



**U.S. Department  
of Transportation**

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# National Roadway Safety Strategy

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United States Department of Transportation | January 2022





**U.S. Department  
of Transportation**

Office of the Secretary  
of Transportation

1200 New Jersey Ave., SE  
Washington, DC 20590

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## Letter from the Secretary

Our priority at the Department of Transportation is to make our transportation system safe for all people. Right now, we face a crisis on our roadways. Almost 95 percent of our Nation's transportation deaths occur on America's streets, roads, and highways, and they are on the rise. An estimated 38,680 people died in motor vehicle crashes in 2020. In the first half of 2021, an estimated 20,160 people died, up 18.4 percent compared to the first six months of 2020. And every year, millions more are seriously and often permanently injured. Those lost are our family members, our friends, our colleagues, our neighbors. They are the people who build, maintain, and fix our roads. They are the people who deliver critical goods, and those who risk their own lives to keep us safe.

The status quo is unacceptable, and it is preventable. We know it's preventable because bold cities in the United States, and countries abroad, have achieved tremendous reductions in roadway deaths. We cannot accept such terrible losses here. Americans deserve to travel safely in their communities. Humans make mistakes, and as good stewards of the transportation system, we should have in place the safeguards to prevent those mistakes from being fatal. Zero is the only acceptable number of deaths and serious injuries on our roadways.

This *National Roadway Safety Strategy* describes the major actions we will take to make a meaningful difference over the next few years. At the core of this strategy is a Department-wide adoption of the **Safe System Approach**, which focuses on five key objectives: **safer people, safer roads, safer vehicles, safer speeds, and post-crash care**. We will launch new programs, coordinate and improve existing programs, and adopt a foundational set of principles to guide this strategy.

One of the Safe System Approach principles is that roadway safety is a shared responsibility. We applaud those who have already committed to zero roadway fatalities and serious injuries, and understand that no one will achieve this goal alone. While U.S. DOT has many tools at its disposal and will shoulder our responsibility, this must be a coordinated effort with our stakeholders across the public sector, private sector, advocacy, and research communities. It will take a sustained, urgent, yet lasting commitment from the people who build and manage our roads, construct our motor vehicles, and use vehicles as part of their businesses to support actions that protect people and prevent harm.

The traveling public also has a role to play. Each of us uses our roads almost every day, whether as a motorist, a passenger, or someone walking, biking, or rolling. Our actions should prioritize safety first. Always.

Thank you for your commitment to saving lives on our roadways. I look forward to meeting this challenge together.



Secretary Pete Buttigieg

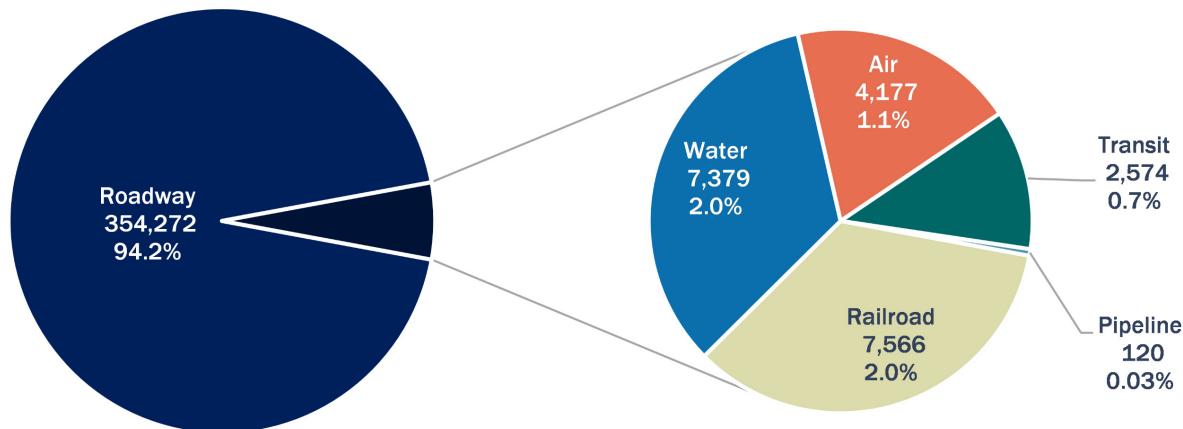
# The Roadway Safety Problem

The foundation of our mission at the United States Department of Transportation (U.S. DOT or the Department) is to ensure America has the safest transportation system in the world. Almost 95 percent of the Nation's transportation deaths occur on its streets, roads, and highways, and they are on the rise.<sup>1</sup> The rate of roadway fatalities per 100 million vehicle miles traveled has not substantially improved over the last ten years, and increased significantly in 2020. An estimated 38,680 people died in motor vehicle crashes in 2020, of which an estimated 6,236 were people walking.<sup>2</sup> In the first six months of 2021 an estimated 20,160 people died in motor vehicle crashes, up 18.4 percent over 2020. That is the largest number of projected fatalities for January through June since 2006.<sup>3</sup> Since 2015, the annual number of fatalities has exceeded 35,000, with millions more injured – sometimes permanently – each year. Traffic crashes are a leading cause of death for teenagers in America, and disproportionately impact people who are Black, American Indian, and live in rural communities.<sup>4</sup>

We face a crisis on our roadways; it is both unacceptable and solvable.

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**More than 370,000 people died in transportation incidents over the last decade (2011-2020) in the United States. More than 350,000 of them died on our roads.**



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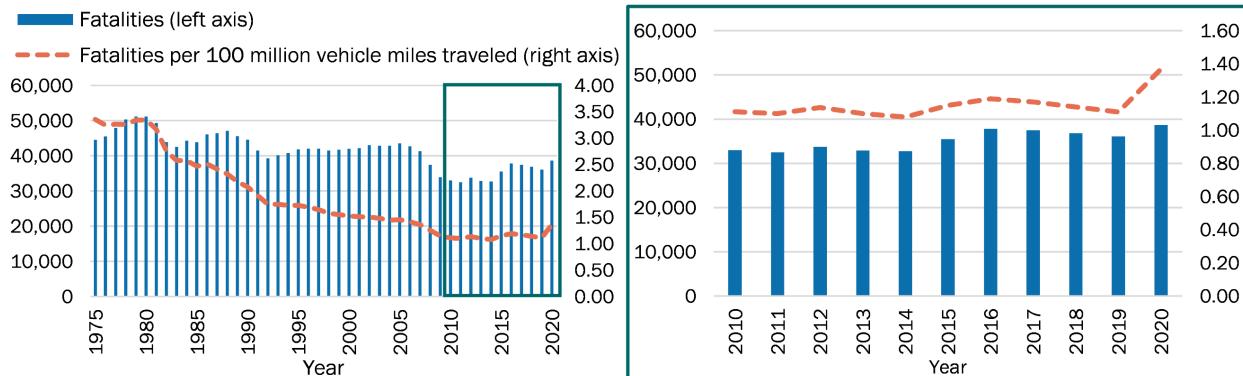
<sup>1</sup> Caution must be exercised in comparing fatalities across modes because significantly different definitions are used. In particular, Rail and Transit fatalities include incidents that do not involve vehicles, such as fatalities from falls in transit stations or railroad employee fatalities from a fire in a work shed.

<sup>2</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813118>

<sup>3</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813199>

<sup>4</sup> National Vital Statistics System, National Center for Health Statistics, Centers for Disease Control and Prevention; FARS 2018 Final File/Census Bureau

**Roadway fatalities and the fatality rate declined consistently for 30 years, but progress has stalled over the last decade and went in the wrong direction in 2020.**



Source: Fatality Analysis Reporting System

**38,680 people died on America's roads in 2020**

Compared to 2019, fatalities increased:

- 7.2% overall
- 23% per mile driven
- 23% among Black people
- 20% involving persons ejected from a vehicle
- 18% among ages 25-34
- 15% among passenger vehicle occupants not wearing seatbelts
- 15% among ages 16-24
- 14% among ages 35-44
- 11% in speeding-related crashes
- 9% in crashes with police-reported alcohol involvement
- 9% among motorcyclists

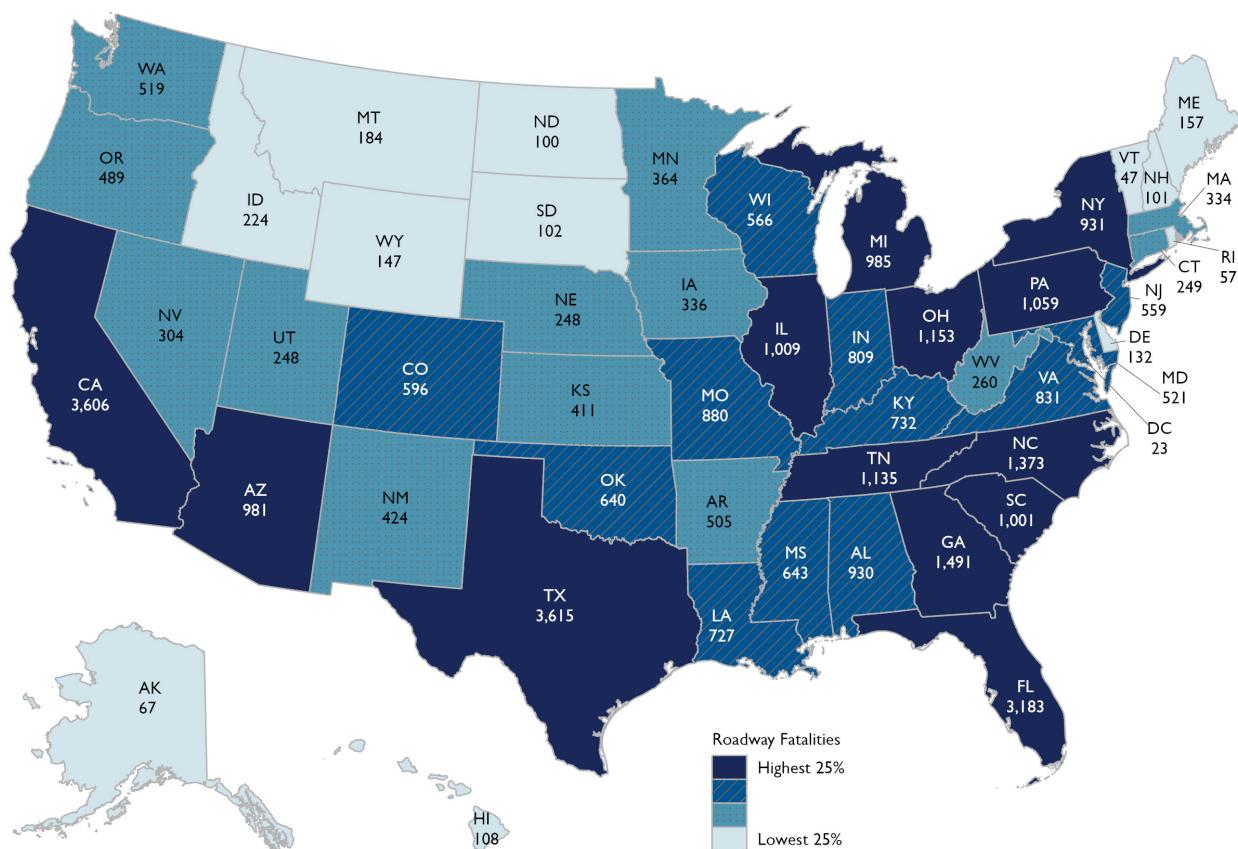
Source: Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2020, National Highway Traffic Safety Administration, DOT HS 813 118, June 2021

It is important to acknowledge the characteristics of America's roadway network as a highly complex, decentralized system with an array of entities responsible for specific aspects that influence safety outcomes. State, Tribal, regional, and local governments manage many elements of this system, with significant levels of autonomy and flexibility to make context-specific decisions, including on roadway location and design, how and where funds are spent to create and maintain road networks, what laws should be enacted within their jurisdiction, and how these laws are implemented. Those who perform commercial operations on our roads, original equipment manufacturers such as automotive manufacturers, and the traveling public further influence safety outcomes. The United States Department of Transportation has a range of authorities and oversight responsibilities over different elements of the transportation system, including the safety of motor vehicles and motor vehicle equipment, the safe operation of commercial vehicles, and stewardship over many of the Nation's highways, roads, and

streets. This nuanced and de-centralized system leads to disparate outcomes across localities and portions of the system, and complicates the landscape to address the roadway safety problem.

