## NEW YORK CITY TAXI AND LIMOUSINE COMMISSION

#### **Notice of Promulgation**

Notice is hereby given in accordance with section 1043(b) of the New York City Charter ("Charter") that the Taxi and Limousine Commission (TLC) promulgates rules for the Green Rides Initiative, which aims to increase the number of zero-emission vehicles and wheelchair accessible vehicles in the high-volume for-hire fleets.

These rules are promulgated pursuant to sections 1043 and 2303 of the New York City Charter and section 19-503 of the Administrative Code of the City of New York. These rules were published in the City Record on August 16, 2023 for public comment. On September 20, 2023 a public hearing was held virtually by the TLC, and the rules were adopted by the Commission on October 18, 2023.

#### **Statement of Basis and Purpose**

#### **Background**

The Green Rides Initiative requires high-volume for-hire services (HVFHS's), a license category that currently includes Uber and Lyft, to have fleets comprised entirely of either zero-emission vehicles (ZEVs),<sup>1</sup> including electric vehicles (EVs), or wheelchair accessible vehicles (WAVs) in New York City by 2030. This goal aligns with Uber's and Lyft's publicly announced commitments to transition to an all-electric fleet by 2030 while continuing to ensure widespread access to WAVs.<sup>2</sup>

The Green Rides Initiative affects only the HVFHS industry by requiring a certain percentage of trips dispatched by those services to be either in a ZEV or a WAV. As explained in greater detail below, it does not affect TLC's existing rules requiring the for-hire industry to provide widespread access to WAVs by meeting either the percentage benchmarks under §59B-17(c) or the wait-time requirements under §59B-17(f).

Increasing the number of, and passenger access to, WAVs on New York City roads continues to be a TLC priority. Increasing the number of ZEVs on the road must not come at the expense of accessible service and, as such, HVFHS drivers continues to have the option to drive a WAV under these rules.

The transition to EVs forms an important part of the City's efforts to improve air quality. Exposure to fine particulate matter produced by internal combustion engines has been linked to various health issues and can lead to hospital admissions and premature death. According to agency estimates, TLC-licensed vehicles account for four percent of the City's transportation emissions.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> The term 'zero-emission vehicle' and 'electric vehicle' will be used interchangeably throughout this Statement of Basis and Purpose. Electric vehicles are currently the most common type of zero-emission vehicle.

<sup>&</sup>lt;sup>2</sup> See <u>https://www.uber.com/us/en/about/sustainability/</u> and <u>https://www.lyft.com/impact/electric</u>.

<sup>&</sup>lt;sup>3</sup> https://www.nyc.gov/assets/tlc/downloads/pdf/Charged\_Up!\_TLC\_Electrification\_Report-2022.pdf

The Green Rides Initiative will facilitate the rapid adoption of modern vehicle technology by an important segment of this transportation sector and will help spur private and public investment in charging infrastructure, with significant environmental benefits for the City.

TLC recognizes that this initiative depends on several external factors as explained in greater detail below. TLC continues to monitor the ever-changing for-hire vehicle (FHV) industry and will adjust the requirements when appropriate.

In developing the standards set forth in these rules, TLC carefully considered the availability of EVs – including the market for used EVs – and affordability of such vehicles, as described in greater detail below.

# Current State of Electrification in New York

As automobile manufacturers prepare for an electric future, many new, reliable, and affordable EVs will enter the market, and with this growth, an ample market for affordable used vehicles is expected to develop. New York State will require all new passenger cars, pickup trucks, and SUVs sold in New York State to be zero emission vehicles by 2035,<sup>4</sup> ensuring both a robust new and used market for EVs in New York.

