

2024 Vision Zero Fleet Safety Forum

VISION ZERO 
Building a Safer City





Peter Goldwasser
Executive Director
Together for Safer Roads



2024 Vision Zero Fleet Safety Forum

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Louis A. Molina
Commissioner

Department of Citywide Administrative Services



2024 Vision Zero Fleet Safety Forum

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Building a Safer City





Keith T. Kerman

Deputy Commissioner & Chief Fleet Officer

Department of Citywide Administrative Services



NYC Fleet



Improving Fleet Safety Through Technology and Compliance

NYC Fleet

Presentation to the 9th Vision Zero Fleet Safety Forum

Keith T. Kerman
NYC Chief Fleet Officer
Deputy Commissioner, DCAS
October 30, 2024

Tragedies on Our Roads

Outraged Parents Call for Safe Streets After Death of Kamari Hughes

Driver in city DEP truck fatally strikes woman, 42, in Queens

On-duty NYC Department of Environmental Protection worker killed in crash with Mercedes: cops

Bronx grandma, 73, fatally struck by school bus in Queens, cops say

Dump truck in fatal Brooklyn crash same one that killed NYPD crossing guard last year

Elderly woman hit, killed by truck in Brooklyn: NYPD

NEWS > NEW YORK NEWS

NYC Sanitation worker dies in accident at Queens yard

Police: Motorcyclist killed following collision with ambulance on Pelham Parkway

METRO

Pedestrian, 86, decapitated when he's hit by city truck in Brooklyn

Mayoral Executive Order Announcement

TRUCKS

Safety First: Mayor Adams Requires In-Vehicle Tech for City Contractors

City contractors are going to have to make their biggest trucks safer. And city employees will have to take a safety course. It's all part of an executive order landing today.

6:55 AM EST on February 15, 2024



File photo: Dave Colon | Mayor Adams hopes to rein in the dangers of some trucks with a new executive order. Pictured, a truck whose driver killed a cyclist on Parkside Avenue in 2022.

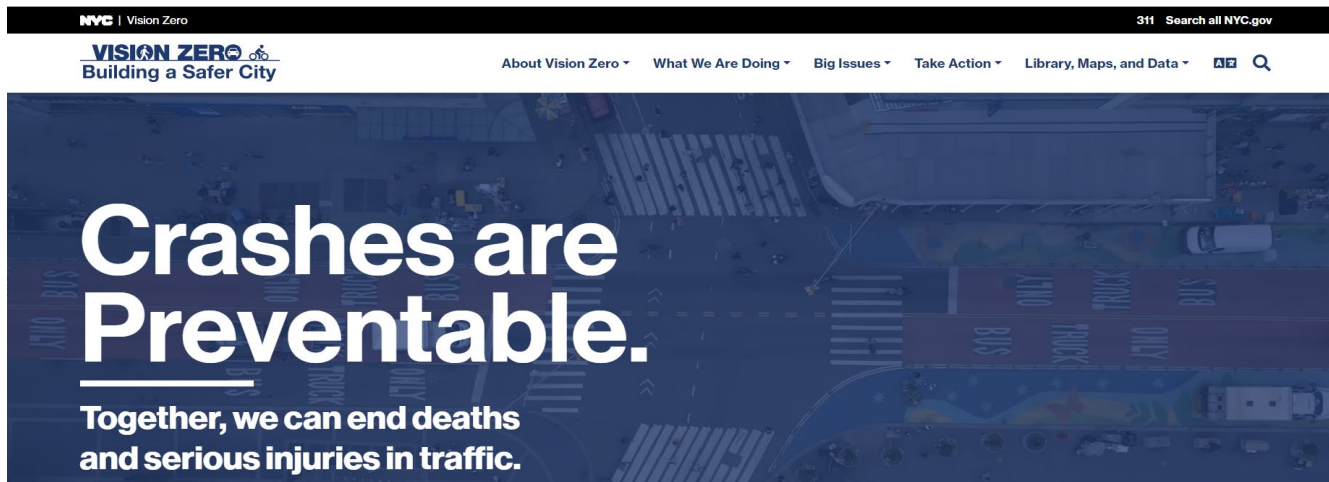
[HERE](#)

 By Gersh Kuntzman



Executive Order 39 of 2024

Whether in-house or contracted, fleet operations funded by the City must implement this program of fleet safety.



[HERE](#)

Contractor Fleet Safety Plan: Due Diligence



Contractor Safety Plan

Per Safety Requirement for City Contractors, NYC Mayoral Executive Order 39 of 2024



Training and Due Diligence

- Vehicle List:** List of vehicles (year, make, model, VIN, license plate) that the Contractor anticipates using in performance of the contract including sub-[contractors](#)
- Drivers List:** List of driver names, license types including required endorsements, and affirmation that each driver has been enrolled in the New York State License Notification System (LENS) or that out of state licensees are being monitored. Contractor must notify contracting agency of any license suspensions and/or arrests tied to unsafe or illegal vehicle operation by drivers of City contracted [vehicles](#)
- Safety Training:** Plans to ensure all drivers have taken a New York State approved defensive driving class within six months of contract commencement or certificates to verify previous attendance within 3 years; or proposed alternative safety training plan.
- Crash Tracking:** Contractor's process to monitor and review collisions including plans to notify contracting agency of collisions that take place while performing services under the city [contract](#)
- Corrective Action:** Corrective action program for drivers who engage in unsafe or dangerous driving behaviors

Contractor Fleet Safety Plan: Technology

Technology

- Truck Side-Guards:** Contractor's indication of which trucks are subject to Local Law 108 of 2021 requiring truck side-guards and plans to comply with the Local Law. Contractor must confirm to the contracting agency and DCAS that side-guards have been installed as required by the Local Law and the public rules for Local Law 108 [implementation](#)
- High Vision Trucks and/or Truck Surround Cameras:** Contractor's indication of which trucks are designed as high vision trucks in accordance with the Executive Order. For all others, Contractor's plan to install truck surround cameras in compliance with the timetables set out in the Executive Order. Pictures and measurements for high vision designed trucks to satisfy the order requirements. Pictures and camera model information to confirm installation of truck surround cameras
- Telematics:** Contractor's confirmation that all vehicles used for the performance of City contracted services are installed with telematics that track at minimum location and speed. Include the model of telematics system being used. Each agency will develop a plan with each contractor to confirm implementation of telematics and/or share the location and speed data tied to City contracted work [during the course of the contract](#).



Additional Safety Measures

- Any additional safety technologies being utilized for impact [vehicles](#)
- Any additional safety practices, training, or other procedures

High Vision Design for Trucks



- Together for Safer Roads Unveils “Direct Vision Transition Guide: An Operator’s Guide to Transforming Fleets for Safety” - Waste Advantage Magazine
- Fleet’s newest higher vision electric box truck

Truck Surround Cameras, DOT Federal Grant

STREETSBLOG NYC

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

City Shows Off Trucks and Buses With Surround-View Cameras

By Filifi Frimpong | Jun 12, 2021 | 4 COMMENTS



On September 5, 2024, US DOT [announced](#) national investments in the Safe Streets and Roads for All program. In February 2024, Mayor Adams signed [Executive Order 39](#) to improve fleet and truck safety for both City fleet and contractors. A key aspect of this initiative is to address visual obstructions for drivers through high vision trucks, surround cameras, or both. Under the new federal grant award, DCAS will be able to retrofit surround camera technology to 600 additional trucks from Sanitation, Parks, DEP, DOT and other agencies. DCAS discussed the benefits of this technology in this ABC news [piece](#). The grant will increase the number of City trucks with this life saving technology by over 30%.



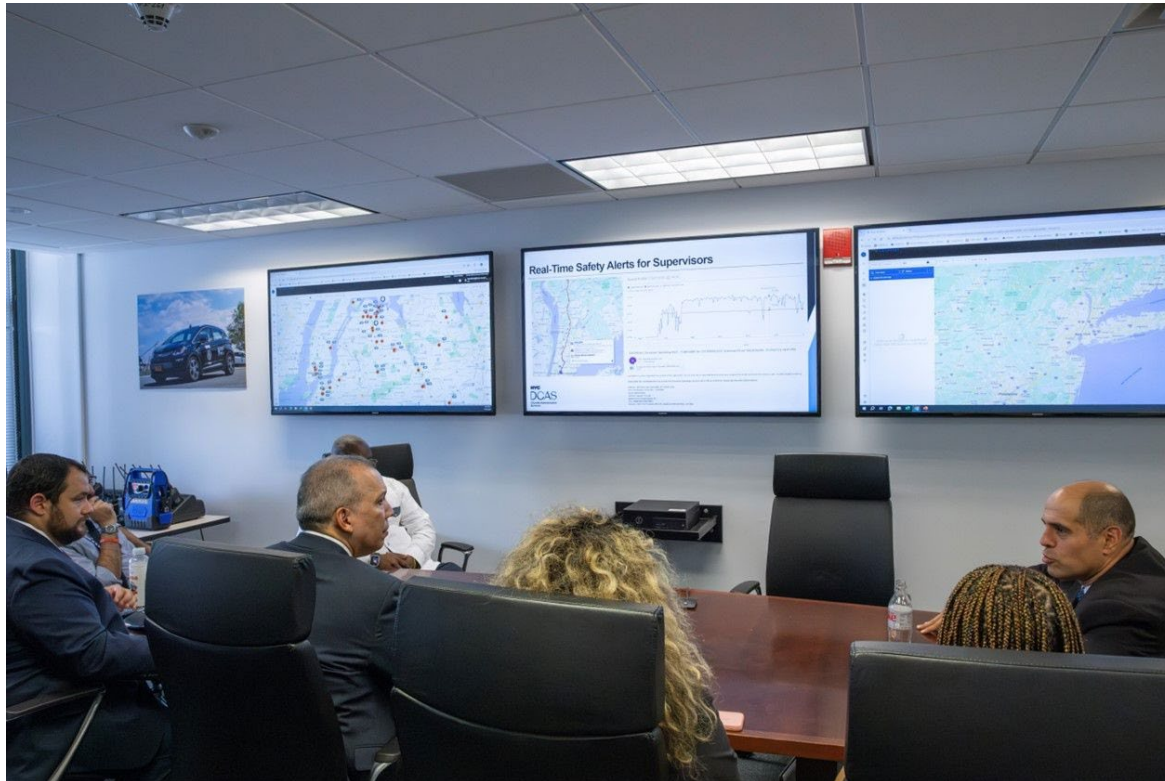
Sammy's Law, Reduced Speed Limits



gothamist.com/news/nycs-lower-speed-limits-take-effect-in-some-areas-after-passage-of-sammys-law

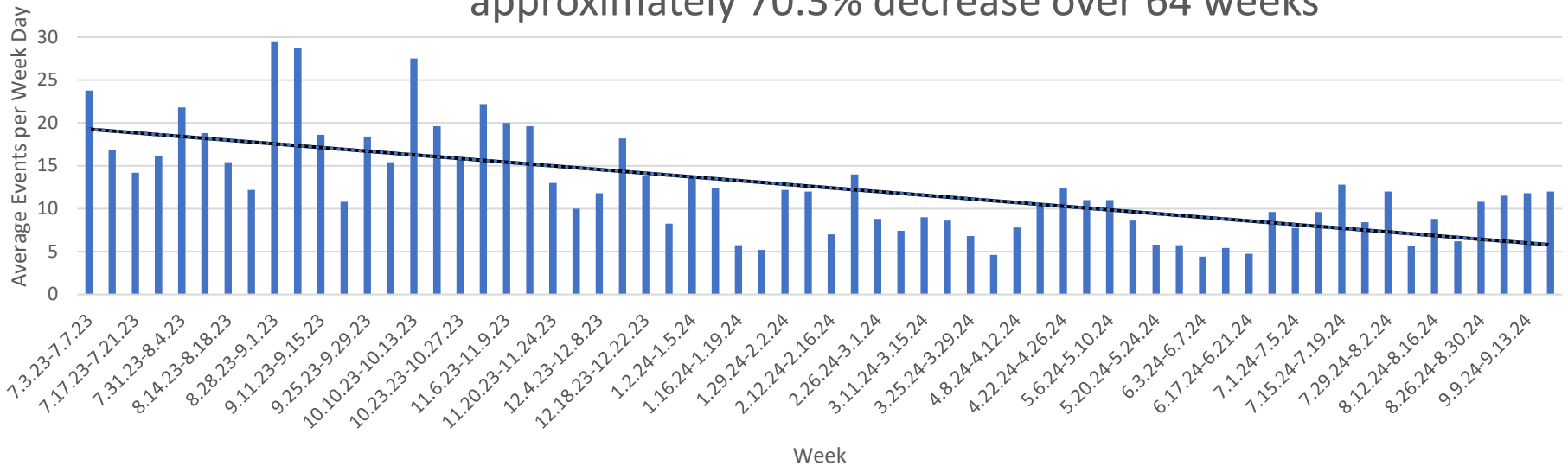


Fleet Office of Real Time Tracking (FORT)



