



TESTIMONY OF  
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REGARDING

**“EXAMINING THE ROADWAY SAFETY CRISIS AND  
HIGHLIGHTING COMMUNITY SOLUTIONS”**

BEFORE THE

**THE UNITED STATES SENATE SUBCOMMITTEE ON SURFACE  
TRANSPORTATION, MARITIME, FREIGHT, AND PORTS**

ON

**TUESDAY, MAY 21, 2024**

## Introduction

Good afternoon, Chair Cantwell, Chairman Peters, Ranking Member Young, Ranking Member Cruz, and members of the Subcommittee. I am humbled at the opportunity to appear today at this important hearing to represent the City of Detroit and the State of Michigan.

My name is Sam Krassenstein, and I serve as Detroit Mayor Mike Duggan's Chief of Infrastructure. I am honored to testify on behalf of the City of Detroit as both a transportation official and proud resident. I want to focus my testimony on the nationwide transportation safety crisis on local roadways, the importance of continued federal funding to address these issues, and how community solutions are improving safety and quality of life for vulnerable road users.

Each and every traffic death and serious injury represents a preventable tragedy with far-ranging impacts on individuals, families, and communities. Those who lose their lives in traffic crashes are our loved ones, our children, parents, siblings, neighbors, or co-workers. I am a city resident of Detroit and a father of a young child with another on the way. I want my children to enjoy the experience of childhood and to have a sense of safety for our family when walking through our neighborhood streets. I have both a personal and professional commitment to ensuring the future of Detroit includes safe streets for all users, especially the most vulnerable.

## Safety Crisis

Traffic deaths rose 9% between 2020 and 2022 nationwide, constituting a public health crisis on our roadways, according to the National Highway Traffic Safety Administration (NHTSA). As you're aware, in 2023, an estimated 40,990 people died in roadway crashes in the United States<sup>1</sup> including 132 just within the City of Detroit limits along with another 600 who sustained serious injuries.

I am here today because Detroit has the second-highest traffic crash fatality rate per capita among large cities in the United States and the third-highest pedestrian fatality rate<sup>2</sup>. We lose 108 people annually by traffic crashes within the City of Detroit -- or about one person every three days. Our fatal crash rate has continued to rise steadily and rapidly over the past few years, out of pace with the nation and other large cities at nearly 4x the national average<sup>3</sup>. Fatal traffic crashes resulting in death or serious injury have increased nearly every year since 2014, resulting in a 53% net increase through 2021<sup>4</sup>. This safety crisis compounds other disparities experienced by Detroit's low-income residents and communities of color every day.

We have gotten used to not treating streets as public spaces but only as ways to move traffic. If 40,990 people were killed annually in any other setting like in our public buildings or parks, there would rightfully be public outrage and a demand for immediate change. We've normalized and contextualized the traffic violence we see on our streets as accidents that just happen rather than as crashes that can be

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<sup>1</sup> NHTSA

<sup>2</sup> Michigan State Police through the Michigan Traffic Crash Facts (MTCF) portal

<sup>3</sup> MTCF portal

<sup>4</sup> MTCF portal

avoided. As stewards of this space, we have a responsibility to change that and make these spaces safer for the people that use them.

Detroit’s street network was built for a city of nearly two million people, almost three times the current population. Like many urban areas nationwide, overbuilt streets create the perfect scenario for speeding, dangerous driving behavior, and treacherous conditions for our most vulnerable residents trying to catch the bus or cross a street on foot. Meeting the needs and activity levels of the city as it is today while realizing the vision for safer Detroit streets in the future requires a comprehensive overhaul of our roadways. Wide roads with few cars have led to excessive speeding and high pedestrian and bicycle fatality rates. From 2017 to 2021, Detroit had 608 motor-vehicle-involved roadway fatalities<sup>5</sup>. As we look to improve roadway safety, targeted, data-driven changes to roadway design can substantially improve safer roads for all users.

