

The Future of Fleet

NYC Fleet

McKee High School , Staten Island

Keith T. Kerman

NYC Chief Fleet Officer

Deputy Commissioner, DCAS

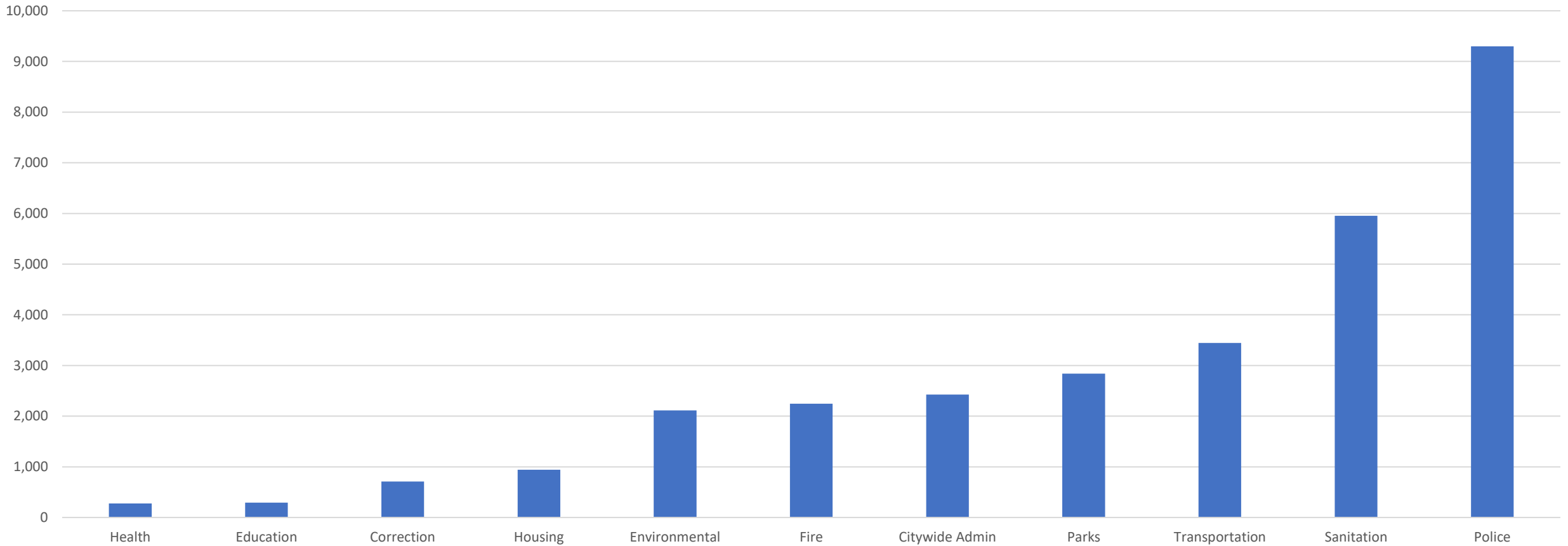
November 19, 2021

NYC Fleet



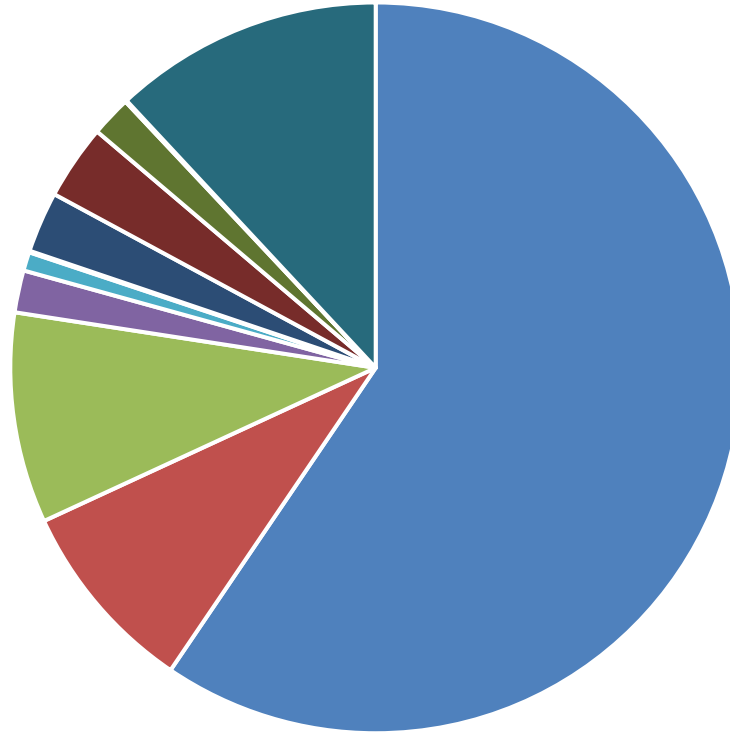
NYC Fleet

NYC Fleet Size



NYC Fleet

NYC Fleet Employs 1,450 Servicing Staff



- Auto Mechanic
- Auto Body Worker
- Electrician (Automobile)
- Senior Automotive Specialist

- Auto Mechanic (Diesel)
- Auto Machinist
- Metal Work Mechanic
- Supervisor Of Mechanics (Mechanical Equipment)

- Automotive Service Worker
- Carriage Upholsterer
- Rubber Tire Repairer

NYC Fleet and the Automotive High Schools



Bill de Blasio, Mayor
Lisette Camilo, Commissioner
Keith T. Kerman, Deputy Commissioner
and Chief Fleet Officer

NYC Fleet Newsletter

August 20, 2021 - Issue 357

Fleet Agencies Welcome Back Auto High School Interns, Summer 2021

By: Keith T. Kerman

At NYPD Shop 4 in Queens, representatives from NYPD, DOT, FDNY, DOE, and DCAS welcomed and congratulated our automotive intern class of 2021. Thirteen high school juniors and seniors are spending the summer in hands-on paid internships with four City agencies. The internships are coordinated through the Department of Education Career and Technical Education program.

The interns at NYPD, DOT, and FDNY are doing hands-on mechanical work in our garages, learning this critical trade from some of the best mechanics around. Some FDNY and DCAS interns tackled the administrative side of fleet management. The DCAS interns worked in our crash and compliance areas, helping to ensure the proper use of vehicles and learning about the expensive world of city vehicle claims.