Acknowledging the cost of converting to EVs, New York State currently offers the Drive Clean rebate through the New York State Energy Research & Development Authority (NYSERDA)<sup>5</sup> for new EV purchases, and both public agencies and private utility companies offer subsidies and incentives for the installation and use of home and public charging. The New York State Drive Clean rebate can also be combined with the tax credits received from the federal Inflation Reduction Act,<sup>6</sup> which provides tax credits for either the purchase of a qualifying new EV or the purchase by an eligible buyer of a qualified, previously owned EV. The federal Inflation Reduction Act also provides a tax credit for those who install a home EV charger. Significant growth in the EV market will allow for more new and used vehicle options for drivers generally, including for TLC-licensed drivers, as well as support New York's rapidly growing charging infrastructure. Currently, New York City has approximately 200 Direct Current-Fast Charging (DCFC) plugs and 1,000 Level 2 plugs that are available to the public.<sup>7</sup> The New York's charging infrastructure to meet the demands of a larger electric fleet.<sup>8</sup>

In the U.S., new EVs currently represent about 5.6 percent of new vehicle sales. While new EVs in New York State in early 2023 represented about 1.6 percent of new vehicles sales, the market has grown rapidly in the past few years, roughly doubling each year. In addition to the expected

<sup>&</sup>lt;sup>4</sup> 6 NYCRR 218-4.1

<sup>&</sup>lt;sup>5</sup> https://www.nyserda.ny.gov/All-Programs/Drive-Clean-Rebate-For-Electric-Cars-Program/How-it-Works

<sup>&</sup>lt;sup>6</sup> https://www.nyserda.ny.gov/All-Programs/Inflation-Reduction-Act/Vehicles

<sup>&</sup>lt;sup>7</sup> <u>https://afdc.energy.gov/fuels/electricity\_locations.html#/analyze?fuel=ELEC</u>

<sup>&</sup>lt;sup>8</sup> See: DOT's "<u>Electrifying New Yok: An Electric Vehicle Vision Plan for New York City</u>" and Revel's plans for expansion of charging sites in NYC, linked <u>HERE</u>

growth of the EV sales market, starting in 2026 New York State will impose EV sales mandates for new passenger vehicle sales, beginning with 35 percent in 2026, and rising to 68 percent in 2030, and 100 percent in 2035.<sup>9</sup>

## **Green Rides Initiative**

In these rules, TLC sets benchmarks for the percentage of trips that HVFHSs must dispatch to ZEVs or WAVs each year, with the eventual goal of 100 percent of trips dispatched to ZEVs or WAVs by 2030. TLC is working with HVFHSs, charging infrastructure companies, vehicle manufacturers, partner city agencies and other stakeholders to ensure that this transition is successful.

The dispatch target for each calendar year is measured by the number of trips completed by ZEVs or WAVs divided by the total number of trips completed. TLC has decided to base this requirement on the percentage of trips dispatched to a ZEV or WAV rather than other metrics, such as vehicle miles traveled (VMT), for several reasons.

First, compared to other markets, New York City's HVFHS driver population is comprised significantly of full-time drivers who perform a similar number of trips of similar mileage. Additionally, New York City is geographically dense so there is relatively little variation in trip distance among drivers in New York City.

Second, TLC already has a robust data reporting and compliance system for trip records, which has been in place for FHV bases since 2015, but has no such system for the reporting of VMT while not on a trip (i.e., distance travelled without a passenger, including cruising for a passenger or en route to a passenger). Given that trip distances have relatively little variation in New York City, and that trip volumes are more standard across drivers in New York City than in other locations, TLC will be able to seamlessly and quickly implement an effective policy based on the data it currently collects. Establishing a miles-based standard in New York City would require an onerous change in data collection and reporting without providing additional policy benefits.

Finally, and relatedly, TLC and its FHV licensees have experience in TLC's FHV wheelchair accessibility rules with a trip-based requirement consisting of percentage benchmarks that increase over time. Modeling some specifics of the Green Rides Initiative after an existing and successful TLC program facilitates its implementation and assists the high-volume services in their compliance efforts.

As stated earlier, in order to continue to promote accessibility in the high-volume industry, trips dispatched to WAVs count towards the percentage targets set forth in these rules. Importantly, the Green Rides Initiative does not change TLC's existing FHV accessibility rules.<sup>10</sup> Including WAVs

<sup>&</sup>lt;sup>9</sup> governor.ny.gov/news/governor-hochul-drives-forward-new-yorks-transition-clean-transportation and *see* 6 NYCRR 218-4.1

<sup>&</sup>lt;sup>10</sup> See 35 RCNY 59B-17(c) and (f).

in these percentages will ensure that New York City's high-volume fleet maintains and improves its accessibility standards, while giving drivers of the HVFHSs the option to drive either an EV or a WAV.

