NYC DCAS
Citywide Administrative Services

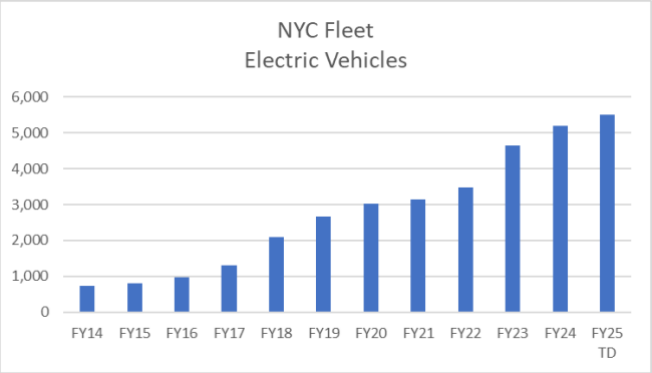
DCAS Inaugural Report on the Transition of the Citywide Fleet to Electric Vehicles

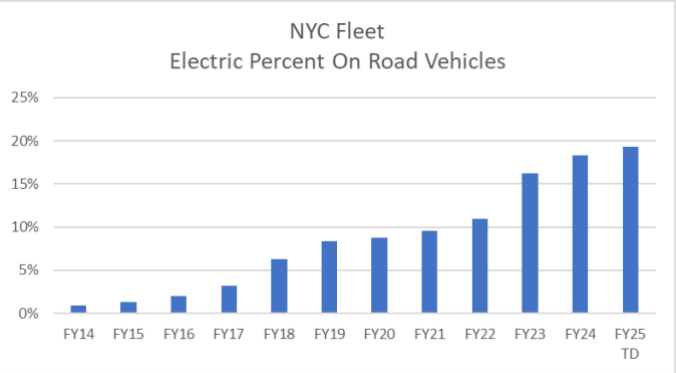
Local Law 140 (2023)

Contents

Summary

The Department of Citywide Administrative Services (DCAS) through Executive Order 161 of 2012, leads New York State in electric vehicle (EV) adoption. Currently, over 5,500 City fleet units are either all battery electric vehicles (BEV) or plug-in hybrid electric vehicles (PHEV); an additional 4,400 vehicles are hybrid electric (HEV). DCAS and DOT also operate the largest charging network in New York State, with over 2,250 charging ports, including close to 400 fast chargers.





In 2023, the New York City Council enacted Local Law 140, which mandates the City's full transition to electric vehicles; for light and medium-duty units by 2035, and for heavy-duty units by 2038. The law also includes a series of exemptions to address practical limitations in EV vehicle supply, charging infrastructure, backup power, operational capacity, and/or cost.

Beginning July 1, 2025, and annually on July 1 thereafter, DCAS is required to publish a report detailing EV and charging infrastructure procurements. In accordance with Local Law 140, the report must also describe impacts, if any, on City employees, including training needs, programs designed to address those needs, and changes to job functions or duties resulting from the adoption of EVs.

Prior to the passage of Local Law 140, New York City had already established goals to promote a sustainable fleet under a 2019 mayoral executive order and committed to achieving a carbon-neutral fleet by 2040 through two additional executive orders issued in 2020 and 2021. These later orders aimed to transition most light duty on-road fleet vehicles to electric models by 2035; objectives that are closely aligned with the mandates of Local Law 140.

In accordance with the NYC Charter (section 827) and Executive Order 161 of 2012, DCAS procures all fleet units and fuel for City agencies and manages initiatives to implement cleaner alternative fuels, reduce vehicle emissions, and increase overall fleet efficiency. DCAS has consistently led the City's efforts to electrify its fleet. As manager of the largest EV fleet and charging network in New York State, DCAS is recognized nationally for its leadership in sustainable, efficient, and safe fleet operations. The National Fleet Management Association

(NAFA) named DCAS the Greenest Fleet in the United States in 2024. To date, more than 5,500 on-road vehicles in the City's fleet have transitioned to electric models.