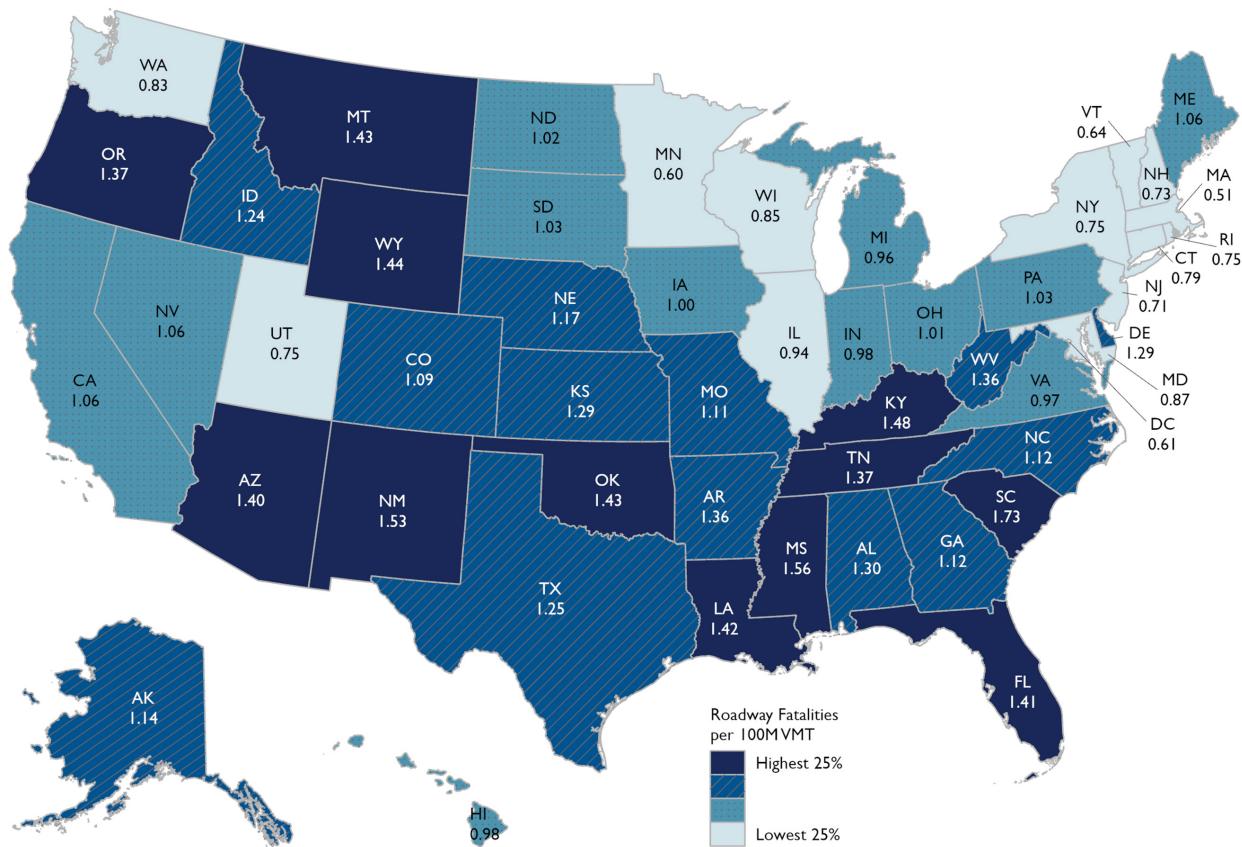
As shown in the maps below, deaths are not evenly distributed across the United States of America, influenced by a range of factors such as where the Nation's population centers are located (highlighted in the first map depicting overall roadway fatalities per state). The second map illustrates the vastly divergent fatality rates among the states, which highlight the heterogeneous nature of the Nation's safety problem. One major factor that explains the difference in fatality rates is whether a particular state is predominantly rural or urban. Nationwide, the rural fatality rate is approximately two times higher than the urban fatality rate.

### Roadway Fatalities by State, 2019



Source: Fatality Analysis Reporting System

## Roadway Fatality Rate (per 100 Million Vehicle Miles Traveled) by State, 2019



Source: Fatality Analysis Reporting System

# Introduction to the National Roadway Safety Strategy

The United States Department of Transportation *National Roadway Safety Strategy* (NRSS) outlines the Department's comprehensive approach to significantly reducing serious injuries and deaths on our Nation's highways, roads, and streets. This is the first step in working toward an ambitious long-term goal of reaching zero roadway fatalities. Safety is U.S. DOT's top priority, and the NRSS represents a Department-wide approach to working with stakeholders across the country to achieve this goal.

The NRSS sets a vision and goal for the safety of the Nation's roadways, adopts the Safe System Approach principles to guide our safety actions, and identifies critical and significant actions the Department will take now in pursuit of five core objectives: Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care. This document highlights new priority actions that target our most significant and urgent problems, and are, therefore, expected to have the most substantial impact. It also highlights notable changes to existing practices and approaches.

The NRSS is a collaborative effort between the Office of the Secretary of Transportation and the Operating Administrations (OAs) whose roles and responsibilities include roadway safety:

- Federal Highway Administration (FHWA)
- Federal Motor Carrier Safety Administration (FMCSA)
- Federal Railroad Administration (FRA)
- Federal Transit Administration (FTA)
- National Highway Traffic Safety Administration (NHTSA)
- Pipeline and Hazardous Materials Safety Administration (PHMSA)

The recent passage of the *Bipartisan Infrastructure Law* (BIL or the *Infrastructure Investment and Jobs Act*) is a generational investment in America's transportation network, and supports the funding, program, and policy provisions described in the NRSS safety actions.<sup>5</sup>

## U.S. DOT Vision for Roadway Safety

Together, we must strive for zero roadway fatalities. Zero is the only acceptable number of deaths on our highways, roads, and streets. The United States Department of Transportation is committed to taking substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation's roadways. However, no one will reach this goal acting alone. Reaching zero will require U.S. DOT to work with the entire roadway transportation community and the American people to lead a significant cultural shift that treats roadway deaths as unacceptable and preventable.

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<sup>5</sup> Public Law No: 117-58. <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>

## Safe System Approach

U.S. DOT adopts the Safe System Approach as the guiding paradigm to address roadway safety.<sup>6</sup> This differs significantly from a conventional safety approach in that it acknowledges both human mistakes and human vulnerability, and designs a redundant system to protect everyone. For the purposes of both the *National Roadway Safety Strategy* and the Department's ongoing safety programs, U.S. DOT recognizes the Safe System Approach as encompassing all the roadway safety interventions required to achieve the goal of zero fatalities, including safety programs focused on infrastructure, human behavior, responsible oversight of the vehicle and transportation industry, and emergency response. The Safe System Approach and this roadway safety policy are inclusive of all road users in all communities and the many people who use roads and streets outside of motor vehicles. Just as the needs of people change and how they move evolves over time, how the Department implements the Safe System Approach will be iterative and will adapt to how people use the Nation's highways, roads, and streets.

A Safe System Approach incorporates the following principles:

1. **Death and Serious Injuries are Unacceptable.** While no crashes are desirable, the Safe System Approach prioritizes the elimination of crashes that result in death and serious injuries since no one should experience either when using the transportation system.
2. **Humans Make Mistakes.** People will inevitably make mistakes and decisions that can lead or contribute to crashes, but the transportation system can be designed and operated to accommodate certain types and levels of human mistakes, and avoid death and serious injuries when a crash occurs.
3. **Humans Are Vulnerable.** People have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates physical human vulnerabilities.
4. **Responsibility is Shared.** All stakeholders – including government at all levels, industry, non-profit/advocacy, researchers, and the public – are vital to preventing fatalities and serious injuries on our roadways.
5. **Safety is Proactive.** Proactive tools should be used to identify and address safety issues in the transportation system, rather than waiting for crashes to occur and reacting afterwards.
6. **Redundancy is Crucial.** Reducing risks requires that all parts of the transportation system be strengthened, so that if one part fails, the other parts still protect people.

The Department will work to ensure the goal of reaching zero roadway fatalities and the principles of an integrated Safe System Approach are part of the implementation of all U.S. DOT program activities that affect the Nation's roadways.

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<sup>6</sup> [https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA\\_SafeSystem\\_Brochure\\_V9\\_508\\_200717.pdf](https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA_SafeSystem_Brochure_V9_508_200717.pdf)

## Opportunities to Simultaneously Address Safety, Equity, and Climate

Safety is and will always be the Department's top priority. Roadway safety is also a foundational pre-requisite to our success in addressing two other major priorities: equity and climate.

The *Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* (EO 13985) pursues a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.<sup>7</sup> An important area for U.S. DOT's focus is the disproportionate, adverse safety impacts that affect certain groups on our roadways. For example, fatalities among Black people increased by 23 percent between 2019 and 2020 compared to an overall increase of 7.2 percent.<sup>8</sup> People who are American Indian and Alaska Native have roadway fatality rates more than double the national rate on a per population basis.<sup>9</sup> Although men consistently represent more than 70 percent of drivers involved in fatal crashes, when comparable crashes are analyzed and risk taking differences are accounted for, studies have shown that motor vehicle fatality risk is, on average, 17 percent higher for a female than for a male of the same age.<sup>10</sup> The disproportionate safety impacts are especially true in underserved communities, where people face heightened exposure to risk. The 40 percent of counties with the highest poverty rates in 2019 experienced a fatality rate 35 percent higher than the national average on a per population basis.<sup>11</sup>

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<sup>7</sup> <https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government>

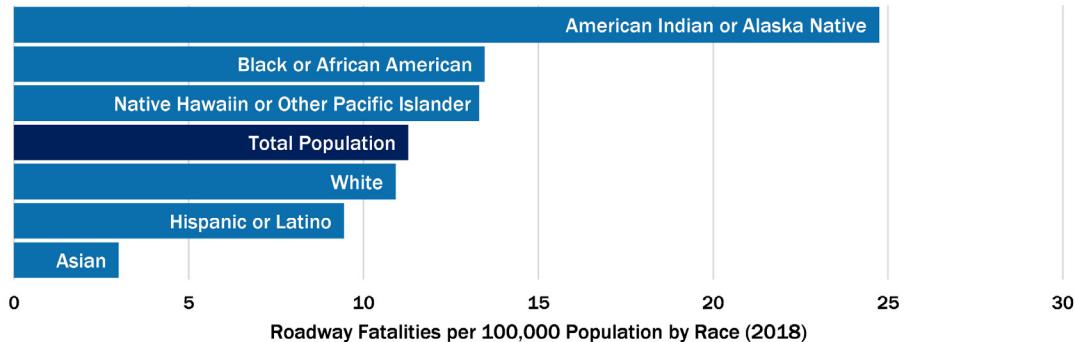
<sup>8</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813118>

