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The preparation of this report has been financed by the Half Penny Charter County Sales Surtax approved by Miami-Dade citizens in 2002 and managed by the Citizen's Independent Transportation Trust.

Achieving the goals, objectives, and actions described within this Vision Zero Action Plan, and in the time frames specified, are contingent upon multiple factors including, without limitation, available funding and resources. Similarly, the implementation of any future engineering improvements that advance the Vision Zero goals, objectives, and actions on the High-Injury Network defined and illustrated in this Plan are contingent upon multiple factors, including but not limited to, right-of-way and resources availability, community outreach, education, and support, funding for all project phases including design, construction, construction inspection, operations and maintenance, and environmental and socioeconomic impacts for each specific improvement.

MAYOR'S MESSAGE



Dear Miami-Dade County Residents, Businesses, Visitors, and Workers.

Public safety is a fundamental human right. That includes the right to travel safely, regardless of mode. That is why we are investing in safe transportation options, whether driving, cycling, walking, or using public transportation.

Regrettably, too many in our community have suffered the pain of losing a loved one to a traffic crash on our roads. From 2018 to 2022, 1,593 of our friends, family, and colleagues in Miami-Dade tragically lost their lives. We must eliminate these fatalities and life-

changing injuries, which are caused by distracted or impaired driving, speeding, or roadway designs that prioritize vehicular traffic over the safety of our pedestrians and cyclists.

Our Vision Zero initiative is a bold declaration of our intent to eliminate fatal and severe traffic injuries in Miami-Dade by 2040. The Department of Transportation and Public Works (DTPW) continues to prioritize safety for all road users in projects that make our streets safer. Significant advancements have been made since the adoption of the Vision Zero Framework in 2021, and we must continue on our path toward zero fatalities and serious injuries.

Our progress is highlighted in this 2024 Vision Zero Action Plan, which identifies roads with the highest safety risks, and outlines a plan to achieve our goals. My administration remains committed to working closely with federal, state, and local partners to implement the recommendations outlined in this Action Plan.

While your county government puts resources into building safer roadways, we all share the responsibility of promoting road safety by wearing our seat belts, driving sober and undistracted, and respecting speed limits.

Together, we can improve health and protect each other across Miami-Dade.

Sincerely,

Daniella Lenne Cara Daniella Levine Cava Mayor, Miami-Dade County

DIRECTOR'S MESSAGE

Dear Miami-Dade Residents,

In 2022, there were more than 3,536 fatalities due to motor vehicle traffic crashes in Florida, of which 9% occurred in Miami-Dade County. These tragic deaths happened during routine activities such as going to work, school, or running errands. It is crucial to recognize that these fatalities can be prevented and are unacceptable. The Vision Zero Action Plan aims to create a County where everyone can travel to their homes, schools, or places of worship without the risk of serious injury or death.



While progress has been made since the 2021 Vision Zero Framework Plan, there is still much to be done. The Department of Transportation and Public Works (DTPW) has taken measures such as evaluating new mid-block pedestrian crossings, increasing the attentiveness and awareness of vulnerable road users through bicycle lane treatments, signalization, improved roadway geometry, and adding traffic calming measures in neighborhoods to make streets safer. Additionally, DTPW's ongoing Vision Zero education and outreach efforts are reaching residents of all ages across the County. Despite these efforts, the number of severe and fatal injury crashes remains too high.

In this 2024 Action Plan, we share the steps our Vision Zero Program will take over the next five years to implement the necessary policies and infrastructure improvements on the corridors that will generate the greatest impact toward reducing fatal and serious injury crashes. This Action Plan focuses on creating streets for everyone, ensuring safe sidewalks and bicycle corridors, improving safety around bus stops and stations, and fixing dangerous intersections. DTPW will continue to work with our local, state, and federal partners to ensure that funds are committed to prioritizing safety.

Miami-Dade County is an excellent place for living, working, and playing. DTPW is dedicated to enhancing street safety for all individuals and ensuring that our transportation system provides a secure and sustainable future for our community.

Sincerely,

17

Eulois Cleckley, Director and CEO, Department of Transportation and Public Works

2024 Action Plan

TABLE OF CONTENTS

Executive Summary	
Introduction	3
What is Vision Zero?	
What is the Safe System Approach?	
Why is Vision Zero Needed?	
Vision Zero in Miami-Dade County	8
Purpose of this Action Plan	
DTPW's Vision Zero Program	
Guiding Principles and Priorities	
DTPW's Vision Zero Progress	12
Transportation Partner Initiatives	28
Vision Zero Plans from Miami-Dade Municipalities	
Florida Department of Transportation (FDOT) Initiatives	
Vision Zero Data Update	32
High-Injury Network (HIN)	33
Project Prioritization	46
Upcoming Efforts	49
Let's Take Action	53
Municipal Safety Priorities	63
City of Aventura	
City of Hialeah	67
City of Miami	
City of North Miami	71
Town of Cutler Bay	72
Town of Miami Lakes	
Conclusion & Recommendations	75
Looking Ahead	
Acknowledgments	

TABLE OF FIGURES

Figure 1: Bicyclist Waiting to Cross at a Light	4
Figure 2: Traditional vs. Safe Systems Approach	5
Figure 3: Safe Systems Approach	5
Figure 4: Top 20 Most Dangerous States for Pedestrians	6
Figure 5: Top 20 Most Dangerous Metro Areas for Pedestrians	6
Figure 6: Fatality Rate per 100,000 Population by Year Comparison	7
Figure 7: DTPW's Vision Zero Program Mission Statement	9
Figure 8: Map of Top 100 Vision Zero & Safety Projects (2021)	15
Figure 9: Mid-Block Crossing Proposed for SW 104th Street	16
Figure 10: Map of Miami-Dade County 24 Safety Projects (2022)	20
Figure 11: Rickenbacker Bike Lanes	21
Figure 12: Downtown Micromobility Safety Project	22
Figure 13: Safety Project on SW 142nd Ave. in Kendale Lakes	22
Figure 14: CTMP Logo	23
Figure 15: Vision Zero Outreach	23
Figure 16: Map of 2022-2023 Vision Zero Community Outreach Events	24
Figure 17: Word Cloud of Social Pinpoint Comment Response Themes	25
Figure 18: Social Pinpoint Comments Summary	25
Figure 19: Social Pinpoint Map Responses	26
Figure 20: Vision Zero Social Media Outreach Summary	27
Figure 21: Miami-Dade County 2022 & 2023 USDOT Safe Streets and Roads for All Pl Grant Recipients	
Figure 22: FDOT Target Zero Statewide Initiative Advertisement	30
Figure 23: FDOT Bicycle and Pedestrian Safety Analysis Roadway Type Findings	31
Figure 24: Miami-Dade County KSI Crashes by Roadway Type	34
Figure 25: Individual Roadway User KSI Crashes (2018-2022 Data)	34
Figure 26: Vulnerable User KSI Crashes by Time of Day (2018-2022 Data)	35
Figure 27: HIN Segment Roadway Types	36
Figure 28: Miami-Dade County Roadway Types	36
Figure 29: Heat Map Showing Density of Effective KSI Crashes	37
Figure 30: Heat Map Showing Density of Pedestrian KSI Crashes	
Figure 31: Heat Map Showing Density of Bicyclist KSI Crashes	39
Figure 32: Migmi-Dade County High-Injury Network Map	40

TABLE OF FIGURES (continued)

Figure 33: Proposed Implementation Factors	46
Figure 34: FDOT's Context Classification System	47
Figure 35: Vision Zero 2021 Framework Plan Projects Prioritization	48
Figure 36: District of Columbia Vision Zero Data Dashboard	49
Figure 37: Youth Crossing at a Marked Crosswalk	52
Figure 38: Proposed Stop Sign Improvements on Country Club Drive in City of Aventur	a 64
Figure 39: Proposed Overhead Lighting Improvements at Crosswalks in City of Aventur	a 65
Figure 40: Proposed Crosswalk Improvements at Don Soffer High School in City of Ave	
Figure 41: Milander Park Crossings in City of Hialeah	67
Figure 42: Bucky Dent Park Crossings in City of Hialeah	68
Figure 43: Babcock Park Crossings in City of Hialeah	69
Figure 44: Intersection Safety Improvements in Town of Miami Lakes	72
Figure 45: Protected Bike Lanes in Town of Miami Lakes	74
Figure 46: Improvements near NW 170 Street Bridge in Town of Miami Lakes	74
TABLE OF TABLES	
Table 1: 2022 Safety Projects	16
Table 2: HIN Crash Type Scaling Factors	35
	40
Table 3: Miami-Dade County High-Injury Network Corridors	····· - 0
Table 3: Miami-Dade County High-Injury Network Corridors	
	54
Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)	54 55
Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)	54 55 56
Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)	54 55 56
Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)	54 55 56 57
Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)	54 55 56 57 58
Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)	54 55 56 57 58 59
Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)	

LIST OF ACRONYMS

Countywide Transportation Master Plan (CTMP)

Emergency Medical Services (EMS)

Fatality Analysis Reporting System (FARS)

Federal Highway Administration (FHWA)

Florida Department of Transportation (FDOT)

Florida Power and Light (FPL)

Full-Time Employee (FTE)

High-Injury Network (HIN)

Highway Safety Improvement Program (HSIP)

Key Action Commitments (KACs)

Key Performance Indicators (KPIs)

Killed or Seriously Injured (KSI)

Leading Pedestrian Intervals (LPIs)

Miami-Dade Department of Transportation and Public Works (DTPW)

Miami-Dade Transportation Planning Organization (TPO)

Miami-Dade Parks, Recreation, and Open Spaces (PROS)

Milling and Resurfacing (M&R)

National Association of City Transportation Officials (NACTO)

National Safety Council (NSC)

Pedestrian Hybrid Beacon (PHB)

Rectangular Rapid Flashing Beacons (RRFBs)

Road Safety Audit (RSA)

Safe Routes to School (SRTS)

Safe Streets and Roads for All (SS4A)

Signing and Pavement Markings (S&PM)

State Highway System (SHS)

Transportation Master Plan (TMP)

United States Department of Transportation (USDOT)



EXECUTIVE SUMMARY

Miami-Dade County's Vision Zero initiative began in 2018 as the Miami-Dade Transportation Planning Organization (TPO) launched the County's first <u>Vision Zero Plan</u>. In 2021, Miami-Dade County Mayor Daniella Levine Cava, and the County Commission, prioritized the <u>Vision Zero Program</u> (the Program) and set the goal to end traffic fatalities and serious injuries in Miami-Dade County. With this commitment came the development of the <u>2021 Vision Zero Framework Plan</u>, in collaboration with multiple stakeholders. This plan identified the roadway safety problems in the County, noted contributing factors, calculated crash types by road users and high-risk road features, performed an equity assessment, and outlined priorities and proven safety countermeasures to improve safety at higher risk locations.

Planning a safe and connected transportation network that serves the access needs of the diverse residents and visitors of Miami-Dade County is paramount. Based on 2021 Census data, Miami-Dade County ranks as the seventh most populous county in the United States, with a population of approximately 2.71 million people. Miami-Dade is also the only Florida county represented within the nation's top 15 largest counties (U.S. Census, 2023). Nearly 70% of Miami-Dade County residents identify as Hispanic or Latino and 20% of the population is under 18 years of age (United States Census Bureau, 2022). The United States Department of Transportation (USDOT) Justice40 Initiative's Equitable Transportation Community (ETC) Explorer, which defines transportation disadvantaged communities based on five factors (Transportation Insecurity, Climate and Disaster Risk Burden, Environmental Burden, Health Vulnerability, and Social Vulnerability), illustrates that 62% (1,554) of the 2018-2022 Killed or Seriously Injured (KSI) crashes on county and municipal roads occurred within equity areas (see the Vision Zero Data Update section for more information).

Numerous studies have demonstrated that the most crash-vulnerable roadway users and census tracts show a strong correlation with those considered most disadvantaged through socio-economic and demographic analyses. The Miami-Dade County Vision Zero 2021 Framework Plan identified that geographic locations disproportionately impacted by high-injury road crashes (also called Equity Priority Areas), also were correlated with the highest crash rates, and included areas with higher concentrations of low-income households, zero-vehicle households, and minority (non-white) populations. Furthermore, non-vehicular roadway users (bicyclists, pedestrians, transit riders, scooter riders, etc.) are disproportionately and adversely impacted by traffic safety issues compared with drivers.

This Action Plan was developed in close coordination with a Technical Committee comprised of representatives from DTPW's Construction, Highway Design, Traffic Operations, Transit Infrastructure, Service Planning, and Multimodal Planning, as well as the County's Parks, Recreation and Open Spaces (PROS) Department. The Technical Committee provided valuable feedback on crash scaling factors for developing the High-Injury Network (HIN), Key Performance Indicators (KPIs), and Key Action Commitments (KACs) during plan development. In addition, recognizing the breadth of this plan's geographic scope, the project team hosted two Vision Zero Municipal Workshops and one-on-one meetings with municipalities to better understand their place-specific safety priorities and to collaborate on the Vision Zero messaging. Municipalities were encouraged to share their top three safety priorities based on their own previous or ongoing safety analyses. This feedback is listed in the Municipal Safety Priorities section.

This Action Plan is driven by a profound understanding of the primary goal at hand: improving road safety for all individuals, regardless of their background or mode of transportation. To underscore the importance of this mission, the Plan places a significant emphasis on personal narratives. Heartbreaking stories of Miami residents who have tragically lost their lives on the county's transportation network are shared to commemorate their lives and communicate the impact of fatal crashes on our families, friends, and communities. These narratives serve as poignant reminders of the lives affected by road accidents and reinforce the urgency and significance of our efforts.



What is Vision Zero?

Vision Zero is a comprehensive approach aimed at eliminating traffic fatalities and severe injuries, while promoting safe, healthy, and equitable mobility for everyone. Originally implemented in Sweden during the 1990s, Vision Zero has proven effective in reducing traffic-related deaths and serious injuries in cities across the globe. The philosophy of Vision Zero acknowledges that humans are prone to making mistakes, and thus advocates for designing transportation systems that mitigate the consequences of these errors. Currently, over 45 communities in the United States have made a commitment to Vision Zero, and over 260 municipalities with more than 50,000 inhabitants have achieved zero fatalities for five or more years (DEKRA, n.d.).

Our national approach to road design and management is a reflection of our values regarding safety and our understanding of the rights and responsibilities we have as travelers. In the past century, our transportation system was constructed under the assumption that crashes were unavoidable accidents, beyond anyone's control or prediction. Vision Zero, on the other hand, presents a fresh traffic safety philosophy that establishes a new set of principles for road engineering, traveler education, and fostering a collective sense of responsibility among all road users. At its core, Vision Zero holds a straightforward belief: no individual should lose their life or sustain severe injuries due to traffic crashes.

Miami-Dade County has adopted this safety philosophy as a systematic approach to implement transportation safety countermeasures and institute policies with the goal to reduce, and ultimately eliminate, fatalities and serious injuries related to mobility throughout the county.





What is the Safe System Approach?

Vision Zero recognizes that even one death on our transportation system is unacceptable and focuses on safe mobility for all road users. Reaching this goal requires system-level changes to how we plan, design, and build our transportation network. To achieve this vision, the Federal Highway Administration (FHWA) developed the Safe System Approach. DTPW sees this approach as offering the highest potential to end traffic fatalities on our roadway system.

The Safe System Approach is founded on the principles that humans make mistakes and that human bodies have limited ability to tolerate crash impacts. Mistakes should never lead to death or life altering injuries. Applying the Safe System Approach involves anticipating human mistakes by designing and managing road infrastructure to mitigate risks, so that when a mistake leads to a crash, the impact on the human body does

not result in a fatality or serious injury. This is a holistic and comprehensive approach that provides a guiding framework for creating a safer roadway system for all users. The Safe System Approach represents a shift from conventional safety methods by focusing on both human mistakes and human vulnerability to design roadways with safety redundancies to protect everyone, regardless of their mode of travel (see **Figure 2**).

Figure 2: Traditional vs. Safe System Approach



Source: Alta Planning. (2022). Elements of Robust Data in the Safe Systems Approach.

The fundamental beliefs that helped build the Safe System Approach are defined in six principles:

- Deaths and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

While the six principles establish the goals of the Safe System Approach, acknowledge human limitations, and set expectations for how to act, the five elements the Safe System Approach (see **Figure 3**) address every aspect of crash risks to build in redundancies that prevent deaths and series injuries and create a holistic approach to safety.

Figure 3: Safe System Approach



Safer People - Encourage safe, responsible traveling behaviors by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.

Safer Roads - Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.

Safer Vehicles - Expand the availability of vehicle systems and features that help prevent crashes and minimize the impact of crashes on both occupants and non-occupants.

Safer Speeds - Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns, and enforcement.

Post-Crash Care - Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.



Why is Vision Zero Needed?

Smart Growth America publishes an annual *Dangerous by Design* report using federal (National Highway Traffic Safety Administration, or NHTSA) Fatality Analysis Reporting System (FARS) data to examine the "preventable epidemic" of pedestrians killed and injured by walking. Smart Growth America's 2022 report (using 2016-2020 data) highlighted Florida as the second most dangerous state for pedestrians, based on average yearly deaths per 100,000 residents (see **Figure 4**). Furthermore, as shown in **Figure 5**, the Miami-Fort Lauderdale-Pompano Beach area is within the Top 20 most dangerous metropolitan areas for pedestrians (Dangerous by Design, 2022).

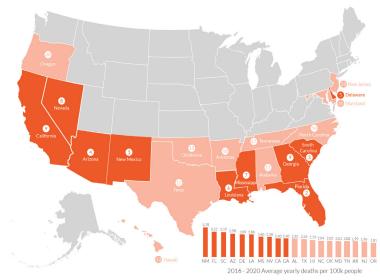


Figure 4: Top 20 Most Dangerous States for Pedestrians

Source: Smart Growth America & The National Complete Streets Coalition. (2022). Dangerous By Design.



Figure 5: Top 20 Most Dangerous Metro Areas for Pedestrians

Source: Smart Growth America & The National Complete Streets Coalition. (2022). Dangerous By Design.

In terms of bicyclist safety, StreetLight's 2021 Special Report: *Bike Safety Shift* lists Florida as the riskiest bicycling state per capita. When considering overall bike miles traveled, Florida is third in the list of riskiest places to bike (StreetLight Data, 2021).

Across this Action Plan's data-driven five-year study period (2018-2022), there w a total of 7,314 KSI crashes in Miami-Dade County. This five-year period saw an average of 105 fatalities and 459 severe injuries per year. Miami-Dade County's fatality rate per 100,000 people is growing much faster than the U.S. trend line (see **Figure 6**).

FHWA recognizes Florida and the Greater Miami Region as priority areas regarding pedestrian and bicyclist safety. Nationwide crash analysis revealed that nearly 20% of fatal crashes involved vulnerable users – a pedestrian crossing the street, a bicyclist riding home from running errands, a transit rider walking home from their local bus stop. Since 2004, FHWA has been developing a Pedestrian and Bicyclist Focused Approach to Safety Program that identifies states and regions with higher proportions of pedestrian and bicyclist fatalities. Updated in 2021, Florida and the Greater Miami Region continue to be focus areas and FHWA allocates extra resources to the Miami-Dade TPO and the Florida Department of Transportation (FDOT) to prioritize pedestrian and bicyclist safety. These deaths and injuries are unacceptable and preventable, and Miami-Dade County is committed to stopping further loss of life.