Total number of trips completed by ZEVs +Total number of trips completed by WAVs= % compliant trips

Total number of trips completed

These rules provide for a gradual increase in the high-volume for-hire trips to be completed by ZEVs and WAVs, starting at five percent in 2024, and increasing to 15 percent in 2025, 25 percent in 2026, 40 percent in 2027, 60 percent in 2028, 80 percent in 2029, and 100 percent in 2030.

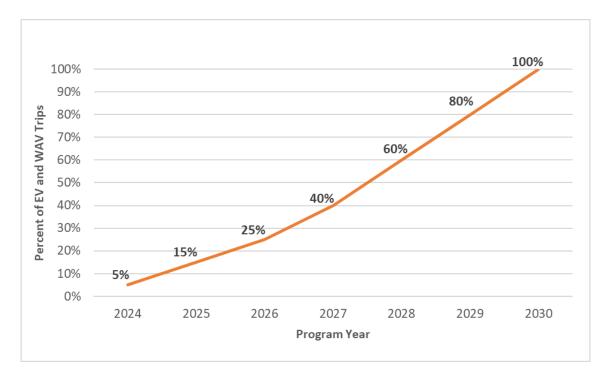


Figure 1: Benchmarks for 100% EV and WAV trips by 2030

#### **Projected Growth of Electric Vehicles in the For-Hire Fleet**

The growth of zero-emission high-volume for-hire trips in the coming years will mainly come from electrifying the high-volume for-hire fleet in three ways: 1) after extensive usage, owners of existing TLC-licensed non-ZEVs will replace their vehicles with EVs, 2) vehicle owners will choose to replace their non-ZEVs with EVs earlier than necessary because of the benefits of EV ownership, and 3) new EVs will enter the for-hire fleet with TLC-issued EV-only vehicle licenses.

Based on an analysis of TLC vehicle inspection data, the overwhelming majority of TLC-licensed HVFHS non-WAV vehicles range from one to seven years in usage after their first inspection with TLC. Only a small portion of non-WAVs are in use for longer than seven years. Therefore, vehicles tend to exit or "retire" from the for-hire market after seven years of driving. Each year, a new group of vehicles will enter their eighth year and likely exit the fleet, opening the door for ZEVs to replace vehicles that are leaving.

## **Incentives for Electric Vehicles**

New York has several incentives in place that support ZEV adoption. These include incentives for vehicle acquisition, reduced tolling, and charging infrastructure. For any driver in New York City, the Drive Clean Rebate program offers up to \$2,000 for new EV purchases.<sup>11</sup> Additionally, the Federal Tax Credit offers up to \$7,500 in tax credit for purchasing EVs.<sup>12</sup> Currently, TLC-licensed drivers of EVs receive a 15 percent discount in charging costs at publicly accessible City-owned charging stations. Drivers of most electric vehicles can qualify for discounts on NYS Thruway tolls through the Thruway Authority's Green Pass Discount Plan<sup>13</sup> and at bridges and tunnels in New York City through the Port Authority's Green Pass Program.<sup>14</sup> Additionally, the Clean Pass Program<sup>15</sup> allows these drivers to use high-occupancy (HOV) lanes when driving alone.

## Price Parity between Electric and ICE Vehicles

Currently, the upfront cost of an EV tends to be higher than that of a comparable internal combustion engine (ICE) vehicle, which presents a barrier for EV expansion. Based on estimates from the International Council on Clean Transportation's study of EV costs,<sup>16</sup> TLC predicts that price parity between EVs and ICE vehicles will occur around 2027. Once price parity between EV and ICE vehicles is reached, the existing price barrier will disappear, making TLC-licensed FHV drivers more likely to purchase an EV than they are today. With the upfront cost of purchasing an EV no longer present as a financial barrier, along with lower maintenance and charging costs , EVs will become more financially viable than ICE vehicles and allow for-hire vehicle drivers to access greater savings over time. For that reason, the benchmarks set by these rules accelerate starting in 2027.