<sup>9</sup> FARS 2018 Final File; Population – Census Bureau

<sup>10</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/811766>

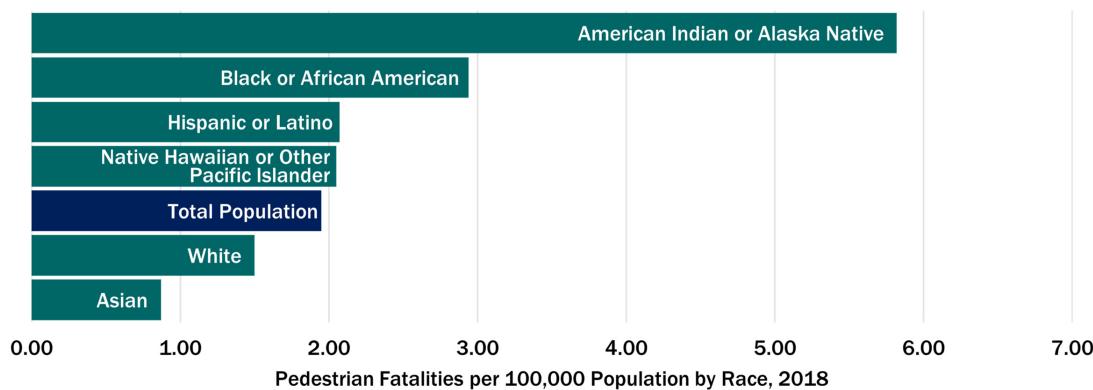
<sup>11</sup> FARS 2019 data publication, 1<sup>st</sup> release; Poverty rates and Population data by County, U.S. Census. The fatality rate for the top 40 percent of counties by poverty rate was 14.9 per 100,000 population versus 11.0 for the country.

## Fatalities impact communities differently...

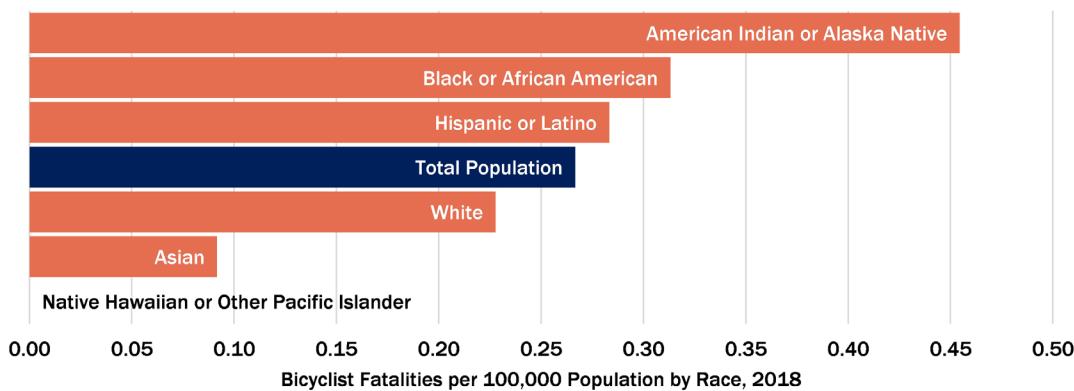


...particularly for people not in a vehicle.

### Fatalities Among Pedestrians



### Fatalities Among Bicyclists



Sources: FARS 2018 Final File; Population – Census Bureau<sup>12</sup>

<sup>12</sup> Note: The x-axis scales in the all roadway fatalities, pedestrian fatalities, and bicyclist fatality charts, respectively, are all different.

To achieve zero roadway fatalities and a transportation system that is safe for all users, all actors in our transportation system must acknowledge and address historic and ongoing inequities. Law enforcement and the work of our Nation's law enforcement officers are critical to the prevention and reduction of traffic-related fatalities and injuries. Traffic enforcement must have equity – the consistent, fair, just, and impartial treatment of all people – at its foundation. Under the Safe System Approach, efforts to make our roads safer should affirmatively improve equity outcomes. The Department will advance equity as an instrumental component of transportation safety and convene key stakeholders – government at all levels, law enforcement, advocacy, community organizations, and the general public – to develop both a better understanding of the intersection of equity and roadway safety, and a comprehensive approach to incorporating equity into all of the Department's efforts to achieve zero roadway fatalities and serious injuries.

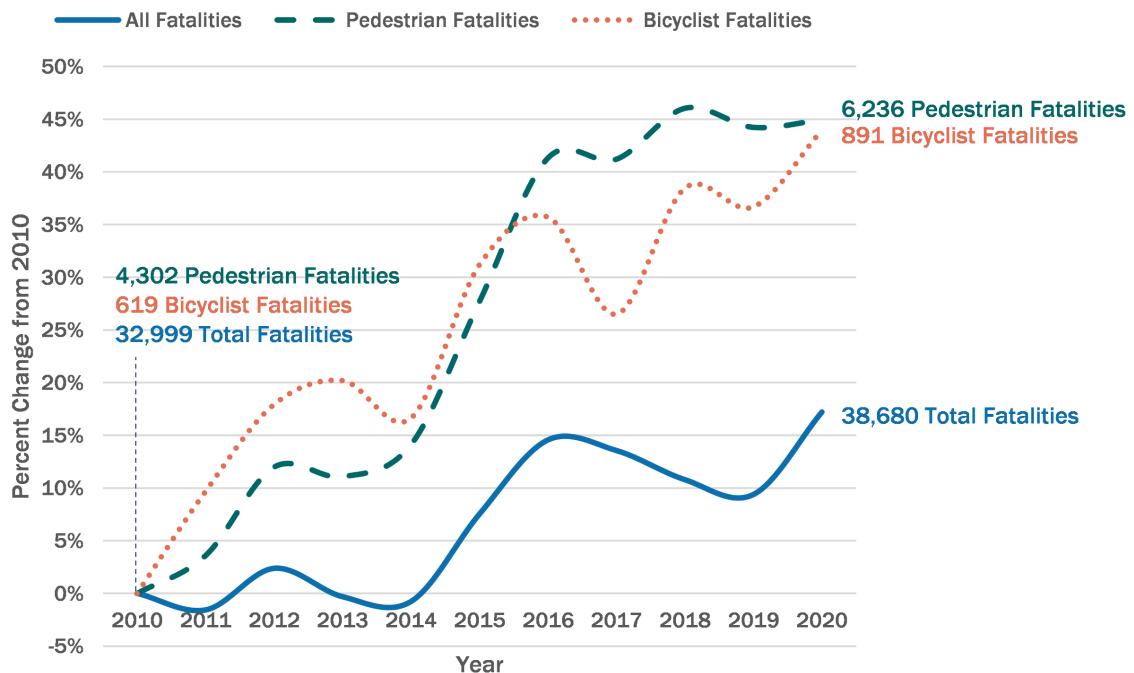
In the case of climate change, the *Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad* deploys the full capacity of Federal executive agencies to combat the climate crisis by implementing a Government-wide approach that: reduces climate pollution in every sector of the economy; increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; and delivers environmental justice.<sup>13</sup> As climate change continues to reshape our environment, its future effects on roadway safety will need to be taken into account. For example, weather events are expected to become more severe as a result of climate change. How we address adverse weather and roadway conditions may need to be adapted to effectively mitigate increasingly extreme weather events.

Improved safety on our roadways is also needed to support one critical component of strategies to achieve transportation greenhouse gas reductions goals: increased use of transit, walking, rolling, and riding. People who select climate-friendly transportation options decrease transportation-related emissions that contribute to climate change. Such reductions also can improve air quality and provide health benefits to those using and living near highways, roads, and streets with heavy motor vehicle traffic. Yet people walking and biking suffer disproportionately from serious injuries and fatalities when a crash occurs compared to people in vehicles. Moreover, fatalities among pedestrians and bicyclists have been increasing faster than roadway fatalities overall in the past decade, which has a chilling effect on climate-friendly transportation options such as walking, biking, or taking public transportation. To unlock the climate benefits of those modes, we need road and street systems that feel safe and are safe for all road users. The climate, health, and other co-benefits of safety improvements on our roadways and in the surrounding environment are substantial, and further support the benefits of a focused roadway safety effort.

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<sup>13</sup> <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>

Fatalities among **all users** have been increasing.  
Fatalities among **pedestrians** and **bicyclists** have been increasing even faster.



Source: Fatality Analysis Reporting System

# Objectives and Implementation

Implementation of the NRSS will be arranged around five complementary objectives corresponding to the Safe System Approach elements:

- **Safer People:** Encourage safe, responsible behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.
- **Safer Roads:** Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.
- **Safer Vehicles:** Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
- **Safer Speeds:** Promote safer speeds in all roadway environments through a combination of thoughtful, context-appropriate roadway design, targeted education and outreach campaigns, and enforcement.
- **Post-Crash Care:** Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

The sections below highlight the importance of each NRSS objective area and outline notable actions that U.S. DOT is committed to taking in each area.

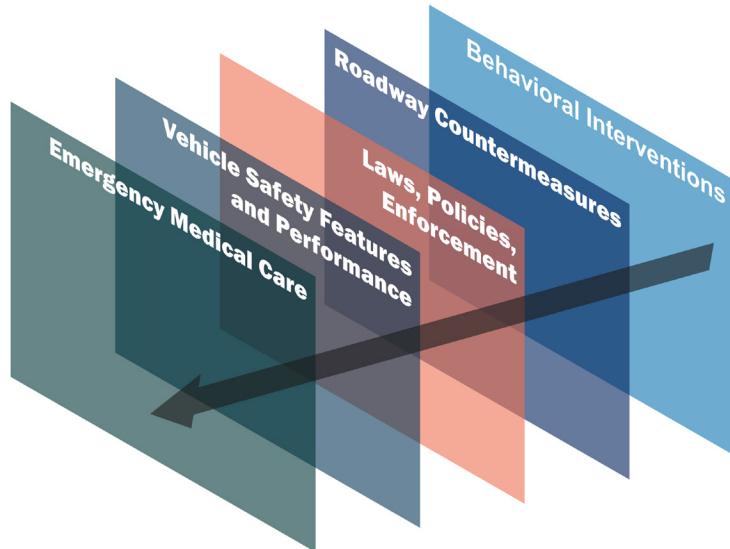
Addressing each of these areas is critical, as their impact can be complementary and build redundancy. The overlapping set of safety measures in a Safe System Approach is similar to the Swiss cheese model for safety long used in the aviation industry, which notes the importance of differing layers and types of defenses and aligns with Safe System Approach principles.<sup>14</sup> The purpose of the NRSS and its adoption of the Safe System Approach is to address contributing factors from all angles and build layers of prevention, protection, and mitigation. Similarly, actions taken by the Department must be augmented by actions taken by partners across the entire transportation community to ultimately be successful in reaching our goal of zero. Crashes are complex events involving a multitude of factors. Certain strategies or interventions could have prevented some of the crashes described above from occurring, while others, such as seat belt use, could have prevented them from being fatal or causing serious injury.

