# VISION Z \* \* \* \* R SAFE STREETS FOR WASHINGTON, DC

## 2022 UPDATE













### MAYOR BOWSER'S MESSAGE

Safe Streets are what we need as a community, and, together, we can get there. We cannot and will not accept the constant toll of traffic injuries and death in our community. That was my position when I made the commitment to Vision Zero in 2015, and it is still true today.

Our original target of achieving zero deaths by 2024 was ambitious and has not been without its challenges. But we are beginning to see the fruits of the many traffic safety initiatives started within the past seven years, and the many lessons learned have helped us identify critical needs—such as new models of project development and enforcement—that we must implement with urgency.

We must also move forward with a focus on equity: the burden of traffic violence falls disproportionately across the District, with Wards 7 and 8 bearing the greatest losses of life and serious injuries, and we must change that outcome.

Everyone deserves to have safer streets to walk along, to get to work, and to play and enjoy our great city. For District government employees, this means working relentlessly to prevent and redress traffic deaths and serious injuries. It also means being data-driven in the projects we select and the solutions we choose. And it means making the significant financial investments that are needed to reach our goal; for example, my Fiscal Year 2023 Fair Shot budget invests in safety improvements on fifteen of our most dangerous corridors, reducing conflicts at fifteen high-crash intersections, and in safer walks to school through a big expansion to our school crossing guard program.

We are also building upon our conversations with community members and stakeholders on their traffic safety priorities. From our communities, I ask for your input and support as we redesign our highest crash streets and intersections to safely serve all roadway users and consider and assess other strategies for improving the safety of our streets.

The District has seen transformational street design changes over the past few decades, but we need do more. Together with you—the community—we are envisioning and delivering on changes that will benefit all residents, visitors and commuters in Washington, DC. In this 2022 update, we share our plans for Vision Zero over the next two years as we prepare for a comprehensive refresh of our Vision Zero Action Plan in 2024.

Thank you for your support as we work together toward a safer, stronger, more equitable, and resilient DC.

Mulikaise

Muriel Bowser Mayor District of Columbia

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## **OUR GOAL OF ZERO**

Vision Zero is a global movement that sees traffic-related deaths and serious injuries as unacceptable and makes traffic safety the highest priority for transportation systems. The initiative takes a data-driven, all-hands-on-deck approach to addressing traffic safety issues facing our communities. It employs the use of a Safe Systems approach to acknowledge that traffic safety has layered components that, when working together, can reduce the frequency and severity of traffic crashes.

The District of Columbia saw a significant decline in traffic fatalities over the past nearly 20 years, going from the highest number of 69 in 2003 to 40 in 2021, which is a rate on par or better than other large U.S. cities. However, our progress has fallen short of our goal to achieve zero deaths by 2024, as originally planned in 2015.



Fatalities in DC each year



#### WHY USE A VISION ZERO APPROACH?

The District's commitment to Vision Zero means that every year our goal is zero deaths and serious injuries, and we are working aggressively toward that goal every single day. Working aggressively means making difficult decisions on trade-offs that always prioritize safety for our most vulnerable road users and populations. It means going above and beyond the typical road design standards and priorities that are traditionally set for the United States as a whole. The District takes this approach because everyone, including our children, seniors, neighbors, friends, and family members, deserves safe streets.

The key principles of a Vision Zero approach acknowledge the following:

#### PRIORITIZING HUMAN LIFE AND HEALTH

Our safety portfolio is still catching up with the amount of multimodal activity occurring on our streets. District streets, operating speeds, users, and vehicles are shifting to maximize safety and comfort of people using more vulnerable modes, such as walking or rolling. The District will continue to use crash data and other industry best practices to determine the highest priority locations, designing around vulnerable users to improve safety for all, including those inside vehicles.

#### THE IMPORTANCE OF DATA-DRIVEN PRIORITIZATION

A critical focus of Vision Zero is using data to determine the areas in most critical need of safety interventions and prioritizing them for multi-agency focus. Being data-driven removes some of the human element and our biases to force jurisdictions to contend with the inequities of the past and prioritize these areas for future investments. It removes some of the "squeaky-wheel" phenomenon to help those communities continually experiencing dangerous conditions to get the safety focus they deserve.

#### AN ALL-HANDS-ON-DECK APPROACH

While the District Department of Transportation (DDOT) is responsible for multiple elements of Vision Zero, many agencies share the responsibility to ensure safe operations on our streets, including the Metropolitan Police Department (MPD), the Department of Public Works (DPW), Department of Motor Vehicles (DMV), and Department of For-Hire Vehicles (DFHV), to name a few. This multi-agency approach intersects and seeks to integrate with existing long range plans and budgetary efforts in the District. These include, but are not limited to: <a href="moveDC">moveDC</a>, A <a href="Fair Shot Budget">Fair Shot Budget</a>, DC's <a href="Economic Strategy">Economic Strategy</a>, <a href="Sustainable DC">Sustainable DC</a>, Age <a href="Friendly DC">Friendly DC</a>, <a href="Climate Action Plan">Climate Action Plan</a>, <a href="Healthy by Design">Healthy by Design</a>, <a href="Safe Routes to Schools">Safe Routes to Schools</a> and <a href="Safe Passage DC">Safe Passage DC</a>.

## MEASURING OUR PROGRESS

To understand the progress that the District has made, we can compare our safety statistics and other relevant measures to similar sister cities that have also adopted a Vision Zero Policy (i.e., Boston, Chicago, Miami, New York, Philadelphia, San Francisco, and Seattle). These cities were selected because of their size, density, transportation infrastructure, metropolitan regional connectivity, and similar policy framework. The following section outlines where the District lines up on key issues related to traffic safety and crash rates.

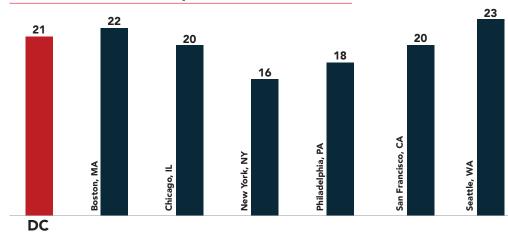
#### TRANSPORTATION SYSTEM

Along with people involved in crashes, traffic volumes, speeds, land use patterns, and the street network and design are intrinsically linked to crash rates and severity. The network includes how many of each type of streets there are, intersection geometry and frequency in the network, as well as risk and exposure rates by all street users. Just by nature of the numbers, the more people who use a street, the more risk for crashes.

#### "TRAFFIC" VMT PER CAPITA1

Traffic is the usage by all modes of the total available street space. Traffic congestion occurs when the number of vehicles on the street (demand) exceeds the available street space (capacity). Traffic activity for motor vehicles is often measured in vehicle miles traveled (VMT) per capita, or total daily miles of vehicle travel in an urbanized area divided by the total population. VMT is a good measurement of congestion as well as the effectiveness of our multimodal facilities and policies. Consistently higher VMT often correlates with the prevalence of wide streets to carry higher volumes of traffic and as a result, higher injury and fatality rates. Infrastructure projects need to keep capacity and all-day demand in balance. Conversely, sudden, steep reductions in VMT, as seen during the COVID-19 pandemic, result in underutilized street space that encourages speeding.



