NYC Department of Transportation Testimony Before the
City Council Committee on Transportation and Infrastructure
June 23, 2023

Good morning, Chair Brooks-Powers and members of the Committee on Transportation and Infrastructure. I am Will Carry, Assistant Commissioner for Policy at the New York City Department of Transportation. With me today are Charles Ukegbu, Assistant Commissioner for Regional and Strategic Planning, Luis Gonzalez, Policy Advisor, and Miranda Alquist, Director of Legislative Affairs. We are also joined by our colleagues at the Department of Citywide Administrative Services (DCAS) and the Taxi and Limousine Commission (TLC). Thank you for the opportunity to testify on electric vehicle infrastructure on behalf of Commissioner Ydanis Rodriguez and Mayor Eric Adams.

Climate change is the defining environmental challenge of our time and New York City is particularly vulnerable to its impacts, including rising sea levels, more severe storms, and more frequent heat waves. After buildings, the transportation sector is the second leading source of the City's greenhouse gas emissions (GHG), making up 28 percent of all emissions. Eighty-four percent of these transportation-related emissions come from light-duty vehicles, such as personal cars and SUVs, while 13 percent come from medium and heavy-duty vehicles, such as box trucks and tractor-trailers. Medium and heavy-duty vehicles disproportionately contribute to air pollution, including particulate matter and nitrogen oxides, that are harmful to human health.

To do our fair share to address climate change, New York City is committed to achieving carbon neutrality in the transportation sector by 2050, with an interim goal of cutting emissions 50 percent by 2030. This transition to a greener transportation system will also help improve air quality, especially in environmental justice communities with high volumes of highway and truck traffic.

To achieve these ambitious goals, we are simultaneously advancing two strategies. First, we are doubling down on our efforts to encourage New Yorkers to walk, bike, and take transit instead of traveling by car. We are implementing street improvement projects to make it safer and more convenient to walk and bike. We are working with communities across the five boroughs to expand our public spaces and make them more inviting. And we are partnering with the Metropolitan Transportation Authority (MTA) to make bus service faster and more reliable.

But DOT recognizes that some New Yorkers will continue to drive because they lack access to transit, have family or work obligations that require it, or simply prefer it to other options. Our second strategy is to transition as many of these remaining car trips as possible to electric vehicles (EVs). We are placing a particular focus on electrifying

taxis and for-hire vehicles (FHVs), as these vehicles drive many more miles than private cars and contribute more GHG emissions. To that end, in January of this year, Mayor Adams announced the City's goal of transitioning all Uber and Lyft trips to EV by 2030.

My testimony today focuses on the steps we are taking to advance the adoption of EVs by New Yorkers and our work to support TLC's effort to electrify the taxi and FHV fleets. I will speak primarily about light-duty vehicles—i.e. cars, SUVs, and pick-ups—while touching more briefly on the medium and heavy-duty sector, as the transition to zero emission trucks is in a more nascent stage and involves its own unique challenges. Deputy Commissioner Keith Kerman from DCAS will then speak to the City's progress in electrifying its own fleet.

So what progress has been made on the adoption of EVs in New York City? According to state records, there are 1.9 million passenger vehicles registered in the city, of which nearly 2 percent are currently electric. Overall, EV adoption has been steadily increasing, with EV registrations increasing 44 percent between 2021 and 2022. In the last six months, EVs made up 7 percent of new vehicle registrations. There are many factors leading to faster EV adoption in New York City: new EVs have much longer ranges than the first generation EVs, EV prices are decreasing and there are more electric models available, the state and federal government are providing generous purchase incentives, and government and the private sector are making historic investments in EV charging infrastructure.

This is very real progress and New York City is now slightly ahead of New York State as a whole, where 6 percent of new vehicle registrations are EV. However, the city still lags the states leading the EV transition, including California, where EVs now comprise 21 percent of new vehicle registrations. Much of this disparity is due to the unique challenges of owning an EV in the five boroughs. Unlike in most American cities, about 50 percent of car owners in New York City park their vehicles at the curb and lack access to home charging—the most convenient way to power up. In addition, private investment in EV charging has not been equitably distributed—most publicly-accessible chargers are in Manhattan south of 96th Street and in inner Brooklyn and Queens. Many are within garages with high parking fees.

To support the widespread adoption of EVs, the city will need hundreds of thousands of public and private EV chargers—with a greater proportion of publicly-accessible chargers than any other U.S. city. Ultimately, most of these chargers will be installed by private companies and individuals, but the City has an important role in jumpstarting the market and ensuring equitable access. Our EV charging program focuses on expanding access to charging in three areas:

1. Communities where the private sector has been slow to invest in charging, especially low and moderate-income neighborhoods in the outer boroughs;
2. High density communities where a large proportion of vehicle owners park at the curb and where there is limited off-street parking; and
3. Communities where a high number of taxi and FHV drivers live and park their vehicles between shifts.

To support these efforts, we are looking to leverage funding from a broad array of sources, including federal and state programs and grants, utility incentives, and from private sector partners.

Before I dive into the details of our charging program, here is a quick summary of the three categories of EV charging:

- Level 1 charging uses a standard 120-volt outlet and can provide about five miles of range for each hour of charging. Level 1 is suitable for at-home use.
- Level 2 charging requires a 208- or 240-volt power source, similar to what is needed for a dryer, and can provide a full charge for most EVs in six to eight hours. Level 2 is suitable anywhere an EV is parked for a few hours or more, such as at home, work, or while out shopping.
- Level 3 or fast charging can provide an 80 percent charge in 15-45 minutes, depending on the vehicle model and the charger's power level. Level 3 requires a connection to a 480-volt direct current electrical connection and provides more of a gas station experience.

The fast chargers operated by Tesla use a proprietary plug standard—the North American Charging Standard (NACS)—that currently can only connect to Teslas. Non-Tesla fast chargers, such as those that DOT has installed, use the Combined Charging System (CCS) plug type, which is the federal standard and can be used by the majority of EVs. Which plug standard will become the dominant standard is in flux, as Tesla recently announced that it is allowing other auto makers to adopt the NACS plug. Ford and General Motors recently announced that their future EV models will switch to the Tesla standard.

First, an overview of our fast charging initiatives. Given that so many vehicle owners in New York City park at the curb, fast charging will play a bigger role in supporting EV adoption here than in other cities. Better access to fast charging will also address range anxiety, or the fear that an EV driver may have that they will run out of power while on the road and have no place to charge. In *PlaNYC: Getting Sustainability Done*, the Adams Administration committed that every New York City resident would live within 2.5

miles of a fast charger by 2035. Currently, only 65 percent of New Yorkers have this level of access.

DOT is leveraging its network of municipal parking garages and lots to dramatically expand fast charging. We have two fast charging stations in operation at the Delancey Essex and Court Square garages, each with three 50 kilowatt (kW) chargers and one 150 kW charger. A third station at the new Queens Borough Hall garage will be in operation next week. And we are in the process of procuring five additional stations throughout New York City. We expect the first two, at White Plains Road in the Bronx and Bensonhurst in Brooklyn, to be in operation by the end of summer 2024. We also recently announced a partnership with the New York Power Authority (NYPA), which will fund and install 13 additional fast charging stations at DOT parking facilities through New York State's EVolve program. Each station will have four to six state-of-the-art 150 kW fast chargers.

Through these investments, investments by DCAS at dual-use fast charging sites, and investments by private charging companies, we project 93 percent of New Yorkers will live within 2.5 miles of a fast charger once these projects are complete. These stations will particularly benefit taxi and FHV drivers by providing fast charging in neighborhoods where these drivers live, including the west Bronx, eastern Queens, and Southern Brooklyn. NYCDOT provides a 15 percent discount to taxi and FHV drivers who charge at City locations. These drivers already make up 10 percent of the charging sessions at our Delancey and Court Square stations.

Moving to level 2 (L2) charging efforts. One of the conveniences of owning an EV is the ability to refuel while your car is parked. With access to convenient, affordable L2 charging at home, work, or neighborhood destinations, EV owners can stop making separate trips to refuel. And since the average New York City driver covers only eight miles per day, many EV owners would only need to plug in for one charging session every few weeks. Another advantage of L2 chargers in comparison to fast chargers is that they are less expensive to install, reduce strain on the electrical grid, and are cheaper for EV drivers to use.

In most of the country, an EV owner can install a personal L2 charger in their own garage or driveway and do most of their charging at home. But as mentioned earlier, New York City is unique among American cities in that half of vehicle owners rely on curbside parking. This means the city needs a robust network of publicly accessible L2 options. DOT currently has 47 L2 chargers spread across seven parking facilities and is in the process of installing 1,100 more across all 37 of our lots and garages. Once completed, the project will bring L2 charging to 20 percent of our total parking spaces. We expect the first phase of 154 chargers to be operational by the end of summer 2024.

We are also expanding curbside EV charging access. In 2021, we began a pilot program in partnership with Con Edison to install 100 curbside L2 chargers at 35 sites citywide. We recently released an 18-month evaluation report on this pilot, the first report of its kind in the country. We found that the chargers were remarkably resilient and remained in operation 99.9 percent of the time. And New Yorkers are using them. In May, the chargers were in use 37 percent of the time—with some sites exceeding 70 percent utilization. As expected, use varies across neighborhoods based on EV adoption, but it is critical that the City continue to install chargers in neighborhoods where people have not yet felt comfortable going electric to encourage further shift to EV adoption.

The Adams Administration is also exploring curbside charging designs that take up less space and that are faster and cheaper to install. In partnership with the New York City Economic Development Corporation (EDC) and NewLab, a technology incubator in the Brooklyn Navy Yard, in 2022 DOT invited startups to test more compact curbside EV charging equipment, including chargers with a user-supplied cord and those that can be mounted on City streetlights. We are also exploring ways to leverage the utility work required for EV chargers to power micromobility charging options, providing a safe charging option to the city's 65,000 delivery workers.

To make the public aware of these new charging resources, DOT has created PlugNYC, the City's brand for its EV charging programs, and has regularly posted on its social media accounts about our EV charging projects, including when new sites are activated. Moving forward, all City chargers will include the PlugNYC branding, and DOT will continue to leverage the brand to increase awareness. We urge the Council to help us spread the word about the increasing availability of chargers and welcome suggestions for how we can better reach New Yorkers and encourage them to make the switch to electric.

Turning now to medium and heavy vehicles. The City is committed to greening the movement of freight, and zero emission trucks will be a key part of that effort. While the technology necessary for this transition is at an earlier stage, DOT and EDC are undertaking a truck electrification study, with the goal of identifying potential sites for truck charging stations. The City also continues its Clean Trucks Program, through which DOT offers incentives to truck owners to replace their older diesel trucks with alternative fuel or zero-emission models. The program, which started in Hunts Point, is focused on trucks in Industrial Business Zones citywide located near Environmental Justice communities that have been subject to a disproportionate amount of diesel exhaust emissions historically. The City is also exploring ways to incentivize the use of low-and zero-emission trucks through low-emission freight zones in areas with the highest concentration of truck traffic and the worst public health outcomes.