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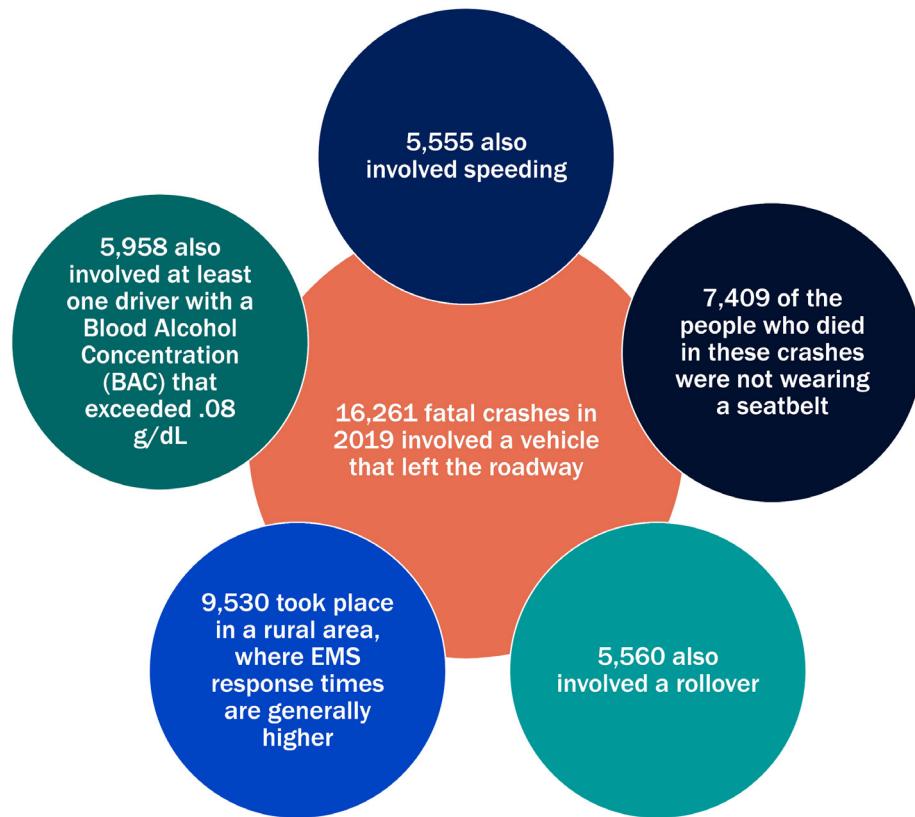
<sup>14</sup> Reason, James (1990-04-12). "The Contribution of Latent Human Failures to the Breakdown of Complex Systems". Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences. 327

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## All layers of a Safe System Approach are critical.



To provide an illustrative example, among the 16,261 fatal crashes involving a vehicle that left the roadway in 2019, thousands also involved other contributing factors:



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Source: Fatality Analysis Reporting System

Identifying, prioritizing, and acting to address the contributing factors associated with crashes depends heavily upon accurate and timely data. U.S. DOT collects, maintains, and disseminates vast data resources, yet room for expansion and improvement exists. While certain issues may only be understood anecdotally or through local data, robust national action often requires detailed and widely available data. The Department seeks opportunities to expand the availability and timeliness of data at all levels of government, particularly data on safety impacts to specific user groups and data that advance the knowledge necessary to understand how to significantly reduce serious injuries and fatalities on our highways, roads, and streets.

## Safer People

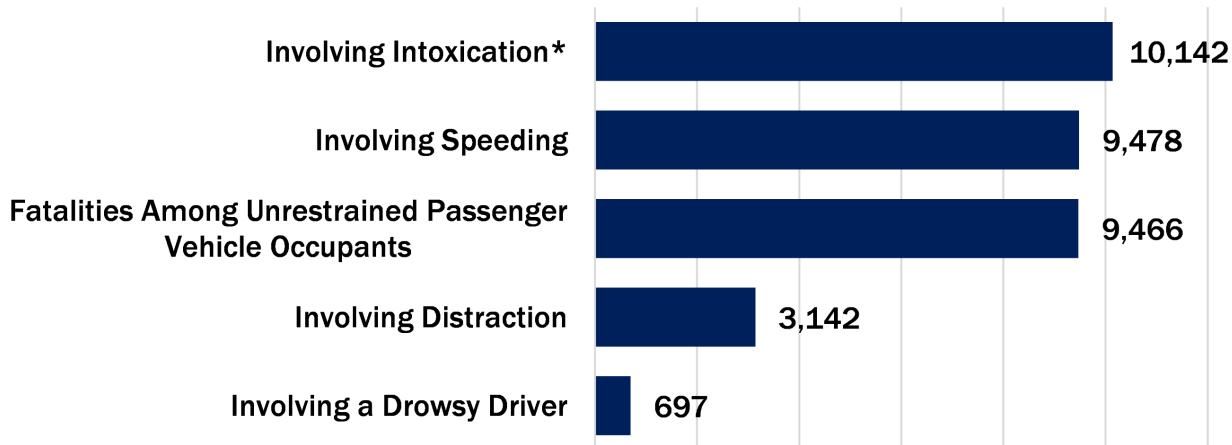
The safety of people is U.S. DOT's core mission. Enabling people to be safer encompasses actions to encourage safer behaviors. This includes the driving public, commercial drivers, and all road users. How individuals use our highways, roads, and streets plays an important role in determining safety outcomes. People generally use the roadway system in a safe manner on any given trip, but mistakes, lapses in judgement, and other more significant risky behaviors still occur.

Dangerous behaviors like impaired driving and excessive speeding threaten the safety of all road users, not just individual drivers. The overwhelming majority of serious and fatal crashes includes at least one human behavioral issue as a contributing factor. People in motor vehicles not wearing seat belts, driving while impaired from alcohol, and speeding are the three most frequent and persistent factors. Recent research indicates such behavioral issues have been major contributing factors to the increase in fatalities during the COVID-19 public health crisis.<sup>15</sup> States play an important role in addressing these behaviors through legislation such as seat belt laws. Issues such as distraction, drug impairment, and fatigue also contribute to thousands of fatal crashes per year.

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### Risky behaviors are a significant contributor to roadway fatalities.

**2019 Fatalities Involving Risky Behaviors**



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\*At least one driver with Blood Alcohol Concentration .08 g/dL or higher

Source: Fatality Analysis Reporting System

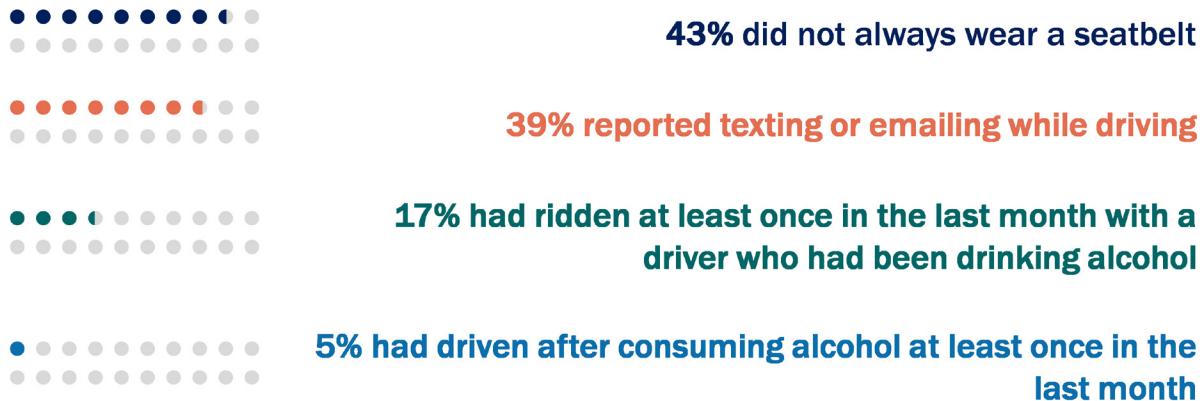
Some behavioral factors are especially prominent among certain groups, and understanding the prevalence and concentration of these safety risks among different demographic groups can inform the interventions needed and target audiences to reach. For example, younger people who may be less

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<sup>15</sup> [https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-10/Traffic-Safety-During-COVID-19\\_Jan-June2021-102621-v3-tag.pdf](https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-10/Traffic-Safety-During-COVID-19_Jan-June2021-102621-v3-tag.pdf)

experienced and more risk tolerant require tailored interventions for effective outreach and education. Furthermore, more than 70 percent of drivers involved in fatal crashes in 2019 were men, even though the number of male and female drivers is about equal.<sup>16</sup> Considerations of demographic shifts such as increases in the older driving population informs the types of efforts implemented, focus needed, redundancies required, and how safety is communicated.

Risky behaviors are particularly common among younger drivers. Among surveyed high school students:



Source: Transportation Risk Behaviors Among High School Students – Youth Risk Behavior Survey, United States, 2019

In 2019, 11,917 people died in crashes where a driver with some alcohol in their system – a Blood Alcohol Concentration or BAC  $> 0.01$  – was involved. Furthermore, roughly two thirds of all alcohol impaired fatalities involve high blood alcohol levels with a BAC  $> 0.15$ .<sup>17</sup> To strongly discourage repeated impaired driving and prevent recidivism, approaches to address alcohol-impaired driving need to focus on assessment and treatment such as ignition interlock programs. Such efforts also require working with the behavioral and public health communities to assess those with substance use disorders, educate drivers on the risks of impaired driving, and support alternative transportation options. Considerable progress in behavioral research has been made to advance our knowledge and understanding of the physiological effects of both alcohol and drug impaired driving. U.S. DOT collaborates closely with toxicology experts and laboratories. The Department is also working on ways to measure drug and alcohol impairment. Accurately measuring drug impairment continues to be a priority and, through research funded in the Bipartisan Infrastructure Law, that work will continue.

Safe behavior among professional drivers is also critical, particularly given their time on the road and the size and weight of commercial motor vehicles. This is especially true of motor coaches and buses that transport multiple people in one vehicle. The Department is responsible for overseeing the safe operation

<sup>16</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813209>

<sup>17</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813120>

of commercial trucks, buses, and transit vehicles. This includes a focus on behavioral safety, such as drug and alcohol testing to address use and impairment offenses by commercial driver's license (CDL) holders. For example, the Drug and Alcohol Clearinghouse recorded more than 54,000 drug and alcohol violations in 2020.<sup>18</sup> While safe behaviors among commercial drivers is critical, it is also important to leverage other approaches to make sure that commercial driving is a safe, healthy, and viable profession, in recognition of its vital importance to the Nation's economic prosperity.