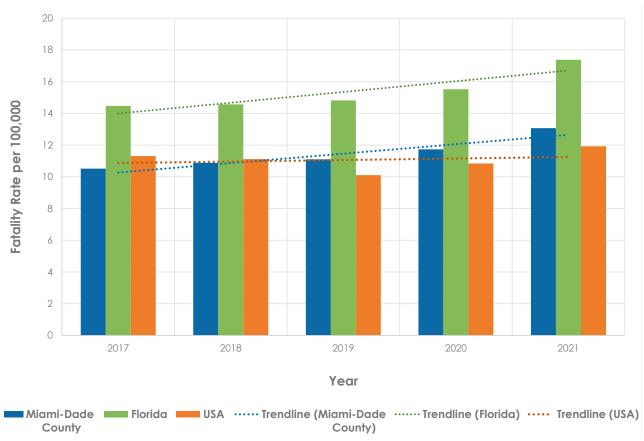


Figure 6: Fatality Rate per 100,000 Population by Year Comparison

Source: USA data from NHTSA, Florida and Miami-Dade County data from Signal 4 Analytics.





Purpose of this Action Plan

The Vision Zero Action Plan is a proactive multimodal transportation safety initiative with a focus on equity and community data. It builds on principles and action strategies established in the 2021 Framework Plan and establishes Miami-Dade County's HIN and KPIs.

This Action Plan examines 5-year crash data (2018 to 2022) to determine the HIN corridors and outlines goals and strategies to enhance traffic safety in partnership with municipalities and community stakeholders. By promoting a culture of traffic safety at both the neighborhood and regional levels, the county can achieve its goal of eliminating fatal and severe injury crashes.

DTPW's Vision Zero Program

Based on Miami-Dade County's initiatives, the Vision Zero Program Team developed a mission statement and guiding principles to frame the development and implementation of the Vision Zero Action Plan. The goal and mission of DTPW's Vision Zero program are outlined in **Figure 7**.

MARIBEL LENA

Story shared by her colleagues and family



Maribel Lena was the Director of Public Information for FDOT in Miami, an agency and community she served for over 30 years. More importantly, Maribel was a mother, daughter, daughter-in-law, and friend. One day, she was on her way to a press conference focused yet on another safety initiative. She was never late and always answered her cell phone. We all knew something terrible had happened when she didn't show up. We could have never imagined that in a matter of seconds a reckless, speeding driver had taken her life instantly and that all we would see on the news would be images of a yellow tarp over her car. The images and sounds of tears and screams reverberated for days, months. Her only daughter lost her best friend and many of us lost our mentor. The world was robbed of an amazing mother, leader, wife, future grandmother, and constant contributor to our world.

Figure 7: DTPW's Vision Zero Program Mission Statement



To end traffic fatalities and serious injuries by 2040



To increase safe, reliable, sustainable, and equitable mobility for all.

Guiding Principles and Priorities

The Vision Zero Program is managed and executed in accordance with DTPW's principles and priorities, which are grounded in adopted plans, programs, and initiatives underway in Miami-Dade County, including those led by DTPW.



Complete Streets Design Guidelines for Safer Roads and Speeds (2016)

Developed prior to Miami-Dade County's adoption of Vision Zero, the <u>Complete Streets Design Guidelines</u> includes relevant safety-related metrics with the potential to provide influential improvements to the status quo of roadway design. The guidelines establish a framework of typologies to guide context-sensitive street design, with overlays appropriate to specialized street types and land use designations to reflect a range of uses from urban centers to agriculture and natural settings. The guidelines also establish design principles for sidewalks based on street type, including determining the appropriate street trees, greenscaping, and amenities (including transit amenities). The guidelines include details to optimize the use of street space, considering safety and speed. Furthermore, they speak to intersection design principles and geometry, including crosswalks, signals and multimodal intersection treatments (Miami-Dade Local Action Team (LAT) for Safer People, Safer Streets, 2016).



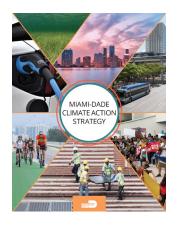
Transportation Planning Organization (TPO) Vision Zero Plan for Safer Roads and Speeds (2018)

The Miami-Dade County TPO's <u>2018 Plan</u> first outlined the county's strategies to eliminate transportation-related fatalities and incapacitating injuries. The 2018 Plan is divided into four tasks: 1) Vision Zero task team engagement, 2) data collection literature review, 3) data collection and analysis and 4) countermeasure selection. Individual high-crash intersections were identified, and these were incorporated into DTPW's safety project list (Miami-Dade Transportation Planning Organization 2018).



Vision Zero Framework Plan for Safer Road Users, Roads, and Speeds (2021)

The <u>2021 Framework Plan</u> reviewed the current state of road safety in Miami-Dade County, highlighted contributing factors and crash types by road users and high-risk road features, performed an equity assessment, and outlined initial strategies to reverse the safety issue in the county. The Framework Plan developed 180-Day, 18-Month and 36-Month action priorities established by both the Office of Mayor Daniella Levina Cava and DTPW's Director and CEO, Eulois Cleckley (Miami-Dade County DTPW, 2021).



Climate Action Strategy for Safer Road, Users, and Vehicles (2021)

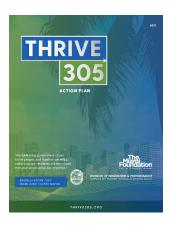
Seeking to mitigate – or lessen – the damage caused by greenhouse gas emissions, the <u>Miami-Dade Climate Action Strategy</u> focuses on enacting measures to reduce greenhouse gas emissions through working diligently to secure and accelerate ambitious public and private investments in Energy & Buildings, Land Use & Transportation, and Water & Waste.

Under Land Use & Transportation, the Strategy calls for the reduction of transportation-related fuel consumption by reducing single-occupant vehicle (SOV) trips by 10%, through ensuring walkability and safety are a community-wide priority (Miami-Dade County, 2021).



SHIFT305 for Safer Vehicles and Roads (2022)

SHIFT305 is an initiative to revitalize Miami-Dade's Transportation System by 2025. Under this actionable and innovative strategy, future projects will be accelerated to enhance the quality of life of Miami-Dade County residents, businesses, and visitors by delivering safe, clean, efficient, reliable, sustainable, and equitable public transportation infrastructure services. The Safety goal focuses on promoting a culture of safety and security by making Miami-Dade County streets, paths, and transportation services accessible to all, based on data-driven analyses to ensure the highest quality of service. The Vision Zero Program falls within this goal's strategic action steps, timelines, and key performance indicators to track progress and measure accountability (Miami-Dade County, 2022).



Thrive 305 for Safer Road Users and Speeds (2023)

Thrive 305 is Miami-Dade County's public engagement initiative. The initiative launched with a community-wide survey receiving 26,400 responses and culminated in an Action Plan focused on 12 key priorities. Priority 6 is most directly related to this effort: "transportation options that work for all." Thrive 305's overall premise that "engaged communities are stronger communities" aligns with this plan's focus on communicating and implementing transparent, data-driven, and context-sensitive safety solutions to benefit all Miami-Dade County residents (Miami-Dade County, 2023).

DTPW's Vision Zero Progress

In November 2021, Miami-Dade County introduced the <u>Vision Zero Framework Plan</u>, which aims to eliminate trafficrelated fatalities and severe injuries in the county. The plan outlined a set of 35 recommended actions to be implemented within specific time frames: the first, 180-days, second, 18-months, and the third, 36-months. DTPW is responsible for overseeing the implementation of the 2021 Framework Plan. Tracking the program's progress is crucial for evaluating the effectiveness of the plan's action strategies, identifying areas of success, and noting those which require additional attention or modification.

Actions established in the 2021 Framework Plan that have been successfully achieved thus far are highlighted below



Established and funded a Vision Zero Program.

Identified funding for the Transportation Planning Division to lead multimodal planning within the High-Injury Network.

Following Mayor Levine Cava's Vision Zero announcement in May 2021, DTPW successfully established the Vision Zero Program within the newly formed Transportation Planning and Policy division. Vision Zero staff worked diligently to develop the 2021 Framework Plan, which served as a road map for the program's objectives, policy modifications and the identification of priority projects throughout the county.

The 2021 Framework Plan played a crucial role in guiding the program's efforts and provided a comprehensive strategy to achieve the goal of eliminating traffic-related fatalities and severe injuries. By outlining program goals, policy changes, and highlighting countywide priority projects, the plan ensured a focused and coordinated approach towards creating safer roadways and enhancing overall transportation safety in Miami-Dade County.

For the fiscal year 2022, the Vision Zero Program secured \$13.7 million in total funding. \$13.2 million of this funding was allocated from the People's Transportation Plan (PTP), with an additional \$500,000 from the General Government Improvement Fund (GGIF).

These financial resources are currently dedicated to two primary focus areas:

- 1. Design and construction of 24 specific safety projects outlined on pages 16-19. These projects aim to improve road safety and reduce the likelihood of crashes in targeted areas.
- 2. Planning and preliminary engineering design of the Top 100 projects discussed on **page 14**. These locations have been identified as high-priority based on data from the 2021 Framework Plan.

Furthermore, the Vision Zero Program is actively pursuing additional funding from federal and state sources to further advance the county's Vision Zero goal. In July 2023, DTPW submitted a \$20,260,500 grant application to USDOT's SS4A program. This application seeks funding to design, consider right-of-way implications, and ultimately construct 24 projects in the Top 100 Safety Priority locations. Additionally, grant funding was requested for a number of Supplemental Planning and Demonstration projects which would directly inform future updates to the Vision Zero Action Plan, including: conducting five Road Safety Audits (RSAs) in identified high-crash corridors within the HIN, conducting a research study

of trauma and Emergency Medical Services (EMS) data to investigate the prevalence and severity of unreported crashes countywide, launching a pilot project to test cutting-edge technology to perform intersection video safety analysis using machine vision at five high-injury intersections, installing bicycle protection devices at three buffered bicycle facilities and conducting a countywide "Safest Driver" contest.

The Vision Zero Program has also completed comprehensive safety analyses for eight of the Top 100 Safety Priority Locations and submitted four to FDOT for funding consideration from the Highway Safety Improvement Program (HSIP). HSIP is a core Federal-aid highway program that is administered by each state and can be used on non-State-owned roads. To obtain these funds, the projects must first be approved by FDOT District Six and are then sent to FDOT Central Office and FHVVA for further approval. By pursuing these federal grants, the Vision Zero Program aims to leverage external resources to implement vital safety measures and make substantial progress towards eliminating traffic-related incidents in Miami-Dade County.

Another milestone for the Vision Zero Program was the award of \$150,000 from the National Safety Council for the Road to Zero project named, "Inspiring a Safer Miami through Inclusive Outreach and Education." The Vision Zero team will work with community advocates to educate the community on safety measures and will also develop a Vision Zero dashboard to facilitate data collaboration with municipal partners and the public.

Vision Zero staff have also submitted a \$3 million Fiscal Year 2024 Community Project funding request to construct roadway safety improvements on E 4th Ave. between E 43rd St. and E 28th St. This Vision Zero Top 100 project was included in the draft bill marked up by the Transportation, Housing, Urban Development, and Related Agencies Appropriations Committee. Ultimately, funding approval is dependent on the bill passing Congress and being signed into law by the President.



Briefed elected officials & cultivated internal leadership to create momentum.

Over the course of the year, the leadership of DTPW conducted briefings for the Mayor's Office, County Commissioners, FDOT, Miami-Dade TPO, and the leadership of external government agencies, informing them about Miami-Dade County's Vision Zero goal, objectives and ongoing initiatives. Each

of the 13 Miami-Dade County Commissioners were provided comprehensive briefings to ensure consistent education about Vision Zero, the County's goals, and the safety projects planned, designed, and under construction in their respective districts. As new officials take office, they and their staff are promptly briefed on Vision Zero.



Conducted a series of workshops to share the developed Vision Zero approach with municipalities and other local entities.

In August 2022, Vision Zero staff organized the inaugural Vision Zero Municipal Workshop which brought together the 34 municipalities of Miami-Dade. During the workshop, staff discussed the Vision

Zero goal, objectives and strategies for the county, as well as their approach to the Fiscal Year 2022 SS4A grant proposal to USDOT. A second municipal workshop was held in April 2023 to collaborate with the 34 municipalities on the Fiscal Year 2023 SS4A grant proposal and this Action Plan.

Furthermore, as part of the County Transportation Master Plan (CTMP) efforts led by DTPW, the Vision Zero team participated in additional municipal workshops targeting the four planning areas of the CTMP. This allowed staff to engage in one-on-one discussions with municipal transportation leaders to better understand their unique safety requirements and explore opportunities for enhanced collaboration.



Identified currently funded transportation projects along roadways in the HIN, prioritized incorporating Vision Zero strategies for safety improvements as part of the projects' implementation, and collaborated with FDOT and municipalities within Miami-Dade County.

Initiated planning and outreach to implement the top fifty countywide priority safety projects.

The initial identification process of the 2021 Framework Plan focused on the top 50 locations where high-injury crashes occurred, taking into account proximity to transit and equity factors. Given available resources, the scope was later expanded to the top 100 projects, encompassing high-crash locations across all districts within the county and involving multiple municipal jurisdictions. View a table of the Top 100 projects in **Appendix A** and see a map of the Top 100 projects in **Figure 8** or <u>visit the online map</u>.

2021 Vision Zero Framework Plan Top 100 Locations

A comprehensive assessment was carried out at all 100 locations. This assessment involved analyzing crash data and evaluating safety countermeasures. Among these locations, 45 are situated on state-maintained roads within the county. To facilitate further progress, a safety report was submitted to FDOT for their review in December 2022. The report presented recommendations for safety countermeasures for FDOT to consider and incorporate into upcoming projects.

For the remaining 55 locations, safety analyses were conducted, and appropriate countermeasures were identified. Currently, ongoing efforts involve additional data collection and validation of these countermeasures. Subsequently, the 30% design phase for implementing these safety countermeasures is currently in progress (view an example of a midblock crossing countermeasure for SW 104th St. in **Figure 9**). For a detailed overview of proposed countermeasures for the project locations, please refer to <u>Appendix A</u>, which includes a comprehensive list.

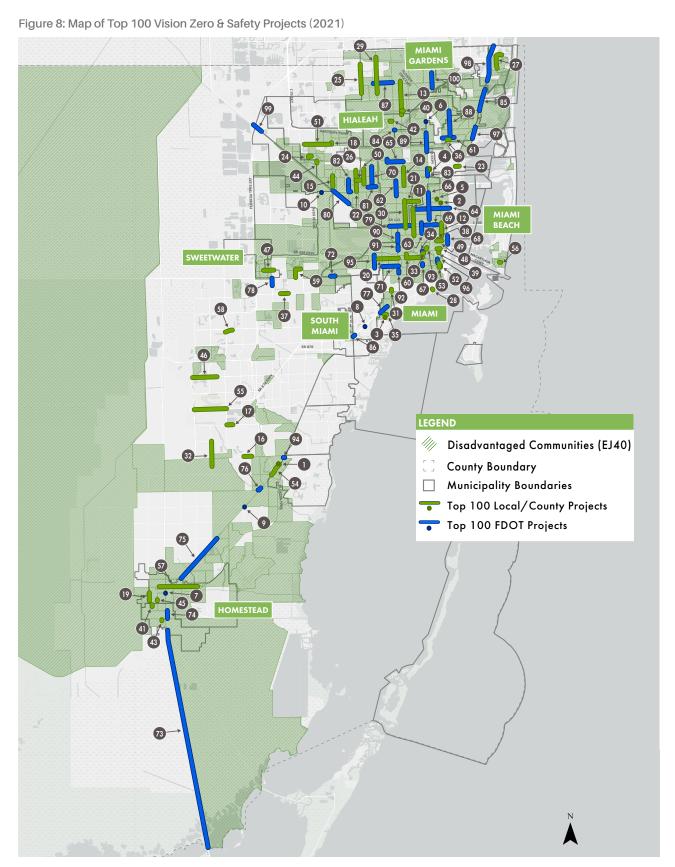


Figure 9: Mid-Block Crossing Proposed for SW 104th Street



2022 Safety Projects

The DTPW Project Delivery Team has completed the design and is constructing 24 safety projects throughout the county (see Table 1 and Figure 10 on page 20) with the objective of enhancing safety and convenience for all transportation modes. Half of these projects are located in disadvantaged communities. Projects encompass a wide range of improvements, such as adding signing and pavement markings, milling and resurfacing, installation of high-visibility crosswalks, buffered bicycle lanes, curb extensions, pedestrian-actuated crossing signals (also known as Rectangular Rapid Flashing Beacons or RRFBs), and Leading Pedestrian Intervals (LPIs). Funding for these projects has been secured until 2024.

Table 1: 2022 Safety Projects

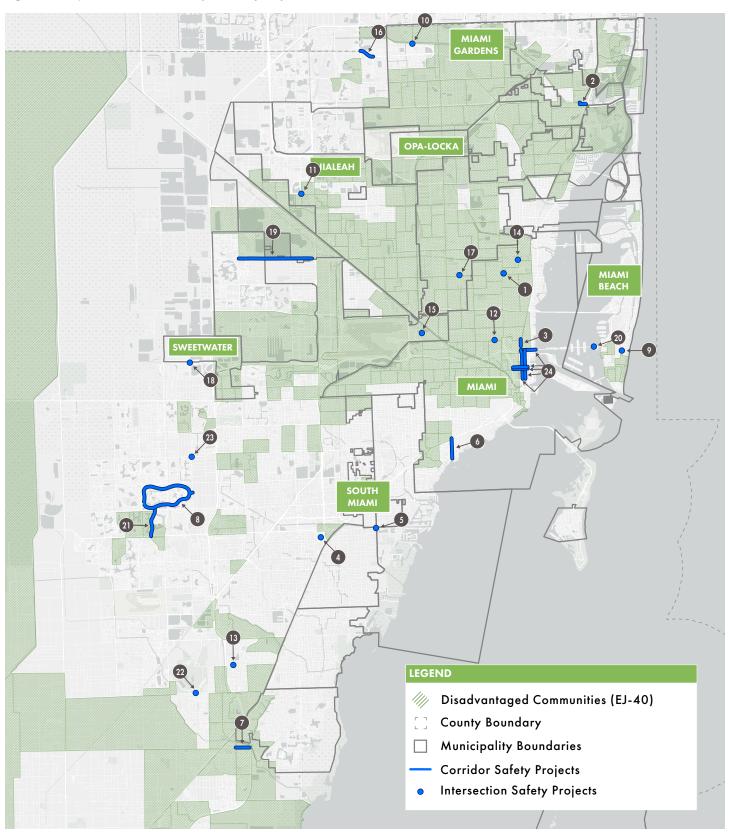
Proje	t Location	Limits From	Limits To	Work Description	Status
1	NW 62nd St.	and NW 6th Ave. and NW 5th Ct.		(curb ramps, sidewalks, and	Under Construction (as of November 2023).