James D'Ambrosio of NYPD led off the event. James has been the long time coordinator and cheerleader for the automotive internship program at NYPD, which has been on the forefront of this program for well over a decade. His brother Gerard is an automotive teacher with the NYC schools.



NYC Fleet and the Automotive High Schools



Bill de Blasio, Mayor
Lisette Camilo, Commissioner
Keith T. Kerman, Deputy Commissioner
and Chief Fleet Officer

NYC Fleet Newsletter

February 5, 2021 - Issue 334

Promoting NYC Fleet Careers

By: Keith T. Kerman and Henry Comejo

This week, we would like to spotlight two NYC employees, George Pirpinias, NYPD Fleet, and Robert Bernacett, DOT Fleet, who were the guest speakers for the Automotive Careers in City Government Panel hosted by the DCAS Office of Citywide Recruitment on January 21, 2021. The purpose of the panel was to introduce students, recent graduates from Career and Technical Education (CTE) schools, and anyone else interested, to automotive career opportunities within city agencies and to highlight the current civil service exam for Automotive Service Workers (ASW). Both George and Robert began their careers as ASWs and were promoted up the ranks, demonstrating this important career path.



Supporting Your Future: New Career Pathways



NYC DCAS @NYCDCAS · 9 Aug 2018

DYK we operate 520 electric vehicle chargers across NYC? One of the largest charging networks in the country. This week we organized **training** on **EV** systems for City electricians from **DCAS** @NYPDnews @NYCSchools @nycHealthy @NYCWater & @FDNY. Thanks to @NYCsanitation for hosting!



NYC Fleet and the Automotive High Schools



NYC Clean Fleet: Our Sustainability Goals

With Paris Climate Talks Underway, Mayor de Blasio Announces NYC Clean Fleet - Launching the Largest Municipal Electric Vehicle Fleet in the U.S.

December 1, 2015

City Will Cut Municipal Vehicle Emissions in Half by 2025, 80 Percent by 2035 – Another Key Step Toward 80 Percent Reduction in All Emissions by 2050

Section 4. Fleet of the Future Network. DCAS, working with the Department of Transportation (DOT), the Business Integrity Commission (BIC), the Department of Consumer and Worker Protection (DCWP), the Mayor’s Office of Sustainability (MOS), and others will establish a contact list and communication network for public, private, and non-profit fleets operating in the five boroughs of the City of New York. This network will be used to establish lines of communication on issues of sustainable and safe fleet operation. DCAS will establish newsletters, events, and trainings aimed at these partner fleets and will share best practices throughout the network.

NYC Mayor orders all-electric fleet by 2040 and end to expansion of fossil-fuel-related infrastructure

10 February 2020

New York City Mayor Bill de Blasio last week issued an **executive order** specifying the attainment of an all-electric “carbon-neutral” fleet by the year 2040. New York City operates more than 30,000 owned and leased vehicles (on-road and off-road), the largest municipal fleet in the United States.

Under the executive order, New York’s Department of Citywide Administrative Services (DCAS) and NYC Fleet are to issue and implement a Clean Fleet Transition Plan, updating it every two years. The CFTP will outline alternative fuel, fuel efficiency and electrification for all City fleet units by type.

Climate Week: City Announces \$75 Million in new Investments for Electric Vehicles and Electric Vehicle Charging Infrastructure

September 22, 2021

Funding will add 275 electric vehicle chargers, replace 300 gas-powered City fleet vehicles, and retrofit diesel-powered trucks to run on electric

NEW YORK—Mayor Bill de Blasio, the NYC Department of Citywide Administrative Services (DCAS), and the Mayor’s Office of Climate and Sustainability, today announced a \$75 million investment in electric vehicles and electric vehicle charging infrastructure to support the City of New York’s vehicle fleet. The new investments will help the greenest municipal vehicle fleet in the country become even greener.

The investments include:

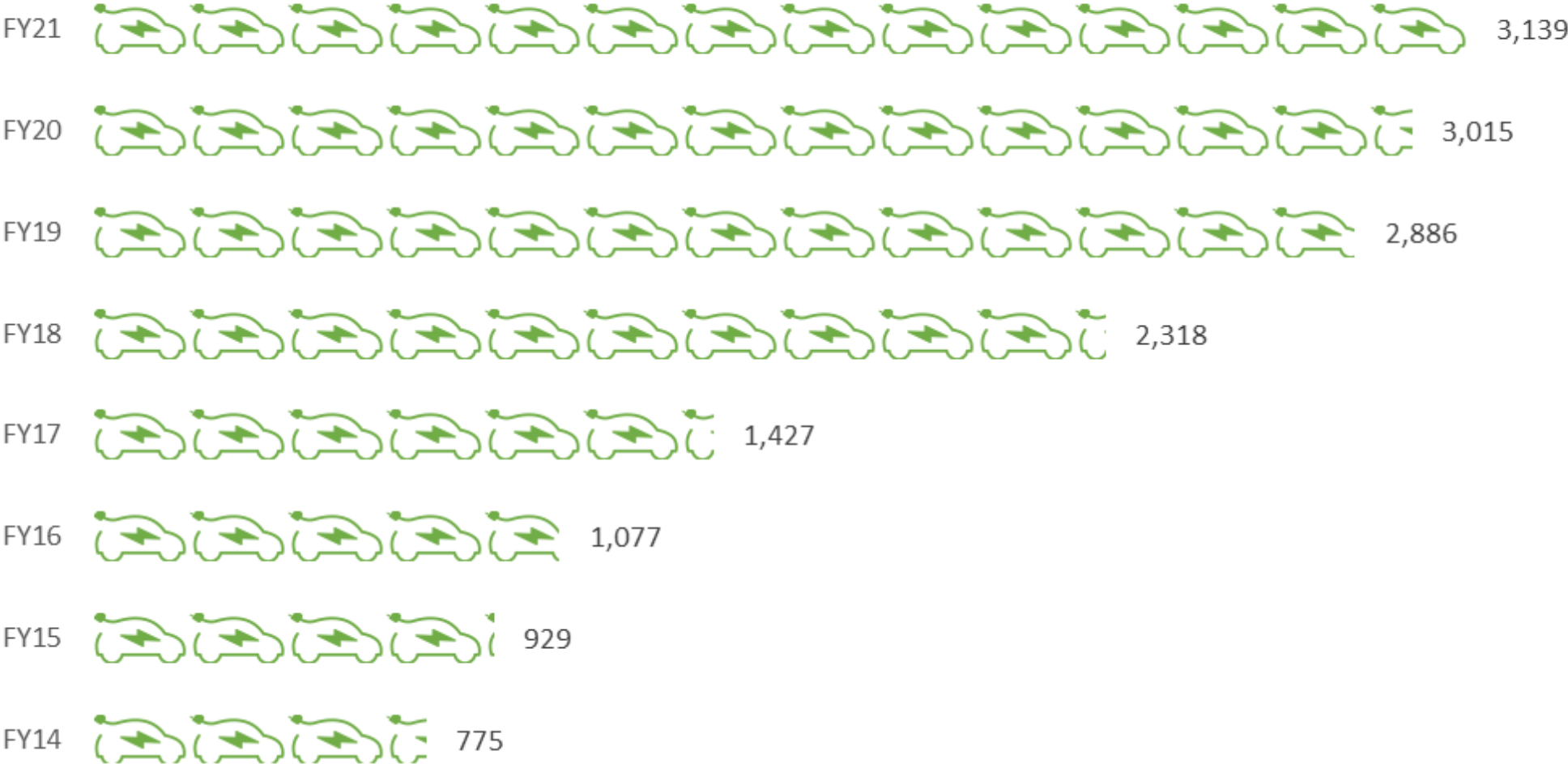
1. 300 electric vehicles to replace fossil fuel-powered models
2. 275 fast vehicle chargers
3. 20 portable vehicle chargers
4. 11 new solar charging carports
5. 3 electric buses to replace diesel models
6. 78 electric ambulances
7. In addition, the City will retrofit 125 existing diesel-powered trucks to be electric-powered.