Finally, on the federal funding front, last week, DOT and our partners EDC and DCAS applied to the federal Charging and Fueling Infrastructure grant, jointly administered by the U.S. Departments of Transportation and Energy. EDC requested $15 million for the "Recharge Hub," a first-of-its-kind electric vehicle charging depot designed to accommodate freight and passenger vehicles located in Hunts Point in the Bronx. DOT requested $15 million to expand our curbside charging program to a total of 700 plugs, which would make this program the largest in the country. This effort would focus on historically disadvantaged neighborhoods and areas where large concentrations of FHV drivers live. The project would also include infrastructure to support the electrification of bikeshare and public micromobility charging, as well as solar-powered L2 charging stations at eight parks across the five boroughs, operated by DCAS. We are also closely tracking other funding opportunities and welcome Council Member letters of support for this and future grant applications.

As I mentioned earlier, these efforts will only provide for a fraction of the chargers the city will ultimately need in order to support over one million EVs. Charging on private sites will be essential. To create more chargers and expand access to EV charging across the city, we look forward to working with the Council on Introduction 150 sponsored by Council Member Brannan. This bill would require L2 EV chargers in new, renovated, and existing parking lots and make chargers accessible for even more New Yorkers.

I now turn it over to my colleagues at DCAS who will speak about the City's efforts to electrify the City fleet. I will be happy to answer any questions once their testimony is concluded. Thank you.

NYC DCAS
Citywide Administrative Services

Dawn M. Pinnock
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New York City Council Committee on Transportation and Infrastructure
Testimony on Electric Vehicle Infrastructure
Friday, June 23, 2023

Thank you, Chair Brooks-Powers, for inviting DCAS to join our colleagues from DOT and TLC to discuss electric vehicles (or EV) and EV charging. I'm Keith Kerman, Deputy Commissioner for Fleet Management at DCAS and the City's Chief Fleet Officer.

Through Mayoral Executive Order 90, DCAS is leading the transition to an electric fleet for NYC, whose current complement of EVs is the largest of any municipality and most states in the U.S. Our goals are to electrify the light and medium duty fleets by 2035 and the heavy duty and specialized emergency equipment by 2040.

NYC is already on the leading edge nationally in fleet electrification. We currently operate 4,625 plug-in electric vehicles, with 412 more units on order. By late summer, we will exceed 4,800 and by end of year 5,000. In FY23 alone, DCAS ordered over 1,000 electric replacement vehicles and this is the pace we will need to maintain. NYC also operates one of the largest alternative fuel fleets in the country with 20,000 units using some type of cleaner fuel alternative including electric, solar, hybrid, and biofuels.

DCAS is steadily expanding fleet electrification to new areas of the fleet. The City's light duty vehicles are already well on the path to electrification, including over 1,000 EV Bolts. Twenty-five agencies now operate 300 electric cargo vans citywide. These vans are supporting skilled building trades, park repairs, storehouse services, and more. We are now receiving the first of 150 new electric pickup trucks. Pickups and vans constitute 25% of the City fleet.

DCAS has also partnered with NYPD and other law enforcement agencies to introduce the first all-electric police units. Over 3,000 of the City's nearly 9,500 law enforcement vehicles are already electric or hybrid, and we expect to have over 1,000 plug-in electric vehicles in use at law enforcement agencies by the end of the year.

DCAS is also working on electrifying trucking. DSNY has introduced the first all-electric sweepers and we will also develop a plug-in hybrid version. With DSNY, Parks and DOT, we will be introducing our first all-electric refuse trucks. With the Department of Correction, we are expecting, later this year, our first 3 electric correction buses. DCAS is currently bidding contracts for electric box trucks and electric general-purpose trucks. On the off-road side, fleet operates 120 solar light towers, 238 electric forklifts, and 232 electric utility carts.

The City fleet includes 120 on-road and 70 off-road types of fleet units. It is an incredibly diverse vehicle fleet, and we must tackle functions such as plowing, off-road and beach use, bucket truck operation, street and sewer maintenance, light and sirens operations, and more as we electrify. We must also ensure the continuity of law enforcement, fire, and emergency service operations including during power loss emergencies.

In partnership with the US DOT Volpe Center, DCAS published in September 2022 the first Clean Fleet Transition Plan (CFTP) to review the full scope of electrifying a complex fleet such as ours. We found that 84% of on-road vehicle types and 81% of off-road equipment types either have an electric option in the market today or are expected to within 5 years. There are still many areas without electric options yet in development including in areas of fire and emergency response and plowing. DCAS and fleet agencies are working with manufacturers to press for further market development in those areas.

Electrification of course requires charging. Working with our partner agencies, DCAS is managing one of the nation's largest EV charging networks with 1,464 current ports. This includes 1,170 level 2 chargers which can take 6 to 8 hours to power a vehicle and are often used to power vehicles overnight.

DCAS has also installed 183 fast (50KW) chargers which can power a vehicle in 50 to 60 minutes. DCAS expects to complete the 200th fast charger this summer and is funded for 200 additional fast chargers each year through 2030. DCAS will also transition to "faster" fast chargers in FY24, moving to 125KW and 150KW units that can power a vehicle in 15 to 20 minutes.

DCAS is also investing in chargers that use battery storage. These will perform critical resiliency roles in the case of power losses. DCAS currently operates 110 free standing solar carports, the largest network of its type in the world. We have 50 more units being delivered now. DCAS will also begin installing this summer 57 battery storage fast charging units. DCAS will also implement 10 additional portable charging units this summer. Portable charging will enable mobile service vans to charge fleet vehicles throughout the City and extend the range of existing EVs.

In total, DCAS will install 700 additional charging ports by the end of 2024 to get to at least 2,200. DCAS is also making use of the DOT supplied curbside chargers and is working with our fuel card supplier to ensure that we have access to commercial charging as that expands in the City.

DCAS is working in close partnership with Con Edison to plan and install our charging infrastructure. DCAS is receiving financial support through the Con Edison Power Ready and Smart Charge programs which provide offsets and incentives for fast charging installation and off-peak charging of electric vehicles. By the end of the year, we expect to have received over $1 million in support through these programs. DCAS uses those funds to further expand the charging network.

The focus for DCAS electric charging is City EV fleet vehicles. However, DCAS also currently offers 11 fast chargers at Parks and DCAS properties to the general public. These units have been used over 22,000 times so far by private vehicles for charging. DCAS is planning at least 16

additional fast chargers for general access in the next year. Sites will include public parking areas at Van Cortlandt Park, Forest Park Bandshell, and World's Fair Marina.

DCAS is also working to focus electric charging investment in environmental justice (or EJ) communities. We will install at least 50%, if not more, of fleet EV charging in EJ communities. For example, currently 54% of the DCAS fast chargers are in EJ communities. Prioritizing charging placement in these communities will expand the level of EV fleet adoption for the same areas.

Ultimately, our goal is to reduce liquid fuel use as we expand use of clean electric power. Since FY18, we have reduced 4 million gallons per year, or 13%, of liquid fuel use in fleet. At the same time, we nearly doubled use of electricity in fleet vehicles from 2020 to 2022 and are on pace to more than double it again in 2023 alone.

Electrification offers many benefits. The most important among them is cleaner air for NYC residents and our municipal employees. Electric charging is a far superior experience to gassing up fuel cars, and electric cars are quieter and less prone to breakdowns than gas cars. DCAS is also working to combine our transition to electrification with introduction of safer fleet technologies including telematics, intelligent speed assist, automatic braking, backup cameras, driver alerts, and more.

DCAS is committed to achieving a fleet that is the most reliable, green, and safe in the country, and electrification will lead the way.

I look forward to continuing our longstanding partnership on fleet sustainability with the City Council and am happy to answer any questions.

Submitted Testimony of Con Edison to the
City Council Committee on the Transportation and Infrastructure
Oversight Hearing on Electric Vehicles
June 23, 2023

Con Edison's "Clean Energy Commitment," outlines our dedication to, and leadership in, the transition to a clean energy future. This commitment includes investing in, building, and operating reliable, resilient, and innovative energy infrastructure, advancing electrification of heating and transportation, and providing our customers with 100% clean energy by 2040.

A key aspect to meeting our collective clean energy goals is Con Edison's commitment to empowering our customers to meet their own climate goals, including widespread adoption of electric vehicles (EVs). Con Edison is all-in on electric vehicles and is collaborating with customers to support installing over one million chargers in our service territory by 2050. This includes support of our commercial customers and government partners - particularly in environmental justice communities - to electrify their car, bus, and truck fleets to meet electrification targets and improve air quality for all our customers. Additionally, as members of the Zero Emission Transportation Association (ZETA) coalition, Con Edison supports policy changes to require that 100% of vehicles sold by 2030 are electric. Finally, Con Edison is making grid and customer investments that support the buildout of a widespread charging network and has several incentive programs currently available to support the installation of vital infrastructure and encourage customers to charge when it is most beneficial for the grid.

In this testimony, Con Edison will discuss our current work related to incentive programs, partnerships, and grid readiness, helping us meet our stated electric vehicle goals.

<u>Con Edison Incentive Programs</u>

PowerReady-- This program provides incentives to connect thousands of new public and private charging stations to the electric grid. PowerReady offsets the electric infrastructure costs associated with bringing power to chargers for light-duty EVs, including cars and small vans. To date, nearly 4,000 Level 2 chargers and over 175 direct current fast chargers (DCFC) have been installed in Con Edison's service territory, with the goal of installing 18,539 Level 2 chargers and 457 DCFCs by 2025. The New York Public Service Commission (PSC) is conducting a mid-point review of all EV charging make-ready programs in the State, including PowerReady, and there is potential for significant expansion of the program budget and goals. The country's largest public universal fast-charging station was launched under the PowerReady program in Bedford Stuyvesant in 2021 at the Revel 25 DCFC station.

Medium-and Heavy-Duty Vehicles- We have a pilot program for medium- and heavy-duty (MHD) vehicle charging infrastructure, and a full-scale program is being considered in the recently launched New York State proceeding to address barriers to MHD charging infrastructure (MHD Proceeding). The PSC is considering additional charging programs for MHD vehicles as well as development of a proactive planning process so that infrastructure is available timely to meet the needs of electrifying MHD vehicles.

SmartCharge--Con Edison offers the SmartCharge New York managed charging program that provides incentives for personal drivers to charge outside of grid peak periods. This program can mitigate the impact of EV charging on the grid and help manage grid infrastructure costs for all customers. Later this year Con Edison is launching a commercial managed charging program that includes eligibility for all commercial charging stations such as for fleets, public stations, and multi-unit dwellings. Along with that program, Con Edison will be providing incentives for load management technologies, such as batteries and load management software, to help customers manage their electric charging.

Partnerships

While we are pleased our incentive programs are helping to build and expand the EV charging network in New York City, we cannot do it alone. We rely on our partnerships, most notably with the NYC Department of Transportation (DOT) to bring the first EV chargers to NYC curbs across all five boroughs. Con Edison holds regular meetings with the DOT to ensure our work is completed in tandem.

Con Edison also partners with the environmental justice community citywide. We want to ensure all communities have access to electric vehicle charging networks.