In 2015, NYC committed to reducing fifty percent of greenhouse gas (GHG) emissions (50x25) for the City fleet through the NYC Clean Fleet plan. Through the growing EV fleet, in combination with renewable diesel (RD) implementation for the City's trucks and off-road equipment, as well as hybrid vehicle use and other fleet efficiencies, DCAS is achieving this 50x25 goal.

In addition to expanding the number of EV units in the fleet, in 2024, DCAS completed the full conversion of its 12,500 heavy-duty, specialized, and off-road units to odorless, nearly petroleum-free RD, a clean-burning alternative derived from renewable feedstocks, such as used cooking oil and waste animal fats (tallow). This transition provides a cleaner, interim solution on the path to full electrification, eliminating an estimated 162 million pounds of carbon dioxide emissions annually. New York City is the first major East Coast municipality to adopt RD at scale.

For light-duty models, BEVs require far less maintenance than other types of vehicles, including PHEVs, hybrids, and gasoline-powered units. DCAS does not yet have sufficient data for EV truck implementation to assess the maintenance costs in that area. At this time, there have been no staff reductions tied to EV adoption. DCAS will monitor this issue as part of these annual reports.

Through ongoing collaboration with government partners including local career and technical education (CTE) institutions, original equipment manufacturers, and subject matter experts in the automotive industry, DCAS continues to deliver targeted workforce education and technical training to ensure a seamless transition to EV operations and long-term fleet readiness.

Electric Vehicle Acquisitions

The City has operated EVs since receiving several donated Toyota Rav4 units in 1998. Today, hybrid and alternative fuel vehicles (AFVs) comprise 75% of the citywide fleet, including more than 5,500 electric vehicles, reflecting the City's long-standing commitment to reducing transportation emissions and transitioning toward a fully electric fleet.

The fleet's transition from internal combustion engine (ICE) vehicles to hybrids and AFVs, including EVs, predates Local Law 140, as well as Mayoral Executive Orders 41 of 2019, 53 of 2020, and 90 of 2021. These executive orders advanced the objectives of the original and subsequent iterations of the City's comprehensive fleet sustainability plan, namely the replacement of most on-road fleet units with cleaner alternative fuel models, and accelerated the pace of progress towards accomplishing these objectives.

By 2007, the City had integrated more than 1,700 hybrid vehicles into its fleet. That same year, the City released PlaNYC, a broad climate action plan aimed at reducing municipal road vehicle emissions by 44% by 2030. This effort marked the start of a long-term strategy to address transportation emissions. PlaNYC proposed the use of BEVs, PHEVs, solar-powered options, and biodiesel alternatives.

The foundation for the City's AFV programs was further laid with the 2010 study PlaNYC: Exploring Electric Vehicle Adoption in New York City, an extension of the 2007 strategic climate initiative.

Federal support accelerated these efforts. In 2009, fleet stakeholders nationally, including NYC, received over $4 billion in federal funding and tax incentives for EV development and infrastructure. These investments were accompanied by updated fuel economy standards and EV deployment mandates. By 2022, more than $90 million in federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding had been allocated to support the City's clean transportation goals.

By Fiscal Year (FY) 2009, 22.3% of the fleet consisted of hybrids or AFVs. Some early models of these vehicles included trucks powered by compressed natural gas, propane, and biodiesel. By FY 2013, the share of these units nearly doubled, aided by a citywide policy and local law requiring agencies to use biofuels for their diesel equipment. By 2015, over 60% of City fleet assets ran wholly or partially on alternative fuels.

Following the 2015 Paris Agreement, the City released NYC Clean Fleet, its first complete fleet sustainability plan. It established goals of adding 2,000 EVs and cutting fleet-related GHG emissions by 50% by 2025, and 80% by 2035. DCAS and the Mayor's Office of Management and Budget (OMB) formed a taskforce to help agencies phase in EVs and phase out inefficient vehicles, like SUVs. DCAS secured contracts with major auto manufacturers GM, Ford, Nissan, and Toyota for BEVs and PHEVs like the Chevy Bolt, Ford Focus, Nissan Leaf, Mitsubishi

Outlander, Chrysler Pacifica, Ford Mach E, Ford Lightning, Ford E Transit, Chevy E Silverado, and Toyota Prius.