Project	Location	Limits From	Limits To	Work Description	Status
2	Snake Creek Trail (Northeast	NW 164th St.	from NE 21st Ave. to NE 23rd Ave.	Concrete work, sharrow installation, high emphasis crosswalks.	Q2 2024 Construction Start Anticipated.
	Corridor)	NE 21st Ave.	from NE 164th St. to NE 165th		
3	N Miami Ave.	NW 17th St.	NW 20th St.	Addition of green bicycle conflict markings.	Construction Completed.
4	SW 77th Ave. & North of SW 95th St.			Installation of pedestrian crossing north of the Kingston Square entrance.	Construction Completed.
5	SW 57th Ave. & SW 88th St.			Intersection reconstruction.	Under Design.
6	SW 27th Ave.	S Bayshore Dr.	US-1	Addition of green bicycle conflict markings.	Construction Completed.
7	SW 216th St.	SW 112th Ave.	Florida's Turnpike Ramp	Addition of green bicycle conflict markings.	Construction Completed.
8	Kendall Lakes Dr.	SW 127th Ave.	SW 147th Ave.	Pavement repair and addition of green bicycle conflict markings.	Design Completed.
9	Washington Ave. & 16th St.			Intersection improvements including installation of curb bulbouts, pedestrians signals and push buttons.	Q4 2023 Construction Start Anticipated.
10	NW 37th Ave. & NW 207th Dr.			Install speed feedback signs.	Construction Completed.
11	W 24th Ave. & W 60th St.			Intersection improvements, including adding "No Right on Red" signs, LPIs, and upgrading curb ramps.	Under Construction (as of November 2023).
12	NW 20th St. & NW 10th Ave.			Intersection improvements, including adding LPIs.	Design Completed.
13	SW 112th Ave. & SW 168th St.			Intersection improvements, including adding pedestrian signals, push buttons, signalization updates.	Construction Completed.

Project #	Location	Limits From	Limits To	Work Description	Status
14	N Miami Ave. & NW 71st St.			Intersection improvements, including adding pedestrian signals and push buttons.	Under Construction (as of November 2023).
15	Miami River Trail Route B - NW 25th St.	NW 37th Ave.	S River Dr.	Sidewalk widening.	Q4 2023 Construction Start Anticipated.
16	Honey Hill Dr.	NW 57th Ave.	NW 52nd Ave.	Installation of an RRFB at NW 52nd Ave and Honey Hill Dr.	Q4 2023 Construction Start Anticipated.
17	NW 22nd Ave. & NW 62nd St.			Intersection improvements, including adding LPIs, pedestrian signals, push buttons, high emphasis crosswalks, and improving pedestrian ramps.	Under Construction (as of November 2023).
18	NW 127th Ave. & NW 12th St.			Intersection improvements.	Construction Completed.
19	NW 74th St.	NW 107th Ave.	NW 77nd Ct.	Addition of green bicycle conflict markings.	Under Construction (as of November 2023).
20	Venetian Way/ Island Ave. & Century Ln.			Intersection improvements, including adding "No Right on Red" signs, pedestrian signals, push buttons, and upgrading curb ramps.	Under Construction (as of November 2023).
21	SW 142nd Ave.	SW 88th St.	SW 68th St.	Addition of green bicycle conflict markings.	Construction Completed.
22	SW 127th Ave. & SW 184th St.			Intersection improvements, including curb ramps.	Construction Completed.
23	SW 127th Ave. & SW 42nd St			Intersection improvements, including curb ramps.	Q1 2024 Construction Start Anticipated.

Project #	Location	Limits From	Limits To	Work Description	Status
24	Downtown Micromobility Network Protection Elements (Bicycle Lane Protection)			Adding bicycle protection devices.	Under Design: N Miami Ave. from NE 11th St. to NW 15th St. NW/NE 1st Ave. from NE 11th St. to NW 15th St. NW/NE 15th St. from N Miami Ave. to Venetian Cswy. Construction Complete: N Miami Ave. from SE 1st St. to NE 11th St. NW/NE 1st Ave. from SE 1st St. to NE 11th St. NW/NE 1st Ave. from SE 1st St. to NE 11th St. NW/NE 5th St. from NW 3rd Ave. to NE 2nd Ave. To NE 2nd Ave. To NE 2nd Ave.

Figure 10: Map of Miami-Dade County 24 Safety Projects (2022)



Micromobility Projects

A Planning and Preliminary Conceptual Engineering (P&PCE) Study was done to assess a Complete Streets network on the corridors listed within the last row of **Table 1** on page 19. The intention of the project was to create a network of protected bicycle lanes in the most multimodal area of the county, and to progressively try out different separation treatments. This project utilized \$1.2 million in micromobility funding that the City of Miami District 2 collected from the micromobility companies that operated in that district for a few years. Installation of the micromobility network was completed in Summer 2022. Non-motorized traffic increased significantly after installing protected bicycle lanes. DTPW's design team is in the process of procuring planters to strengthen the separation along the network as phase II of the project.



Collaborated with other county departments to identify opportunities to implement quick-build safety solutions within the identified high-injury network.

After a tragic crash occurred between a sports-utility vehicle and two cyclists on the Rickenbacker Causeway in May 2022, Mayor Daniella Levine Cava directed the DTPW Director to evaluate and provide safety recommendations for conflict resolution.

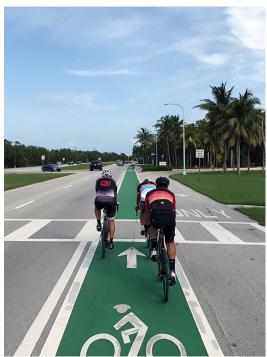
DTPW spearheaded meetings with the public, Miami-Dade County Police Department, DTPW Engineering Design and Delivery Team, Miami-Dade PROS, Village of Key Biscayne, and other key stakeholders.

Various safety recommendations were identified based on these meetings, including:

- Re-striping of the bicycle facilities and adding enhanced vertical protection.
- Closing the existing U-Turn at the William Powell Bridge through the main highway.
- Providing exclusive access to the U-Turn through Hobie Island Beach Park North Road.
- Adjusting posted speeds to 40 mph in the segment from the Toll Plaza to Calusa Circle, to test establishing a constant speed limit along the entirety of the Causeway.

The roadway re-striping and bikeway protected elements were developed from concept to execution in less than one week, while the speed management efforts were installed within six months. This project eliminated the most dangerous conflict points between bicyclists and vehicular traffic and demonstrated that safety projects can be installed efficiently when safety and collaboration is prioritized.

Figure 11: Rickenbacker Bike Lanes



Source: The Miami Bike Scene. (2019, February). Rickenbacker Causeway - William Powell Bridge Rehabilitation Project



Developed a program strategy to ensure Vision Zero goals are incorporated in every transportation project during planning, engineering, and maintenance. Collaborated with the Transit Planning, Land Use Planning, and Traffic Engineering divisions and the planned Transportation Planning Division.

Miami-Dade County is dedicated to creating a safe, convenient, and dependable transportation network that caters to individuals of all ages and abilities, regardless of their chosen mode of transportation. To prioritize these efforts, DTPW is actively developing a streamlined Project Development Process that aims to expedite the delivery of infrastructure projects to residents.

Vision Zero is integrated into the planning, engineering, and construction/implementation functions in the early stages through continuous coordination among staff members from the various divisions. This collaborative approach ensures that Vision Zero safety measures are considered during the planning, engineering, design, constructability, and environmental factors assessment, while also addressing all transportation and safety requirements.

Vision Zero staff has also been collaborating on land use development reviews by providing multimodal safety comments and cross-checking Vision Zero initiatives against proposals for new development submitted through the County's permitting system.



Initiated a Modal Priority Master Plan within Miami-Dade County.

DTPW is currently in the process of developing the Countywide Transportation Master Plan (CTMP), a significant undertaking for Miami-Dade County. The CTMP will serve as a comprehensive road map, outlining all transit and transportation projects planned for completion within the next 20 years.

Its primary objective is to establish a clear vision and prioritization of projects across all modes of transportation and networks throughout the county.

What sets this plan apart is its holistic approach, transcending both modal and jurisdictional boundaries to create a cohesive and interconnected multimodal transportation network. The CTMP will act as an implementation plan, driving the development and improvement of transportation infrastructure over the next two decades. To prioritize projects, a set of criteria rooted in the SHIFT305 initiative, focusing on cleanliness, safety, connectivity, and efficiency, will be employed annually. Ultimately, these prioritized projects will be integrated into other planning documents, such as the Miami-Dade

Figure 12: Downtown Micromobility Safety Project



Figure 13: Safety Project on SW 142nd Ave. in Kendale Lakes



County TPO's Long Range Transportation Plan (LRTP).

The development of the CTMP is currently underway, with an expected adoption scheduled for Spring 2024. This forward-thinking plan will provide a comprehensive and strategic approach to transportation development in Miami-Dade County, ensuring a well-connected and efficient transportation network that meets the needs of its residents and visitors for years to come. Vision Zero is set as a top criteria for prioritizing transportation projects in the County.

Figure 14: CTMP Logo





Initiated planning and outreach to implement the top countywide priority safety projects.

Launched a Vision Zero web page on the county's website.

Countywide Outreach

Between August 2022 and November 2023, the public engagement team of DTPW's Vision Zero Program took proactive measures by organizing a total of 55 outreach events throughout the county (see **Figure 16**). The primary objective of these events was to introduce the Vision Zero Program and its initiatives to the community. Notably, nearly three-quarters of these events were strategically held in equity districts (as identified via the EJ-40 disadvantaged communities equity layer), prioritizing areas that deserve focused attention.

The outreach activities encompassed a wide range of initiatives aimed at engaging and involving the community. These included setting up booths and conducting interactive sessions at transit stations, participating in community events that emphasized health and promoted active transportation modes, organizing events in schools, and more. The team distributed Vision Zero branded swag such as bike lights, mini flashlights, recyclable bags, and flashing bracelets.

To ensure that all residents could actively participate and have their voices heard, the team made language inclusivity a top priority. Attendees were given the opportunity to express their opinions and share their feedback in English, Spanish, and Creole. Additionally, all materials associated with the events were translated into multiple languages, ensuring effective communication and accessibility for the diverse communities in Miami-Dade County.

Figure 15: Vision Zero Outreach



HIALEAH 24 LEGEND Disadvantaged Communities (EJ-40) **County Boundary Municipality Boundaries Community Outreach Events**

Figure 16: Map of 2022-2023 Vision Zero Community Outreach Events



Online Vision Zero Information & Outreach

Since the initiation of the Vision Zero Program in 2021, DTPW has been actively maintaining and updating various platforms to ensure the provision of current information and the solicitation of targeted feedback from residents. This includes regular updates to the Vision Zero web page, frequent social media posts on a monthly or sometimes weekly basis (see examples in **Figure 20**), and engagement through the Social Pinpoint platform.

The <u>Miami-Dade County Vision Zero</u> web page serves as a comprehensive resource, showcasing the County's dedication to achieving Vision Zero. It highlights important programmatic aspects such as securing funding, ongoing public engagement efforts, and the progress of safety project designs throughout the county. The web page also offers convenient access to relevant Vision Zero reports, web maps displaying prioritized projects, and informative presentations/educational materials. To cater to a diverse audience, project fact sheets are available in English, Spanish, and Creole languages.

DTPW's <u>Social Pinpoint</u> engagement page serves as a central hub for community engagement within the Vision Zero Program. Currently, it offers two distinct outreach opportunities for community members. Launched in July 2022, the website has witnessed a total of 5,663 visits and 1,129 unique users as of November 2023. The word cloud in **Figure 17** showcases the most frequently submitted comment response themes.

Figure 17: Word Cloud of Social Pinpoint Comment Response Themes



Figure 18: Social Pinpoint Comments Summary

394 5,663 map pins site visits

202 survey respondents

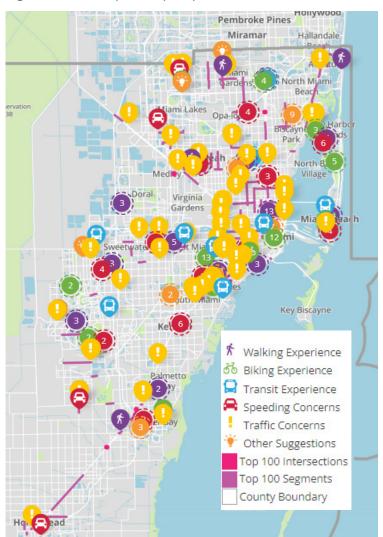
The first engagement opportunity available on the platform is a <u>neighborhood survey</u>, designed to gather insights from residents. It addresses various aspects of safety, including the resident perceptions of factors contributing to traffic crashes in their areas, and their sense of safety while walking, biking, using mobility devices, taking the bus, and driving. Additionally, residents are encouraged to share their preferences regarding safety tools and traffic calming solutions they would like to see implemented in their neighborhoods. This valuable feedback enables DTPW to better understand the most desired traffic calming measures. The survey was made available in July 2022, and during the period between then and November 2023, a total of 202 surveys were submitted by community members.

The second engagement feature on the Social Pinpoint platform involves an <u>online map</u> that encourages respondents to pinpoint any issues they are facing. These issues can range from challenges related to walking, biking, transit, speed, and traffic, and respondents also can provide additional suggestions. As of November 2023, a total of 389 pins have been added to the map (see **Figure 19**).

Analysis of the pins reveals that the most frequently mentioned issue, accounting for approximately 30% of comments, relates to the walking experience. Following closely, traffic concerns were the next most common issue cited, comprising about 22% of comments. The Social Pinpoint page will continue to function as a platform for gathering input not only on proposed projects and programmatic improvements, but also for gathering feedback after project implementations have taken place.

A detailed Vision Zero Outreach Summary can be found in Appendix B.

Figure 19: Social Pinpoint Map Responses



Social Pinpoint Neighborhood Survey Comment

Location: NW 32nd Ave., south of NW 77th St., Miami



Source: Google Maps (2023).

Spanish Comment

"El cruce en el semáforo para acceder a Walmart es sumamente peligroso y apenas los autos permiten que los traenseuntes crucen con tranquilidad. Está zona esta mucho más poblada con la ejecucion de proyectos nuevos de vivienda, mayormente personas de la tercera edad."

English Translation

"Crossing at the traffic light to access Walmart is extremely dangerous and hardly any cars allow pedestrians to cross with ease. This area is much more populated with the construction of new housing projects, mostly for elderly people."



Figure 20: Vision Zero Social Media Outreach Summary

















MIAMI-DADE VISION ZERO



TRANSPORTATION PARTNER INITIATIVES

Vision Zero Plans from Miami-Dade Municipalities

Miami-Dade County is comprised of 34 municipalities and 37 unincorporated communities. Implementing Vision Zero and the Safe System Approach can prove challenging for smaller communities with limited resources. As Vision Zero efforts begin to take hold across our South Florida incorporated and unincorporated communities, nine municipalities have taken the lead in addressing fatal and serious-injuries crashes on their local roadways.

The City of Aventura (2023), City of Homestead (2023), City of North Miami Beach (2022), City of South Miami (2023), Miami Beach (2022), Opa-Locka (2022), Palmetto Bay (2022), Town of Miami Lakes (2023), and Village of Biscayne Park (2023) were awarded USDOT's Safe Streets and Roads for All (SS4A) planning grants (the year each municipality received their grant is listed in parentheses). This funding will help these communities develop holistic, well-defined strategies to prevent roadway fatalities and serious injuries within their jurisdictions and memorialize these commitments in a Vision Zero action plan. Coordination with USDOT is already underway for the award recipients shown in Figure 21.

Figure 21: Miami-Dade County 2022 & 2023 USDOT Safe Streets and Roads for All Planning Grant Recipients



















DTPW is committed to supporting all Miami-Dade jurisdictions in reducing the number of deaths and serious injuries occurring on the roadway system. As part of this commitment, DTPW spearheaded the data analysis utilized in this report, which will enable each municipality to determine their specific safety focuses. The <u>Municipal Safety Priorities</u> section of this plan provides further details on additional safety improvements lead by some municipalities and shared with DTPW.

TRANSPORTATION PARTNER INITIATIVES

Florida Department of Transportation (FDOT) Initiatives

FDOT Target Zero Outreach Campaign

No matter one's journey or travel route, providing a safe and efficient transportation network is at the forefront of all transportation agency's priorities. FDOT's Target Zero is an initiative to reduce the number of transportation-related serious injuries and fatalities across Florida to zero. It builds upon the Vision Zero belief that everyone has the right to move safely in their communities, however this statewide initiative focuses on influencing dangerous driver behaviors before serious and fatal crashes occur. It's a data-driven, multi-faceted behavior change initiative that helps implement educational campaigns for emphasis areas within the Florida Strategic Highway Safety Plan (SHSP). FDOT highlights the driver groups and driving behaviors that present the greatest safety needs. In South Florida, the initial top driver behavior of concern was speeding and the top driver group of concern was young males.

FDOT Bicycle and Pedestrian Safety Analysis

FDOT conducted a statewide root-cause analysis of pedestrian and bicycle crashes between 2016 and 2020. The data revealed that pedestrian and bicyclist KSI crashes represent 4% of all crashes, but 28% of all fatalities and 15% of all serious injuries, suggesting an over representation of safety impact on these modes. **Figure 23** (on the next page) illustrates further details on the over representation of statewide pedestrian and bicyclist crashes on the urban roadway network both along the State Highway System and on local roadways.

FDOT SAFE STRIDES 2 Zero Analysis

Every year, the FDOT Traffic Engineering and Operations Office in Tallahassee conducts SAFE STRIDES 2 Zero safety studies to determine candidate roadway segments and intersections for safety improvements. This analysis ranks candidate road segments and intersections based on the number of fatal and serious injury crashes including observed, predicted, and expected crashes. The analysis also incorporates <u>FDOT's Context Classification System</u>, and further details on the segment and intersection types. Each candidate intersection is also assigned five sister intersections, which may be located anywhere in Florida. Sister intersections are those with similar traffic conditions to the candidate intersections, but which show better safety performance measures, for comparison.

Figure 22: FDOT Target Zero Statewide Initiative Advertisement



TRANSPORTATION PARTNER INITIATIVES

GABRIELLA GONZALES

Story shared by her stepsister



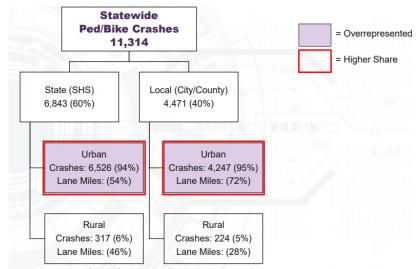
In the summer of 2016, I lost my stepsister, Gabriella Gonzalez in a fatal traffic accident in Miami-Dade County. She was a passenger on a motorcycle that was stopped at a red light when a drunk driver slammed into them from behind. She was only 18 years old and had a whole life ahead of her that was cut way too short. This was an extremely devastating loss for

me, her family, her friends, and especially for her mother. Gaby was the sweetest girl who lit up every room she walked into. She was loved by so many, so much so that her memorial services were over capacity.