Any successful partnership requires commitment from both sides. To that end, we are ensuring electrification of Con Edison's own light-duty fleet is underway, with 100% of new light-duty vehicles purchased comprised of EVs. Con Edison has committed to achieving 80% by 2030 and 100% by 2035 of its light duty fleet to be EVs. The Company has also invested in the development, and currently has operating, one of the country's first all-electric utility bucket trucks and continues to pursue opportunities to reduce fossil fuel use in its MHD fleet.

Grid Readiness

Con Edison is working to evolve its robust planning processes to prepare for the ramp up in clean transportation energy demands. The increased energy demands are expected to drive significant grid impacts and ambitious emissions regulations will further accelerate an already rapidly growing EV market. The timeline to install EV chargers is short compared to that of other new customer-required infrastructure, such as a new building, while the buildout of utility-side grid infrastructure to meet the significant increase in demand from EV chargers requires longer timelines, sometimes of five to seven years. Through New York's MHD Proceeding, Con Edison proposed a proactive grid planning process to meet near-term needs and build out the grid in advance to support long-term growth in the deployment of EVs.

Support for Intro 983

Given that it takes time and resources to build out EV charging stations, we are pleased to support Intro 983—legislation that mandates that each city-controlled parking lot allocate a number of parking spaces equal to or greater than 50 percent of the parking spaces covered by solar canopies to be equipped with electrical raceways capable of supporting electric vehicle charging stations and shall be installed in each city-controlled parking lot where a solar canopy is installed. This legislation, once enacted, will help with our collective efforts to provide more EV charging stations across the city.

In conclusion, Con Edison is pleased to collaborate with many partners to ensure we provide a greener and cleaner future for generations to come in New York City.

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NYC Council Committee on Transportation & Infrastructure
June 23, 2023

Thank you, Chair Brooks-Powers and members of the Committee on Transportation, for convening this important oversight hearing on electric vehicle infrastructure.

UPS is a global logistics firm. Every day, our 534,000 employees deliver approximately 25.2 million packages in over 220 countries and territories. In the New York City region alone, UPS is responsible for over 600,000 packages daily. Our mission is to deliver packages on time, but how we deliver is also important at UPS. We have set a goal to achieve 100% carbon neutrality by 2050 and are proud to be the industry leader on alternative fuel and advanced technology vehicles.

Globally, UPS' fleet includes over 13,000 alternative fuel vehicles, including more than 1,000 electric and plug-in hybrid vehicles with additional commitments to purchase well over 10,000 more. . However, the marketplace for zero-emission Class 6 and near zero-emission Class 6-8 vehicles is still incredibly limited. Due to their limited availability, EV's are often deployed in suburban and rural areas of the country, where vehicles typically have higher mileage per day than in densely populated cities, and in states with strong incentives to transition commercial fleets to zero- and low-emission vehicles. For example, California offers grants of up to $80,000 for zero-emission Class 6 vehicles and upwards of $200,000 for Class 8 tractors, making it more cost effective for companies to purchase zero and near-zero emission trucks than traditional diesel-powered vehicles.

These factors put New York City at a significant competitive disadvantage when it comes to transitioning electric and alternative fuel commercial fleets. To compete for the limited commercial vehicle market, New York could implement a few recommendations, including:

- **Following London's congestion pricing model**: When London implemented congestion pricing in 2003, it included incentives for low- and zero-emission vehicles. As clean fuel technology became more readily available, incentives for low-emission vehicles were phased out. Incentives for full battery electric or hydrogen fuel cell vehicles will sunset in 2025. New York City should follow this example of incentivizing medium duty zero-emission vehicles in order to improve air quality within the Central Business District. It should be noted, the incentives for low and zero emissions vehicles had a significant and direct impact in the positive environmental gains often reported from their congestion pricing model.

- **Implement "Green Loading Zones":** In dense areas of New York City, UPS package cars may only service one or two blocks. This means that many trucks spend more time parked at the curb than driving New York City streets, making it difficult to recoup a return on investment for electric vehicles. UPS has proposed that the Department of Transportation implement "Green Loading Zones," which would provide dedicated curb

space for electric or alternative fuel delivery vehicles. With current City and State budgetary concerns, this creative solution to tap into the value of the curbside, would serve as an additional measure by which to create a demand for EV investment in the area.

By working collaboratively with New York State and partners in the trucking and logistics industry, New York City has an opportunity to become a leader on transitioning to electric and alternative fuel vehicles. UPS looks forward to continuing to work with the Council and NYC DOT to implement strategies to put New York on a path towards sustainable deliveries.

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Good afternoon, Chair Brooks-Powers and members of the Transportation and Infrastructure Committee. My name is Zach Miller, I am the Director of Metro Region Operations for the Trucking Association of New York. Since 1932, TANY has advocated on behalf of the trucking industry at all levels of government, providing compliance assistance, safety programs, and educational opportunities to our members, and in the process, creating jobs, supporting the economy, driving safety and delivering a sustainable future.

Thank you for convening this critical oversight hearing on infrastructure for electric vehicles. New York State has some of the most ambitious climate and emissions reduction goals in the country including the Climate Leadership and Community Protection Act (CLCPA) and the adoption of California's Advanced Clean Truck (ACT) regulation. At the same time, the efficient movement of freight is essential to the economic vitality of New York City. Currently nearly 90% of goods transported in the city every day are on trucks. Nearly 200 million tons of freight are moved into or out of New York City each year. By 2045 it is anticipated that freight tonnage will increase by 68%. As we strive to meet our goals, the transition to zero and near zero emission vehicles is paramount and in dense urban areas, battery electric vehicles (BEV) will play a key role.

I testify today regarding the infrastructure that will be needed to increase battery electric medium-and-heavy duty vehicles (MHD) in NYC. There must be robust investments and smart planning in this infrastructure for this transition to proceed without causing a significant economic impact. According to a recent report[1] by the American Transportation Research Institute (ATRI) two of the main challenges related to MHD charging are U.S. electricity supply and demand and truck charging requirements.

As it relates to the first challenge, utilities will have to expand infrastructure to generate more electricity and transmit and distribute that electricity to locations where trucks need to charge. According to the ATRI study, a fully electrified MHD fleet would consume nearly 9% of current electricity generation. Combined with a fully electrified passenger vehicle fleet, nearly 35% of today's electricity in New York would be consumed just for vehicle charging. The legislature in Albany has begun to seriously look at what is needed. They took a good first step this session by implementing a statewide study of highway, depot, freight, and public charging requirements. Next year they must add to it by paring this study with tangible infrastructure solutions, and I encourage this council to demand that they do so. Keep in mind that we are looking at an 8–10-year construction timeline to hit the necessary grid interconnection and upgrades. While that project timeline illustrates some of the timelines set by the state to be unrealistic, continued delay in this needed investment makes them unattainable.

[1] Jeffrey Short, Alexandra Shirk and Alexa Pupillo, *Charging Infrastructure Challenges for the U.S. Electric Vehicle Fleet,* ATRI (December 2022) https://truckingresearch.org/wp-content/uploads/2022/12/ATRI-Charging-Infrastructure-Challenges-for-the-U.S.-Electric-Vehicle-Fleet-12-2022.pdf.

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To understand the challenges related to truck charging requirements it is also important to understand the work hour limitations of professional truck drivers. All commercial truck drivers must follow the federal hours-of-service (HOS) regulations which require drivers to take 10 hours of off-duty time following 14 hours of on-duty time (which includes 11 hours of driving) before they can drive again. To be effective, it is imperative that battery charging takes place during these mandatory rest periods.

However, there is a serious lack of available truck parking for drivers to take their mandated rest periods. Across the U.S. there is currently only one commercial truck parking spot for every eleven trucks. In New York this issue is particularly acute in New York City. If there are not enough places for trucks to park, that means there are not enough places for trucks to charge. Both this council and the Adams administration deserve credit for taking the lack of overnight truck parking seriously. Int-906, which would designate off-street truck parking in each borough is the first step to establishing depots where drivers can get their mandate rest and safely charge their vehicles. It will also create a safe space for drivers to stage overnight deliveries or to establish microhubs to breakdown freight and load it onto smaller vehicles such as cargo bikes, hand carts, or smaller electric vans. I implore the council to view Int-906 as a climate bill as well as a safety bill.

There is also an opportunity to change signage and regulations to allow for overnight truck parking in industrial business zones (IBZ). Charging hubs for MHD must be identified throughout the state, which we have already done with our 21 IBZs located on truck routes where the truck traffic is highest. This is the type of on-street charging solution that will work for fleets and the sooner overnight truck parking is solved, the sooner BEV adoption will scale. To that end, it is important to note that for the most part commercial vehicles will not be able to access curb-side charging as the deliveries must be made as quickly as possible and the driver or helper does not have the available time to ensure the truck is charging at the curb. I'd like to relay a conversation I had recently with a small business near JFK. They have a fleet of 5 trucks, all of which are currently diesel. They would like to replace them with EVs. Unfortunately, the cost is prohibitive. As an example, EV cars cost on average 10-15% more than ICE cars. Compared this to EV Trucks which cost upwards of 35% more (in addition to the cost of charging infrastructure) and this is after you apply all incentives. They believe that one of the most important subjects is increasing the number of incentives which will make economic sense for all small business owners. We believe that IBZ park and charging infrastructure is a good first step to address the charging costs and allocating funding from the Citizen's Air Complaint Program into DOT's Clean Trucks program will help our small businesses in their transition.

Another question that needs to be answered is how many chargers will be needed? Today's fleet of diesel trucks can refuel while the driver remains on duty. On average, it takes a driver only 10-15 minutes to refuel their truck. Due to the short time needed, the ratio of fuel pumps to trucks is relatively low. However, electric charging takes much longer and will need to occur more frequently due to shorter driving ranges. A long-haul truck that holds 300 gallons of diesel fuel could drive more than 1,800 miles across three days between brief refueling events, hours-of service (HOS) conditions aside. However, a truck with a very large 1,500 kWh battery would

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have to spend at least four to five consecutive hours recharging each day to do a similar task over 3-4 days with ideal conditions. As a result, the number of charging stations required will be far more than the current diesel fuel stations. In California, the California Energy Commission identified a need for 157,000 direct-current fast chargers (DCFC) to support 180,000 MHD battery-electric (BEV) trucks, a nearly one-to-one ratio of chargers to trucks.

Lastly it is important to mention the diversity of the industry. There are a wide range in types of goods which are transported that require various types of vehicles. Most commercial vehicles cannot utilize curbside parking but plumbers, electricians, and other service companies who tend to stay at the curb for longer periods may indeed be able to charge their van or pickup curbside. Meanwhile, over-the-road, long-haul trucks are likely to be among the last to transition to BEV due to a host of challenges including the lack of range, availability, cost, increased weight of the vehicle and no national charging infrastructure, so the initial charging depots need to accommodate more local deliveries. Not infrastructure related exactly but I do want to quickly mention that addressing the impact of cold temperatures on battery performance, addressing the maintenance of the vehicles and ultimately the resale of those vehicles will all be critical points in commercial EV adoption.

