

# 2023 Vision Zero Fleet Safety Forum

**VISION ZERO**   
**Building a Safer City**



**VISION ZERO**   
**Building a Safer City**



**Dawn M. Pinnock**

*Commissioner*

**Department of Citywide Administrative Services**

**NYC DCAS**  
Citywide Administrative Services



# **VISION ZERO**

## **Building a Safer City**



**Peter Goldwasser**  
*Executive Director*  
**Together for Safer Roads**



**VISION ZERO**   
**Building a Safer City**



**Mark J.F. Schroeder**  
*Commissioner*

**New York State Department of Motor Vehicles**



**Department of  
Motor Vehicles**





NYC Fleet



# Safe Fleet Transition

**NYC Fleet**

**Presentation to 8<sup>th</sup> Vision Zero Fleet Safety Forum**

**Keith T. Kerman**

**NYC Chief Fleet Officer**

**Deputy Commissioner, DCAS**

**November 2, 2023**

# Kamari Hughes

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## 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.

# Improving Truck and School Bus Safety

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- 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

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## 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-NYDCAS-23-01

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

# Vision Zero Safe Fleet Transition Plans (SFTP)

## 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-VNTSC-DCAS-14-01

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



## Launching the Safe Fleet Transition Plan

Technology and Process Recommendations

Margo Dawes and Alexander K Epstein, Ph.D.



May 2017  
DOT-VNTSC-DCAS-17-01

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



## Safe Fleet Transition Plan Update 2018 - 2019

Best Practice Technologies and Processes

Alexander K Epstein, Ph.D. and Rebecca Kiriazos



NYC DCAS  
Citywide Administrative Services  
November 2018

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

U.S. Department of Transportation  
John A. Volpe National Transportation Systems Center



## 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 Ravi Patel



December 2021

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



[HERE](#)

[HERE](#)

[HERE](#)

[HERE](#)

# Clean Fleet Transition Plan (CFTP), EO 53

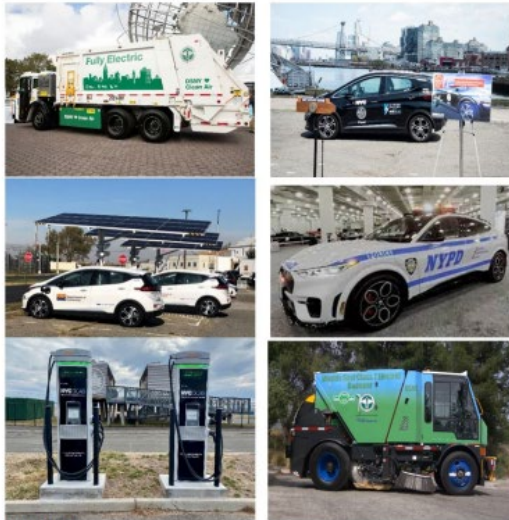
## Clean Fleet Transition Plan

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

[HERE](#)



Fall 2022

DOT-VNTSC-DCAS-22-01

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

**NYC DCAS**  
Citywide Administrative Services

U.S. Department of Transportation  
**Volpe Center**

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

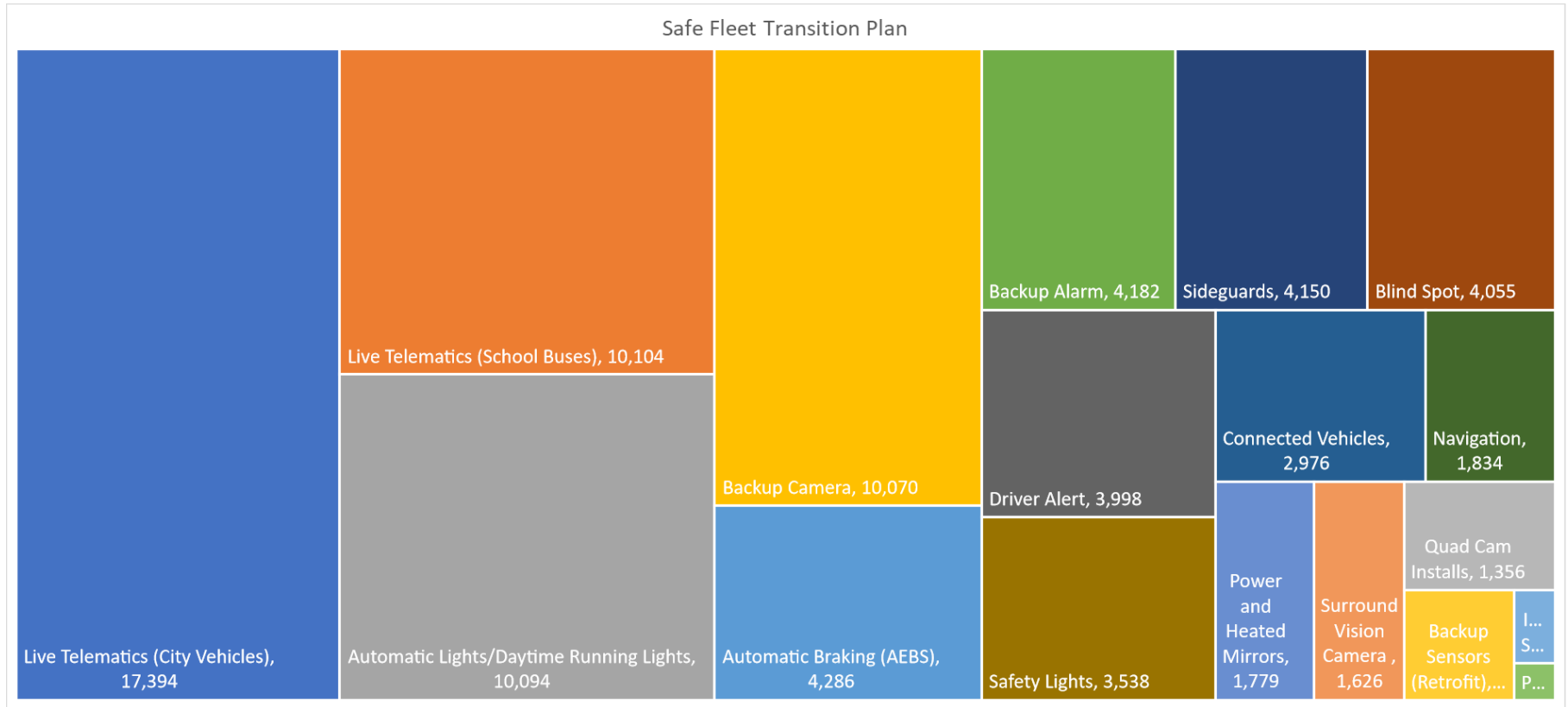
# Investing in Safety

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- Since onset of Safe Fleet Transition Plan (SFTP) initiative, DCAS has installed over 83,000 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 83,000 since 2017





# 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



NYC Fleet Newsletter

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

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)

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- 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 [Politics](#) September 26, 2023 by [Peter Goldwasser](#), [Keith Kerman](#)

[✉ Email](#) [🖨 Print](#)

[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.

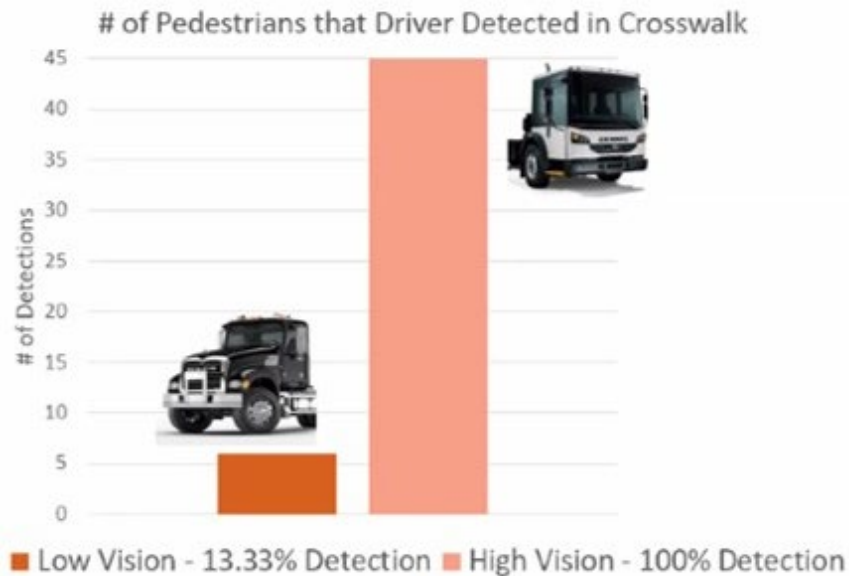
# Changing Truck Design: High Vision

## Pedestrian crosswalk safety study results

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

vs.

**None killed** when truck was **high vision**





# Implementing Higher Vision Electric Trucks

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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

## STREETSBLOG NYC

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

### City Shows Off Trucks and Buses With Surround-View Cameras

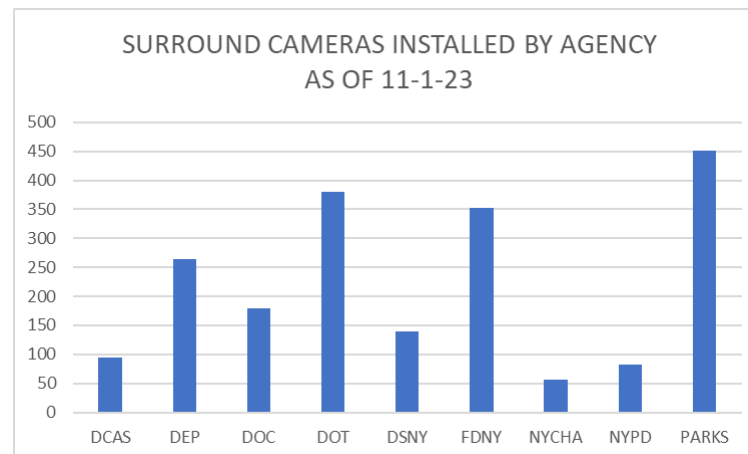
By Fiifi Frimpong | Jun 12, 2021 | 4 COMMENTS





# Changing Truck Design: Surround Cameras

- Over 2,000 City trucks now using 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: Side-guards

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- DCAS has installed side-guards 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

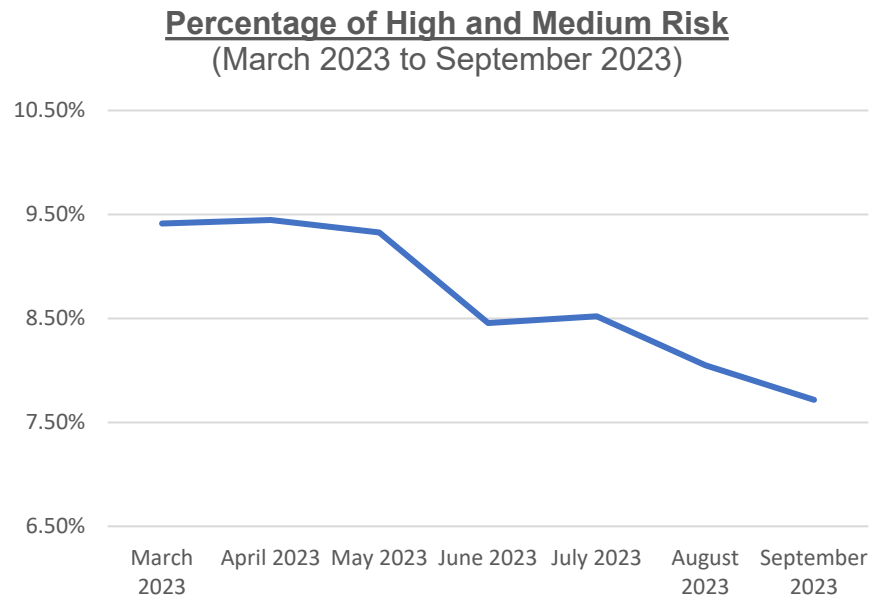
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- DCAS piloting audible turn-alerts on 100 City trucks from DEP, DOT, and Parks.
- DCAS also partnering with NYCSBUS to pilot on 50 school buses.