A comprehensive Safe System Approach involves using all available tools, including education, outreach, engineering solutions, and enforcement. The Department will continue to promote effective practices focused on behavioral safety such as alcohol ignition interlock devices and administrative license suspensions to deter impaired driving, enforcement of primary seat belt laws and support for high-visibility law enforcement, graduated driver's license requirements for novice drivers, and pedestrian safety zones for areas at high risk of crashes involving those walking. Traffic enforcement specifically focused on dangerous driving behavior, including impaired driving, speeding, distracted driving, and failure to wear seat belts, remains critical to saving lives, preventing injuries, and reducing traffic crashes, and should be accompanied by educational tools and outreach efforts. Persistent behavioral risks can also be addressed over time through other interventions such as transformative street design and motor vehicle technologies like alcohol detection systems. Beyond effectively leveraging our safety tools, a robust and comprehensive approach to influencing human behavior requires deepening our understanding of underlying causes. To reflect the Safe System Approach principles, U.S. DOT will shift its safety messaging to recognize that humans are fallible, will make mistakes and at times exercise poor judgment, and that such decisions should not lead to death and serious injury. Activities such as building safety culture within organizations and leveraging public health approaches can assist with the practical implementation of a Safe System Approach.<sup>19</sup>

### **Key Departmental Actions to Enable Safer People**

1. Leverage new funding in the Bipartisan Infrastructure Law for behavioral research and interventions, and use education, technical assistance, and outreach to disseminate information to partners. Leverage public health approaches for implementation by engaging with a wide variety of stakeholders using a diversity of interventions. For alcohol and drug impaired driving research and interventions, focus on developing means to accurately measure impairment, reducing drug and alcohol impaired driving recidivism, as well as promoting assessment and treatment of drug and alcohol substance use disorders by working with the behavioral and public health communities. Support research and development of technology to detect and prevent alcohol and drug impaired driving.
2. Update Departmental safety messaging so that it is unified across the entire Department and reflects the Safe System Approach principle of human fragility.
3. Implement the October 2021 final rule requiring State Driver Licensing Agencies to access and use information obtained through the Drug and Alcohol Clearinghouse and take licensing actions against

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<sup>18</sup> <https://clearinghouse.fmcsa.dot.gov/>

<sup>19</sup> Safety culture is defined for the purposes of this document as the shared values, actions, and behaviors that demonstrate a commitment to safety over competing goals and demands.

commercial drivers who have drugs or alcohol violations in the system and are not cleared to return to duty.

4. Implement the July 2021 final rule requiring State Driver Licensing Agencies to develop systems for the electronic exchange of driver history record information. Work with State Driver Licensing Agencies to improve accuracy of CDL driver records and to evaluate additional opportunities to use these more accurate records to take unsafe drivers off the road more expeditiously.
5. Work with State Driver Licensing Agencies to improve the accuracy of non-CDL driver records, and to evaluate additional opportunities to use these more accurate records to take unsafe drivers off the road more expeditiously. Further encourage State Driver Licensing Agencies to identify and educate repeat offenders of impaired driving and other behavioral safety issues.
6. Support the development and accessibility of training designed to enhance equity in law enforcement.
7. Encourage States to apply for the Section 1906 grant program that funds the collection of information on the race and ethnicity of the driver in motor vehicle stops.
8. Increase commercial motor vehicle highly visible traffic enforcement against risky driver behavior focused on high crash locations.

## Safer Roads

Roadway design strongly influences how people use roads. The environment around the roadway system – including land use and where highways, roads, and streets intersect with other transportation modes such as rail and transit – also shapes the safety risks borne by the traveling public. The United States has more than four million miles of public roads, which vary widely by ownership, type, and function. The Nation's highways, roads, and streets have been built at different times, with different design standards, and are in widely varying states of repair. Many public roads also support a growing diversity of uses and mix of users – including people who take public transportation, walk, bike, and roll – and function as places unto themselves, contributing to community and prosperity.

The Safe System Approach emphasizes that redundancy is critical, and safer roadways mean incorporating design elements that offer layers of protection to prevent crashes from occurring and mitigate harm when they do occur. Through the NRSS, the Department will focus on advancing infrastructure design and interventions that will significantly enhance roadway safety. This includes advancing support for the implementation of Complete Streets policies to help transportation agencies across the United States plan, develop, and operate roads, streets, and networks. Complete Streets policies prioritize safety, comfort, and connectivity to destinations for all users, including pedestrians, bicyclists, those who use wheelchairs and mobility devices, transit riders, micro-mobility users, shared ride services, motorists, and freight delivery services.

A one-size-fits-all approach to roadway design will not work; instead, context-sensitive designs must be the norm. Unfortunately, many of our Nation's roads do not adequately incorporate infrastructure design elements that are conducive to the safe travel of all road users. People who take public transportation, walk, bike, roll, or use a motorcycle require special attention since they lack the protections gained from being inside a motor vehicle. Recent research found that 90 percent of the top pedestrian fatality hotspots are on roadways with three or more lanes, and 70 percent have five or more lanes of traffic that pedestrians had to cross.<sup>20</sup> Visibility continues to be an issue for people walking and biking; 75 percent of all fatal pedestrian crashes occur in darkness.<sup>21</sup> More broadly, safety risk differs depending on the type of road and how it is used, with arterial roads comprising over half of all traffic deaths in 2020 despite constituting approximately ten percent of the Nation's public road mileage.<sup>22</sup> Context-sensitive design permits the flexibility to address variations in the purpose and anticipated use of roads, as well as take into consideration the surrounding land use and potential impacts related to the natural environment. As roadways are built, maintained, and upgraded with the latest safety features, it is also essential that roadway construction and maintenance zones are safe for workers.

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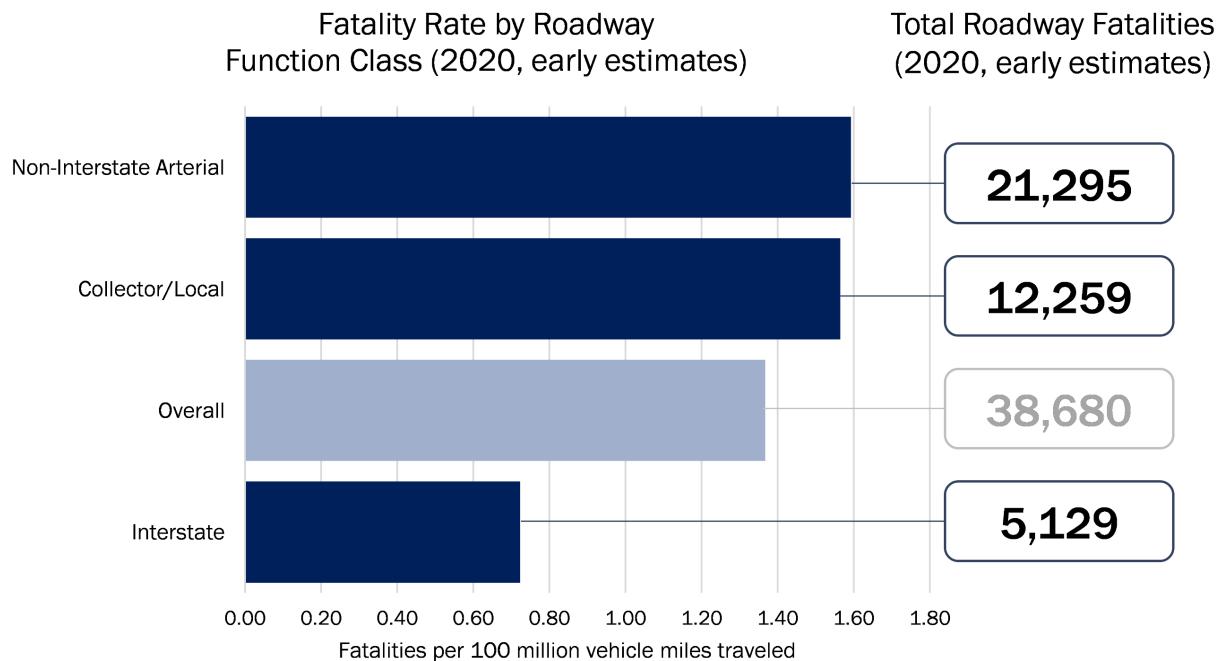
<sup>20</sup> Schneider, R. J., Sanders, R., Proulx, F., & Moayyed, H. (2021). United States fatal pedestrian crash hot spot locations and characteristics. *Journal of Transport and Land Use*, 14(1), 1–23. <https://doi.org/10.5198/jtlu.2021.1825>

<sup>21</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813079>

<sup>22</sup> <https://www.fhwa.dot.gov/policyinformation/statistics/2019/hm220.cfm>

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## Risk levels vary widely across different types of roads.



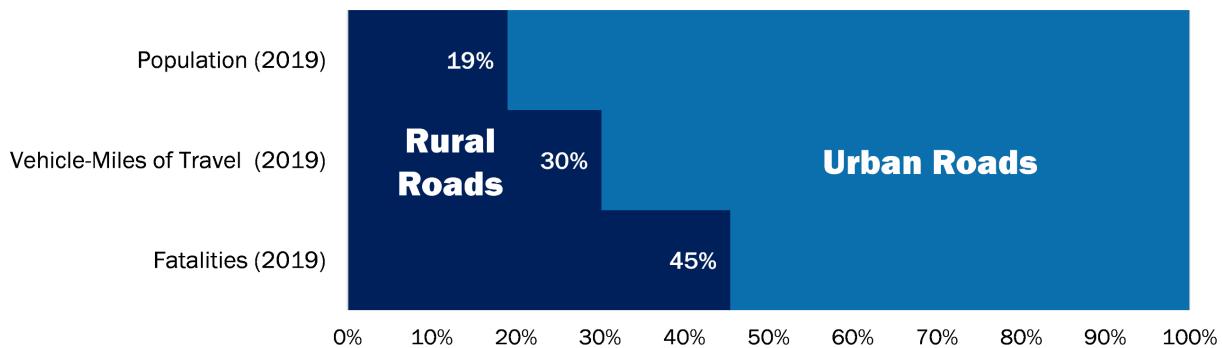
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Source: Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2020, DOT HS 813 118, June 2021

Roadway design guidance and regulations will be updated to reflect best practices for designing safer roadways such as incorporating proven safety countermeasures, and the Department will work with States and other owners of highways, roads, and streets to achieve safer roadway design. When roadways intersect with railroads, those locations should have sufficient infrastructure in place to limit the possibility of a collision between a train and a motor vehicle or a person walking. The NRSS is also a strategy designed to reverse the disproportionate impact of crashes on people of color, and on people outside of the vehicle. Compared with urban areas, highways, roads, and streets that serve rural communities and small towns face outsized safety impacts relative to their population and number of miles traveled, and have unique design considerations such as how to minimize collisions with large wildlife.

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## Fatalities and fatal crashes occur disproportionately – by both population and vehicle travel – on rural roads.



Source: Fatality Analysis Reporting System, U.S. Census

Advancements in making roadways safer are important for success in the other NRSS objectives. Safer highways, roads, and streets can encourage safer behaviors among drivers and other road users, for example. Well-designed roadways can also complement vehicle technology in improving safety performance with respect to people both inside and outside of vehicles.

### Key Departmental Actions to Enable Safer Roads

1. Complete the current rulemaking process for Manual Uniform Traffic Control Devices (the Manual) by finalizing the proposed amendments and incorporating changes based on the public comments and Administration priorities. Identify proposed future changes not possible via the current rulemaking effort and further update the Manual to promote the safety, inclusion, and mobility of all users and provide for the protection of vulnerable road users. Initiate four-year cycles to update this national standard for keeping current with the latest research, practices, and technologies. Ensure a wide range of practitioner and stakeholder engagement in the development of future editions, with representation that is consistent with the impact of crashes on people outside the vehicle such as people walking, people in rural communities, and people of color. Provide education and technical assistance to the users of the Manual, emphasizing the purpose of the Manual, roles of engineering, and how device innovation occurs.
2. Support the planning, design and implementation of safer roads and streets in all communities using all available and applicable Federal funding resources, including existing formula funding programs to include but not limited to the Highway Safety Improvement Program. Also leverage the \$6 billion Safe Streets and Roads for All grant initiative, which is included in the Bipartisan Infrastructure Law. Support states and Metropolitan Planning Organizations (MPOs) in the new requirement to use planning funds to develop Complete Streets policies and prioritization plans.
3. Launch a comprehensive Complete Streets Initiative and provide technical assistance to communities of all sizes to implement policies that prioritize the safety of all users in transportation network planning, design, construction, and operations, including in small towns and rural areas. Incorporate Complete Streets criteria in Federal grant opportunities and in the *Emergency*

- Relief Manual.* Incorporate lighting into Complete Streets implementation so that lighting becomes a key design factor in roadway upgrades. Involve transit providers in Complete Streets implementation activities to support safe walking, biking, and rolling to stops and stations.
4. Improve State performance on achieving safety performance targets using a focused approach to safety and other technical assistance.<sup>23</sup> Consider revisions to guidance and regulations to improve State strategic highway safety plans and ensure that State safety performance targets demonstrate constant or improved performance for each safety performance measure.
  5. Elevate the Transportation Performance Management Dashboard<sup>24</sup> to stakeholders such as State Executives, Congress, the media, and the public to spur and reward roadway safety gains and share information on State safety performance targets and progress toward achieving those targets. Promote and continue to add noteworthy safety practices in the Noteworthy Practices Database<sup>25</sup> to assist State and local agencies in identifying optimal projects aimed at reducing fatalities and serious injuries.