By FY 2014, the City had 775 EVs. Nine months after NYC Clean Fleet's launch, that number grew exponentially. By July 2017, half of the 2,000-EV goal was met. That goal was exceeded in 2019, five years ahead of schedule, and was later doubled before being surpassed again by 2022. In May 2024, DCAS announced that the City had surpassed 5,000 EVs. Since that time, the City has set a new acquisition target of 6,000 EVs by the end of 2025, tripling the original goal of ten years ago.

In March 2025, DCAS published a report outlining the important role that fleet electrification plays in improving fleet efficiency. In April 2025, DCAS and TLC announced that all TLC law enforcement units would be electric by 2027.

In May 2025, DCAS and FDNY announced the first use of EVs for emergency medical services paramedic response. DCAS first rolled out all-electric patrol units for NYPD in 2022 and is expanding that initiative in 2025.

To achieve GHG reduction, DCAS pursued a three-pronged strategy of electrification, biofuels, and vehicle efficiency including rightsizing and anti-idling technologies. Additional early initiatives included the deployment of alternative power units (APUs), and targeted fleet reductions aimed at streamlining operations, cutting emissions, and lowering costs. Using this three-part strategy, DCAS will achieve 50x25 GHG reduction.

Since FY 2013, a total of 6,261 plug-in and solar units have been purchased for $627 million, including BEVs, solar/electric, PHEVs, and diesel plug-in electric (such as ambulances, which also employ solar energy). A complete list of specific purchases for FY 2023 and FY 2024 is included in this report.