#### Issuance of New EV Licenses

From August 2019 to June 2021, EVs were exempt from TLC's moratorium on the issuance of new FHV licenses. WAVs have always been exempt from the moratorium and will continue to be exempt. TLC data shows that most of the EVs active today joined the fleet either (a) during the period when the EV exemption was in place, or (b) when TLC released 1,000 EV-only licenses in

<sup>&</sup>lt;sup>11</sup> <u>https://www.nyserda.ny.gov/All-Programs/Drive-Clean-Rebate-For-Electric-Cars-Program</u>

<sup>&</sup>lt;sup>12</sup> https://www.irs.gov/credits-deductions/credits-for-new-clean-vehicles-purchased-in-2023-or-after

<sup>13</sup> http://www.thruway.ny.gov/ezpass/greentag.html

<sup>14</sup> http://www.panynj.gov/bridges-tunnels/tolls.html

<sup>&</sup>lt;sup>15</sup> https://www.dot.ny.gov/programs/clean-pass

<sup>&</sup>lt;sup>16</sup> See: "Update on electric vehicle costs in the United States through 2030", ICCT Working Paper

2023, 600 of which were reserved exclusively for existing drivers and all of which were claimed within minutes of their release.<sup>17</sup> TLC will continue to evaluate the license moratorium and determine whether additional licenses are needed to spur electrification of the FHV fleet.

# WAVs

As stated above, the Green Rides Initiative does not interfere with or change TLC's WAV requirements. Increasing access to TLC's fleet is an important step to make New York City a place that is truly accessible to all our residents and visitors, including those who use wheelchairs. In 2014, TLC created a framework to introduce wheelchair accessible green and yellow taxis into the City's fleet over time. To reach the FHV sector, TLC promulgated an accessible service requirement that helps put wheelchair accessible for-hire vehicles in circulation and available for passengers who need them.

Specifically, TLC rules §59B-17(c) and (f) require all FHV bases to either dispatch 25% of their trips in WAVs or meet strict response time requirements for requests for WAVs. These requirements have increased the number of WAV FHVs from almost zero to over 5,000 since the onset of the program. The number of requests for and number of trips completed by a WAV FHV have grown dramatically each year following the introduction of these requirements. Mandating the use of WAVs has led to an increase in accessible service in the City, and incorporating trips performed by WAVS into the Green Rides Initiative ensures the City remains accessible while it also works toward its important air quality improvements.

# Forecasting EV Growth among TLC FHVs

For 100% of trips dispatched by HVFHSs to be completed by ZEVs or WAVs by 2030, there must be a path by which non-accessible or ICE FHVs gradually convert to EVs or WAVs in line with the benchmarks established by these rules. In mapping out the path for conversion to EVs, TLC has used the following assumptions and relied on the following data for existing and projected EV sales:

- ICE vehicles that reach the end of their lifecycle—based on TLC data, after about seven years of use—and need to be replaced. TLC anticipates that these vehicles will be replaced by EVs at an increasing rate from now until 2030;
- Some ICE vehicles are replaced before the typical seven-year lifecycle due to high mileage, driver preference, or other factors. To account for this, TLC projects a conversion rate for ICE vehicles are not yet seven years old that will be replaced by EVs;
- These estimations assume a static total FHV fleet size, and do not account for attrition or new vehicle licenses; and
- From 2024 to 2026, before the cost of EVs is comparable to that of similar ICE vehicles, the rate at which EVs will replace ICE vehicles in the FHV fleet will reflect the trends and

<sup>&</sup>lt;sup>17</sup> https://www.nyc.gov/assets/tlc/downloads/pdf/license-pause-report-2022-08.pdf

regulatory requirements in New York State EV sales as outlined above. After 2026, when lower EV costs are expected to accelerate adoption, the rate at which EVs will replace ICE vehicles in the FHV fleet is expected to accelerate beyond these trends and requirements.