We have only begun to scratch the surface here today but as always, the Trucking Association of New York looks forward to ongoing collaboration and dialogue with the City Council, the Department of Transportation, and the City of New York. Thank you for your time.

tech:nyc

Testimony: Electric Vehicle Infrastructure

6.22.23

NYC COUNCIL COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE

Tech:NYC is a nonprofit member-based organization representing over 800 technology companies in New York. Our membership includes hundreds of innovative startups as well as some of the largest tech companies in the world. We are committed to supporting New York's tech based economy and ensuring that all New Yorkers can benefit from innovation. Within our membership, there are many tech companies that provide transit related services and are invested in NYC's transition to a city for electric vehicles - whether they are privately owned, part of the taxi and rideshare fleets, public transit, or government fleets.

New York City's future as an electric vehicle (EV) hub will have many benefits, including reducing emissions and positioning the city as a leader in civic technology and modern streetscapes. It is crucial for NYC to be seen as an EV-friendly city for our residents, tourism, business, and economic development purposes, as many still commute or travel within NYC by car. To help the city meet its EV goals, it will be important to address charging capacity and the needs of our for-hire vehicle fleets.

According to NYC DOT, in 2022 there were 10,758 new EVs registered in New York City, which was a 37% increase over the prior year. For reference, the city's total car owning population was nearly 1.4 million households in 2018 - and a recent law will require that all new vehicles purchased in New York must be EVs beginning in 2035. There are also currently over 1,300 electric taxis and for-hire-vehicles (FHV) licensed in NYC, out of roughly 100,000 total licensed vehicles. Rideshare providers Uber and Lyft have committed to converting their fleets to be entirely EV by 2030, and Revel already operates EVs exclusively. But as the number of FHV licenses is capped, the current process of transitioning FHV licenses to apply to EVs will be very slow, and offers no incentives. NYC has also committed to an entirely electric school bus and municipal

vehicle fleet by 2035. Future plans and policies implemented by the city will need to address charging infrastructure and the licensing structure of FHVs.

It is critical that plans for EV charging infrastructure take into consideration where these vehicles will be traveling and parking, and balance the need to install both slow (L2) and fast (L3) EV chargers throughout these areas. Fast chargers are most appropriate in areas where vehicles will need to charge mid-trip, while a mix of fast and slow chargers will be more appropriate to address the overnight and off-peak charging needs of residential neighborhoods. Chargers can be installed in a variety of places, including curbside, in parking lots and garages, and dedicated EV lots like those built by Revel.

Roughly 75 percent of New Yorkers live in residential buildings with three or more units, so private garages or driveways are not an option for a large number of vehicle owners. A report conducted by HR&A and Uber in February 2023 also found that 54 percent of for-hire-vehicle drivers park their vehicles on city streets. And as mentioned in NYC TLC's "Charged Up!" report, a majority of TLC licensed drivers also live in environmental justice communities in Brooklyn, Queens and the Bronx, as well as the northern ends of Staten Island and Manhattan, which Uber's report echoes. Prioritizing charging solutions in these boroughs will also align with the Biden administration's Justice40 Initiative, which requires 40 percent of the federal funds for clean transit programs to be deployed in underserved communities. Rideshare vehicles often operate throughout Manhattan and by visiting the city's two airports, and these areas should be prioritized for fast charging options during daytime hours, as well as Red Hook, Grand Concourse, Maspeth, and Jamaica which were recommended by TLC's Charged Up! report. With active ports in Red Hook and Sunset Park, a large-scale food market in the Bronx, and manufacturing districts throughout the city, EV truck usage is also a key segment that will need charging infrastructure.

It is estimated that there are approximately 2,000 EV chargers in NYC at the moment. The City expects to build 80 fast chargers by 2025 and 10,000 curbside L2 chargers by 2030, as well as more L2 charging at DOT parking garages. Additional chargers are expected to be built by the private sector - and thousands more will be needed to provide charging solutions for the city's EVs. To help incentivize the purchasing of EVs and planning for EV charging infrastructure, Tech:NYC makes the following recommendations:

- Establish a joint city and state EV charging infrastructure plan.
- Appoint EV infrastructure czars who will be responsible for driving progress and coordinating between agencies and private sector partners.
- NYC TLC should exempt EVs from its for-hire vehicle license cap, so that additional EVs can be licensed and purchased quicker.
- Map and incentivize the installation of L2 and L3 EV chargers throughout NYC:
    - L3 charging in lower and mid Manhattan as well as JFK, LGA, and other strategic locations for mid-shift charging.
    - L3 and L2 charging focused in residential neighborhoods throughout the five boroughs for overnight charging.
    - Expand DOT's PlugNYC curbside charging program to include parking spaces within designated taxi and for-hire vehicle relief stands.
    - Release an RFI and RFP that allows private sector partners to apply to build curbside charging.
    - Identify underutilized properties that are within areas of sufficient electric grid capacity and could be used as EV charging lots.
    - Leverage NY's $175 million in allocated funding from the National Electric Vehicle Infrastructure (NEVI) Formula Program to build charging near highways within the five boroughs, as per the funding guidelines.

By undergoing thorough future planning for EV charging infrastructure, as well as how to transition the for-hire-vehicle fleet, the city will be on track to be a leading hub for EVs.

Testimony of Alia Soomro, Deputy Director for New York City Policy
New York League of Conservation Voters
City Council Committee on Transportation and Infrastructure
Oversight - Electric Vehicle Infrastructure
June 23, 2023

Good afternoon, my name is Alia Soomro and I am the Deputy Director for New York City Policy at the New York League of Conservation Voters (NYLCV). NYLCV is a statewide environmental advocacy organization representing over 30,000 members in New York City. Thank you, Chair Brooks-Powers and members of the Committee on Transportation and Infrastructure for the opportunity to comment.

One of NYLCV's top policy goals is moving New Yorkers away from fossil fuel-powered vehicles to fight climate change and improve the city's air quality. Fossil fuel-powered vehicles are a major source of air pollution, causing respiratory and public health issues, most often concentrated in low-income and communities of color due to environmental racism in the siting of toxic waste facilities and our country's historic highway construction. These communities are also often underserved by alternative transportation options and infrastructure designed to protect pedestrians and families from cars. In order to equitably improve our transportation system, cut down on air pollution, and fight climate change, the Council and the City must prioritize the following initiatives and City Council bills.

Electric Vehicle Charging Infrastructure

NYLCV supports the passage of Intro 150-2022, sponsored by Council Member Brannan, which would increase the number of electric vehicle (EV) charging stations in open parking lots and parking garages. This bill, included in our 2021 and 2022 City Council Environmental Scorecards, would require that 40% of all parking spaces in existing garages and open lots be capable of supporting electric vehicle charging stations (EVCS) by 2030.

Expanding EV charging infrastructure is vital as the City strives to meet the State's emissions reduction goals set out in the Climate Leadership and Community Protection Act. Intro 150 will make EV charging infrastructure more accessible throughout the City, especially since the majority of the City's publicly-accessible charging stations are located in Manhattan. According to the City's 2021 *Electrifying New York* report, by the end of the decade, the City will need to switch nearly 400,000 fossil fuel vehicles to EVs, up from 15,000 today. To serve these EVs, the City will need over 40,000 publicly-accessible level 2 (L2) charger plugs and 6,000 fast charger plugs (there are currently over 1,400 publicly-accessible L2 plugs and 117 publicly-accessible fast charging plugs).

As our power grid switches to renewable energy such as solar, wind, and hydropower, EVs will become an even cleaner way to get around as they have a much smaller carbon footprint on average than conventional cars. We urge the City to continue coordinating with utility companies to ensure our charging infrastructure is ready for increased demand.

City of Yes for Carbon Neutrality

This year, New York City has an opportunity to modernize the City's zoning regulations to support the City and State's climate goals by approving the NYC Department of City Planning's proposed City of Yes Carbon Neutrality zoning text amendment. This proposed zoning change will update the City's Zoning Resolution to ensure New York City and State's climate goals are met by removing zoning restrictions that limit the placement of EV charging infrastructure, installation of solar photovoltaic (PV) systems and energy storage systems, energy efficient building facade retrofits, and more.

City of Yes would support electric vehicles by allowing charging stations in all commercial areas, clarify regulations and facilitate safe bicycle and e-mobility public parking, and unlock solar power opportunities in thousands of acres of parking lots across the City. NYLCV strongly supports this zoning proposal and we urge the City Council to approve it when it comes up for a vote this fall.

Micromobility

We are encouraged by the City's successful rollout of bike share programs over the past several years. Bike share programs, such as Citi Bike, allows more people to not only have access to alternative forms of transportation, but gives them an easy way to commute or travel long distances on them. We hope the City continues to expand this program to more areas of the city. Additionally, as the City continues its expansion of bike, e-bike and e-scooter shares, we must also build out safe corridors to use them on, especially in transportation deserts where many low income and communities of color are located. These underserved communities need safe and reliable transportation options, and should not be forced to endure the constant pollution and traffic accidents that occur in their neighborhoods.

That's why NYLCV strongly supports Intro 417-2022, sponsored by Council Member Restler. Intro 417, included in our 2022 City Council Environmental Scorecard, would consolidate the Community Board and Council Member notice requirement for bike lanes with the requirement for major transportation projects. Currently, the process for approving major transportation projects and any change to a bike lane is unnecessarily long and arduous, requiring unnecessary waiting periods and multiple confusing timelines. This bill would streamline this process by creating a single, uniform notice process for DOT street projects. Safe and widespread access to micro-mobility options such as biking are crucial to reduce air pollution, meet our State's carbon emission goals, and for the City to implement the NYC Streets Plan.

Relatedly, as micromobility devices have increased in commercial usage, and given the recent increases in lithium-ion battery fires and injuries around the City, NYLCV stresses the importance of e-bike safety outreach, education, and increased charging stations throughout the

City, especially in areas where delivery workers congregate. As advocates of micromobility and other sustainable forms of transit, NYLCV appreciates the City Council's and Mayoral Administration's role in finding comprehensive solutions to this safety issue. This includes increasing the amount of outdoor and affordable e-bike battery charging stations and e-bike storage around the City so riders, especially delivery workers, don't have to risk carrying multiple batteries with them and don't have to bring e-bikes inside businesses and residences. NYLCV is encouraged by the Street Deliveristas Hubs that use existing infrastructure, such as vacant newsstands, to provide delivery workers charging stations, shelter, rest areas, and bike repair servicing. The City needs more hubs like this that not only help workers but revitalize public spaces. We also urge the City to increase the number of safe battery disposal locations and explore longer-term solutions to ensure batteries are responsibly disposed of or recycled.

NYC Streets Plan

Lastly, NYLCV strongly supports the full implementation and funding of DOT's NYC Streets Plan, an extensive five-year plan beginning last year that would expand and improve public transportation options and transition NYC's streets away from being entirely car-dominated, focusing on equity and safety. This will all be accomplished specifically by requiring the City to install 250 miles of protected bike lanes and 150 miles of dedicated bus lanes, 500 bus stop upgrades, 1,000 intersection signal improvements, 400 intersection redesigns, 500 accessible pedestrian signs, in addition to improving pedestrian spaces, commercial loading zones, and parking spaces, within five years. As the City's FY24 budget is finalized, we need to ensure the City prioritizes and funds the Streets Plan for staffing and other needs.