Betore her passing, Gaby had just tinished high school and was excited for her life as an adult. One of her new responsibilities was to take our little brother to school and pick him up every day, but her accident happened just two weeks before his first day of kindergarten. This was a simple task that every family with grade-school children deals with, but for us it just made her loss even more painful and palpable. My little brother, who was once excited for his sister to be his driver for school, now had to be placed in morning school care and after-school care. At such a young age, he had to deal with the daily reminder that his sister was no longer there for him

Six years later and we still miss Gaby every day. It is horrible to think that a preventable traffic accident ripped her out of our lives forever. She missed out on going to college, getting married, having children, and many more moments in life that she deserved to experience.

Figure 23: FDOT Bicycle and Pedestrian Safety Analysis Roadway Type



Source: FDOT. (2023). Root Cause Analysis Pedestrian & Bicycle.

FDOT District Six comprises the counties of Miami-Dade and Monroe. In the 2023 SAFE STRIDES 2 Zero analysis, 14 candidate intersections were identified in District Six. All but two of the 14 candidate intersections are located in Miami-Dade County. Pedestrian and bicyclist crash types were identified as overrepresented for five intersections of the 12 candidate intersections in Miami-Dade County. The <u>full Technical Report</u> is available online. For more information regarding FDOT's network and segment screening methodologies please reach out to <u>FDOT Traffic Engineering and Operations</u>.



DTPW's Vision Zero Program recognizes that each year hundreds of community members' lives are forever altered due to roadway crashes. Even one death on our transportation system is unacceptable. Achieving "Zero" will require a consistent and collective commitment on an individual, municipal, and countywide level. Operating under the tenants of the Safe System Approach represents a significant shift from conventional safety methods and focuses on designing an infrastructure system that protects everyone. This Vision Zero Action Plan solidifies Miami-Dade County's commitments and positions to appropriately prioritize and fund safety improvements through developing an HIN, and noting actionable strategies (KPIs and KACs) to ensure the agencies involved in the design of safety enhancements, community outreach, messaging and other related efforts are aware of their vital role in achieving Vision Zero.

High-Injury Network (HIN)

HIN development evolved from two prior phases of project prioritization mapping efforts. The first phase was the identification and design of the 2022 Safety Projects, intended to enhance safety and convenience for all transportation modes (see further details starting on page 16). The second phase was the Framework Plan's identification of over 2,000 locations with a high incidence of crashes, further refined to the Top 100 projects (see details starting on page 17).

The development of an HIN is a fundamental component of any data-driven Vision Zero effort. Mapping the locations and analyzing the frequency of reportable KSI crashes across the county allows for identifying the riskiest corridors from a traffic safety perspective. Further analyzing involved parties allows for identifying patterns and trends, particularly in reference to the most vulnerable road users (pedestrians, bicyclists, transit users, etc.). The HIN provides a prioritized road map for tackling improvements and significantly reducing the incidence of KSI crashes. See Miami-Dade County's HIN map with the EJ4O equity layer showing displayed in Figure 32 (page 40).

Analysis Approach

The HIN was developed as part of this Action Plan with the goal of highlighting corridors with a disproportionately high rate of severe injury and fatal crashes. The process of defining the HIN was informed by peer review of plans from comparable cities and counties, namely:

- 2017 Los Angeles Vision Zero Action Plan
- 2017 Denver City and County Vision Zero Action Plan
- 2020 Philadelphia Vision Zero Action Plan 2025
- 2021 San Francisco Vision Zero SF Action Strategy

Review of these plans provided a general framework for HIN analysis. This framework was then tweaked as necessary by the project team. A brief summary of this analysis process is provided below, with further details included in this plan's HIN Technical Supplement (Appendix C).

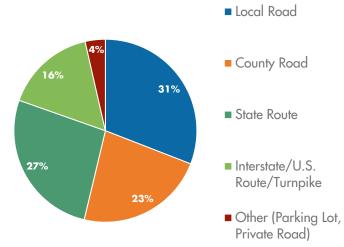
Crash Data Processing

Crash data for 2018 through 2022 (7,314 crashes) was downloaded from Signal Analytics, a statewide web-based geospatial crash analytical tool, developed and hosted at the University of Florida Geoplan Center. The overall

breakdown of KSI crashes across the Miami-Dade County roadway system (for all user types) is shown in **Figure 24**.

This analysis focused on crashes occurring in Miami-Dade County, which were listed with a severity of Incapacitating Injury or Fatality (KSIs), which occurred between the dates of January 1, 2018, and December 31, 2022, and which occurred on county, local municipal, or "other" roadways (not considering crashes on FDOT roadways). Further GIS analysis to narrow down known data point locations brought the final total of crashes analyzed in this five-year study period to 2,505.

Figure 24: Miami-Dade County KSI Crashes by Roadway Type



Note: Total does not add to 100% due to rounding.

The crash analysis focused on vulnerable users (bicyclists and pedestrians). Key takeaways include:

- There were 607 KSI crashes involving these users on local/county roads (24% of all crashes).
 - Of these, 148 crashes (6%) involved bicyclists and 459 crashes (18%) involved pedestrians.
 - A breakdown of KSI crashes by roadway users is shown in Figure 25.
- The most common time(s) of day during which vulnerable user KSIs occurred (more than 30 in a single hour) were between 6:00 7:00 AM and between 4:00 10:00 PM. The highest number of crashes per hour occurred at 7 PM. See Figure 26 for countywide statistics and Appendix D for a breakdown by municipality/planning zone.



Figure 25: Individual Roadway User KSI Crashes (2018-2022 Data)

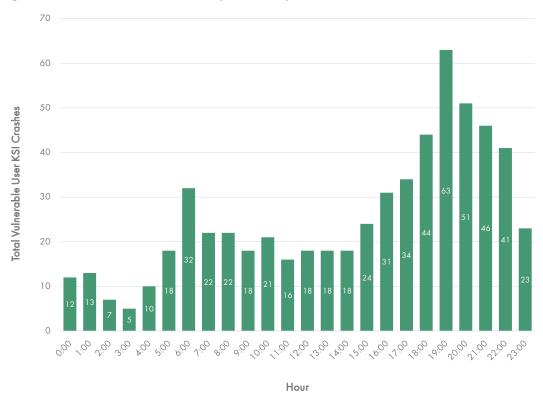


Figure 26: Vulnerable User KSI Crashes by Time of Day (2018-2022 Data)

Weighted Crash Events

The project team, along with the Action Plan's Technical Committee, agreed at an April 2023 meeting that certain crash factors should be weighted to prioritize their inclusion on the HIN. These weighting factors include Vulnerable User (Bicycle and Pedestrian) crashes weighed as 1.25 crashes and Fatal cashes weighed as 2.0 crashes. The combination of the two weighting parameters left four possibilities for crash event total weight. The term "Effective Crashes" is used within this document to reflect the total weights placed on a crash event. See details outlined in **Table 2**.

Given the above factors, the 2,505 total crash events in Miami-Dade County yielded a weighted total of 3,194 Effective Crashes. This number was referenced in the mapping analysis to develop an HIN. Figure 29 (page 37) displays a density heat map of Effective KSI crashes, Figure 30 (page 38) displays a density heat map of pedestrian KSI crashes and Figure 31 (page 39) displays a density heat map of bicyclist KSI crashes.

Table 2: HIN Crash Type Scaling Factors

Crash Type	Number of Crashes	Crash Scaling Factor	Number of Effective Crashes
Serious Injury Auto Crash	1,557	1.00	1,557
Serious Injury Bicycle/Pedestrian Crash	450	1.25	562.5
Fatal Auto Crash	341	2.00	682
Fatal Bicycle/Pedestrian Crash	157	2.5	392.5
TOTALS	2,505		3,194



HIN Development

The HIN encompasses those segments with the highest rate of Effective Crashes per mile in Miami-Dade County, excluding roadways under the jurisdiction of FDOT. Streets that shared a name and municipality were stitched together to make continuous segments, with segments less than one mile long eliminated from consideration. Crashes

at intersections were counted twice, as separate segments overlap at those locations.

An Equity Layer from September 2023 is also included on the HIN Map. This layer is sourced from the USDOT's Justice 40 Initiative. The Justice 40 Initiative was created by the Biden-Harris Administration to "confront and address decades of underinvestment in disadvantaged communities" (U.S. Department of Transportation, n.d.). This USDOT layer uses 2020 Census tracts and data to compare how different communities experience transportation disadvantage, based on forty indicators divided into five overarching disadvantage components: Transportation Insecurity, Climate and Disaster Risk Burden, Environmental Burden, Health Vulnerability, and Social Vulnerability. A total of 1,554 KSI crashes (62% of all KSI crashes) are located within these equity areas, of which 410 (16% of all KSI crashes) involved vulnerable road users. View USDOT's Equitable Transportation Community (ETC) Explorer.

After the project team completed quantitative analysis to develop the HIN, with changes approved by the Technical Committee, engineering judgment was used to trim and add to the HIN as needed to deliver a complete, continuous network.

The HIN captures 31.2% of countywide Effective Crashes in 40 roadway segments that comprise 1.5% of all county and local road centerline miles. A striking 92.5% of HIN segments are at least partially within an equity area and 62% of overall HIN mileage is within an equity area.

Figure 27: HIN Segment Roadway Types

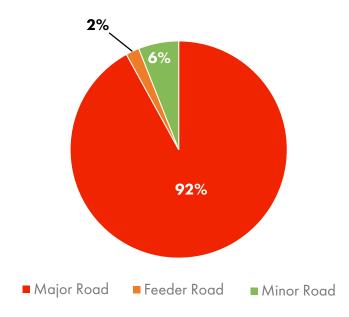
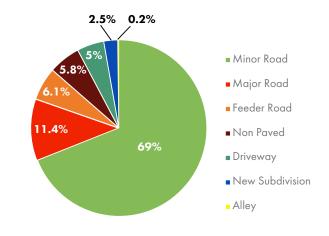


Figure 28: Miami-Dade County Roadway Types



Shown in Figure 27, 92% of the HIN segments are along major roads. In comparison, just six percent of the HIN segments are along minor roads and only two percent are along feeder roads. This finding is notable when considering that minor roads account for 69% of the Miami-Dade County network (excluding FDOT roadways) while major roads represent just 11% of the network (see Figure 28). Major roadways are commonly designed to accommodate higher speeds and traffic volumes, necessitating the installation of safety measures to minimize the associated safety risks.



OPA-LOCKA //// Disadvantaged Communities (EJ-40) [] County Boundary Density of Effective KSI Crashes Low Crash Density High Crash Density HOMESTEAD

Figure 29: Heat Map Showing Density of Effective KSI Crashes



OPA-LOCKA //// Disadvantaged Communities (EJ-40) [] County Boundary ■ Municipality Boundaries Density of Pedestrian KSI Crashes Low Crash Density High Crash Density

Figure 30: Heat Map Showing Density of Pedestrian KSI Crashes



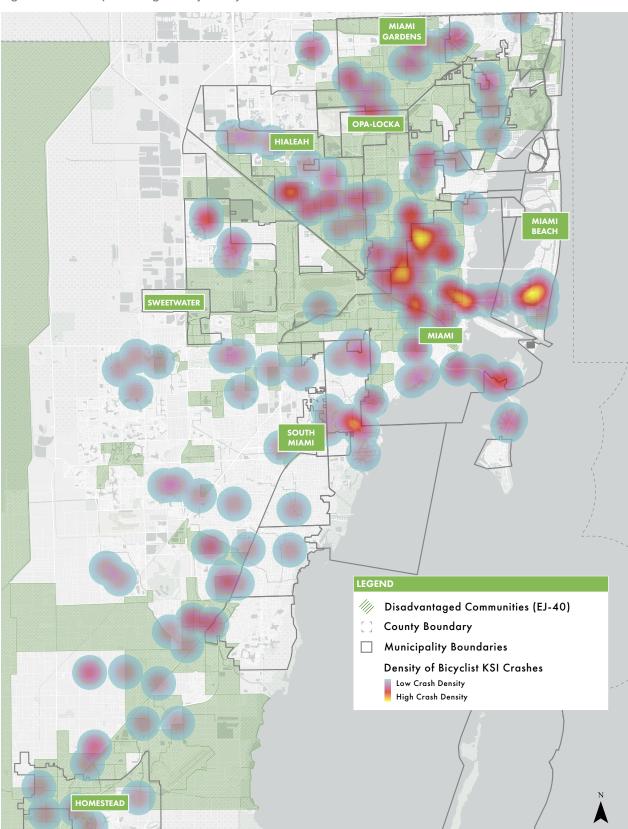


Figure 31: Heat Map Showing Density of Bicyclist KSI Crashes



SWEETWATER Ri a LEGEND Disadvantaged Communities (EJ-40) [] County Boundary ■ Municipality Boundaries Top 40 HIN Segments

Figure 32: Miami-Dade County High-Injury Network Map

Table 3: Miami-Dade County High-Injury Network Corridors

KSI Effective Crashes ¹ per Mile Ranking	Length (Miles)	KSI Crashes	Fatal Crashes	Serious Injury Crashes	KSI Effective Crashes Per Mile	Corridor Name	Corridor Roadway Extents	Road Jurisdiction	Road Classification	Municipality Included
1	2.50	26	6	20	13.09	W 16th Ave.	Okeechobee Rd. / W 68th St.	County Maintained within City	Collector Road	Hialeah
2	2.80	27	5	22	12.66	NW 20th St.	NW 27th Ave. / N Miami Ave.	County Maintained within City	Major Road	Miami
3	2.00	16	5	11	12.03	W 29th St.	W Okeechobee Rd. / Palm Ave.	City	Collector Road	Hialeah
4	8.10	70	17	53	11.76	NW 17th Ave.	SW 8th Street / NW 119th St.	County Maintained within City/County	Major Road	Miami
5	5.16	43	12	31	11.39	NW 62nd St.	W Okeechobee Rd. / NW 6th Ave.	County Maintained within City/County	Collector Road	Miami / Hialeah / Unincorporated Miami-Dade County
6	1.33	10	3	7	11.24	NW 12th Ave.	NW 40th St. / NW 62nd St.	County Maintained within City	Major Road	Miami
7	2.49	16	6	10	10.13	W 12th Ave.	W 29th St. / W 68th St.	County	Major Road	Hialeah
8	1.44	12	2	10	9.92	Hialeah Gardens Blvd.	W Okeechobee Rd. / W 84th St.	County	Major Road	Hialeah / Hialeah Gardens

¹ Effective Crashes: The total weights placed on a crash event. These weighting factors include Vulnerable User (Bicycle and Pedestrian) crashes weighed as 1.25 crashes and Fatal cashes weighed as 2.0 crashes. See **Table 2** on page 35 for further details.



KSI Effective Crashes ¹ per Mile Ranking	Length (Miles)	KSI Crashes	Fatal Crashes	Serious Injury Crashes	KSI Effective Crashes Per Mile	Corridor Name	Corridor Roadway Extents	Road Jurisdiction	Road Classification	Municipality Included
9	4.08	30	8	22	9.63	SW 104th St.	SW 1 <i>57</i> th Ave. / SW 11 <i>7</i> th Ave.	County	Major Road	Unincorporated Miami-Dade County
10	2.55	17	5	12	9.52	NW 7th Street	NW 37th Ave. / NW 12th Ave.	County Maintained within City	Major Road	Miami
11	1.00	9	0	9	9.21	W 76th Street	NW 97th Ave. / NW 87th Ave.	City	Minor Road	Hialeah
12	4.04	28	5	23	8.90	E 4th Ave.	E 65th St. / Hialeah Dr.	City	Major Road	Hialeah
13	1.08	7	1	6	8.81	Dade Blvd.	Venetian Way / 23rd St.	County	Non-Limited Access Highway	Miami Beach
14	11.13	69	22	47	8.62	NW 22nd Ave.	NW 7th St. / NW 183rd St.	County Maintained within City/ County	Major Road	Miami Gardens / Opa-Locka / Miami / Unincorporated Miami-Dade County
15	1.21	10	0	10	8.26	West Ave.	17th St. / 5th St.	City	Minor Road	Miami Beach
16	3.57	22	4	18	8.18	NW 2nd Ave.	NW 20th St. / NW 79th St.	County	Collector Road	Miami

¹ Effective Crashes: The total weights placed on a crash event. These weighting factors include Vulnerable User (Bicycle and Pedestrian) crashes weighed as 1.25 crashes and Fatal cashes weighed as 2.0 crashes. See **Table 2** on page 35 for further details.



KSI Effective Crashes ¹ per Mile Ranking	Length (Miles)	KSI Crashes	Fatal Crashes	Serious Injury Crashes	KSI Effective Crashes Per Mile	Corridor Name	Corridor Roadway Extents	Road Jurisdiction	Road Classification	Municipality Included
17	1.41	5	4	1	7.99	NW 30th St.	NW 12th Ave. / NW 27th Ave.	City	Minor Road	Miami
18	1.02	6	1	5	7.86	SW 312th St.	SW 187th Ave. / N Krome Ave.	County Maintained within City	Major Road	Homestead
19	3.78	27	1	26	7.67	NW 122nd St.	NW 92nd Ave. / W 4th Ave.	City	Major Road	Hialeah / Hialeah Gardens
20	3.48	21	4	17	7.62	W 60th St.	W 28th Ave. / Palm Ave.	City	Collector Road	Hialeah / Unincorporated Miami-Dade County
21	2.56	14	3	11	7.53	N Miami Ave.	NE 20th St. / NE 62nd St.	County	Major Road	Miami
22	2.30	16	0	16	<i>7</i> .18	Ponce De Leon Blvd.	SW 57th Ave. / Greco Ave.	City	Major Road	Coral Gables
23	2.28	15	0	15	7.02	Palm Ave.	W 65th St. / W 29th St.	City	Major Road	Hialeah
24	3.50	16	6	10	6.93	SW 268th St.	US-1 / SW 112th Ave.	County	Major Road	Unincorporated Miami-Dade County

¹ Effective Crashes: The total weights placed on a crash event. These weighting factors include Vulnerable User (Bicycle and Pedestrian) crashes weighed as 1.25 crashes and Fatal cashes weighed as 2.0 crashes. See Table 2 on page 35 for further details.



KSI Effective Crashes¹ per Mile Ranking	Length (Miles)	KSI Crashes	Fatal Crashes	Serious Injury Crashes	KSI Effective Crashes Per Mile	Corridor Name	Corridor Roadway Extents	Road Jurisdiction	Road Classification	Municipality Included
25	2.03	9	4	5	6.90	W Flagler St.	NW 107th Ave./ NW 87th Ave.	County Maintained within City / County	Major Road	Sweetwater / Unincorporated Miami-Dade County
26	1.43	7	2	5	6.80	NE 2nd Ave.	NE 62nd St. / NE 85th St.	County	Major Road	Miami
27	1.08	7	0	7	6.72	NW 3rd Ave.	NW 6th St. / NW 20th St.	City	Minor Road	Miami
28	1.27	8	0	8	6.67	NW 14th St.	NW 12th Ave. / N Miami Ave.	City	Collector Road	Miami
29	2.65	13	4	9	6.60	SW 147th Ave.	SW 60th St. / SW 18th St.	County	Major Road	Unincorporated Miami-Dade County
30	1.94	11	0	11	6.56	W 24th Ave.	NW 103rd St. / W 84th St.	City	Minor Road	Hialeah
31	2.79	12	5	7	6.37	NW 32nd Ave.	NW 62nd St. / NW 107th St.	County	Major Road	Unincorporated Miami-Dade County
32	1.27	7	1	6	6.32	NW 29th St.	NW 12th Ave. / N Miami Ave.	City	Major Road	Miami
33	5.05	26	4	22	6.13	NW 37th Ave.	Ali Baba Ave. / Broward County Line	County Maintained within City	Major Road	Opa-Locka / Miami Gardens

¹ Effective Crashes: The total weights placed on a crash event. These weighting factors include Vulnerable User (Bicycle and Pedestrian) crashes weighed as 1.25 crashes and Fatal cashes weighed as 2.0 crashes. See Table 2 on page 35 for further details.



