

NYC Fleet

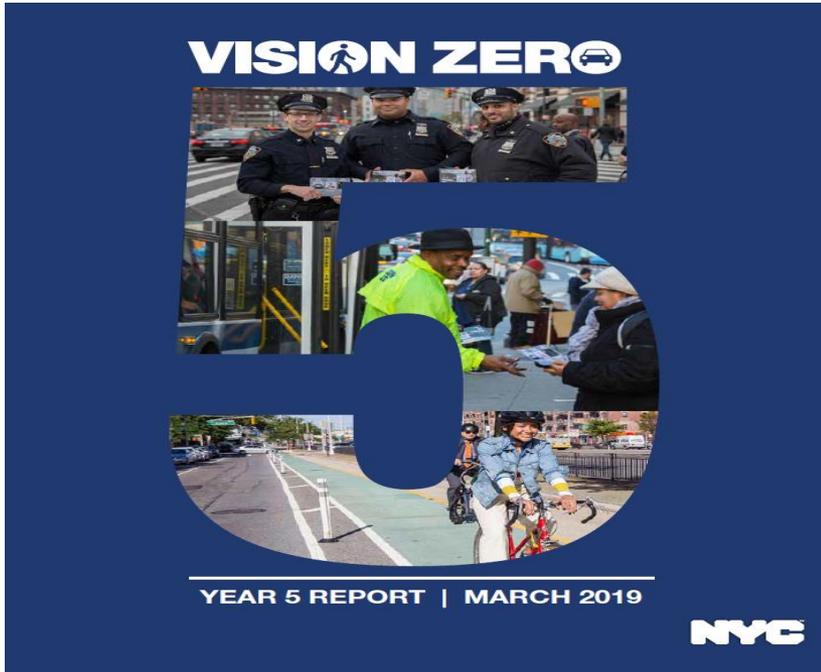
Partnering for Safer Fleets

Keith T. Kerman, NYC Chief Fleet Officer

Future Fleets Forum, London England

January 22, 2020

NYC Vision Zero



NYC and US DOT Partnership

NYC Safe Fleet Transition

Truck Sideguards for Vision Zero
Review and technical recommendations for Safe Fleet Transition Plan pilot deployment

Alexander K Epstein, Ph.D., Alan Pines, Anthony Bindi, Nicole Cooper, and Eric Singer



December 2014
DOT-HR7C-0346-0403

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

NYC
Citywide Administrative Services

Volpe

Launching the Safe Fleet Transition Plan
Technology and Process Best Practices

Walter Chiles and Alexander K Epstein, Ph.D.



June 2017
DOT-HR7C-0346-0716

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

NYC
Citywide Administrative Services

Volpe

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

Alexander K Epstein, Ph.D., and Rebecca Wilson



November 2018
DOT-HR7C-0346-0916

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

NYC
Citywide Administrative Services

Volpe

Trade Waste Vehicle Crashes and Vehicle Safety Technology
Preliminary Analysis

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



October 2019
DOT-HR7C-0346-10-01

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

Safe Fleet Transition Plan

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.

Real Time Tracking for City Fleet, School Busses



THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

EXECUTIVE ORDER No. 41

March 28, 2019

CITYWIDE FLEET SUSTAINABILITY, RIGHT-SIZING, AND EFFICIENCY THROUGH NYC CLEAN FLEET PLAN

WHEREAS, the City operates a large fleet ("NYC Fleet") of vehicles and motorized equipment that is critical to the daily provision of municipal services; and

WHEREAS, the Department of Citywide Administrative Services (DCAS) through NYC Fleet manages an extensive network of fueling and electric vehicle charging infrastructure to power these fleets including light, medium, heavy duty and off-road units; and

WHEREAS, in accordance with New York City Charter section 827 and Executive Order No. 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 fleet efficiency; and

WHEREAS, the NYC Clean Fleet Plan was released in December 2015, and calls for NYC to implement the most sustainable fleet in the country, including operating at least 2,000 on-road electric vehicles by 2025 and reducing greenhouse gas emissions (GHG) by 50% by 2025; and