# Reducing High Risk Driving

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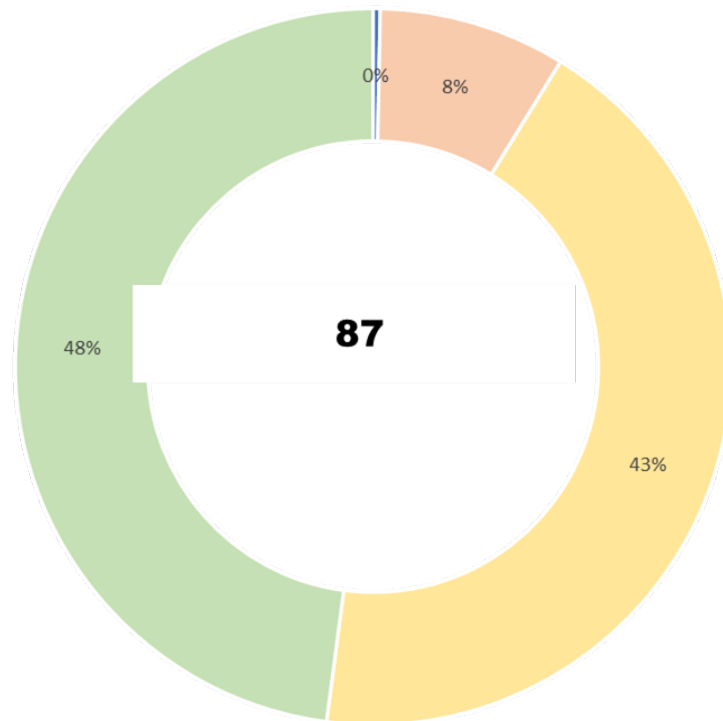
- DCAS tracks 28,500 City Fleet Trucks and School Buses live through our Fleet Office of Real-Time Tracking (FORT).
- DCAS has reduced high risk driving by 15% in the last six months for the City fleet.
- DCAS will partner with the Office of Pupil Transportation (OPT) to track and reduce high risk driving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



# Reducing High Risk Driving

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Average Safety Score

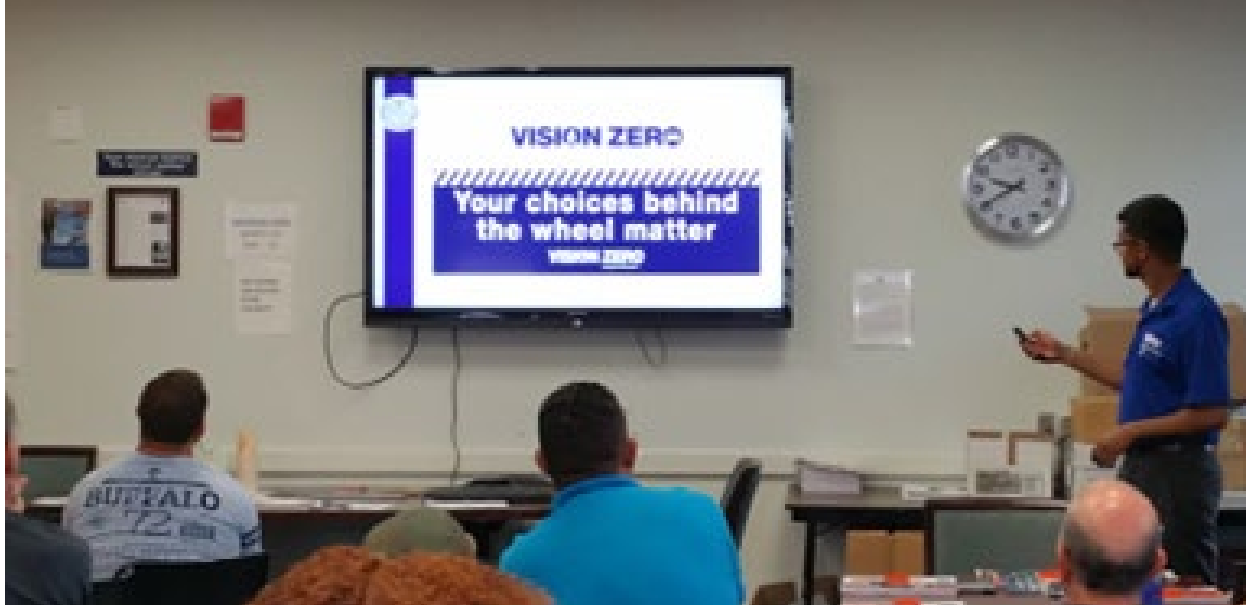


■ High Risk Vehicles   ■ Total Medium Risk Vehicles   ■ Total Mild Risk Vehicles   ■ Total Low Risk Vehicles

# Expanding Safety Training

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- 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

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## TSR ANNOUNCES KEY PARTNERS FOR GLOBAL SEATBELT UTILIZATION STANDARDS



**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**

New York, NY (September 19, 2023) — This week, [Together for Safer Roads](#) (TSR), a leading non-

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FORT GREENE

# Tow truck driver who struck and killed 7-year-old boy in Brooklyn arrested: Police

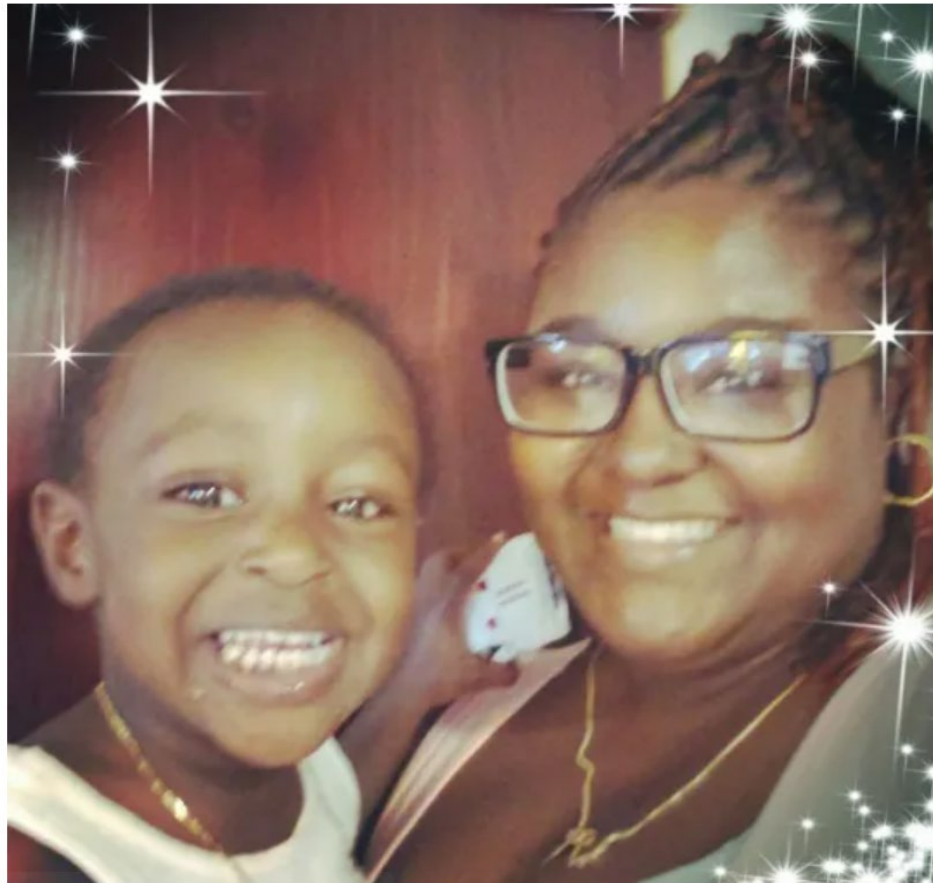
By [Marc Santia](#) and [NBC New York Staff](#) • Published October 27, 2023 • Updated on October 27, 2023 at 2:21 pm





# Kamari Hughes

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# Contact

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

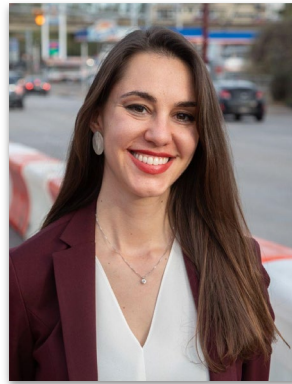
Keith Kerman  
Chief Fleet Officer  
New York City  
Deputy Commissioner,  
Department of Citywide Administrative Services

[kkerman@dcas.nyc.gov](mailto:kkerman@dcas.nyc.gov)

DCAS

THANK YOU

**2023 Recipient  
Together for Safer Roads Global Vision Zero  
Leadership Award**



**Natalie Draisin**

*Director/United Nations Representative*

North American Office, FIA Foundation





# KEYNOTE & GLOBAL VISION ZERO LEADERSHIP AWARD

NATALIE DRAISIN

NORTH AMERICA DIRECTOR &  
UNITED NATIONS REPRESENTATIVE



# WHO WE ARE

- Global philanthropy: Work closely with partners to shape projects and advocate for safer, more sustainable policy and practice.
- Objective: Safe and healthy journeys for all.
- Support: Safer vehicles and highways, clean air and electric cars, safe motor sport and low speed streets.



**Safe Roads**



**Climate Action**



**Clean Air**



**Safe Motor Sport**



**Child and Youth Rights**



**Liveable Cities**







**10 school buses**

**fall off a cliff**

every day

365 days/year



The background of the slide is a stylized American flag. The top-left corner features a blue field with white stars, while the rest of the slide is composed of horizontal stripes in shades of red and white.

**259,025 killed or injured**

**ages 1-25**

Every year

**Costing the US \$141.4 billion**





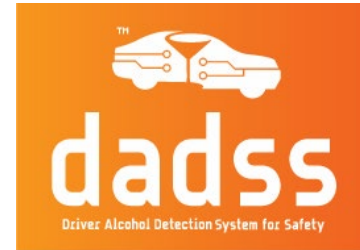






# Sound Public Policy Safety & Societal Benefits

- ✓ Each year, **9,400 deaths** could be prevented
  - Insurance Institute for Highway Safety (IIHS) analysis
- ✓ Over 15 years
  - Almost **59,000 deaths** and approximately **1.25 million nonfatal injuries** could be avoided
  - Estimated **\$342 billion** in injury-related costs avoided (University of Michigan)



- ✓ Drunk driving is still the **#1 cause** of traffic fatalities, costing the U.S. an estimated **\$194 billion annually**
- ✓ A one-time investment – totaling less than **1%** of this cost – is both **sound fiscal and sound safety policy**

#### Sources:

Farmer, C. M. (2020) Potential lives saved by in-vehicle alcohol detection systems. IIHS. Available at <https://www.iihs.org/topics/bibliography/ref/2209>.

