purchased used was \$5,200 and the average for the quartile of drivers with the highest maintenance expenses was \$10,300 per year.

⁸ Internal Revenue Service, Travel, Gift, and Car Expenses, Publication 463, p. 35. <https://www.irs.gov/pub/irs-pdf/p463.pdf>

percent sales tax on short-term vehicle rentals, higher insurance costs, and a “registration rent” that is a function of the costs and administrative burden of getting a vehicle licensed by TLC and the agency’s limitation on the issuance of new vehicle licenses.

Uber recently commissioned the New York City-based consulting firm HR&A to prepare a report on the expense of for-hire vehicle drivers in New York City.¹⁰ Their report derives an overall per-mile expense amount that is 29 percent less than my estimate. The main reasons for this lower estimate are that HR&A uses lower weights for the shares of EVs and rented vehicles in deriving the composite per mile factor. While my analysis and the HR&A report find similar results for fuel and charging expenses, and for insurance, the HR&A report uses an extremely flawed method to estimate vehicle costs.¹¹

My analysis draws heavily from an extensive survey of what drivers are actually paying each month. I annualize these payments and amortizing their down payment and dividing by 32,500 annual miles to fairly represent the costs to the driver of driving for-hire. The HR&A analysis ignores the effect of intensive vehicle use common among HVFHV drivers and disregards the resulting high mileage after five or six years of intensive use in overstating the residual resale value a vehicle might have.

The HR&A Uber study concludes that depreciation costs in their composite model average 11.0 cents per mile, far less than the national average of 33 cents per mile depreciation included in the \$0.70 IRS per mile allowance for 2025 for personal vehicles used for business purposes.¹² My estimated vehicle payment cost of 31.2 cents per mile is fairly close to the 33 cents per mile IRS depreciation factor, but it is 20 cents more than the Uber figure.¹³

Thank you for the opportunity to testify today.

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¹⁰ HR&A, *New York City Uber Driver Earnings and Expenses Study*, Final Report, for Uber Technologies, Inc., November 4, 2024.

¹¹ Other differences involve the HR&A Uber report discounting interest costs that owners who have fully paid for their vehicles might have made, thus ignoring the prior investments made by 27 percent of drivers who indicated in an Uber survey that they were not actively making car payments on their vehicles; and excluding any allowance for drivers’ time spent charging their EVs (either time spent waiting for access to a public charger or waiting for their vehicles to charge). For a side-by-side comparison of the HR&A Uber and our expense analysis, and a comparison of each report’s composite weighting factors, see Appendix Exhibit 3 in my report.

¹² See <https://www.irs.gov/newsroom/irs-increases-the-standard-mileage-rate-for-business-use-in-2025-key-rate-increases-3-cents-to-70-cents-per-mile>, and IRS Note 2025-5, <https://www.irs.gov/pub/irs-drop/n-25-05.pdf>

¹³ It is ironic to say the least, that Uber urges drivers to use the IRS business mileage rate (67 cents for 2024) in calculating expenses that can reduce a driver’s taxable income when they subscribe to a much lower mileage rate when it comes to minimum pay regulations. <https://www.uber.com/us/en/drive/tax-information/>.

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February 4, 2025

NELP Comment on TLC's Revised Pay Rules for High-Volume For-Hire Vehicle Drivers

My name is Daniel Ocampo, and I am a lawyer with the National Employment Law Project (NELP), a national nonprofit with more than fifty years of experience advocating for the employment and labor rights of low-wage workers. NELP works across the country with organized groups of app-based workers, supporting campaigns and designing policy at the local, state, and federal level. In New York City, we have worked with both the Taxi & Limousine Commission (TLC) and the Department of Consumer & Worker Protection (DCWP) to advocate for effective pay standards for for-hire vehicle (FHV) drivers and delivery workers, respectively, and we have worked on similar minimum compensation standards for app-based workers in Seattle, Chicago, Minnesota, and Massachusetts. We write in support of TLC's revised pay rules.

TLC's New Rule

For-hire vehicle drivers provide critical transit labor on which New York City depends, and their jobs should be good jobs—jobs that earn a living wage, and that guarantee reliable and regular access to work. Thanks to TLC's 2019 pay standard and its subsequent revisions, drivers are much closer to earning a living wage than previously, while Uber & Lyft continue to operate profitably in the city.

Today's rule revises the individual per-mile and per-minute components of the pay standard to reflect ongoing changes in the costs of driving a for-hire vehicle in New York City, and to account for the cost of living in the New York area.¹ These changes are based on observed data by TLC and a comprehensive study by economist James Parrott, and ensure TLC's pay standard remains up to date with evolving industry practices and economics.² Regular updates like this are important, and we support today's revisions.

¹ *Proposed Amendment of FHV Driver Pay Rules*, NYC Taxi & Limousine Commission (Dec. 26, 2024), https://www.nyc.gov/assets/tlc/downloads/pdf/proposed_amendment_of_driver_pay_rules_for_hvfhs.pdf.