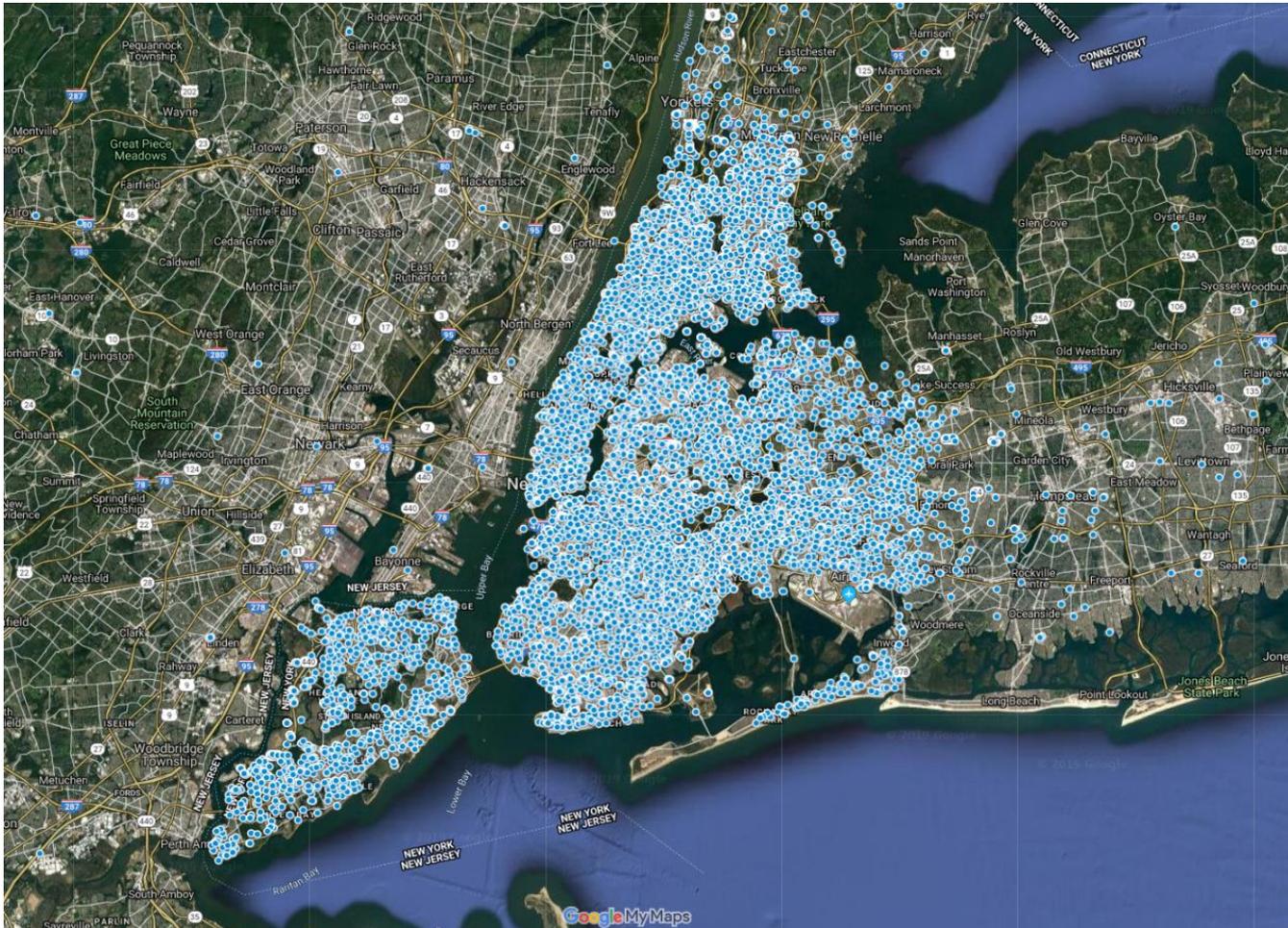
NOW, THEREFORE, by the power vested in me as the Mayor of the City of New York, it is hereby ordered:

Section 1. NYC Clean Fleet Plan. DCAS, working with the Office of Management and Budget (OMB) and the Mayor's Office of Sustainability (MOS), will continue to implement the NYC Clean Fleet Plan. All agencies operating fleet units will support implementation of this phase of the plan and take all required efforts to achieve the environmental and efficiency performance goals within the NYC Clean Fleet Plan. DCAS and MOS will issue a report and update to the plan every two years, with the first such report and update issued by January 1, 2020. This report will include an update on implementation of this Executive Order.

§ 2. Fleet Size. By June 30, 2019, DCAS will implement telematics, mapping, and analytics for all City on-road fleet units, including long-term rentals. The New York City Police Department will implement a similar initiative. Working with OMB, DCAS will set fleet daily usage targets for all City fleet agencies and major operational sub-divisions of the fleet, to ensure that the City achieves an optimal fleet size based on documented usage patterns. At least 1,000 existing on-road units will be reduced by June 30, 2021. In addition, DCAS and OMB will establish an 80 percent general usage standard for the



Fleet is Everywhere!