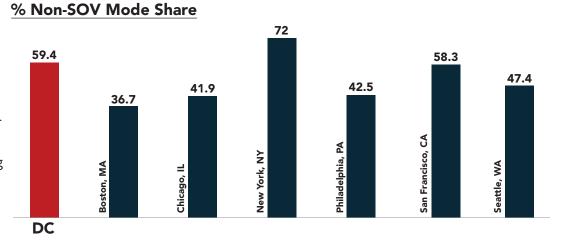


#### 1 fhwa.dot.gov/ohim/onh00/onh2p11.htm

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#### COMMUTE MODE SHARE<sup>2</sup>

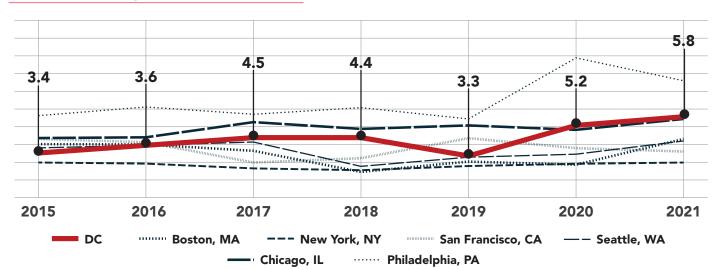
The District has one of the highest rates of non-single occupant automotive (Non-SOV) mode share (e.g., walking, wheeling, scooting, biking, and transit) for work trips in the nation at nearly 60%. This means there are more people moving outside of private cars who are, therefore, more vulnerable to crash risks as they travel.



#### **CRASH STATISTICS**

The District lost, on average, 32 people on our streets per year between 2015-2021. These numbers have increased significantly during the COVID-19 public health emergency. However, at the same time, reported injury crashes overall went down dramatically, by more than 30% in the first year of the public health emergency. The graphic below shows fatality rates in comparison across these Vision Zero cities according to Fatality Analysis Reporting System (FARS) data. Compared to other Vision Zero cities, the District has close to an average fatality rate per capita at 4.3. Pre-pandemic, but was also on a downward trajectory.

#### Traffic Fatalities per 100,000 Residents



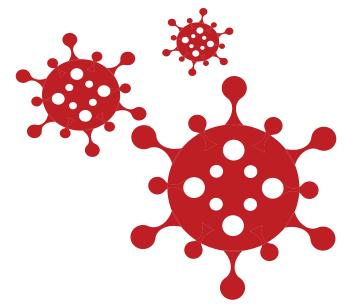
<sup>2</sup> enotrans.org/article/2018-acs-survey-while-most-americans-commuting-trends-are-unchanged-teleworking-continues-to-grow-and-driving-alone-dips-in-some-major-cities/

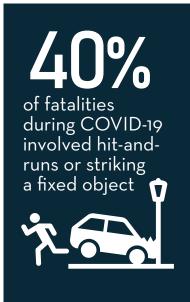
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#### CRASHES DURING COVID-19

In the three years before the pandemic, the District recorded an average of 8,530 traffic crashes per year, or 23 per day, that resulted in injuries (2017-2019 based on MPD crash data). During the nearly three years of the COVID-19 public health emergency, overall reported traffic injuries in the District decreased sharply, by about 30% overall. Among pedestrians and cyclists, reported injuries decreased even more: by 44% (pedestrians) and 51% (cyclists).

However, fatalities did not follow suit, instead showing a divergence, where injuries declined and fatalities increased. Preliminary data from other jurisdictions seem to match this pattern, as fatality numbers and rates went up distinctly in 2020 and 2021 across the country. Increased speeds were made possible by reduced congestion, while people's daily travel patterns changed. In the District, fatalities increased from 27 in 2019, to 37 in 2020, and 40 in 2021. This overall pattern of fewer but more severe crashes likely relates to overall increased speeds on the roadway. Increased speeds are exponentially reflected in the force of impact, which correlates closely to severity of injuries for all involved.





## A FOCUSED STRATEGY



The District has made strides in street safety over the past few decades, by updating street design standards and policies to improve safety, but we recognize there's still a lot of work to do on our streets. Agencies must continue to meet the ever-changing transportation landscape and technological innovations that affect how residents, commuters, and visitors travel. To make the greatest impact, District agencies will focus resources on a Safe Systems approach to end traffic deaths and severe injuries.

Traffic safety in the District can benefit from even more transformational changes such as those DDOT has been making over the past decade. Safer streets designed to operate at safer speeds with safer vehicles and people helps to avoid crashes before they occur, and reduce the severity of crashes that do occur. Traditional street safety efforts focused on behavioral change, but while behavioral change is important, the District is shifting our focus to place more efforts and resources on proactive, systems-level safety than ever before.

#### **CENTERING EQUITY**

The District has committed to race and social equity in a more meaningful way than ever before. In 2021, the Mayor created the Office of Racial Equity to ensure policy decisions and District programs are evaluated through a racial equity lens. The Chief Equity Officer reports to the City Administrator and is responsible for collaborating with District agencies, residents, and external stakeholders to make meaningful progress toward a more equitable city.

#### CRASHES AND EQUITY

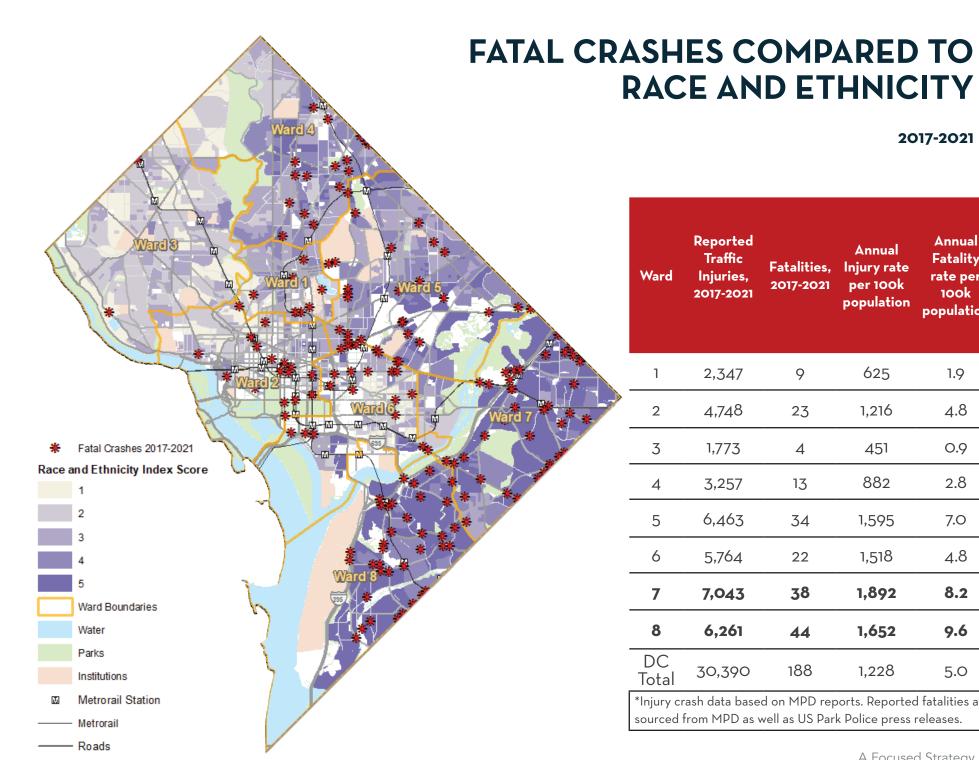
Transportation disparity is the state in which both transportation disadvantage and sociodemographic vulnerability overlap, thereby limiting accessibility and social inclusion. Just distribution means investing in the communities and areas that are in the greatest need. Research on nationwide crash data shows that Black, Indigenous, and people of color, low-income or populations experiencing poverty and houselessness are more likely to be killed or injured in crashes.<sup>3</sup>

#### **VULNERABLE POPULATIONS AND CRASHES**

This information can be used to prioritize transportation investments that reduce disparate impacts and address sociodemographic vulnerabilities—in effect, improving equitable outcomes. We will examine ways to adjust the District's investment prioritization, within the context of federal and District of Columbia guidance, from providing equal resources to prioritizing need and targeting resources to rectify past disinvestment. District government agencies are using information about sociodemographic vulnerabilities to improve equitable outcomes.