Carter, P. M., Flannagan, C. A., Bingham, C. R., Cunningham, R. M., & Rupp, J. D. (2013) Alcohol ignition interlock installation in new vehicles as a primary prevention measure to decrease alcohol involved crash fatalities and injuries. In *Alcoholism-Clinical and Experimental Research*, 37, pp. 149A-149A. Wiley-Blackwell: Hoboken, NJ

THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. NO PART OF THIS DOCUMENT MAY BE DISCLOSED IN ANY MANNER TO A THIRD PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF ACTS.

**93% of children  
breathe dirty air**

**-World Health Organization**





**Euro 3**  
2000



**Euro 4**  
2005



**Euro 5**  
2009



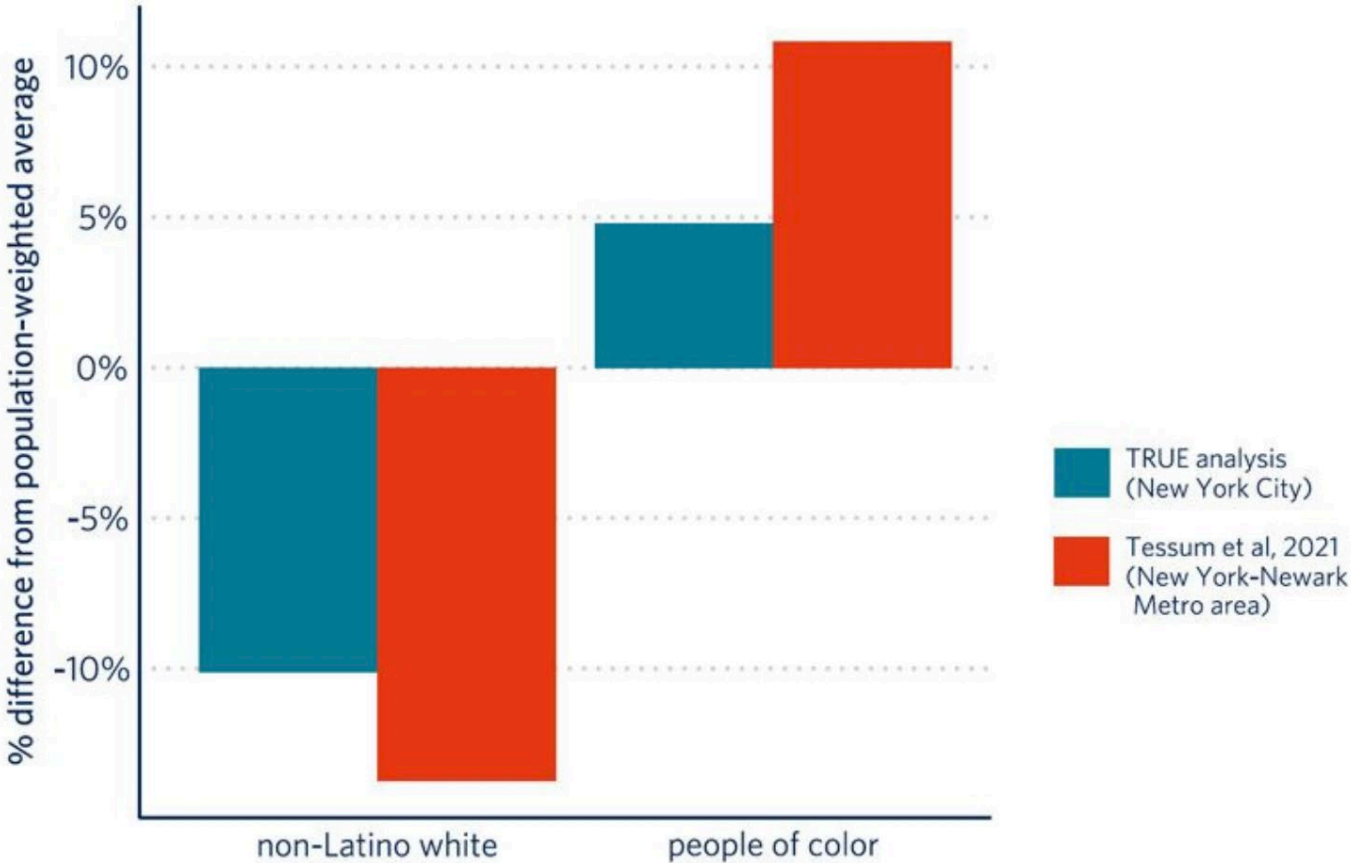
**Euro 6**  
2014

# TRUE locations





# NYC: RACIAL DISPARITY IN AIR POLLUTION



# HOW MUCH DOES YOUR CAR POLLUTE?

Find out: [TRUEinitiative.org](https://TRUEinitiative.org)

## HOW DOES YOUR CAR RATE?

Manufacturer  Model  Fuel Type  Emissions Standar  Engine Size (L)  Vehicle Class  True Rating



# LONG-TERM DECISION



Approximately 20+ year lifespan

***Every fleet that is not safe & sustainable  
is an opportunity lost***



# YOU CAN IMPROVE DECADES OF SAFETY



YOUR FLEET



HER SAFETY







**United Nations**



**“Encouraging the provision of consumer information on vehicle safety through new car assessment programmes that are independent from vehicle manufacturers.”**

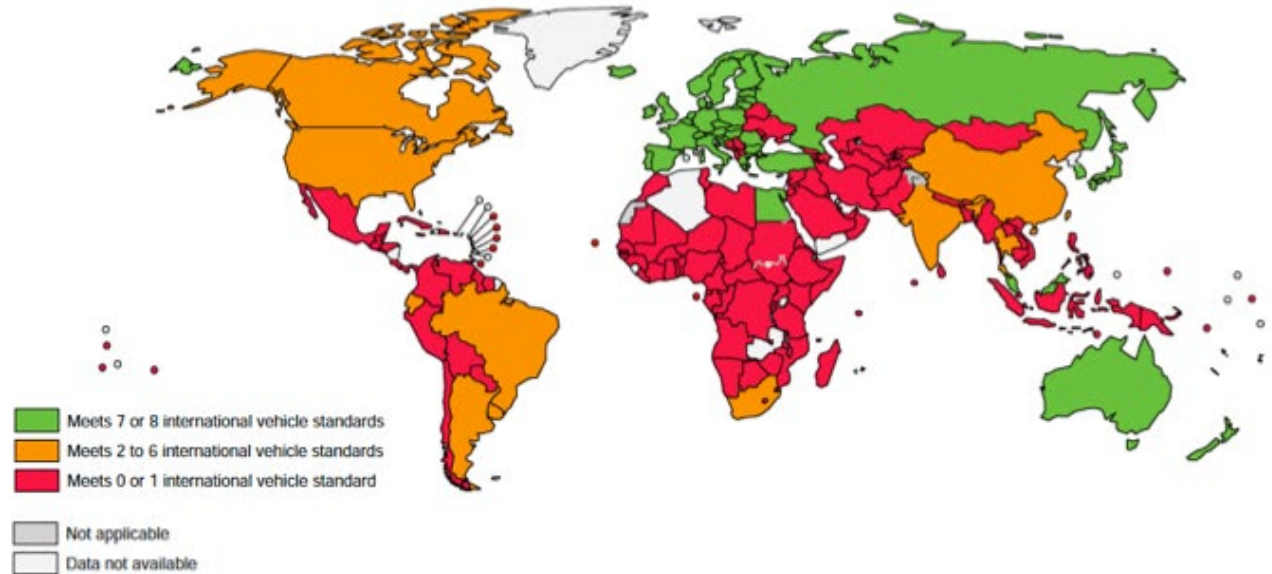
**ANTÓNIO GUTERRES, SECRETARY-GENERAL OF THE UNITED NATIONS**

# U.S. DOES NOT MEET ALL UN SAFETY STANDARDS

## UN Priority Safety Standards

- Seat belt anchorages
- Safety belts & restraints
- Frontal collision
- Lateral collision
- Electronic stability control
- Pedestrian protection
- Child restraints
- Motorcycle ABS

\*Or equivalent national standards  
(eg: FVMSSs)



40 out of 193 UN Member States apply 7-8 of most important UN safety regulations. These are overwhelmingly high-income countries










# G20

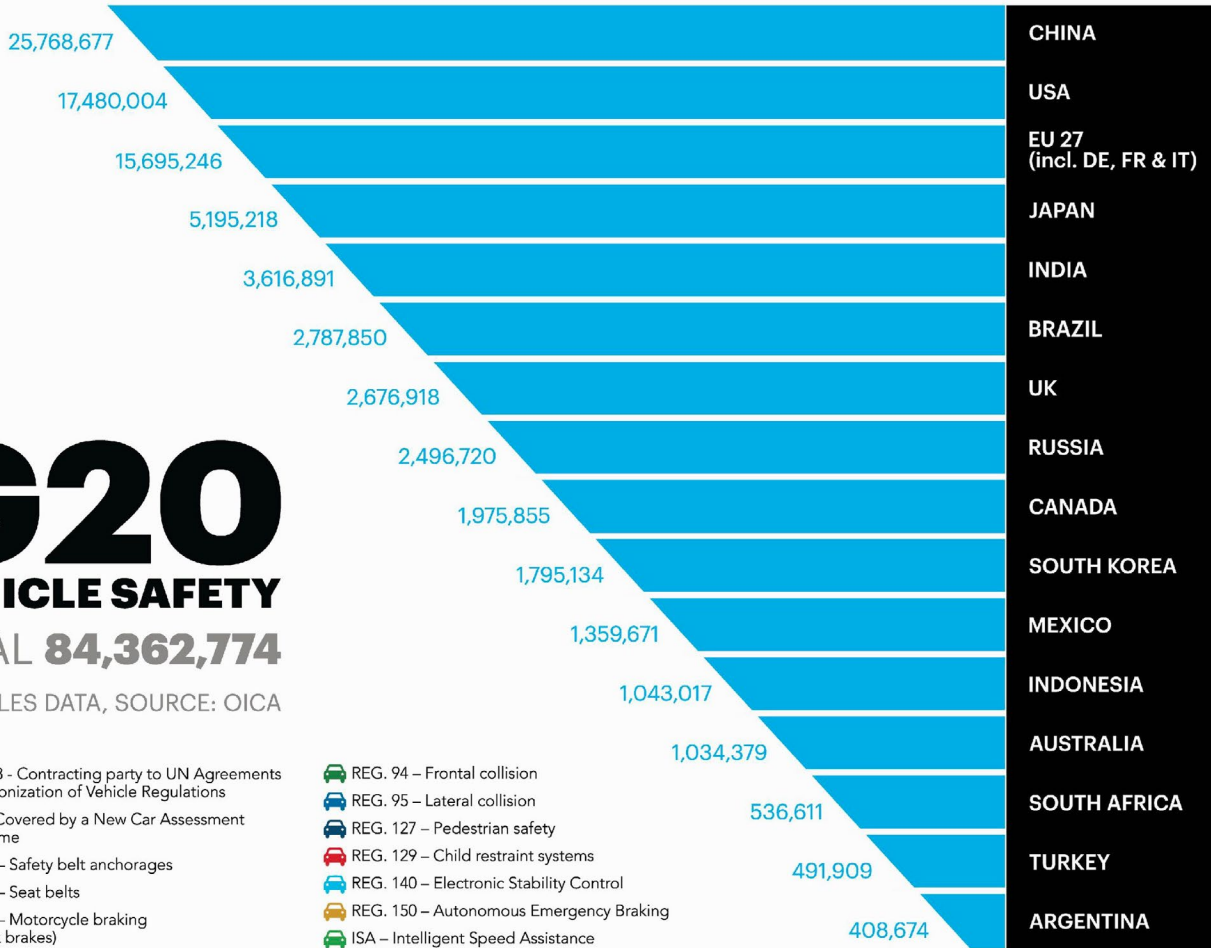
## VEHICLE SAFETY

TOTAL **84,362,774**

2019 SALES DATA, SOURCE: OICA

-  UN 58/98 - Contracting party to UN Agreements on Harmonization of Vehicle Regulations
-  NCAP - Covered by a New Car Assessment Programme
-  REG. 14 - Safety belt anchorages
-  REG. 16 - Seat belts
-  REG. 78 - Motorcycle braking (anti-lock brakes)

