

## *DCAS and US DOT Volpe Issue Report on Intelligent Speed Assistance (ISA)*

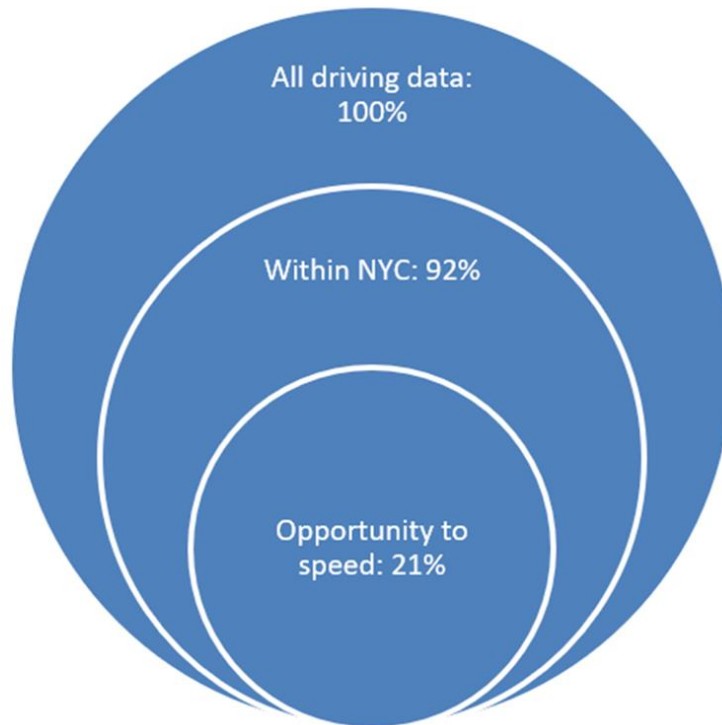
By Keith T. Kerman



This week, DCAS [announced](#) the expansion of our nation-leading intelligent speed assistance (ISA) initiative to 500 vehicles, including 158 cars identified as high-risk units due to regular speeding. DCAS and US DOT Volpe also issued a [report](#) on the ISA initiative based on a control group study conducted to determine the effectiveness of ISA. The announcement was made at the 9th Annual DCAS Fleet Safety Forum at Queens Theatre.

Intelligent speed assistance (ISA) is an active technology that prevents a vehicle from speeding wherever it operates in the City or beyond. ISA does not engage a

vehicle's brakes to stop speeding. ISA prevents a vehicle from further accelerating once it is traveling at or above the posted speed limit or a different limit that DCAS can set. DCAS often sets vehicles at 11 miles per hour above the posted speed limit to help with driver adoption and transition to the technology. This NY1 [video](#) discusses the technology deployed on a DCAS all-electric Bolt.



DCAS has now expanded its use of the technology to 500 vehicles from 19 agencies and offices, with 23 distinct types of vehicles, including heavy trucks. To date, medium- and heavy-duty trucks account for 31% of the vehicles using ISA and 36% of the 2.9 million miles that NYC Fleet vehicles have traveled with ISA engaged. This is the nation's largest rollout to date of active ISA and will only get bigger as DCAS expands to 1,600 more vehicles with the support of a Federal DOT grant.

For the first time, DCAS also focused the rollout on vehicles identified as high risk due to repeated speeding and red light camera tickets or high-risk driving behavior identified through risk monitoring from the DCAS Fleet Office of Real-Time Tracking (FORT). In February 2024, Washington DC became the first City in the United States to [mandate](#) this technology for at-risk drivers.

DCAS and US DOT Volpe conducted a control group study to assess further ISA's effectiveness for all vehicles, especially the high-risk units. In the control group study, vehicles with ISA were compared to comparable vehicles without ISA. The

analysis reviewed 894,983 miles of driving and over 51 million total records. The analysis did not focus on all miles driven. Instead, the assessment was for all miles with an "opportunity to speed." As we all know, congestion can often keep us slowed down in traffic. While these miles represent driving within the speed limit, they are not a good test of ISA. Volpe found that only 21% of all miles represented an opportunity to speed and focused the ISA analysis on those miles.

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

| 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      |

Despite narrowing the analysis in this way, DCAS and Volpe found a 64% improvement in speeding behavior using ISA compared to not using ISA. The improvements in speed were more significant for roadways with higher speed limits. The benefits of ISA also held for those most at-risk vehicles with histories of speeding and more reckless driving.

The report discusses many aspects of ISA implementation and makes some important recommendations, including a discussion of whether ISA settings should be different for local roads and highway areas. The report also recommends further analysis of ISA's capacity to improve fuel economy and reduce fuel costs through improving driver efficiency.

Thanks to everyone who produced the report, including at US DOT Volpe: Sarah Yahoodik, PhD, Alexander K Epstein, PhD, Alyssa Brodeur, Juwon Drake; at DCAS Fleet: Tomomi Landsman, Nate Koszer, Matthew Aronberg, Dilshad Basheer, Sherry Lee; and all the fleet agency staff and drivers who have supported this initiative.

In future newsletters, we will have much more to say about the Fleet Safety Forum.



The City and its union offer **free** flu shots to municipal employees and their families. All employees, dependents, and pre-Medicare retirees eligible for New York City health benefits are covered to receive a flu vaccination at no cost. For information about how you can **fight the flu with free and convenient flu shots**, visit:

[on.nyc.gov/wwnycflu](https://on.nyc.gov/wwnycflu)

---

## 10 Years of Vision Zero: Part 5 - Leading by Example



### Hear from Eric

The Adams administration is dedicated to cutting through the noise and delivering information directly to you and all New Yorkers.

Sign up to "Hear From Eric" and get direct messages from City Hall, tailored to your interests and neighborhood, sent directly to your inbox - at [nyc.gov/hearfromeric](https://nyc.gov/hearfromeric)!

Week in Review | October 20 - October 26



Thank you to all of you who helped organize the Liberty's celebration last week. Together, we can continue to do great things for New York City.

---

### Check out past editions of the Fleet Newsletter

[NYC Fleet Newsletter 474, October 22, 2024:](#) Renewable Diesel Coming To NYC Ferry Operations

[NYC Fleet Newsletter 473, October 11, 2024:](#) Fleet Spotlight: The Murphy Brothers, Patrick and Tim; FDNY, DEP, and Parks

[NYC Fleet Newsletter 472, October 4, 2024:](#) DCAS Completes Renewable Diesel Rollout for Trucks and Off-Road Equipment

[NYC Fleet Newsletter 471, September 20, 2024:](#) Fleet Updates: NY State Inspection Program

Check out the [complete archive](#).

// Connect with DCAS to learn more about the City of New York's Fleet //



Visit us on the web at [nyc.gov/DCAS](https://nyc.gov/DCAS)