**Crashes Involving Vulnerable Users, City of Detroit**

User	2017	2018	2019	2020	2021
Pedestrian	448	520	524	399	369
Work Zone	265	379	304	427	533
Elderly	2,905	2,957	2,986	2,333	2,712
Motorcycle	215	209	233	312	297
Bicycle	174	183	149	129	118
Young	2,570	2,575	2,519	2,780	2,897
<b>TOTAL</b>	<b>6,577</b>	<b>6,823</b>	<b>6,715</b>	<b>6,380</b>	<b>6,926</b>

Source: SEMCOG

**Crashes Involving Vulnerable Users, Fatal and Serious Injuries, City of Detroit**

Type	2017	2018	2019	2020	2021	TOTAL
Fatal	95	101	103	173	136	608
Serious-A	486	480	491	552	565	2574

Source: SEMCOG

<sup>5</sup> Southeast Michigan Council of Governments

## Crashes Involving Vulnerable Users, Fatalities and Serious Injuries, City of Detroit

User	Type	2017	2018	2019	2020	2021	TOTAL
Pedestrian	Serious-A	78	81	94	77	65	395
Pedestrian	Fatal	27	36	28	40	43	174
Work Zone	Serious-A	6	2	4	7	13	32
Work Zone	Fatal	2	2	2	-	1	7
Elderly	Serious-A	37	43	49	33	44	206
Elderly	Fatal	13	12	8	4	4	41
Motorcycle	Serious-A	34	42	38	64	61	239
Motorcycle	Fatal	12	6	19	30	19	86
Bike	Serious-A	24	10	17	18	14	83
Bike	Fatal	-	2	2	8	1	13
Young (15-20)	Serious-A	49	58	44	69	78	298
Young (15-20)	Fatal	10	12	12	15	16	65

Source: SEMCOG

### Detroit's Safety Initiatives

It needs to prioritize the needs of all, emphasize sustainability, minimize negative environmental impacts, and provide an efficient use of resources while maximizing the economic benefits of the transportation investment. In this mindset, Detroit is working on a multifaceted approach to solving the safety problem.

In 2017, we looked at a dozen neighborhoods around Detroit to focus on rebuilding our commercial corridors. A key part of our economic development strategy was investing in Streetscape projects to serve as a backbone for placemaking. These streetscape projects were all built on complete streets principles with a very simple objective, make the streets safer for the people that use them to create a corridor where neighborhood businesses can thrive. We developed a [Complete Streets](#) team to ensure Detroit's design and safety standards follow an approach that enables safe access by considering how our streets build community and benefit people of all ages and abilities. Detroit invested \$80M in bond funding and made improvements that ranged from improving lighting quality, fixing broken sidewalks, and doing road diets to slow traffic down and make places that people want to be. Safer streets support local businesses and commercial corridors. On every corridor where we've made these investments and safety improvements, small businesses are opening and the neighborhoods surrounding them are thriving. While bond funding has been helpful to fund capital projects that bring tangible and direct benefits to residents including increasing road safety, it's not a sustainable funding solution for the safety crisis we're facing day in and day out.

As the Streetscape program got under way, we also started working on our Streets for People Master Transportation Plan to build a road map for road safety in Detroit. During this planning effort, traffic safety was the #1 issue that Detroiters raised by a wide margin. [Detroit's Streets for People Master](#)

[Transportation Plan](#), [Street Design Guidelines](#), and [Comprehensive Safety Action Plan](#) are a family of documents that outline citywide approaches that will be implemented by multiple departments over the coming years with Equity, Dignity, and Transparency as its guiding star and through line.

One of the things to come out of the Streets for People plan was the creation of Detroit's High Injury Network (HIN) to give us a clear priority of where to direct our investments toward the most dangerous streets and work with partners to increase safety on streets the City does not own. In Detroit, 80% of all crashes occur on 3% of streets, and 34% of those crashes resulted in death or serious injury from 2017 to 2020<sup>6</sup>. The streets that make up the HIN tend to be wide, with high speeds, lots of traffic, and few opportunities for people to cross the street safely. These also tend to be streets not under our jurisdiction but that belong to Wayne County or Michigan DOT.

It's a simple idea that our streets are here to serve the Detroiters who use them. The Streets for People plan recognizes that streets are some of our most valuable public spaces that serve multiple purposes. Like any public space, our streets should be beautiful, economically vibrant, comfortable, and safe for all community members regardless of age, ability, or how they choose to get around. Detroit is committed to streets that get you where you need to go safely and give you places where you enjoy spending your time. Overall, Detroit's vision is that everything we do on streets, from roadway design to the use of the curb, ties back to safety.

### Federal Funding

As a priority community within the federal DOT Thriving Communities Network, federal funding is critical to meeting Detroiters' safety needs. The Streets for People Plan and Comprehensive Safety Action Plan allow us to identify our funding needs, and the Detroit HIN helps us prioritize requests. The bi-partisan Infrastructure Investment and Jobs Act (IIJA) has provided stable, long-term policy and funding opportunities critical for communities to meet their safety goals. However, we have a long way to go, and continued prioritization of this funding for local roads is critical.