KSI Effective Crashes¹ per Mile Ranking	Length (Miles)	KSI Crashes	Fatal Crashes	Serious Injury Crashes	KSI Effective Crashes Per Mile	Corridor Name	Corridor Roadway Extents	Road Jurisdiction	Road Classification	Municipality Included
34	3.17	16	3	13	6.08	Pine Tree Dr.	W 63rd St. / 23rd St.	County	Major Road	Miami Beach
35	2.05	9	2	7	5.37	SW 137th Ave.	SW 184th St. / SW 152nd St.	County	Major Road	Unincorporated Miami-Dade County
36	3.69	14	3	11	4.94	SW 184th St.	SW 137th Ave. / US-1	County	Major Road	Unincorporated Miami-Dade County
37	4.88	19	3	16	4.82	NW 37th Ave.	SW 25th Ter. / NW 20th St.	County Maintained within City	Major Road	Miami / Coral Gables
38	7.21	27	5	22	4.65	Ives Dairy Rd.	NW 37th Ave. / NE 26th Ave.	County Maintained within City/ County	Major Road	Miami Gardens / Unincorporated Miami-Dade County
39	4.07	16	2	14	4.61	SW 117th Ave.	SW 88th St. / SW 152nd St.	County	Major Road	Unincorporated Miami-Dade County
40	10.07	32	10	22	4.20	SW 56th St.	SW 157th Ave. / SW 57th Ave.	County	Major Road	Unincorporated Miami-Dade County / South Miami

¹ Effective Crashes: The total weights placed on a crash event. These weighting factors include Vulnerable User (Bicycle and Pedestrian) crashes weighed as 1.25 crashes and Fatal cashes weighed as 2.0 crashes. See Table 2 on page 35 for further details.



Project Prioritization

Miami-Dade County has developed a number of implementation factors to determine weighting priority for potential Vision Zero projects once at the countermeasure development/funding phase. These factors are selected carefully as to not duplicate already incorporated crash scaling factors that influenced the initial development of the HIN map (detailed above).

Potential implementation factors are listed below (and shown in Figure 33):

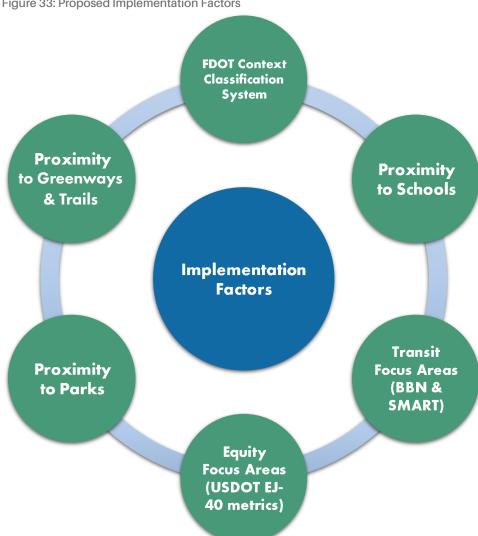


Figure 33: Proposed Implementation Factors

FDOT's Context Classification System - FDOT's system outlines the variety of built environment types existing within Florida, noting differences in land use, development, and road connectivity (FDOT, 2020). This classification system applies to all roadways within Miami-Dade County's transportation system (see Figure 34).

Figure 34: FDOT's Context Classification System



Natural	Rural	Rural Town	Suburban Residential	Suburban Commercial	Urban General	Urban Center	Urban Core
LANDSCAPE CONTEXT	RURAL	CONTEXT	SUBURBAN CONTEXT			URBAN CONT	EXT

Source: FDOT. (2020, July). FDOT Context Classification Guide.

- Proximity to Schools (within ½ mile) Given that providing safe roadway conditions and adequate facilities to encourage multimodal travel to and from schools supports both the State of Florida and Miami-Dade Transportation Planning Organization Safe Routes to School (SRTS) Programs, this is an important consideration factor. Furthermore, coordinating Vision Zero enhancements in close proximity to schools with the TPO's SRTS Infrastructure Plans Program will maximize funding potential (Kittelson & Associates, 2022).
- Proximity to Parks (within ½ mile) Given the importance the county places on access to green spaces and opportunities for recreation, ensuring safe access to parks is of high priority.
- Location within Equity Focus Areas (as established by USDOT's Justice 40 Initiative metrics) Equity focus areas were an important mapping component of the 2021 Framework Plan and the significant overlap with these areas and the newly developed HIN further grounds the need for prioritized improvements here.
- Location within a Transit Focus Area (either on the Better Bus Network (BBN) or Strategic Miami Area Rapid
 Transit (SMART) Program corridors) Given the County's focus on expanding and improving transit services
 throughout the county, considering the overlap between the HIN and existing and planned transit focus areas will
 be crucial to ensuring those accessing transit are able to do so safely.

The 2021 Framework Plan developed an initial Projects Prioritization scoring matrix with scoring weights based on four categories: Crash Score, Equity Score, Current Transit Access Score and Future Transit Access Score (see Figure 35). The Action Plan's refined the 2021 Framework Plan approach to effectively capture the Crash Score within the HIN Effective Crashes scoring, the Equity Score within the implementation factor "Location within Equity Focus Areas," and Future Transit Score within the "Location within a Transit Focus Area" implementation factor. Given that there are more than 3,000 bus stops throughout the county, the Transit Score was modified to exclude the Bus Stop Vicinity component so that the prioritization factor better highlights high priority segments of the HIN.

Figure 35: Vision Zero 2021 Framework Plan Projects Prioritization

	PROJECTS PRIORITIZATION										
Bicycle Crashes	Pedestrian Crashes	Vehicle Crashes	Minority Population Density	Low Income Households Density	Zero-Vehicle Households Density	Rail Station Vicinity	Bus stop Vicinity	Metromover Vicinity	SMART Corridor Vicinity	Better Bus Project Vicinity	2045 LRTP Projects Vicinity
0-2 points	0-3 points	1-6 points	0-5 points	0-5 points	0-5 points	0 or 2 points	0-2 points	0-2 points	0 or 2 points	0-2 points	0-2 points
					TOTAL SCORE						
	CRASH SCORE-11 POI	NTS	EQU	JITY SCORE - 15 POIN	TS	TRANS	SIT SCORE - 6	POINTS	FUTURE	TRANSIT SCORE - 6 F	POINTS
	WEIGHTING										
	CRASH - 55%			EQUITY - 25%		CURRENT	TRANSIT AC	CESS - 15%	FUTUF	RE TRANSIT ACCESS -	15%

Source: Miami-Dade County DTPW. (rep.). Miami-Dade County Vision Zero 2021 Framework Plan.

Upcoming Efforts

Miami-Dade's Vision Zero Program is entering its second year with an array of projects and initiatives aimed at enhancing safety and improving mobility on local and county roadways. The program is charging ahead at full speed, determined to achieve its goals. An overview of notable efforts is outlined below.

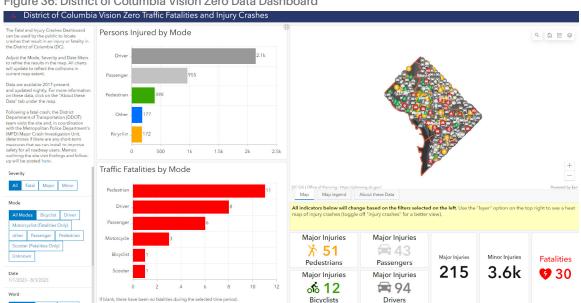
Vision Zero Dashboard

Using a data-driven approach, the Vision Zero Program aims to enhance road safety. In early 2023, DTPW received a grant from National Safety Council's (NSC) Road to Zero program to develop an online, publicly accessible Vision Zero Data Dashboard based on Geographic Information Systems (GIS) technology (an example from Washington DC is shown in **Figure 36**).

This innovative dashboard will offer numerous advantages to both internal stakeholders such as regional and municipal agencies, as well as external entities including residents, visitors, and advocacy agencies. By visualizing various trends and intersections in crash data, it will facilitate improved transparency within the community. The primary goal is to aggregate information on fatal and severe injury crashes, with a particular focus on HIN areas. This comprehensive baseline will enable effective messaging and progress monitoring towards DTPW's Vision Zero objectives.

The envisioned "open style data portal" will go beyond just presenting raw data. It will incorporate advanced data visualization features, ensuring transparency and accountability across all Miami-Dade communities. Through this initiative, DTPW aims to foster a safer and more informed environment for everyone traveling on the County's roads.

The dashboard will provide a countywide map of planned and completed safety projects in each municipality, links to multi-lingual educational materials and, a map of upcoming outreach and educational events (such as workshops and safety demonstrations) planned in neighborhoods across the county.



Source: ArcGIS. (2023). District of Columbia Vision Zero Traffic Fatalities and Injury Crashes.



Ensure Effective Community Engagement, Particularly in Underserved Communities

As part of the National Safety Council (NSC) Road to Zero grant, DTPW was awarded funds to initiate a Vision Zero Local Community Partners Liaison Pilot Program. This program leverages existing relationships between community action partner groups and vulnerable communities in Miami-Dade County. The sustained connections are facilitated through the County's Community Advisory Committees, which actively foster civic engagement in 16 targeted areas across the county.

By working alongside partners who already have established community ties, the education process is streamlined, requiring minimal initial relationship building. This approach enables the program to cultivate a positive safety culture that specifically focuses on Miami-Dade County's most vulnerable communities. The Local Community Partners Liaison model is built upon a framework that enhances awareness and advocacy for critical safety issues that impact residents' daily lives. This model aims to inspire long-term champions for healthy communities.

With the support of the grant funding, DTPW will collaborate with trusted partners and neighborhood representatives to deliver neighborhood-level education in equity priority areas where Vision Zero projects are planned or already implemented. Equally important, this collaboration allows for a better understanding of the residents' needs and concerns. Residents will have the opportunity to learn about Vision Zero, the County's Vision Zero goals, and the infrastructure safety improvements implemented by DTPW in their own neighborhoods. This information will be delivered by individuals whom they trust within their community, ensuring effective communication and engagement.

Develop Vision Zero Program Key Performance Indicators (KPIs)

Through this Vision Zero Action Plan, the Vision Zero program is formally establishing KPls. KPls provide a measurable framework to assess the progress and effectiveness of Vision Zero initiatives in reducing traffic-related fatalities and severe injuries. By setting specific indicators and targets, stakeholders can track and evaluate the impact of interventions, policies, and infrastructure changes on road safety. This allows for evidence-based decision-making and enables adjustments to strategies if necessary.

Furthermore, KPIs help to prioritize actions and allocate resources effectively. By identifying and tracking key metrics such as the number of traffic fatalities, serious injuries, or safety infrastructure improvements, organizations can focus efforts on areas that require urgent attention. KPIs provide a road map for setting strategic goals and guide the allocation of resources towards the most critical aspects of the Vision Zero agenda. Moreover, establishing KPIs enhances accountability and transparency. By publicly defining and regularly reporting on these metrics, it creates transparency and fosters trust among stakeholders, including community members, government agencies, and advocacy groups. KPIs will hold DTPW responsible for its commitment towards the goal of eliminating traffic-related fatalities and severe injuries.

Pages 53-61 provide a comprehensive overview of Vision Zero KPls by focus area. By referring to these pages, stakeholders can gain valuable insights into the specific indicators used to measure the effectiveness and success of various interventions and strategies. These KPls play a crucial role in guiding decision-making, allocating resources, and fostering a culture of continuous improvement within the Vision Zero framework.

Prioritize RSAs Along the High-Injury Networks

As part of the 2023 cycle of USDOT's SS4A program, DTPW pursued funding for conducting Road Safety Audits (RSAs) on five high-crash corridors within the High-Injury Network (HIN).

RSAs are formal evaluations of the safety performance of existing roads or intersections. These audits are conducted by independent multidisciplinary teams and go beyond examining the safety of motorized road users. RSAs take into account all road users and consider human factors that may contribute to unsafe road conditions. The purpose of an RSA is to both quantitatively and qualitatively estimate and report potential road safety issues while identifying opportunities for improvements that enhance the safety of all road users.

The identified corridors for the RSAs are as follows:

- 1. W 16th Ave. from Okeechobee Rd. to W 68th St.
- 2. NW 20th St. from NW 27th Ave. to N Miami Ave.
- 3. NW 17th Ave. from SW 8th St. to NW 119th St.
- 4. NW 62nd St. from Okeechobee Rd. to NW 6th Ave.
- 5. W 12th Ave. from W 29th St. to W 68th St.

By conducting RSAs in these corridors, DTPW aims to identify potential safety issues and propose improvements that enhance the overall safety for all road users. Additionally, securing funding for the engineering design and construction of the identified projects will contribute to making these corridors safer and reducing the incidence of high-injury crashes.

Social Pinpoint Neighborhood Survey Comment

Location: N Miami Ave. and N 25 St., Miami



Source: Google Maps (2023).

"A crosswalk and appropriate signage to protect pedestrians and slow drivers is badly needed where NE 25 St. intersects with N Miami Ave. I should not have to walk a block and a half (or more) either north or south to access a crosswalk. Scampering across N Miami Ave. at that spot is scary."

Update the County's Engineering Design Criteria and Standards

In recent years, there has been a significant transformation in roadway design manuals and guidelines, driven by the emergence of concepts such as Complete Streets, Vision Zero, protected bike lanes, and Accessible Streets. Recognizing the importance of incorporating these principles into transportation infrastructure, the Transportation Planning and Design teams at DTPW have embarked on a comprehensive update of particular sections of the County's Engineering Details.

This update aims to align the County's Engineering Design Manual with the latest safety best practices. Several new sections will be added to address key aspects, including:

- Countermeasure selection tool: This tool will serve as a guide for implementing Vision Zero engineering projects.
 It will assist in selecting appropriate measures and interventions to enhance safety and reduce traffic-related incidents.
- **Guidelines for selecting bicycle facilities:** Recognizing the significance of bicycle infrastructure, the updated engineering details will provide guidelines for choosing suitable bicycle facilities based on factors such as vehicle speeds and volumes. This will ensure the development of bicycle-friendly roadways that promote safe cycling.
- **Updated engineering details for pedestrians and accessibility:** The new sections will include updated standard engineering details that prioritize pedestrian safety and accessibility. These revisions will reflect the latest standards and practices, ensuring that transportation infrastructure caters to the needs of pedestrians and individuals with disabilities.

In line with these updates, the primary focus remains on ensuring the safety, health, and welfare of the public. Engineering design should prioritize the creation of transportation systems that are safe for all road users, regardless of their chosen mode of transportation. These systems should be accessible to people of all ages, incomes, and abilities. By incorporating these principles into the County's Engineering Design Manual, DTPW aims to foster safer and more inclusive communities through transportation infrastructure.



Figure 37: Youth Crossing at a Marked Crosswalk

Let's Take Action

The core principle of Vision Zero is the recognition that traffic fatalities and severe injuries are not inevitable but rather preventable. KACs and KPIs are critical to tracking the progress and effectiveness of DTPW's Vision Zero initiatives, most importantly, eliminating all traffic fatalities.

DTPW's Vision Zero KACs and KPls were organized into themes (focus areas) to help prioritize related efforts. These are identified as a result of a comprehensive analysis of Miami-Dade's crash data, as well as valuable input from key stakeholders. While aligned with global and national Vision Zero strategies, these themes (listed below) reflect the specific priorities of Miami-Dade County.

Key Action Commitments (KACs): Policy and program driven strategic commitments to advance Vision Zero. Key Performance Indicators (KPIs): Trackable indicators for measuring progress towards Vision Zero goals.

- 1. **Enhance City Processes and Collaboration**: Focus on improving internal procedures and fostering effective collaboration among County departments and agencies to ensure streamlined and coordinated efforts towards Vision Zero goals.
- 2. **Build Safe Streets for Everyone:** Prioritize the creation of safe and accessible streets and infrastructure for all road users, regardless of their age, ability, or mode of travel, including but not limited to, pedestrians, micromobility, personal conveyance devices, or motor vehicles, by implementing Complete Streets design principles, national best practices, and testing innovative design solutions.
- 3. **Create Safe Speeds:** Emphasize the importance of managing and reducing vehicle speeds to ensure safer road conditions that minimize the severity of crashes. This involves implementing measures such as traffic calming, speed limit adjustments, and enforcement strategies.
- 4. **Promote a Culture of Safety:** Cultivate a community-wide commitment to safe behaviors on the road through education, outreach, and awareness campaigns. This theme aims to foster a culture where safety is valued and prioritized by all road users, stakeholders, designers, and decision makers.
- 5. **Improve Data and Be Transparent:** Enhance data collection and analyses to gain a better understanding of road safety issues, evaluate the effectiveness of interventions, and make informed decisions. Additionally, promote transparency by sharing relevant data and progress updates with the public to ensure accountability and maintain trust.

By addressing these key themes, Miami-Dade County can effectively advance its Vision Zero agenda and work towards the ultimate goal of eliminating traffic-related fatalities and severe injuries.

1. Enhance Processes and Collaboration

Vision Zero impacts the management of Miami-Dade County's transportation system and therefore foundational changes are needed to institutionalize this approach. The County regularly coordinates transportation projects and safety initiatives internally and externally. Existing processes, programs, and laws need to be revamped to explicitly address the commitment to eliminating the loss of life on Miami-Dade County roadways in a proactive, data-driven manner.

Table 4: Enhance Processes and Collaboration Key Action Commitments (KACs)

Strategy	Lead Agency	Implementation Strategy	Commitments
Institutionalize the Vision Zero Program within the County	DTPVV	Cultivate internal and external leadership and dedicated funding to create momentum towards achieving program goals.	 Establish a permanent, dedicated funding source for Vision Zero implementation and coordination. Continue to create a Vision Zero Program with dedicated staff. Establish Vision Zero Internal Task Force with representatives from Miami-Dade County departments to advance the County's priorities, policies and processes. Integrate Vision Zero into the County's Project Development Process and Master Plan to ensure Vision Zero efforts are incorporated in every transportation project during planning, engineering, and
Coordinate with Key Partners (All 34 Municipalities, Miami-Dade TPO, FDOT, Police, Fire Rescue, Emergency Medical Services, Researches, & Community-based Organizations)	DTPVV	Knowing achieving Vision Zero requires regional collaboration, continue to advance safety priorities with key partners.	 Ensure Vision Zero staff are represented at key regional meetings with intergovernmental partners. Develop a Vision Zero Coalition that meets twice a year and holds quarterly subgroup meetings in accordance with the objectives of the Safe System Approach and similar to FDOT's Pedestrian and Bicycle Safety Coalition.