3 ghsa.org/sites/default/files/2021-06/An%20Analysis%20of%20Traffic%20Fatalities%20by%20Race%20and%20Ethnicity.pdf





2017-2021

Reported Traffic Injuries, 2017-2021	Fatalities, 2017-2021	Annual Injury rate per 100k population	Annual Fatality rate per 100k population
2,347	9	625	1.9
4,748	23	1,216	4.8
1,773	4	451	0.9
3,257	13	882	2.8
6,463	34	1,595	7.0
5,764	22	1,518	4.8
7,043	38	1,892	8.2
6,261	44	1,652	9.6
30,390	188	1,228	5.0
	Traffic Injuries, 2017-2021  2,347  4,748  1,773  3,257  6,463  5,764  7,043  6,261  30,390	Traffic Injuries, 2017-2021  2,347  4,748  23  1,773  4  3,257  13  6,463  3,4  5,764  22  7,043  38  6,261  44	Traffic Injuries, 2017-2021       Fatalities, 2017-2021       Annual Injury rate per 100k population         2,347       9       625         4,748       23       1,216         1,773       4       451         3,257       13       882         6,463       34       1,595         5,764       22       1,518         7,043       38       1,892         6,261       44       1,652         30,390       188       1,228

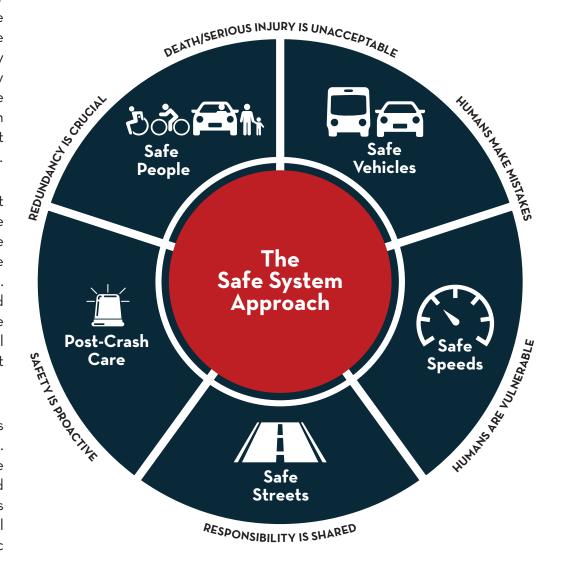
\*Injury crash data based on MPD reports. Reported fatalities are sourced from MPD as well as US Park Police press releases.

## FOCUS ON A SAFE SYSTEM

The District is taking a fresh look at our strategies and processes to address the streets and neighborhoods that continue to see the highest fatal and serious injury crash rates. This strategy is supplemented by prioritizing policies and projects that provide the greatest benefits to neighborhoods with streets that have seen historic disinvestment and high numbers of vulnerable populations.

Between these two methods of project prioritization, the District can more effectively prevent future crashes, reduce fatalities and serious injuries, and reduce transportation disparities in the District. Safety analysis, policy, and program and project development will be used to prioritize high-crash intersections and corridors as well as the risky and aggressive behaviors that lead to severe and fatal crashes.

All these efforts will be retooled to focus and maximize the safety of all street users. This approach has been proven effective internationally, and now with focus and commitment from the USDOT, the District is better positioned to make more meaningful progress toward the goal of zero traffic deaths and serious injuries.



#### Key Principles of a Safe System:

Humans make mistakes. Humans are imperfect beings and have lapses in judgment that sometimes cause crashes. Under Vision Zero we acknowledge that mistakes will continue to happen so we build these assumptions into our work to make sure these crashes do not cost someone their life or limb.

Human bodies are vulnerable to injury. Our bodies are not capable of surviving a crash at high speeds and/or with objects weighing tons or even hundreds of pounds. This is especially true when our bodies are young or aging into our senior years. Therefore, the utmost care should be taken to prioritize human life and health on our streets.

Deaths and serious injuries are unacceptable. If we know that because humans make mistakes and crashes will undoubtedly occur, we can design our systems in ways to prevent these crashes from becoming severe or deadly. A death or serious injury is considered a failure on one or many parts of the system.

Responsibility is shared. When we say responsibility for a safe system is shared, we mean that the burden is not solely and proportionately on street users, but a larger burden is on planners, engineers, lawmakers, emergency care, and police. Each entity that plays some part in the activity on our streets bears responsibility for a safer system.

Cities need to be proactive. Governments must address high risk areas before a fatality or serious injury occurs, rather than be reactive after the severe crash occurs. This can be difficult because in a given year, the locations of fatal crashes can be somewhat random. Using historical data and research, we can identify the most dangerous locations in our cities, so that we can prioritize those and work as quickly as we can to reduce crashes.





Our community is already walking, cycling, and taking transit more than in the past, but our safety portfolio is still catching up with the amount of activity occurring on our streets. DDOT assumes a great part of the responsibilities, as system designers and operators, to be more proactive and design safer streets in a more equitable way than traditional approaches. This new approach to mobility means that intersections and traffic controls (e.g., signals and signs) are shifting to maximize comfort of people using more vulnerable modes, such as walking or rolling.

#### MULTIAGENCY EFFORTS

Vision Zero and Safe Systems acknowledge that one entity or agency within the District cannot fix the problems with an unsafe system on its own. Instead, coordination, cooperation, resources. and focus from other agencies and neighboring jurisdictions are necessary for success. Many agencies have a part in creating each piece of the safe system and layers of protection for system users. Each agency's role, activities, commitments, and performance measures are included in the following sections. Each performance measure or indicator will be established at a baseline level and tracked in a forthcoming performance dashboard.



#### AGENCY KEY

**DDOT:** District Department of Transportation

**DPW:** Department of Public Works

**DMV:** Department of Motor Vehicles

**OCME:** Office of the Chief Medical Examiner

**MWCOG:** Metropolitan Washington

Council of Governments

**MPD:** Metropolitan Police Department

FEMS: Fire and Emergency Medical Services

**DFHV:** Department of For-Hire Vehicles

OAG: Office of the Atterney General

**OAG:** Office of the Attorney General

**DOH:** Department of Health

#### PERFORMANCE INDICATORS

The following represents the system-wide data that are intersectional to traffic safety to give a high level prediction of how the District is progressing on the goal of Vision Zero. The Vision Zero initiative may not be able to directly affect these data points, but they help to establish context for our efforts

#### SYSTEM-WIDE INDICATORS

The indicators below influence activities on our streets as well as crash patterns and outcomes.