These and other investments are part of the City’s plan to transition its entire vehicle fleet to electric vehicles.

“Climate change is an existential threat facing our city, our nation, and our world,” said **Mayor Bill de Blasio**. “You can count on New York City to lead the way when it comes to finding sustainable climate solutions, fighting back against global warming, and building a greener future for the next generation.”

Our Strategy: 1) Electrify Where We Can

NYC Fleet Electric Vehicles



DSNY Pilot EV Garbage Truck



World's First EV Street Sweeper



NYPD Pursuit EV Unit



Our First Electric School Busses



EV Charging



EV Charging



EV Charging

NYC Fleet EV Charging Network as of 09/02/2021



Total 1,071 Electrical Charging Ports

-  - 891 Charging Ports
-  - 89 Solar Carports ( - 3 Solar Public Charging)
-  - 90 DC Fast Chargers ( - 8 DC Fast Public Charging)
-  - 1 Mobi Mobile Charger

2) Hybrids and More Efficient Vehicles

CBS2 Rides Along In NYPD Highway Unit's New Hybrid SUV

Program: CBS2 News At 5 Categories: Automotive, News, Local News, WCBSTV



3) Biofuels and a Low Carbon Fuel Standard



CASE STUDY

RENEWABLE DIESEL IN CALIFORNIA

Many cities and private companies have seen the importance and opportunity of replacing fossil diesel fuels with renewable diesel, a next stage biofuel derived from waste cooking oils, animal fat and excess soybean oils. Critically, renewable diesel can be used by a traditional engine and can immediately replace fossil diesel without investing in new or retrofit equipment. **San Francisco, Oakland, Sacramento, and San Diego** have successfully switched to entirely renewable diesel, and UPS, Google and Boeing have also begun to phase in RD in their fleets.



Reducing Maintenance and Fuel Costs

AXIOS

Sections

About Axios

Sign up

Mar 14, 2019 - Energy & Environment

EV maintenance costs in NYC run lower than gas-powered cars



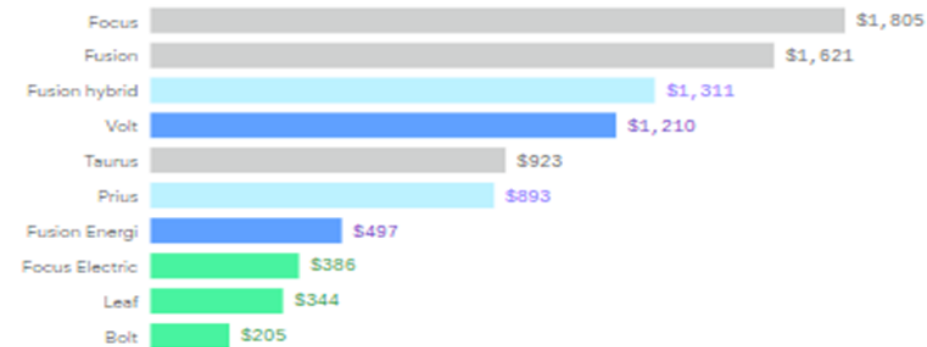
Dan Geman, author of [Generate](#)



The New York City government's maintenance costs for its electric vehicle fleet were much less per automobile than its gasoline-powered cars, city data released this month shows.

Average maintenance cost for NYC municipal vehicles in 2018

By car energy type: ● Gasoline ● Hybrid ● Plug-in hybrid ● Electric



Date: [NYC Department of Citywide Administrative Services](#); Chart: Andrew Wilenspoon/Axios

Why it matters: Municipal and corporate vehicle fleets are a growth area for EVs, and not just for environmental reasons. That's the upshot of the latest edition of a newsletter I'd never seen until yesterday: the [NYC Fleet Newsletter](#) from Citywide Administrative Services.

