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Testimony on Electric Vehicle Infrastructure
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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.