EV Medium and Heavy-Duty Trucks

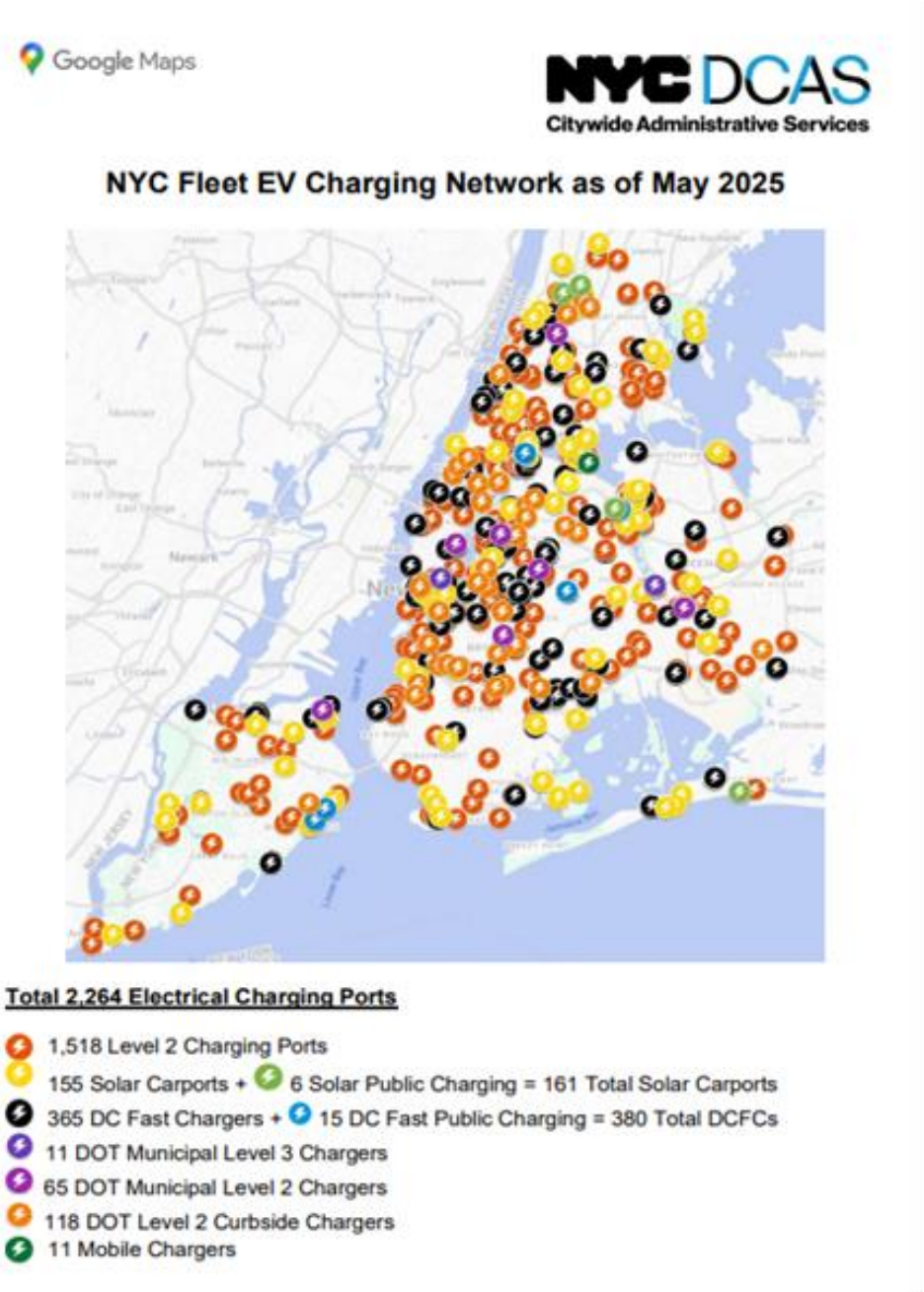
Under Local Law 140, the goal date for electrification of medium-duty units is 2035, and 2038 for heavy trucks. To date, DCAS and its partners at NYCSBUS (NYC School Bus Umbrella Services) have implemented or ordered over 1,600 medium and heavy-duty EV trucks, including 624 pickups and vans, constituting the largest EV truck program in New York State. Market and model options for EV pickups and vans have grown over the last five years, and acquisition costs have decreased enough to make these investments cost effective over the life of the vehicles. The market for heavy-duty EV trucks is more limited, and the costs are well over those of diesel-powered alternatives at this time.

In FY 2019, DCAS piloted the use of 950,000 gallons of RD as a cleaner-burning alternative to petroleum-based fuels. Following the successful pilot, DCAS executed a citywide supply contract in 2023, and began distributing RD across multiple agencies. The full deployment of RD for the City's trucking and off-road fleet–including both emergency and non-emergency equipment–was later completed in June 2024. As of May 2025, more than 27 million gallons of high carbon emitting diesel fuel have been replaced with RD, resulting in a more than 60% reduction of GHGs and up to 35% in decreased air quality-related pollutants. Unlike regular fossil-fuel based diesel, which has a strong, unpleasant odor, RD has no smell. DCAS will use RD in fleet equipment until electric options become available.

EV Charging Infrastructure

In 2016, DCAS executed a long-term contract with ChargePoint for Level 2 chargers. By spring 2017, the agency's network had grown to 375 stations, including the City's first solar carport. Level 2 chargers, which are widely used across municipal facilities, can take up to eight hours to fully charge a BEV or PHEV, making them ideal for overnight or extended parking scenarios. In 2021, DCAS announced a program to install Level 3 fast-charging. These high-capacity stations are capable of fully charging a BEV or PHEV in 30 to 60 minutes, significantly improving operational turnaround for fleet vehicles with demanding schedules.