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<sup>23</sup> <https://safety.fhwa.dot.gov/fas/>

<sup>24</sup> <https://www.fhwa.dot.gov/tpm/reporting/state/>

<sup>25</sup> <https://rspcb.safety.fhwa.dot.gov/noteworthy/default.aspx>

## Safer Vehicles

In 2019, the Nation had over 275 million registered motor vehicles, which carried people and goods over three trillion miles.<sup>26</sup> The role of vehicle safety performance in avoiding or mitigating the harm of crashes cannot be overstated. Seat belts and air bags, for example, prevented an estimated 425,000 fatalities in traffic crashes since they were first required through the Federal Motor Vehicle Safety Standards (FMVSS).<sup>27</sup> Through the NRSS, the Department will seek opportunities to build on these successes, not only making vehicles safer for their occupants, but for other road users too.

While air bags and seat belts work together to protect the people inside a motor vehicle when a crash occurs, the next generation of motor vehicles will increasingly have the technology necessary to prevent certain crashes from occurring in the first place, and to mitigate harm to those outside of the vehicle when a crash happens. Several Advanced Driver Assistance Systems (ADAS) technologies are known to help prevent or mitigate the impact of crashes.<sup>28</sup> Examples include: Automatic Emergency Braking, which can apply a vehicle's brakes automatically in time to avoid or mitigate an impending forward crash with another vehicle; and Lane Departure Warning, which monitors lane markings and alerts the driver when it detects that the vehicle is drifting out of its lane. Expanding the availability of such vehicle technologies and improving existing technologies may be especially important given that new vehicle purchases continue to trend towards larger vehicles – particularly sport utility vehicles and crossovers – which recent studies have found to cause more serious injuries than passenger cars when involved in collisions with pedestrians.<sup>29</sup> The Department seeks to continue to leverage enhanced motor vehicle safety performance and technologies to improve safety, including commercial motor vehicle equipment such as rear underride guards and technologies that address behavioral issues such as alcohol detection systems and distracted driving detection systems. Incentivizing the inclusion of technologies in new motor vehicles can help to reduce the frequency of crashes, and to reduce the severity of the outcomes when they do occur. The Department also continues to identify opportunities to make transit buses safer for passengers, operators, and anyone walking, biking, or rolling near them.

In addition to setting performance standards and encouraging the adoption of new technologies, it is also important to provide responsible oversight over safety issues. When motor vehicle design or technologies pose unreasonable safety risks to the public, the Department will take action to investigate issues, initiate recalls, and remedy vehicle defects.

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<sup>26</sup> <https://www.bts.gov/content/number-us-aircraft-vehicles-vessels-and-other-conveyances>; [https://www.fhwa.dot.gov/policyinformation/travel\\_monitoring/20augtv/figure2.cfm](https://www.fhwa.dot.gov/policyinformation/travel_monitoring/20augtv/figure2.cfm)

<sup>27</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812691>. Figure is based on estimated lives saved through 2017.

<sup>28</sup> <https://www.safercar.gov/ratings#25196>

<sup>29</sup> <https://www.iihs.org/news/detail/new-study-suggests-todays-suvs-are-more-lethal-to-pedestrians-than-cars>

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**From 1960 through 2012, over 600,000 lives have been saved by vehicle safety technologies, including seat belts, air bags, child safety seats, electronic stability control, and others.**

FMVSS Number and Topic	Lives Saved, 1960-2012
208/209/2010 Seat belts	329,715
203/204 Energy-absorbing steering assemblies	79,989
208 Frontal air bags	42,856
206 Door locks, latches, and hinges	42,135
201 Occupant protection in interior impact	34,477
214 Side impact protection (incl. side air bags)	32,288
105/135 Dual master cylinders/front disc brakes	18,350
213 Child safety seats	9,891
212 Adhesive windshield bonding	9,853
126 Electronic Stability Control	6,169
216 Roof crush resistance	4,913
108 Trailer conspicuity tape	2,660
226 Rollover curtains	178
301 Fuel system integrity	26

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Source: Kahane, C. J. (2015, January). Lives saved by vehicle safety technologies and associated Federal Motor Vehicle Safety Standards, 1960 to 2012 – Passenger cars and LTVs – With reviews of 26 FMVSS and the effectiveness of their associated safety technologies in reducing fatalities, injuries, and crashes. (Report No. DOT HS 812 069). Washington, DC: National Highway Traffic Safety Administration.

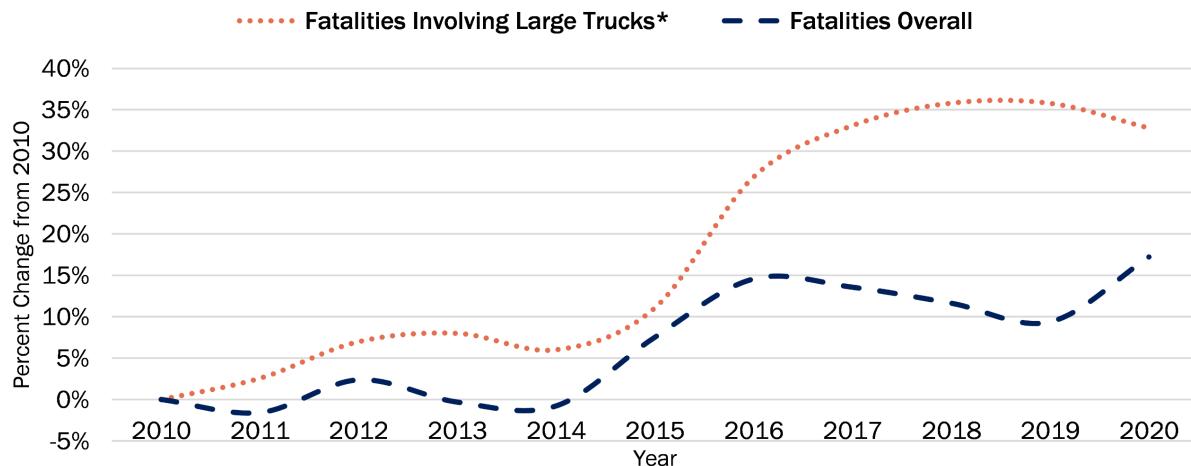
U.S. DOT is also cognizant of the need to plan for the safety landscape in the future. This includes a responsibility to use holistic approaches to assess the safety of emerging technologies such as Automated Driving Systems (ADS). A small number of vehicles equipped with ADS are in development and undergoing testing today. The Department is tracking their performance daily, and is actively researching test methods, procedures, and criteria to assess long-term safety benefits, as well as broader impacts on workers, drivers, and all people who use the roadways.

Enabling safer vehicles also means employing strategies to improve the safety of the commercial motor vehicles that transport goods and carry thousands of passengers locally and across the country every day. 5,005 fatalities are estimated to have involved a large truck in 2019 and more than 80 percent of these fatalities involved the occupants of other vehicles or other road users such as pedestrians, bicyclists, and motorcyclists.<sup>30</sup> To ensure the safe operations of commercial trucks and motor carriers, the Department continues to identify high risk companies and operators of commercial motor vehicles using a data-driven and performance-based approach, including roadside commercial vehicle safety inspections.

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<sup>30</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813110>

Fatalities involving large trucks have been increasing faster than fatalities overall, though they declined slightly for 2020, even as total fatalities increased.



\*Trucks over 10,000 Gross Vehicle Weight Rating, including single unit trucks and truck tractors

Sources: Fatality Analysis Reporting System; Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2020, DOT HS 813 118, June 2021

### Key Departmental Actions to Enable Safer Vehicles

1. Develop proposals to update consumer information on vehicle safety performance through the New Car Assessment Program (NCAP or Program). The updated Program is expected to emphasize safety features that protect people both inside and outside of the vehicle, and may include consideration of pedestrian protection systems, better understanding of impacts to pedestrians (e.g., specific considerations for children), and automatic emergency braking and lane keeping assistance to benefit bicyclists and pedestrians. The Program can also identify areas of most promising vehicle technology that may lead to subsequent analysis and possible FMVSS rulemakings, such as alcohol detection systems, and systems to detect distracted driving.
2. Provide an NCAP ‘road map’ that will show how a set of vehicle improvements may be advanced over the next ten years, covering the stages of data evaluation, research, and analysis of the criteria for inclusion in NCAP.
3. Initiate a rulemaking to update the Monroney consumer label to include crash avoidance information next to crashworthiness information. NHTSA may also consider including information on features that mitigate risks for people outside of the vehicle.
4. Initiate a new rulemaking to require Automatic Emergency Braking and Pedestrian Automatic Emergency Braking technologies on new passenger vehicles. Initiate a rulemaking to require Automatic Emergency Braking technologies on heavy trucks.
5. Consider a rulemaking effort to establish motor vehicle safety standards to require passenger motor vehicles manufactured to be equipped with advanced impaired driving prevention technology.
6. Issue a final rule to upgrade existing requirements for rear impact guards on newly manufactured trailers and semi-trailers.

7. Require manufacturers to provide notification when there is a crash involving Automated Driving Systems, and create a public database of information that can inform safer passenger vehicles.
8. Ensure timely investigation into emerging vehicle safety issues arising from the deployment of new technologies.

## Safer Speeds

The Department believes it is important to prioritize safety and moving individuals at safe speeds over focusing exclusively on the throughput of motor vehicles. Both exceeding the posted speed limit and driving too fast for conditions are speeding-related crash factors. By this definition, speeding has played a role in more than a quarter of traffic deaths – killing nearly 100,000 people – over the past decade.<sup>31</sup> Speeding increases both the frequency and severity of crashes, yet it is both persistent and largely accepted as the norm amongst the traveling public.<sup>32</sup> In 2019, 78 percent of the vehicles involved in fatal pedestrian crashes were on a roadway with a speed limit greater than 30 miles per hour (mph).<sup>33</sup> Unsafe speeds are now a well-documented and understood factor in death and injury, especially among people outside of a vehicle.