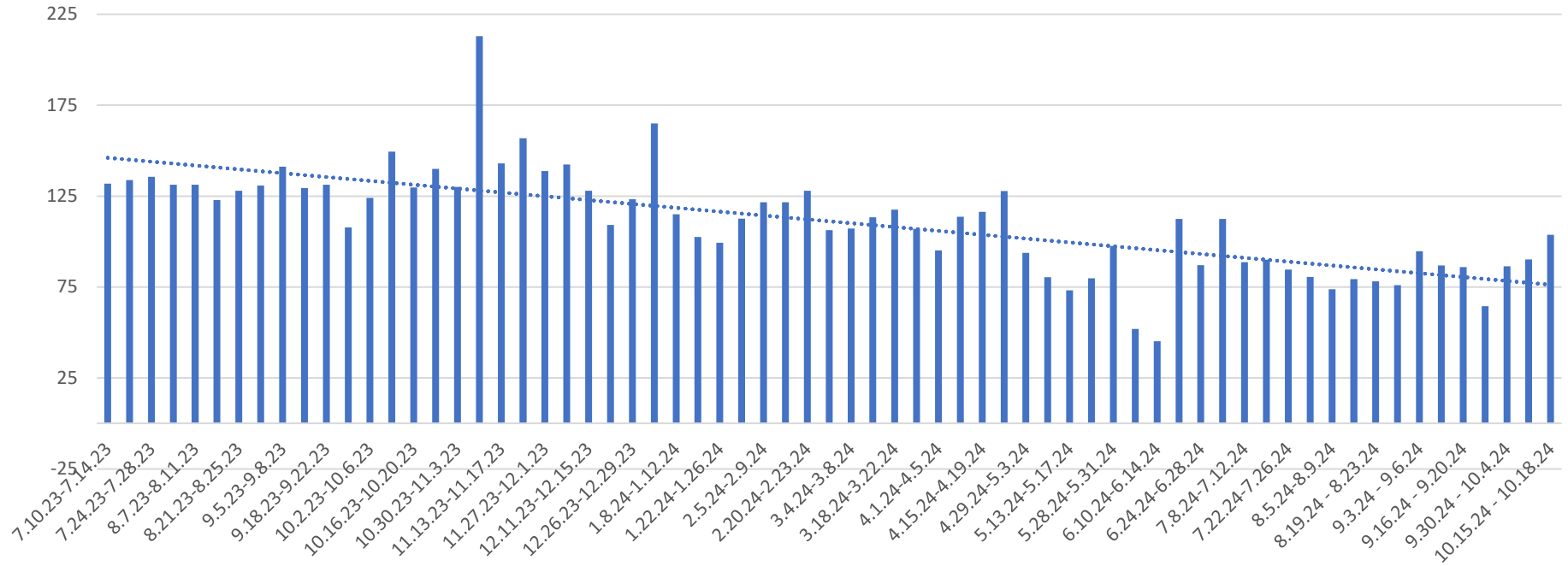
Reducing Excessive Speeding

NYC Fleet; Week-by-week trend of Excessive Speeding Citywide
(17900 vehicles)
approximately 70.3% decrease over 64 weeks



Reducing High Risk Driving

NYC Fleet: Weekly trend of High Risk & Medium Risk Vehicles
Decrease of 48% in the count of High & Medium Risk units over a 67-week period.
Lowest Risk Driving also up 21%



Fleet Safety, Mayor's Management Report (MMR)

VEHICLE FLEETS AND MAINTENANCE (Mayor's Management Report, MMR)				
	Actual	Actual		Change
INDICATORS	FY22	FY23	FY24	FY22 to FY24
Preventable collisions in City vehicles	2,861	2,584	2,400	-16%
Employees trained in defensive driving	7,999	7,054	11,552	44%
Authorized City drivers trained in defensive driving (%)	90%	89%	100%	11%

Update on Intelligent Speed Assistance (ISA)

- 500 City Vehicles now use ISA across 19 agencies and 23 vehicles types.
- NYC Fleet vehicles have travelled over 2.5 Million Miles on ISA to date.
- DCAS was awarded a Federal grant to retrofit an additional 1600 vehicles

ISA By Vehicle Class		
Agency	Vehicles	Percent
Light Duty	345	69%
Medium Duty	82	16%
Heavy Duty	73	15%
Total	500	-

ISA By Fleet Agency	
Agency	Vehicles
ACS	11
BIC	2
DCAS	4
DEP	110
DHS	45
DOB	15
DOC	6
DOE	3
DOH	11
DOT	35
DPAR	47
DSNY	39
HPD	9
HRA	1
NYCFS	92
NYCSBUS	50
OCME	10
PROB	7
TLC	3
Total	500

ISA By Vehicle Type	
Agency	Vehicles
Aerial Lift	1
Attenuator Truck	1
Box Truck	3
Bus (Corrections)	1
Collection Truck	4
Container Truck	1
Crossover	8
Dump Truck	3
Dump truck	1
Electric	1
Graffiti Truck	1
Load Lugging	1
Minivan	3
Pickup	60
Rack Truck	1
School Bus	50
Sedan	261
SUV	46
Tractor Trailer	1
Utility Truck	2
Van	47
Water Truck	1
Welding Truck	2
Grand Total	500

ISA for Most At Risk Vehicles

DCAS: ISA for Most At-Risk Vehicles, By Agency						
Agency	Tier 1: Speeding camera tickets and Excessive speeding alerts	Tier 2: 3+ tickets in past 18 months and 10+ tickets since 2021	Tier 3: 3+ speeding tickets in last 18 month	Tier 4: 10+ tickets since 2021, but none in past 18 months	Tier 5: High count of Geotab speeding alerts	Total
ACS					7	7
DCAS					1	1
DEP	4		6	1	20	31
DHS		1	1		1	3
DOB				9	6	15
DOE			2		1	3
DOH	1	1	6	1	2	11
DOT					14	14
DPAR	1	1	22		2	26
DSNY				3	20	23
HPD				1	5	6
HRA					1	1
OCME					10	10
PROB					7	7
Total	6	3	37	15	97	158

DCAS: ISA for Most At-Risk Vehicles, By Vehicle Type						
Vehicle Type	Tier 1: Speeding camera tickets and Excessive speeding alerts	Tier 2: 3+ tickets in past 18 months and 10+ tickets since 2021	Tier 3: 3+ speeding tickets in last 18 month	Tier 4: 10+ tickets since 2021, but none in past 18 months	Tier 5: High count of Geotab speeding alerts	Total
Container Truck					1	1
Crossover			1		6	7
Dump Truck					2	2
Dump truck					1	1
Graffiti Truck			1			1
Minivan					2	2
Pickup	6		11		10	27
Sedan		2	14	9	38	63
SUV			2	6	27	35
Van		1	6		10	17
Van			1			1
Water Truck			1			1
Total	6	3	37	15	97	158

ISA Assessment Report with US DOT Volpe

New York City Intelligent Speed Assistance Pilot Evaluation

Analysis and Findings

U.S. DOT Volpe Center: Alyssa Brodeur, Juwon Drake, Alexander Epstein, Sarah Yahooodik
NYC DCAS: Tomomi Landsman



Image: <https://nyc.gov/intelligent-speed-assistance-specifications-officially-published/>

Fall 2024

DOT-VNTSC-NYC-24-02

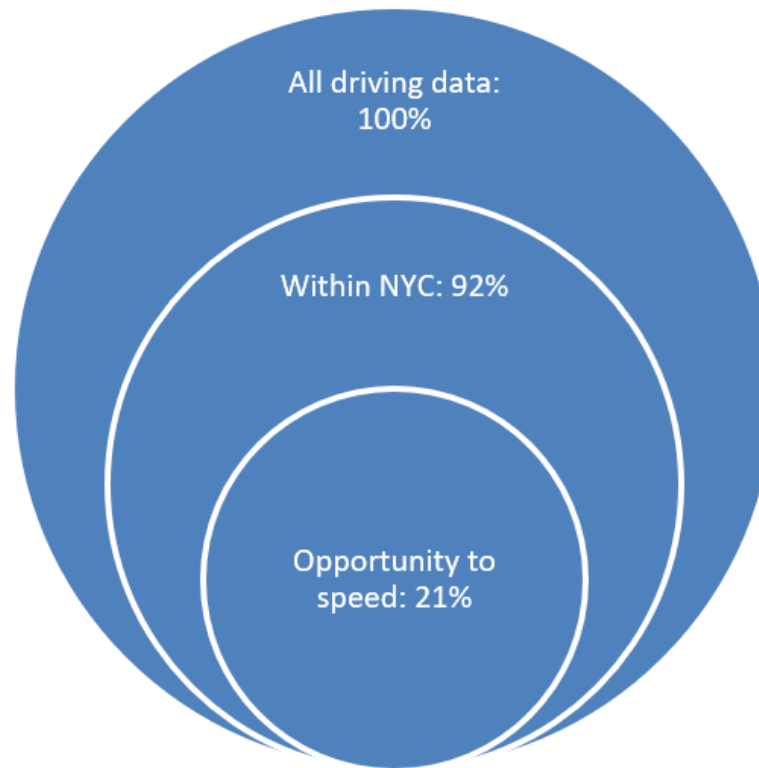
Prepared for:
Department of Citywide Administrative Services
City of New York

NYC DCAS
Citywide Administrative Services

U.S. Department of Transportation
Volpe Center

NYC
DCAS
Citywide Administrative
Services

Opportunity to Speed



Analysis used 51 million records across 894,983 miles driven

ISA Control Group Study with US DOT Volpe

	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph
Pre-ISA Control (No ISA)	0.65%	2.36%	10.21%	10.20%	5.13%	5.66%
Post-ISA Control (No ISA)	0.68%	2.36%	9.49%	10.89%	5.31%	6.55%
Speeding Relative Change Control (No ISA)	4.77% increase	0.18% increase	7.09% decrease	6.76% increase	3.49% increase	15.77% increase
	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph
Pre-ISA ISA-enabled (No ISA)	0.70%	3.47%	13.56%	9.09%	4.29%	5.38%
Post-ISA ISA-enabled (with ISA)	0.35%	1.58%	4.86%	4.20%	0.98%	0.98%
Speeding Relative Change ISA-enabled (with ISA)	49.65% decrease	54.59% decrease	64.14% decrease	53.79% decrease	77.19% decrease	81.85% decrease

ISA: Greater Impacts on Worse Drivers

ISA 50% worst	ISA 50% best	Habitual speeders 50% worst	Habitual speeders 50% best
94.8% improvement	76.7% improvement	96.7% improvement	67.2% improvement
109 out of 115 vehicles	89 out of 116 vehicles	59 out of 61 vehicles	41 out of 61 vehicles

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 Epstin, Ph.D., Sean Petrus, Andrew Breck, Coralee Cooper, and Eran Segur



December 2014
DOT-WNTSC-DCAS-14-05

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



[HERE](#)

Launching the Safe Fleet Transition Plan

Technology and Process Recommendations

Margo Downs and Alexander K Epstin, Ph.D.



May 2017
DOT-WNTSC-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 Epstin, Ph.D. and Rebecca Krass



November 2018
DOT-WNTSC-DCAS-18-05
Prepared for:
Department of Citywide Administrative Services
City of New York



[HERE](#)

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 Epstin, Ph.D., Michael Chang, Lucy Liu, and Rob Patel



December 2021

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



[HERE](#)

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

Andrew Breck, Ali Broderick, Alexander Epstin, Ph.D., Elkar Lai, Ahmad Nasser, Lily Slonim, Sarah Yaboodik, Hayden Smith, and Brian Xu



Photo credit: Volpe

November 2023
DOT-WNTSC-NYDCAS-23-01

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



Clean Fleet Transition Plan

NYC Department of Citywide Administrative Services (DCAS) Fleet

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

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



Fall 2022
DOT-WNTSC-DCAS-22-01

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



[HERE](#)

Partnering with TSR to improve Seatbelt Use

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

Data Driven Management for Fleet Safety

ANALYTICS

Data-Driven Fleet Management Improves Safety in New York City

An executive order requiring telematics for NYC's fleet vehicles enabled better monitoring of driver habits like speed and seatbelt use, reducing crashes and improving safety citywide.

