



Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington DC 20515

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June 3, 2022

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Highways and Transit
FROM: Staff, Subcommittee on Highways and Transit
RE: Subcommittee Hearing on “Addressing the Roadway Safety Crisis: Building Safer Roads for All”

PURPOSE

The Subcommittee on Highways and Transit will meet on Wednesday, June 8, 2022, at 10:00 a.m. in 2167 Rayburn House Office Building and virtually via Zoom to receive testimony related to the hearing titled “Addressing the Roadway Safety Crisis: Building Safer Roads for All.” The purpose of this hearing is for Members of the Subcommittee to discuss the safety of our nation’s roadways, explore programs and policies included in the *Infrastructure Investment and Jobs Act* to improve roadway safety, and learn from key stakeholders about their role in implementing these programs and other roadway safety strategies. The Subcommittee will hear from the National League of Cities, the American Association of State Highway Transportation Officials (AASHTO), the Washington Area Bicycle Association, a transportation policy professional with past positions at various levels of Florida government, and the American Traffic Safety Services Association.

BACKGROUND

In 2021, motor vehicle crashes killed an estimated 42,915 people in the United States, approximately a 10.5 percent increase over the 38,824 fatalities in 2020.¹ This represents the highest number of total fatalities since 2005 and the largest annual percentage increase in total fatalities since the National Highway Traffic Safety Administration (NHTSA) first established the Fatality Analysis Reporting System in 1975.² In 2021, vehicle miles traveled (VMT) increased by 11.2 percent. The

¹ Early Estimates of Motor Vehicle Traffic Fatalities in 2021, NHTSA, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813283>.

² *Id.*; Crash Data Systems: FARS, NHTSA, <https://www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system>.

fatality rate, expressed as the total number of fatalities per 100 million VMT, fell marginally in 2021 to 1.33 from 1.34 in 2020. However, 2020 represented a significant jump from 2019's rate of 1.11 and the decade average of 1.13.³ In fact, the rate in 2020 is the highest rate experienced since 2007.⁴

The number of fatal traffic crashes represents only a fraction of the total number of crashes which occur on U.S. roadways every year. According to NHTSA data, in 2019 there were more than 1.9 million traffic crashes that resulted in injury and another 4.8 million that resulted in property damage.⁵

Last year, Congress enacted H.R. 3684, the *Infrastructure Investment and Jobs Act (IIJA)*, P.L. 117-58), which provides historic funding levels to modernize our nation's roads, bridges, transit, and other transportation infrastructure. The *IIJA* also increased funding for various roadway safety programs administered through the Federal Highway Administration (FHWA) and NHTSA. Safety programs administered by NHTSA support state and local efforts to reduce risky driving behaviors, with a focus on driver education, behavior, and enforcement of safety laws.⁶ FHWA approves roadway design standards, identifies best practices and proven safety countermeasures, requires states to conduct performance-based safety planning, and provides funding to state Departments of Transportation (state DOTs) to implement these plans to reduce roadway fatalities.⁷

In January 2022, the U.S. Department of Transportation (USDOT) released the National Roadway Safety Strategy, which outlines the Department's comprehensive, multimodal approach to significantly reducing serious injuries and deaths on our nation's roads, including through implementation of new programs and policies in the *IIJA*.⁸ Consistent with the *IIJA*, the strategy formally adopts the Safe System Approach as the Department's guiding paradigm to address roadway safety, incorporating the following principles: (1) death and serious injuries are unacceptable; (2) humans make mistakes; (3) humans are vulnerable; (4) responsibility is shared; (5) safety is proactive; and (6) redundancy is critical.⁹

Traffic Fatalities

Progress in reducing both the total number of fatalities and rate of fatalities per 100 million VMT has stagnated over the last decade. The last two years have seen significant increases in both numbers over the decade average, even as VMT has returned to pre-pandemic levels.¹⁰

³ Motor Vehicle Safety Data (1960-2021), Bureau of Transportation Statistics (BTS), <https://www.bts.gov/content/motor-vehicle-safety-data>. From 2009 to 2019, the annual roadway fatality rate averaged 1.13 fatalities per 100 million VMT.