-  REG. 94 - Frontal collision
-  REG. 95 - Lateral collision
-  REG. 127 - Pedestrian safety
-  REG. 129 - Child restraint systems
-  REG. 140 - Electronic Stability Control
-  REG. 150 - Autonomous Emergency Braking
-  ISA - Intelligent Speed Assistance



## FIA ROAD SAFETY INDEX

**Methodology** to assess road safety performance of private sector, looking at value chain.

**Platform** to inform external stakeholders of what they can do to control safety.

**Tool** to help organizations understand what they know and don't know about their operations.





# DOMESTIC & INTERNATIONAL ALIGNMENT

















Source: AP





San Francisco Municipal Transportation Agency Youth Transportation Advisory Board

# VISION ZERO FOR YOUTH U.S.



Washington, DC Walk, Bike & Roll to School Day



Tennessee infrastructure project



Atlanta Students Advocating for Pedestrian Safety



Hawaii curb extension



Philadelphia youth bicycle advocacy network



Source: National Center for Safe Routes to School





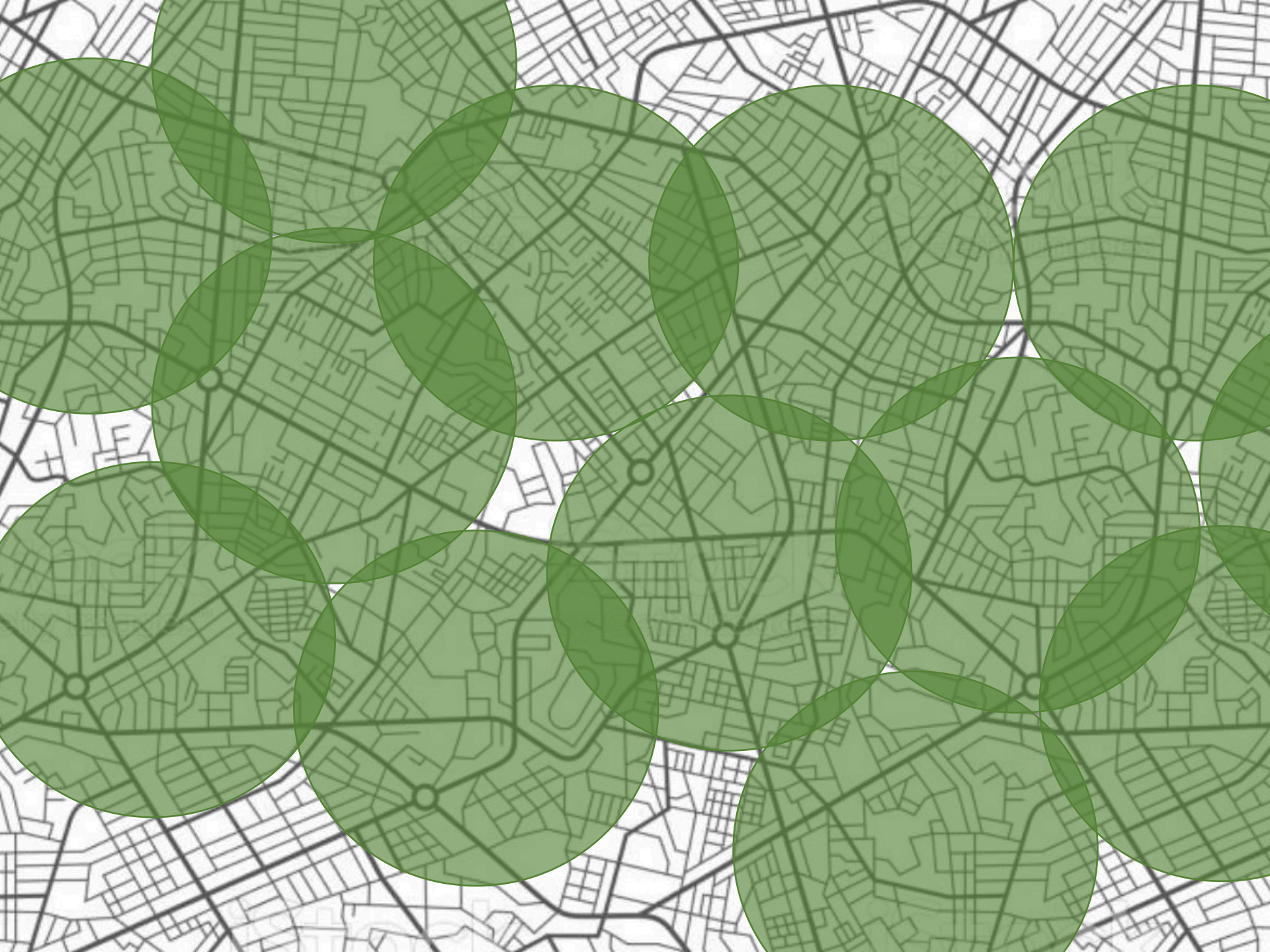
















Leadership in  
Video Zero for Youth  
presented to  
**Bill de Blasio**  
Mayor, New York City  
with the  
Support of the Youth Forum  
for the development of youth  
in public services for children  
2019







# APPLY FOR VISION ZERO FOR YOUTH LEADERSHIP AWARD



Open to U.S. cities, counties & tribal governments  
until **December 16, 2023**

[visionzeroforyouth.org/awards/US](https://visionzeroforyouth.org/awards/US)







## AWARD CRITERIA

- 20 mph
- Focus on school zones & nearby arterials
- Quick builds & school streets
- Link to equity & climate plans



A photograph of a city street scene. In the foreground, a man wearing a black helmet and a light blue t-shirt is riding an orange bicycle from left to right. In the middle ground, a young girl with blonde hair, wearing a pink helmet and a light pink long-sleeved shirt, is riding a small red bicycle with a wicker basket on the front. The background shows a dark blue car with a license plate that reads '12159' and other vehicles. To the right, there is a signpost with a red 'ENTER' sign and a white sign that says 'EXCEPT BICYCLES'. A blue utility box is also visible. The scene is set during the day with trees and foliage in the background.

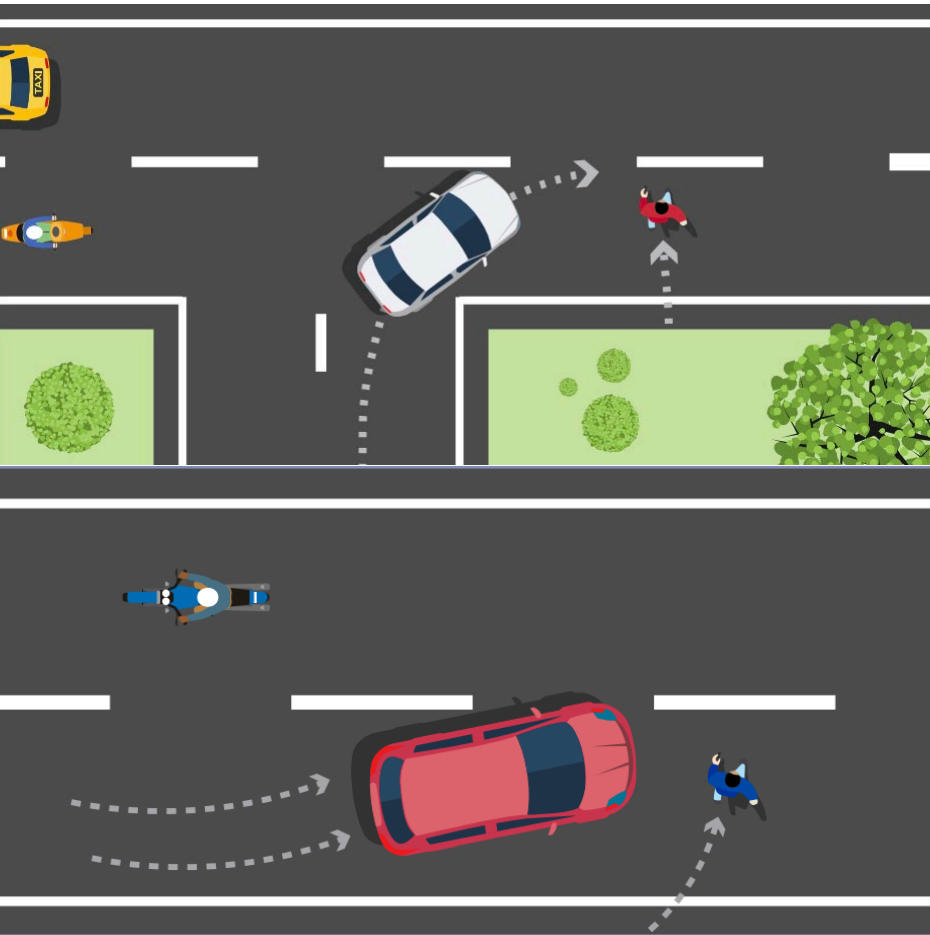
There can be no keener revelation of a society's soul than the way it treats its children.

-Nelson Mandela





# TRAFFIC CONFLICT TECHNIQUE TOOLKIT



- Free
- 5 methods based on your experience and resources
- 11 steps, 8 months
- Pre & post monitoring
- Includes data collection forms
- Video analysis optional





# Make Way for the Bike Bus

For the school commute, families are taking to the streets with two wheels. Some have termed the movement “kidical mass.”





**Megan Ramey** @BIKABOUT · May 10, 2020



Moms: the indicator species for a healthy city.

When you see Mom and child biking side-by-side and smiling or talking, this indicates a great bikeway.