Safety Scorecards

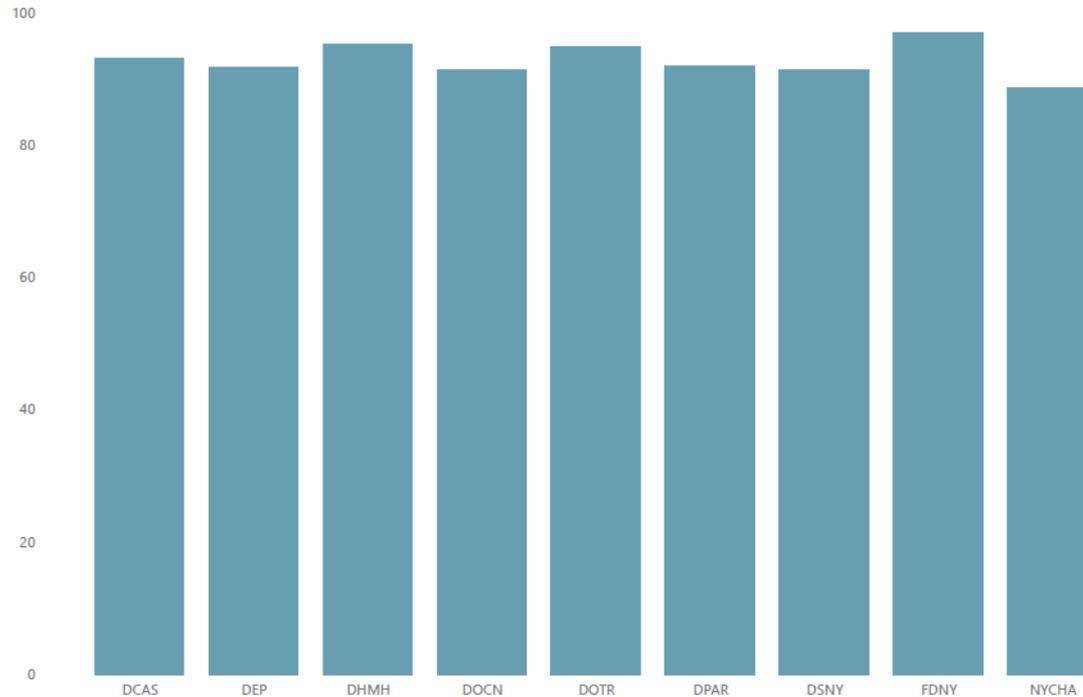
Geotab Safety Scorecard

December 9, 2019 - December 13, 2019

92.54

Citywide Average Score

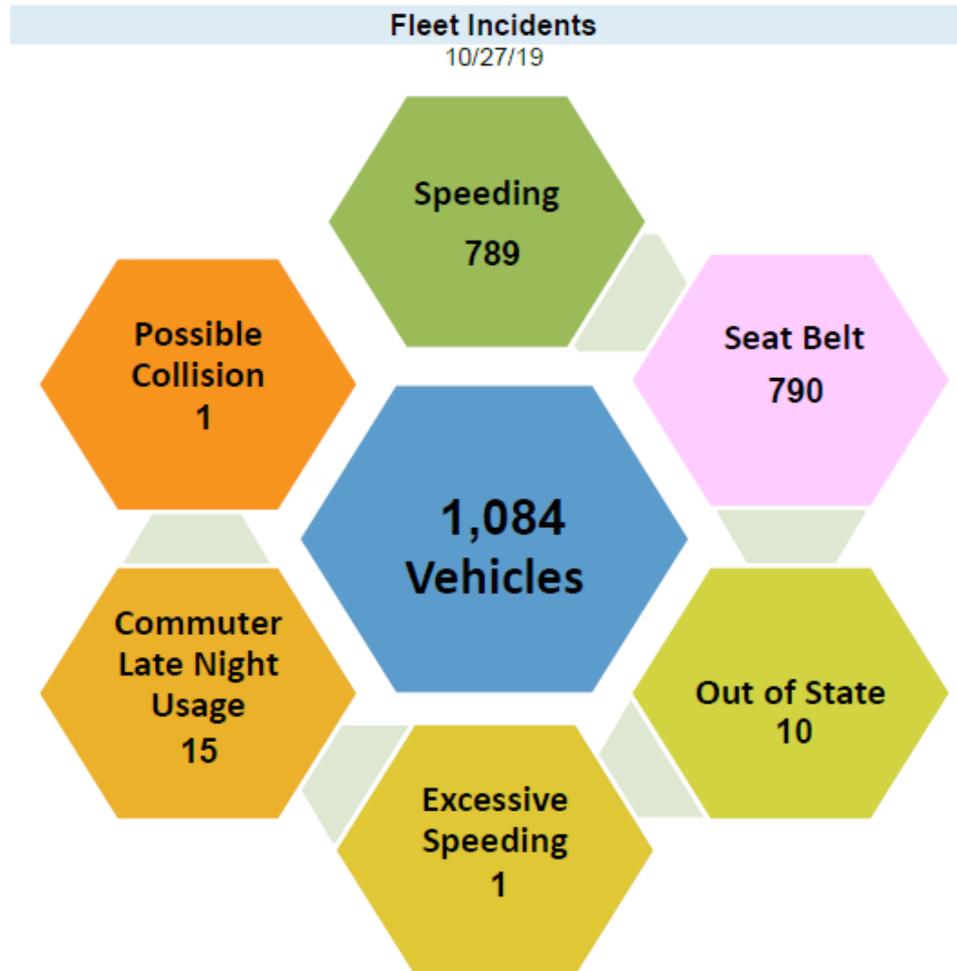
Agency	Average Score
DCAS	93.16
DEP	91.68
DHMH	95.27
DOCN	91.43
DOTR	94.81
DPAR	91.88
DSNY	91.41
FDNY	97.00
NYCHA	88.71
Total	92.54