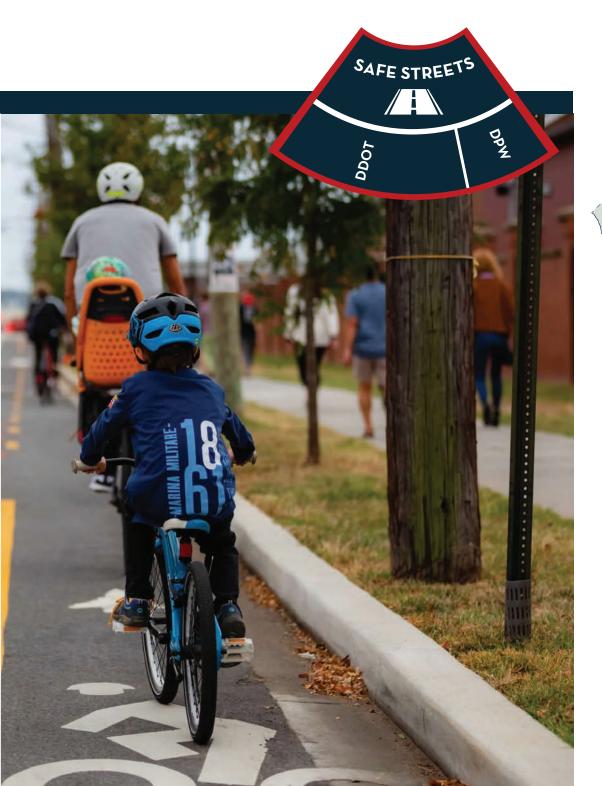
Indicator	Target	
Traffic-related Deaths and Severe Injuries	<b>\</b>	Decrease /Eliminate
Vehicle Miles Traveled per Capita	<b>4</b>	Decrease
Street Network Density per Square Mile	1	Expected Increase
Mode Split for People Walking, Wheeling, Biking, and Using Transit	<b></b>	Increase
Population Density	1	Increase
Poverty Rate	<b>\</b>	Decrease
Unhoused Residents	4	Decrease

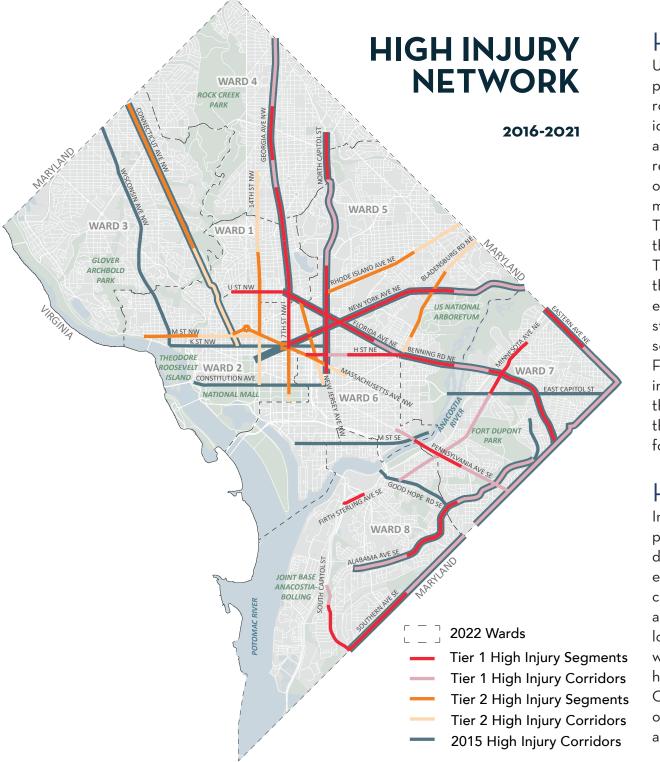


SAFE STREETS

Street design is one of the most fundamental factors of a safe system. It is the critical piece in the multi-layered approach that can make the difference between a crash that someone can survive or not. Street design influences behavior and the need for enforcement. If designed properly, streets can be mostly self-enforcing and deter dangerous driving behaviors such as speeding, aggressive actions, and failures to yield. Within the Safe Systems framework, the District is authorized to design roads that make operating at safe speeds intuitive, and by introducing an inclusive and holistic design approach that focuses on reducing exposure, reducing conflicts, and managing speeds in every project we undertake.

Our community must come together to shape and embrace a new model of city street design that makes it easier to navigate conflict points for everyone. With a new expectation of safety and livability to meet, District government must come together across agencies and domains to shape public space and make it something that brings everyone together. The goals of each project on our streets moving forward will be to reduce exposure to crash risk by protecting and separating users, reduce or mitigate conflicts between modes and movements, and reduce and manage speeds. Because of vulnerability, the safety of people walking, wheeling or using mobility assistive devices will be the top priority, followed by those biking or scooting, in transit vehicles, and in passenger vehicles. Our goal is to eliminate deaths for all users of the street.





#### HIGH INJURY NETWORK

Under this new approach to Vision Zero, we will prioritize proactive safety interventions on the roadways with the most deaths and injuries. To identify those roadways, DDOT conducted an analysis of all corridors in the District based on reported injury and fatality crash data from June of 2016 - July of 2021. The resulting corridors are mapped here as the High Injury Network (HIN). Tier 1 streets segments and corridors represent the highest priority segments citywide. The Tier 2 segments supplement Tier 1, to represent the highest priority segments and corridors for each Ward. The streets highlighted in blue are streets that were evaluated in 2015, continue to see high rates of injury, and are funded in the FY2023 budget to receive safety treatments in the next few years. The District will use this map to prioritize safety improvements that span multiple intersections and projects for even larger portions of corridors.

#### HIGH INJURY INTERSECTIONS

Intersections are, in a way, the natural conflict points of our transportation system. Using crash data, along with other data (e.g., volumes, land uses, etc.), the District can determine the highest priority crash locations so that education, enforcement, and engineering interventions are focused in these locations for both low-cost and quick build all the way up to major capital projects. To determine the highest injury intersections, the District used a Crash Composite Index (CCI) to rank intersections based on the crash frequency, rate (frequency/volumes), and severity.

In District Government, Safer Roads generally mean the design, construction, operation, and maintenance of our miles of roadways. These duties generally fall under the jurisdiction of DDOT and DPW. DDOT is charged with the engineering, operations, and state of good repair of District streets. The Safe Roads and Safe Speeds categories are intrinsically linked as the street design often determines the speeds that system designers expect to accommodate or discourage.

DDOT is committed to putting this plan into action by prioritizing our work to the areas with the highest safety concerns. We will do this through a two-pronged approach of focusing existing programs and targeted safety projects on high risk and crash areas that address issues across the city as well as targeted safety projects on our HIN streets. Wherever possible, scalable solutions such as the massive effort to spread Leading Pedestrian Intervals (LPIs) throughout the District over the past five years, will also be prioritized.