⁴ *Id.*

⁵ Traffic Safety Facts: Summary of Motor Vehicle Crashes (2019), NHTSA, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813209>.

⁶ Risky Driving, NHTSA, <https://www.nhtsa.gov/risky-driving>.

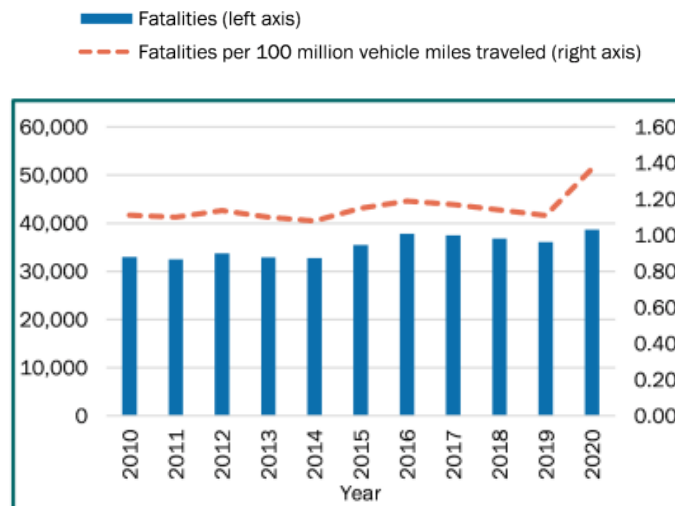
⁷ Highway Safety Improvement Program (HSIP), FHWA, <https://safety.fhwa.dot.gov/hsip/hsip.cfm>.

⁸ National Roadway Safety Strategy, USDOT, <https://www.transportation.gov/sites/dot.gov/files/2022-02/USDOT-National-Roadway-Safety-Strategy.pdf>.

⁹ *Id.*, p. 6.

¹⁰ Americans drove 3.26 trillion miles in 2019. Due to pandemic related stay at home orders in March 2020, VMT fell to 2.9 trillion in 2020, but rebounded to 3.28 trillion in 2021. Traffic Volume Trends, Federal Highway Administration, https://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm.

Fatalities and fatality rate by VMT (2010-2020)



Source: *National Roadway Safety Strategy*, USDOT p. 2.

According to NHTSA, the trend of the total fatality rate per 100 million VMT in 2021 was strongly driven by the trends in the fatality rates per 100 million VMT on roadways functionally classified as rural arterial, rural local/collector/street, and urban arterial.¹¹ However, rural and urban areas each have unique safety risks. Traffic fatalities are more common on rural roads per mile driven. In 2019, only 30 percent of the total vehicle miles traveled were in rural areas, yet rural areas accounted for 45 percent of all traffic fatalities.¹² In that same year, the remaining 54 percent of the fatalities occurred in urban areas. Urban traffic fatalities have increased by 34 percent from 2010-2019, primarily driven by a sharp increase in pedestrian fatalities.¹³

In 2020, NHTSA estimated that of the total 38,824 fatalities, passenger car occupants made up the largest portion of the fatalities on our nation’s roadways at 35 percent. Occupants of light-trucks made up 27 percent, followed by nonmotorized users (pedestrians and pedalcyclists) that comprised 20 percent of the fatalities. Motorcyclists made up 14 percent, and larger trucks, buses, and other vehicles 4 percent.