Table 4 (continued): Enhance Processes and Collaboration Key Action Commitments (KACs)

Strategy	Lead Agency	Implementation Strategy	Commitments
Ensure Policies and Programs Support Vision Zero	DTPVV	Enact policy, legislative, and programmatic changes to improve traffic safety.	 Develop a Vision Zero policy. Modify County engineering standards to add Complete Streets standards and traffic calming measures. Integrate "safety moments" into public presentations.
Emphasize Vulnerable Users	DTPVV	Knowing that pedestrians, bicyclists, and transit riders are particularly vulnerable to traffic violence, focus policies, programs, and projects on protecting these users.	Adopt a County resolution prioritizing the most vulnerable users in the following order: people walking/accessing transit, people biking and using micro-mobility modes, transit vehicles, and freight and personal vehicles.

Table 5: Enhance Processes and Collaboration Key Performance Indicators (KPIs)

Strategy	Lead Agency	Implementation Strategy	Data Points & Targets
Institutionalize the Vision Zero Program within the County	DTPVV	Dedicate appropriate staffing and funding to support a robust Vision Zero Program.	 Dedicate \$3 Million per year to the Vision Zero Program, increasing to \$3.5 Million after 2 years, for the next 5 years. 1.5 additional Full-Time Employee (FTE) per year, increasing to 3 FTEs per year after 2 years.
Coordinate with Key Partners (Municipalities, Miami-Dade TPO, FDOT, Police, Fire Rescue, Emergency Medical Services, Researches, & Community-based Organizations	DTPVV	Support key partnerships to advance opportunities to coordinate on advancing Vision Zero priorities and addressing safety concerns.	Record and track outcome and priorities from ongoing coordination meetings.
Ensure Policies and Programs Support Vision Zero	DTPVV	Regularly examine policy and programmatic opportunities to address existing barriers and/or further advance transportation safety objectives.	Number of policy updates instituted annually that support Vision Zero.

Table 5: (continued) Enhance Processes and Collaboration Key Performance Indicators (KPIs)

Strategy	Lead Agency	Implementation Strategy	Data Points & Targets
Emphasize Vulnerable Users	DTPVV	Advance policies, programs and projects which emphasize improving safety outcomes for vulnerable roadway users.	 Number of programmed projects that improve safety, connectivity, and/or access to transit stops, stations, or hubs. Number of programmed projects that improve non-motorized safety to and from education facilities. Number of programmed projects that increase dedicated pathways for vulnerable road users or that harden/protect or separate pathways from faster speeds and heavier modes of transportation.

2. Build Safe Streets for Everyone

Acknowledging that pedestrians, bicyclists, and motorcyclists are often placed at the greatest risk when navigating the transportation system, streets and safety countermeasures should be designed with the needs of these vulnerable road users in mind.

Table 6: Build Safe Streets for Everyone Key Action Commitments (KACs)

Strategy	Lead Agency	Implementation Strategy	Commitments
	DTPVV	Transportation projects should include the Vision Zero framework from funding prioritization to the project delivery, operations, and maintenance phases.	 Implement signal and/or operational modifications that are proven to reduce serious crashes.
۷۱۰ ۵۱۰			 Incorporate the County's goal into every transportation project.
Achieve Safety Wins System-Wide			 Incorporate safety analysis when retrofitting or modifying existing transportation infrastructure.
			 Provide template to enhance the process for municipalities applying to install traffic calming treatments (inter-local agreements).
Target Improvements on the HIN	DTPW	Knowing that 25% of crashes occur on under one percent of Miami-Dade County's roadways, focus improvements on the HIN.	 Establish process to ensure that Vision Zero mitigations are evaluated and implemented where feasible on projects that fall along the HIN.
			 Ensure consistent before and after evaluations of safety improvements implemented along the HIN.

Table 6: (continued) Build Safe Streets for Everyone Key Action Commitments (KACs)

Strategy	Lead Agency	Implementation Strategy	Commitments
Focus on Vulnerable Users	DTPVV	Focus policies, programs and projects on creating safe, multimodal facilities for all – with added emphasis on vulnerable users.	 Develop multimodal safety countermeasures toolbox. Install/upgrade pedestrian crossing treatments and lighting, with special emphasis on mid-block crossings, consistent with DTPW standards.

Table 7: Build Safe Streets for Everyone Key Performance Indicators (KPIs)

Strategy	Lead Agency	Implementation Strategy	Data Points & Targets
Achieve Safety Wins System-Wide	DTPW	In addition to targeting improvements on the HIN, the county will advance system-wide changes in accordance with the Safe System Approach.	 Number of KSIs on Miami-Dade County roadway network. Number of safety projects completed. Number of grant applications submitted focused on funding Vision Zero or Complete Streets projects.
Target Safety Improvements on Local and Collector Roadways	DTPW	Install roadway safety improvements at Top 100 locations.	Implement safety geometric treatments at 10 intersections per year (Phase 1 baseline goal), and 20 intersections per year for Phase 2.
Target Improvements on the HIN	DTPVV	Reduce KSIs on these targeted corridors to achieve measurable progress towards Vision Zero.	 Number of projects on HINs. Decrease in KSIs in locations where geometric safety treatments have been installed.
Focus on Vulnerable Users	DTPVV	Achieve zero pedestrian and bicyclist fatalities.	 Number of bicyclist/pedestrian fatalities. Number of signals adjusted with Leading Pedestrian Interval (LPIs). Miles of context-sensitive bicycle facilities installed. Miles of missing sidewalk gaps built.

3. Create Safer Streets

Speed reduction is an essential Vision Zero strategy. Higher speeds not only increase the risk of a crash, but also increase the risk of serious injury or death, regardless of mode. The effects of speeding are most pronounced for pedestrians, whose risk of dying if struck by a vehicle increases substantially with vehicle speed.

Table 8: Create Safer Speeds Key Action Commitments (KACs)

Strategy	Lead Agency	Implementation Strategy	Commitments
Enforcement	Miami-Dade PD DTPVV	Focus enforcement on speeding and related violations on the HIN, in consultation with community members and agency partners.	 Establish policies and funding to support automated speed enforcement for traffic violations, such as running red lights or speeding, to reduce dangerous driving behaviors. Ensure visible enforcement and communicate this focus transparently to the community.
Targeted Speed Reduction Improvements	DTPVV	Prioritize speed reducing treatments in project development, particularly when on HIN segments.	 Conduct Road Safety Audits on HINs. Examine HIN to understand which corridors had the greatest speed-related crash events. Conduct speed reduction analysis on HINs.
Speed Limit Evaluation	DTPVV FDOT	Work with FDOT and the DTPW Traffic Operations Division (who currently approves speed limit reductions following studies and review processes) to clarify when assessment of posted speed limits is feasible in the context of Vision Zero goals and safety metrics, both on corridor projects and within individual municipalities.	 Perform countywide speed evaluation to explore needed reductions. Refine and share process with municipalities for reducing the default speed limit in residential neighborhoods from 30MPH to 20MPH consistent with the allowable limits in the Florida Statutes. Work towards setting a maximum speed limit of 35MPH, reduced from 45MPH, on all appropriate streets classified as arterials and collectors. Update county policy to utilize the USLIMITS2 software to set speed limits instead of using the 85th percentile speeds.

Table 9: Create Safer Speeds Key Performance Indicators (KPIs)

Strategy	Lead Agency	Implementation Strategy	Data Points & Targets
Enforcement	Miami-Dade PD DTPVV	Target speed limit enforcement on the HIN.	Number of speeding enforcement campaigns on the HIN.
Targeted Speed Reduction Improvements	DTPVV	Focus speeding-reduction related improvements on the HIN.	 Percentage decrease in vehicles traveling 5+ MPH over the post speed following installation of improvements. Installation of speed enforcement tools along HIN.
Speed Limit Evaluation	DTPVV	Posted speeds are context appropriate to area conditions.	 Conduct speed reduction analyses on 5 HINs per year (increasing to 7 HINs per year for Phase 2). Prioritize speed limit evaluations in Equity Priority Areas (20% of analyses).

4. Promote a Culture of Safety

Only through honoring our collective responsibility to make safe transportation decisions can we achieve our Vision Zero goals. Safe street design alone cannot prevent someone from driving under the influence or while distracted. A culture shift must take place to develop a collective understanding that our streets are places for people of all ages and abilities to travel, play, shop, build community, and live.

Table 10: Promote a Culture of Safety Key Action Commitments (KACs)

Strategy	Lead Agency	Implementation Strategy	Commitments
Ongoing Education	DTPVV	Conduct Vision Zero engagement throughout the project life cycle.	 Launch Local Community Partners Liaison outreach program with NSC grant funding. Develop a calendar of outreach events and social media posts that reflect outreach strategy for recurring events such as Back to School season, 100 deadliest days for teen drivers, holiday/major event precautions, Ride of Silence, Parks and Open Spaces events, etc.

Table 10 (continued): Promote a Culture of Safety Key Action Commitments (KACs)

Vision Zero Messaging	DTPVV	Refine package of Vision Zero message materials to ensure consistent adopting and messaging of the Safe System Approach across municipalities.	 Develop branded Vision Zero signage to be installed with Vision Zero infrastructure projects during construction. Develop standard language regarding Vision Zero and traffic safety for use by all municipalities when interacting with the media and with the public. Enact a strong public campaign to create a sense of urgency on achieving Vision Zero.
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Table 11: Promote a Culture of Safety Key Performance Indicators (KPIs)

Strategy	Lead Agency	Implementation Strategy	Data Points & Targets
	DTPW	Ensure multilingual Vision Zero outreach is prioritized, with a focus on equity priority areas.	 Number of established community events per year held to educate residents on Vision Zero.
			 50% percent or more of community events are held in equity priority communities.
Ongoing Education			 Number of partnerships with school and youth related programs, including the YMCA and Boys & Girls Clubs to provide youth-oriented Vision Zero outreach.
			 Number of events hosted/participated in through the Local Community Partners Liaison Program.
Vision Zero Messaging	DTPVV	Ensure Vision Zero messaging is integrated into safety focused events and outreach across the county (both in person and online).	 Number of impressions/likes/comments/shares on Miami-Dade County's Vision Zero content on social media.
			 Number of visits and surveys submitted on Miami-Dade County's Vision Zero Social Pinpoint website.
			 Number of printed and audio Vision Zero campaigns (radio ad, billboards, bus shelter benches, advertisements on transit, etc.).

5. Improve Data and Be Transparent

Building from the findings of the analysis conducted for the 2021 Framework Plan, DTPW must continue collecting and analyzing crash and speed data while evaluating future project safety impacts and creating a data-driven prioritization process focused on community needs and prioritization of the pedestrian realm, transit, and bicycle facilities. Program progress and information should be shared with the public and stakeholders to support and promote efficiency and effectiveness.

Table 12: Improve Data and Be Transparent Key Action Commitments (KACs)

Strategy	Lead Agency	Implementation Strategy	Commitments
Prioritize Collaboration	DTPVV	Broaden the scope of available data behind police incident records to include items such as health related data and transit safety records.	Establish partnerships to analyze transportation-related anonymized data from regional medical facilities to gather more comprehensive information on non KSI and near-misses in the region.
Demonstrate Wins & Areas of Improvement	DTPVV	Develop a public-facing annual report to document progress towards achieving program goals (highlighting area KSIs, projects in equity areas, reductions in speed and near-misses, and policy changes).	Distribute Annual Evaluation Report through County website and municipal/community partners.
Measure Progress	DTPVV	Conduct before and after evaluation studies to determine the success of installed Vision Zero safety projects.	 Distribute results to municipal partners to inform design of future projects. Post evaluation studies on website and pair with survey data from area community members in project locations.
Communicate Data Transparently	DTPVV	Develop and regularly update a public- facing data dashboard to communicate the HINs, Vision Zero events, track progress, etc.	 Use NSC awarded funding to build initial data dashboard. Share dashboard with internal and external agency partners for use in related planning efforts. Publish the data on Miami-Dade County's Open Data Hub or another publicly accessible municipal site.

Table 13: Improve Data and Be Transparent Key Performance Indicators (KPIs)

Strategy	Lead Agency	Implementation Strategy	Data Points & Targets
Demonstrate Wins & Areas of Improvement	DTPVV	The Miami-Dade community celebrates successful projects alongside staff and understands the urgency and partnership needed for continued success moving the needle towards zero traffic fatalities.	 Number of Vision Zero project implementation celebration events held. Number of media promotions of installed projects.
Measure Progress	DTPVV	The Miami-Dade County community understands the importance of Vision Zero and why zero traffic fatalities is the only acceptable number.	 Annual number of KSIs on Miami-Dade County roadway network. Total number of safety projects completed.
Communicate Data Transparently	DTPVV	The Miami-Dade community has access to the data they need to understand where safety challenges exist and what/when safety projects are coming to their neighborhood.	 Number of visits to the new data dashboard. Number of downloads of Vision Zero materials.
Prioritize Collaboration	DTPVV	Achieving Vision Zero is seen as an all-hands-on deck approach to meet collective safety goals.	Annual meetings with data partners.



MUNICIPAL SAFETY PRIORITIES

At a May 2023 countywide Vision Zero meeting, Miami-Dade County municipalities were asked to provide locations, safety needs, and proposed safety countermeasures for their municipalities' safety priorities.

City of Aventura

Department of Public Works & Transportation

Priority Project #1

Project Name: Proposed Stop Sign Improvements on Country Club Dr.

Location: Country Club Dr., Aventura, Florida

Description: Proposed improvements consist of replacing existing stop signs with flashing LED stop signs to

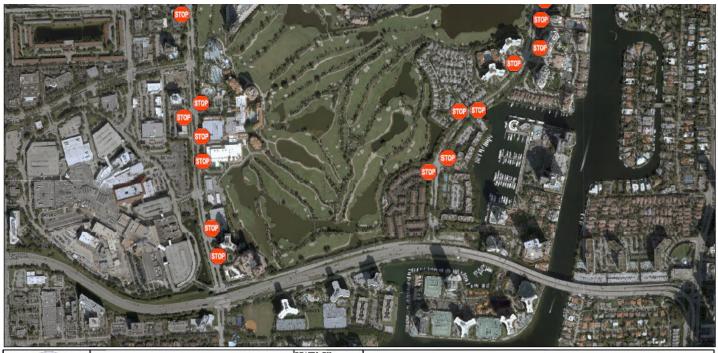
provide greater awareness to motorists at 27 high risk and high incident intersections where static signs prove ineffective. Proposed improvements will reduce blow-throughs up to 50%.

Miami-Dade County Given this project is within the Top 100 Vision Zero & Safety Projects, Miami-Dade County

has conducted an initial safety analysis and developed proposed countermeasures for the

project area. See the table in Appendix A for more details.

Figure 38: Proposed Stop Sign Improvements on Country Club Drive in City of Aventura





CITY OF AVENTURA
9200 W COUNTRY CLUB DR
1° = 200'
AVENTURA, FL 33180

DATE 5/31/23

SCALE

1" = 200'

PROJECT NO.
001

CAD FILE
C:\

Proposed Blinking STOP Sign Locations Country Club Drive

ехнівіт А

City of Aventura

Department of Public Works & Transportation

Priority Project #2

Project Name: Proposed Overhead Lighting Improvements on Enhanced Crosswalks

Location: Country Club Dr., Aventura, Florida

Description: Proposed improvements consist of installing overhead lights to provide enough concentrated,

quality light that a motorist can discern an incoming pedestrian at a sufficient distance for them

to safely and appropriately react.

Figure 39: Proposed Overhead Lighting Improvements at Crosswalks in City of Aventura





CITY OF AVENTURA
9200 W COUNTRY CLUB DR
1" = 200'
AVENTURA, FL 33180

DRAWN BY:

5/31/23

SCALE:
1" = 200'

PROJECT NO.
001

CAD FILE
C:\

Proposed Floodlight Locations Added To Crosswalks Country Club Drive

ехнівіт А

City of Aventura

Department of Public Works & Transportation

Priority Project #3

Project Name: Proposed Crosswalk Improvements at Don Soffer High School

Location: 3351 NE 213 St., Aventura, Florida

Description: Proposed improvements consist of installing high visibility crosswalks, improved lighting, and

enhanced signage and pavement markings to increase pedestrian safety.

Figure 40: Proposed Crosswalk Improvements at Don Soffer High School in City of Aventura





CITY OF AVENTURA 9200 W COUNTRY CLUB DR AVENTURA, FL 33180

DRAWN BY:
AM

DATE
5/31/23

SCALE
1" = 200'
PROJECT NO.
001

CAD FILE
C:\

Proposed Crosswalk Improvements Don Soffer High School 3351 NE 213 St

вхнівіт А

City of Hialeah

Streets Department

Safety Priority #1

Project Name: Milander Park Crossings

Location: Palm Ave. & 48th St. pedestrian crossing

Description: Proposed Pedestrian Hybrid Beacon (PHB) installation location. The serious bodily injury /

fatality count for this location is four.

Figure 41: Milander Park Crossings in City of Hialeah



City of Hialeah

Streets Department

Safety Priority #2

Project Name: Bucky Dent Park Crossings

Location: Mid-block crossing on W 60th St. between 22nd Ct. & 22nd Ln.

Description: Proposed PHB installation location. The serious bodily injury / fatality count for this location

is five.

Figure 42: Bucky Dent Park Crossings in City of Hialeah



City of Hialeah

Streets Department

Safety Priority #3

Project Name: Babcock Park Crossings

Location: New crossing across E 6th Ave. at E 5th St. intersection

Description: Proposed PHB installation location. The serious bodily injury / fatality count for this location

is one.

Figure 43: Babcock Park Crossings in City of Hialeah



City of Miami

Safety Priority #1

Project Name: Miami-Dade County High Injury Network Segment #17

Location: NW 30th St. from NW 12th Ave. to NW 27th Ave.

Safety Priority #2

Project Name: Miami-Dade County High Injury Network Segment #27

Location: NW 3rd Ave. from NW 6th St. to NW 20th St.

Safety Priority #3

Project Name: Miami-Dade County High Injury Network Segment #28

Location: NW 14th St. from NW 12th Ave. to N. Miami Ave.

City of North Miami

Public Works Department

Safety Priority #1

Project Name: SR 2021008565

Location: NE 9th Ave. between NE 125th St. and NE 131st St.

Description: North Miami staff conducted a traffic study, traffic counts were collected at different locations,

crash data was reviewed for the last three years, and a field inspection was performed. Speeding was found along the segment, meeting the criteria for the installation of traffic calming devices. Since the study road is a city-maintained street, North Miami provides operational approval for the city to proceed with the installation of traffic calming devices such as median treatments and traffic circles. The length of the segment between intersections does not meet the minimum criteria; therefore, speed humps are not recommended for the

study road.

Safety Priority #2

Project Name: SR 2022027506

Location: NW 118th Rd. and Sans Souci Blvd.