While we recognize that EVs are not the sole solution to fighting climate change, it is one tool in our mitigation toolbox. Prioritizing more EV charging infrastructure in existing parking lots and garages, along with policies that invest in our public transportation system, make our streets safer and more pedestrian-friendly, and encourage alternative modes of transportation are key to making our City more equitable. At the state level, we are supporting legislation to create a purchase rebate for e-bikes and e-scooters, legislation to add e-bike batteries to the State's rechargeable battery recycling law, and legislation to create a Clean Fuel Standard, which would lower the costs of building out the EV charging network. All of these pathways forward will improve our City by helping to reduce emissions, increase affordability, and improve safety. We hope the Council will work to fight for these crucial initiatives and plans so we can have a truly traversable and equitable City.

Thank you for the opportunity to testify.

NYLPI

JUSTICE THROUGH COMMUNITY POWER

Testimony of Ibrahim Ramoul
New York Lawyers for the Public Interest
To New York City Council's Committee on Transportation and Infrastructure on June 23, 2023
Regarding the EV Charging Infrastructure Oversight Hearing and in Support of Resolution No. 638

Good afternoon Chair Brooks-Powers and members of the Council. My name is Ibrahim Ramoul and I'm a legal intern in the Environmental Justice program at New York Lawyers for the Public Interest (NYLPI). We appreciate the Council convening an oversight hearing regarding the status, development, and implementation of EV charging infrastructure in New York City. To ensure that EV charging infrastructure is designed and deployed in a way that truly benefits all New Yorkers, the City must prioritize development in disadvantaged communities; work with State partners to enact a surcharge that will fund the equitable expansion of fully accessible and fully electric for-hire vehicles; and pursue electrification across all vehicle categories in the municipal fleet, and across all privately-owned vehicles that serve municipal interests, like sanitation.

The toxic smoke engulfing New York City this month once again underscores that the climate crisis is negatively impacting our health, our communities, and our economy right now, and that a rapid transition to a zero-emissions transportation and infrastructure must be a primary and urgent focus of our government.

Part of NYLPI's mission is to ensure that transportation systems are both environmentally sustainable and fully accessible to all New Yorkers regardless of disability. We therefore strongly support the passage of Resolution No. 638, which calls on the State to create a surcharge that will fund the expansion of wheelchair accessible and all-electric for-hire vehicles (FHVs). NYC has around 100,000 FHVs operating within our five boroughs, but only a small percentage of them are considered accessible. Further, TLC's 2022 Electrification Roadmap, "Charged Up", does not prioritize the development and deployment of these kinds of vehicles. The City, then, should seize the opportunity to both further its climate goals as well as bring fully electric *and* fully accessible FHVs to the US market. As New York looks to electrify its FHV fleet, addressing the disparity in service to riders with disabilities should be a priority.

We are encouraged by DOT's stated commitment to deploy EV infrastructure that is tailored to best serve the drivers and the places they live in, prioritizes the most disadvantaged communities, and ensures safe, fast and reliable charging. As we know, drivers rely on their vehicles not only for transportation—like most New Yorkers—but also for their livelihood. Providing fast charging stations with limited wait times is critical to mitigate any decreases in income that will come from having to divert time towards charging rather than offering rides. We note further that partner organizations have expressed grave concerns over the safety of charging infrastructure, citing alarming accounts of fires that have left drivers with no car, and consequently, no income. We urge the City to take all appropriate measures to both uplift and protect drivers and their communities when it comes to EV infrastructure. Furthermore, we emphasize the need for mandates on labor and procurement, as part of these efforts, that guarantee good, green, union jobs.

Additionally, we strongly support the passage of Intro 279, a bill currently before the Committee on Environmental Protection that would mandate the electrification of the full municipal fleet, including heavy-duty vehicles. These vehicles, refuse trucks being a prime example, have high emissions, drive tens of millions of miles annually on our streets and are heavily concentrated in environmental justice communities. While we are encouraged by DCAS' stated commitment to fleet electrification across all vehicle categories, we call on the city to ensure that *all* heavy-duty vehicle fleets, public *and private*, undergo an electric transition, and do so in a way that is safe and dependable, that best protects EJ communities, and that maintains reliable service for all New Yorkers. We note, here, that the Commercial Waste Zones Law of 2019 provides an opportunity to require and/or incentivize private sanitation companies to transition to a fully electric fleet alongside DSNY.

Finally, Local Law 120 of 2021 mandates that all diesel and gasoline powered school buses be replaced by electric school buses by 2035. While DOE is not in attendance today, we nevertheless urge the Council to prioritize this transition moving forward, especially given the disproportionate impacts of diesel and gas emissions on children, bus operators and workers, and environmental justice communities. We urge the Council, moreover, to ensure that PEG and other cuts being proposed by the Mayor's Office do not compromise the electric school bus initiative, nor the timely implementation of equitable EV charging infrastructure across New York City.

Thank you for the opportunity to testify. We look forward to partnering with the City Council and relevant agencies to create a far more sustainable, accessible, and equitable transportation sector for all New Yorkers.

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For more than 45 years, NYLPI has fought to protect civil rights and achieve lived equality for communities in need. NYLPI combines the power of law, organizing, and the private bar to make lasting change where it's needed most. Our Environmental Justice program fights environmental racism, works to eliminate the unfair burden of environmental hazards borne by low-income communities and communities of color, and seeks to create a more equitable and sustainable city. Our Disability Justice Program works to achieve equality of opportunity, self-determination, and independence for people with disabilities, including equal access to transportation.

June 24, 2023

Committee on Transportation and Infrastructure

New York, NY 10007

Re: T2023-3560 Oversight - Electric Vehicle Infrastructure

Greetings Members of the Committee and staff,

I'm Anthony Willingham, State Government Affairs Manager at Electrify America, and I appreciate the opportunity to testify in support of expanding fast charging infrastructure in New York City. Briefly about Electrify America, we are the largest open Direct Current Fast Charger ("DCFC") network in the U.S. and are investing $2 billion over 10 years in Zero Emission Vehicle infrastructure. Last month, we celebrated the 5th anniversary of opening our very first station, located in Massachusetts. And, since then, our network has grown to include over 3,500 chargers across over 800 stations in 46 states and the District of Columbia. In New York City, Electrify America has 16 chargers across 3 stations.

Direct Current Fast Chargers—especially those offering charging speeds above 150 kWs and up to 350 kWs—are essential to achieving widespread EV adoption and transportation electrification. They provide to the EV driver a recharging experience that comes the closest to replicating a trip to the gas station. DCFCs can recharge a vehicle in minutes versus the, perhaps, more familiar Level 2 charger which requires multiple hours to provide a meaningful charge. This distinction is important because access to public fast chargers is critical to the viability of EV adoption for significant populations. To make the switch to electric vehicles, apartment dwellers, residents who rely on street parking, and drivers without the ability to charge at home will need reliable access to public fast chargers. Fast chargers are also critical

for the taxi and rideshare industries because their drivers cannot afford, literally, to be out-of-service for hours to charge.

EV adoption in New York is slated to grow tremendously. This is not only fueled by drivers opting for an EV but also the Taxi and Limousine Commission, rideshare companies, and automakers who each have made some commitment to electrification within the next decade. The City's goal is to have 800,000 EVs registered by 2035, which is four times the number today.[1] Slower, Level 2 chargers will not be adequate to satisfy this demand for charging because they are only effective in specific use cases that entail prolonged vehicle dwell times. Fast charging infrastructure is necessary for those who need to charge quickly for the same reasons a driver would like to refuel quickly at a gas station.

Electrify America's 16 chargers across 3 stations in New York City may seem like a small number, and that is because dense, urban areas can pose a challenge to fast charging providers mainly because adequate real estate is hard to identify. The greater charging speeds offered by fast chargers induce different planning and spatial considerations in contrast to the slower Level 2 chargers. New York City is no exception. Electrify America's ask is for the city to leverage its vast real estate portfolio to provide the much needed sites to host fast charging stations.

Electrify America appreciates the opportunity to submit these comments. We would be happy to discuss this matter further and answer any questions the Committee may have.

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[1] https://www.nyc.gov/html/dot/downloads/pdf/electrifying-new-york-report.pdf

Respectfully submitted,

/s/ Anthony Willingham

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New York City Council
Committee on Transportation and Infrastructure
New York City Hall
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June 23, 2023

Re: Oversight: Electric Vehicle Infrastructure Hearing

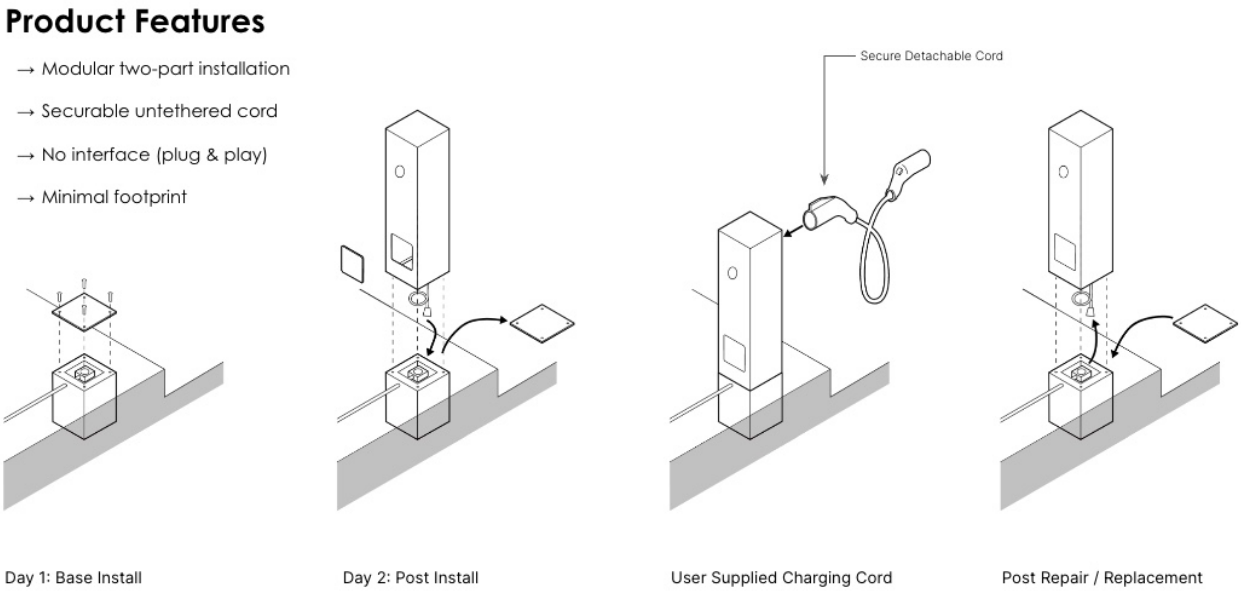
Thank you Chair Brooks-Powers, and members of the Committee, for holding this hearing on electric vehicle (EV) charging in New York City. My name is Nathan King, and I'm the co-founder and CEO of itselectric, a curbside EV charging startup. We are headquartered at the Newlab offices in the Brooklyn Navy Yard, in District 33 (Council Member Restler's district).

itselectric launched in 2021 to solve a pressing challenge: New York City wants to convert our gas cars to electric vehicles as quickly as possible – and in an equitable manner – but no scalable charging solutions existed for the one million drivers in NYC who don't have access to a private driveway or garage, If we want all New Yorkers to have access to electric mobility, we must provide them with convenient and affordable public charging options where they already park: the curb.

itselectric is addressing this challenge by harnessing spare electrical capacity from nearby buildings to deploy low-footprint curbside Level-2 EV chargers. We create a behind-the-meter connection to property owners' electrical panels to tap this excess capacity, thereby avoiding the barrier of grid limitations and the costly and time-consuming process of creating a new utility interconnection. In return for hosting an *itselectric* charger, property owners receive 20% of the charger's topline revenue, creating a new income stream for them while making it easier for everyone in their community to charge an EV.