Strategy	Program Description	Action Commitments
Transit Priority Program	The District's plan to implement transit priority treatments on key streets for improved bus service	51 projects over the next 10 years
Bicycle Master Plan	The District's plan to implement bicycle facility treatments on key streets in the city, creating a network of safe, connected bicycle routes	30 miles of protected bike lanes by 2025, trails network expansion
Safe Routes to Schools	The District's program to provide safe street design in school zones for all District school children	Improve safety and viability of walking and biking to school
Annual Safety Program (ASaP)	Quick build interventions planned at critical locations along the HIN or at high injury intersections	100 sites or projects to increase safety at data-driven locations
State of Good Repair Projects	Street repaving and reconstruction activities that bring streets up to current design and marking standards	Bring streets up for repaving to marking standards for safety
Safe Accommodations	Regulation and monitoring of public space to ensure no construction activity creates unsafe situations for vulnerable street users	Construction in public space shall safely accommodate persons with disabilities, pedestrians, and bicyclists

#### PERFORMANCE INDICATORS

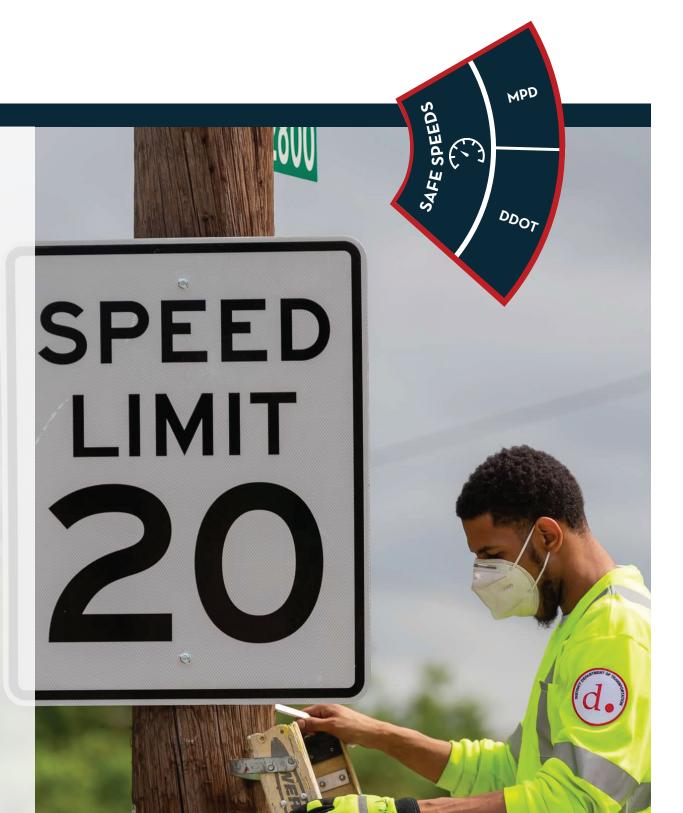
Strategy	Goal	Data Points		
System-wide Metrics				
Fatalities and Serious Injuries	Zero fatalities and serious injuries	Crash Data		
Fatalities and Serious Injuries on High-Injury Network	Zero fatalities and serious injuries	Crash Data and HIN Map		
Fatality Rate for Vulnerable Street Users	Zero fatalities	Crash Data		
Bicycle and/or Transit Priority Lane-Miles	Bicycle and/or Transit priority treatments implemented on HIN as stated in moveDC	Project extents and lane miles		
	Project-based Evaluati	ons		
Fatalities and Serious Injuries	Zero	Crash Data (e.g., 3 years before, 1 year after, 3 years after)		
Vehicle Speeds	Adherence to posted limit	Speed and Volume counts (e.g., Before counts and after normalization)		
Multimodal Volumes	Increases walking, biking, and transit ridership	Multimodal traffic counts at intersections		
Safer Crossing	90% or higher yield or compliance rates	Compliance observational studies		
Exposure Metrics	Reductions appropriate to each safety intervention (Ex: reduced crossing distances)	Design plan sheets		
Conflict Points	Reductions in conflict points	Before and after construction conflict point diagrams noting multimodal activity and accounting for signal timing and phasing		

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#### SAFE SPEEDS

Speed is a critical factor for the safety and crash risk of a street. Research has shown that speeding has a similar influence on likelihood of serious crashes as drunk driving, yet it is still considered socially acceptable, even socially desirable, to own cars that can quickly accelerate to high top speeds. The speed at which a vehicle is traveling at the point that it strikes a person, another vehicle, or an object is a strong determinant in the severity of the outcomes for all people involved. Since speed at the time of a crash is one of the most critical factors in crash severity, moving people slowly is moving them safely.

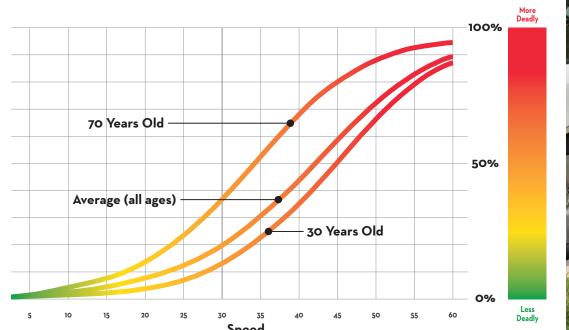
Vision Zero recognizes the limitations on the human body's ability to recover from injury and aims to design the transportation system to avoid combining places where people are unprotected from vehicles with those speeds that we cannot tolerate. Safer speeds are inextricably tied to safer street design. The District works to primarily manage operating speeds and reduce posted speed limits through priority infrastructure projects or systemic program efforts. Street design efforts strive to create streets that are self-enforcing to the maximum extent possible. To supplement design, the District can also deploy speed management practices to enforce safe speeds before or in collaboration with these projects.



Engineering and enforcement tools in DDOT and MPD's toolbox can best manage speeds on our streets in several ways. DDOT can design District streets to encourage slower typical operating speeds and prevent extreme speeds, as well as set speed limits on all streets to communicate speed expectations. The Safer Roads portion of this report explains street design in detail.

In May 2020, Mayor Bowser announced a permanent lowered default speed limit on local roads (i.e., residential streets that primarily serve neighborhood traffic) from 25 to 20 miles per hour. This change lowered the speed limit for more than 60% of the District's street mileage. DDOT continues to assess posted speed limits on each corridor project to improve safety outcomes. To help reinforce posted speed limits, DDOT installs driver feedback signs to help encourage greater compliance with the posted speed limits before further enforcement needs to be instituted.

Research has shown that the faster a driver travels, the less likely the person in the car or the person being struck will survive. The chart below (adapted from Propublica) shows the likelihood of a fatality for people of different ages at different speeds.





