NYC Fleet



Safer Vehicles

NYC Fleet

Research on the Road

Keith T. Kerman NYC Chief Fleet Officer Deputy Commissioner, DCAS November 29, 2023

Kamari Hughes

NYPD tow truck strikes, kills 7-year-old boy on the way to school with his mom, police say

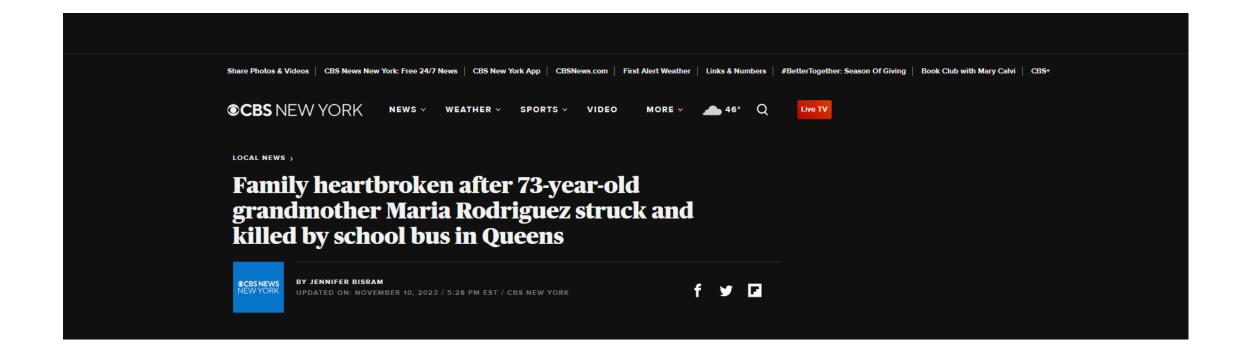
Story by Saman Shafiq, USA TODAY • 1d

A 7-year-old boy was killed in Brooklyn, New York on Thursday morning when a New York Police Department tow truck struck him while he was crossing the street, police say.

The accident took place in the borough's Fort Greene Park neighborhood at about 7:45 a.m. in the morning as the victim and his mother were walking on a crosswalk on their way to school, said Jeffrey Maddrey, the NYPD chief of department, during a press briefing at department's headquarters in the city.



Maria Rodriguez





Improving Truck and School Bus Safety

- Safe Fleet Transition Plan (SFTP) and School Bus Report
- Intelligent Speed Assist (ISA)
- High Vision Trucks
- Electric Fleet
- Surround Cameras
- Truck Side-guards
- Pedestrian Turn Alerts on Trucks
- Reducing Risky Driving
- Expanding Training



Safe Fleet Transition Plan for School Buses

The NYC School Bus Fleet: Improving Road Safety Through Technologies and Training

Andrew Breck, Ali Brodeur, Alexander Epstein, Ph.D., Eikar Lai, Ahmad Nasser, Lily Slonim, Sarah Yahoodik, Hayden Smith, Juwon Drake



Photo credit: Volpe

November 2023

DOT-VNTSC-NYCDCAS-23-01

Prepared for: Department of Citywide Administrative Services and the Department of Education City of New York



NYC DCAS Citywide Administrative Services

Vision Zero Safe Fleet Transition Plans (SFTPs)

Truck Sideguards for Vision Zero

Review and technical recommendations for Safe Fleet Transition Plan pilot deployment

Alexander K Epstein, Ph.D., Sean Peirce, Andrew Breck, Coralie Cooper, and Eran Segev



December 2014 DOT-VINTSC-DCAS-14-01

Prenared for: Department of Citywide Administrative Services City of New York



UL Department of Transportation Jane A. Value National Transportation



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Launching the Safe Fleet Transition Plan

Technology and Process Recommendations

Margo Dawes and Alexander K Epstein, Ph.D.