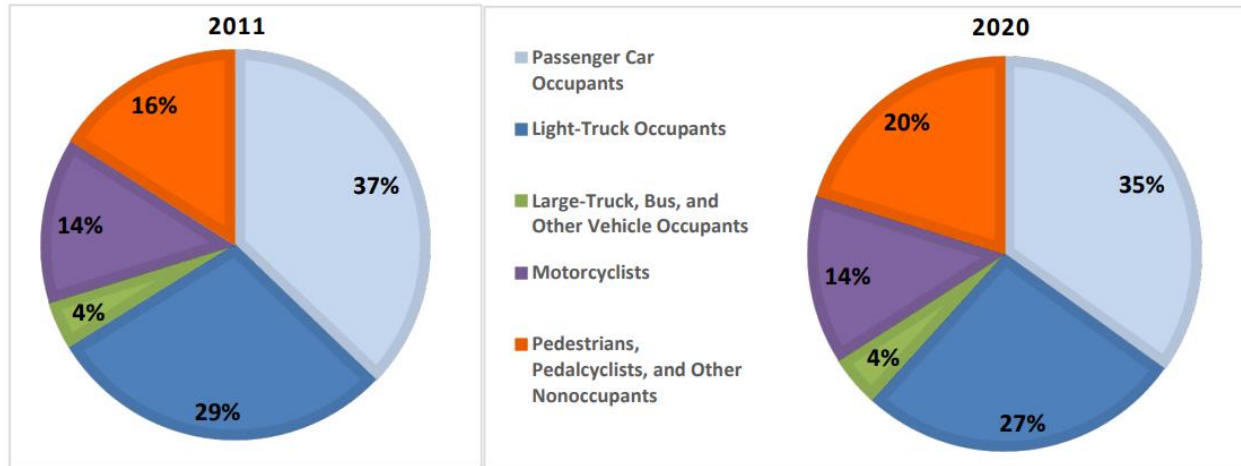
According to NHTSA’s comparison of the 38,824 fatalities in 2020 and the 32,367 fatalities in 2011, the biggest change in proportion was in nonmotorized fatalities which increased from 16 percent in 2011 to 20 percent in 2020. Meanwhile the percentage of passenger car occupant fatalities decreased from 37 percent to 35 percent while light-truck occupant fatalities decreased from 29 percent to 27 percent during the same time period. The proportion of motorcyclist fatalities and the proportion of large truck, bus, and other vehicle occupant fatalities remained the same in both years.

¹¹ Traffic Safety Facts: Summary of Motor Vehicle Crashes (May 2022), NHTSA, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813298>.

¹² Traffic Safety Facts: Rural/Urban Comparison of Motor Vehicle Traffic Fatalities (2019), NHTSA, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813206>.

¹³ Pedestrian fatalities in urban areas increased by 64 percent over the decade. Traffic Safety Facts: Rural/Urban Comparison of Motor Vehicle Traffic Fatalities (2019).

Changes in Proportion of Traffic Fatalities by Road User Type, 2011 and 2020



Source: *Overview of Motor Vehicle Crashes in 2020*, NHTSA, p. 6.

Over the last decade, fatalities among pedestrians and bicyclists have been increasing faster than for all other users, and 2021 is estimated to have been the deadliest year on record for people walking in 40 years.¹⁴ According to NHTSA’s estimates, 7,342 pedestrians were struck and killed in 2021, an increase of 13 percent from the previous year, resulting in 826 additional lives lost.¹⁵ Approximately 82 percent of the pedestrian fatalities occur in urban areas.¹⁶ NHTSA estimates 985 bicyclists were killed in 2021, an increase of 5 percent from the previous year.¹⁷ Together, the number of pedestrians and bicyclists killed in traffic crashes has increased by 62 percent over the last decade.¹⁸

¹⁴ [Estimated pedestrian fatalities for 2021](https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813141) are the highest since 1976. *Traffic Safety Facts (2019)*, NHTSA, p. 26., <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813141>.