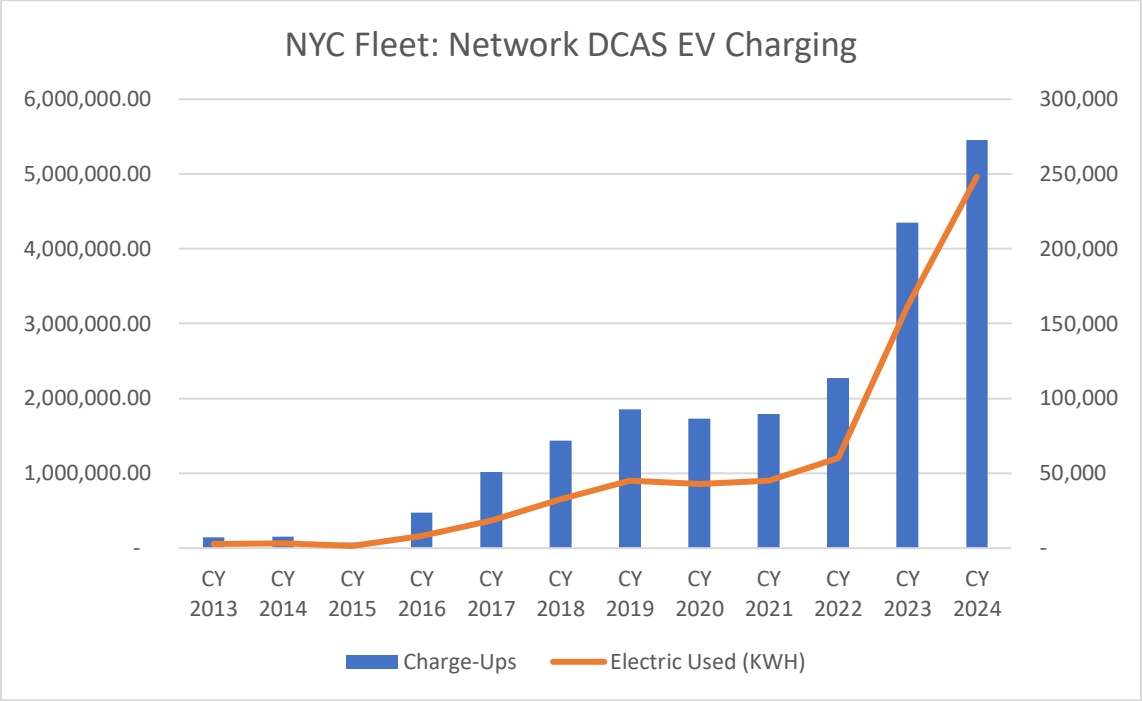
Since then, DCAS has grown its electricity use for fleet vehicles by 600%, with more than 23,000 monthly agency charging sessions. DCAS has installed 380 fast chargers with more going online each week. This includes nearly 200 fast chargers with utility Con Edison's help. DCAS has committed to installing at least 50% of EV chargers in environmental justice communities. In 2024, the partnership with Con Edison culminated in the installation of the 2,000th municipal charging port at DEP's Bronx Wastewater Facility. Through the utility's PowerReady program, Con Ed has provided $1.4 million in incentives across 38 fast-charging sites and 109 plugs, to date, with other charging infrastructure projects currently underway.



DCAS now operates one of the largest charging networks in the nation, with over 2,250 ports (including fast, solar, portable, and overnight options) supporting over 1.1 million charge-ups to date. For three consecutive years, Con Ed has recognized DCAS as the largest installer of fast charging in their service area. DCAS also operates 161 freestanding solar carports. These units are not connected to the City's power grid and use only solar power with battery storage, offering charging resiliency in the case of a sudden loss of power.

To formalize its electrification strategy, DCAS partnered in 2022 with the U.S. Department of Transportation's Volpe Center (Volpe) to develop the NYC Clean Fleet Transition Plan (CFTP), in accordance with Mayoral Executive Order 53 of 2020. The plan outlined electrification pathways for 120 distinct fleet vehicle types and identified key operational barriers, such as the absence of commercially available electric models for specialized tasks like snow plowing and firefighting.

Based on vehicles currently available in the marketplace, as well as those expected by 2027, the plan estimates that electric models exist for 84% of the City's on-road fleet, though critical functions like towing and plowing create additional limitations.