May 2017

Prepared for:

City of New York

DOT-VNTSC-DCAS-17-01

Department of Citywide Administrative Services

Volpe

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

Alexander K Epstein, Ph.D. and Rebecca Kiriazes



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

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Safe Fleet Transition Plan: Private Vehicle Crashes and Vehicle Safety Technology

Preliminary Report: Expanding the NYC Safe Fleet Transition Plan to Trade Waste Industry and Private Truck Fleets

Alexander K Epstein, Ph.D., Michael Chang, Lucy Liu, and Rahi Patel



December 2021

Prepared for: **Business Integrity Commission and Department of Citywide Administrative Services City of New York**



HERE



Clean Fleet Transition Plan (CFTP), EO 53

Clean Fleet Transition Plan

NYC Department of Citywide Administrative Services (DCAS) Fleet

U.S. DOT Volpe National Transportation Systems Center: Alexander Epstein, Ph.D., Scott Lian, Ana Vargas, Andrew Breck, and Brian Xi

New York City Department of Citywide Administrative Services: Keith Kerman and Eric Richardson



Fall 2022 DOT-VNTSC-DCAS-22-01

Prepared for: Department of Citywide Administrative Services, City of New York



Department of Transportation *Volpe* Center

Section 2. Clean Fleet Design and Electrification. The Department of Citywide Administrative

HERE

Services (DCAS) and NYC Fleet will issue, implement and update a Clean Fleet Transition Plan (CFTP). This plan will be updated at least every two years. The plan will outline alternative fuel, fuel efficiency, and electrification requirements for all City fleet units by type. The plan will also review fuel efficiency and emissions reductions outfitting that is implemented for specific fleet segments only and/or being tested. As part of the plan, the City will report on electrification and charging options for each class of fleet vehicle. The plan will include a schedule for adoption of cleaner vehicles and technologies which will lead to a fully-electric, carbon-neutral fleet by 2040. In addition to City fleet agencies, DCAS will consult with private, non-profit and other public fleets that operate in NYC on this plan. The plan will include a section discussing options for requiring and/or encouraging adoption of these clean fleet improvements with the private fleets the City contracts and regulates. The first CFTP plan aimed at both public and private fleets will be published by January 1, 2021.



Investing in Safety

- Since onset of Safe Fleet Transition Plan (SFTP) initiative, DCAS has installed over 86,000 safety enhancements on City fleet vehicles.
- In the last two years, DCAS has added 2,500 enhancements to City trucks alone.
- DCAS is partnering with DOE to pilot and introduce safety enhancements for school buses.
- As City school buses and fleet trucks transition to electric, we will work to include the highest level of safety in those new cleaner vehicles.



Safe Fleet Investments, over 86,000 since 2017

	Safe	Fleet Transition Plan				
			Backup Alarm, 4,182	Sideguards, 4,1	.50 Blin	nd Spot, 4,055
	Live Telematics (School Buses), 10,104					
					Connected Vehicles, Navigation, 2,976 1,834	
		Backup Camera, 10,070	Driver Alert, 3,998			
				Power and Heated	Surround Vision	Backup
Live Telematics (City Vehicles), 17,394	Automatic Lights/Daytime Running Lights, 10,094	Automatic Braking (AEBS), 4,286	Safety Lights, 3,538	Mirrors, 1,779	Camera , 1,626	Sensors (Retrofit), P

DCAS Citywide Administrative Services

Truck of the Future Initiative

- DCAS is partnering with Together for Safer Roads (TSR) on the Truck of the Future Initiative
- DCAS and TSR will study effectiveness of different safety implementations
- Our aim is to better understand how safety investments and technologies work together within a vehicle
- One goal of the initiative is to develop ways to track and reduce 'near misses', stopping crashes before they happen



Dawn M. Pinnock, Commissioner Keith T. Kerman, Deputy Commissioner and Chief Fleet Officer

NYC Fleet Newsletter

July 6, 2022 - Issue 396

DCAS, Parks, and Together for Safer Roads Announce Truck of Future Initiative at United Nations

By: Eric Richardson

The greatest safety risk faced by the City fleet is visual impairment with large emergency and public works trucks. In a conventionally designed truck, a driver may not be able to see the road for over 20 to 25 feet.

DCAS is taking various steps to address visual impairment, including investing in high vision trucks, where available, and installing surround cameras and telematics. U.S. DOT Volpe has conducted computer simulations that show high vision trucks greatly reduce risk to pedestrians, bicyclists, and children.



Together for Safer Roads and staff from DCAS and the NYC Department of Parks and Recreation outside of the United Nations (UN) during international high level meetings on road safety.



Intelligent Speed Assist (ISA)







Intelligent Speed Assistance (ISA)

- DCAS has now expanded the pilot to 300 vehicles, leading the nation in promoting this safer technology.
- The pilot now includes 50 school buses in partnership with NYCSBUS which is the first rollout of ISA nationally with school buses.
- Thirteen City agencies and fourteen types of vehicles are involved including box, collection, and dump trucks.
- Fleet has operated over 750,000 miles to date on ISA.
- Of these, 99% of the miles were driven within speed parameters set by DCAS.
- We also achieved a 37% reduction in hard braking which is an indicator of unsafe driving behavior.
- DCAS and Volpe will issue a report on ISA later in the fiscal year.