Strategy	Agency	Program Description	Action Commitments
Self- Enforcing Streets	DDOT	Self-enforcing streets are those that, by design, need minimal to no additional enforcement because the design matches expected speeds and safe behaviors. DDOT redesigns streets to meet different goals as outlined in moveDC and Vision Zero.	<ul> <li>All streets in the HIN and in moveDC are designed to be self-enforcing so that operating speeds more closely match the posted speed limit</li> </ul>
StreetSafe System- (Automated Traffic Enforcement)	DDOT	ATE includes red light enforcement, stop sign enforcement, and speed enforcement. ATE is able to reduce speeding with its mere presence on the street, with data showing that mroe than 70% of ticketed drivers learn their lesson immediately, and only receive one citation.	<ul> <li>Increase the number of ATE cameras deployed with a focus on the HIN, arterials, and high-speed streets</li> <li>Increase the types of ATE deployed to support new Bus Lane Cameras, as well as Red Light Cameras, Stop Sign Cameras, and more as approved by the DC Council</li> <li>Enhance safety assessment of new ATE cameras to weight HIN in conjunction with other DDOT processes</li> </ul>
Lower, Context- Sensitive Speed Limits	DDOT	In 2020, DDOT instituted a new default speed limit of 20 mph for District streets, to reduce speeds particularly on neighborhood streets. Speed limits in school zones, during school hours were set at 15 mph in 2019. On each corridor project, DDOT staff assesses the posted speed limits to ensure they meet the context of the area and safety goals.	<ul> <li>Continue to reassess posted speed limits on District streets to ensure maximum speeds are set appropriately for each context</li> <li>Update speed limit setting guidelines in the Design and Engineering Manual with updated guidance from USDOT and FHWA when published (expected by end of 2024)</li> </ul>
In-person Enforcement	MPD	Enforcement of traffic laws, especially speed limits, will be focused on the HIN and other focus areas as determined by MPD and in consultation with community and other agencies.	<ul> <li>Coordinate with other agencies (MPD, DFHV, DPW, and DDOT) to prioritize in-person enforcement at key locations</li> <li>Ensure safety enforcement is highly visible and reported publicly to increase transparency and promote safety effects</li> </ul>

#### PERFORMANCE INDICATORS

Strategy	Agency	Goal	Data Points
Self- Enforcing Streets	DDOT	Increase number of street designs that are self- enforcing	<ul> <li>Miles of streets that are redesigned</li> <li>Percent of the HIN that is funded for planning, design, or construction</li> </ul>
Posted Speed Limits Reassessed	DDOT	All posted speeds are appropriately set for the context, prioritizing safety	<ul> <li>Number of blocks with speed limit assessed</li> <li>Number of blocks with speed limit reduced</li> </ul>
StreetSafe System Enhancement	DDOT	Increases in the number and variety of automated enforcement cameras	<ul> <li>Number of camera devices of each kind</li> <li>Percent of use time of each camera on HIN streets</li> </ul>
Speeding Citations	MPD	Ensure traffic citations are focused on the High Injury Network as well as overtime enforcement funded by the Highway Safety Office	<ul> <li>Number of traffic citations for speeding</li> <li>Number of traffic citations focused on the HIN</li> <li>Percent of overtime enforcement used funded by the DC Highway Safety Office</li> </ul>



#### SAFE PEOPLE

People using our streets must understand the rules of the road and expectations must be appropriately set depending on the protection, size, and power of the way someone chooses to get around. The heavier and more powerful the vehicle, the greater the driver or user's capacity for harm. Naturally, those on foot or person-powered wheels are the lowest on the spectrum of capacity for harm, while multi-ton trucks are the highest.

Education efforts should focus on youth and seniors as they are overrepresented in injury and fatal crash data. Education and reeducation efforts in these groups are needed, especially given their slower than average reaction times, propensity for distraction, and need for enhanced understanding of changing laws and street designs. Drivers of larger and commercial vehicles need special training and outreach to ensure they are aware of the responsibilities when operating such large, heavy vehicles with sight line limitations.

The focus for safer people is education and outreach, enforcement, and legislative rules to ensure all street users are traveling safely. The District educates all street users in a variety of ways including regional campaigns, driver or bicyclist education courses for youth and adults, drivers through DMV programs and testing, and more.

in the color SAFE PEOPLE

#### KEY AGENCY ACTIVITIES & ACTION COMMITMENTS

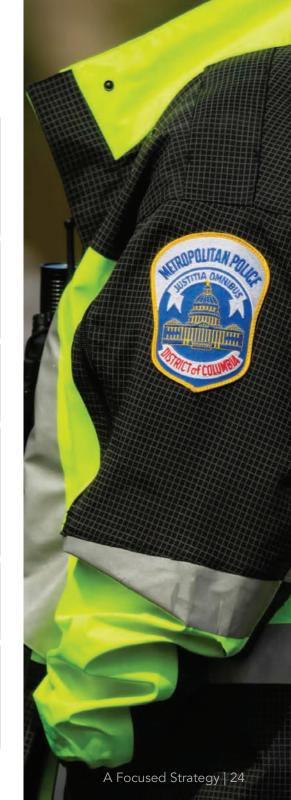
Strategy	Agency	Program Description	Action Commitments		
	Education and Outreach				
Highway Safety Campaigns	DDOT	The District Highway Safety Office works to raise awareness about aggressive driving, impaired (alcohol and drug) driving, occupant protection, pedestrian safety, distracted driving and occupant protection. Messaging is informed by crash data and coincides with regional and national campaigns.	<ul> <li>Continue to support the Highway Safety Office grant programs that target problematic behaviors</li> <li>Improve campaign messaging by using latest behavioral research</li> </ul>		
Bicycle Education	DDOT	This program funds adult and youth cycling education courses that cover learning to ride, fundamentals, and city cycling.	Continue programming and funding adult and youth bicycle education courses		
Driver Education	DMV DDOT	DMV carries out District legislation that requires different levels of driver education based on the vehicle types that each driver uses. The agency also promotes safety standards and child safety seat use and proper installation with DDOT coordination.	<ul> <li>Keep driver manual updated to educate drivers on rules of the road as they are added and adjusted</li> <li>Expand the driver assessment quiz to other DMV renewal transactions online</li> </ul>		
Incentivize Safety in For- Hire Vehicles	DFHV	DFHV is the regulatory agency for all drivers of for-hire vehicles. DFHV uses what it learns from enforcement efforts, public feedback, and driver records to engage drivers and provide training on key safety issues.	<ul> <li>Explore driver incentives for voluntary participation in vehicle cameras, data recording devices, and passenger facing speedometer pilot programs</li> <li>Identify drivers who may need more training, and bolster Vision Zero training by coordinating with stakeholders</li> </ul>		
		Enforcement			
Traffic Control Officers	DDOT	This program funds officers to be trained on and control traffic to enhance safety and manage traffic at key locations such as schools, large events, and congested areas.	<ul> <li>Expand Traffic Control Officer (TCO) recruitment to meet demand at schools, and other high risk locations</li> <li>Enhance TCO training to increase protections for vulnerable users</li> </ul>		

Strategy	Agency	Program Description	Act	tion Commitments
Safe Routes to Schools Deployment	MPD	This program funds officers to be trained on and control traffic to enhance safety for school children.	•	Deploy officers to school areas during drop-off and pick- up hours in identifiable areas
Impaired Driving Enforcement	MPD	This program funds officer time to enforce traffic safety laws related to impaired driving laws to take dangerous drivers off of the streets.	•	Run saturation patrols in high-issue areas and during major holidays and local events (e.g., Nationals games)
Dangerous Driver Adjudication	DMV	Enforce driver requirements and administer the license revocation periods.	•	Launch ignition interlock program for convicted drinking/ drug offenders to enroll Submit recommendations for and study deferred adjudication programs for drivers who endanger vulnerable users
Enforce High Risk Parking Violations	DPW	DPW enforces primarily parking violations and focuses on high-risk behaviors exhibited by drivers and improper standing or storing of their vehicles in public space (e.g., blocking bicycle lanes, crosswalks, parking abreast/double parking, illegal traffic turns).	•	Expand and target parking enforcement in key high-crash areas for high risk behaviors (e.g., parking in bicycle lanes, crosswalks, parking abreast/double parking)  Expand boot/tow team to increase number of vehicles booted in excess of daily/weekly average
Enforce For- Hire Vehicles	DFHV	DFHV enforces primarily moving and safety violations (and some parking violations) among its drivers, focusing on high-risk behaviors as well as activity on the HIN.	•	Target traffic safety-related enforcement in key high-crash areas  Conduct formal bi-monthly enforcement blitzes