Classification	
Low Risk	90
Mild Risk	70
Medium Risk	50
High Risk	0

Weighted Categories	
Hard Acceleration	10%
Harsh Braking	10%
Harsh Cornering	10%
Seat-Belt	20%
Speeding	20%
Excessive Speeding	30%
100%	

Fleet Safety Reporting



Instant CRASH Reports

1/16/2019

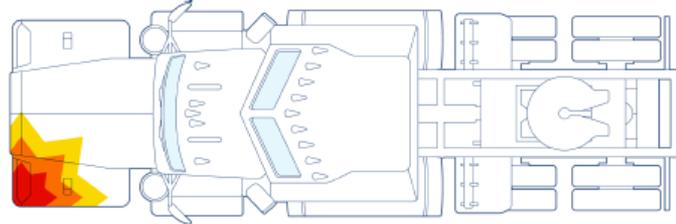
Collision Reconstruction [Zoom in \(Ctrl+Plus\)](#)

Collision Reconstruction (BETA)

Device Information

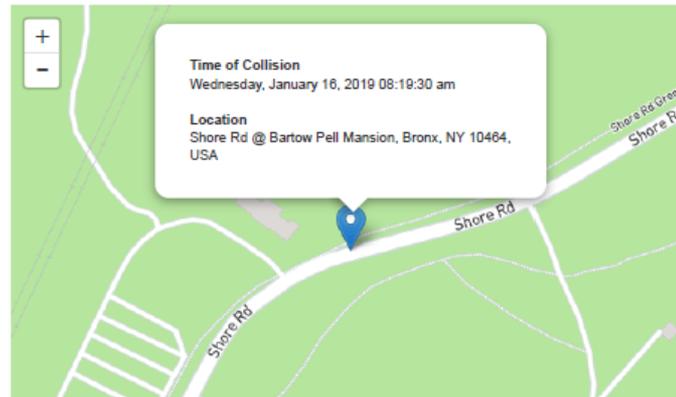
Vehicle Name: P8357
Driver: Unknown Driver
VIN: 2FZACFDK08AZ36598
Vehicle: 2008 Sterling Acterra
Time of Collision: Wednesday, January 16, 2019 08:19:30 am