[#HappyMothersDay](#)







BUMPS

AHEAD



Sam Balto



**Sam Balto**

@CoachBalto Follows you

PE teacher | Bike Bus/Walking School Bus Specialist | UrbanArrow Influencer  
Using Twitter to Improve Active Transportation for my Students

Portland, OR [linktr.ee/coachbalto](https://linktr.ee/coachbalto) Joined October 2014





Source: Transportation Alternatives and Open Plans





# SCHOOL STREETS: PUTTING CHILDREN AND THE PLANET FIRST

A POLITICAL ECONOMY ANALYSIS  
OF THE RISE OF SCHOOL STREETS IN  
EUROPE AND AROUND THE WORLD



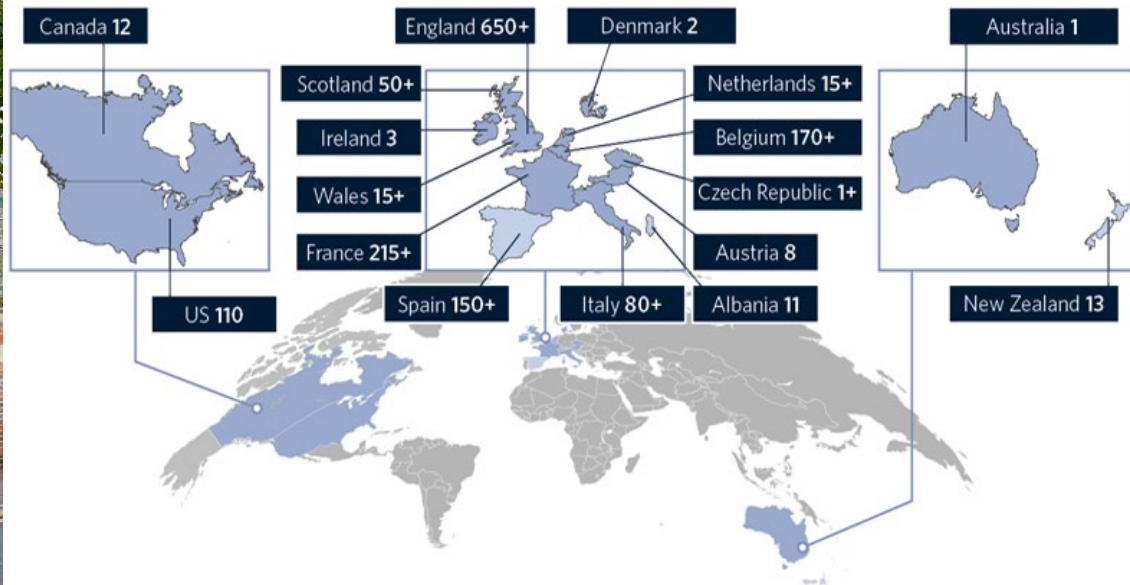
School



APRIL 2022

ADVOCACY HUB

# SCHOOL STREETS GLOBALLY



[childhealthinitiative.org/connect/publications/school-streets-putting-children-and-the-planet-first](https://childhealthinitiative.org/connect/publications/school-streets-putting-children-and-the-planet-first)





# RECAP

## 1. Ensure safe, sustainable fleet

- Global NCAP Fleet Safety Guide
- Buy electric. Include ISA, AEB, passive alcohol impairment technology

## 2. Improve organization safety

- FIA Road Safety Index

## 3. Get involved in community

- Vision Zero for Youth
- Traffic Conflict Technique Toolkit
- Bike & walk bus
- School streets





# Thank you

Natalie Draisin

North American Office Director & UN Representative

FIA Foundation

@Ndraisin





# **VISION ZERO**

## **Building a Safer City**

### **Panel 1: A Vision for Tomorrow**



**Geoff Rigg**

*President*

Dennis Eagle Inc., North  
America



**Jim Olson**

*Vice President of Safety*  
Republic Services



**Moderator:**

**Dr. Alex Epstein**  
*Safety and Sustainability*  
*Senior Engineer*  
U.S. DOT Volpe Center



**Sam Weller**

*Freight & Fleet Project*  
*Manager*  
Transport for London



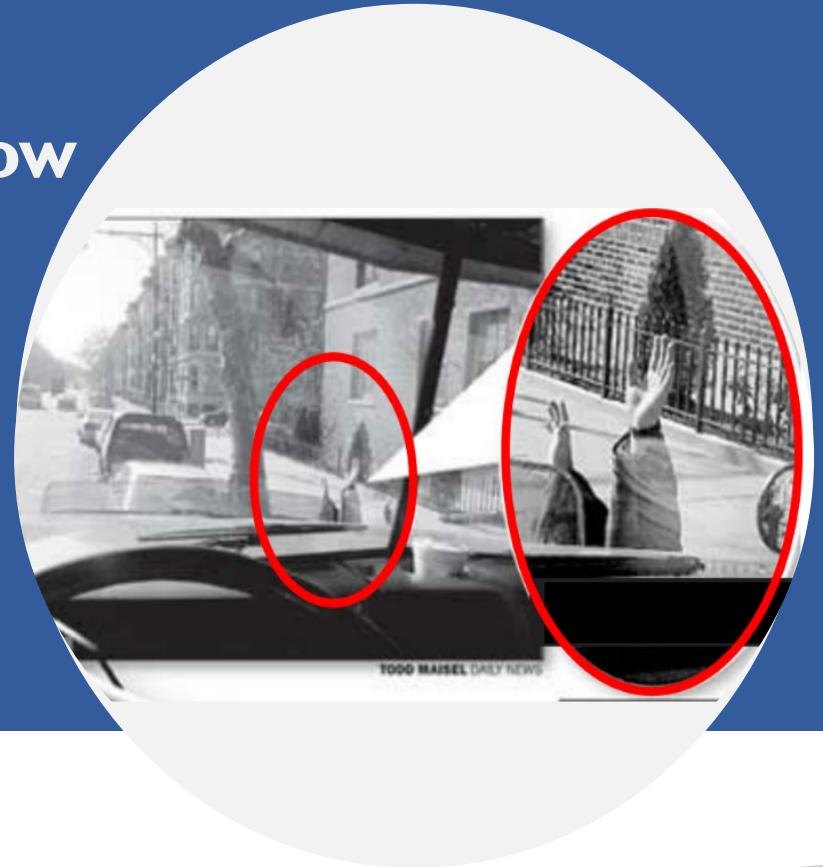
**Andrea Bach**

*Senior Solution Engineer*  
VisionTrack



# A (Direct) Vision for Tomorrow

November 2, 2023 | NYC Vision Zero Fleet Safety Forum



# Agenda

- The Blind Zone Problem
- Why Direct Vision Matters
- Who's Doing What About It
- Measuring Direct Vision
- The Panel



# The Blind Zone Problem



What are blind zones, direct vision, and indirect vision?

# WATCH OUT FOR BLIND ZONES

The risk of injury or death to vulnerable road users (VRUs) — pedestrians, pedalcyclists, and other non-vehicle occupants — has rapidly increased over the past 20 years.

Most pedestrian fatalities occur in the front of the vehicle.



U.S. Department  
of Transportation  
Federal Highway  
Administration



For More Information: FHWA Pedestrian & Bike Safety - <https://highways.dot.gov/safety/pedestrian-bicyclist>



**Direct vision**

**Indirect vision**

**Blind Zone**

Not just a  
problem with  
large trucks

# WATCH OUT FOR BLIND ZONES

The risk of injury or death to vulnerable road users (VRUs) — pedestrians, pedalcyclists, and other non-vehicle occupants — has rapidly increased over the past 20 years.

Most pedestrian fatalities occur  
in the front of the vehicle.



U.S. Department  
of Transportation  
Federal Highway  
Administration

For More Information: FHWA Pedestrian & Bike Safety - <https://highways.dot.gov/safety/pedestrian-bicyclist>



# Why Direct Vision Matters

# Scope of the problem

- **2nd leading cause of truck-pedestrian crashes, in over 1/3 of VRU-truck crashes** in the UK (Loughborough University);
- **25% of VRU-truck deaths** in the U.S. (UMTRI, 2006).
- NTSB recommended **addressing truck blind zones** to reduce VRU fatalities (2013)



>650                      >15,000  
Fatalities/yr              Injuries/yr

<https://deepblue.lib.umich.edu/handle/2027.42/83927>

<https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812515>

<https://www.iihs.org/news/detail/suvs-other-large-vehicles-often-hit-pedestrians-while-turning>

<https://www.consumerreports.org/car-safety/the-hidden-dangers-of-big-trucks/>

[https://rosap.ntl.bts.gov › dot › dot\\_20427\\_DS1](https://rosap.ntl.bts.gov › dot › dot_20427_DS1); <https://www.nts.gov/safety/safety-recs/reclatters/H-13-011-019.pdf> ;

<https://www.nts.gov/safety/safety-recs/reclatters/h-14-001-007.pdf>; <https://www.nts.gov/safety/safety-studies/Documents/SIR1803.pdf>

# Importance of direct vision at a crosswalk



Low  
Vision



High Vision





# Who is doing what about blind zones?

# Globally

- SUVs/Pickups/Cars
  - UN regulation 125 (“Forward field of vision”)
- Bus
  - APTA bus procurement guide
- Large truck
  - Transport for London Direct Vision Standard
  - UN Regulation 167 (“Commercial Vehicle Direct Vision”)



UNITED NATIONS



AMERICAN  
PUBLIC  
TRANSPORTATION  
ASSOCIATION



TRANSPORT  
FOR LONDON

# North America

- City of Boston
- City of New York
- Massachusetts DOT
- Quebec Bureau of Standardization
- Together for Safer Roads
- US DOT Volpe Center and OST-R
- Insurance Institute for Highway Safety
- National Safety Council Safer Vehicle Design Working Group





# The Panel

Geoff Rigg

Sam Weller

Andrea Bach

Jim Olson

*Dennis Eagle Inc. NA*

*Transport for London*

*VisionTrack*

*Republic Services*

# Thank you!

**USDOT Volpe Center blind zone team email:**

[blindzoneapp@dot.gov](mailto:blindzoneapp@dot.gov)