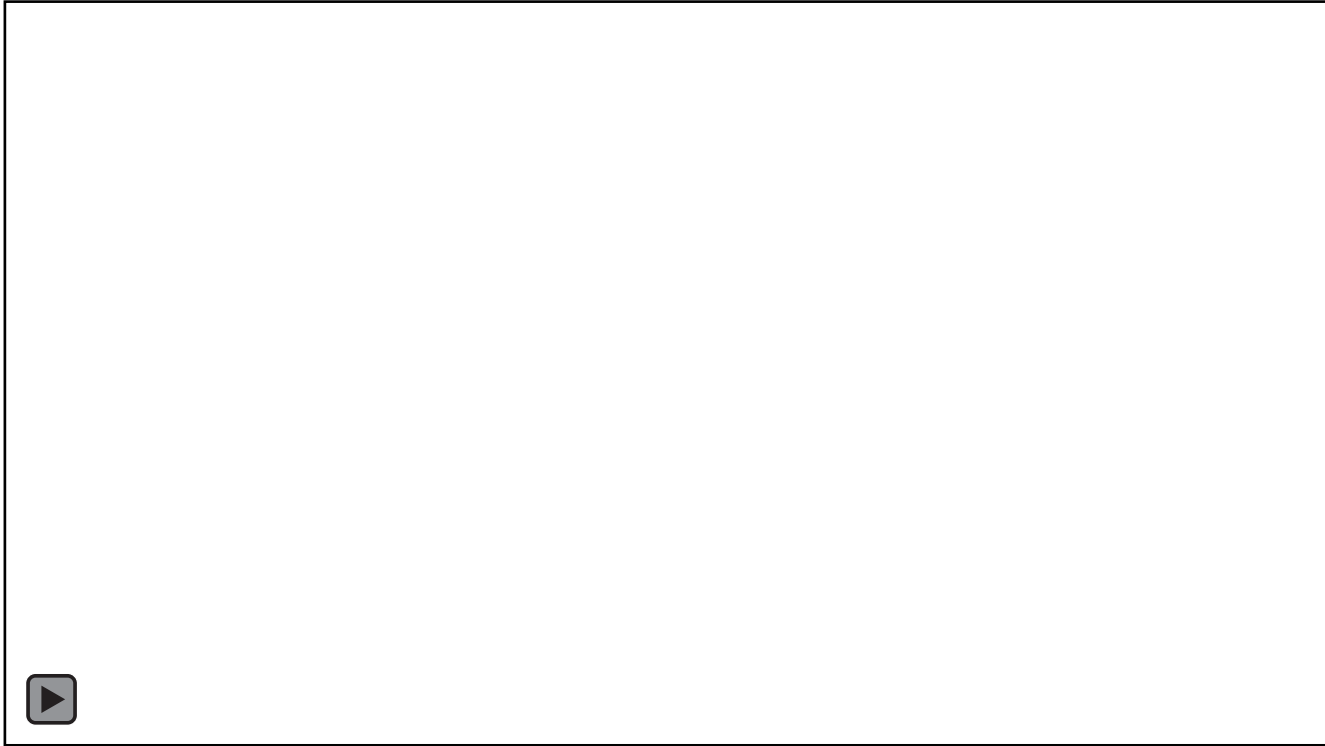
September/October 2024 • Stephen Goldsmith



Adobe Stock/Ryan DeBerandis

Data-Driven
Fleet
Management
Improves
Safety in New
York City
(govtech.com)

NYC Leading by Example



Eric Richardson

SAFETY

Fleet Safety Champion Eric Richardson to Retire From NYC DCAS

July 2, 2024 • By Christy Grimes •



Lenin Fiero Vision Zero Fleet Advocacy Award



Jim Olson

Road Safety Leader

Former VP of Safety at Republic Services

NYC Fleet's Safest Drivers, FY24

Vehicles Tracked at DCAS Fleet Office of Real Time Tracking (FORT): 18,994

Agencies and Offices Tracked: 53; Annual Miles Tracked: 92 Million+

Fleet Operators Tracked: 22,542

Safety Indicators: Violations, Crashes

Telematics Indicators: Speeding, Excessive Speeding, Seatbelts; Hard Cornering, Acceleration, Braking

Eligible Drivers:

- No Crashes or Traffic Tickets
- 100% Seatbelt Compliance
- No Excessive Speeding
- 8,000+ Miles
- 95%+ Telematics Safety Score
- Agency Recommendation

NYC Fleet's Safest Drivers, FY24

Name	Agency	Miles	Trips	Notables
Felix Zeygeril	DOTR	9,862	3,073	98.78 Safety Score, Only 7 Speed Events and 4 Harsh Accelerations in almost 10,000 miles
Miguel Guy	DOB	8,802	1,904	Only 1 Speed Event in 8,802 Miles
Peter Pollara	FDNY	11,759	2,179	Only 16 Harsh Brakings in Nearly 12,000 miles

NYC Fleet's Safest Drivers, FY24



Felix Zeygeril

*Supervisor for Electrical
Installation & Maint.*

NYC Dept. of Transportation



Peter Pollara

Communication Electrician

NYC Fire Department



Miguel Guy

Inspector, Plumbing

NYC Dept. of Buildings



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

2024 Vision Zero Fleet Safety Forum

VISION ZERO 
Building a Safer City



Intelligent Speed Assist Technologies in Practice



Moderator:

Dr. Sarah Yahoodik
Engineering Psychologist
U.S. DOT Volpe Center



Ian Reagan
Senior Research Scientist
Insurance Institute for Highway
Safety (IIHS)



Rick Birt
Director of Washington, DC
DC Highway Safety Office
(HSO)



Tara Gill
Senior Director
Advocates for Highway & Auto
Safety



Ellen Lee
Accident Investigator
National Transportation Safety
Board



Julia Kite-Laidlaw
Program Manager
Road to Zero Coalition (RTZ)



Not So Fast and Furious: Intelligent Speed Assist Technologies in Practice

Vision Zero Fleet Safety Forum

October 30, 2024

Sarah Yahoodik, PhD

ISA Pilots & Implementations



Forbes

Mandated Anti-Speeding Tech For New Vehicles Begins In Europe

Ed Garsten Senior Contributor

[Follow](#)

DC approves requiring 'speed governor' devices on dangerous drivers' cars

The DC STEER Act also would create a new point system for speeding and reckless driving and give D.C.'s attorney general the authority to sue drivers with multiple dangerous driving violations, no matter where they live

BUS

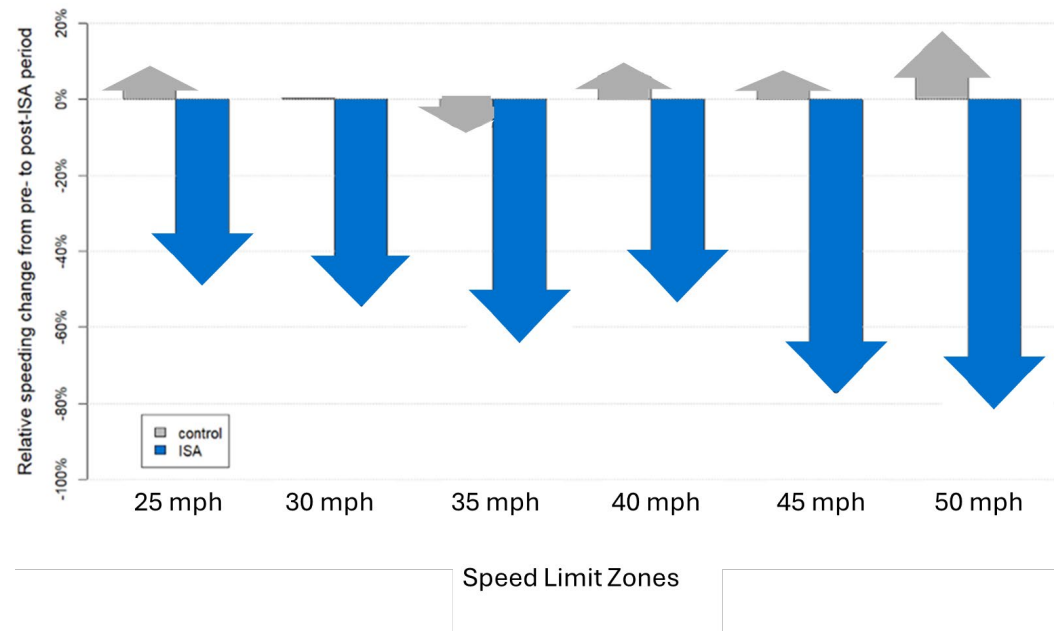
'Transport for London leads the way on bus safety'

NEWS

NYC school buses to be equipped with speed-limiting technology to improve safety

ISA Effectiveness: NYC DCAS Pilot

- It works!
- 2.9 million miles driven
- 64% relative decrease in driving time speeding >11 mph over limit.
- Effective even with habitual speeders
 - 49% decrease in speeding



Moving ISA Forward...

NTSB Calls for Technology to Reduce Speeding in All New Cars

Deadly crash in North Las Vegas highlights need for intelligent speed assistance technology and countermeasures including interlock program for repeat speeding offenders

Safer Fleets Challenge | INTELLIGENT SPEED ASSISTANCE

Safer Speeds in a Safe System Approach



FINAL VOTE: DC COUNCIL APPROVES TRAFFIC SAFETY BILL ADDING TEETH TO AUTOMATED CAMERAS, GETTING DANGEROUS DRIVERS OFF THE STREET

Most drivers would be OK with anti-speeding tech in vehicles, survey shows

June 12, 2024

Our panelists

- Julia Kite-Laidlaw - National Safety Council
- Tara Gill - Advocates for Highway & Auto Safety
- Ian Reagan, PhD – Insurance Institute for Highway Safety
- Ellen Lee - NTSB Office of Highway Safety
- Rick Birt - DC Highway Safety Office

Intelligent Speed Assist Technologies in Practice



Moderator:

Dr. Sarah Yahoodik
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Ian Reagan
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Ellen Lee
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National Transportation Safety
Board



Julia Kite-Laidlaw
Program Manager
Road to Zero Coalition (RTZ)





Intelligent Speed Assistance

An Introduction and Why It Matters in Getting to Zero

Julia Kite-Laidlaw
Program Manager, Road to Zero Coalition

The Safe System Approach

- A framework for thinking about road safety, adopted by USDOT
- Based on six foundational statements
- Recognizes that all components need to work together to both prevent serious crashes and mitigate the damage of the ones that still happen



What Exactly is ISA?

- Advanced driver assistance technology
- Passive ISA: An advisory, supportive system
- Active ISA: An intervention to control speed
- Not the same as “speed governors” – but same general idea that speed must be limited

Where Do We See ISA Today?

- In the EU, new vehicles must come equipped with at least passive ISA
- In the US, this technology is being used mainly in fleets
- No requirements for the general public to have ISA
 - Some states attempting legislation
 - General: California
 - Targeted to offenders: New York

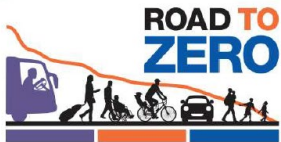
Myths vs. Reality

- Big Brother is watching – and controlling
- This will make vehicles inefficient
- Getting this onto a large number of vehicles is too expensive
- Going below the speed limit is dangerous in an emergency
- Crashes aren't just about speed

Thank You

nsc.org/roadtozero

julia.kite-laidlaw@nsc.org



**Massive Hazards:
How Bigger, Heavier Light Trucks Endanger Lives
on American Roads**

A Report by the Road to Zero Coalition

October 2024

Intelligent Speed Assist Technologies in Practice



Moderator:

Dr. Sarah Yahoodik
Engineering Psychologist
U.S. DOT Volpe Center



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Road to Zero Coalition (RTZ)





ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

Vision Zero Fleet Safety Forum
***Not So Fast and Furious:
Intelligent Speed Assist
Technologies in Practice***

Tara Gill
Senior Director, State and Federal
Government Relations
October 30, 2024

Our Board and Mission



Safe Road Users

Safe Vehicles

Safe Roadway
Environments



A Uniquely Effective Alliance

- Advocates for Highway and Auto Safety (Advocates) was founded in 1989 by the nation's leading property and casualty insurance companies and prominent consumer, public health and safety leaders.
- Our mission is the adoption of federal and state laws, policies and programs that are proven to prevent motor vehicle crashes, save lives, reduce injuries, and contain costs.