Point of Impact



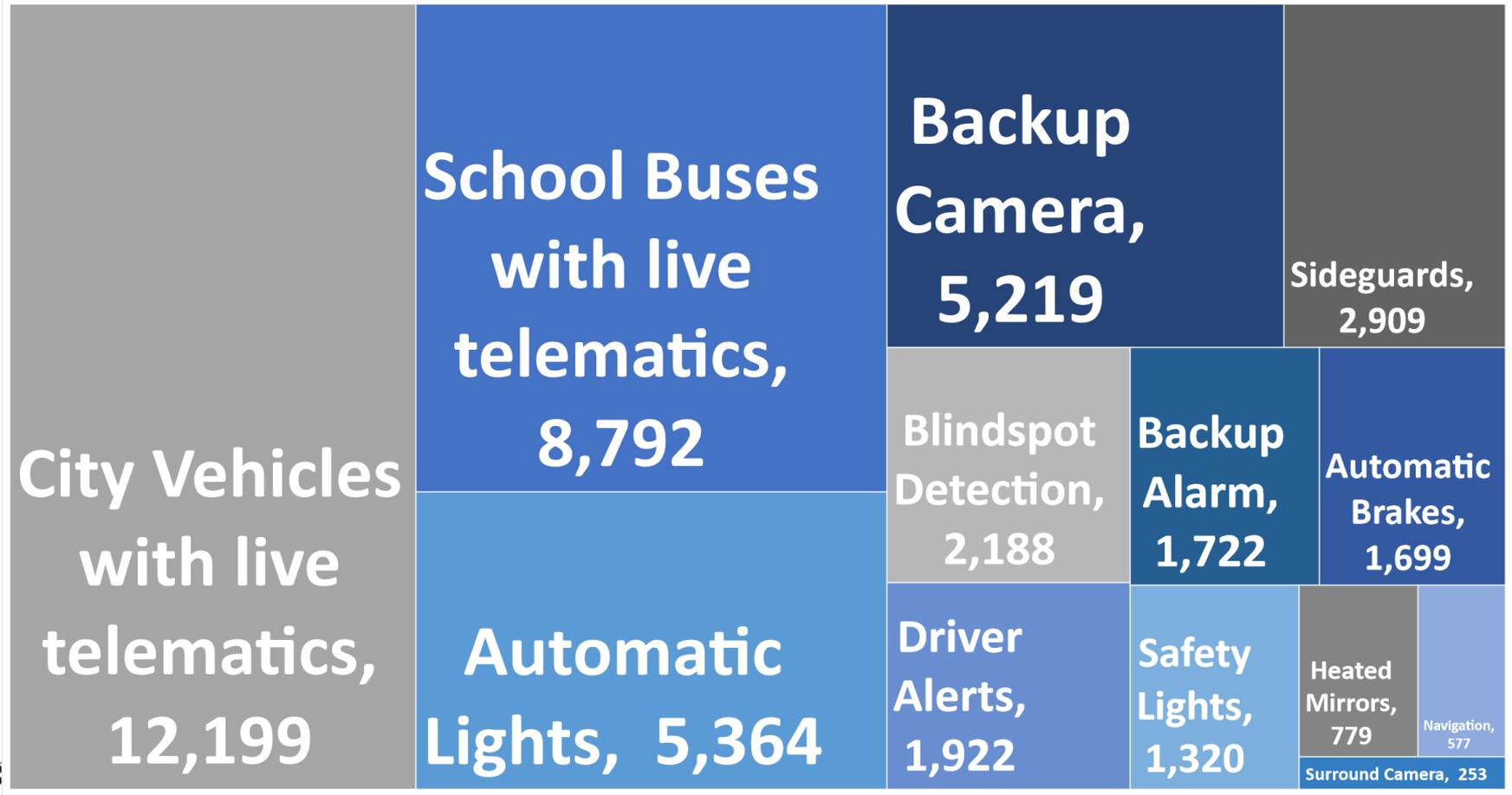
Map View

[Trip History](#)