# **VISION ZERO**

## **Building a Safer City**

### **Panel 1: A Vision for Tomorrow**



**Geoff Rigg**

*President*

Dennis Eagle Inc., North  
America



**Jim Olson**

*Vice President of Safety*  
Republic Services



**Moderator:**

**Dr. Alex Epstein**  
*Safety and Sustainability*  
*Senior Engineer*  
U.S. DOT Volpe Center



**Sam Weller**

*Freight & Fleet Project*  
*Manager*

Transport for London



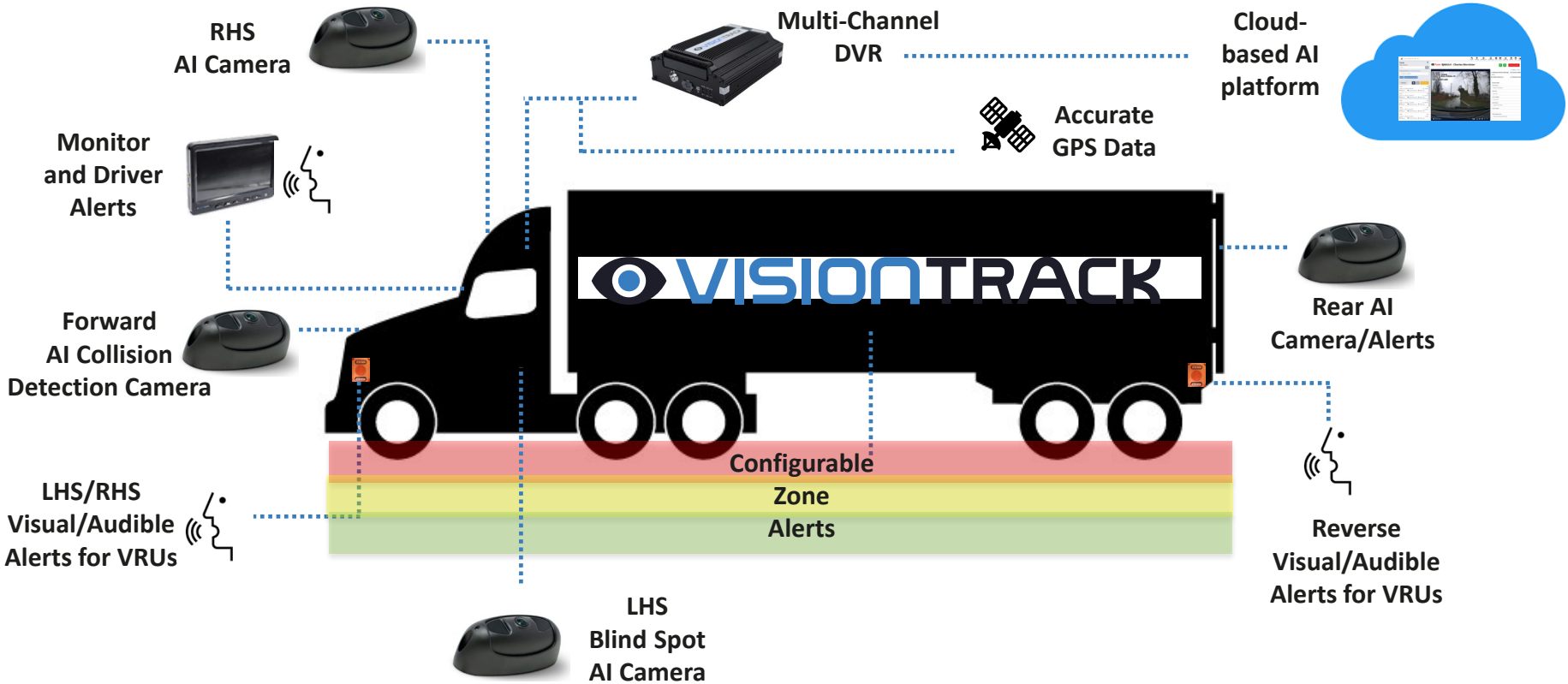
**Andrea Bach**

*Senior Solution Engineer*  
VisionTrack



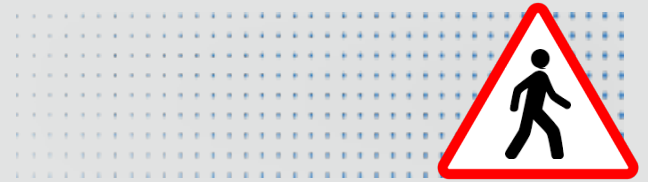


# Truck of the Future



# Vulnerable Road Users

Real-Time Pedestrian Alert





Alert – Pedestrian front

Alert – Pedestrian left/right

Alert – Pedestrian rear



Driver View





Alert – Pedestrian front

Alert – Pedestrian left/right

Alert – Pedestrian rear



VISIONTRACK

Driver View

# Vulnerable Road Users

Real-Time Motorbike Alert





Caution vehicle turning right

Caution vehicle turning left

Caution vehicle reversing



CAUTION

86

www.nyc.g

VRU View



# **VISION ZERO**

## **Building a Safer City**



**Matthew Daus**  
*President*

International Association of  
Transportation Regulators



**David Do**  
*Commissioner & Chair*  
NYC Taxi & Limousine  
Commission



**Building a Safer City**

**Panel 2: Braking the Culture of Speed**



**Jessica Cicchino, Ph.D.**  
*Vice President of Research*  
Insurance Institute for Highway  
Safety



**Moderator:**  
**Richard Simon**  
*Region 2 Administrator*  
NHTSA



**Mike McGinn**  
*Executive Director*  
America Walks



**Maxime Brault**  
*Director of Road Safety*  
Research  
SAAQ



**Julie Huntington**  
*Member & Policy Advocate*  
Families for Safe Streets



# IIHS activities on speed

## Vision Zero Fleet Safety Forum

November 2, 2023



**Jessica Cicchino**

VP Research, IIHS







## Vehicle-based approaches to preventing speeding: recommended strategies

- ▶ Promote ISA on privately-owned passenger vehicles
- ▶ Promote ISA and speed limiters to public and commercial fleets
- ▶ Promote ISA and speed limiters to high-risk groups
- ▶ Improve public acceptability of ISA
- ▶ Improve speed limit information quality
- ▶ Investigate benefits of current ISA systems on passenger vehicles





## Lowering urban speed limits reduces speeds and injury severity

Reducing the default speed limit from 30 mph to 25 mph...

- ▶ Lowered the odds that drivers in Boston exceeded 30 mph by 9% and 35 mph by 29%
- ▶ Reduced the risk of being injured in a crash on arterials in downtown Seattle by 20%

# Automated enforcement program checklist

Outlines best practices for establishing successful red light and speed safety camera programs with broad public support.



## AUTOMATED ENFORCEMENT PROGRAM CHECKLIST

For red light cameras and automated speed enforcement

Automated enforcement is an effective tool to make roads safer. Research shows that red light cameras reduce violations and injury crashes, especially the violent front-into-side crashes most associated with red light running. Speed cameras have been shown to reduce vehicle speeds, crashes, injuries and fatalities. Both types of programs should be designed, implemented and administered properly. Poorly run programs are less likely to be durable and may undermine support for automated enforcement generally.

Speed and red light camera programs augment traditional enforcement to improve traffic safety by deterring dangerous driving behaviors. Automated enforcement does not require traffic stops, and well-designed programs can improve safety for all road users in a neutral manner.

Successful programs are transparent and have a strong public information component. Communities should take into account racial and economic equity when making decisions about camera placement and fines. Automated enforcement programs should be data-driven and should prioritize safety, not revenue. In fact, communities should expect that revenue will decline over time as fewer drivers run red lights or violate speed limits.

This checklist assumes your community is already legally authorized to set up a program. It provides a minimum list of considerations to help you follow best practices. The goal is to operate a successful program that reduces crashes and prevents deaths and injuries while maintaining strong public support. Automated enforcement can be integrated into broader efforts to discourage unsafe driving that include optimizing speed limits for safety and improving roadway design.

### ✓ FIRST STEPS

- Identify problem intersections and roadways.
  - Assess violation and crash data.
  - Conduct field observations.
  - Collect resident and roadway user input.
- Consider what role automated enforcement should play as part of a comprehensive traffic safety strategy.
- Make any engineering or signage changes needed to improve drivers' compliance with the law.
  - Ensure the road geometry conforms with guidelines from the [American Association of State Highway and Transportation Officials](#), [National Association of City Transportation Officials](#) guidance or state road design manuals, as appropriate.
  - Remove sightline obstructions of signals and signage.
- For red light cameras:**
  - Ensure that yellow light timing conforms to the [Manual on Uniform Traffic Control Devices](#) and [Institute of Transportation Engineers](#) guidelines.
- For automated speed enforcement:**
  - Ensure the speed limit is appropriate and accounts for all road users. Follow guidance and use tools from the [Federal Highway Administration](#), [Institute of Transportation Engineers](#), and the [National Association of City Transportation Officials](#).
  - Ensure the speed limit is appropriate for special conditions, such as work zones and school zones.
  - Assess whether engineering changes could be made to promote compliance with the speed limit.
  - Ensure adequate posting of speed limits.
- Establish an advisory committee comprised of stakeholders.
  - Consider including law enforcement, transportation department employees, victim advocates, equity and civil rights advocates, school officials, community residents, first responders, health officials and the courts.
  - Outline the committee's role. This may include developing guiding principles related to safety, equity, and transparency, as well as other aspects of the program.
  - Ensure committee meetings are open to the public and deliberations are transparent.
- Meet with the media, including newspaper editorial boards, to build support and educate the public.




ADVOCATES  
FOR HIGHWAY  
& AUTO SAFETY










# Speed management pilot program

Maryland received \$100,000 in grant funding

Countermeasures include:

- Roadway improvements
- Increased speed enforcement
- Public outreach

Odds of exceeding the speed limit by > 10 mph reduced by 80%




Insurance Institute for Highway Safety  
Highway Loss Data Institute


[iihs.org](https://www.iihs.org)


 [/iihs.org](https://www.facebook.com/iihs.org)

 [@IIHS\\_autosafety](https://twitter.com/IIHS_autosafety)

 [@iihs\\_autosafety](https://www.instagram.com/iihs_autosafety)

 [IIHS](https://www.youtube.com/IIHS)

 [/company/iihs-hldi](https://www.linkedin.com/company/iihs-hldi)

 [@iihs\\_autosafety](https://www.tiktok.com/@iihs_autosafety)

**THANK YOU**



**Jessica Cicchino**

VP Research

[jcicchino@iihs.org](mailto:jcicchino@iihs.org)



# ***Braking* the culture of speed in the province of Quebec**

*Actions taken over the last three decades*

---

Maxime Brault

Road Safety Research Director, SAAQ

Société de l'assurance  
automobile

Québec 

Avec vous,  
au cœur de votre sécurité



# Speeding - What Have We Done

*Société de l'assurance  
automobile*

Québec 

# SAAQ - Mission and Mandates

**SAAQ: A public insurance governmental organization for people injured after a road crash in Quebec**

## **Mission:**

Protect individuals from the inherent risks of road use:

### **1. Protection**

- Promoting road safety through awareness campaigns to improve Quebec's road safety record

### **2. Control and Surveillance**

- Managing access to the road (same as DMV)
- Monitoring and controlling road transportation of persons and goods

### **3. Compensation and Rehabilitation**

- Compensates people who have been injured in road collisions and facilitates their rehabilitation
- Sets insurance contributions

**Société de l'assurance  
automobile**

**Québec** 

Avec vous,  
au cœur de votre sécurité

# Road Safety Research Team - Mandates

## Increasing road safety knowledge:

- Behavioural observation
- Roadside surveys
- Public opinion polls: reported behaviour, attitudes, opinions, and risk perceptions
- Statistical analysis of collision data, violations, and demerit points
- Research

## To help SAAQ develop evidence-based interventions

- Awareness campaigns
- Social marketing
- Programs, countermeasures, tools, and laws and regulations
- Strategies and partnerships



# Road Safety Benchmarking, 2021

	Norway	Sweden	Netherlands	Québec	Canada	New York State	USA
Fatalities	80	210	582	347	1,768	1,157	42,939
Fatality rate per 100 000 inhabitants	1.5	2.0	3.3	4.0	4.6	5.8	12.9
Population	5,408,320	10,452,326	17,475,415	8,602,335	38,226,498	19,587,492	332,031,554

Speeding is a causal factor of 30.8% of collisions that result in a fatality and 17.7% of all total injuries (2018-2022)

# Speed Actions in Quebec, 1990-2020

A theme of research and intervention for over 30 years:

1st step (1990s'): Speed is a strong social value, risks are not well known.