The chart below provides an overview of the transition from ICE vehicles to EVs in the City's FHV fleet. The first column answers the question: What percentage of ICE vehicles that are seven years old will be replaced by EVs? For example, assume the fleet consists of 100,000 vehicles and 10,000 vehicles reach seven years in 2024. The chart says that while all of those 10,000 vehicles will be replaced with a new vehicle, 5% of the 10,000 will be replaced by an EV. The owners will have to replace the vehicles anyway because of their age, and 5% will say "If I have to replace it, I may as well get an EV."

The second column answers the question: What percentage of ICE vehicles <u>that are not yet</u> <u>seven years old</u> will be replaced by EVs? To continue the example, 90,000 vehicles in the FHV fleet will be under seven years in 2024. What percentage of those will be replaced by EVs? Because those owners have newer vehicles, unlike the first group they won't have to replace them, but some will anyway because there is some turnover before the seven-year mark. Assume that 5,000 vehicle owners with vehicles newer than seven years decide to replace their vehicles in 2024. The chart says that 2% of the 90,000—not 2% of the 5,000—will replace their vehicles with EVs. The percentage is lower in the second column because the class is all vehicles, not retiring vehicles.

	Anticipated Retired ICE FHVs that are 7 years older or more replaced by EVs	Anticipated Other ICE FHVs not yet 7 years old replaced by EVs	or WAV trips
2024	5%	2%	5%
2025	10%	4%	15%
2026	30%	5%	25%
2027	40%	15%	40%
2028	60%	30%	60%
2029	80%	50%	80%
2030	100%	100%	100%

Accordingly, this initiative furthers the City's dual goals of improving air quality within the City and ensuring that accessible transportation service remains widely available within the high-

volume for-hire vehicle fleets. TLC is excited to contribute to improving air quality for New Yorkers while, at the same time, continuing to promote and guarantee accessibility.

As stated earlier, TLC is monitoring the ever-changing industry, including the impact of the issuance of new vehicle licenses, and will make adjustments as appropriate.

#### **Public Comments**

TLC held a public hearing on these rules on September 20, 2023, at which 31 people testified. Additionally, TLC received 27 written comments on the proposed rules. The testimony and comments were overwhelmingly supportive of the accessibility and air quality goals of the Green Rides Initiative. Drivers, environmental groups, and the high-volume for-hire services alike all agree on the urgent need for a more accessible, greener fleet of vehicles. However, TLC heard some recurring concerns about its approach to achieving the goals of the initiative:

- 1. <u>Charging Infrastructure:</u> Many commenters noted the current lack of available charging infrastructure necessary to meet the rules' requirements. The High Volume Bases suggested tying the increase in percentages to the construction of new charging infrastructure. TLC designed the Green Rides Initiative benchmarks to increase as charging infrastructure and electric vehicles become more readily available, scaling up more rapidly in the later years when more charging infrastructure is expected to be in place. However, should the development of charging infrastructure lag behind expectations, TLC can revisit the percentage requirements at that time if compliance becomes infeasible.
- 2. <u>Accessibility</u>: TLC heard from several accessibility advocates, expressing concerns that that conversion to a zero-emissions high-volume fleet will come at the expense of accessibility. TLC received several comments calling on TLC to require all vehicles to be wheelchair accessible *and* zero emissions. The Green Rides Initiative puts trips to WAVs and EVs on equal footing, allowing the City to achieve twin goals of accessibility and air quality improvement. Importantly, the requirement that high-volume companies service 80% of their requests for WAVs in under ten minutes remains untouched, ensuring that the high-volume fleets must always have a WAV available. Additionally, as some of the comments noted, a commercially available electric wheelchair accessible vehicle does not yet exist in the United States market. These rules express the City's clear commitment to both accessibility and air quality improvement, and TLC continues to advocate with vehicle manufacturers for the development of a zero emissions WAV.
- 3. <u>Implementation by High-Volume Services</u>: Some commenters expressed concern over giving the high-volume for-hire services discretion as to how they comply with the trip percentage mandates. Namely, giving companies control over their distribution of trips leaves drivers and owners of ICE vehicles with less certainty about whether they are still able to receive dispatches from the HVFHS at any given time. TLC intentionally designed this program to place the responsibility for WAV and EV trip conversion, and the penalties for failure to comply, on the high-volume companies rather than the vehicle owners. The

program is similar to TLC's requirements relating to wheelchair accessibility, where the companies are responsible for dispatching WAVs sufficient to satisfy customer demand, as opposed to imposing the conversion requirement on vehicle owners and penalizing them for failure to convert.