#### PERFORMANCE INDICATORS

Strategy	Agency	Goal	Data Points
Safety Education Campaigns	DDOT	Expand effectiveness and reach of safety education campaigns. Reductions in citations and crashes involving unsafe behaviors	<ul><li>Number of impressions</li><li>Crash data</li></ul>
Bicycle Education	DDOT	Increase bicycle education courses and increase enrollment in low income and communities of color.	<ul><li>Residents enrolled</li><li>Classes funded and held</li></ul>
Driver Education	DMV	Increase driver education by keeping the testing materials up to date	<ul><li>License points</li><li>Scores on quiz</li></ul>
Parking Enforcement	DPW	Increase bike lane enforcement, boot- and-tow teams, and parking tickets in high risk areas and along HIN	<ul> <li>Staffing levels on each team</li> <li>Citation data on HIN year to year</li> </ul>
Traffic Control Officers	DDOT	Increase staff levels to meet demand at critical locations such as HIN and schools	<ul><li>Increase in staffing</li><li>Staff at schools and on the HIN</li></ul>
Safety Critical Citation Adjudication	DMV	Increase citation adjudication to reinforce positive behaviors	<ul> <li>Percent of critical safety citations that are adjudicated</li> <li>Number of ignition interlocks issued</li> </ul>



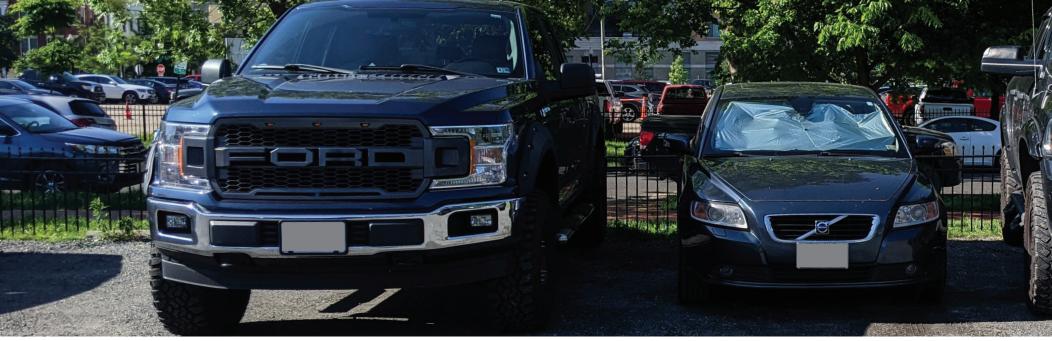
#### SAFE VEHICLES

The safety of the vehicles using District streets is of the utmost importance because the size, weight, and design of vehicles are often a predictor of the severity of a crash and whether the person inside or the person who is crashed into will survive. The safety features inside of a vehicle such as seat belts air bags and more recent technology, when used or functioning properly, also contribute to the survival rates of the vehicle occupants. The goal of the Safe Vehicles component of the Safe Systems approach is to expand the availability of safe vehicle designs, systems, and features that help prevent crashes from occurring as well as minimize the impacts at the time of a crash on both occupants of the vehicle and those outside of the vehicle.

According to an Insurance Institute of Highway Safety research in 2020, drivers of larger vehicles like sport utility vehicles (SUVs), pickup trucks, vans, and minivans are more likely to hit people walking when making turns.¹ When compared to cars involved in crashes, drivers of these larger vehicles are 2-3 times more likely to injure and kill people walking and eight times more likely to kill a child walking.²,³ These results are due to the physics of crash forces and the point at which the force of the driver's vehicle hits the person walking. For drivers of cars, the force is mostly on the lower body and legs of the person crossing, while the driver of a SUV or pickup truck will strike the person in the vital organ region of the torso of an adult or the head and vital organ region for a child.

- 1 iihs.org/topics/bibliography/ref/2249
- 2 iihs.org/topics/bibliography/ref/2203
- **3** doi.org/10.1016/j.jsr.2022.06.005





Therefore, the size and weight of vehicles need more regulation by the federal government to adjust industry standards more toward the European New Car Assessment Programme (NCAP). National standards guide vehicle design and USDOT is currently working to revise those vehicle standards for vehicle occupants and safety technology to mitigate crashes for those outside of vehicles. To disincentivize larger vehicles, in 2022, DC Council instituted higher fees for larger vehicles.

The D.C. Official Code sets forth standards and requirements for passenger vehicles. These include safety requirements for lighting and safety standards expected for all vehicles registered in the District. The DMV handles vehicle registration and mandates inspections to ensure standards continue to be met. The MPD enforces safety violations that may impair driver visibility and safety features that are not present between inspections as well as occupant safety such as seat belt violations and child seat issues. However, the safety of the vehicles is often as good as the operator of that vehicles; therefore, the Safer People section goes hand-in-hand with the safer vehicles themselves.

The goals for vehicle size that cities can best control are fleets, registration, regulation and enforcement of certain aspects of private vehicles, and to work with federal partners to support safer vehicle designs and industry standards. The District's fleet represents the largest opportunity for safer vehicles as design constraints are especially relevant for larger and commercial vehicles. To assist with this, the National Association of City Transportation Officials (NACTO) has worked with the USDOT Volpe Center through a multi-city working group to identify challenges and opportunities. These standards and optimization recommendations can provide guidance as District agencies replace our fleet vehicles.



Strategy	Agency	Program Description	Action Commitments
District Fleet	DDOT DPW	DDOT and DPW own and operate a fleet of maintenance vehicles, trucks, passenger vehicles and more. Drivers of these vehicles must go through Commercial Driver's License (CDL) certification and trainings.	<ul> <li>As fleet is replaced and updated ensure it meets NCAP, commercial vehicle safety, and other standards to the highest extent feasible</li> <li>Ensure all DDOT drivers are compliant and up to date on CDL and other safety training</li> </ul>
Private Vehicle Safety	DMV	DMV requires inspections and registration of all District vehicles. As a disincentive, the District has increased fees to register a vehicle according to weight and size of the vehicle.	<ul> <li>Require inspections and proper registration of vehicles</li> <li>Enact graduated fees for heavier and larger vehicles</li> </ul>
Vehicle Safety Enforcement	MPD	MPD handles enforcement of critical vehicular safety offenses.	<ul> <li>Enforcement of street- legal requirements, especially critical safety infractions such as illegal tints</li> </ul>