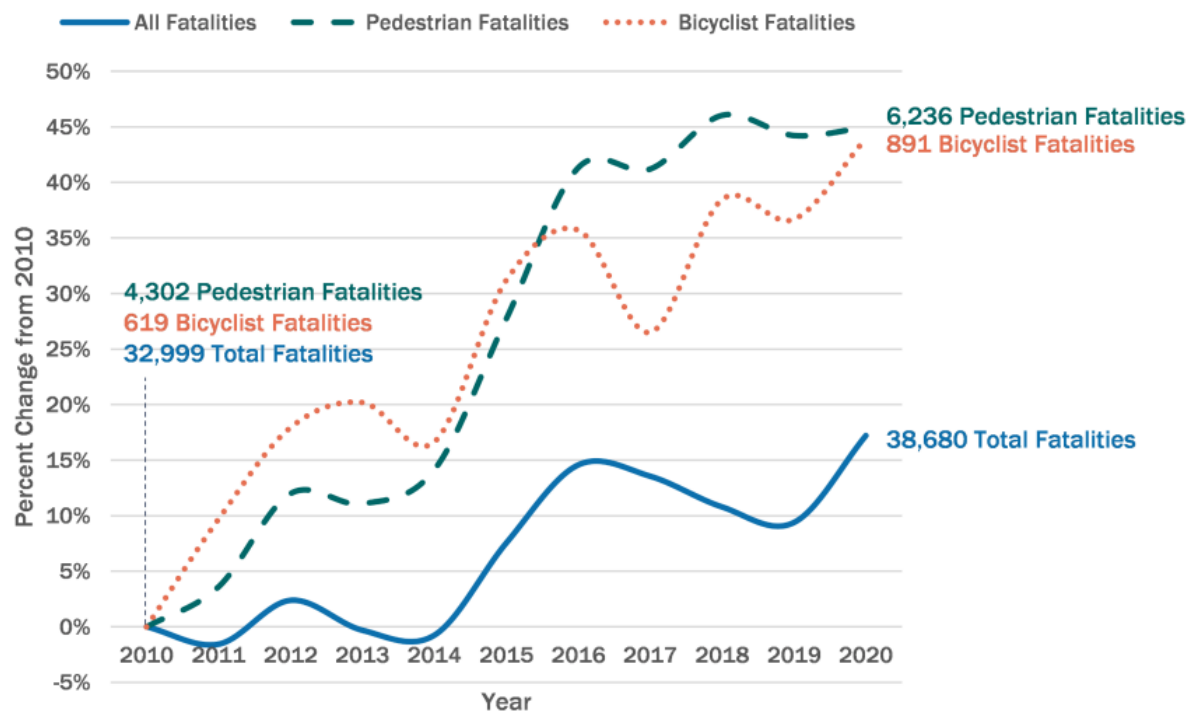
¹⁵ 2021 Early Estimates, NHTSA.

¹⁶ *Traffic Safety Facts: Pedestrians (2019)*, NHTSA, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813079>.

¹⁷ 2021 Early Estimates, NHTSA.

¹⁸ *Id.*

Percent change in fatalities for nonmotorized users compared to all users (2010-2020)



Source: *National Roadway Safety Strategy*, USDOT, p. 10.

Key Federal Safety Programs and Policies

According to FHWA, roadway design is a key risk factor in reducing traffic-related fatalities, particularly for vulnerable road users.¹⁹ FHWA has identified a collection of roadway design countermeasures shown to improve safety in the areas of speed management, intersection safety, roadway departures, and pedestrian and bicyclist safety, among others.²⁰ Countermeasures are eligible under most federal-aid highway funding programs, and can support state, local, and tribal agency efforts to effectively accomplish goals to reduce fatalities and serious injuries.²¹ FHWA administers programs to promote innovative safety technologies, implement proven safety countermeasures, deliver technical assistance and training, and communicate best practices to transportation agencies nationwide.²²

The Highway Safety Improvement Program (HSIP)

HSIP is a core federal-aid highway program, funded out of the Highway Trust Fund. HSIP provides federal funding for projects that will achieve a significant reduction in traffic fatalities and

¹⁹ *Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges*, FHWA, p. 8-9, <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-03/Complete%20Streets%20Report%20to%20Congress.pdf> (cited hereafter as “Complete Streets Report to Congress”).

²⁰ Proven Safety Countermeasures, FHWA, <https://safety.fhwa.dot.gov/provencountermeasures/index.cfm>.

²¹ Making Our Roads Safer | One Countermeasure at a Time, FHWA, https://safety.fhwa.dot.gov/provencountermeasures/pdf/FHWA-SA-21-071_PSC%20Booklet.pdf.