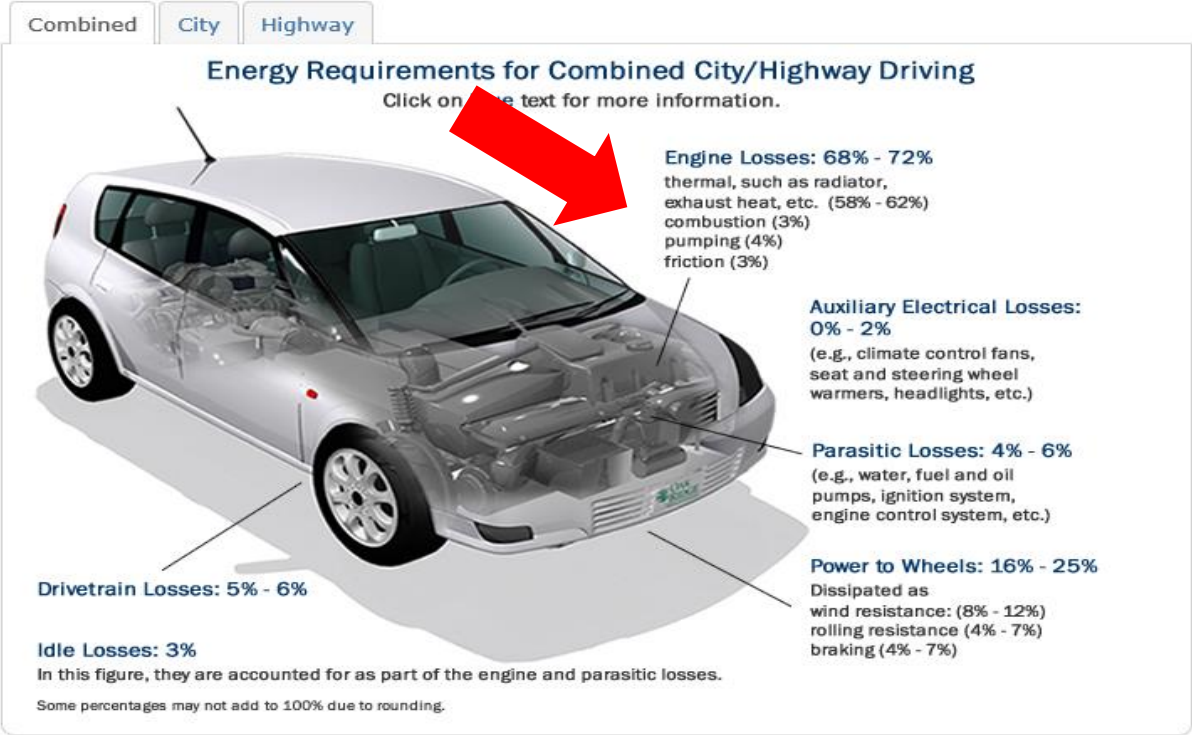
The Internal Combustion Engine

www.fueleconomy.gov Mobile Es
the official U.S. government source for fuel economy information

Find a Car Save Money & Fuel Benefits My MPG Advanced Cars & Fuels About EPA Ratings More Q

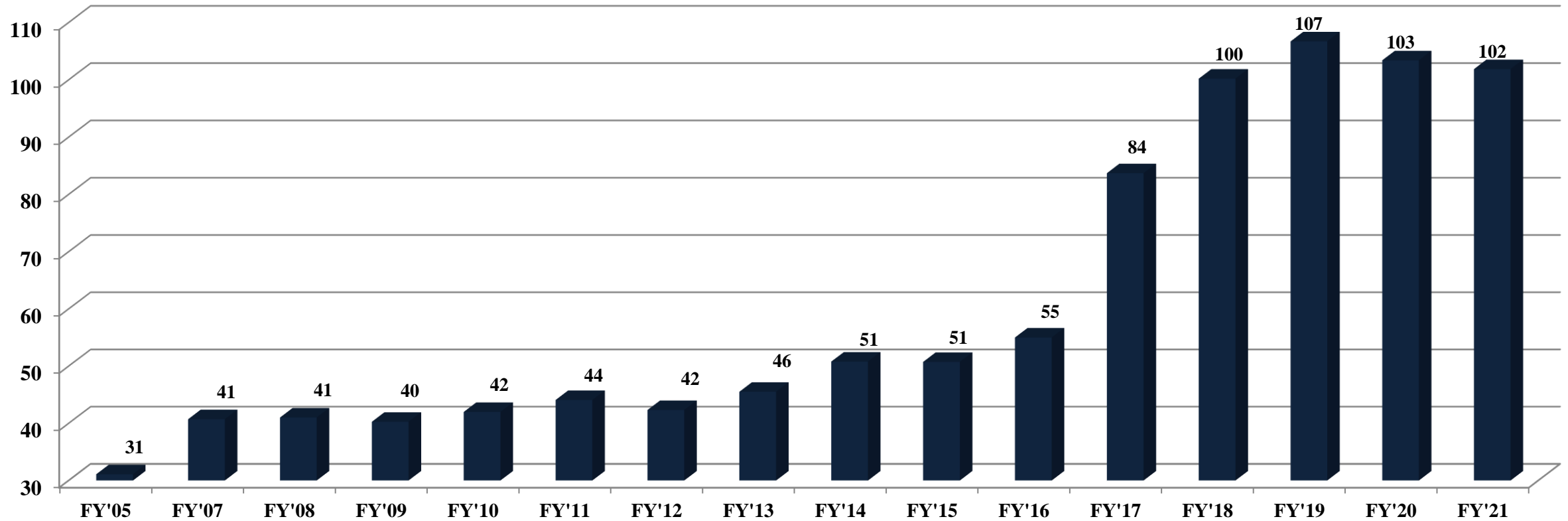
Where the Energy Goes: Gasoline Vehicles

Only about 12%–30% of the energy from the fuel you put in a conventional vehicle is used to move it down the road, depending on the [drive cycle](#). The rest of the energy is lost to engine and driveline inefficiencies or used to power accessories. Therefore, the potential to improve fuel efficiency with advanced technologies is enormous.