In the meantime, DCAS remains committed to working with manufacturers to close these technology gaps, while advancing interim strategies that include the expanded use of renewable fuels, hybrid technologies, and incremental vehicle design improvements. DCAS regularly meets with vehicle manufacturers and suppliers to discuss the state of the EV market and has met with hundreds of fleet equipment and EV charging vendors. In May 2025, DCAS hosted its 36th annual Equipment and Vehicle Show at Flushing Meadows Corona Park in Queens. That same month, DCAS and Volpe kicked off the start of the CFTP update process.

EV Training

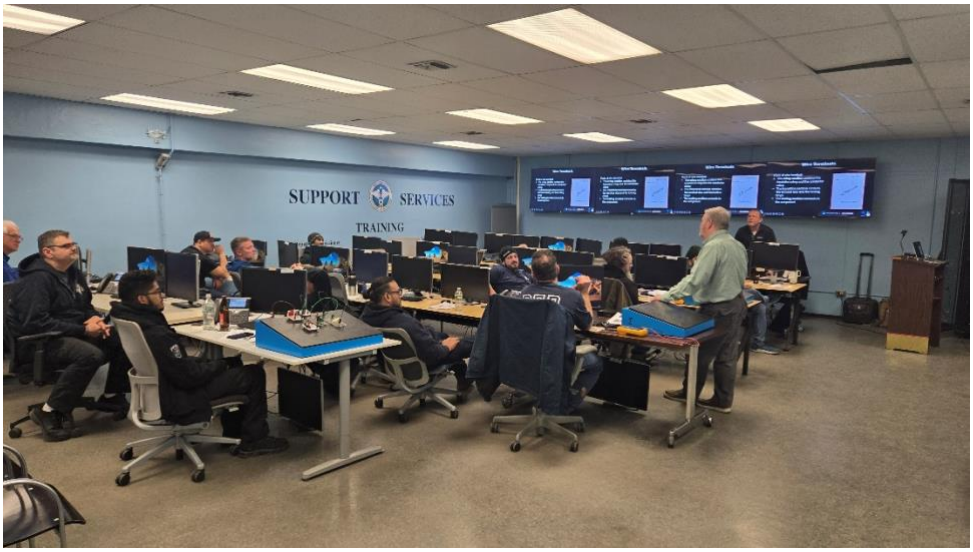
Advanced technical training is pivotal to the sustainable operation of a fleet. To support the transition to electrification, DCAS continues to provide targeted workforce education and technical training, ensuring City personnel are equipped to manage, operate, and maintain a fully electric fleet. These efforts are carried out annually in collaboration with government partners, local CTE schools, original equipment manufacturers, and automotive industry experts.

For over a decade, DCAS has collaborated with the Office of Student Pathways at NYC Public Schools (NYCPS) to administer the High School Automotive Internship Program. The program provides automotive technology students from participating CTE schools with paid, hands-on experience working alongside City fleet professionals in agency fleet management shops. To further support instruction, DCAS also provides these schools with retired electric and hybrid vehicles, as well as engines and other vehicle components, for classroom-based learning. As of May 2025, DCAS had assigned some two dozen EVs for training and education purposes. In 2024, the program expanded to include a year-round series of seasonal learning cohorts designed to broaden access and engagement. The internship program serves as a pipeline to civil service employment, offering a structured path toward careers in municipal fleet operations through the entry-level Automotive Service Worker exam.

In August 2018, DCAS and DSNY hosted a training session for citywide fleet electricians and staff, including personnel from DEP, DOC, DOE, DOHMH, FDNY, and NYPD, on advances in EV charging infrastructure. The session, led by EV charging equipment (EVCE) vendor ABM Industries, addressed safety protocols for the assembly, connection, and maintenance of ChargePoint-manufactured systems.

In February 2022, GM facilitated a full-day training focused on service and safety in hybrid and EV system maintenance for fifteen mechanics from DCAS, DSNY, FDNY, NYPD, DOT, DOC, and DPR. The session also covered vehicle communication networks integral to modern fleet operations.