We specifically designed our charging hardware to complement the urban landscape. While most other U.S. EV charging equipment is designed for installation in garages, parking lots, or highway rest stops, without a focus on aesthetics, *itselectric* chargers are sleek and unobtrusive, with a small footprint. Not only does this make our chargers easier and cheaper to install, it also ensures that the majority of the sidewalk is clear of obstruction – a priority for all New Yorkers, especially those with mobility limitations.

Furthermore, *itselectric* chargers are the only ones in North America to feature bring-your-own charging cords. Detachable cords not only streamline the charger's profile, they reduce the maintenance required from damaged cords or cord management components, which are the most commonly broken element of a public charger. We also maintain our chargers end-to-end throughout their entire lifecycle in order to exceed the 97% uptime requirement set by the National Electric Vehicle Infrastructure (NEVI) Formula Program.



Pilot Deployments

I want to tell you a little bit about our initial pilots – which we'd love you to come see for yourself, as they're installed here in New York – and then tell you about our plans for the future.

In February 2023, *itselectric* deployed three chargers in partnership with the New York City Economic Development Corporation (EDC) and Hyundai Motor America. These chargers are located in Sunset Park at the Brooklyn Army Terminal. *itselectric* secured this opportunity by becoming a finalist in the EV Open Innovation Challenge, a competition issued by Hyundai

Motor Group and Hyundai CRADLE, the automaker's innovation arm. The Pilot will run for six months, allowing Pilot partners to collect driver feedback and charger utilization data.

Also this year, in March, *itselectric* deployed three chargers at Steiner Studios, the largest film and television studio outside of California and a major local landowner. *itselectric* is the first company to deploy EV charging on Steiner's lot, which serves over 3,000 vehicles daily. These chargers are intended to provide usage data and driver feedback to Steiner. If the pilot proves successful, they will be kept in place permanently, with potential for further expansion within the Studio.

We'll soon be expanding outside of New York through a partnership with DTE Energy in Detroit, where we were selected as first-round grant winners of DTE's Emerging Tech Fund.[1] We are supported in our efforts through partnerships with SWTCH (our software provider) and ChargerHelp! (our operations and maintenance partner). I hope to have more news to share with you soon about deployments throughout New York State and around the country.

Meeting the City's Electrification Goals

As a company founded and based here in New York, we want to help the city meet its ambitious electrification goals to deploy 10,000 curbside chargers and electrify the rideshare fleet by the end of the decade. We think this is particularly important for the outer boroughs, where people are more reliant on cars not only for their daily lives, but to earn their livelihood.

J.D. Power research has consistently found that charging station availability is the biggest barrier for drivers when considering whether to purchase an electric vehicle.[2] For-hire drivers in particular need to feel confident that they can reliably and affordably charge their car in order to purchase an EV. But right now, there is a major disconnect between where public chargers are located and where drivers live. Despite being home to nearly 40% of New York City's FHV drivers, Queens has just 16% of the city's chargers.[3] We think *itselectric* is the ideal solution for getting curbside Level 2 chargers quickly and easily installed throughout the outer boroughs, to help for-hire drivers and the millions of other New Yorkers who rely on personal vehicles make the switch to EVs.

Workforce Development

Finally, I'd like to highlight our partnership with ChargerHelp!, whose CEO, Kameale Terry, is one of our advisers. As mentioned before, our goal is to make curbside EV chargers a ubiquitous part of the urban landscape, so EV drivers can reliably find a charger when they need it. The other piece of reliability is making sure that the chargers themselves are working. We think that we can solve a big piece of that problem through detachable cords, but we know that sometimes our chargers (and other types of EV chargers) will need maintenance. That's why we're working with ChargerHelp! not only to service *itselectric* stations, but to

[1] Buscemi, Hannah. "DTE's Emerging Tech Fund." https://empoweringmichigan.com/dtes-emerging-tech-fund/ March 22, 2023.
[2] J.D. Power "Electric Vehicle Experience (EVX) Public Charging Study." https://www.jdpower.com/business/automotive/electric-vehicle-experience-evx-public-charging-study
[3] Jurkowicz, Sam. "New York City's Largest Group of Drivers is Being Left Out of the Electric Vehicle Conversation." *Gotham Gazette*. Published online December 1, 2022.

invest in the training of EV maintenance technicians (EVMTs) in communities throughout the country.

ChargerHelp! doesn't need our stamp of approval by any means – they were just recognized by the White House for their stellar work in this field – but I wanted to call attention to the fact that while we're doing our part to make curbside EV charging widely available, there are other great organizations doing their part to ensure that the transition to EVs is equitable and just.[4]

This is all about expanding the definition of who sees themself as a stakeholder in the transportation electrification revolution. By sharing 20% of our topline revenue with property owners, we give them an incentive to have EV chargers in front of their house or business. And by investing in our local workforce, we give folks the opportunity to advance their careers in the clean transportation industry.

Conclusion

We think *itselectric* is the ideal solution for getting curbside Level 2 chargers quickly and easily installed, to help the millions of New Yorkers who rely on personal cars make the switch to EVs. We encourage the Council and the City to prioritize the deployment of Level 2 curbside chargers to address our urgent electrification needs.

Thank you again for your time and attention to this important issue.

[4] The White House. "Fact Sheet: Biden-Harris Administration Announces New Standards and Major Progress for a Made-in-America National Network of Electric Vehicle Chargers." Published online February 15, 2023.

June 24, 2023
Committee on Transportation and Infrastructure
New York, NY 10007
Re: T2023-3560 Oversight - Electric Vehicle Infrastructure

Dear Chair Brooks-Powers,

Thank you for the opportunity to submit testimony around the important topic of electric vehicle infrastructure. As you know, New York City has set the laudable goal of transitioning all trips in the for-hire transport sector to electric by 2030. Lyft is incredibly excited about this development, and we are eager to work with the Taxi & Limousine Commission (TLC) and the City Council over the next few years to electrify rideshare.

A critical component of this transition will be ensuring that there are numerous, equitably distributed, and easily-accessible charging opportunities for drivers within the for-hire transport sector. TLC licensed vehicles are highly utilized vehicles. Because drivers utilize their cars to work throughout the day, and because driver income increases in accordance with the hours they work, drivers have relatively small windows to charge and have relatively inelastic charging demand. For-hire vehicle drivers do not typically have access to off-street or overnight charging. Accordingly, as more EVs come onto the road in this sector, they will need to rely on publicly accessible fast-charging stations for charging during the day, or on any stations made available to drivers that could provide overnight lower-level charging.

Many TLC drivers hail from diverse and sometimes economically disadvantaged communities. Many drivers also reside in New York City's outer boroughs. We encourage the City to prioritize the needs of the outer boroughs and of environmental justice communities when shaping the deployment of new EV infrastructure in the ensuing years. For a smooth transition to electric, TLC drivers must be able to charge in the communities where they live and where they work.

Lyft is also committed to working with the City to engage with drivers and to support awareness around charging infrastructure. Thank you again for the opportunity to comment, and we look forward to working with the City to improve air quality and reduce carbon emissions as a result of our 2030 goals.

Sincerely,
Larry Gallegos

Larry Gallegos
Public Policy | New York
LGallegos@Lyft.com
718-683-4231

BEFORE THE NEW YORK CITY COUNCIL
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

Oversight - Electric Vehicle Infrastructure

Public Hearing: June 23, 2023

COMMENTS OF UBER USA, LLC

Hayley Prim
175 Greenwich St.
New York, NY 10001

Email: prim@uber.com

Dear Members of the New York City Council,

I write on behalf of Uber USA, LLC[1] to share further support for Mayor Adams' announcement of a zero emission for-hire vehicle (FHV) fleet by 2030.

In 2020, Uber committed to becoming a fully zero-emission platform by 2040, and an earlier 2030 timeline for its rides platform in the US, Canada and certain European cities.[2] In furtherance of those goals, Uber has committed $800 million in resources to support EV adoption by drivers' globally.

In 2022, Uber partnered with consulting group HR&A Advisors to produce a study focused on the steps necessary to achieve zero emissions in New York City by 2030. HR&A reviewed the existing charging infrastructure as well as the publicly available plans for new charging stations within the City. A copy HR&A's final report is linked with this submission and incorporated herein by reference.

HR&A's report advances 10 strategies aimed at increasing access and affordability to EV charging infrastructure, building the processes and systems to support for-hire driver needs and helping achieve the shared goal of a zero-emissions FHV fleet by 2030:

1. Identify high-need neighborhoods that overlap with where for-hire drivers live to prioritize where to place low cost and fast chargers.

2. Work with utilities to identify high-volume pick-up and drop-off areas in which the grid currently has capacity to support new fast chargers.

3. Develop a comprehensive EV infrastructure deployment plan to strengthen coordination with utilities, optimizing the City's ability to achieve its emission reduction and environmental equity goals, and electrify the for-hire vehicle fleet.

[1] Uber USA, LLC is a TLC licensed High-Volume For-Hire Service (HV0003) (B03404).
[2] https://www.uber.com/newsroom/driving-a-green-recovery/

4. Aggressively pursue new federal funding opportunities to direct investment to target neighborhoods.

5. Streamline the permit process for EV charging as part of the City's ongoing efforts to improve land-use processes.

6. Leverage real estate assets owned/managed by public or faith-based entities to provide land for accessible, affordable chargers in targeted neighborhoods and near high-volume trip areas.

7. Explore land use incentives for private developers to integrate public chargers with no gate or parking fees into new developments.

8. Continue targeted outreach and engagement specific to the for-hire vehicle industry.

9. Support EV charging operators in communicating electricity prices and charger availability with drivers, as well as in developing driver-centric incentives to reduce charging during peak load times.

10. Further develop a new pricing structure for the cost of power for charging operators that makes charging more affordable.

While Uber and FHV drivers celebrated TLC's most recent release of 1,000 FHV licenses restricted to Battery Electric Vehicles, new licenses alone won't be enough. Uber respectfully requests that the Council consider the strategies suggested within HR&A's report, act quickly to explore available federal funding for infrastructure improvements, and place new chargers where the City's FHV drivers live and drive the most.

Achieving this goal is sure to require increasing public-private partnerships and Uber welcomes the opportunity to continue working alongside City stakeholders in the Council, TLC, and DOT.

Sincerely,

Hayley Prim
Senior Policy Manager, Uber

To whom it may concern,

Open Plans, a non-profit dedicated to safe and livable streets, respectfully submits this testimony to advocate for electric vehicle policy that is centered around off-street fast charging rather than vast levels of on-street L2 charging.