Outfitting Vehicles for Safety

SAFE FLEET TRANSITION PLAN

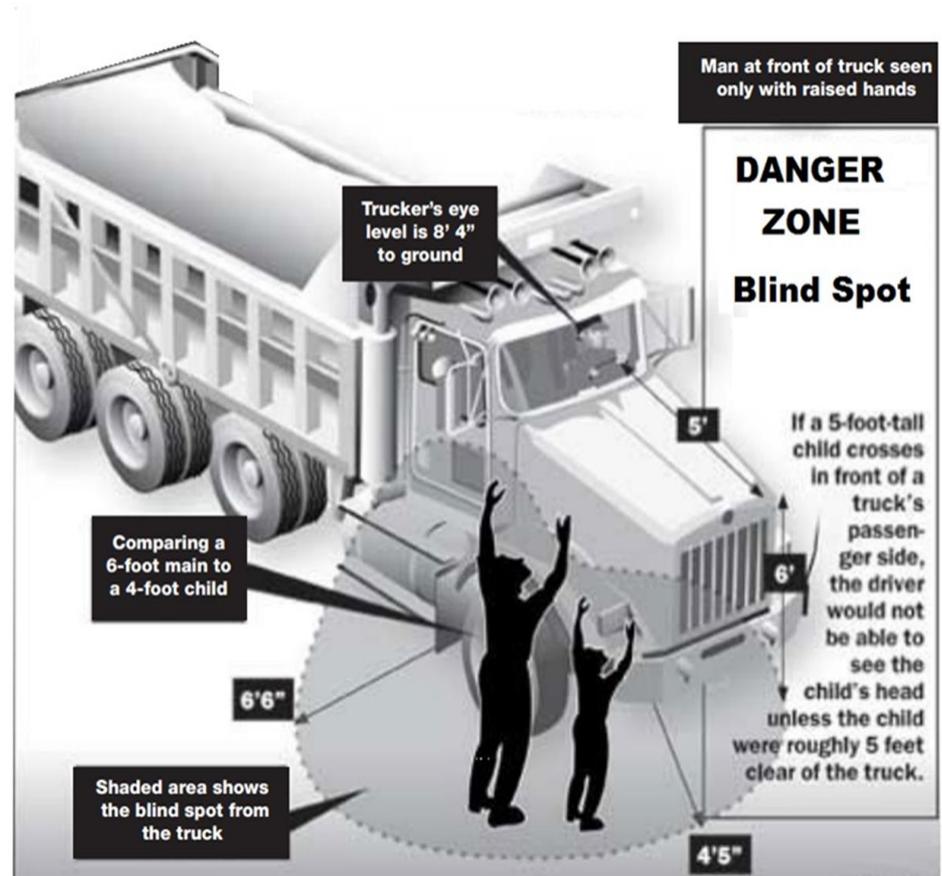


Nation's Largest Sideguard Program



Improving Vehicle Line of Sight

- All vehicles have line of sight and potential blind spot issues. These are more prominent for trucks.
- Pedestrians and bicyclists may think you can see them when you can't. A cyclist can be in your blind spot.
- On trucks, cross-over mirrors will help remove blind spots. Please practice using the mirrors and check your line of sight before getting on the road.



V to V and V to I, Connected Vehicles

Together for Safer Roads, Anheuser-Busch First to Join NYC Connected Vehicle Pilot

New Public-Private Partnership Supports City's Vision Zero Goals



Left to right: David Braunstein, President, Together for Safer Roads; Cesar Vargas, Vice President of Legal & Corporate Affairs, Anheuser-Busch; Keith Kerman, Chief Fleet Officer and Deputy Commissioner, NYC Department of Citywide and Administrative Services; Mohamed Talas, Director of System Engineering, NYC Department of Transportation; Ellen McDermott, Co-Interim Executive Director, Transportation Alternatives

NEW YORK – During the launch of the United Nations' Fifth Global Road Safety Week, international leaders held a briefing to recognize New York City's leadership in Vision Zero and pledge their support for it. Together for Safer Roads and its members, including Anheuser-Busch, will support the City of New York's Connected Vehicle Pilot: Anheuser-Busch is equipping its local fleet with connected vehicle technology to test driver alerts and other safety measures.

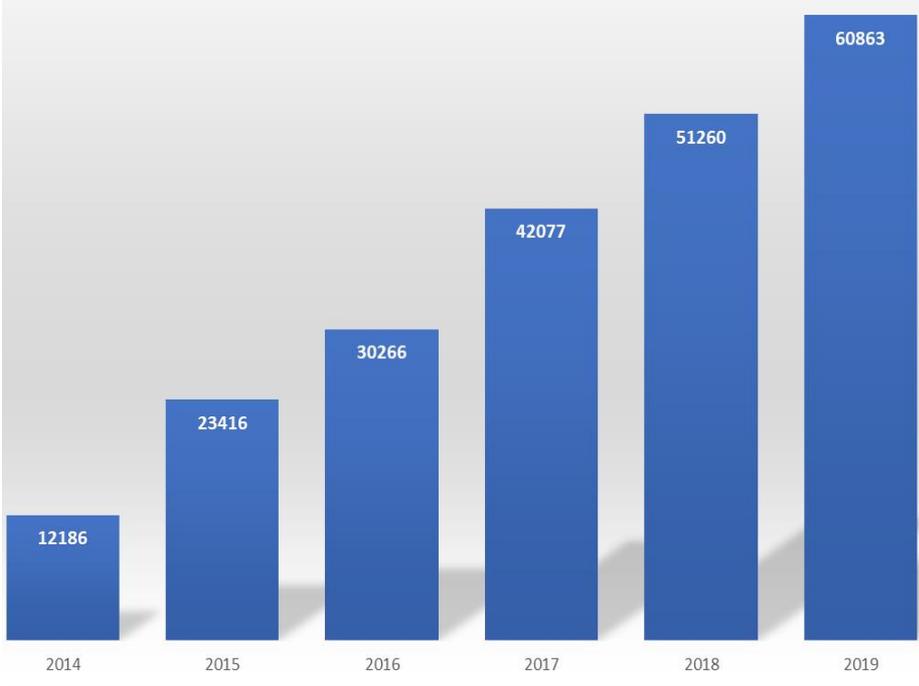
The City of New York's Vision Zero program is unique in the U.S. in its commitment to fleet safety and in business support for it. The Department of Citywide Administrative Services' Safe Fleet Transition Plan is the City's strategy to make the municipal fleet consistent with Mayor de Blasio's Vision Zero goal of eliminating traffic deaths and serious injuries in the city by 2024. The NYC Connected Vehicle Pilot provides a well-defined opportunity for private fleets to support this goal. Few, if any, Vision Zero cities have similar ways for businesses to proactively partner in this work.