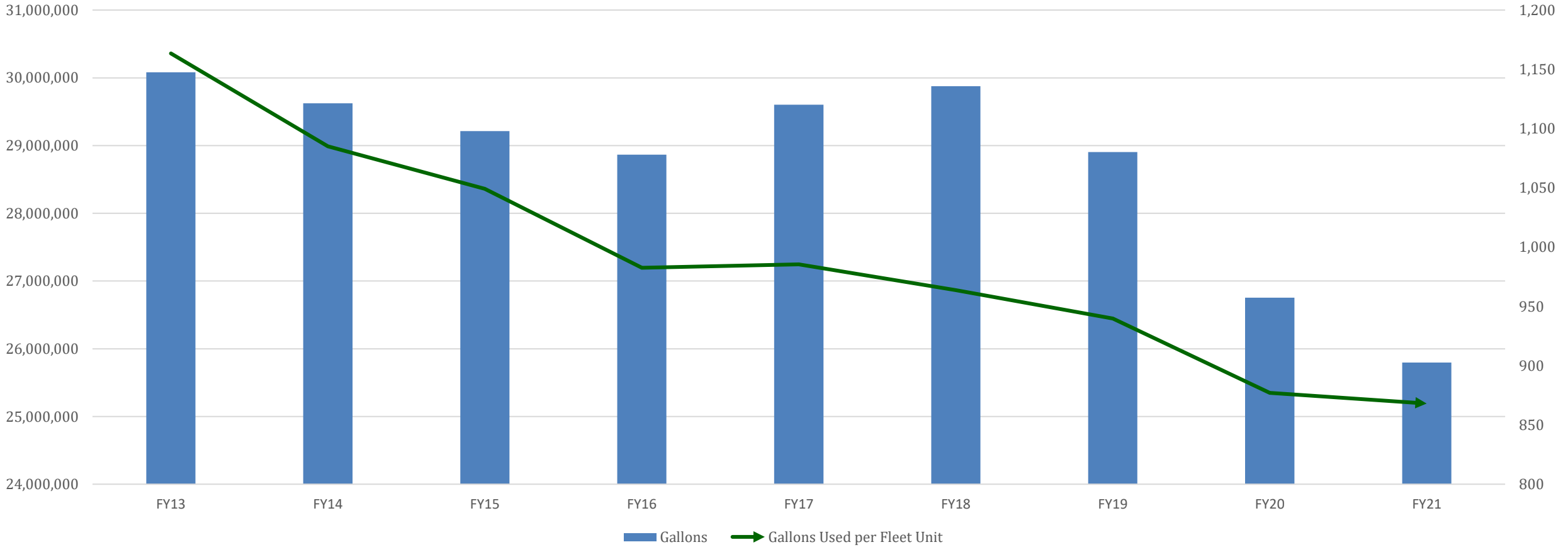
New Vehicle Fuel Economy: CAFE Equivalent

NYC Fleet: Light Duty Fuel Economy by Fiscal Year
Local Law 38 of 2005



Reducing Fuel Use

NYC Fleet: Fuel Use



Electric Vehicle Speed Record



Bill de Blasio, Mayor
Lisette Camilo, Commissioner
Keith T. Kerman, Deputy Commissioner
and Chief Fleet Officer

NYC Fleet Newsletter

October 21, 2021 - Issue 367

Eric Ritter, DSNY Mechanic, Eclipses World Speed Record for Electric Vehicles

By: Keith T. Kerman

In 1957, John Glenn set a transcontinental speed record, a major moment in the history of flight, and a signal to the world of the limitless potential for jet aviation.

We are now entering the age of electric transportation, and NYC public servant and Sanitation Truck Mechanic Eric Ritter is again pushing the limits, surpassing the world speed record for electric vehicles at 353 miles per hour (mph) on October 1, 2021.

In his day job, Eric is a truck mechanic for the Special Chassis unit at the DSNY Central Repair Shop (CRS) in Queens. He refurbishes sanitation trucks, replaces motors, fixes hydraulics leaks, and takes on major unit upgrades. He's helping prep the salting fleet now for the upcoming snow season. Eric is one of NYC's behind-the-scenes technical and mechanical experts, keeping our City running every day.