4. <u>Vehicle Licenses</u>: Drivers, the high-volume companies, and even environmental groups and economists such as the League of Conservation Voters and James Parrott of the New School for Social Research noted the need for the issuance of additional EV-restricted FHV licenses in order to make compliance with the percentages feasible. Currently, WAV FHV licenses are available to any qualified applicant, and TLC recently released 1,000 EV FHV licenses. If more EV-restricted licenses are necessary to ensure compliance, TLC can issue those licenses through its license review process. New license issuance does not require new rulemaking, but the comments on these rules will be used to inform TLC's analysis in any future license issuance.

TLC has made one change to the proposed rules after their publication. TLC has determined that requiring HVFHVS bases to collect and transmit to the Commission the vehicle's VIN as part of their trip data submission is not necessary to monitor this program. Including a vehicle's VIN as part of a HVFHVS's required trip data submission was initially proposed to assist in measuring compliance with the benchmarks. However, TLC can obtain the relevant information from the existing data sources and requirements.

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

<u>New material is underlined.</u> [Deleted material is in brackets.]

Section 1. Section 51-03 of Title 35 of the Rules of the City of New York is amended by adding a new definition, in alphabetical order, to read as follows:

**Zero-Emission Vehicle** is a vehicle that produces no direct exhaust or tailpipe emissions and includes, but is not limited to, battery electric vehicles and hydrogen fuel-cell electric vehicles.

§ 2. Section 59D-05 of Title 35 of the Rules of the City of New York is amended by adding a new subdivision (f), to read as follows:

# (f) High-Volume For-Hire Services must comply with the requirements set forth in subdivision (c) of §59D-13 of these Rules.

§ 3. Section 59D-13 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) <u>Vehicle requirements</u>. Each High-Volume For-Hire Service must dispatch to vehicles in accordance with the following:

- (1) In each of the following years, each High-Volume For-Hire Service must dispatch at least the following percentage of trips to either a Zero-Emission Vehicle or an Accessible Vehicle:
  - (i) <u>2024: five percent (5%).</u>
  - (ii) <u>2025: fifteen percent (15%).</u>
  - (iii) 2026: twenty-five percent (25%).
  - (iv) <u>2027: forty percent (40%)</u>.
  - (v) <u>2028: sixty percent (60%).</u>
  - (vi) 2029: eighty percent (80%).
  - (vii) 2030: one-hundred percent (100%).
- (2) The above percentages will be calculated by adding the number of trips dispatched to, and completed by, a Zero-Emission Vehicle or Accessible Vehicle during the calendar year by the High-Volume For-Hire Service, and dividing the sum by the total number of trips dispatched by the High-Volume For-Hire Service in that calendar year.

§59D-13(c)(1)	Fine: \$50 for each 1,000 trips below the percentage requirement in that calendar year.	Appearance REQUIRED
	If a High-Volume For-Hire Service does not fulfill the	
	requirement in a calendar year, the High-Volume For-Hire Service must file a corrective action plan for approval by the	
	<u>Commission. The corrective action plan must outline the steps</u> the High-Volume For-Hire Service will take to meet its	
	percentage requirements for the following calendar years.	

(3) Nothing in this subdivision shall be construed to alter the requirements of subdivision c of section 59B-17 of title 35 of the rules of the city of New York or subdivision f of such section.

§ 4. Subdivision (b) of Section 59D-19 of Title 35 of the Rules of the City of New York is amended to read as follows:

(b) *Corrective Action Plan.* A High-Volume For-Hire Service must comply with any corrective action plan approved by the Commission pursuant to Section 59D-05(c)(1) and Section 59D-13(c) of these Rules.

§59D-19(b) Fine: \$500 and suspension up to 30 days	Appearance REQUIRED