The United States Department of Transportation's (USDOT) programs, such as Safe Streets and Roads for All (SS4A) -- focused on preventing roadway deaths and serious injuries -- and the Active Transportation Infrastructure Investment Program (ATIIP) -- focused on providing safe and connected active transportation facilities -- are providing significant value at local levels. SS4A has provided the City of Detroit with the promise of some relief from this complex safety issue. Being exclusively designed to help local communities, the available funds will have a significant impact in making roadway safety a priority. Awarded communities comprise about 70% of the nation's population<sup>7</sup>. The Planning and Demonstration funding pushes communities to prioritize safety by outlining and piloting approaches, and the Implementation funding provides physical safety countermeasures visible on the roads today, addressing the preventable death crisis.

Detroit's Streets for People Plan was already in the works when the first SS4A Notice of Funding Opportunity was issued back in 2022. This prompted the development of our Comprehensive Safety

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<sup>6</sup> MTCF portal

<sup>7</sup> USDOT

Action Plan to allow the City to seize the opportunities that SS4A provided to address the safety crisis. We have been fortunate to receive two Implementation grants through the SS4A program totaling \$49.6 million across the 2022 and 2023 fiscal year cycles.

1. The first will allow for infrastructure improvements to city-jurisdiction streets on the High Injury Network with the highest crash rates. This will help reduce severe crashes by implementing evidence-based safety countermeasures, systematically upgrading areas with high numbers of vulnerable roadway users, deploying emerging safety technologies to supplement engineering countermeasures, and executing a robust engagement and evaluation framework.
2. The second focuses on high-crash intersections near transit stops, where data shows that a majority of pedestrian crashes took place within proximity to these stops. Specifically, we targeted intersections with a transit usage that five (5) or more pedestrian involved crashes or five (5) or more fatal or serious injury crashes. Many of these intersections are partially or fully under County or State jurisdiction and required close collaboration with our partners to be able to seek funding. Implementation of this project will substantially reduce the risk of countless vulnerable roadway users being killed or injured in Detroit and help realize the region's vision for improved transit by dramatically increasing safety and quality of the bus stops, improving ADA compliance, modeling a culture of safety through training for bus operators and staff that encourages safe operations around people walking and biking, and plan for future improvements to promote safe connections between modes.

We can all agree that everyone should be able to get to work, school, healthcare, wherever they need to go safely. This funding is essential for the city of Detroit to continue this work as the national leader in addressing traffic violence, make progress on moving towards a Vision Zero future, and create safer and more welcoming streets for our residents.

### Collaboration

It is important to recognize that cities also have state- and county-owned roadways running through them. In addition to 2,588 city miles, Detroit has 325 state miles and 122 county miles on its road network, which makes up 52% of Detroit's High Injury Network<sup>8</sup>, where high numbers of traffic deaths and serious injuries are occurring. Therefore, safety measures need to be collaborative to be successful.

Last week, in partnership with Michigan Department of Transportation we submitted another SS4A funding request, this time for a Demonstration pilot -- for safety countermeasures on the city's most dangerous roadway, Gratiot Avenue, which is state-owned and not covered by previous funding awards. Gratiot is one of the most dangerous roadways in Michigan for drivers and pedestrians alike, with its entire length on the City's High Injury Network. Gratiot is the longest contiguous segment of the HIN, representing the greatest opportunity to reduce the number of fatal and serious injury crashes in Detroit. The corridor accounts for the largest proportion of crashes on the HIN, with 147 out of 857<sup>9</sup>.

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<sup>8</sup> Detroit Streets For People Plan

<sup>9</sup> SEMCOG Analysis

Gratiot is the perfect example of the road safety challenges that the City of Detroit and other cities across the country face. Gratiot is a 9-lane surface arterial street that cuts through the heart of Detroit's east side. The road design has been virtually unchanged since 1956 when streetcars stopped running in Detroit. While the posted speed is 30mph, the actual speeds average closer to 60mph (though we are prevented and discouraged from completing a speed study as State law would require the speed limit to be updated to the 85% percentile of prevailing speeds). Since 2017, this 8-mile stretch of road has had 159 pedestrian or bicycle involved crashes, 45 fatal injuries, and nearly 1200 injury crashes. These largely aren't the result of drunk drivers or people texting, but rather they are the result of a road that doesn't meet the needs of the population it serves. While Gratiot is one of the busiest bus transit corridors in the State, there are multiple sections of the road that don't have as much as a marked crossing for at least half a mile which means that when someone gets off the bus from work and needs to get to their house on the other side of the street, we're asking them to walk more than 1 mile to get to the other side to avoid trying to cross 100' at an unprotected location. Unsurprisingly, people don't do this and regularly take their lives into their hands on a daily basis. The data on Gratiot reflects this with 33 pedestrian fatalities or serious injuries occurring at unsignalized or marked crossings since 2017. In spite of all this, there is little the City can do without our State DOT since it's their road.