#### PERFORMANCE INDICATORS

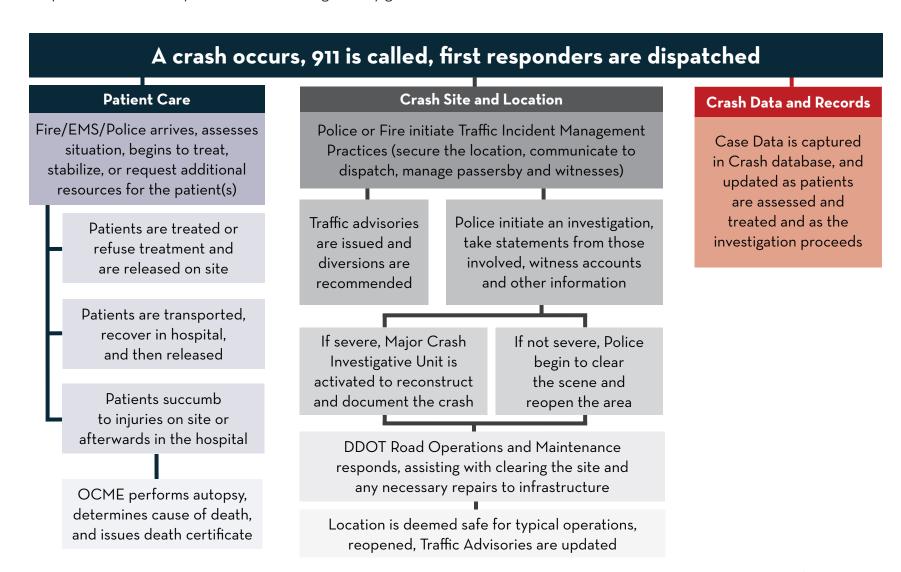
Strategy	Agency	Goal	Data Points
Update District Fleet	DDOT DPW	Increase percent of fleet meeting or exceeding NCAP and other safety standard compliance	Number of fleet vehicles that meet updated NCAP standards
Private Vehicle Safety	DMV	Increase percent of District- registered vehicles that are current with inspections and registration	Number of District vehicle registrations and inspections
Vehicle Safety Enforcement	MPD	Increase non- compliant vehicle safety citations, especially for critical safety issues such as illegal tints	Number of traffic citations for critical safety inspection or standard non-compliance



**POST-CRASH CARE** A Focused Strategy

According to FHWA, Post-Crash Care includes immediate medical response, as well as "forensic analysis at the crash site, traffic incident management, and other activities." If all else fails and a crash occurs that results in an injury or life-threatening injuries, the care that those involved receive can be life saving. First responders are dispatched to the scene of the crash where they treat those who are injured and/or transport them to a local hospital. The goal of Post-Crash Care is to enhance the ability for those involved to survive crashes through quick and efficient access to emergency medical care, while creating a safe work environment for those first responders and preventing secondary crashes from occurring through robust and proven traffic incident management practices.

The process of crash response in the District generally goes as follows:



Strategy	Agency	Program Description	Action Commitments
Response Times	MPD FEMS	The time between when a crash occurs, to an emergency call, to dispatch and arrival of first responders is critical in the survivability of a crash. MPD and FEMS drivers are trained on navigating District streets and work to respond as quickly, accurately, and efficiently as possible.	Explore methods to reduce or optimize response times and accuracy of dispatch to the scene of a crash
Traffic Incident Management Standards	MPD FEMS	First Responders secure the location according to Traffic Incident Management Systems (TIMS) procedures developed and refined by FHWA. This serves to protect the first responders working at the crash site.	
Emergency Medical Services	FEMS	Emergency Medical Services (EMS) play a critical role post-crash to reduce fatalities and serious injuries. Recent studies show that an effective emergency trauma care system can improve survival from serious injuries by as much as 25% and coordinated systems of trauma care can reduce crash fatalities rates as much as 50%.	<ul> <li>Conduct biennial review of travel times to ensure travel time consistency, investigate substantive changes and find solutions</li> <li>Maintain and expand EMS/first responder training with a focus on learning new/innovative methods and adapting to changing technology</li> </ul>
Post-Critical Crash Interventions	MPD DDOT	Within 24 hours, MPD officers meet DDOT Staff at the crash location to review crash details. Within a week, a multidisciplinary team at DDOT reviews the site of the crash to determine further safety treatments.	Continue post fatal crash coordination and data dashboard work
Crash Data Collection and Quality Assurance/ Quality Control	DDOT MPD	When a crash occurs, MPD officers are dispatched to conduct a criminal investigation, collect data, and work to complete an investigation. DDOT pulls from the MPD crash data system to maintain a <u>Crash Data layer</u> on the DC Open Data Portal and populate the <u>Vision Zero Injury and Fatality Crash Dashboard</u> . DDOT and MPD, among others, participate on a Traffic Records Coordinating Committee (TRCC), which examines data issues and seeks to address them.	,

#### PERFORMANCE INDICATORS

Strategy	Agency	Goals	Data Points
Response Times	FEMS MPD	<ul> <li>Decrease response times to site and from site to hospital</li> <li>Increase accuracy of dispatch of first responders to a crash site</li> </ul>	Response time     tracking
Traffic Incident Management	FEMS MPD DDOT	<ul> <li>Increase number of staff trained on TIMS</li> <li>Decrease in time to clear crash site and restore damaged areas as appropriate for each crash scene</li> </ul>	<ul> <li>Number of staff trained</li> <li>Site clearance times once investigations are complete</li> </ul>
Emergency Medical Services	FEMS	<ul> <li>Increase % trained staff</li> <li>Increase training hours completed</li> <li>Training courses that expand knowledge from minimum standards</li> </ul>	<ul> <li>Number or percent of first responders trained in CPR, Emergency Medical Services, and other life saving treatments</li> </ul>
Post Fatal Crash Site Interventions	DDOT	<ul> <li>Increase number and percent of fatal crash sites that receive treatments</li> <li>Reduce delivery times for safety treatments at these locations</li> </ul>	<ul> <li>Number of fatal or major crashes with countermeasures or spot treatments</li> </ul>
Crash Data Collection and Quality Assurance/ Quality Control	MPD DDOT FEMS	Increase accuracy and precision of traffic records	<ul> <li>Number of TRCC and other data issues identified</li> <li>Percent resolved</li> </ul>

31 | A Focused Strategy

#### **ACTING ON THIS PLAN**

The District is refocusing our efforts on Vision Zero by embracing a Safe Systems approach. Every day, every year, every decision, and every project will reflect our goal of zero deaths and serious injuries. because no one should die while traveling on District streets. Our agencies will collaborate more than ever as we work aggressively toward that goal within each component of the Safe Systems approach. Working aggressively means making trade-offs that prioritizes safety above all else for our most vulnerable street users and populations.

Centering equity as a critical component of building a safe system directs District agencies to refocus efforts in historically under-invested neighborhoods. A person's income, race and ethnicity, disabilities, or housing security shouldn't dictate whether they can get to their destination safely. All District agencies must refocus efforts and resources to act in the areas of highest injury, highest risk, and highest need as a top priority. Everyone deserves safe streets.

The road ahead for the implementation of this plan will not be easy. It requires bold efforts, difficult decisions, and trade-offs. These trade-offs can be on big-picture policy decisions down to individual detailed project decisions. All of these efforts will be in service to preventing more families from losing loved ones.

As a government, we have a large share of the responsibility to do everything we can to prevent deaths and severe injuries. Our agencies are already rolling up their sleeves and working toward a better, safer future. We will continue working on critical safety issues to achieve Vision Zero and keep working after that to maintain that goal. Our children, seniors, neighbors, friends, and family members matter, the people working in and visiting the Nation's Capital matter, and the choices we make today affect our individual and collective futures. We're striving to make our future a safer for everyone.