In alignment with the Safe System Approach, achieving safe speeds requires a multi-faceted approach that leverages road design and other infrastructure interventions, speed limit setting, education, and enforcement. Roadway design and other infrastructure factors play a significant role in managing speeds and can deter excessive speeding behaviors from occurring in the first place. Design can help to make roads and streets “self-enforcing,” offering drivers contextual encouragement – via lane width, intersection design, pedestrian and bicyclist infrastructure, and other features – to drive at safer speeds. Speed limits frame expectations for drivers and other roadway users, and should be set to provide a safe, consistent, and reasonable speed to protect drivers, other people in motor vehicles, and people walking, biking, and rolling along the roadway. Setting safer speed limits is a critical tool for reducing crashes and injury, and methods for setting speed limits should be customized to the context of the roadway. For situations where temporary conditions may necessitate slower speeds, interventions such as signage that permits variable speed limits and education on driving cautiously in inclement weather can be used to ensure safe driving speeds. Speeding can also be addressed and discouraged through education and enforcement. Automated speed enforcement, if deployed equitably and applied appropriately to roads with the greatest risk of harm due to speeding, can provide significant safety benefits and save lives.

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<sup>31</sup> Source: NHTSA FARS files 2010-2018, FARS 1<sup>st</sup> release 2019.

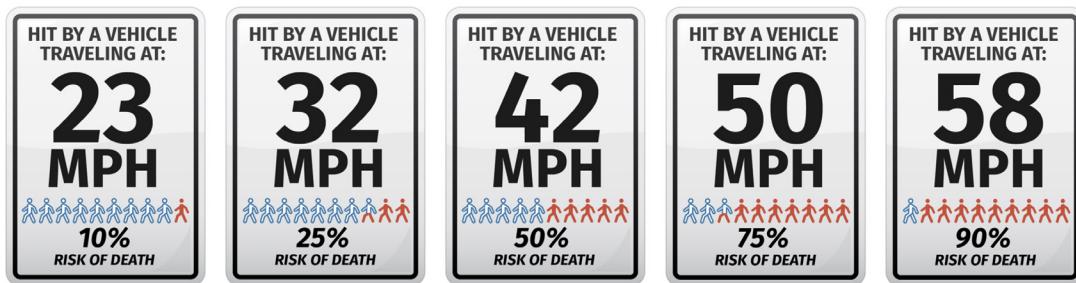
<sup>32</sup> [https://www.who.int/violence\\_injury\\_prevention/publications/road\\_traffic/world\\_report/speed\\_en.pdf](https://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/speed_en.pdf)

<sup>33</sup> Source: NHTSA FARS 1<sup>st</sup> release 2019

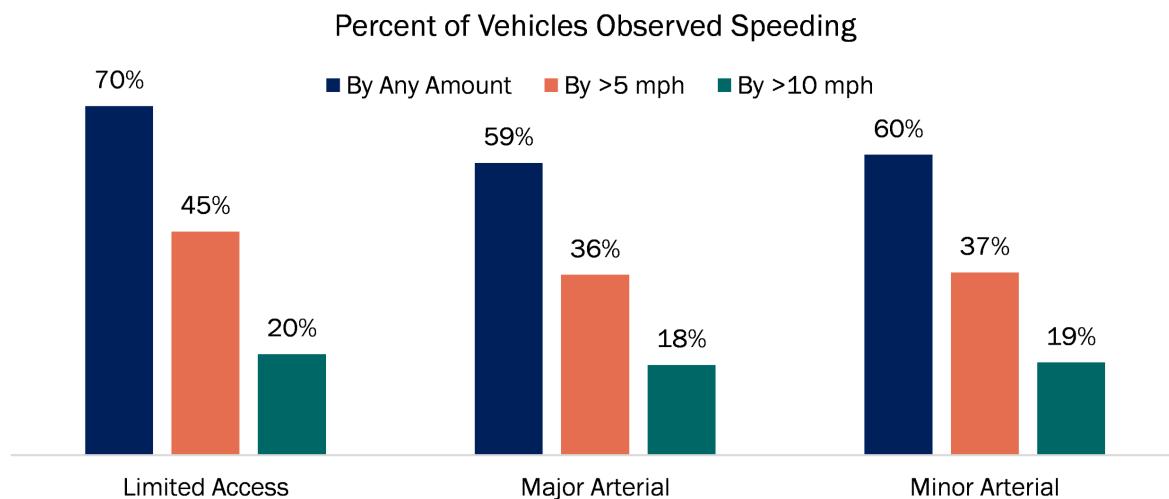
Speeding is a significant contributor to deaths on our roadways...

*10,490 fatalities are estimated to have been speeding-related in 2020.  
This represents an **increase of 11 percent** compared to 2019.*

...and is particularly hazardous to pedestrians.



Yet, speeding remains worryingly common.



Sources: Fatality Analysis Reporting System; Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2020, DOT HS 813 118, June 2021; AAA Foundation for Traffic Safety, Impact of Speed and a Pedestrian's Risk of Severe Injury or Death, <https://aaafoundation.org/impact-speed-pedestrians-risk-severe-injury-death/>; National Traffic Speeds Survey III: 2015, DOT HS 812 485, March 2018.

Safer speeds are ultimately a crosscutting issue, and the supporting actions need to encompass multiple programs within the Department. U.S. DOT will address the risks associated with speeding through an array of actions coordinated between FHWA, FMCSA, and NHTSA.

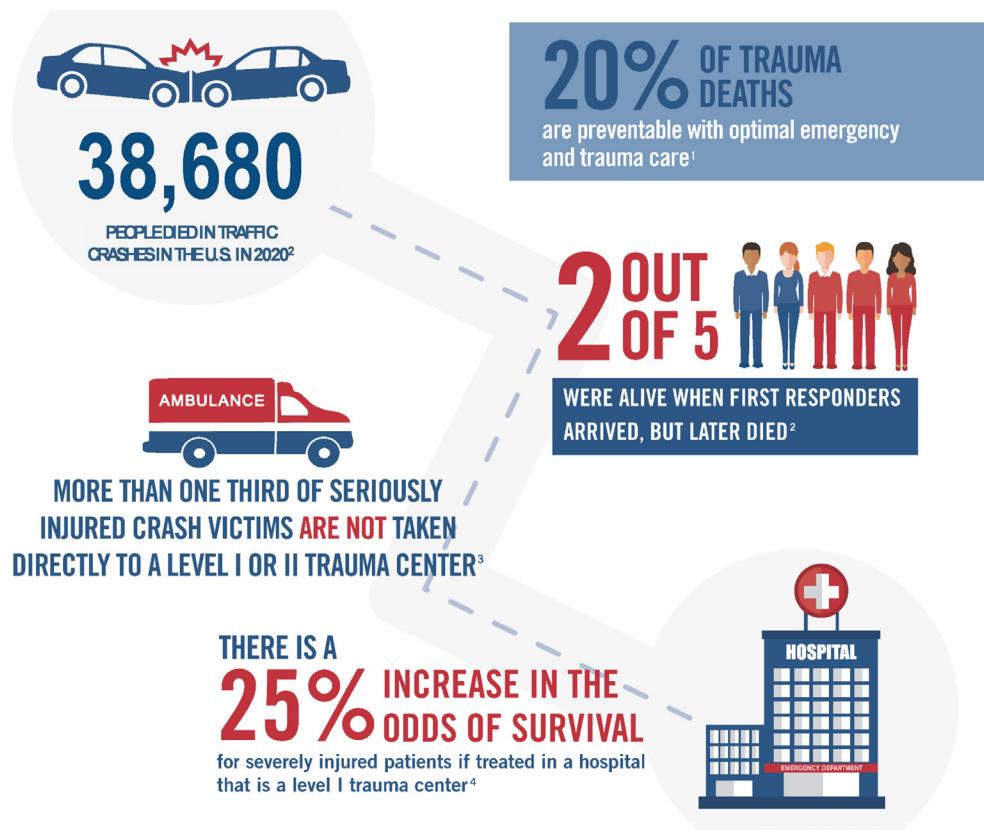
## **Key Departmental Actions to Enable Safer Speeds**

1. Update and lead the implementation of a robust, multimodal speed management program through new guides and close partnerships with stakeholders.
2. Develop and improve the information available for setting speed limits through Proven Safety Countermeasures and the Manual of Uniform Traffic Control Devices, providing a range of methodologies depending on the context of the roadway. Clarify the applicability and correct use of key criteria used in setting speed limits such as the 85th percentile. Provide technical assistance to all sizes of communities to determine appropriate speed limit setting, considering external assistance from leading practitioners and research organizations.
3. Revise FHWA guidance and regulations to take into account the safety of all users by encouraging the setting of context-appropriate speed limits and creating roadways that help to “self-enforce” speed limits. Provide noteworthy practices for re-engineering roads to slow down vehicles rather than relying primarily on enforcement to manage speeding. Promote speed safety cameras as a proven safety countermeasure.
4. Make funds available to communities through discretionary grant programs such as the Safe Streets and Roads for All program, and through behavioral safety programs to study and pilot automated or enforcement strategies focused on speeding that are designed to ensure their equitable application.

## Post-Crash Care

A Safe System Approach emphasizes preventing fatalities and serious injuries over preventing crashes. This approach, combined with a focus on redundancy, means that our responsibility does not end when a crash occurs. Caring for people injured in a crash to prevent their injuries from becoming fatal is just as critical. The timing of the arrival of ambulances and emergency responders is a major factor in whether an injured person survives a crash, and crash location is a major determinant of response time. The rural versus urban disparity in emergency medical response times for crashes is one such example. In rural areas, about 39 percent of fatal crash victims do not arrive at a hospital for between one and two hours from the time of the crash, compared to ten percent in urban areas.<sup>34</sup>

Access to emergency and trauma care is critical to the survivability of crashes.<sup>35</sup>



Sources: (1) National Academies of Sciences, Engineering and Medicine. A National Trauma Care System: Integrating Military and Civilian Trauma Systems to Achieve Zero Preventable Deaths After Injury. (2) Early estimate, NHTSA Fatality Analysis Reporting System (FARS). (3) NHTSA National Automotive Sampling System-Crashworthiness Data System (NASS-CDS). It is not known the percentage who were later transferred to a level I or II trauma center. (4) Mackenzie et al, 2006. This study compared level I trauma centers to non-trauma centers.

<sup>34</sup> <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813141>

<sup>35</sup> [https://www.ems.gov/pdf/advancing-ems-systems/EMS\\_Improving\\_Emergency\\_and\\_Trauma\\_Care\\_Infographic.pdf](https://www.ems.gov/pdf/advancing-ems-systems/EMS_Improving_Emergency_and_Trauma_Care_Infographic.pdf)

Managing the scene of a crash and providing a safe environment for first responders and passing travelers are also critical elements of delivering effective post-crash care. Transportation incidents, which include crashes as well as flat tires and other issues, are the second most common cause of death among both police officers and firefighters, and the leading cause of death among tow truck operators.<sup>36</sup> Moreover, up to 20 percent of crashes are estimated to be secondary in nature, meaning that they occur as the result of an earlier incident. The Department estimates that the likelihood of a secondary crash occurring increases by 2.8 percent for every minute the primary crash obstructs a travel lane or poses another type of hazard.<sup>37</sup> Safe and quick incident clearance is critical to addressing not only crash survivability and first responder safety, but also the safety of passing road users. Additionally, quickly clearing crashes has climate benefits by mitigating extensive congestion.