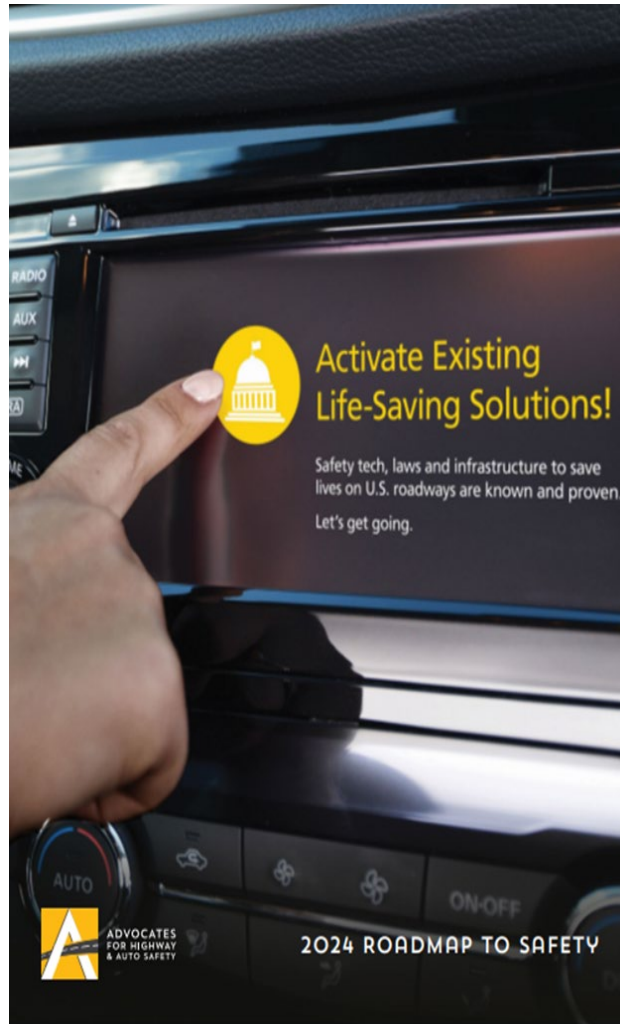
Joan Claybrook, President Emeritus, Public Citizen, and former Administrator, National Highway Traffic Safety Administration

Our Annual Roadmap to Safety



Pairs Leading Safety Issues With Proven Safety Solutions.

Calls For Action on State and Federal Levels.



Successful Efforts

Vehicle Safety Improvements

Front of vehicle

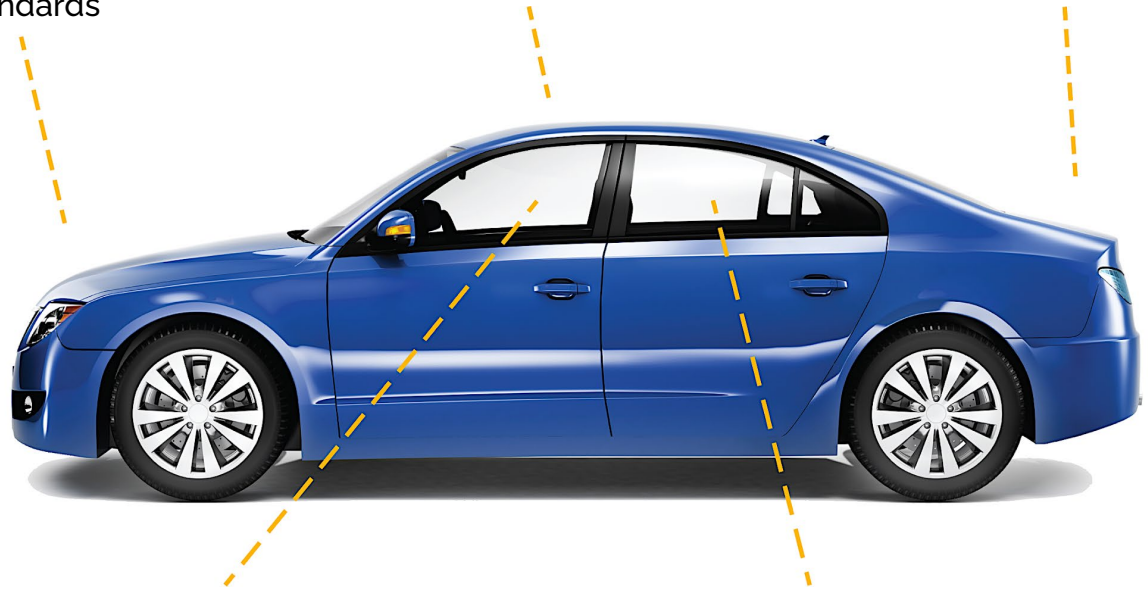
- Headlamp aiming
- Collision avoidance
- Hood and bumper standards

Roof

- Rollover prevention
- Improved head injury protection

Rear of vehicle

- Minimum sound requirements
- Rearview cameras



Front seat

- Airbags as standard equipment
- Advanced impaired driving prevention technology
- Driver monitoring systems
- Automatic shutoff for vehicles with keyless ignitions
- Occupant ejection prevention

Rear seat

- Rear seat belt reminders
- Child-safe power windows
- Child passenger safety upgrades
- Side impact protection

The Challenge on Our Roads



Overall Traffic Fatality Toll:

2023	40,990 people killed	3.6% decrease (Estimated)
2022	42,514 people killed	1.7% decrease
2021	43,230 people killed	11% increase
2020	38,824 people killed	21% increase

Excessive Speed Toll:

- 11,608 estimated fatalities in 2023
- 21 percent more fatalities than in 2019 (9,592 fatalities)
- A top 3 contributor to crash fatalities (impairment, lack of seat belt use)
- Pedestrian risk of death: 10 percent at 23 mph impact, 25 percent at 32 mph, and 50 percent at 42 mph

Financial Toll:

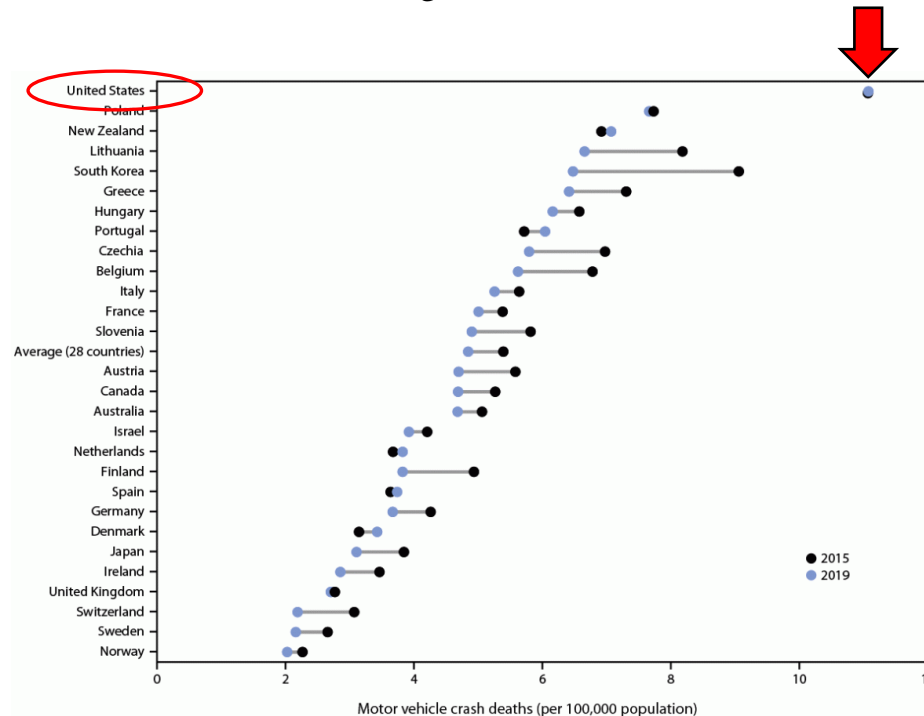
- Nearly \$1.4 trillion in total costs to society
- “Crash tax” of \$1,035 on every person living in the U.S. (economic costs only)
- Crashes alone cost employers \$72.2 billion (2019\$)

Fatalities and injuries caused by traffic crashes remain historically high, particularly for vulnerable road users (VRU).

International Comparisons

Traffic fatalities in the U.S. far exceed those of other similar nations.

CDC: Motor Vehicle Crash Deaths — United States and 28 Other High-Income Countries, 2015 and 2019



- In a study of 34 similarly developed countries, the **U.S. was one of only five that experienced an increase in road deaths** in 2021, compared to the 2017-2019 annual average.
- Of those five countries, the U.S. experienced the largest percentage increase in the number of fatalities, an increase of **16.3 percent**.

By Population: U.S. had the highest death rate

By VMT: U.S. had the 6th highest death rate

By Vehicle Registrations: U.S. had the 4th highest death rate.

Intelligent Speed Assistance



Comprehensive
Approach to
Reducing Traffic
Fatalities and
Serious Injuries –
Safe System
Approach

**Safe
Vehicles**

**Safe
Road
Users**

**Safe
Speeds**

**Safe
Roads**

**Post
Crash
Care**



ISA in the USA



117th Congress (2021 – 2023) – Transportation Reauthorization

- 21st Century Smart Cars Act – ISA Requirement
- INVEST in America Act – ISA Requirement
- Infrastructure Investment and Jobs Act – NO ISA

Safer Fleets Challenge

- 2023 – Launched Challenge
- 2024 – Federal Fleet Focus

Local Programs

- NYC, Ventura County, CA, Summerville, MA, King County, WA

ISA for Repeat Offenders: NTSB Recommendation and New DC Law

Grant Funding: Award for NYC ISA Pilot Program

Road to Zero Coalition: IIHS Led Position Paper on ISA Adoption

2026 Next Transportation Reauthorization



July 5, 2023

The Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590-0001

Dear Secretary Buttigieg,

Speeding is a persistent and deadly issue on our roads. The National Highway Traffic Safety Administration (NHTSA) has identified speeding as one of “three major behavioral factors” that contributed to the dramatic spike in overall traffic fatalities from 2019 to 2020.¹ Twenty-nine percent of the 42,539 people killed in 2021, or 12,330 fatalities, were speeding related. These losses totaled an eight percent increase from 2020, which recorded a 19 percent increase from the previous year (2019).² Proven solutions are critically needed to stop this leading killer. We commend you, NHTSA and the Federal Motor Carrier Safety Administration (FMCSA) for recently commencing rulemakings on automatic emergency braking (AEB) for new cars and trucks and urge you to similarly move forward with a rulemaking to require intelligent speed assistance (ISA) systems on new vehicles.

Under your leadership, the U.S. Department of Transportation (DOT) adopted the Safe System Approach (SSA) which identifies safer speeds as a key element to accomplish the goal of zero fatalities on our roads. Safer speeds can mitigate other traffic safety issues and reduce crashes. The Insurance Institute for Highway Safety (IIHS) study of speed limit reductions in Seattle, Washington, found a five miles-per-hour reduction in speed limits was associated with a 17 percent reduction in odds of a crash in the downtown area involving a police-reported injury. On arterial roads (high-capacity urban roads that are not freeways) in the downtown area, the speed limit reduction was associated with a 20 percent decrease in odds of a crash involving a police-reported injury.³

They're hard to do. Take a long time. Why pursue?

- **Assure Safety Performance**
- **Accelerate Market Penetration**
 - Speeds Up Adoption
 - Reduces Cost
 - Amplifies Safety
- **Bolster Traffic Safety Equity**
 - All Consumers of New Vehicles
 - Next Generation of Used Car Buyers
 - Other Road Users Incl. Those Outside the Vehicle

“Voluntary measures are intended to supplement rather than substitute for the FMVSSs, which remain NHTSA’s core method of ensuring that all motor vehicles can achieve an adequate level of safety performance.”