Description: Traffic counts were collected, crash data was reviewed for the last three years, and a field

inspection was performed. Traffic data revealed an average daily volume of 11,400 vehicles per day with an average 85th speed percentile of 36 mph. Crash data revealed that the most common crash type is angled crashes, with repeated patterns at this location. Field inspection verified that previous unwarranted school crossing signs had been removed and posted speed limit signs were properly placed. Based on North Miami staff's findings, traffic calming devices such as traffic circles are highly recommended at the intersection of Sans

Souci Blvd. and NE 118th Rd.

Safety Priority #3

Project Name: SR 2020026042

Location: NE 10 Ave. from NE 137 Ave. to NE 143 St.

Description: Based on a recent review of NE 139th St. between NE 9th Ave. and NE 11th Ave.,

DTPW would like to inform the City of North Miami that the County has no objections to the

installation of Traffic Calming Devices along NE 10th Ave.

Town of Cutler Bay

Department of Public Works

Top Three Safety Priorities

- Identifying safety problems
- Developing potential safety strategies
- Selecting and implementing strategies

Town of Miami Lakes

Safety Priority #1

Project Name: Intersection Safety Improvements

Location: NW 154th St. & Miami Lakeway North

Description: The intersection of NW 154th St. and Miami Lakeway North features a sharp curve and has

experienced several crashes both on the east and west bound lanes. A report written in 2021 referenced five accidents at this intersection. Since the report was written, an additional five accidents have occurred at this location. The Town proposes to improve this intersection by means of a traffic circle or a traffic half circle, as well as speed control mechanisms ahead

of the curve.

Figure 44: Intersection Safety Improvements in Town of Miami Lakes



Town of Miami Lakes

Safety Priority #2

Project Name: Protected Bike Lanes

Location: NW 87th Ave.

Description: NW 87th Ave. is a county road which currently has 4-foot bike lanes North of NW 154th

Street, extending into unincorporated areas to the North of the Town, all the way to NW 186 St. The Town proposes to extend the bike lanes South into the city of Hialeah, and enhance the bike lanes by adding protection, narrowing travel lanes, and reducing travel speed on 87th Ave. Under current conditions, potential users of the bike lanes continue to use the sidewalk, as there is a perception of lack of safety due to the speed of vehicles on the road and the narrowness of the bike lanes. These bike facilities connect facilities planned to serve Barbara Goleman High School, the westbound shared use bridge over I-75 to the City of Hialeah, Royal Oaks Park, and bike trail facilities on NW 170th St. Since NW 87th Ave. is a county road, these improvements would be carried out by the county.

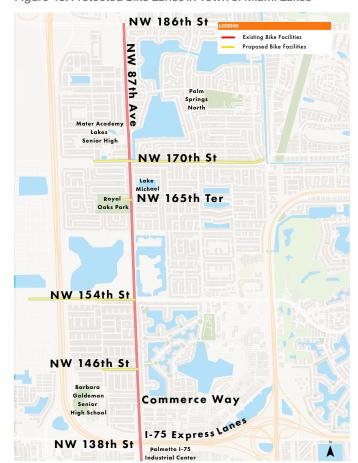


Figure 45: Protected Bike Lanes in Town of Miami Lakes

Town of Miami Lakes

Safety Priority #3

Project Name: Traffic circle, traffic stop, or signalization project

Location: NW 170th St. and NW 89 Ave. (after newly opened bridge)

Description: The NW 170 St. bridge over I-75 was opened August of 2022 connecting the City Hialeah,

the Town of Miami Lakes, and unincorporated areas North of the Town. Since the opening, five accidents have occurred at the intersection with 89th Ave. Since NW 170th St is a county road north of the centerline, these improvements would be carried out by the county.

Figure 46: Improvements near NW 170 St. Bridge in Town of Miami Lakes





CONCLUSION & RECOMMENDATIONS

Looking Ahead

Vision Zero recognizes that humans make mistakes, and therefore the transportation system should be designed to minimize the consequences of those errors. Miami-Dade County DTPW declared its unwavering commitment to Vision Zero in May 2021. However, progress towards achieving the Vision Zero Program's objectives is not moving at an urgent enough pace.

This 2024 Action Plan provides a five-year road map of next steps Miami-Dade County aims to take through the year 2028 to advance safety outcomes. This plan will be updated on a five cycle to outline the next phase of Vision Zero Program priorities, including utilizing updated crash data to make any needed refinements to the HIN. Additionally, DTPW will conduct bi-annual reporting of KPI/KAC progress and share its findings with the community.

Achieving Vision Zero will require implementing strategic safety solutions countywide, with a targeted focus on priority areas (including along HIN corridors and within equity areas). Furthermore, implementing both infrastructure countermeasures and educational efforts will be informed by KSI crash data findings, broken out by municipality and the municipal planning zones listed in <u>Appendix D</u>. DTPW's ongoing effort to update the County Engineering Design Manual to include a selection tool for countermeasures that have proven efficacy for reducing crash events is critical to ensuring that the County meets the KPIs outlined in this Action Plan, reducing KSIs on the HIN and achieving zero pedestrian and bicyclist fatalities.

Leading with data-driven investment priorities offers a responsive approach to geographic crash trends, while planning for proactive measures addresses known crash contributing factors. Miami-Dade County DTPW will unite with transportation partners to explore targeted educational campaigns to reach residents of all ages (given 18.5% of KSI crashes involved aging drivers and 11.8% involved teenage drivers), while also addressing top contributing factors such as aggressive driving (7.6% of KSI crashes) and distracted driving (6.9% of KSI crashes).

Miami-Dade DTPW is committed to collaborating with municipalities to further their Vision Zero efforts. The nine municipalities awarded USDOT's Safe Streets and Roads for All (SS4A) 2022 and 2023 planning grants (as outlined in the <u>Transportation Partner Initiatives section</u>) are empowered to develop well-defined strategies to prevent roadway fatalities and serious injuries within their jurisdictions through their own Vision Zero Action Plans.

The next iteration of this plan will include summary reports of award grants, accomplishments, and programmed and completed projects, to provide lessons learned for future Vision Zero related improvements, particularly along the HIN.

This Action Plan solidifies targeted next steps for Miami-Dade County to achieve its safety goals through HIN development and outlining KACs and KPIs for each of the five targeted focus areas. Only through collective action, dedicated funding, and context-sensitive community engagement can the tenets of Vision Zero be scaled countywide.

CONCLUSION & RECOMMENDATIONS

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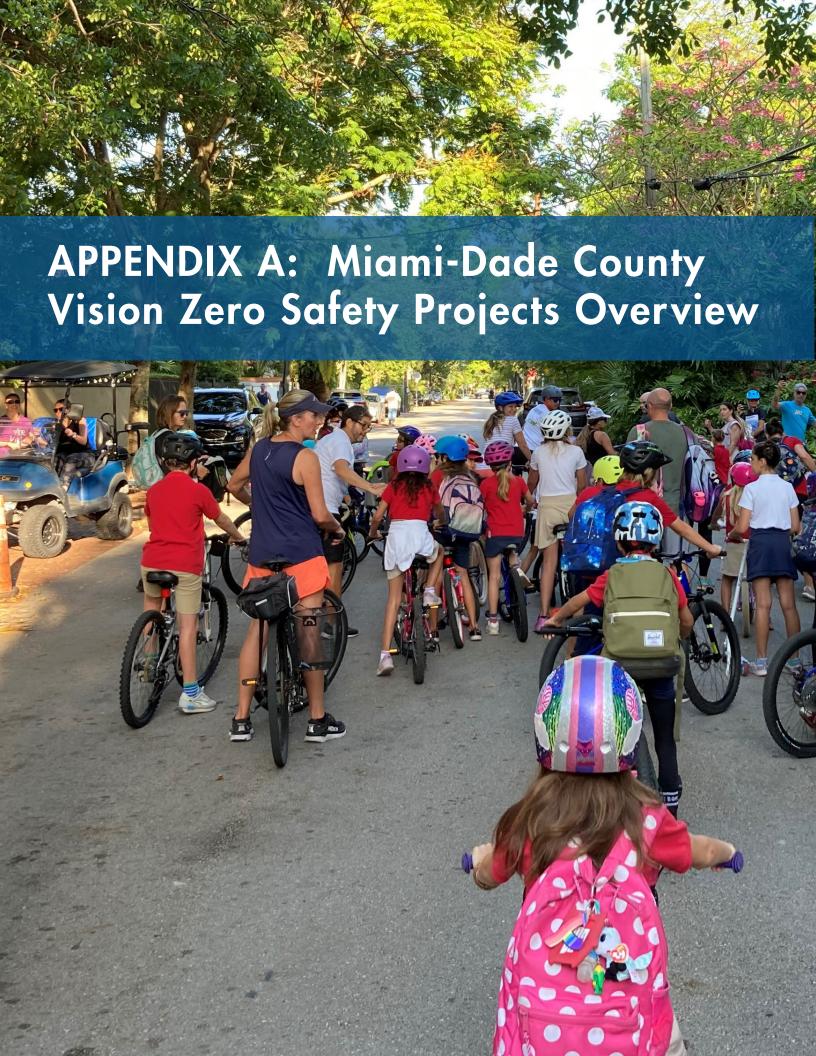
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Top 100 Vision Zero & Safety Projects

Table A-1: Top 100 Vision Zero & Safety Projects

Local/County Projects
FDOT Projects

oject#	Roadway	Limits From	Limits To	Project Type	Distric
1	Marlin Rd. & SW 106th Ave.			Intersection Project	9
2	N Miami Ave. & NW 60th St.			Intersection Project	3
3	Charles Ave. & SW 37th Ave.			Intersection Project	7
4	NW 95th St. & NW 6th Ave.			Intersection Project	3
5	NW 2nd Ave. & NW 64th St.			Intersection Project	3
6	NW 7th Ave. & NW 143rd St.			Intersection Project	2
7	SW 177th Ave. & NW 2nd St.			Intersection Project	8 & 9
8	Stanford Dr. & S Dixie Hwy.			Intersection Project	7
9	SW 232nd St. & Dixie Hwy.			Intersection Project	8
10	NW 74th Ave. & Hialeah Expy.			Intersection Project	6 & 1
11	NW 17th Ave	NW 55th St.	NW 26th St.	Corridor Project	3
12	N Miami Ave.	NW 24th St.	NE 38th St.	Corridor Project	3
13	NW 22nd Ave.	NW 150th St.	NW 184th St	Corridor Project	1
14	NW 22nd Ave	NW 96th Ter.	NW 79th St.	Corridor Project	2
15	W 12th Ave.	W 37th St.	W 26th St.	Corridor Project	13
16	SVV 184th St	SW 127th Ave.	SW 122nd Ave.	Corridor Project	9
17	SW 152nd St.	SW 137th Ave.	SW 132nd Ave.	Corridor Project	9
18	W 12th Ave.	W 69th St.	W 68th St.	Corridor Project	13
19	SW 187th Ave.	NW 2nd St.	SW 6th St.	Corridor Project	9
20	NW 7th St.	NW 39th Ave.	NW 27th Ave.	Corridor Project	5 & 6
21	NW 62nd St.	NW 21st Ave.	NW 13th Ave.	Corridor Project	3
22	Palm Ave.	W 42nd St.	W 21st St.	Corridor Project	6&1
23	NE 96th St.	NE 8th Ave.	NE 10th Ave.	Corridor Project	3 & 4
24	W 56th St.	W 24th Ave.	W 56th St.	Corridor Project	12
25	NW 47th Ave.	NW 203rd St.	NW 173rd Dr.	Corridor Project	1
26	Palm Ave. & W 32nd St.			Intersection Project	6&1
27		W Country Club Dr. & W.L.Causeway WB Exit Ramp	NE 34th Ave. & N Country Club Dr.	Area Project	4
28		SW 26th Rd. & S Miami Ave.	SE 26th Rd. & Federal Hwy	Corridor Project	7
29	NW 37th Ave.	NW 207th St	NW 172nd Ter.	Corridor Project	1
30	NW 22nd Ave.	NW 63rd St.	NW 34th St.	Corridor Project	2 & 3

Project #	Roadway	Limits From	Limits To	Project Type	District
31	SW 32nd Ave.	SW 21st Ter.	SW 22nd Ter.	Corridor Project	7
32		SW 168th St. & SW 147th Ave	SW 192nd St. & SW 147th Ave	Corridor Project	8 & 9
33	NW 11th St	NW 12th Ave	NW 11th Ct.	Corridor Project	3
34	NW 10/9th Ave.	NW 14th St.	NW 15th St	Corridor Project	3
35	Grand Ave.	SW 37th Ave.	Plaza St.	Corridor Project	7
36	NE 123rd St.	W Dixie Hwy.	NE 5th Ave.	Corridor Project	2
37	SW 24th St.	SW 102nd Ave.	SW 97th Ave	Corridor Project	10
38	NW 2nd Ave.	NW 21st St.	NW 20th Ter.	Corridor Project	3
39	NW 2nd Ave./NW 1st Pl.	NW 11th St.	NW 12th St.	Corridor Project	3
40	NW 154th St.	NW 22nd Ave.	NW 20th Ave.	Corridor Project	1
41	NW 8th Pl.	NW 14th St.	NW 12th St.	Corridor Project	9
42	Sharazad Blvd.	Ahmad St.	Kalandar St.	Corridor Project	1
43	SW 3rd Ave.	SW 1st St.	SW 2nd St.	Corridor Project	9
44	W 20th Ave.	W 51st Pl.	W 49th St.	Corridor Project	13
45	SW 6th Ave.	SW 5th St.	SW 6th St.	Corridor Project	9
46	SW 104th St.	SW 157th Ave.	SW 142nd Ave.	Corridor Project	11
47	W Flagler St.	NW 112th Ave.	SW 105th Pl.	Corridor Project	10 & 12
48	NW 14th St.	NW 3rd Ave.	NW 1st Ave.	Corridor Project	3
49	NW/NE 20th St.	NW 3rd Ave.	N Miami Ave.	Corridor Project	3
50	E 4th Ave.	E 43rd St.	E 28th St.	Corridor Project	6 & 13
51	W 68th St.	W 26th Dr.	W 13th Ave.	Corridor Project	12 & 13
52	SW 1st Ct.	SW 2nd St.	SW 3rd St.	Corridor Project	5
53	NW/SW 2nd Ave.	NW 1st St.	SW 3rd St.	Corridor Project	5
54	Busway	Caribbean Blvd.	Marlin Rd.	Corridor Project	9
55	SVV 136th St.	SW 1 <i>57</i> th Ave.	SW 137th Ave.	Corridor Project	11
56	6th St.	Meridian Ave.	Euclid Ave.	Corridor Project	5
57		NW 4th Ave. & NW 8th St.	SW 312th St. & Newton Rd.	Area Project	8
58	SW 59th St.	SW 137th Ct.	SW 133rd Ave.	Corridor Project	10
59		SW 92nd Ave. & SW 8th St.	W Flagler St. & Fontainebleau Blvd.	Area Project	6 & 10
60		NW 22nd Ave. & NW 11th St., NW 22nd Ave. & NW 7th St.	NW 7th St. & NW 12th Ave., NW 7th St. & NW 22nd Ave.	Area Project	5



Project #	Roadway	Limits From	Limits To	Project Type	District
61	NE 125th St.	NE 2nd Ave.	NE 8th Ave.	Corridor Project	2
62	NW 27th Ave.	NW 84th St.	NW 69th St.	Corridor Project	2
63	NW 12th Ave.	NW 39th St.	NW 28th St.	Corridor Project	3
64	NW/NE 54th St.	NW 17th Ave.	US-1/Biscayne Blvd.	Corridor Project	3
65	NW 32nd Ave NW 103rd St.	NW 106th St. NW 32nd Ave.	NW 103rd St. NW 22nd Ave.	Area Project	2
66	NW 7th Ave.	NW 71st St.	NW 43rd St.	Corridor Project	3
67	NW/SW 12th Ave.	NW 1st St.	SW 1st St.	Corridor Project	5
68	Biscayne Blvd.	NE 24th St.	NE 17th Ter.	Corridor Project	3
69	NW 36th St.	NW 10th Ave.	NW 2nd Ave.	Corridor Project	3
70	E 8th Ave.	E 45th St.	NW 79th St.	Corridor Project	6 & 13
71	W Flagler St.	NW 37th Ave.	SW 27th Ave.	Corridor Project	5 & 6
72	SW 8th St.	SW 70th Ave.	SW 67th Ave.	Corridor Project	6
73	Dixie Hwy.	Old Card Sound Rd.	Overseas Hwy.	Corridor Project	9
74	NE 1st Ave.	NE 7th St.	SW 344th St.	Corridor Project	9
75	Dixie Hwy.	Kings Hwy.	SW 264th St.	Corridor Project	8 & 9
76		SW 216th St. & S Miami-Dade Busway	Dixie Hwy. & SW 214th St.	Area Project	9
77	S Dixie Hwy.	Oak Ave.	Bird Ave.	Corridor Project	7
78	SW 107th Ave.	SW 8th St.	SW 16th St.	Corridor Project	10
79	NW 36th St.	NW 32nd Ave.	NW 17th Ave.	Corridor Project	2 & 3
80	S Okeechobee Rd.	W 12th Ave.	N Red Rd.	Corridor Project	6 & 13
81	NW 79th St.	E 6th Ave.	E 10th Ave.	Corridor Project	6
82	VV 4th Ave	W 21st St. W 3rd Ave.	W 33rd St. W 21st St.	Area Project	6 & 13
83	NW 7th Ave.	NW 95th St.	Little River Dr.	Corridor Project	2
84	NW 135th St.	NW 27th Ave.	NW 26th Ct.	Corridor Project	2
85	Biscayne Blvd.	NE 151st St.	NE 172nd St.	Corridor Project	4
86	S Dixie Hwy.	S Red Rd.	Yumuri St.	Corridor Project	7
87	NW 183rd St.	NW 39th Ave.	NW 27th Ave.	Corridor Project	1
88		NE 5th Ct. & NE 152nd St.	NE 6th Ave. & NE 127th St.	Area Project	2
89	NW 7th Ave.	NW 131st St	NW 112th St.	Corridor Project	2



Project #	Roadway	Limits From	Limits To	Project Type	District
90	NW 27th Ave.	NW 28th St.	NW 20th St.	Corridor Project	2
91	NW 27th Ave.	NW 17th St.	NW 14th St.	Corridor Project	5 & 6
92	SW 27th Ave.	SW 4th St.	SW 7th St.	Corridor Project	5
93	NW 12th Ave.	NW 12th St.	Dolphin Expy.	Corridor Project	3
94	Quail Roost Dr./SW 186th St.	Busway	Dixie Hwy.	Corridor Project	8 & 9
95	NW/SW 42nd Ave.	NW 11th St.	SW 2nd St.	Corridor Project	6
96	NW 3rd Ave.	NW 5th St.	NW 1st St.	Corridor Project	3 & 5
97	Biscayne Blvd.	NE 123rd St.	NE 135th St.	Corridor Project	2 & 4
98		W Dixie Hwy. & NE 181st St.	Biscayne Blvd. & SE 11th St.	Area Project	4
99	Okeechobee Rd	NW 117th Ave.	NW 138th St.	Corridor Project	12
100	NW 2nd Ave.	NW 191st St.	NW 176th St.	Corridor Project	1