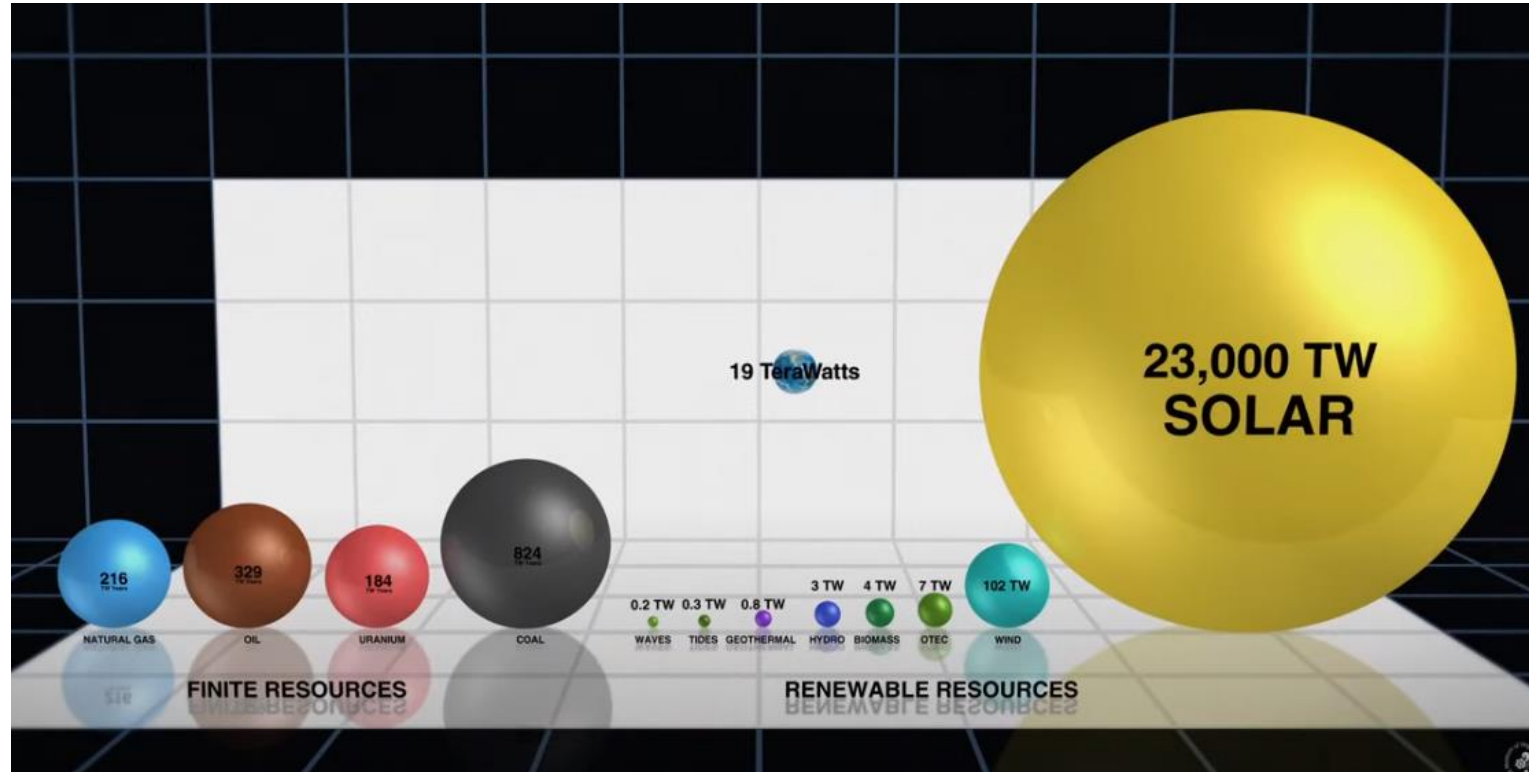


Eric Ritter (center) and others standing in front of the electric vehicle used to surpass the electric vehicle speed record.

- [Spectator view](#)
- [Driver View](#)

Powering the Future

- Question Power



Promoting Sustainability

NYC Fleet Electric Vehicles



A Primer on Biodiesel

- Even where we use liquid fuel, we don't need to get it from the ground as fossil fuel.
- Biofuels are produced from farm feedstocks like soy, animal fat, and used grease. Biofuel works in every type of diesel truck. NYC's garbage trucks, ambulances, and police response trucks use biodiesel today. American farmers are the major producer.
- Compared to traditional diesel, biodiesel produces less particulate matter, carbon monoxide, unburned hydrocarbons, and sulfur dioxide. One type, called B20, reduces carbon emissions by 15%!
- NYC is a leader in biodiesel, using blends in all City diesel vehicles.
- Renewable diesel is the next step for the NYC fleet. It is 99% petroleum free and results in up to a 65% emissions reduction!



The City of New York's Fleet:
A Model for Sustainability

NYC Fleet
NYC DCAS
Citywide Administrative Services

nyc.gov/dcas

@NYCDCAS
 @NYCDCAS
 @NYCDCAS

NYC Fleet

NYC DCAS
Citywide Administrative Services

Safe Fleet Design

Safe Fleet Transition Plan Update 2018 - 2019 Best Practice Technologies and Processes

Alexander K Epstein, Ph.D. and Rebecca Kiriazes



NYC DCAS
Citywide Administrative Services
November 2018
DOT-VNTSC-DCAS-18-01
Prepared for:
Department of Citywide Administrative Services
City of New York

Safe Fleet Design

Tier 1	Tier 2	Tier 3
	Best Practice Technologies	Exploratory Technologies
High vision truck cabs where competitively available and operationally feasible * [§]	Pedestrian AEB for medium- and heavy-duty vehicles where available (Class 3-8) * [§]	Alcohol touch ignition interlock [§]
Additional mirrors/lenses where applicable including Fresnel lenses *	Blind spot monitors	Cell phone physical or app-based lock box/ docking station ignition interlock [§]
Appropriate technologies and techniques to see behind vehicle, such as but not exclusive to backup cameras	Enhanced Seat Belt Reminder systems (ESBRs)	Seatbelt assurance ignition interlock systems [§]
Forward Collision Warning (FCW) and Pedestrian Collision Warning (PCW) for Class 1 and 2	Navigation systems	Surround cameras *
Automatic Emergency Braking (AEB) for light-duty vehicles (Class 1-2) with Advanced Pedestrian Monitoring as preferred option where available [§]	Power mirrors and heated mirrors *	Turning alarms *
Automatic headlights where available	Speed governors * [§]	Universal design
Enhanced truck rear underride guards *	Connected vehicle, or vehicle-to-vehicle (V2V), communication technology	Rear Automatic Emergency Braking (AEB) for light-duty vehicles (Class 1-2) [§]
Safety lights for work trucks, such as but not exclusive to side-visible turn signals and roadwork lights (amber)	Broadband backup alarms †	Intelligent Speed Assistance (ISA) [§]
Side underride guards * consistent with Local Law	Rear Automatic Emergency Braking (AEB) for heavy-duty vehicles with air brakes * [§]	Automatic Emergency Braking (AEB) for medium- and heavy-duty vehicles (Class 3-8) * [§]
Self-adjusting volume backup alarms †	Forward Collision Warning (FCW) and Pedestrian Collision Warning (PCW) for Class 3 and above	
Telematics to enable utilization, collision, speed, and safety reporting, among other uses	External Cameras and Recording	
Warning decals *	Training where feasible in appropriate use of technologies	

Note: Entries in bold are potential updates for 2018 (see explanations below)

* = Only apply to vehicles with gross vehicle weight rating of 10,000 lbs. or greater.