EVs are a net good and are necessary for a green transition, but they are not a silver bullet. They generate the same congestion that gasoline-powered cars create, and they still pose a threat to vulnerable road users — in some cases an elevated threat due to the fact that EVs are heavier than gasoline-powered cars.

Instead of framing and focusing on EVs as a panacea for transportation, it is important to remember that in order to truly reduce carbon emissions and make our city as green as it can be, we must prioritize mode shift. Car-centric infrastructure exacerbates the climate crisis and makes the use of all other modes of transportation difficult. Electrification is crucially important, but getting more people on buses, trains, walking, and using micromobility should be our main focus in making our transportation sector greener.

In order to reach our electrification targets, the 2021 *Electrify New York* report estimates that the city will need to install 40,000 public L2 chargers — 10,000 of which at the curb — and 6,000 DC Fast Charging (DCFC) chargers within the next 7 years.[1] An expansion of this size will be costly and complex.

Placing 10,000 L2 chargers at the curb — which is public space — is wrongheaded and presents a number of difficulties:

- Placing an EV charger in a curbside spot essentially "locks in" that use of the curbside. It becomes a parking space only for EVs and due to the monetary investment of installing the charger, it becomes much more difficult to repurpose that segment of the curb for any other use.
- Any L2 charging technology installed at the curb may be rendered obsolete by more readily accessible or efficient off-street charging options.

[1] https://www.nyc.gov/html/dot/downloads/pdf/electrifying-new-york-report.pdf

- The nature and scale of the planned expansion risks chargers being placed at the curb in a haphazard way, which could have far-reaching negative impacts on our streetscape now and in the future.
- There are serious issues with the technical reliability of on-street public charging stations that must be addressed; a recent survey found that in the Bay Area, 23% of the 657 public charging stations surveyed were broken.[2] On-street charging stations are geographically dispersed and more difficult to service regularly, whereas consolidated off-street charging stations can be managed efficiently.
- Our sidewalks and curbs are already cluttered and difficult for those with disabilities to navigate. EV charging creates additional complications for those using mobility devices to get around and further takes away space from people not using cars.
- The unavailability of chargers (and potential for them to be broken) could create further congestion due to cruising and circling.

We should instead center our EV charging policy around equitably placed, efficient off-street charging stations. This helps ensure a balance between available EV charging and ensuring public space remains free of the aforementioned complications with curbside charging. We could do so by pursuing the following policies:

- The Council should **pass Councilmember Brannan's Intro 150-2022** which would mandate necessary off-street charging capacity in our city's new and existing parking garages. The majority of the Council is signed on to this legislation, and it should be passed.
- The City should think creatively about a wider **expansion of publicly accessible off-street DCFC charging hubs**, which would resolve the negative impacts of curbside charging on the street and more closely mirror the current experience of drivers using gas stations. Such hubs would provide charging efficiency — fully charging vehicles in minutes rather than hours — and have the potential to serve as conduits for not only EV charging, but also retail, housing, or public space above, around, or below them.
- The City should explore a program to **encourage and facilitate gas station conversions**, either partial or full. Having reliable EV charging infrastructure

[2] https://arxiv.org/ftp/arxiv/papers/2203/2203.16372.pdf

nearby encourages the adoption of EVs, discourages gasoline-powered car usage, and negates the need for curbside chargers.

- The City should further **expand and fund other transit options**, including bike parking, electric bike charging stations, and fast and reliable public transportation. The best way to lessen our transportation's climate impacts is to shift away from private vehicle use — be it electric or otherwise.

By changing the way we approach the proliferation of EV charging across the city, we can ensure an equitable and effective program.

Sincerely,
Open Plans

Sara Lind
Co-Executive Director
sara@openplans.org

Jackson Chabot
Director of Advocacy and Organizing
jacksonchabot@openplans.org

Michael Sutherland
Policy Analyst
michael@openplans.org

June 23, 2023

Testimony from Revel for Transportation and Infrastructure Committee Hearing on Electric Vehicle Infrastructure

Thank you to the Transportation and Infrastructure Committee and Chair Brooks-Powers for holding this hearing on electric vehicle charging, one of the most important challenges our city faces in decarbonizing the transportation sector. While increasing charging access of any kind is useful to promote more EV adoption and the curbside charging pilot has shown success doing that, we submit this written testimony to encourage additional emphasis on direct current fast charging (DCFC) infrastructure because it's particularly critical for the electrification of the city's For-Hire-Vehicle (FHV) fleet and will vastly increase access to charging for residents of multi unit dwellings (MUDs).

The *Plug NYC* evaluation report published in May by the Department of Transportation showed promising results about how our public charging infrastructure is functioning. Specifically, DOT, Con Edison and FLO achieving charger uptime of over 99.9 percent demonstrates very high network reliability, which is essential to building consumer confidence in EVs. One hundred curbside chargers is a good starting point, however, we should remain flexible in our priorities as technologies advance and best use cases become clearer.

In its 2021 *Electrify New York* report, DOT projected the city will need 40,000 public Level 2 (L2) chargers and 6,000 public DCFCs by 2030 to reach stated electrification targets. Developing that much charging infrastructure will be challenging, in part because of overall capital costs, viable grid connection points, years-long power upgrade timelines, real estate constraints and potentially even charger supply. Emphasizing DCFC infrastructure will have a more significant impact on EV adoption, especially for FHV drivers.

Mayor Eric Adams has rightly committed to electrify the city's fleet of nearly 100,000 FHVs by 2030. It's one of the best immediate investments our city can make in reducing transportation-based pollution, with one electric FHV having the equivalent emission reduction impact as three or more private EVs. FHV drivers will predominantly need fast charging access because they will on average charge at minimum once per shift, and therefore cannot have their earning potential interrupted by a four to eight hour L2 charge. In its 2022 *Charged Up* report, the Taxi & Limousine Commission recognized FHV drivers will use DCFC for at least 70 percent of their charging needs.

Revel is the leading provider of public fast charging in New York City, with two off-street hubs in Brooklyn totaling 40 charging stalls. We are laying a foundation of DCFC infrastructure where FHV drivers live and work to ease their transition to electric. In the next year, we will open the first high-volume public fast charging stations in the Bronx and Upper Manhattan, as well as several sites in Queens, including a 60 stall hub in Maspeth. All of our fast charging stations are open to the public 24/7, equipped with both CCS and NACS plug types, have no paywalls to

enter and can fully charge an EV in minutes not hours. Revel currently employs about 1,000 TLC-licensed New Yorkers as W2 employee drivers to operate our all-electric citywide rideshare fleet, so we uniquely understand FHV driver electrification hurdles and the DCFC necessity for this industry.

DCFCs are also an efficient use of finite real estate, and that efficiency will compound as charging speeds continue to increase — Revel's latest and future sites have charging speeds of 150+ kilowatts, able to charge an EV in just 10 to 20 minutes, compared to an average charging time of roughly four hours reported in the curbside charging pilot. In a perfect scenario of an EV charger having 100 percent utilization, an L2 could charge up to six EVs a day versus more than 70 by a 150kW DCFC with the same spatial footprint.

Revel supports Int. 150-2022 to amend the building code to allow and require more EV charging access in parking garages. Indeed, Councilmember Brannan's bill specifies that one fast charging installation would be equivalent to ten L2 chargers, underscoring the greater efficiency of DCFC installations.

Equitable EV charging access is a key issue for the future of our city. L2 charging certainly has an important role to play, but the FHV electrification timeline and specific DCFC needs makes building that side of the infrastructure more urgent than past models may have projected. Revel hopes to be a partner and resource to the Council in determining the best path forward for eliminating transportation-based pollution and improving New Yorkers' environment, air quality and overall well-being through electric vehicles.

Respectfully submitted,

Frank Reig
CEO & Co-Founder
Revel

Michael Huarachi
10th Avenue
Apt ###
New York, NY 10018

T2023-3560 Oversight - Electric Vehicle Infrastructure
Resolution **Res 0638-2023**

Good afternoon,

The NYC Council will pass lots of electric charging bills in the coming years but the e-microbility chargers have so far been overlooked.

Here are some of my thoughts on the pilot proposed:

While mobility and sustainability are linked, electrifying private cars is not a cure-all to New York City's climate crises, we need a holistic approach.

- We need safe and secure on-street parking for e-micro mobility. Bike parking is the number two reason (only after safety) why New Yorkers don't bike or don't bike more often.
- We need to expand public charging infrastructure for all vehicle types. Any electric charging requirements must also include charging space for e-micro mobility. The "Deliverista hubs" are a great example.
- Infrastructure investments should focus on getting as many New Yorkers to their destinations as quickly, safely, and efficiently as possible while reducing emissions and supporting a just transition to a sustainable future. Cars only move a few people at once and increase congestion: riding the bus and using active transportation move more people and free up more space.
- Electric vehicles also include electric buses and e-micro mobility, and we need to prepare our infrastructure for all modes of transportation.
- Electric cars and trucks are much more heavier than their gas-powered counterparts and more dangerous to other road users.
- Make it easier for New Yorkers to try out and adopt modes of transportation outside of private car ownership is a critical step to meeting a number of New York City's goals - including mitigating gridlock, pollution and emissions; improving the quality of life for New Yorkers and visitors; accelerating bus speeds and growing ridership; and protecting the most vulnerable users of the road. New York City should create financial and infrastructural incentives to the use of e-micro mobility.
- Invest in safe, secure on-street parking, charging, and docking for private and shared e-micro mobility outside every subway station. Locate additional short-term parking in busy commercial and dense residential districts, critical for workers making deliveries. Require 25% of all on-street electric mobility charging stations installed in New York City to power e-micro mobility rather than or in addition to electric cars, including at least 100 daylighted intersections with e-micro mobility charging stations. E-micro mobility parking should include on-street space for dock shared e-

micro mobility as part of the expansion of electric Citi Bike and e-scooter share programs.

- Create secure on-street overnight parking hangars to provide theft-proof storage with a focus on low-income neighborhoods
- Cars move few people and increase congestion - we should be speeding up buses and electrifying them.
- Shrink the fleets! (DHL, USPS, UPS, FEDEX, BALDOR, etc.) AND electrify them!
- Electrify/automate/digitize/streamline e-charging station enforcement (like bus cams, but charging station cams!)

Finally, a 2019 Harvard Kennedy School study published that the public costs of the vehicular economy are substation - amounting to $14,000 per family, regardless of whether they own a vehicle. The vast majority of roads are provided free at point of use, and as a result more than half of the costs of driving - roads, maintenance, policing -are subsidized by ALL. We barely subsidize housing anymore, but roads are HIGHLY subsidized: https://www.hks.harvard.edu/publications/64-billion-massachusetts-vehicle-economy

Transportation desert council people should be promoting more robust and reliable electrified public transportation, rather than an expensive pilot that will serve a small fraction of your constituents. We all know 86%+ of New Yorkers do not use and/or own a vehicle. Arguing for charging stations for vehicles in transportation deserts is like arguing for cars in food deserts.

This proposal must include robust support and plans to build an equitable, sustainable, and robust electric grid for e-micro mobility use. Get people out of cars!