- NHTSA, Final Rule for Automatic Emergency Braking Systems for Light Vehicles, April 2024

Partial Driving Automated Systems and Automated Driving Systems (ADS)

The Washington Post
Democracy Dies in Darkness

TRANSPORTATION

How U.S. safety regulators have struggled to get a grip on Tesla's Autopilot

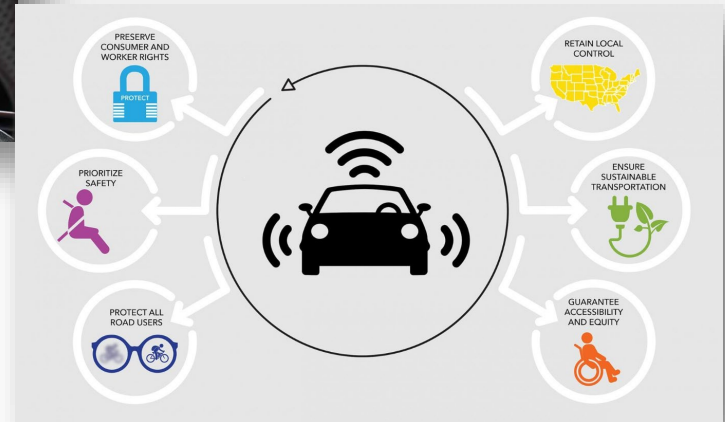
After fatal crashes, investigations and a massive recall, the government is still trying to keep pace with the risks on the road.

Updated May 5, 2024



Vehicle Safety Technology Proven To Prevent Crashes and Reduce Harm Can Save Lives Now and Will Likely be a Component of ADS.

65 AV Tenets Supporters





ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

Saferoads.org
@SafeRoadsNow

Tara Gill
Senior Director
State and Federal Government Relations
tgill@saferoads.org

Intelligent Speed Assist Technologies in Practice



Moderator:

Dr. Sarah Yahoodik
Engineering Psychologist
U.S. DOT Volpe Center



Ian Reagan
Senior Research Scientist
Insurance Institute for Highway
Safety (IIHS)



Rick Birt
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Julia Kite-Laidlaw
Program Manager
Road to Zero Coalition (RTZ)



Intelligent Speed Assistance appears more acceptable to U.S. drivers than you might think

Vision Zero Fleet Safety Conference

October 30, 2024



Ian Reagan

Senior Research Scientist



Momentum on ISA is building

European mandate effective July 2024

US field research and proposed legislation

IIHS research efforts

- ▶ National survey on acceptability
- ▶ Observations of on-off status of ISA features at vehicle dealership service centers



2024 survey of U.S. drivers



Nationally representative sample of 1,800 adults

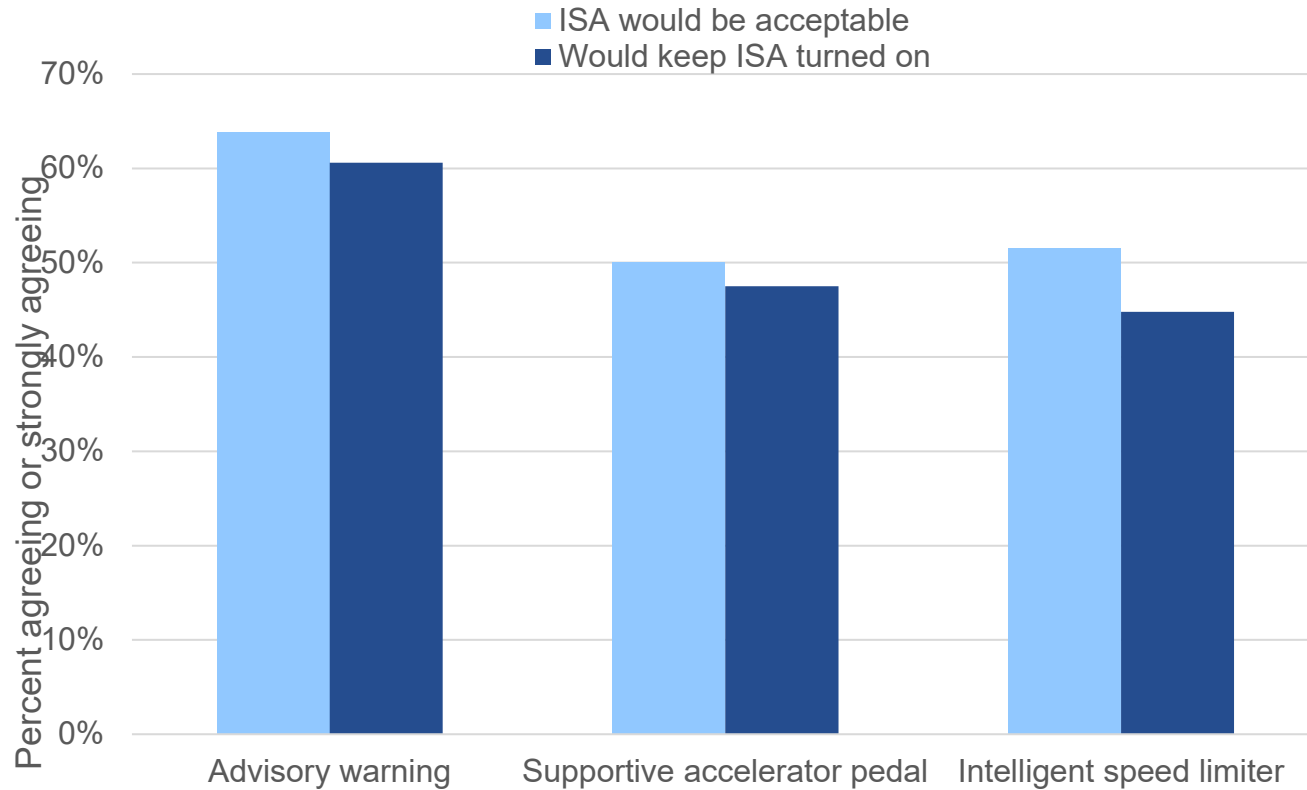
Provided ratings of agreement that

- ▶ Three types of ISA interventions would be acceptable
- ▶ They would keep ISA turned on
- ▶ Intervening at 1-2, 5, or 10 mph over the limit is acceptable

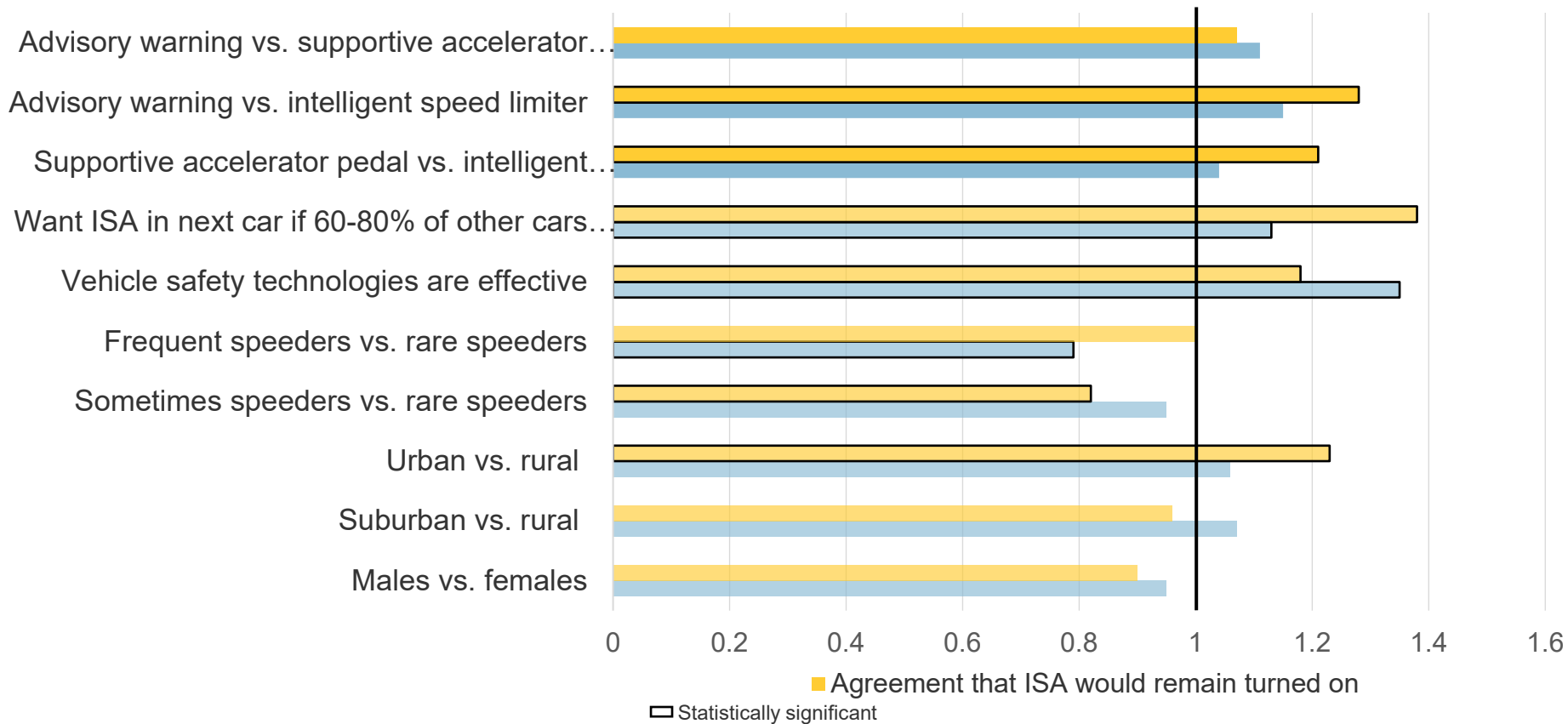
Answered questions related to factors that may influence acceptance

Would you find the system acceptable? Would you keep it turned on?

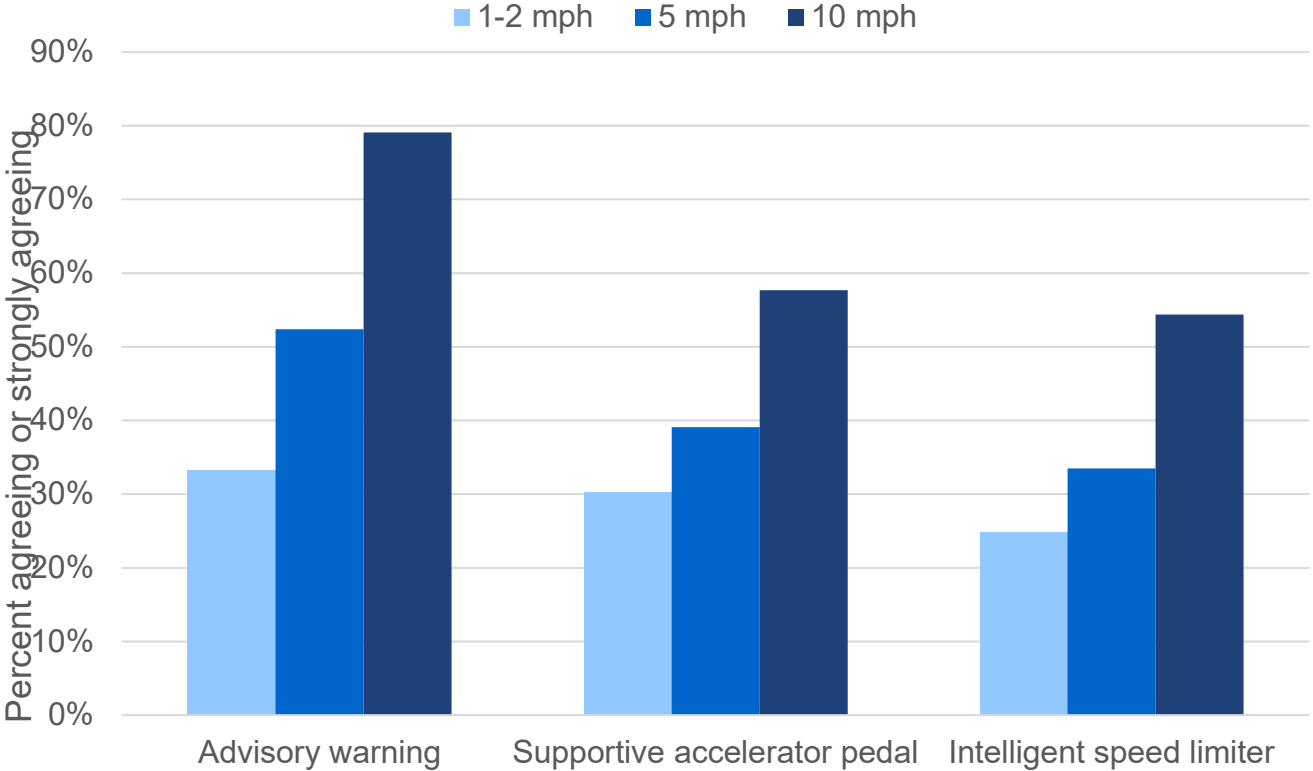
Each respondent received a summary of one ISA intervention and then gave ratings



