

Safer Fleets Challenge | INTELLIGENT SPEED ASSISTANCE

Putting safety before speed

Communities in the United States face an increasing epidemic of deaths caused by vehicle crashes, with an estimated nearly 43,000 people killed last year in car crashes in 2021. Speeding was a factor for 29% of fatalities in crashes.¹

A Safe System Approach addresses this crisis by prioritizing safer roads, safer speeds, and safer vehicles. Intelligent Speed Assistance adds another layer of redundancy to protect all the people on our roads.

What is Intelligent Speed Assistance and how does it work?

Intelligent Speed Assistance (ISA) is a vehicle support technology that helps drivers travel safely by maintaining posted speed limits. Some new vehicles already come equipped with ISA and it's possible to retrofit older ones for as little as \$1,250 per vehicle.

ISA uses GPS-linked speed limit data and/or video cameras that recognize speed signs to advise drivers of the current speed limit. To prevent speeding, ISA limits the speed of the vehicle by restraining engine power, whether an internal combustion engine or an EV. ISA can be overridden by pushing on the accelerator, or it can be compulsory, depending on the installation.

What are the benefits of ISA for fleets?

For fleets, safety is paramount. Speeding is a major cause of the increase in deaths and serious injuries on American roadways and regrettably fleet employees aren't immune to this dangerous behavior. A 2020 study in San Francisco clocked 148,034 instances of city cars and trucks driving 10 mph or more over the speed limit.² In more than 16% of these instances, the driver was going a shocking 20 to 28.9 mph over the speed limit.

State and local governments can demonstrate their commitment to pedestrian, bicycle, and vehicle occupant safety by retrofitting their fleets to incorporate ISA. Real world examples show ISA encourages safer driving. Transport for London, the city's transportation agency, has begun to retrofit their buses with ISA. Prior to installation, the buses in London exceeded posted 20 mph speed limits 15% to 19% of the time; after ISA installation, that figure fell to 1% to 3%.³ Since the launch of New York City's ISA pilot program in August 2022, vehicles utilizing ISA have driven over 133,400 miles and successfully traveled within speed limit parameters 99 percent of the time.⁴

With safer driving comes increased fuel savings and reduced emissions. Studies have shown a 10.5% increase in fuel economy for vehicles using ISA with acceleration control in combined urban and rural settings.⁵ Reduced fuel use resulted in an annual cost saving of \$1,867 per vehicle, meaning ISA retrofits pay for themselves.



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Where has it been adopted?

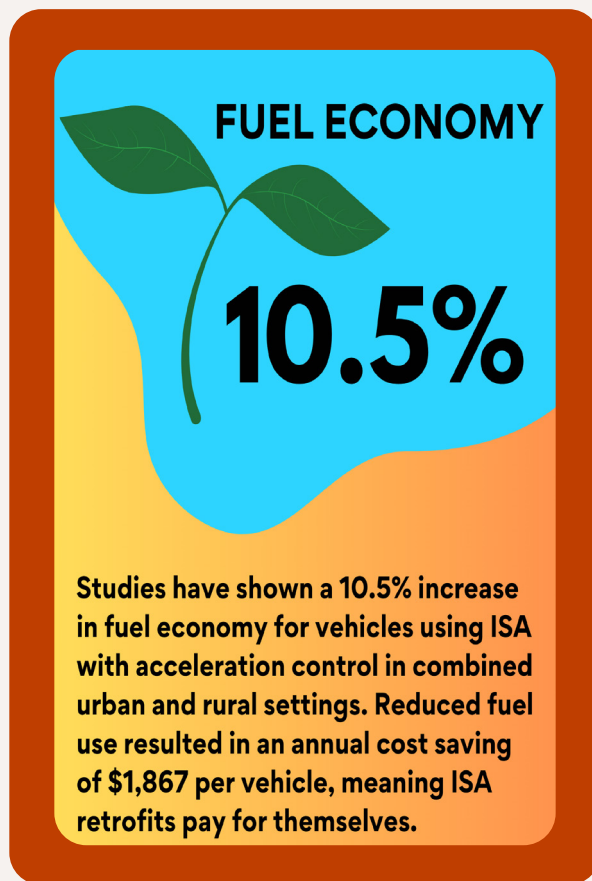
ISA is becoming a mainstream technology in European countries. In July 2022, ISA became required for new vehicle models introduced on the European Union market and all new cars will have ISA by July 2024.⁶

Government fleets have been early adopters. Nearly 20% of Transport for London's buses have been equipped with ISA and the agency anticipates all its buses will have the technology by 2032. New York City recently launched its own 6-month ISA pilot program, retrofitting 50 city vehicles with the technology. Other programs are in the works. King County in Washington approved a study to install ISA on its fleet, Montgomery County in Maryland has developed a pedestrian master plan that recommends speed governors for public vehicles, and Ventura County in California has begun its own pilot program.

USDOT should set a performance standard and require ISA, but until then localities can employ the technology to reap the benefits.

How can my department or agency get started?

If your city or town already has a Vision Zero pledge, installing ISA on your vehicles is a tangible step to demonstrate a commitment to safety. Because the technology is about safe and efficient operations, ISA adoption can be done through executive action. Government leaders can celebrate adoption of a technology that improves road safety, reduces carbon



emissions, and saves money through greater fuel efficiency.

A pilot program is a great place to start installing ISA on your fleet. It offers a starting point to collect data and feedback for a wider implementation. If you're ready to start now, we have [template resolution/executive order](#) language you can use to get going. Visit <https://americawalks.org/campaigns/safer-vehicles-for-pedestrians> for more information.

¹ National Highway Traffic Safety Administration, [Overview of Motor Vehicle Traffic Crashes in 2021](#).

² City and County of San Francisco Board of Supervisors, [Policy Analysis - Vehicle Telematics Update](#).

³ European Transport Safety Council, [Case Study: Intelligent Speed Assistance \(ISA\) on London Buses](#).

⁴ New York City Office of the Mayor, [Mayor Adams Announces Results of Successful Pilot Program to Reduce Speeding and Hard Braking in City Fleet Vehicles](#).

⁵ Sturdy Corp, [Success Story: Partnering North West Ambulance Service with Acceleration and Top Speed Control](#).

⁶ European Road Safety Charter, [Intelligent speed assistance \(ISA\) set to become mandatory across Europe](#).