As you plan for EV charging infrastructure, please implement policies that extremely limit use of the public curb for that purpose. Our curbs are extremely valuable space and a sustainable transportation future will include repurposing them for more bus lanes, bike lanes, expanded sidewalks, waste containerization, and public gathering places like plazas.

Please prioritize funds such as the Charging and Fueling Infrastructure (CFI) grant money to accelerate construction of multi-modal hubs that can serve e-bikes, EV carshare, cargo bikes, etc.

Thank you!

EV Infrastructure Oversight Hearing
City Council Committee on Transportation and Infrastructure
Friday, June 23rd at 1:00pm

While mobility and sustainability are linked, electrifying private cars is not a cure-all to New York City's climate crisis. **As a nurse, pedestrian and cyclist, I believe we need to take a holistic approach to protect vulnerable road users.**

Electric cars and trucks are much heavier than their gas-powered counterparts and are more dangerous to other road users. Electric vehicles also include electric buses and e-micromobility, and we need to prepare our infrastructure for all modes of transportation.

Infrastructure investments should focus on getting as many New Yorkers to their destinations as quickly, safely, and efficiently as possible while reducing emissions and supporting a just transition to a sustainable future. Cars only move a few people at once and increase congestion: riding the bus and using active transportation move more people and free up more space.

We need to expand public charging infrastructure for all vehicle types. Any electric charging requirements must also include charging space for e-micromobility. The "Deliverista hubs" are a great example.

We need safe and secure on-street parking for e-micromobility. Bike parking is the number two reason (only after safety) why New Yorkers don't bike or don't bike more often.

On high traffic routes and where conditions allow, convert a car-traffic lane into a dedicated lane wide enough for passing and side-by-side use of e-micromobility, alongside a separate lane for non-electric bikes and kick scooters. E-micromobility lanes should be speed limited to devices traveling 20 mph or less. On bridges, configure lane space to allow for safe crossing by pedestrians, cyclists, and e-micromobility users. This may require converting a lane of car space to additional separated bike or 20 mph limited e-micromobility lanes.

Lift restrictions on e-micromobility access, including existing e-bike bans on the Hudson River Greenway; e-micromobility should be allowed on greenways and in parks wherever non-electric bikes are allowed. New York City's parks and greenways serve as critical connectors for an incomplete network of bike lanes. Restrictions on e-micromobility access limit the extent to which e-micromobility can succeed as a transportation alternative.

Making it easier for New Yorkers to try out and adopt modes of transportation outside of private car ownership is a critical step to meeting a number of New York City's goals — including mitigating gridlock, pollution, and emissions;

improving the quality of life for New Yorkers and visitors; accelerating bus speeds and growing ridership; and protecting the most vulnerable users of the road. New York City should create financial and infrastructural incentives to the use of e-micromobility.

Construct a Variety of On-Street E-Micromobility Parking: Invest in safe, secure on-street parking, charging, and docking for private and shared e-micromobility outside every subway station. Locate additional short-term parking in busy commercial and dense residential districts, critical for workers making deliveries. Require 25% of all on-street electric mobility charging stations installed in New York City to power e-micromobility rather than or in addition to electric cars, including at least 100 daylighted intersections with e-micromobility charging stations. E-micromobility parking should include on-street space for docking shared e-micromobility as part of the expansion of electric Citi Bike and e-scooter share programs. Create secure on-street overnight parking hangars to provide theft-proof storage with a focus on low-income neighborhoods.

Build Public Charging Infrastructure: Expand public charging infrastructure, like the forthcoming "Street Deliveristas Hubs" as called for in Intro 0927, to include at least one public charging station in every City Council District. Prioritize investment in and construction of e-micromobility charging infrastructure over privately owned electric car charging to encourage New Yorkers to transition away from driving. Require all New York City-owned buildings, including schools and NYCHA buildings, to provide fire-resistant charging stations on or near their premises.

Incentivize Private Charging Infrastructure: Require all new residential and commercial buildings to include e-micromobility charging. Retrofit existing parking garages to include e-micromobility charging. Incentivize restaurants and ground-floor businesses that employ e-micromobility users to provide short-term parking on the roadbed to discourage sidewalk riding and blocking.

Offer Incentives for E-Micromobility Purchase: Because the safety of any given road user rises or falls based on how many other riders of the same mode are on the streets — a theory known as "safety in numbers" — incentivizing e-micromobility purchases will directly serve the safety of all e-micromobility users. Incentives could include a voucher-based point-of-sale rebate, federal tax credit, and sales tax exemption to reduce the cost of purchasing a certified e-bike or e-scooter with a new, working battery. Additionally, given the rapid growth of gas-powered mopeds, New York should offer purchase incentives for electric mopeds, which contribute much less to carbon emissions and noise pollution.

Offer Incentives for Residential and Commercial E-Micromobility Storage and Charging: Create a tax incentive program for new or retrofitted buildings that offer residents safe infrastructure for charging and storing e-micromobility, as

well as storage for bikes of all kinds. Incentivize all new residential and commercial buildings to include e-micromobility charging, in addition to expanded requirements for bike parking. Retrofit existing parking garages to include e-micromobility charging and parking facilities. While TA supports the removal of mandatory parking minimums for new residential development, while they are in effect, e-micromobility parking should count toward these parking minimums.
Expand Automated Enforcement of Licensed Vehicles: Pass legislation in Albany that allows the City of New York to issue tickets to licensed cars, trucks, and mopeds that block or drive in bike lanes. Automated enforcement is one of the most effective forms of traffic enforcement. With the addition of separated lane space for e-micromobility, it is essential that these lanes are kept clear of unauthorized uses.

Offer Battery Buybacks: Create a buyback system (such as Intro 0949 in the City Council) for damaged, non-compliant, or uncertified lithium-ion batteries, bikes, and chargers. By allowing New Yorkers to safely recycle or exchange uncertified or damaged batteries for cash, or trade in a non-compliant e-bike model for a heavily-discounted certified e-bike, the ongoing fire risk would be mitigated.

Develop Licensing for E-Micromobility Vendors: Develop regulations for the distribution and sale of e-micromobility equipment, including batteries, and require vendors to be licensed by the New York City Department of Consumer and Worker Protection. While many mopeds in particular are being operated without license plates or registrations as required by law, this is an issue that can be best addressed by targeting at point of sale. This agency should hold vendors accountable for selling faulty equipment or with illegal titles.

Pass New Housing Standards for E-Micromobility: Create new rules under the guidance of the New York City Fire Department defining safe battery storage and charging for e-micromobility that includes fire suppression and detection of damaged batteries. Fund the FDNY to work with residential and commercial building owners to install safe storage stations.

Charge an E-Micromobility Safety Fee for Delivery App Companies: Pass a law mandating a new fee, similar to the Black Car Fund, to be paid by all delivery app companies for permission to operate in New York City. Collected fees would pay for the cost of incentive programs to promote e-micromobility and encourage safe battery swaps.

Ban Instant Delivery Apps: Pass a law banning “instant” delivery app companies, which operate on a near-impossible business premise and promote

unsafe working conditions, from operating in New York City. The "15-minute-or-less" promise directly endangers the lives of delivery workers and all road users by encouraging speeding, wrong-way driving, and other unsafe driving practices.

Enact Delivery Worker Minimum Pay: Implement legislation creating a livable minimum wage for delivery workers and adding a fixed tip to delivery app totals. The low wages, lack of job security, and dangerous working conditions provided by companies that employ e-micromobility users has incentivized unsafe behavior. Creating a per-minute minimum wage encourages workers to prioritize safety without being forced to choose between their livelihood and street safety measures.

Develop a Battery Safety Education Campaign: Educate e-micromobility users, repair workers, and sellers how to safely charge batteries. Such campaigns should be rolled out alongside the construction of safe, secure, and accessible public charging stations. Additional educational materials for homeowners and building managers should be developed, and all materials should be available in multiple languages.

Develop a Safe Street-Use Education Campaign: Educate all e-micromobility users about how and where to operate e-micromobility devices safely currently and reeducate in accordance with all traffic law at the point-of-sale and on streets after new infrastructure is built. Additionally, update the vehicle driver's education curriculum and road tests to reflect the changing streetscape and a variety of road use types.

Develop a Transit Safety Education Campaign: Educate e-micromobility users and would-be users about where they can safely use e-micromobility to complete their transit trips by following the MTA's new guidelines, including not riding or charging in transit facilities and how to safely board and ride transit with an e-bike or e-scooter.

Safe Disposal of Batteries: Pass legislation requiring the proper and safe disposal of e-micromobility batteries and other rechargeable batteries once they reach the end of their lifespan or are otherwise unusable.

Expand a Proven Public Safety Strategy:

Daylighting intersections

By removing the parking spots closest to an intersection to increase visibility — a practice known as daylighting — the City of New York can make intersections safe.

State law requires this, but the City of New York overrides this life-saving requirement to prioritize parking over safety.

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Anthony Willingham

Address: _____

I represent: Electrify America

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 6/23/23

(PLEASE PRINT)

Name: Samantha Ortega ChargerHelp!

Address: _____

I represent: ChargerHelp!

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 6/23/23

(PLEASE PRINT)

Name: Lauren Kesner O'Brien

Address: 55 Water St.

I represent: Empire Clean Cities

Address: 55 Water St., NY, NY

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Miranda Algvist

Address: _____

I represent: DOT

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: BRENT TAYLOR

Address: DCAS

I represent: _____

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Charles Ukegbu

Address: _____

I represent: NYCDOT Assistant Commissioner

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Keith Kerman (DOT)

Address: Deputy Commissioner, Fleet Management and Chief Fleet Officer

I represent: NYC DCAS

Address:

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Ryan T Wanttaja

Address: First Deputy Commissioner (TLC)

I represent: NYC TLC

Address:

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: William Carry

Address: Assistant Commissioner for Policy (DOT)

I represent: (DOT)

Address:

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Luis R Gonzalez

Address: Policy Advisor (DOT)

I represent: _____

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 6/23/2023

(PLEASE PRINT)

Name: Raul Rivera

Address: _____

I represent: _____

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Julian Kline

Address: _____

I represent: Tech:NYC

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Michael Sutherland

Address: 377 Broadway

I represent: Open Plans

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Jackson Chabot

Address: 377 Broadway

I represent: Open Plans

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: BRENT [illegible]

Address: [illegible]

I represent: [illegible]

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: June 23, 2023

(PLEASE PRINT)

Name: Katherine Voceika

Address: [redacted] W 77th St [redacted]

I represent: N/A

Address: Speaking about Bicycle Parking

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 06/23/2022

(PLEASE PRINT)

Name: Ibrahim Ramos

Address: [redacted] Broadway [redacted] BK, NY 11211

I represent: New York Lawyers for the Public Interest

Address: 151 W 30th St fl 11

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: JUNE 23, 2023

(PLEASE PRINT)

Name: NATHAN KING

Address: _____

I represent: EV Charging & NY City

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 6/23/23

(PLEASE PRINT)

Name: Zach Miller

Address: _____

I represent: Trucking Association of New York

Address: _____

Please complete this card and return to the Sergeant-at-Arms