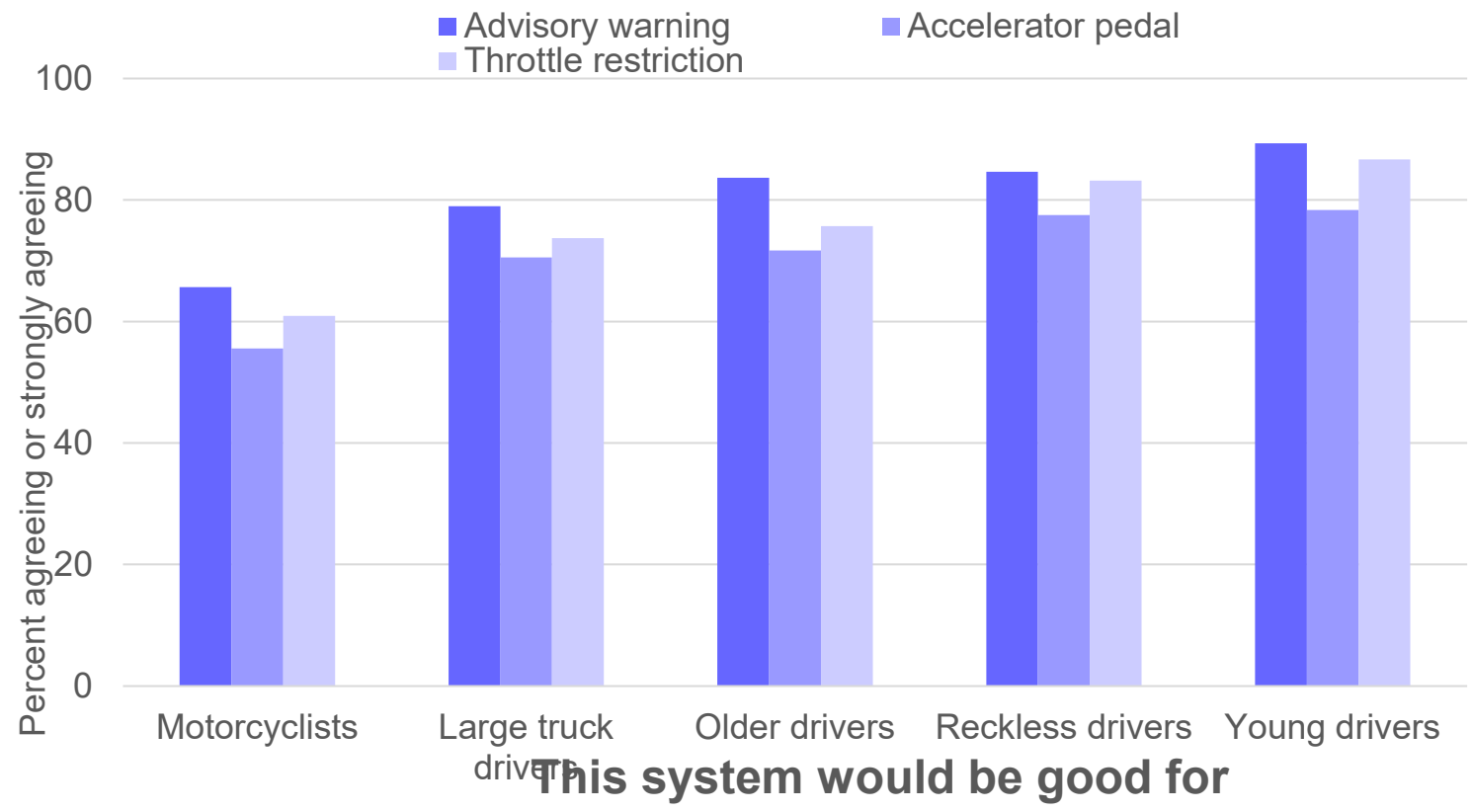
Relative likelihood of respondents agreeing they would keep ISA on and relative likelihood of respondents agreeing that ISA would be acceptable



Agreement that interventions at 1-2 mph, 5 mph, and 10 mph over the speed limit would be acceptable



Higher percentage of agreement that reckless or young drivers would benefit from ISA than other driver types





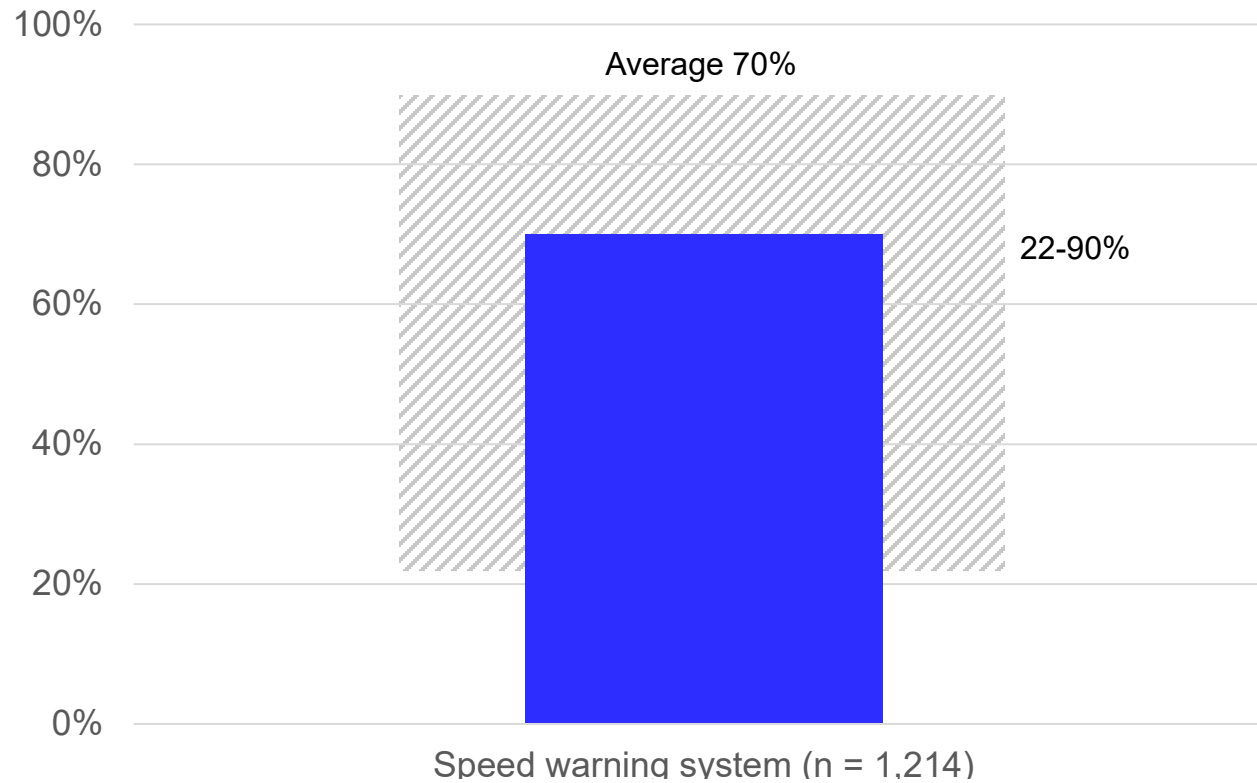
Observations of speed warning systems of vehicles serviced at dealerships in the Washington, DC region

Speed warning system characteristics

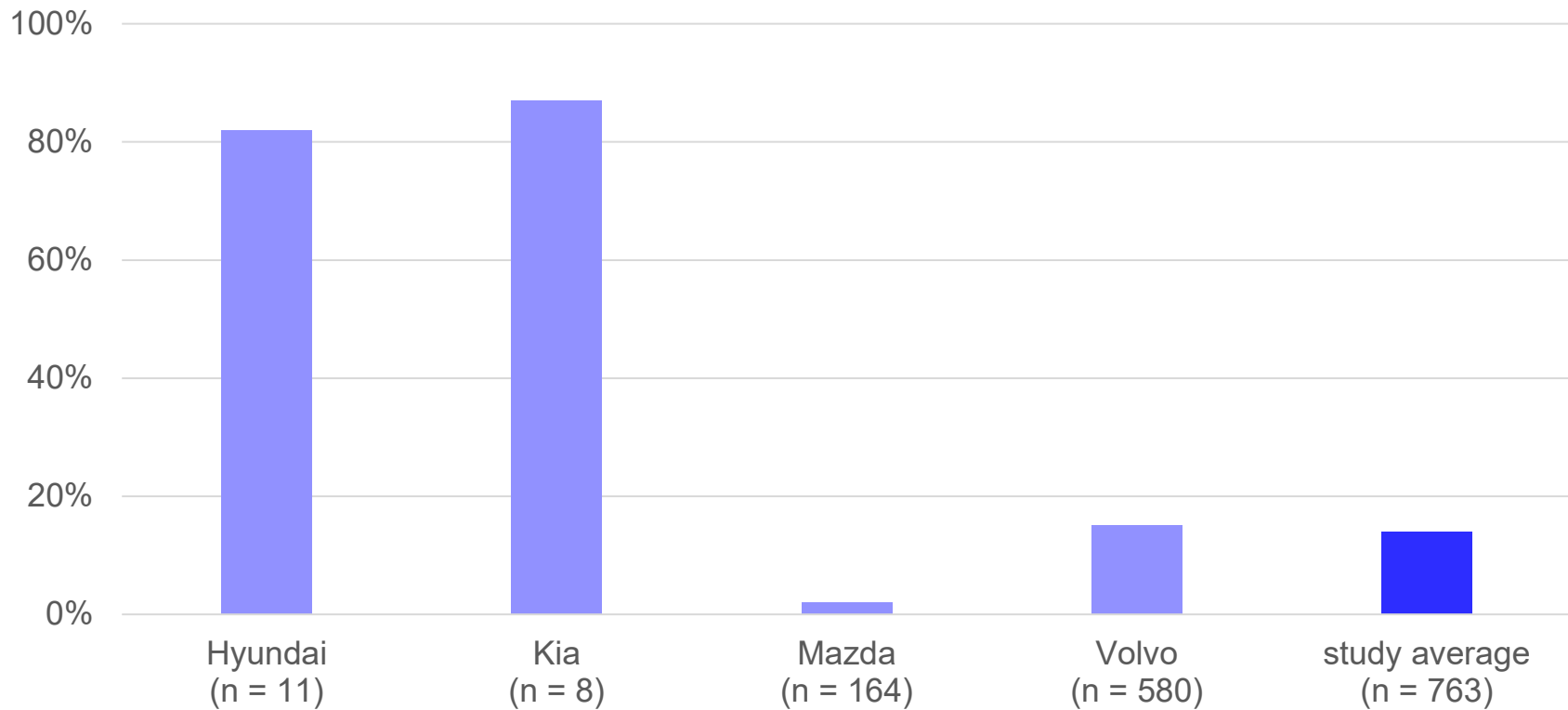
Manufacturer	Speed warning system interventions	Threshold options
Ford	D + V	1-mph increments between 0 and 5 mph
Honda	D D, D + V	0, +3, +5, +10 mph
Hyundai	D, D + V D, D + V, D + V + A	-10, -5, 0, +5, +10 mph -5, -3, 0, +3, +5 mph
Kia	D, D + V D, D + V, D + V + A	-10, -5, 0, +5, +10 mph -5, -3, 0, +3, +5 mph
Mazda	D, D + V, D + V + A	0, +3, +5 mph 0, +5, +10 mph 0, +3, +5, +10 mph
Volvo	D, D + V D, D + V, D + V + A	Set +3 mph (no choice) 0, +5, +10, +15, +20 mph