While civic leadership is absolutely essential to achieving Vision Zero, ultimately it will not happen without robust participation from all sectors, especially businesses. Knowledge sharing and public-private partnerships like this one have long been hallmarks of the United Nations. In addition to bringing connected vehicle technology to new use cases, private sector participation in the pilot will help chart the way to bringing proven safety interventions to scale.

"New York City's Department of Citywide Administrative Services (DCAS) is proud to partner with NYC DOT and represent New York City—one of only three test sites in the nation—as part of the U.S. DOT's Connected Vehicle Pilot Program. Through Mayor Bill de Blasio's Vision Zero Program, we are reducing traffic deaths and making the city's streets safer for everyone. We believe the Connected Vehicle program will take us even further and make our fleets and streets even safer," said DCAS Commissioner Lisette Camilo.

Surveying City Fleet Operators

Word cloud containing terms such as: Increase training, Back-up cameras, Quality preventive maintenance, Built in navigation, Cleanliness, Mirrors, Reliable repair, Safety lights, Blind spots, Drive defensively, Newer vehicles, Make safety features standard.



WordItOut

Separating Safety from Luxury

YES



NO



Hands and Mind on the Wheel

**SAFE DRIVING IS
FOCUSED DRIVING!
NO CELL PHONES
INCLUDING
HANDS FREE
AND NO TEXTING
WHILE DRIVING.**



**VISION
ZERO**
nyc.gov/visionzero

Looking Out for Bikes



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

NYC Fleet Newsletter

July 29, 2019 - Issue 271

Keeping Bicyclists Safe

By: Keith T. Kerman and Eric Richardson

On July 25, 2019, Mayor de Blasio announced the Green Wave plan for Bicycling in NYC. Biking in NYC is more popular and prevalent than ever. Biking can be a healthy and fun way to get around town and without the need to depend on cars and burn polluting fuels. The City and DOT have made substantial investments to expand bike lanes and encourage the growth of biking, and bike sharing is more common than ever.

Under the plan, there will be additional development of protected bicycle lanes, renewed enforcement, and a focus on safety with private and public trucks fleets.



As biking expands, fleets and drivers need to do more to keep bicyclists safe and better share the roads. Through our Vision Zero Safe Fleet Transition Plan we are re-designing vehicles to make them safer including for bicyclists. Our truck side-guard initiative, fleet telematics tracking, high vision truck requirements, and lane and collision alert systems will help prevent collisions with bicyclists and keep bicyclists safe.

There are also critical steps our nearly 80,000 fleet operators can take. Please follow these common sense safety practices:

- **Respect the use of bike lanes by bicyclists.** Do not park, stop, or idle in a bike lane unless for an emergency response or unavoidable work specific purpose, such as repairs to the lane itself.



turns.

- **After parking, check for bicyclists before opening the door.** You can use the opposite hand technique to open the door. Use your hand furthest from the door to open the door. This will help shift your body in a better position to see bicyclists coming from behind you.

- **Allow extra space for bicyclists and drive cautiously near them.** Just like pedestrians, bicyclists are greatly exposed and at risk in potential crashes with cars and trucks and we must give them the benefit of any doubt on the roads. Provide 3 feet or more of extra space for bicyclists and be especially careful when making

Introducing VR for Training



Taking Next Steps including ISA

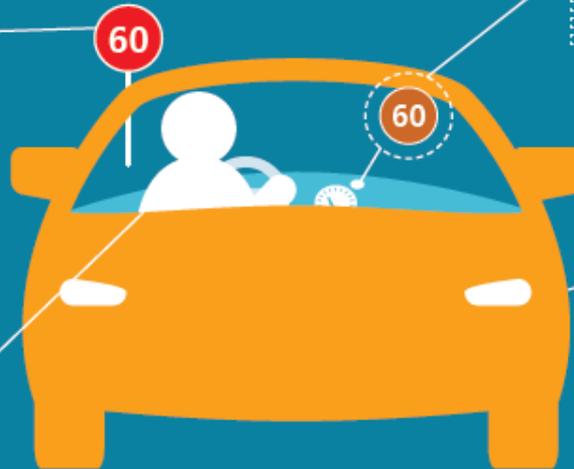
WHAT IS INTELLIGENT SPEED ASSISTANCE?