Truck Side-Guards



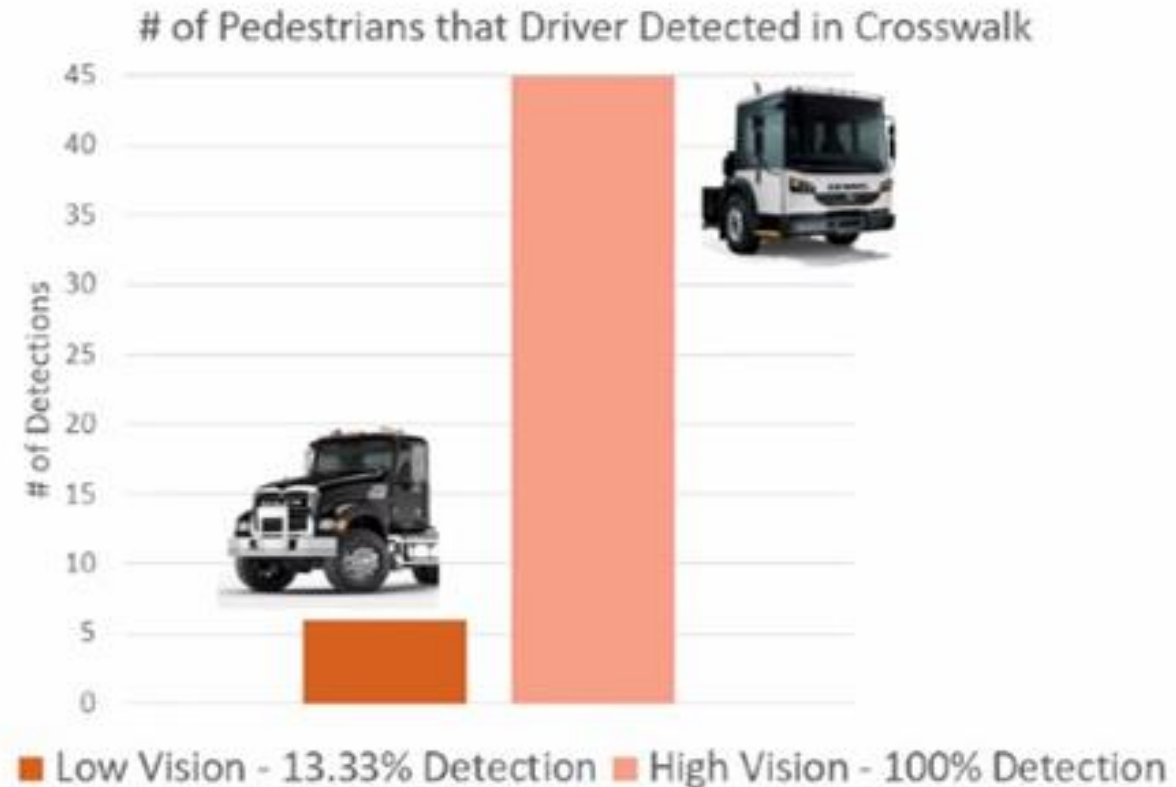
High Vision Trucks

Pedestrian crosswalk safety study results

39 out of 45 killed when truck was **low vision**

vs.

None killed when truck was **high vision**



Surround Cameras for Trucks

STREETSBLOG NYC

Parking Madness 2021 / Coronavirus Crisis / Transit / Congestion Pricing / Open Streets / Calendar

City Shows Off Trucks and Buses With Surround-View Cameras

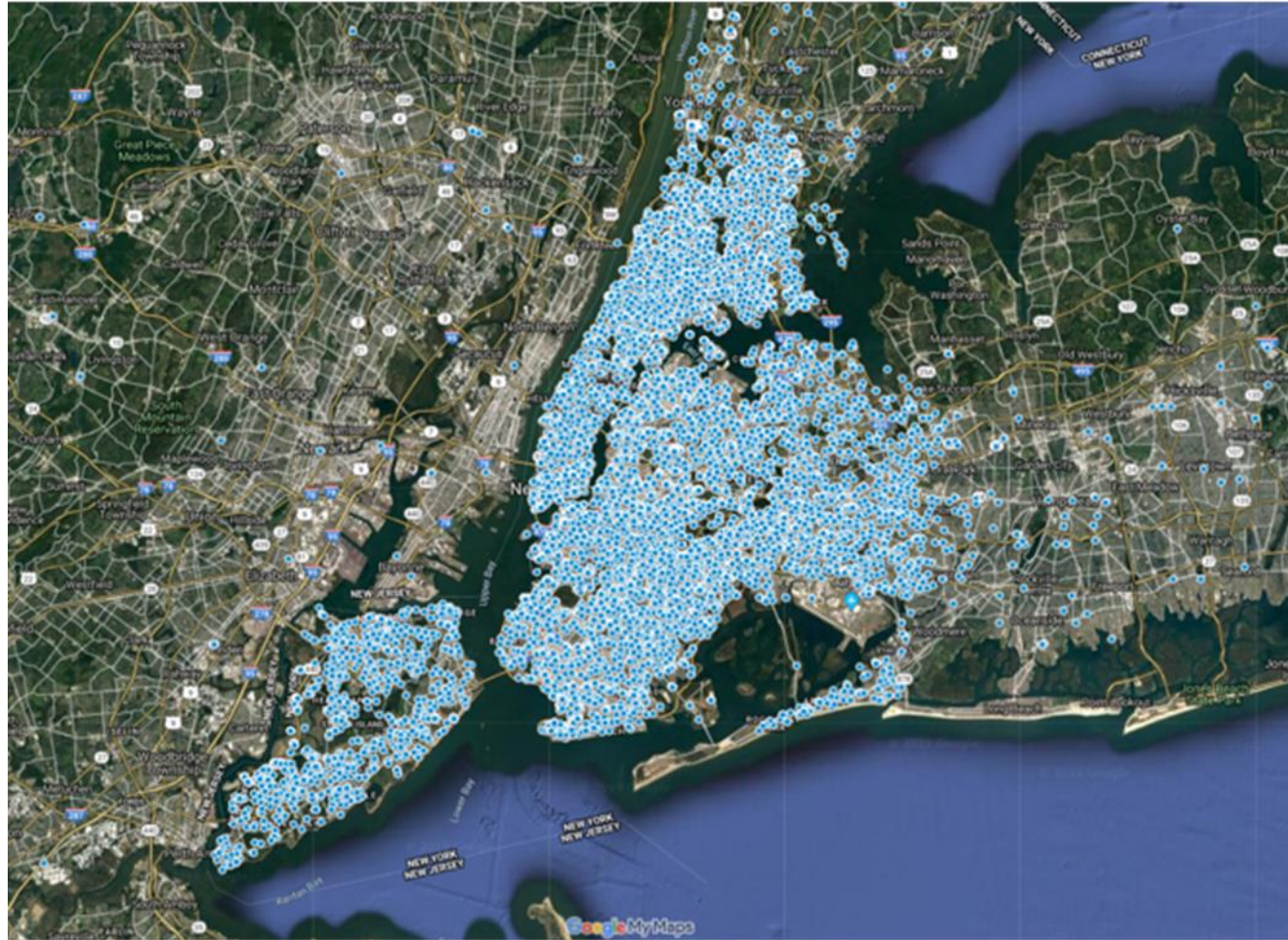
By Fiifi Frimpong | Jun 12, 2021 | 4 COMMENTS