²² Highway Safety Improvement Program (HSIP), FHWA, <https://safety.fhwa.dot.gov/hsip/hsip.cfm>.

serious injuries on public roads, including local roads and roads on tribal land.²³ In order to use HSIP funding, the state must have an approved, comprehensive, and data-driven strategic highway safety plan (SHSP) that defines state safety goals and describes a program of strategies to improve safety.²⁴ Funding provided under HSIP is apportioned to state DOTs to implement highway safety improvement projects identified in the state's SHSP.²⁵ The state DOT is responsible for selecting projects, administering the funding, ensuring compliance with all applicable federal requirements, and overseeing the project to completion.²⁶ Each state DOT must evaluate the SHSP on a regularly recurring basis to ensure the accuracy of the data in the plan and the priority of the proposed safety strategies.²⁷

The *IIJA* reauthorized HSIP, ensuring that states will receive more than \$15.5 billion in HSIP funding over the next five years, a 34 percent increase over the previous authorization act, the *Fixing America's Surface Transportation (FAST) Act* (P.L. 114-94).²⁸ The amounts states receive in HSIP apportionments do not have to be spent on safety projects, however. Pursuant to 23 U.S.C. 126, states can transfer up to 50 percent of their HSIP and other core formula program funds to any other federal-aid highway program. In fiscal year 2021, 23 states transferred funds out of HSIP to other highway construction programs, whereas only nine states transferred funds into HSIP from other programs.²⁹ The *IIJA* also restored flexibility for states that had been in effect prior to the *FAST Act* to allow them to obligate up to ten percent of their HSIP funding each year to safety projects beyond just infrastructure solutions.³⁰ Examples of such projects include: promoting public awareness and education regarding highway safety matters for bicyclists, pedestrians, individuals with disabilities, and other vulnerable road users; facilitating enforcement of traffic safety laws; and conducting safety-related research to evaluate experimental safety countermeasures and equipment.³¹

Over the last ten years, Congress has created several special rules to address key safety problems, including for high-risk rural roads, older drivers, and most recently under the *IIJA* for vulnerable road users.³² These special rules require state DOTs to take a specific action (such as obligate HSIP funding on a specific category of roadways or risks) based on state safety data.

To address non-motorist fatalities and ensure the safe and adequate accommodation of all users of the transportation system, *IIJA* requires states and metropolitan planning organizations to use not less than 2.5 percent of their planning and research funds for complete streets activities that will increase safe and accessible transportation options.³³ Further, *IIJA* requires each state, in consultation with regional and local partners, to conduct a vulnerable road user safety assessment that identifies locations and corridors that pose a high risk to vulnerable road users and includes a

²³ 23 U.S.C. 148(b).

²⁴ 23 U.S.C. 148(c)(1).

²⁵ 23 U.S.C. 148(c)(1).

²⁶ *Funding Federal Aid Highways*, FHWA, <https://www.fhwa.dot.gov/policy/olsp/fundingfederalaid/>.

²⁷ 23 U.S.C. 148(c)(1)(C).

²⁸ *IIJA Authorization Table*, USDOT, https://www.transportation.gov/sites/dot.gov/files/2022-01/DOT_Infrastructure_Investment_and_Jobs_Act_Authorization_Table_%28IIJA%29.pdf.

²⁹ *Obligation Rates for the Highway Safety Improvement Program*, FHWA, https://safety.fhwa.dot.gov/hsip/gen_info/slorhsip/.

³⁰ 23 U.S.C. 148(e)(3).

³¹ 23 U.S.C. 148(a)(11).

³² 23 U.S.C. 148(g)(1); (g)(2); (g)(3); *IIJA* Sec. 11111.

³³ *IIJA* Sec.11206.

program of projects or strategies to reduce identified safety risks.³⁴ The assessment must take into consideration the Safe System Approach to roadway design, which emphasizes minimizing the risk of injury or fatality of all road users and considers the likelihood of human error to prevent fatalities.³⁵

In addition to these key HSIP programs and complete streets planning initiatives, *IIJA* includes several other FHWA programs and policies to address roadway safety, including reauthorization of and reforms to the railway-highway grade crossing set-aside, the Safe Routes to School program, incentives for states to establish highway work zone contingency funds, and the set aside for Operation Lifesaver and other safety initiatives.³⁶

Safe Streets and Roads for All

IIJA established the new Safe Streets and Roads for All grant program to provide \$5 billion over the next five years for local governments to improve roadway safety by significantly reducing or eliminating roadway fatalities and serious injuries for all road users, with a focus on vulnerable road users.³⁷ Funding is eligible for both development and implementation of comprehensive safety action plans. Applicants must have a safety action plan or similar plan, such as a “vision zero” plan, in place to apply for an implementation grant under this program.³⁸ Eligible activities for implementation grants are infrastructure, behavioral, or operational activities identified in the action plan directly related to addressing the roadway safety problems identified in the application and action plan.³⁹ Eligible activities for implementation grants include improvements to multimodal networks, applying low cost safety treatments along high crash corridors, speed management projects, safety enhancements, and making street design changes.⁴⁰