Actions are:

- Raising awareness about the risks of speeding
- Education about the physics of speed (braking distances, crash risks, severity vs impact speeds, and field of vision)
- Increase the credibility of speed limits
- Increase the perceived risks of being arrested

Société de l'assurance  
automobile

Québec 

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au cœur de votre sécurité

# Speed actions in Quebec 1990-2020

## A theme of research and intervention for more than 30 years:

2nd step (00s' and 10s'): People understand the risks, but don't care. Speeders are the problem.

### Actions are:

- Awareness Campaigns: speed is costly, encourage passengers to speak up, the faster you drive the greater the risks
- Work in partnership to share knowledge and best practices (road safety roundtable)
- Increase excessive speeding sanctions (40, 50 or 60 kph over the limit depending of the speed zone) : fines and demerit points doubled, immediate suspension of driver license and vehicle seizing. (2008)
- Photo-radar and red light cameras introduced (2009)
- Fines doubled for speeding in road work zones or school zones



# Speed actions in Quebec, 1990-2020

A theme of research and intervention for more than 30 years:

**3rd Step (20s'): Brake the social norm**

I'm driving 5-10 mph above posted speed limit, but I'm following the traffic, so it's fine

- The majority find it acceptable to slightly exceed the limit on rural roads (63%) or in the city (55%)
- 70% consider that exceeding speed limits by less than 10 km/h is completely acceptable

**Although:**

- 97% agree on the importance of respecting the posted speed limits
- 84% want people to drive slower in zones of 50 km/h or less
- A slight speeding violation is considered abnormal (54%) or serious and dangerous (50%) in a 30 km/h zone

**What respondents think of those who respect the speed limits:**

- 83% believe that drivers who respect the speed limit in zones of 50 km/h or less deserve respect
- 70% of drivers feel they are judged positively by others when they obey speed limits
- 51% somewhat or strongly agree that more and more drivers are following speed limits

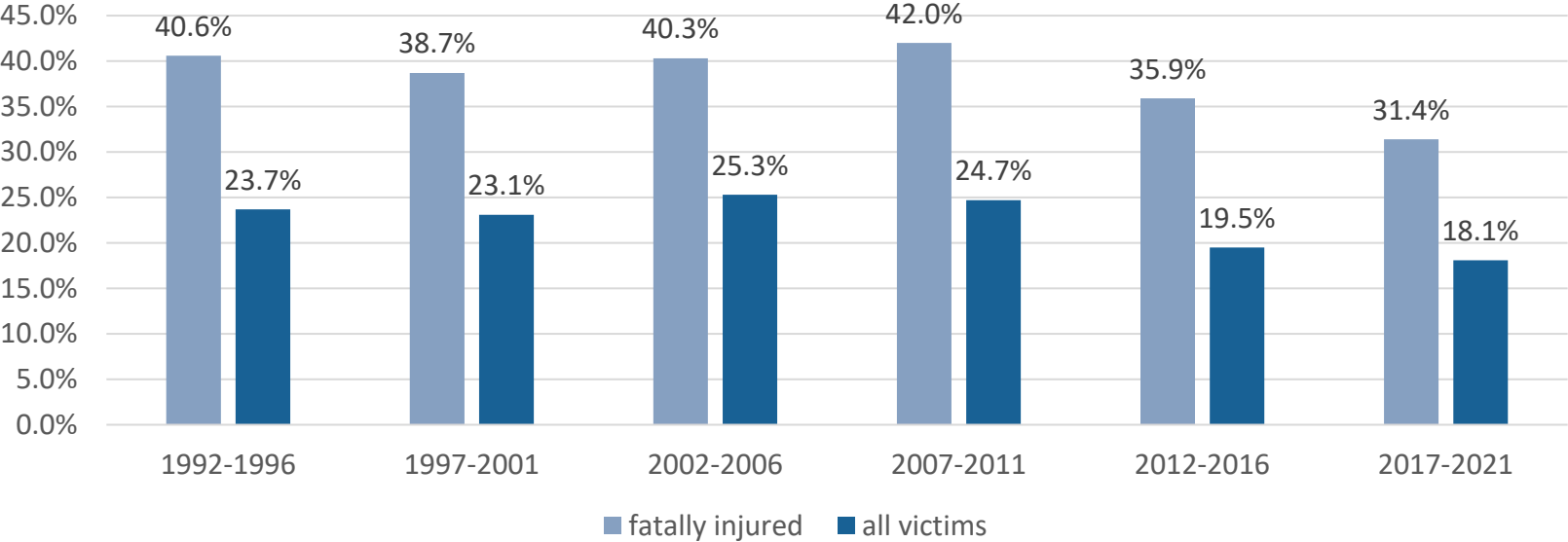
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automobile

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au cœur de votre sécurité

# Speeding Contribution Over the Years

Percentage of car collision injuries reported involving speed



# Speeding - What Needs to be Done

Société de l'assurance  
automobile

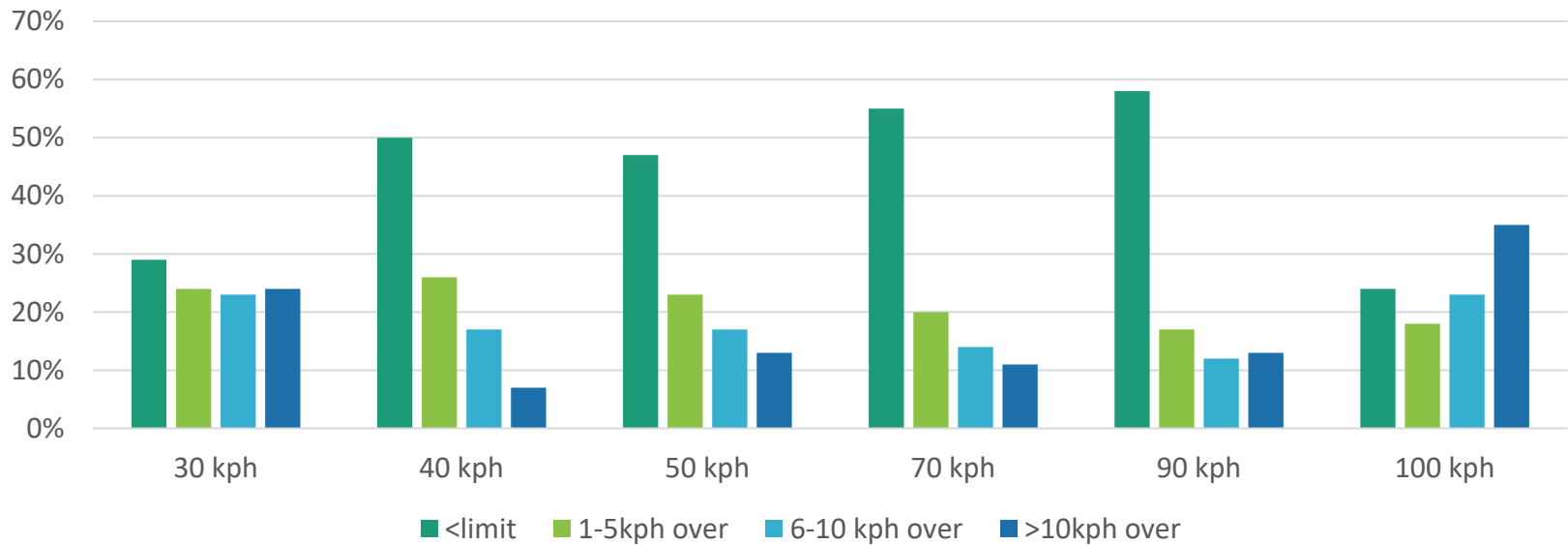
Québec 

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# Roadside Surveys on Traveling Speeds (2022)

Traveling Speeds Distribution



# Braking the social norm

## Denormalize speed:

### Speeding strategy 2021-2025 - SAAQ:

- Transformation of «slight speeding social norm» to support the idea that the constant quest for speed is tiresome, both on the road and in life
- Create a movement among road users that an increasing number of people disapprove of those who drive faster than the speed limit

### Approach:

- Change the perception among the population that minor speeding is commonplace
- Complement limited police action by adding an element of self-control:
  - “It's not so much the risk or not that my speed will result in a ticket that will make me slow down”
  - “It is the perception that my behavior is seen as a bit ‘silly’ by others”

# Braking the Social Norm

## Denormalize speed:

### Approach:

- Denormalization will serve to change the perception by gradually leading people to consider that exceeding the speed limit, even by a small margin, is not normal
- Associate the idea that "disconnecting from the need to go faster" is a growing trend, more and more popular in today's life

### How:

- Studies: margin of tolerance (police), road design (civil engineers), Deterrence theory (impact of very small fines for slight speeding)
- Awareness campaigns: Leave earlier, Let's respect speed limits
- Partnership with the public health sector and non-traditional partners (be part of the «slow-living movement»)



**Merci ! Thank you!**

For any questions: [maxime.brault@saaq.gouv.qc.ca](mailto:maxime.brault@saaq.gouv.qc.ca)