Mayor Adams, DCAS Commissioner Pinnock Implement new Technology on City Fleet Cars to Reduce Speeds and Save Lives

August 11, 2022



Changing Truck Design: High Vision



[IS] OPINIONS Politics

Direct Vision in Commercial Trucks is a Public Safety Priority

Posted to <u>Politics</u> September 26, 2023 by <u>Peter Goldwasser</u>, <u>Keith</u> <u>Kerman</u>

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f Share This 🛛 🕑 Tweet This

Thirty-two members of Congress recently wrote a letter urging the National Highway Traffic Safety Administration (NHTSA) to

address a national crisis: the surge of traffic deaths on American roads. This letter implored NHTSA to prioritize pedestrian protection and visibility from the driver's seat in federal vehicle safety ratings, known as the New Car Assessment Program.

Since then, leading road safety organizations have continued their longstanding efforts toward achieving change on this and other critical safety issues.

Together for Safer Roads (TSR), which counts some of the world's largest trucking fleets among its members, applauds these efforts. But the work cannot stop there.



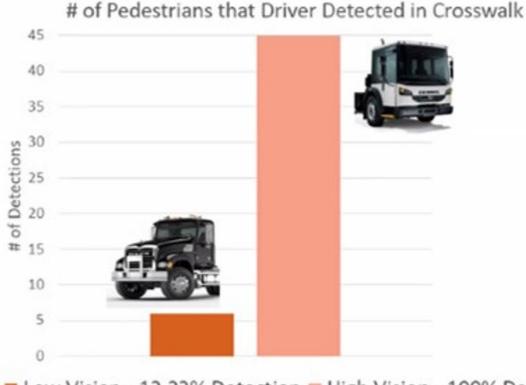
Changing Truck Design: High Vision

Pedestrian crosswalk safety study results

39 out of 45 killed when truck was low vision

vs.

None killed when truck was high vision



Low Vision - 13.33% Detection High Vision - 100% Detection



Implementing Higher Vision Electric Trucks







Electric Box Truck: Line of Sight: 3 feet

Diesel Box Truck: Line of Sight: 11 feet

EV Fleet Bill Signing, October 23



Mayor Adams Signs Bill Paving Way for Electrification of All City Government Vehicles •

Oct 23- New York City Mayor Eric Adams today signed Intro. 279-A, formally codifying the city's goal of transitioning its automobile fleet to

RELATED LINKS:

City Fleet On Path To Be Fully Electric By 2038

City Installing Solar Carports At NYCHA Parking Lots And Introducing Electric Vehicle Car-Sharing Program for NYCHA Staff





Changing Truck Design: Surround Cameras

STREETS**BLOG 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 94 COMMENTS



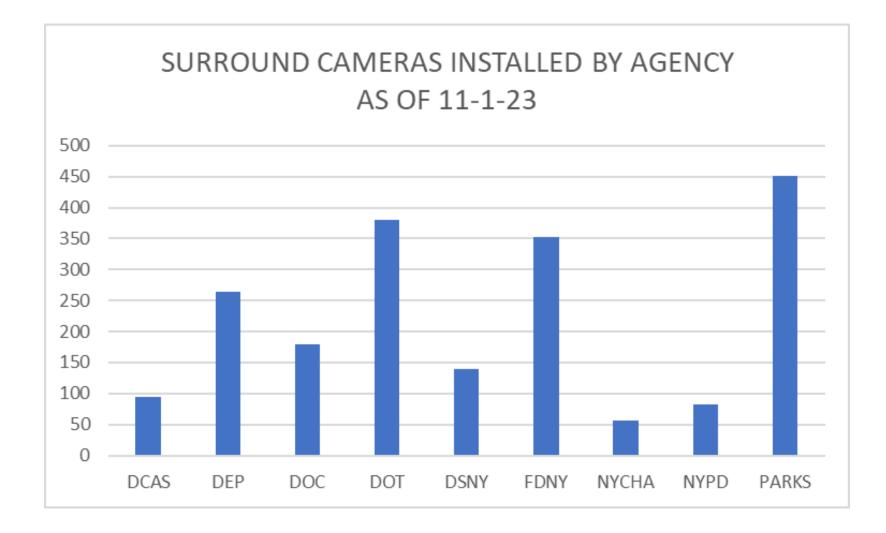


Changing Truck Design: Surround Cameras

- Over 2,000 City trucks will soon use surround cameras to enhance safety
- Working with DCAS, DSNY is adding surround cameras on all street sweepers starting with a current order of 183 trucks.
- DCAS will require surround cameras on all City truck specifications moving forward.
- DCAS, TSR, and NYCSBUS will pilot surround cameras on ten school buses as part of the TSR Truck of the Future Program