1. Car receives position information via GPS and current speed limit from a digital map. Can also be combined with video camera sign recognition.

2. Speed limit is displayed on the dashboard.

3. Car helps driver not to speed when speed limit is reached.

Driver can override system by pushing harder on accelerator.



Partnering Across the World



**TRANSPORTATION
ALTERNATIVES**



2019 VISION ZERO FLEET SAFETY FORUM Queens Theatre in the Park

Please join us at the City of New York's 6th Annual Vision Zero Fleet Safety Forum, where you will hear from fleet managers, experts on fleet safety practices and technologies, and advocates for the Vision Zero program.

The event is free and includes breakfast and lunch. There are also a limited number of spaces available for exhibits. Reservations are required for attendees and exhibitors. To RSVP, please contact NYCFleet@dcas.nyc.gov.

Thursday, October 31, 2019
8:30 AM to 1:30 PM
Queens Theatre, Flushing Meadows Corona Park
RSVP to NYCFleet@dcas.nyc.gov

For more information, please contact:
Dan Shinn-Krantz at NYC Fleet, dshinn@dcas.nyc.gov, 212-386-0377

Queens Theatre in the Park is an accessible venue.
For accessibility questions please contact
Dan Shinn-Krantz, 212-386-0377, by Friday, October 25



Directions in the park:
By car: when you arrive at Flushing Meadow Park follow the signs for Theatre Parking.
By Train: Exit at the Willets Point station. Follow the boardwalk into the park, you will pass the US24 National Tennis Center. At the end of the boardwalk, follow the tree-lined path on your right to the Unisphere, then bear left toward the towers.



Local Authority Plant & Vehicles

Future Fleet Forum 2020

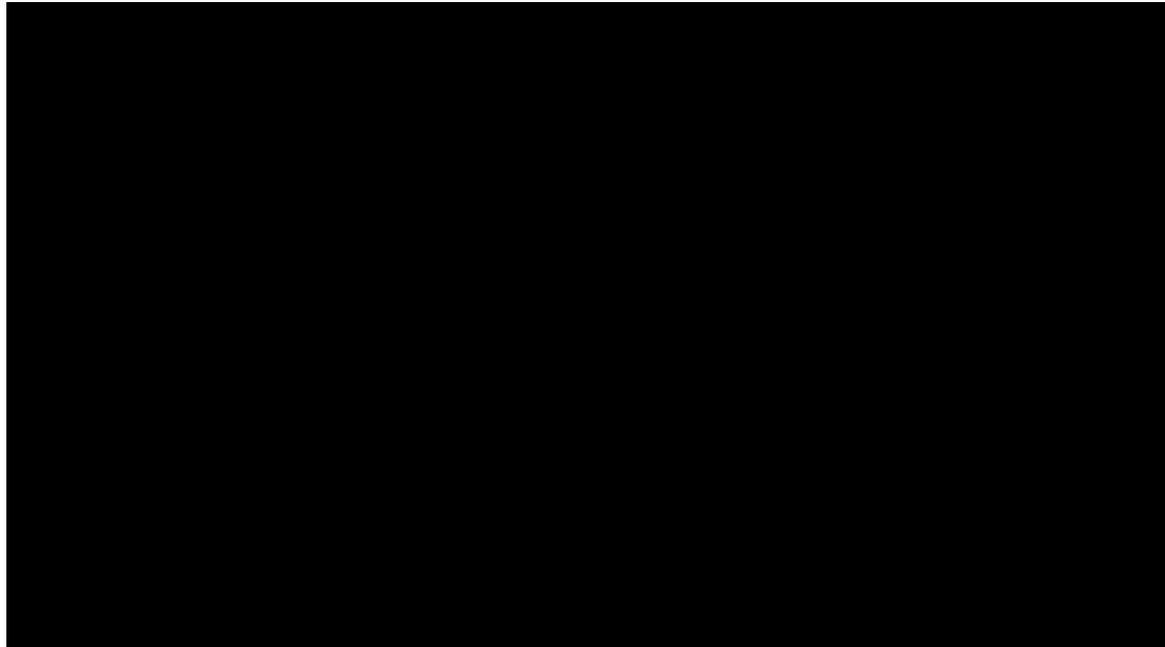
22nd January | Guildhall, London

Hosted by

NYC Fleet: Driver Training Video

Truck Safety Video

Partnership between NYC DOT and NYC Fleet



DCAS

THANK YOU