*Société de l'assurance  
automobile*

Québec 



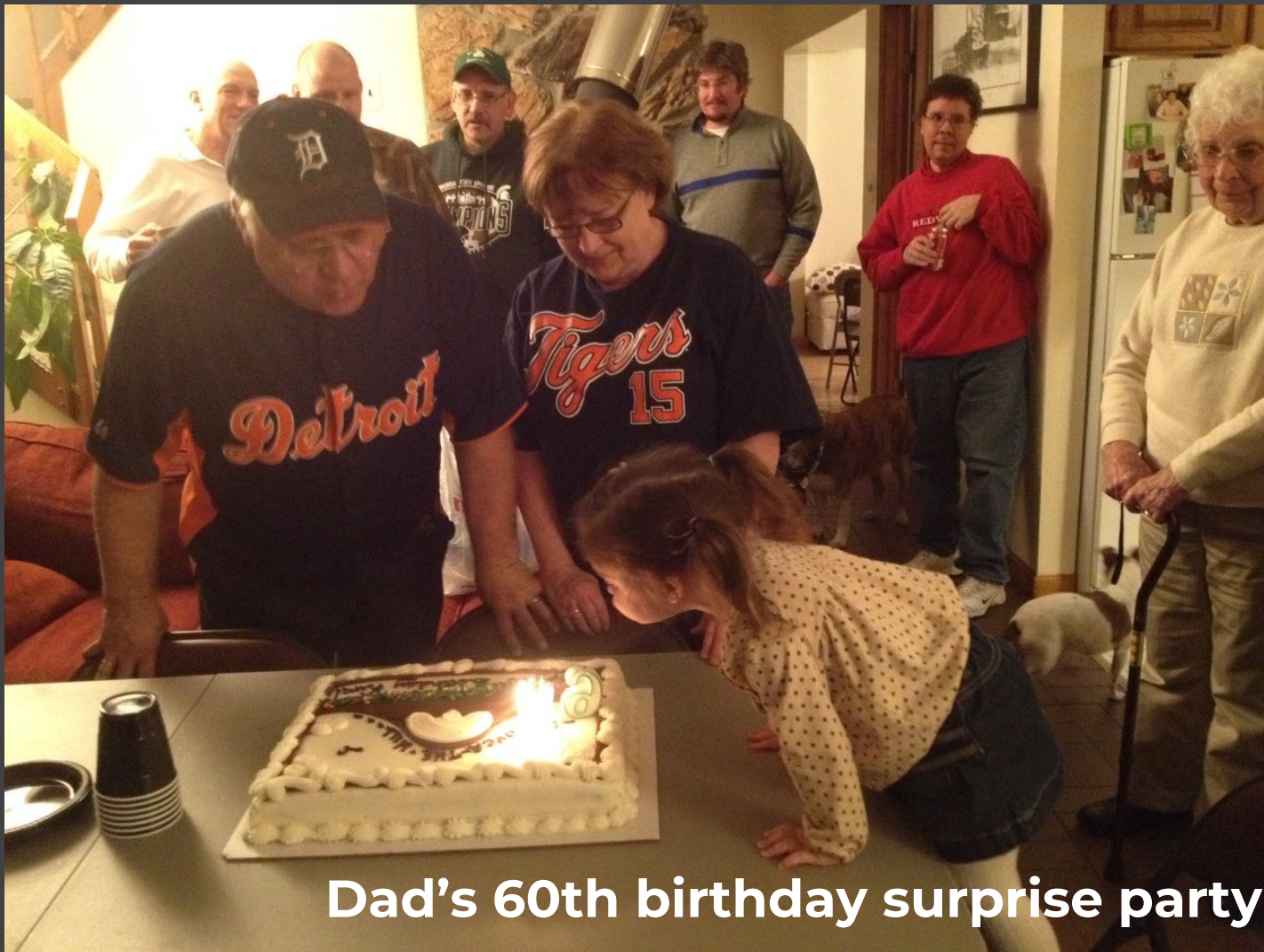
# Victim-Survivor Advocacy

Putting Pain to Purpose with  
Families for Safe Streets



**Julie Huntington,**  
Co-Chair FSS Policy & Advocacy Committee NYC

November 2, 2023



**Dad's 60th birthday surprise party**



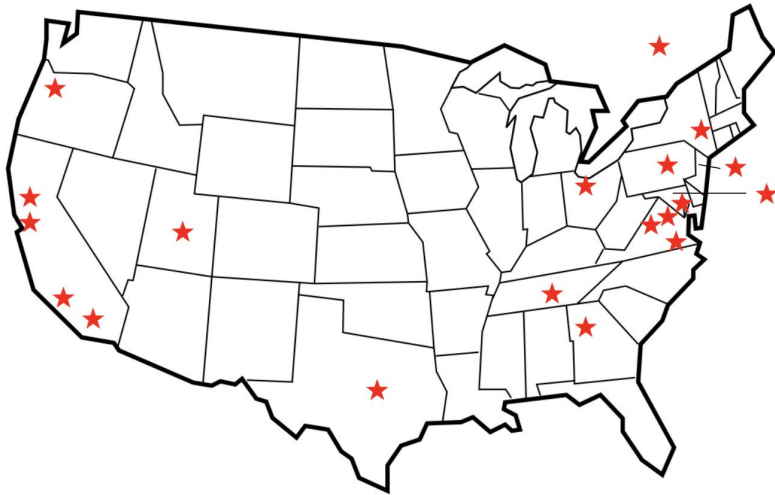
# FAMILIES FOR SAFE STREETS



Photo: Scott Heins



# FSS CHAPTERS



Alexandria, Virginia

Arlington County, Virginia

Atlanta, Georgia

Central Texas

Fairfax County, Virginia

Montgomery County, Maryland

Nashville, Tennessee

New York, New York

New Jersey

Northeast Ohio

Oregon and Southwest Washington

Philadelphia, Pennsylvania

Richmond, Virginia

San Diego, California

San Francisco Bay Area, California

San Jose, California

Southern California

Toronto, Canada

Utah

Washington, DC



# FAMILIES FOR SAFE STREETS (FSS)

Families for Safe Streets confronts the preventable epidemic of traffic injuries and deaths through advocacy and support.

FSS is comprised of individuals who have lost loved ones, been injured, or care for someone who was, in traffic violence.

## SUPPORT SERVICES

- Resource Guide
- Peer Mentoring
- Support Communities
- Referral Guidance

Learn more at [familiesforsafestreeets.org](https://familiesforsafestreeets.org)

**WON 25 MPH SPEED LIMIT**

**NATION'S LARGEST SPEED CAMERA PROGRAM**

**PASSED NYC STREETS PLAN**

**DANGEROUS VEHICLES ABATEMENT PROGRAM**





# NEW FSS INITIATIVE: NYS ISA for Repeat Offenders Bill

LOCAL NEWS >

**New York lawmakers pitch installing speed limiters on cars of chronic traffic offenders**



☰ CBS NEW YORK

**FOX 5**  
NEW YORK

Transit

**State lawmakers unveil bill to put speed limiting devices in reckless drivers' cars**

JUSTICE AND PUBLIC SAFETY

**New York Lawmakers Want to Mandate Devices to Slow Speeders**

**New York Bill Aims to Place Speed Limiters in Cars With Too Many Speed Camera Tickets**



**gt**

government  
technology

Drivers who have received multiple speed-camera violations would be ordered to install aftermarket speed limiters on their vehicles under a state bill proposed Tuesday by two legislators.



**Tree planting  
Memorial Grove for Victims of Traffic Violence**



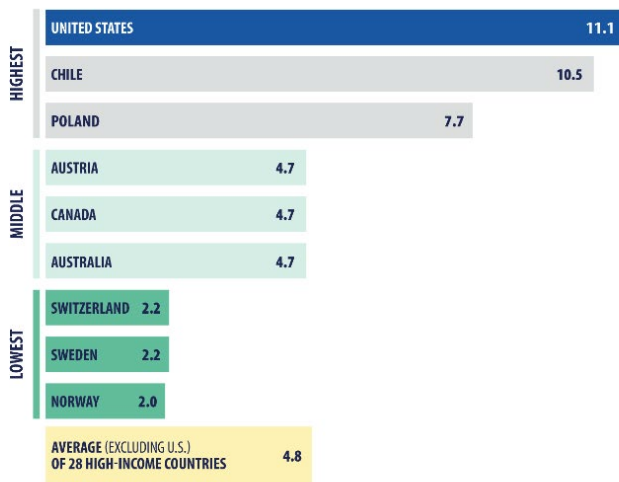
The United States had the **highest motor vehicle crash death rate\*** compared with 28 other high-income countries.

\*Population-based death rates; deaths per 100,000 people in 2019

[www.cdc.gov](http://www.cdc.gov)

[bit.ly/mm7126a1](https://bit.ly/mm7126a1)

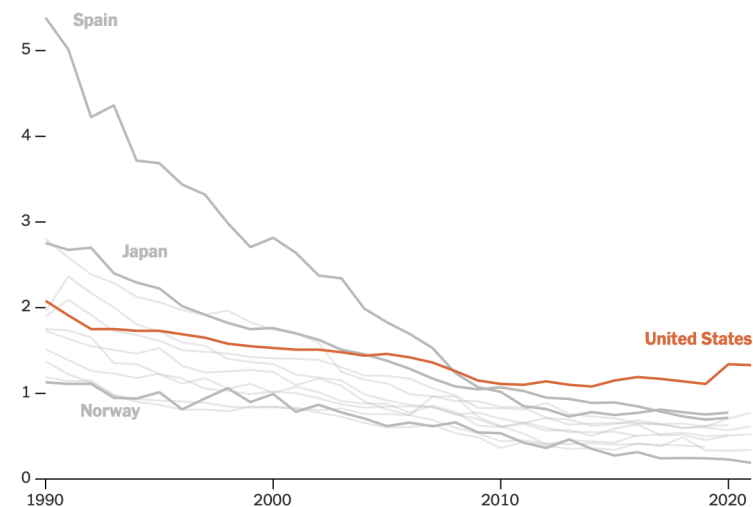
### Crash death rates\* in high-income countries



### America is becoming more of an outlier when it comes to road safety

Annual road fatalities adjusted for distance traveled, including those in motor vehicles as well as pedestrians and cyclists.

DEATHS PER 100 MILLION MILES TRAVELED



Source: O.E.C.D., National Highway Traffic Safety Administration • Note: Comparison countries selected from a [list of peer countries](#) based on comparable income levels. Some countries were excluded because of missing data.



# SAFE VEHICLES

## BIGGER VEHICLES = MORE PEOPLE KILLED

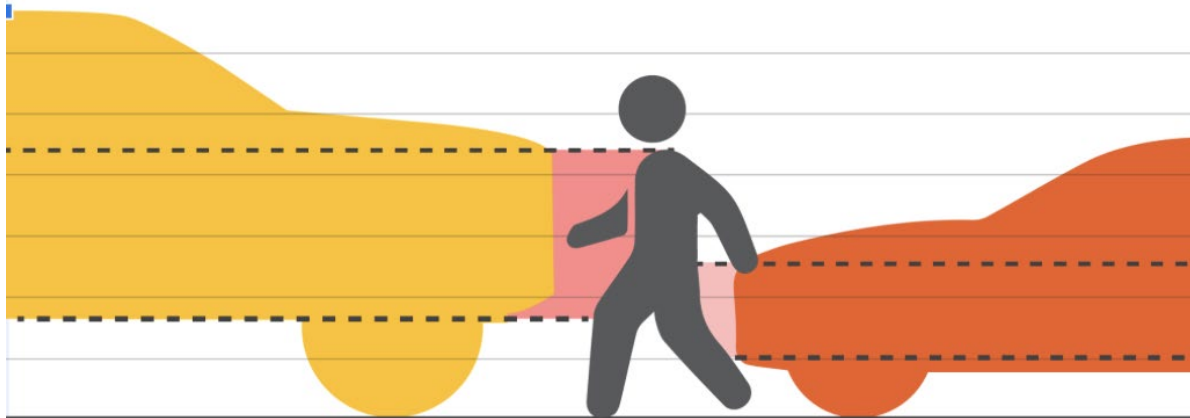
Automakers build bigger vehicles every year. Taller front-ends increase likelihood of head or chest impact and of falling under the vehicle instead of on the hood. Plus, more power required to power larger vehicles means a harder strike.

It doesn't have to be this way. In Japan and Europe, government regulations force automakers to make vehicles safe in shape and size. Fatalities are in decline there while on the rise in the U.S.

Ford F-Series 6'9"

Avg American 5'7"

Sedan 4'8"



# SAFE SYSTEM APPROACH



## Traditional approach

Prevent crashes



## Safe System approach

Prevent death and serious injuries

Improve human behavior



Design for human mistakes/limitations

Control speeding



Reduce system kinetic energy

Individuals are responsible



Share responsibility

React based on crash history



Proactively identify and address risks



# TRAFFIC CRASHES ARE PREVENTABLE

**CRASH**  
~~ACCIDENT~~

[crashnotaccident.com](http://crashnotaccident.com)





# Contact Information



[www.familiesforsafestreeets.org](http://www.familiesforsafestreeets.org)  
[info@familiesforsafestreeets.org](mailto:info@familiesforsafestreeets.org)  
(844) 377-7337



# Workshops:

## The Cabaret Room

The Power of Procurement

## The Studio Room

Storytelling for Change

## Main Theatre

Right Size Then Electrify

**VISION ZERO**   
**Building a Safer City**



# Closing Remarks

Main Theatre – 3PM



**Sam Stephens**

*Executive Director*

AB InBev Foundation

**VISION ZERO**   
**Building a Safer City**