Changing Truck Design: Surround Cameras





Changing Truck Design: Side-guards

- DCAS has installed sideguards on all eligible City trucks
- BIC is implementing guard requirement for commercial waste vehicles.
- Working with the Mayor's Office of Contracts, all City contracts involving trucks now require side-guards through Local Law 108 of 2021.





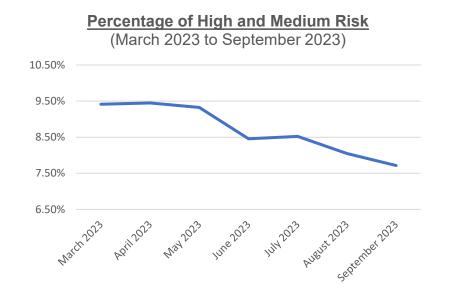
Changing Truck Design: Turn-Alerts

- DCAS piloting audible turn-alerts on 100 City trucks from DEP, DOT, and Parks.
- DCAS also partnering with NYCSBUS to pilot on 50 school buses.



Reducing High Risk Driving

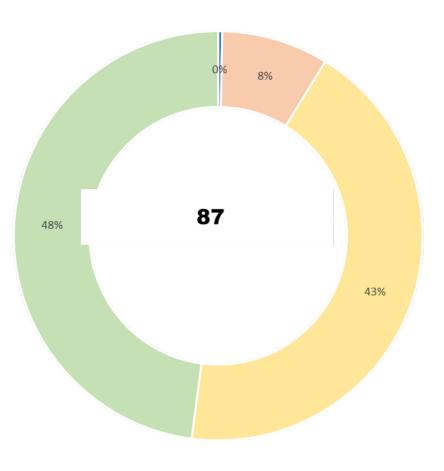
- DCAS tracks 28,500 City Fleet Trucks and School Buses live through our Fleet Office of Real-Time Tracking (FORT).
- DCAS has reduced high risk driving by 15% in the last six months for the City fleet.
- DCAS will partner with the Office of Pupil Transportation (OPT) to track and reduce high risk driving by school bus operators.





Reducing High Risk Driving

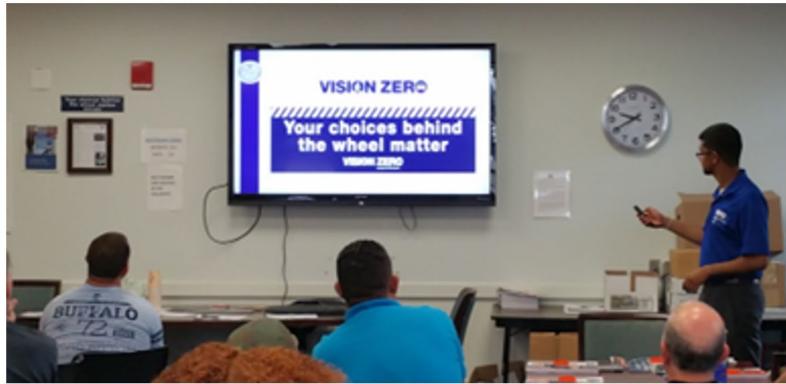
Average Safety Score





Expanding Safety Training

- DCAS has now trained over 90,000 fleet operators in all day training in person or on-line since 2014 and the beginning of Vision Zero.
- DCAS will partner with DOE to train all school bus operators by end of 2025.





Partnering with TSR to improve Seatbelt Use

TSR ANNOUNCES KEY PARTNERS FOR GLOBAL SEATBELT UTILIZATION STANDARDS



COMPANIES DRIVEN TO SAVE LIVES™

FOR IMMEDIATE RELEASE

Together For Safer Roads Announces Steps Toward New Global Seatbelt Utilization Standards and Fleet Operator Implementation Partners During United Nations General Assembly



Contact

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

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