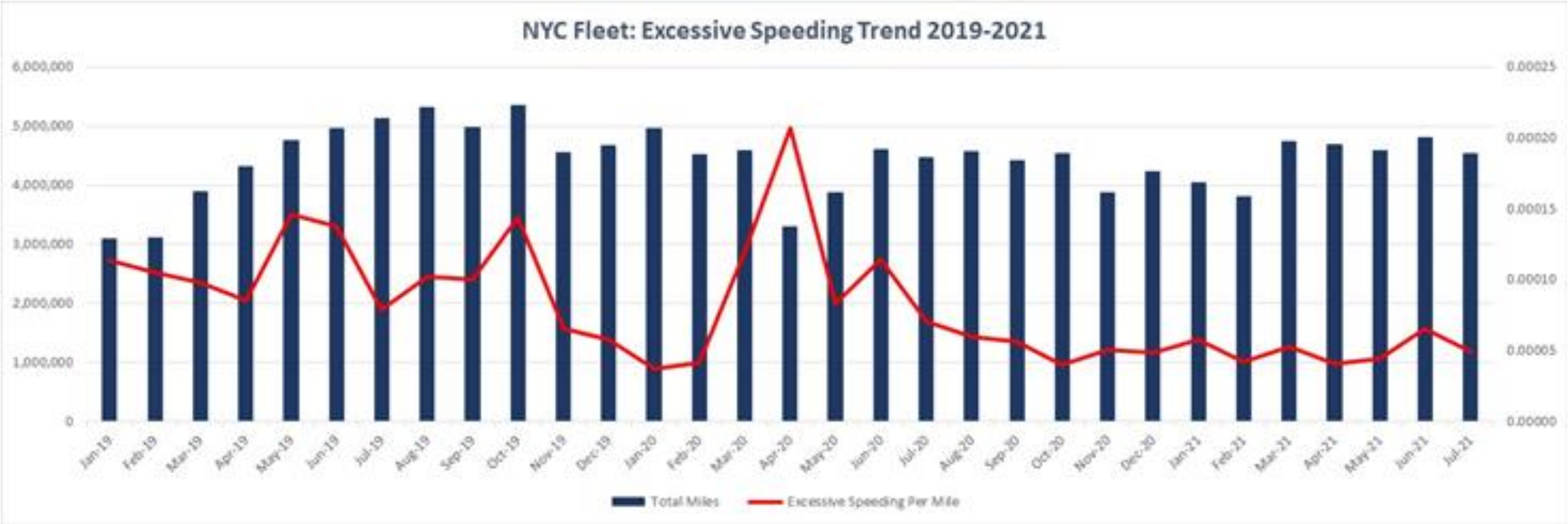
Tracking Vehicles



Tracking Vehicles



Tracking Vehicles



Learn More at Our Website

[Here](#)



Bill de Blasio, Mayor
Lisette Camilo, Commissioner
Keith T. Kerman, Deputy Commissioner
and Chief Fleet Officer

NYC Fleet Newsletter

June 15, 2020 - Issue 308

FDNY and DEP Complete Truck Side-Guard Safety Installs

By: Keith Kerman



While the COVID-19 emergency and protest movement have been the appropriate focus of attention, Vision Zero and truck safety remains an important commitment.

DCAS is pleased to announce that we have completed truck side-guard

safety installations with FDNY and DEP, upgrading 335 trucks between the two agencies. FDNY and DEP join NYPD, Parks, DOHMH, Correction, and the DCAS Client Fleets in completing this initiative.

The truck side-guard program was launched in 2015 by DCAS as part of Mayor de Blasio's Vision Zero Initiative and is now governed by Local Law 56 of 2015 which requires all City-owned and commercial waste trucks to have side-guards no later than Jan. 1, 2024. The DCAS and US DOT Volpe Truck side-guards report is provided [here](#).

Side-guards are inexpensive and common-sense protections to help keep pedestrians, bicyclists, or children from being caught in the gap of a truck and badly hurt or killed. Truck side-guards are standard in many countries but still rare in the United States.



On April 17, Eric Richardson from DCAS presented at the National Sideguard Task Force Virtual Forum. Attendees included victim advocates, government officials, the trucking industry, and side-guard manufacturers. The forum discussed current side-



Bill de Blasio, Mayor
Lisette Camilo, Commissioner
Keith T. Kerman, Deputy Commissioner
and Chief Fleet Officer

NYC Fleet Newsletter

June 10, 2020 - Issue 307

Inter-Agency Fleet Staff Support Medical Examiner (OCME)

By: Keith Kerman

As COVID-19 devastated NYC, the Office of the Chief Medical Examiner (OCME) was challenged with an extraordinarily difficult, somber, and wide-ranging responsibility. A massive crisis morgue operation was put in place at the South Brooklyn Marine Terminal, led by OCME Deputy Commissioner Frank DePaolo. Retired Fire Captain Charlie Arnone and retired OEM Deputy Commissioner John Scivani returned to help manage the complex logistics behind these operations.

Over 150 equipment units were scaled up quickly for this operation and staffing from the National Guard and emergency services lent critical support to OCME and its dedicated staff. You can read more about this effort from Time Magazine [here](#).

Fleet Services from NYCHA, DOT, DEP, NYC Parks, DOC, and DCAS also provided trucks and skilled commercial drivers to participate in these operations. Deputy Commissioner Frank DePaolo states, "The NYC Office of Chief Medical Examiner greatly appreciates the assistance received from DCAS Fleet and other federal, state, and NYC partner agencies who helped with our response to this tragic event."



We want to thank the following truck operators especially:

Contact

For more information, go to the NYC Fleet website:
<http://www.nyc.gov/html/dcas/html/employees/fleet.shtml>

Keith Kerman
Chief Fleet Officer
New York City
Deputy Commissioner,
Department of Citywide Administrative Services

kkerman@dcas.nyc.gov

DCAS

THANK YOU