These earlier EV training efforts have since been expanded to a regular, yearly training program schedule. DCAS and DSNY are collaborating with manufacturers and qualified vendors to provide training in EV maintenance for City auto mechanics. In 2023, seventy-two days of specialized training were offered to that audience, and sixty-six days' worth of these sessions were conducted the following year.



In 2023, DCAS partnered with the Environmental Defense Fund to produce *Let's Talk About Electric Vehicles*, a training deck designed to familiarize City vehicle operators with EV and EVCE systems.

In 2024, DCAS collaborated with NYCPS and an M/WBE vendor to release *Batteries Included*, an animated educational short aimed at introducing school-aged children to the environmental and operational benefits of electric vehicles.

In partnership with the Mayor's Office of Talent and Workforce Development, DCAS is presently organizing an EV training program on basics and safety for non-technical City fleet employees, including Motor Vehicle Operators, Automotive Service Workers, and Associate Park Service Workers. This initiative, which is funded by the New York State Department of Labor's Office of Just Energy Transition, is anticipated to launch in early FY 2026.

Compliance Challenges and Potential Exemptions

Effective July 1, 2025, all light and medium-duty fleet units are expected to be electric unless specific exemptions are provided by DCAS, as outlined in Local Law 140. The purchase of EV heavy-duty trucks is expected to begin in 2028.

While DCAS is making substantial progress in electrification and leading New York State in EV adoption, major hurdles subject to potential exemption remain. Key concerns include:

- **Lack of EV models for plow trucks**: The citywide fleet includes approximately 4,000 plow trucks. There are no viable EV models for plow trucks in the marketplace. Cold weather impacts on batteries, charging limitations, and backup power requirements make potential plowing with EVs even more difficult.
- **Limited PHEV options for patrol vehicles**: DCAS is collaborating with the NYPD and other City law enforcement agencies to evaluate BEV models such as the Ford Mach-E and Chevy Blazer EV. However, large-scale implementation for policing presents logistical challenges, including substantial charging infrastructure and emergency power backup requirements. DCAS continues to engage with manufacturers to promote the development of a PHEV suitable for law enforcement that supports fleet electrification goals while providing flexibility for emergency response.
- **High Costs and Limited Models for EV Trucks**: The EV truck market is still very new, with limited models for the various types of vehicles and operations that DCAS supports. EV truck costs are also much higher than diesel options.
- **National and statewide regulatory changes**: DCAS depends on favorable national and state regulatory environments that promote EV market growth through expanded model options and reduced costs and to enable its continued progress in electrification. Policy shifts related to programs like Advanced Clean Trucks (ACT), Advanced Clean Cars II (ACC2), EPA Corporate Fuel Economy Standards (CAFE) as well as federal tariff regulations, could significantly affect the availability and affordability of EV models and the broader vehicle marketplace.
- **Acquisition Funding**: The availability of expense budget funding for vehicle procurement, particularly for light-duty EVs, will have a critical impact on the speed of vehicle replacement. DCAS, in coordination with OMB, the Law Department, and NYPD, is exploring changes that would allow capital funding to be used for the acquisition of police patrol vehicles, including both PHEV and EV units.
- **Emergency backup power requirements**: As fleet electrification expands, the City will need a robust backup power strategy to mitigate risks associated with power grid disruptions. In FY 2025, DCAS incorporated EV charging into its emergency fueling plans, which include solar carports, portable charging units, mobile generators, and the use of PHEVs for emergency operations. As the municipal charging network grows further, significant infrastructure upgrade investments will also be required, particularly in locations where technical or fiscal barriers may limit expansion.

Conclusion

The City of New York remains a national leader in fleet electrification and sustainability. The City's commitment has been sustained across multiple mayoral administrations and shaped by more than a decade of executive orders, local laws, and programmatic initiatives that prioritize electrification, cleaner vehicles, advanced infrastructure, and workforce development.