While the SS4A program has allowed us to strengthen our partnership and collaboration with our local partners and other stakeholders around the shared safety crisis in our community, we need to be doing more to incentivize safety measures by road owners. For years, we have been working with our State DOT to figure out a plan for roads like Gratiot only to be given outdated design criteria and funding excuses for addressing a sobering number of crashes, injuries, and fatalities. While the SS4A program has created an opportunity for cities to seek funding to address the safety challenges on corridors like Gratiot, its success towards addressing our most dangerous streets are solely dependent on not just having the funding available, but also having the continued cooperation of State DOTs and County road agencies that historically have done little to prioritize safety or funding within urban areas and have little incentive from the Federal government to do so. Even if funding materializes for Gratiot, we expect an uphill battle on finding consensus on exact safety countermeasures and the need to deviate from outdated design standards not in line with today's best practices.

#### SS4A Reauthorization

As I've highlighted, the IJA provides increased funding and flexibility, allowing cities to expand their efforts to identify and implement improvements to our surface transportation infrastructure, which counteracts the daily tragedies occurring on our roads.

The investments in infrastructure safety activities and programs, such as the Safe Streets and Roads for All Grant Program, continue to provide funding opportunities for local and state governments to collaborate in addressing this road safety crisis throughout the planning, design, operation, and maintenance of all public roads.

The IJA has helped DOTs and communities address our aging transportation infrastructure in an expansive way. The bill's prioritization of funding to various programs has allowed the bill to provide the resources needed to address critical infrastructure needs at the local level. I ask that you continue

programs that allow us to address safety issues on local streets and roads for all users. It is crucial as we address the pressing safety crisis on our roadways with the attention it desperately needs.

As we continue to look at the opportunities to create safer roads, this program should continue to be a bi-partisan priority. For future authorizations, I recommend Congress apply more of the funding allocation to the Implementation Grant or allow Planning and Demonstration Grant funding to be used for Implementation Projects to provide a greater impact in the communities now that action plans are in place at regional and local levels. I also recommend that incentives such as waived match requirements in disadvantaged communities be added to encourage cross-agency collaboration for addressing dangerous streets under State or County jurisdiction.

### Vision Zero and Safe System Approach

The transportation industry has evolved in recent years, and new and updated standards on road safety, such as Vision Zero, Safety System Approach, and the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 11th edition, have been widely supported.

#### 1. Vision Zero<sup>10</sup>

I mentioned Detroit’s vision zero goal earlier. This global safety strategy has gained momentum to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. People sometimes make mistakes, so the road system and related policies must be designed to ensure those inevitable mistakes do not result in severe injuries or fatalities. System designers and policymakers can participate by improving the roadway environment and policies, such as speed management, to lessen the severity of crashes. The strategy acknowledges that many factors contribute to safe mobility — including roadway design, speeds, behaviors, technology, and policies — and sets clear actions to achieve the shared goal of zero fatalities and severe injuries.



Source: Vision Zero Network

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<sup>10</sup> Vision Zero Network

## 2. Safe System Approach<sup>11</sup>

Thanks to your leadership, the IIJA calls out the principles of the Safe System Approach: that no death or serious injury is acceptable; people make mistakes and are vulnerable; we all share responsibility in preventing serious crashes; we need to be proactive in our efforts, and we need to have redundant safety strategies in place. Improving roadway safety requires a Safe System Approach combined with advancements in technology. No one solution will solve this problem. The transportation community has embraced the Safe System Approach as an effective way to address and mitigate the risks inherent in our enormous and complex transportation system. It works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur. It is a holistic and comprehensive approach that provides a guiding framework to make places safer for people. (What Is a Safe System Approach? | US Department of Transportation) This supports a combination of roadway safety countermeasures focusing on human mistakes and vulnerability to design a system with many redundancies to protect everyone.



Source: USDOT

This supports a combination of roadway safety countermeasures focusing on human mistakes and vulnerability to design a system with many redundancies to protect everyone.