² James A. Parrott, *Revised Expense Model for the NYC Taxi and Limousine Commission's High-Volume For-Hire Vehicle Minimum Pay Standard*, Ctr. for NYC Affairs (Dec. 2024), https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf.

Lockouts

TLC's revised rules also address a critical issue facing drivers in the city: Uber and Lyft's aggressive lockouts, a tactic designed to evade compliance with existing TLC rules. Lockouts are when Uber and Lyft kick drivers off the platform at random times, or simply prevent them from logging in to make themselves available to work in the first place, often preventing drivers from working during the middle of their workday, without warning.³ The effect is to erase some of their working time from the record, artificially inflating the "utilization rate"—a component of the pay rate meant to ensure that workers are paid even for time spent between trips—and therefore suppressing driver pay.⁴

Lockouts have become increasingly common in the last year, and have been incredibly disruptive for drivers simply attempting to work a full day. Sometimes, a driver will take a passenger from lower Manhattan to somewhere further out in the outer boroughs or outside city lines, only to then be locked out of the platform after completing the ride, suddenly unable to work mid-shift. For drivers, it is extremely destabilizing to be randomly shut out of work and forced to drive around aimlessly at their own expense, while waiting to regain access to work. It means reduced earnings, and makes it much harder to plan financially.

Today's rule sets up important protections for drivers, requiring companies to give 72-hours' notice to drivers before locking them out of the platform, and prohibiting companies from locking drivers out within the 16 hours after they have logged in to begin a work shift.⁵ The rule also amends how the utilization rate is applied to the pay formula. Rather than just applying the rate to both the per-mile and per-minute standards equally, TLC will now use a distance-based utilization rate as its multiplier for the distance component of the pay standard, as well as a time-based multiplier for the time component of the pay standard.⁶ This change may have adverse effects on driver pay, since the distance-based utilization rate is higher than the time-based rate, but is a reasonable change to the rules, and will reduce the incentive of the companies to continue locking drivers out of the platform. NELP supports these changes, and continues to urge Uber and Lyft to stop the lockouts.

Vehicle Depreciation Schedule

We also write in support of TLC's choice to follow standard five-year depreciation schedules in calculating driver mileage costs. The per-mile component of the pay standard is an important part of how driver pay is calculated, and it relies on some assumptions about the costs of owning and driving a vehicle. One such assumption TLC is making is that a vehicle used as a high-volume

³ See, e.g., Lung et al., *How Uber and Lyft Used a Loophole to Deny NYC Drivers Millions in Pay*, Bloomberg (Oct. 10, 2024), <https://www.bloomberg.com/graphics/2024-uber-lyft-nyc-drivers-pay-lockouts/>.

⁴ Evan Gorelick, *Uber Is Locking Out NYC Drivers Mid-Shift to Lower Minimum Pay*, Bloomberg (Jun. 24, 2024), <https://www.bloomberg.com/news/articles/2024-06-24/uber-is-locking-out-new-york-city-drivers-mid-shift-to-lower-minimum-pay>.

⁵ TLC Proposed Rule, at 7.

⁶ Id. at 5-6.

for-hire vehicle in New York has about a five-year lifespan, and that after five years of heavy use has minimal resale value, and that therefore it should account for the complete depreciation of the vehicle over those five years. This ostensibly uncontroversial choice has now been drawn into question by Uber and its researchers who have proposed other, much more unusual accounting practices, which would have the effect of suppressing driver pay.

TLC pulled this assumption from economist James Parrott's 2018 report that underlay the initial pay standard, an assumption he again made in his most recent report.⁷ And it's a common-sense assumption: the average full-time driver in New York City logs 32,500 miles annually, meaning that after five years of consistent use, it would have 162,500 miles—a point at which many cars have minimal resale value.⁸

It's also an assumption that's consistent with standard accounting practices. The IRS uses a five-year depreciation schedule under the Modified Accelerated Cost Recovery System (MACRS) system, chosen because it reflects common industry standards, and most employers use the five-year schedule in setting mileage reimbursements for their employees.⁹ But as in all other areas of public policy, Uber and Lyft now demand a special rule to allow them to continue underpaying their drivers. We commend TLC for rejecting that demand, and instead making the obvious but important choice to use the standard five-year depreciation schedule.

For all these reasons, we support TLC's proposed amendments to the FHV driver pay rules. Thank you for the opportunity to comment.

Sincerely,

Daniel Ocampo
Staff Attorney
National Employment Law Project

⁷ James A. Parrot & Michael Reich, *An Earnings Standard for New York City's App-based Drivers: Economic Analysis and Policy Assessment*, Ctr. for NYC Affairs (Jul. 2018), <https://www.centrernyc.org/an-earnings-standard>; Parrott, *Revised Expense Report* (Dec. 2024) https://www.nyc.gov/assets/tlc/downloads/pdf/driver_expense_report.pdf.