D = display, **V** = visual warning, **A** = audible warning

Activation rates of speed warning system alerts



Activation rates of audible speed warning alerts by OEM



Insurance Institute for Highway Safety
Highway Loss Data Institute

iihs.org

-  /iihs.org
-  @IIHS_autosafety
-  @iihs_autosafety
-  IIHS
-  /company/iihs-hldi
-  @iihs_autosafety

THANK YOU



Ian Reagan
Senior Research Scientist
ireagan@iihs.org



Intelligent Speed Assist Technologies in Practice



Moderator:

Dr. Sarah Yahoodik
Engineering Psychologist
U.S. DOT Volpe Center



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Senior Research Scientist
Insurance Institute for Highway
Safety (IIHS)



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Reducing speed and speeding recidivism: recommendations from NTSB investigations

Ellen Lee

Office of Highway Safety

National Transportation Safety Board

Technology to Prevent Speeding

- Intelligent Speed Assistance, ISA
 - Both passive and active systems have safety benefits
 - Required in European Union as of 2024
 - Many US manufacturers offer ISA as an option on certain models
- NTSB recommendations on ISA since 2012; new recommendations issued in 2024

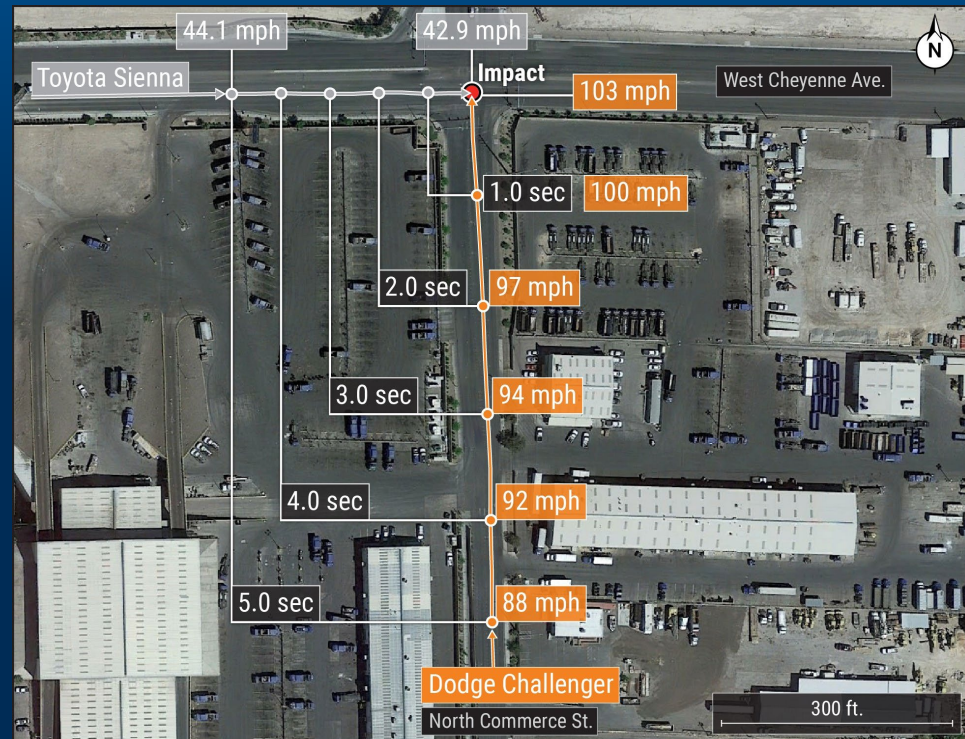
North Las Vegas, Nevada Crash

- January 29, 2022, 3:12 p.m.
- Intersection of North Commerce St. and West Cheyenne Ave.
- Primary collision between Dodge Challenger and Toyota Sienna
- Six vehicles containing 15 occupants involved
- Nine fatalities



Dodge Driver's Actions

- Dodge Challenger ran stop sign and passed slow truck
- Increased speed until impact
- Red traffic signal for 29 seconds prior to entering intersection
- Did not apply brakes
- Impact at 103 mph
- Driver was impaired by effects of cocaine and PCP



Driving History

- History of risky driving behavior
- Multiple traffic convictions between 1984 and 2017
- Seven speeding violations in past 5 years
 - Only one appeared on his official 10-year driving record (April 2017)
 - Four pled down to illegal parking

Five Year History

Date	Citation
04/26/2017	Speeding
05/17/2017	Speeding
12/25/2017– 01/08/2020	License suspended
08/29/2020	Speeding
11/18/2020	Speeding
02/03/2021	Speeding
08/25/2021	Speeding
12/09/2021	Speeding
01/29/2022	*Crash*

Probable Cause and Safety Issues

- Dodge driver was impaired and was a repeat speeder (risky driver)
- Traditional countermeasures for speeding less effective
- Need for technology to prevent speeding
- Need for countermeasures for repeat speeding offenders

Recommendations: Speed-Prevention Technology

To NHTSA:

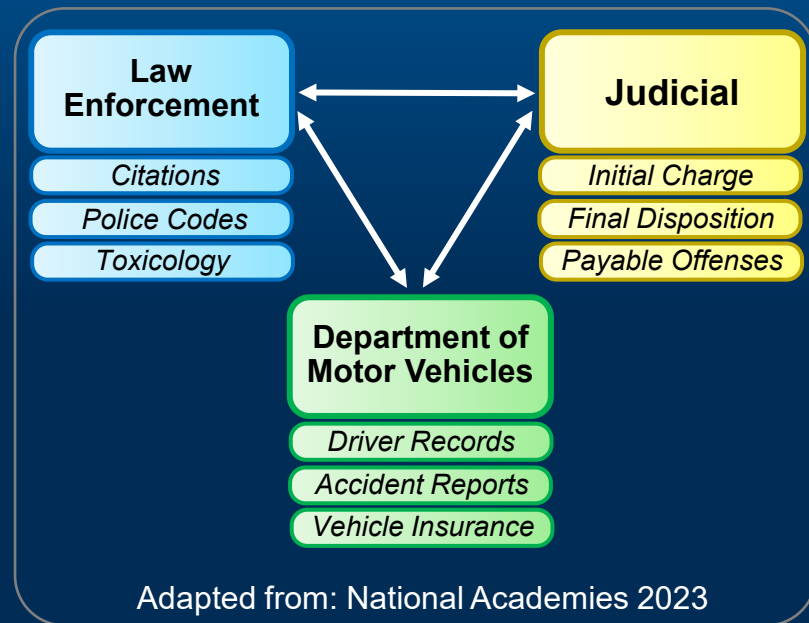
- Require ISA systems that, at a minimum, warn the driver when speed limit is exceeded
- Educate the public about the benefits of ISA to mitigate speeding

To Automakers:

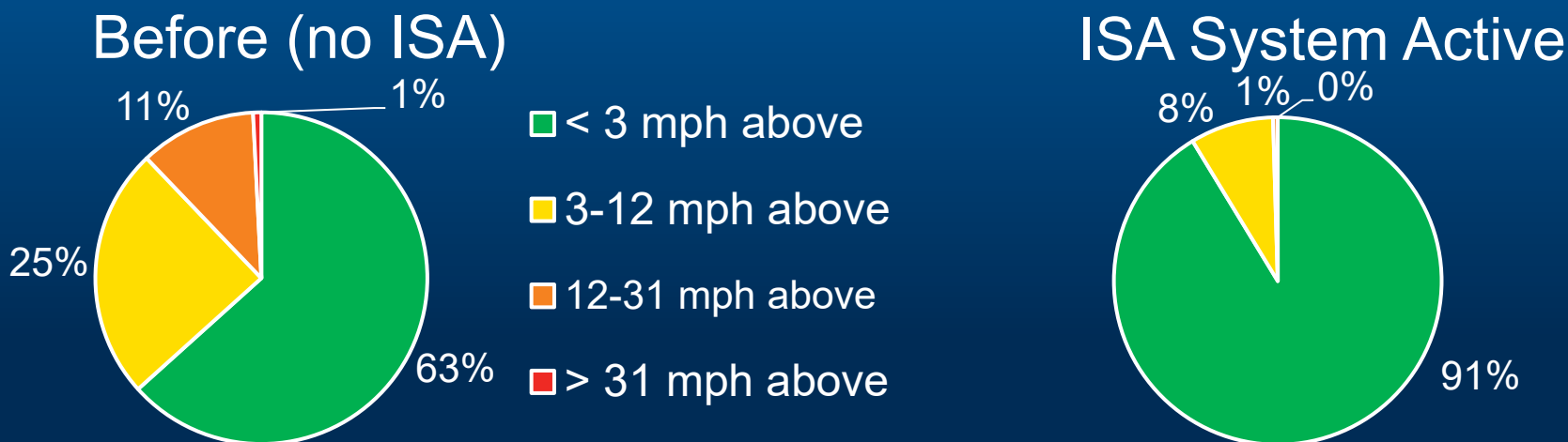
- Install as standard ISA systems that, at a minimum, warn the driver when speed limit is exceeded

Speeding Recidivism

- Dodge driver was a repeat speeding offender, but his driving record was inaccurate
- Inaccurate driver records limit state's ability to accurately identify repeat offenders
- Identification critical because repeat speeding offenders more likely to cause fatal crashes
- Traditional countermeasures less effective for repeat offenders



Countermeasures for Repeat Speeding Offenders



Source: van der Pas et al., 2014

- ISA has potential to reduce speed among repeat speeding offenders
- Programs using aftermarket ISA devices could be beneficial

Recommendations: Speeding Recidivism

To NHTSA:

- Update guidelines for state highway safety programs to identify and track repeat offenders
- Develop countermeasures to reduce speeding recidivism
- Develop guidelines for states to implement pilot ISA interlock programs

To States, D.C., and Puerto Rico:

- Implement programs to identify and deter repeat speeding offenders

To Insurance Institute for Highway Safety:

- Study the effect of automobile marketing showing risky behaviors, such as speeding

What We Encourage States To Do

- Ensure traffic records capture driver's complete history
- Consider countermeasures such as restricting access to diversion programs or plea agreements for repeat speeders
- Consider a “speed interlock” program using ISA devices
 - Similar to an alcohol ignition interlock program

Ellen Lee
ellen.lee@ntsb.gov



Link to NTSB Report: <https://www.nts.gov/investigations/AccidentReports/Reports/HIR2309.pdf>

Intelligent Speed Assist Technologies in Practice



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Racing Against a Culture Obsessed with Speed

Novel Practice & Policy in the District of Columbia



BY THE DC HIGHWAY SAFETY OFFICE

WE ARE
WASHINGTON
DC GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

Thank you!



 **GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR**

Novel Practice

Engagement, Engineering, Education, Enforcement



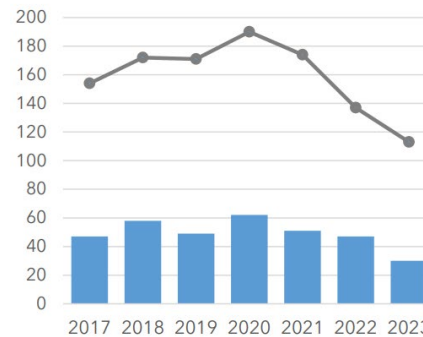
- 40 community listening sessions hosted in the past year to engage all audiences in lived experience
 - 30 in-person 8, virtual, encompassing all 8 Wards of the District
 - Dedicated sessions were hosted with targeted audiences: Seniors, Youth, Unhoused, Commuters, LE, FEMS, etc.
- Community survey gathered 3,000+ unique IP addresses in a 2-week period.
- Speed was listed as a top concern in 93% of surveys and listening sessions.



- Bus/Safety Priority Projects – Primary Focus of DDOT
- Allows us to reimagine mobility from public transit to pedestrian experience
- *In February 2022 (before construction began), 98% of vehicles exceeded the 25-mph speed limit on Minnesota Ave SE, adjacent to Kimball Elementary School.*
- *In February 2023 (after construction was completed), average speeds declined 50% from about 40 mph to 20 mph. In 2022, about 100 vehicles per hour would travel over 45 mph during school arrival and dismissal. Now it is less than one vehicle on average.*

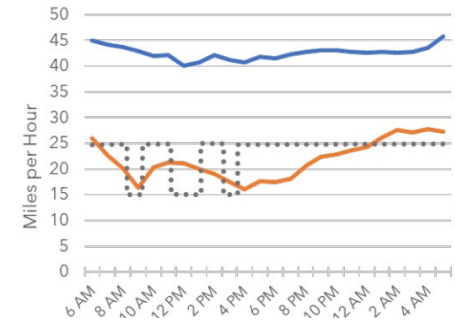
Injuries and Crashes

Crash records are the most important data source to understand roadway safety, but when there is a major change to traffic operations, it can take time before improvements are seen. Traffic patterns can take up to a year to change and the motoring public must learn how to navigate the new environment. Early data shows that **crashes on Minnesota Ave SE are down 34% and injuries are down 44%** compared to the five-year average for the corridor. (Districtwide crashes are down 9% in 2023.)