Federally Recognized Design Standards

Two documents that provide standards and govern design are incorporated through federal statutes and regulations: the FHWA *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD) and the AASHTO *Policy on Geometric Design of Highways and Streets* (known as the “Green Book”).⁴¹ FHWA is responsible for updating the MUTCD, whereas AASHTO updates the Green Book, although FHWA contributes to its development and must adopt each subsequent update by reference for it to be recognized as a binding federal standard on the National Highway System (NHS).⁴²

³⁴ 23 USC 148(j). Under HSIP, a vulnerable road user is defined as a person walking, biking, and or using a “personal conveyance” such as a wheelchair or micromobility device. 23 U.S.C. 148(a)(15); 23 CFR 490.205.

³⁵ 23 USC 148(j)(4)(A).

³⁶ 23 U.S.C. 130; *IIJA* Sec.11108; 23 U.S.C. 208; 23 U.S.C. 120(b)(3)(B)(vi); *IIJA* Sec.11124.

³⁷ *IIJA* Sec.24112.

³⁸ Notice of Funding Opportunity for the Safe Streets and Roads for All (SS4A) Discretionary Grant Opportunity, CFDA # 20.393, <https://www.grants.gov/web/grants/view-opportunity.html?oppId=34038>.

³⁹ *Id.*

⁴⁰ Safe Streets and Roads for All (SS4A) Fact Sheet, USDOT, https://www.transportation.gov/sites/dot.gov/files/2022-03/Safe-Streets-and-Roads-for-All-Fact-Sheet_March-2022.pdf.

⁴¹ 23 U.S.C. 109.

⁴² Guidance on NHS Design Standards and Design Exceptions, FHWA, [https://www.fhwa.dot.gov/design/standards/qa.cfm#:~:text=109\(c\).-What%20design%20standards%20has%20FHWA%20adopted%3F,4%20and%2049CFR37](https://www.fhwa.dot.gov/design/standards/qa.cfm#:~:text=109(c).-What%20design%20standards%20has%20FHWA%20adopted%3F,4%20and%2049CFR37).

The MUTCD is the national standard for all traffic control devices—signs, signals, and markings—installed on any street, highway, or bicycle path open to public travel.⁴³ The MUTCD also provides guidance on setting speed limits. FHWA is updating the MUTCD for the first time since 2009. This rulemaking is currently underway, and the comment period closed on May 14, 2021.⁴⁴

The Green Book provides minimum standards and guidance for the geometric design of roadways, such as lane width and design speed. Earlier versions of the Green Book often dictated high-speed designs for urban and rural arterial roadways, but the latest update in 2018 allows for more flexible, multimodal, and performance based designs.⁴⁵ While the Green Book only applies to facilities on the NHS, state standards that control federal-aid projects off the NHS are often consistent with Green Book requirements.⁴⁶ To provide additional flexibility for local governments that wish to deviate from state design standards, *IIJA* clarifies that local jurisdictions may use design guides that are different from state standards on the roads they own that are not part of the NHS, without approval from the state.⁴⁷

⁴³ Federal Highway Administration, Manual on Uniform Traffic Control Devices, “Overview,” <https://mutcd.fhwa.dot.gov/kno-overview.htm>.

⁴⁴ Federal Highway Administration, “National Standards for Traffic Control Devices; the Manual on Uniform Traffic Control Devices for Streets and Highways; Revision,” Docket No. FHWA-2020-0001, February 2, 2021, <https://www.federalregister.gov/documents/2021/02/02/2021-01440/national-standards-for-traffic-control-devices-the-manual-on-uniform-traffic-control-devices-for>.

⁴⁵ *Complete Streets Report to Congress*, FHWA, p. 33.

⁴⁶ 23 U.S.C. 109(e); (o).

⁴⁷ *IIJA* Sec.11129.

WITNESS LIST

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