⁸ Parrott, *Revised Expense Report*, at 3.

⁹ 29 U.S.C. § 168(e)(3)(B)(i). See also *IRM 1.35.6.4.9(2)*, available at https://www.irs.gov/irm/part1/irm_01-035-006; *Publication 946, How to Depreciate Property* (2023), available at <https://www.irs.gov/publications/p946>.



February 5, 2025

TLC Commissioner David Do
NYC Taxi & Limousine Commission
33 Beaver Street
New York, NY 10004

Dear Commissioner Do:

On behalf of the Manhattan Chamber of Commerce, I write with concerns about elements of the recently proposed new driver pay rules. Our organization is the convener, voice and advocate of the 125,000+ businesses across the borough of Manhattan, which is the heart of New York City's economy. We're focused on advancing the economic vitality of our region by building a strong and thriving climate for the broad business community, including solo-entrepreneurs, small businesses, startups and larger companies.

The rideshare industry, specifically its riders and drivers, are a critical part of this community, and their success plays an important role in the overall health of the city.

Over the past six years, the City and State have taken several steps to regulate the rideshare industry. While the intent of these regulations were noble, many of these policies have turned out to have unintended consequences that have harmed drivers and riders alike. Now is not the time to double down on those outdated policies but rather it is the time to reevaluate our approach to ensuring proper protections in the ridesharing industry for New Yorkers.

With the recent congestion pricing fee, rideshare costs have already increased this year, and the regular March CPI increase will push costs up further. We are concerned that additional rate hikes embodied in the TLC's newly proposed rules will hurt both riders and drivers, dampening demand, limiting earning opportunities and minimizing transportation options.

The City's pay formula also has a fundamental flaw – tying driver pay to the industry's utilization rate and putting the onus on the rideshare companies to hit those rates. This has resulted in the lockout and the new rules continue to incentivize the companies to lock drivers out.

While it's convenient to say the companies just don't want to pay their drivers more, that ignores the obvious crisis we find ourselves in. The reality is rideshare has gotten less affordable, and is likely to only get more expensive if trends continue.

These increased costs are not just having an impact on the companies' bottom line. Real New Yorkers, many of them living in the outer-boroughs or coming from low-income communities, have been priced out of being able to afford the service. Dwindling ridership means fewer rides for drivers, meaning less overall pay for them. And because of the way the current and proposed new pay laws are written, this decline in ridership means prices will likely further rise due to an additional driver pay rate increase - starting the whole cycle over.

The new proposed rules maintain this flaw. No other jurisdiction in the country uses utilization in this way, and only in NYC do we see these lockouts.

It doesn't need to be this way. Several places, including the rest of New York State, protect drivers through minimum pay policies and no other location risks the kind of economic death spiral we find ourselves in. Rather than doubling down on a flawed policy, we must take the learnings of the past six years to update and improve upon the approach. That starts by decoupling the industry's utilization rate from driver pay. That way we can still ensure drivers are paid fairly without unnecessary and harmful restrictions.

Drivers earn more money by giving more rides. That means we need to strike a balance that pays drivers fairly and keeps rides affordable. Well-paying rides don't help drivers if no one can afford to take them.

Following last year's election, it's clear New Yorkers have had enough with the rising pricing of living here. Let's heed their call to action by rethinking how we approach regulating the rideshare industry. In doing so, we can make progress in helping New Yorkers afford to get around without sacrificing proper protections for drivers.

Sincerely,

A handwritten signature in black ink, appearing to read "Jessica Walker". The signature is fluid and cursive, with the first name "Jessica" written in a larger, more prominent script than the last name "Walker".

Jessica Walker
President and CEO



Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver St.
22nd Fl.
New York, NY 10004

To whom it may concern:

My name is Elder Kirsten John Foy. I'm the founder and CEO of The Arc of Justice and a proud born and raised Brooklynite.

I am writing in opposition to the rate increase proposed by the Taxi and Limousine Commission earlier this month, because it is the latest example of something I have been fighting against my whole life as an activist. Low-income outer borough residents are consistently an afterthought in the city's agenda.

The TLC is once again raising rates on cars. But this narrative neglects the reality that many for-hire vehicle drivers and riders are hardworking New Yorkers who rely on cars because of how unreliable and how much of a distance MTA services are the further you get into Brooklyn.

The MTA is a bloated bureaucracy with urgent issues being kicked down the road by decades of irresponsible politicians. Why is it the hardworking commuters and FHV drivers who have to pay the price for our leaders' shortsightedness?

With this proposed pay increase on top of yellow cab and FHV surcharges from congestion pricing, the increase for drivers will be shouldered by the low-income outer borough riders for whom these services are essential due to failures of New York and the MTA to address transit deserts.

Until our politicians commit to ensuring transit equity for all, I ask the TLC and the mayor to reconsider the pay increase – the sixth in five years – which will disproportionately fall on Brooklyn and other outer borough commuters.

Sincerely,

Elder Kirsten John Foy