Average Vehicle Speed

Vehicles that exceed the speed limit are more likely to be in a crash and higher speed also results in more severe crashes. In February 2022 (before construction began), 98% of vehicles exceeded the 25-mph speed limit on Minnesota Ave SE, adjacent to Kimball Elementary School. In February 2023 (after construction was completed), average speeds declined 50% from about 40 mph to 20 mph. In 2022, about 100 vehicles per hour would travel over 45 mph during school arrival and dismissal. Now it is less than one vehicle on average.



- Focus on High Injury Network – 5% of roadways, 50% of fatalities and serious injuries
 - Weekly Traffic Safety Check Points
 - Concentration of HVE
- Enhance of Automated Traffic Enforcement (ATE)
 - 472 cameras all placed on problem-ID and with equity as the cornerstone
 - 211 Speed Cameras
 - Less than 1% of vehicles who receive one citation receive a second



Novel Policy

Strengthening Traffic Enforcement, Education, and Responsibility

(STEER)

Amendment Act of 2024.



- Empowers the DC Attorney General (and the newly funded attorneys) to bring civil suits against dangerous drivers (scofflaws), wherever they live.
- Creates an Intelligent Speed Assistance (ISA) Pilot Program that authorizes the DMV to install "speed governors" in the cars of anyone convicted of serious speeding crimes, including:
 - Reckless driving
 - Aggravated reckless driving
- Protects owners of stolen cars to ensure that victims of car theft aren't responsible for the tickets accumulated by someone else driving the stolen car.



- Creates a new points system targeting vehicles repeatedly caught speeding.
 - If a vehicle accumulates 10 points in a six-month window, it immediately becomes eligible for booting and towing.
- Points are accumulated as follows:
 - Speeding 11-15 mph over the limit — 2 points
 - Speeding 16-19 mph over the limit — 3 points
 - Speeding 20+ mph over the limit — 5 points
 - Reckless driving — 5 points
 - Aggravated reckless driving — 10 points
- Requires the DMV to create a safe driving class to waive up to \$500 in fines per year



Thank you!



 **WE ARE
WASHINGTON
DC** GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR



United We Go | @unitedwegodc

Thank you!

Rick Birt
Director
DC Highway Safety Office
Rick.Birt@dc.gov



BY THE DC HIGHWAY SAFETY OFFICE

Intelligent Speed Assist Technologies in Practice



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2024 Vision Zero Fleet Safety Forum

VISION ZERO 
Building a Safer City





Natalie Draisin

Director

FIA Foundation



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VISION ZERO 
Building a Safer City



Vision Zero Leadership Award Recipient



Robin Hutcheson
Former Administrator
U.S. Dept. of Transportation



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VISION ZERO 
Building a Safer City





Liz Crotty

Commissioner & Chair

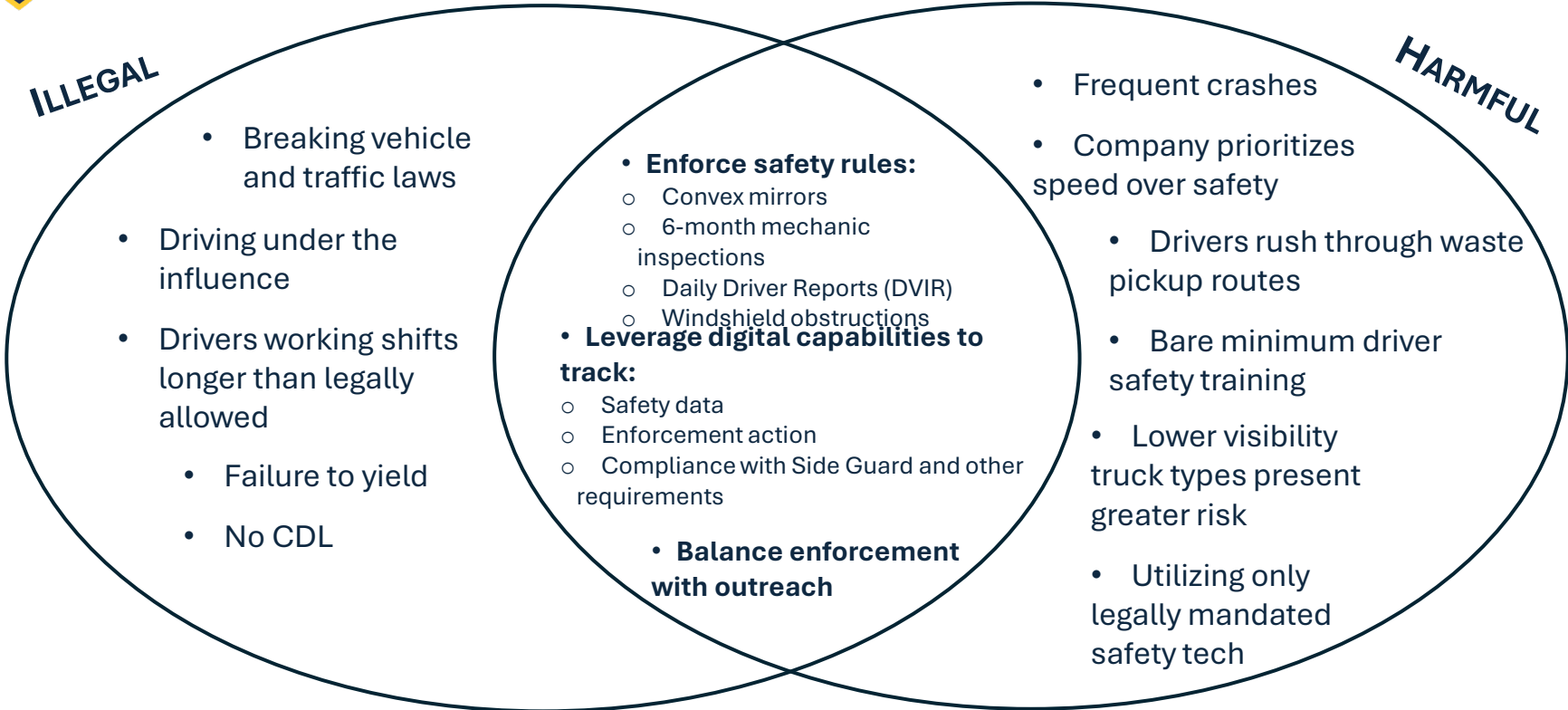
NYC Business Integrity Commission (BIC)





Elizabeth Crotty
Commissioner & Chair
NYC Business Integrity
Commission

BIC MISSION TO ADDRESS SAFETY IN THE REGULATED NYC TRADE WASTE INDUSTRY



WITH THANKS AND CREDIT TO PROFESSOR MALCOLM K. SPARROW, AUTHOR OF "THE FUNDAMENTALS OF REGULATORY DESIGN" (2020)

2024 Vision Zero Fleet Safety Forum

VISION ZERO 
Building a Safer City



All Eyes on Us:
Setting Policy for Direct Vision



Kate Fillin-Yeh
*Senior Transportation
Associate*
Stantec



Moderator:
Jim Olson
Road Safety Leader
Republic Services



Kevin Clifford
*Logistics & Transportation
Leader & CEO*
Quality Truck Center



Kris Carter
Chief Possibility Officer
Massachusetts Dept. of
Transportation



Monique Williams
*Co-chair of the Outreach
Committee*
Families for Safe Streets



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Kate Fillin-Yeh

Senior Transportation Associate

Stantec





Image: Alex Epstein

Design Matters: Comparing visibility in medium-duty trucks

2024 REE P7C

Medium Duty - Class 4

Front ★★★★★

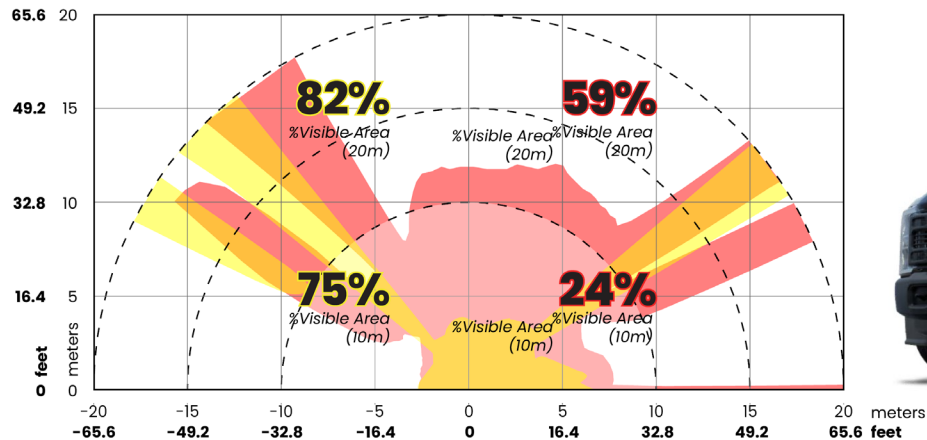
Passenger ★★★☆☆

2024 Ford F-450

Medium Duty - Class 4

Front ★☆☆☆☆

Passenger ★★★☆☆

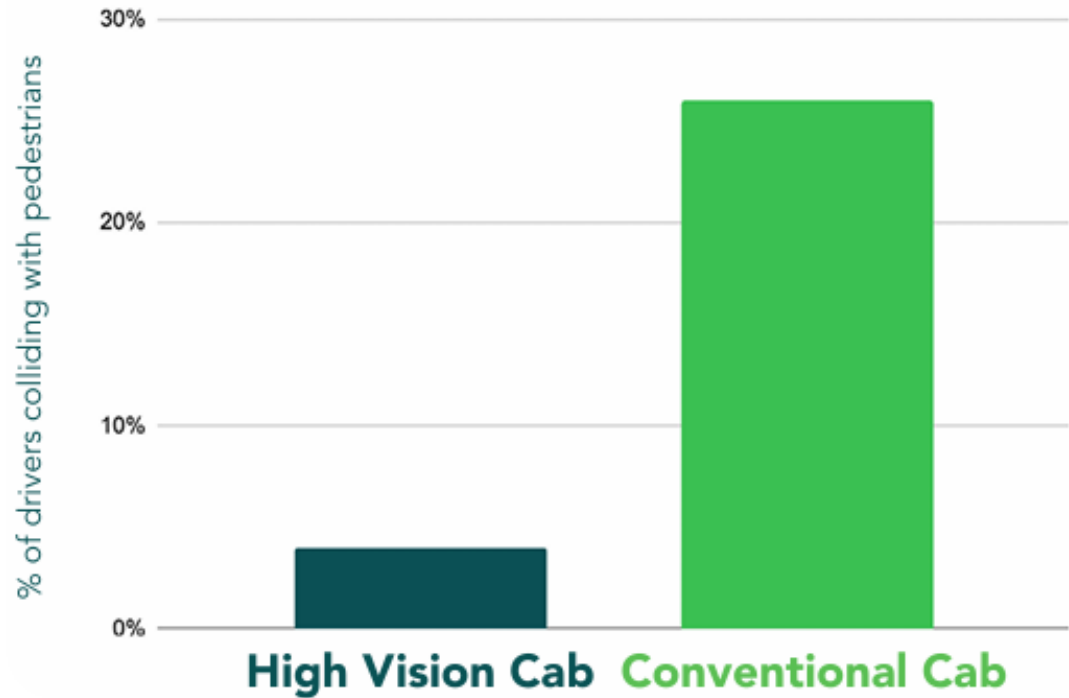








Crashes are more likely in conventional cabs



Source: Transport for London. Image: NACTO



Measuring front visibility with TSR's 5-Star Rating System. Image: TSR.







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Breakout Sessions:

Measuring the Impact of Road Safety Initiatives: The FIA Road Safety Index

Main Auditorium

Partnerships Begin with People

Blackbox Theatre

What Can You See? A Sneak Peak at the New Boston Visibility RFI

Cabaret Room



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