### Federal Policy

This year, states are beginning to adopt the 11<sup>th</sup> edition of the Federal Highway Administration's Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), the first major update since 2009. The MUTCD serves as the governing document for accepted safety design principles and standards that Departments of Transportation and agencies follow for all traffic control devices installed on any street, highway, bikeway, or private road open to public travel and must be adopted within two years.

The updates address the evolving challenges of modern traffic and provide guidelines for meeting the safety infrastructure needs of pedestrians and bicyclists. The manual ensures a standardized approach to traffic control nationwide and underscores the urgency of implementing the latest and best practices in safety measures on our roads. Thank you for mandating that the manual be updated every four years in the IIJA to keep pace with innovation and current practices.

However, there is more that the Federal government and Congress can be doing to support road safety around the country. Both the pending Complete Streets and Building Safer Streets Acts have the potential to provide tremendous merit and value to local governments. The [Building Safer Streets Act](#) would help to speed up delivery of common-sense safety countermeasures by giving local governments more flexibility on working around outdated and restrictive design standards. The [Complete Streets Act](#)

<sup>11</sup> USDOT

would ensure that projects using Federal money be required to incorporate best practice complete streets design standards into construction projects. Even on our own Federally funded road projects, we are disincentivized from adding safety improvements beyond pavement markings at the perceived risk of being held up in State and FHWA reviews. Requirements for engineered drawings on basic project elements, such as ADA ramps and sidewalk replacements, put an onerous burden on municipalities and threaten the obligation date requirements each funding cycle.

Local agencies shouldn't be put in a position where safety is second to budget and schedule or have to ask other road jurisdiction owners to prioritize safety in their communities and welcome support from the Federal government to figure out ways to incentivize change.

### ITS

As I've mentioned, Detroit takes a multifaceted approach to safety. This approach is centered around creating safer roads from the way we design and maintain them, but it also includes Intelligent Traffic System (ITS) modernizations. ITS improvements benefit Detroiters through increased safety, mobility, and connectivity. In 2017, FHWA granted the city an Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant that kickstarted efforts to continue advancing ITS as another mechanism to save lives. The City of Detroit's Traffic Management Center (TMC) provides for the remote monitoring of these traffic signalized intersections using a central platform, Econolite Centrac's Advanced Traffic Management System (ATMS). This intuitive GUI-based enterprise-class traffic software solution provides powerful and flexible ITS management, traffic control, and data sharing in one ATMS platform. In addition to real-time monitoring, the City utilizes its ATMS remote capable systems to deploy optimal signal timing plans in response to planned or unplanned events. The recent 2024 NFL Draft, in which we set a record of attendance with over 775,000 fans converging in the downtown environment throughout the three-day event, was closely monitored using the ATMS system.

In 2023, the City of Detroit won a \$2 million "Strengthening Mobility and Revolutionizing Transportation" (SMART) USDOT grant to improve traffic safety and equity in the city for the Detroit "Mobility Optimization through Data for Equity and Safety" (Detroit MODES). The Detroit MODES initiative will use existing smart intersection technology to collect contextual and environmental data on crashes from a variety of sources, use advanced analytics to identify dangerous areas and measure the effectiveness of construction and City interventions, and summarize findings on a cloud-based platform with high-level summaries and focus zones. This type of technology allows us to identify dangerous intersections with near misses sooner so we can intervene before a crash or fatality takes place. We are actively exploring other technologies with an overarching goal of developing ITS technologies that are sustainable and compatible with the City's current infrastructure.

### Conclusion

As I close today, I request that you consider how many lives funding programs like Safe Streets for All can save by making it easier for local governments to plan, pilot, and implement common sense safety countermeasures and proven safety design standards. As we all seek to reduce fatalities and serious injuries on our roadways, it is critical to have dedicated safety funding that does not have to compete with maintaining roads and bridges. I understand that we are more than halfway through the IJA, and discussions on the next iteration of the bill will begin shortly. As you engage in these crucial discussions around funding authorizations and allocations, please consider what those funds can do for our communities by creating safer streets and saving lives. Unsafe roadways affect all users but disproportionately impact the most vulnerable. Let's seize the opportunity to pave the way towards a future where our streets are not just conduits of transportation, but pathways to safety for all.

I appreciate the work of this subcommittee and committee as a whole. Thank you again for the opportunity to testify today on behalf of the City of Detroit and local governments across the Country, I am happy to answer any questions.