In November 2024, DCAS announced that the Mayor's Office Street Conditions Observation Unit (SCOUT) had joined DFTA, DCLA, LPC, the NYC Office of the Actuary, DORIS, DVS, GrowNYC, and the citywide car share fleet pool maintained by DCAS in completing the transition to plug-in EV units.

In December 2024, the City announced it was awarded approximately $40 million in competitive grants from the U.S. Environmental Protection Agency's 2024 Clean Heavy Duty Vehicles Program to replace 55 diesel trucks with ZEV units, as well as add 10 additional L3 chargers citywide, and expand annual zero emission technology training opportunities for over 40 interns and 200 mechanics.

In March 2025, DCAS published a report outlining the important role that electrification plays in fleet efficiency.

In April 2025, DCAS and TLC announced that TLC's city-owned fleet would fully transition to EVs by 2027, some eight years earlier than required under Local Law 140, which will make it the largest fleet agency to go all-electric.

In May 2025, DCAS and FDNY jointly announced their investment in thirty EVs for FDNY's EMS Bureau, including the first four all-electric paramedic response units. The acquisition represents the first all-electric FDNY units to be deployed through 911 calls for direct emergency medical response, which doubles the fire department's existing EV footprint and supports these first responders in their ability to deliver life-saving care to New Yorkers.

While substantial progress has already been made, several key challenges must still be addressed. These include lack of options for functions like plowing, the need for PHEVs for emergency operations, high costs of EV trucks, and backup power requirements. DCAS will also continue monitoring policy and legislative developments in the federal government and their impacts on New York State and fleet electrification.

Overall, DCAS remains committed to fleet electrification and maintaining its national leadership in sustainable fleet management. Together, these achievements and strategic initiatives affirm the City's steadfast commitment to lead by example in the transition to a cleaner, safer, and more sustainable municipal fleet.

Appendix

EV Vehicle Procurements

	Fiscal Year	BEV	PHEV	Plug In Diesel Hybrid	Total No. of EV Procurements	Total EV Procurement Cost
	FY23	1302	99	205	1606	$155,520,265.70
	FY24	403	122	169	694	$132,201,994.60
Total		1705	221	374	**2300**	**$287,722,260**

EV Charger Procurements

	Fiscal Year	L2 Charging	L3 Charging	Other Charging Type*	Total No. of Procured Chargers	Total Cost of Procured Chargers
	FY23	16	34	2	443	$11,534,768.66
	FY24	8	27	0	204	$4,153,852
Total					**647**	**$15,688,621**

EV Training Sessions

	Calendar Year	No. of EV Training Sessions Conducted
	2023	72
	2024	65
Total		138

NYC Fleet – Annual Maintenance Costs

Vehicle Type	Number	Annual Cost Per Unit
EVs	578	$568
PHEVs	171	$1,488
Hybrids	521	$1,464
Gas (ICE)	50	$1,642

NYC Fleet – EV Truck Pricing Comparison

Truck Type	EV	Diesel	Difference	Percentage
Box Truck	$474,222	$105,171	$369,051	351%
Refrigerated Box	$663,973	$171,865	$492,108	286%
25 Yd. Collection Truck (R&D Model)	$538,240	$476,647	$61,593	13%
Alley Collection Truck	$569,611	$303,397	$266,214	88%
Attenuator Truck	$500,298	$187,475	$312,823	167%
Rack Truck	$369,977	$207,199	$162,778	79%
Street Sweeper	$621,021	$316,028	$304,993	97%

NYC Fleet – Electric Trucks, Vans and Buses Inventory

	In Operation	On Order
Total BEV	**637**	**134**
Total Plug In Units	**1,258**	**360**
Total EV Investments	**1,618**	

Local Law 140 Report Attachment

- EV vehicle procurements list (FYs 2023, 2024)
- EV trucks, vans and buses inventory list
- EV charger procurements list (FYs 2023, 2024)
- EV automotive training calendar (CY 2023)
- EV automotive training calendar (CY 2024)

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