The Department collaborates with groups such as the Federal Interagency Committee on Emergency Medical Services to boost the efficiency and effectiveness of emergency medical services (EMS) through planning, projects, and research, supporting data EMS need to help advance their services, and measuring the health of the nation's EMS systems. U.S. DOT is committed to taking action within its scope and statutory responsibilities to make advances in survivability through the delivery of equitable and impartial post-crash care, including EMS and 911. Priority areas include shortening ambulance on-scene response times and improving the quality of EMS data. It will also address the importance of clearing a crash scene quickly, to minimize both the exposure of first responders to surrounding vehicle traffic, and the risk of secondary crashes involving vehicles approaching the scene. Partnerships that cut across sectors, including at the Federal level such as with the Centers for Disease Control and Prevention, are also important to pursue. The Department will continue to support inter-governmental efforts to transition to next generation 911 systems across the Nation.<sup>38</sup>

### **Key Departmental Actions to Enable Safer Post-Crash Care**

1. Develop and implement an outreach plan for EMS personnel for on-scene safety and traffic incident training.
2. Advance Traffic Incident Management training and technologies targeted at improved responder and motorist safety.
3. Expand the use of and support for the National Emergency Medical Services Information System — the national database that is used to store EMS data from the U.S. States and Territories — by funding applied research and data quality improvements.
4. Improve the delivery of EMS throughout the nation in collaboration with the Federal Interagency Committee on Emergency Medical Services and the National Emergency Medical Services Advisory Council by focusing on shortening ambulance on-scene response times.

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<sup>36</sup> [https://www.bls.gov/iif/oshwc/cfoi/er\\_fact\\_sheet.htm](https://www.bls.gov/iif/oshwc/cfoi/er_fact_sheet.htm); <https://www.cdc.gov/niosh/research-rounds/resroundsv4n8.html>

<sup>37</sup> [https://ops.fhwa.dot.gov/publications/fhwahop10009/tim\\_fsi.htm](https://ops.fhwa.dot.gov/publications/fhwahop10009/tim_fsi.htm)

<sup>38</sup> [https://www.911.gov/issue\\_nextgeneration911.html](https://www.911.gov/issue_nextgeneration911.html)

## Conclusion

The NRSS articulates the Department's ultimate goal: zero roadway fatalities. A Safe System Approach will guide our actions through a focus on Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care.

In publishing this strategy, we are communicating our intent to take significant action over the next few years. As we embark on this reinvigorated effort, we are relying on our partners to also identify and commit to near-term actions that will help make our collective efforts to reach zero a reality. Roadway safety is a shared responsibility, and the actions of Federal, State, regional, local, and Tribal governments; industry; advocacy organizations; research and academia; and the traveling public are all instrumental. Promisingly, many in the transportation community have already committed to making significant safety gains. The Department intends to support and leverage the advancements already made, and encourage even more from our partners.

We are committed to making every trip safe, whether that trip involves driving, taking transit, walking, biking, or rolling.

## Summary of Key Departmental Actions

To summarize the key actions the Department will take to work towards zero fatalities and serious injuries over the next three years:

### Safer People

Action	Lead(s)	Action Type	Target Completion
Leverage new funding in the Bipartisan Infrastructure Law for behavioral research and interventions, and use education, technical assistance, and outreach to disseminate information to partners. Leverage public health approaches for implementation by engaging with a wide variety of stakeholders using a diversity of interventions. For alcohol and drug impaired driving research and interventions, focus on developing means to accurately measure impairment, reducing drug and alcohol impaired driving recidivism, as well as promoting assessment and treatment of drug and alcohol substance use disorders by working with the behavioral and public health communities. Support research and development of technology to detect and prevent alcohol and drug impaired driving.	FMCSA NHTSA	Research	2024
Update Departmental safety messaging so that it is unified across the entire Department and reflects the Safe System Approach principle of human fragility.	DOT-wide	Program Oversight	2024
Implement the October 2021 final rule requiring State Driver Licensing Agencies to access and use information obtained through the Drug and Alcohol Clearinghouse and take licensing actions against commercial drivers who have drugs or alcohol violations in the system and are not cleared to return to duty.	FMCSA	Rulemaking	2024
Implement the July 2021 final rule requiring State Driver Licensing Agencies to develop systems for the electronic exchange of driver history record information. Work with State Driver Licensing Agencies to improve accuracy of CDL driver records and to evaluate additional opportunities to use these more accurate records to take unsafe drivers off the road more expeditiously.	FMCSA	Rulemaking	2024
Work with State Driver Licensing Agencies to improve the accuracy of non-CDL driver records, and to evaluate additional opportunities to use these more accurate records to take unsafe drivers off the road more expeditiously. Further encourage State Driver Licensing Agencies to identify and educate repeat offenders of impaired driving and other behavioral safety issues.	NHTSA	Program Oversight	2024

Action	Lead(s)	Action Type	Target Completion
Support the development and accessibility of training designed to enhance equity in law enforcement.	FMCSA NHTSA	Program Oversight Guidance Stakeholder Engagement	2024
Encourage States to apply for the Section 1906 grant program that funds the collection of information on the race and ethnicity of the driver in motor vehicle stops.	NHTSA	Program Oversight	2024
Increase commercial motor vehicle highly visible traffic enforcement against risky driver behavior focused on high crash locations.	FMCSA	Program Oversight	Ongoing, completion by 2024

## Safer Roads

Action	Lead(s)	Action Type	Target Completion
Complete the current rulemaking process for Manual Uniform Traffic Control Devices (the Manual) by finalizing the proposed amendments and incorporating changes based on the public comments and Administration priorities. Identify proposed future changes not possible via the current rulemaking effort and further update the Manual to promote the safety, inclusion, and mobility of all users and provide for the protection of vulnerable road users. Initiate four-year cycles to update this national standard for keeping current with the latest research, practices, and technologies. Ensure a wide range of practitioner and stakeholder engagement in the development of future editions, with representation that is consistent with the impact of crashes on people outside the vehicle such as people walking, people in rural communities, and people of color. Provide education and technical assistance to the users of the Manual, emphasizing the purpose of the Manual, roles of engineering, and how device innovation occurs.	FHWA	Rulemaking	2023
Support the planning, design and implementation of safer roads and streets in all communities using all available and applicable Federal funding resources, including existing formula funding programs to include but not limited to the Highway Safety Improvement Program. Also leverage the \$6 billion Safe Streets and Roads for All grant initiative, which is included in the Bipartisan Infrastructure Law. Support states and Metropolitan Planning Organizations (MPOs) in the new requirement to use planning funds to develop Complete Streets policies and prioritization plans.	OST, FHWA	Program Oversight	2022
Launch a comprehensive Complete Streets Initiative and provide technical assistance to communities of all sizes to implement policies that prioritize the safety of all users in transportation network planning, design, construction, and operations, including in small towns and rural areas. Incorporate Complete Streets criteria in Federal grant opportunities and in the <i>Emergency Relief Manual</i> . Incorporate lighting into Complete Streets implementation so that lighting becomes a key design factor in roadway upgrades. Involve transit providers in Complete Streets implementation activities to support safe walking, biking, and rolling to stops and stations.	FHWA	Information and Technical Assistance	2024

Action	Lead(s)	Action Type	Target Completion
Improve State performance on achieving safety performance targets using a focused approach to safety and other technical assistance. <sup>39</sup> Consider revisions to guidance and regulations to improve State strategic highway safety plans and ensure that State safety performance targets demonstrate constant or improved performance for each safety performance measure.	FHWA	Guidance	2024
Elevate the Transportation Performance Management Dashboard to stakeholders such as State Executives, Congress, the media, and the public to spur and reward roadway safety gains and share information on State safety performance targets and progress toward achieving those targets. Promote and continue to add noteworthy safety practices in the Noteworthy Practices Database to assist State and local agencies in identifying optimal projects aimed at reducing fatalities and serious injuries.	FHWA	Information and Technical Assistance	2024

<sup>39</sup> <https://safety.fhwa.dot.gov/fas/>

## Safer Vehicles

Action	Lead(s)	Action Type	Target Completion
Develop proposals to update consumer information on vehicle safety performance through the New Car Assessment Program (NCAP or Program). The updated Program is expected to emphasize safety features that protect people both inside and outside of the vehicle, and may include consideration of pedestrian protection systems, better understanding of impacts to pedestrians (e.g., specific considerations for children), and automatic emergency braking and lane keeping assistance to benefit bicyclists and pedestrians. The Program can also identify areas of most promising vehicle technology that may lead to subsequent analysis and possible FMVSS rulemakings, such as alcohol detection systems, and systems to detect distracted driving.	NHTSA	Consumer Information	2022
Provide an NCAP ‘road map’ that will show how a set of vehicle improvements may be advanced over the next ten years, covering the stages of data evaluation, research, and analysis of the criteria for inclusion in NCAP.	NHTSA	Research	2022
Initiate a rulemaking to update the Monroney consumer label to include crash avoidance information next to crashworthiness information. NHTSA may also consider including information on features that mitigate risks for people outside of the vehicle.	NHTSA	Rulemaking	2024
Initiate a new rulemaking to require Automatic Emergency Braking and Pedestrian Automatic Emergency Braking technologies on new passenger vehicles. Initiate a rulemaking to require Automatic Emergency Braking technologies on heavy trucks.	NHTSA	Rulemaking	2024
Consider a rulemaking effort to establish motor vehicle safety standards to require passenger motor vehicles manufactured to be equipped with advanced impaired driving prevention technology.	NHTSA	Rulemaking	2024
Issue a final rule to upgrade existing requirements for rear impact guards on newly manufactured trailers and semi-trailers.	NHTSA, FMCSA	Rulemaking	2024
Require manufacturers to provide notification when there is a crash involving ADS and create a public database of information that can inform safer passenger vehicles.	NHTSA	Rulemaking	2024
Ensure timely investigation into emerging vehicle safety issues arising from the deployment of new technologies.	NHTSA	Enforcement	Ongoing

## Safer Speeds

Action	Lead(s)	Action Type	Target Completion
Update and lead the implementation of a robust, multimodal speed management program through new guides and close partnerships with stakeholders.	FHWA NHTSA	Program Oversight	2024
Develop and improve the information available for setting speed limits through Proven Safety Countermeasures and the Manual of Uniform Traffic Control Devices, providing a range of methodologies depending on the context of the roadway. Clarify the applicability and correct use of key criteria used in setting speed limits such as the 85th percentile. Provide technical assistance to all sizes of communities to determine appropriate speed limit setting, considering external assistance from leading practitioners and research organizations.	FHWA	Guidance	2024
Revise FHWA guidance and regulations to take into account the safety of all users by encouraging the setting of context-appropriate speed limits and creating roadways that help to “self-enforce” speed limits. Provide noteworthy practices for re-engineering roads to slow down vehicles rather than relying primarily on enforcement to manage speeding. Promote speed safety cameras as a proven safety countermeasure.	FHWA	Guidance	2024
Make funds available to communities through discretionary grant programs such as the Safe Streets and Roads for All program, and through behavioral safety programs to study and pilot automated or enforcement strategies focused on speeding that are designed to ensure their equitable application.	FHWA NHTSA	Program Oversight	2024

## Post-Crash Care

Action	Lead(s)	Action Type	Target Completion
Develop and implement an outreach plan for EMS personnel for on-scene safety and traffic incident training.	FHWA NHTSA	Information, Technical Assistance	2024
Advance Traffic Incident Management training and technologies targeted at improved responder and motorist safety.	FHWA	Information, Technical Assistance	2024
Expand the use of and support for the National Emergency Medical Services Information System — the national database that is used to store EMS data from the U.S. States and Territories — by funding applied research and data quality improvements.	NHTSA	Program Oversight	2024
Improve the delivery of EMS throughout the nation in collaboration with the Federal Interagency Committee on Emergency Medical Services and the National Emergency Medical Services Advisory Council by focusing on shortening ambulance on-scene response times.	NHTSA	Stakeholder Engagement	Ongoing