Miami-Dade County Top 55 Safety Projects Countermeasures Summary

Table A-2: Miami-Dade County Top 55 Safety Projects Countermeasures Summary

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Aventura	4	W Country Club Dr	W.L.Causeway WB Exit Ramp	NE 34th Ave	Corridor	General: Install traffic calming measures (such as speed humps) to reduce speeding.	N/A	N/A
						 Conduct lighting analysis. Side streets: Provide "Turning Vehicles Stop for Pedestrians" signage wherever crosswalks are present. 		
						At signalized intersections: • Provide reflective borders on signal heads to improve visibility.		
Florida City	9	NW 8th Pl	NW 14th St	NW 12th St	Corridor	 Close the box¹ (north leg crosswalks). General: Add pavement markings (such as edge lanes, lane lines, and stop bars). 	N/A	N/A
						Provide speed humps.Conduct lighting analysis.		
Florida City	9	SW 3rd Ave	SW 1st St	SW 2nd St	Corridor	General: • Provide pavement markings (such as edge lanes, lane lines, and stop bars).	N/A	N/A
						Provide speed humps.Conduct lighting analysis.		
						At Intersections (where warranted): • Provide high emphasis crosswalks.		
Hialeah	12	W 24th Ave/ W 56th St	W 54th PI/ W 24 Ave	W 56th St/ W 22nd Ct	Corridor	 General: Conduct lighting analysis. Improve pavement markings (such as edge lanes, lane lines, and stop bars). 	Provide traffic calming measures on W 24th Avenue between W 56th Street and W 60th Street.	N/A
						 Provide reflective borders on signal heads to improve visibility. W 24 Avenue & W 56 Street: 		
						Conduct evaluation study for Leading Pedestrian Interval (LPI) ² at the intersection (school in the northwest corner).		
						Add pedestrian pushbuttons to all corners.		
Hialeah	12	W 12th Ave	W 68th St	W 69th St	Corridor	N/A	Provide midblock crosswalk with raised median controlled by traffic signal.	N/A

¹ Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



83

² Leading Pedestrian Interval (LPI): Gives pedestrains a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Hialeah	12/13	W 68th St	W 26th Dr	W 13th Ave	Corridor	At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Conduct evaluation study for modification to signal timing for safety. Provide high emphasis crosswalks. General: Provide speed feedback signs for speed management.	 W 26th Drive: Add crosswalk markings on the south leg (need to create refuge in existing median to provide sidewalk continuity) and curb ramps. W 24th Avenue: Red light cameras (if allowed). Install sidewalk segment on north side, just to connect to the hospital driveway. W 21st Court: Red light cameras (if allowed). Reconstruction of south leg (add curb ramps in the southeast and southwest corners for south leg crosswalk and upgrade porkchop to concrete. SR 826 SB interchange: Red light cameras (if allowed). Extend existing raised median into painted chevron area to restrict southbound through movement. W 19th Court: Conduct evaluation study for modifying eastbound left-turn phasing. Sedano's Shopping Center: Restrict northbound left-turn movement by converting full opening to directional (northbound left-turn movements detoured to W 67th Place traffic signal). 	Complete Streets Study (segment length = 2 miles) • Construction of medians throughout the corridor and access management review. • Construction of trail on the north side and appropriate north/south pedestrian crossings.
Hialeah	13	Palm Ave	W 21st St	W 42nd St	Corridor	 At intersections (where warranted): Improve pavement markings (such as stop bars) and provide high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. Add pedestrian pushbuttons and signal heads at applicable intersections. Conduct lighting analysis. 	Provide mid-block crosswalk controlled by traffic signal between E 33rd Street and 34th Street.	Master Plan - Lane Repurposing Study (segment length = 1.4 mile) On Palm Avenue between 21st Street and 41st Street.
Hialeah	13	W 12th Ave	W 37th St	W 26th St	Corridor	At intersections (where warranted): • Provide high emphasis crosswalks. • Provide "Turning Vehicles Stop for Pedestrians" signage.	 Provide mid-block crosswalk with raised median controlled by traffic signal south of 36th Street. Provide raised median for pedestrian refuge at all painted medians (segment length = 0.7 miles). 	N/A

Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Hialeah	13	W 20th Ave	W 51st Pl	W 49th St	Corridor	At W 51st Place: • Add pavement markings (stop bars). • Provide ADA improvements (curb ramps).	N/A	N/A
Hialeah	6/13	E 4th Ave	E 43rd St	E 28th St	Corridor	At intersections (where warranted): Provide high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. Upgrade pedestrian pushbuttons.	 Provide midblock crossing controlled by traffic signal between E 36th Street and E 37th Street. Upgrade painted median to raised concrete between E 32nd Street and E 41st Street (segment length = 0.60 miles). 	N/A
Hialeah	6	E 32nd St	Palm Ave	E 4th Ave	Corridor	 At intersections (where warranted): Add high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. Improve pavement markings (add stop bars). Provide pedestrian signal heads and pushbuttons. 	 Localized Improvements: E 32nd Street at E 2nd Avenue: Provide traffic signal with crosswalk on the east leg. E 32nd Street at Palm Avenue: Conduct evaluation study for modifying left-turn phasing. E 32nd Street at E 4th Avenue: Conduct evaluation study for modifying left-turn phasing 	Corridor Wide Lane Repurposing Study (segment length = 1.75 miles): Install bike lane (Red Road to 4th Avenue) and install neighborhood bikeway to 10th Avenue. Explore four lane to two lane road conversion. East of E 4th Avenue up to E 10th Avenue: Add traffic calming measures.
Homestead	8	NW 8th St/SW 312th St	NW 4th Ave	Newton Rd	Corridor	 General: Improve the school zone markings around Homestead Junior High School on Campbell Drive, within school zone limits. At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Provide "Turning Vehicles Stop for Pedestrians" signage. Provide high emphasis crosswalks. Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)². Provide ADA improvements. 	 N Homestead Boulevard: Conduct evaluation study for modifying left-turn phasing for southbound left-turn movement. Provide midblock crossings controlled by traffic signals at following locations: Between NE 15th Avenue and NE 16th Avenue. Between Washington Avenue and English Avenue. Between NE 4th Avenue and NE 3rd Avenue. 	Construct bike lane between Krome Avenue and SW 187 Avenue.
Homestead	9	SW 6th Ave	SW 5th St	SVV 6th St	Corridor	N/A	Conduct evaluation study for installing neighborhood bikeway from South Dade Trail to Blakey Park on SW 6th Street.	N/A

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³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Homestead	9	SW 187th Ave [Redland Rd]	NW 2nd St	SW 6th St	Corridor	 At intersections (where warranted): Provide high emphasis crosswalk markings. Provide "Turning Vehicles Stop for Pedestrians" signage. Install curb ramp improvements. 	 Provide sidewalk along the east side of the road. Provide traffic signal at the intersection of SW 4th Street. 	N/A
Miami	3	NW 17th Ave	NW 55th St	NW 26th St	Corridor	 Improve pavement markings (add stop bars). 	Provide a midblock crosswalk controlled by a traffic signal at a location between NW 52nd Street and NW 53rd Street.	Master Plan - Access Management Study/Lane Repurposing (segment length = 0.9 miles) • From Airport Expressway to NVV 54th Street: Provide exclusive left-turn lanes or parking depending on the demand. • Lane repurposing from North of Airport Expressway: Convert 6 lanes to 4 lanes and provide protected bike lanes and bus bays.
Miami	3	N Miami Ave	NE 38th St	NW 24th St	Corridor		Install a mid-block crosswalk between 25th Street and 24th Street controlled by Rectangular Rapid Flashing Beacons (RRFBs) ³ .	Master Plan - Lane Repurposing Study (segment length = 1.0 mile) Lane repurposing with bike lanes from N 20th Street to N 36th Street.
Miami	3	NW/NE 20th St	NW 3rd Ave	N Miami Ave	Corridor	At intersections (where warranted): Improve pavement markings (add stop bars). Add pedestrian pushbuttons. Provide curb ramps.	Install traffic signal at NVV 1st Avenue.	Full reconstruction of eastbound approach at NW 2nd Avenue intersection.
Miami	3	NW 2nd Ave & NW 64th St			Inter- section	 General: Conduct lighting analysis. ADA improvements at transit stops. 	Install either a traffic signal or a roundabout at the intersection.	Master Plan - Complete Streets Study (segment length = 1.0 miles) Install bike lanes along NW 2nd Avenue and traffic calming measures between NW 64th Street and NW 79th Street.

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³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Miami-Dade County Top 55 Safety Projects Countermeasures Summary

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Miami	3	N Miami Ave & N 60th St			Inter- section	General:Provide speed humps on minor street.Conduct lighting analysis.	Provide midblock crossing controlled by traffic signal.	N/A
Miami	3	NW 11th St	NW 12th Ave	NW 11th Ct	Corridor	 General: Provide bike sharrow pavement markings. Provide "Share Road with Bicycles" sign. Provide "Turning Vehicles Stop for Pedestrians" signage at signalized intersections. 	N/A	N/A
Miami	3	NW 2nd Ave	NW 21st St	NW 20th Ter	Corridor	 General: Improve pavement markings (such as edge lanes, lane lines, and stop bars). Add bike/pedestrian signage. 	 Install traffic calming measures (e.g., modular raised curbs at intersections). Conduct evaluation study for installing three pedestrian crossings between NW 20th Street and NW 25th Street controlled by Rectangular Rapid Flashing Beacons (RRFBs)³. 	N/A
Miami	3	NW 10th/9th Ave	NW 14th St	NW 15th St	Corridor	 At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Provide "Turning Vehicles Stop for Pedestrians" signage. Add curb ramps. NW 15th Street & NW 9th Avenue: Close the box¹ (south leg crosswalk). 		Corridor Wide Lane Repurposing Study (segment length = 0.5 miles) • Lane repurposing on NW 9th Avenue between NW 20th Street and NW 14th Street (given low Average Annual Daily Traffic) to create a bike lane. • Install bike lane from NW 14th Street to U.S. 441, then continue east to 6th Avenue to connect to Miami River Drive.
Miami Close the Box:	3	NW 2nd Ave/ NW 1st Pl	NW 11th St	NW 12th St	Corridor	 General: Conduct lighting analysis. Add green bike pavement markings within existing bike lane. At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Add high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. 	Conduct evaluation study for shared use path on the east side along the corridor, between NW 9th Street and NW 14th Street.	N/A

Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



87

² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Miami	3	NW 14th St	NW 3rd Ave	NW 1st Ave	Corridor	 General: Add green pavement markings within existing bike lane. At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Add high emphasis crosswalks. Provide ""Turning Vehicles Stop for Pedestrians"" signage. NW 1st Place: Close the box¹ (east leg crosswalk). 	Provide a mid-block crosswalk controlled by traffic signal between NW 1st Court and NW 1st Avenue.	N/A
Miami	5	NW/SW 2nd Ave	NW 1st St	SW 3rd St	Corridor	 At intersections (where warranted): Improve pavement markings (add stop bars). Provide reflective borders on signal heads to improve visibility. Provide high emphasis crosswalks. Provide pedestrian pushbuttons and add pedestrian signal heads. 	Conduct evaluation study for continuing bike lane on SW 2nd Street from SW 1st Avenue to Miami River Drive trail.	N/A
Miami	5	NW 7th St	NW 27th Ave	NW 39th Ave	Corridor	 At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Add high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. NW 30th Avenue: Close the box¹ (west leg crosswalk). Add pedestrian signal heads. 	 Provide mid-block crosswalks with traffic signals: East of NW 38th Court. Between NW 30th Place and NW 31st Avenue. 	Master Plan - Access Management Study/Lane Repurposing (segment length = 1.3 miles) Conduct a planning study to evaluate providing left-turn lanes on NW 7th Street at a few intersections through on-street parking removal. Provide bike lanes by removing on-street parking.

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



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² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Miami	5	NW 22nd Ave NW 7th St	NW 11th St NW 22nd Ave	NW 7th St NW 12nd Ave	Corridor	 At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Add high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. Add raised median for pedestrian refuge island. Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)² along NW 7th Street. General: Paint bike sharrows on far right travel lanes to indicate vehicles should share the roadway with bicycles. Improve pavement markings (such as edge lanes, lane lines, and stop bars). 	 Conduct evaluation study for installing a traffic signal at the NW 20th Avenue intersection. At NW 17th Avenue at NW 7th Street: Conduct evaluation study for converting southbound left-turn phasing. 	Corridor Planning Study (segment length = 1 mile) Provide bike lane either by: Lane repurposing, after planning study. Repurposing the existing chevron markings or onstreet parking. Providing a raised median if lane repurposing is possible.
Miami	5	SW 1st Court	SW 2nd St	SW 3rd St	Corridor	N/A	 At SW 2nd Street: Conduct evaluation study for multi-way stop control. Reconstruct the intersection corners to include bulb-outs. Move the stop-bar (for the south leg/northbound approach) to the north side for better sight distance. At SW 3rd Street: Reconstruct the sidewalk at existing connection with trail ramp ending, with curb ramps and raised crosswalk to connect north and south sidewalks. Conduct evaluation study for removing parking spot on the north side of the road. Provide bike wayfinding signage on SW 1st Court from SW 3rd Street to SW 2nd Avenue bike lane (future/potential). Paint green sharrows on SW 1st Court. 	N/A

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³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Miami	7	SW 32nd Ave	SW 21st Ter	SW 22nd Ter	Corridor	 General: Improve pavement markings (such as edge lanes, lane lines, and stop bars). Complete missing sidewalk gaps. Install ADA improvements, such as curb ramps. On side streets: Provide bike-pedestrian signage to remind motorists to yield. 	 North of SW 21st Terrace: Potential midblock crosswalk controlled by Rectangular Rapid Flashing Beacons (RRFBs)³. Conduct evaluation study for installing bike lane on SW 32nd Avenue from Coral Way to SW 23rd St and then "Share the Road" sharrow markings up to US-1. 	Corridor Wide Repurposing Study (segment length = 1.0 miles) • Lane repurposing on SW 32nd Avenue between SW 21st Street and US-1 (given low Annual Average Daily Traffic) to create a bike lane. • Install buffered bike lane between Flagler Street and US-1.
Miami	7	S 26th Rd	S Miami Ave	Federal Hwy	Corridor	At intersections (where warranted): Provide "Prepare to Stop When Flashing" signs at the eastbound and southbound approaches. Provide reflective borders on signal heads to improve visibility.	NEXUS Project (FDOT District 6 is working on a concept to provide roundabouts at S Miami Avenue and Brickell Rd intersections).	N/A
Miami / Unincorp- orated	3	NW 62nd St	NW 13th Ave	NW 21st Ave	Corridor	 At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Install "Turning Vehicles Stop for Pedestrians" signage. 	Provide directional median at NW 21st Avenue to restrict minor street left-turns and through movements and a midblock crossing controlled by a traffic signal east of the intersection.	Master Plan - Access Management Study (segment length = 0.8 miles) Provide raised median at possible locations (especially south of NW 36th Street). Install pedestrian channelization barriers along the corridor limits to reduce mid-block crossings and encourage crossing at marked mid-block crosswalks.
Miami Beach	5	6th St	Meridian Ave	Euclid Ave	Corridor	 General: Provide curb extensions at intersections Conduct evaluation study for applying green bike paint markings within existing bike lane on Euclid Avenue between 5th Street and 6th Street. 	N/A	N/A

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¹ Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Miami Gardens	1	NW 22nd Ave	NW 150th St	NW 184th St	Corridor	 General: Conduct lighting analysis. Provide speed feedback signs for speed management. 	 At NW 167th Street: Conduct evaluation study for providing additional traffic signals to increase visibility. Red light cameras (if allowed). At NW 179th Street: Conduct evaluation study for providing traffic 	N/A
							signal due to incidence of serious injury angled crashes.	
							 At NW 175th Street: Conduct evaluation study for modifying left turn phasing to increase safety. 	
	_						Add pedestrian signage.	
Miami Gardens	1	NW 37th Ave	NW 172nd Terr	NW 207th St	Corridor	At intersections (where warranted): • Provide high emphasis crosswalks.	At NW 207th Street: • Conduct evaluation study for modifying left turn	Conduct: • Target Speed Limit analysis to
						 Provide reflective borders on signal heads to improve visibility. 	phasing to increase safety. At NW 199th Street:	understand roadway speeds (incidences of speeding and
						 Install "Turning Vehicles Stop for Pedestrians" signage. 	Conduct evaluation study for modifying left turn phasing to increase safety.	fatalities/serious injuries observed).
							At NW 183rd St/Miami Gardens Drive: Conduct evaluation study for modifying left turn phasing to increase safety.	 Long-term: Conduct a mode priority assessment study, bike- pedestrian mobility analysis.
Miami	1	NW 154th St	NW 22nd Ave	NW 20th Ave	Corridor	General: • Provide speed humps.	Safe Routes To School project: • Provide traffic calming measures on NW	N/A
Gardens						Conduct lighting analysis.	154th Street between NW 22nd Avenue and Railroad Drive.	
							 Provide School Zone pavement markings between NW 22nd Avenue and Railroad Drive on the following corridors: 	
							NW 152nd Terrace.	
							NW 18th Avenue .	
							 NW 19th Avenue (consider speed bumps). 	

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



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² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Miami Gardens / Unincorp- orated	1	NW 47th Ave	NW 173rd Dr	NW 203rd St	Corridor	 General: Conduct lighting analysis. Install raised median for pedestrian refuge island at selected locations. At intersections (where warranted): Provide high emphasis crosswalks. Provide reflective borders on signal heads to improve visibility. Install "Turning Vehicles Stop for Pedestrians" signage. 	N/A	N/A
Miami Shores	3/4	NE 96th St	NE 8th Ave	NE 10th Ave	Corridor	N/A	Conduct evaluation study for modifying left-turn phasing for the northbound/southbound approaches at the intersection of US-1 to address visibility issues.	N/A
North Miami	2	NE 123rd St	W Dixie Hwy	NE 5th Ave	Corridor	 At W Dixie Hwy: Close the box¹ (north leg crosswalk). At intersections (where warranted): Provide high emphasis crosswalks. Provide reflective borders on signal heads to improve visibility. Install "Turning Vehicles Stop for Pedestrians" signage. 		
Opa-Locka	1	Sharazad Blvd	Ahmad St	Kalandar St	Corridor	General: Close the box¹ (east leg crosswalk). Provide reflective borders on signal heads to improve visibility.	Provide sidewalk on Ahmad Street on the east side (just south of Sharazad Boulevard).	N/A
Sweetwater	10/12	W Flagler St	NW 112th Ave	SW 105th Place	Corridor	 SW 112th Avenue: Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)². 	Provide mid-block crosswalk with traffic signal and raised medians and pedestrian channelization between Pollo Tropical and plaza driveway.	N/A
Unincorp- orated	2	NW 22nd Ave	NW 96th Terr	NW 79th St	Corridor	 At intersections (where warranted): Provide high emphasis crosswalks. Provide reflective borders on signal heads to improve visibility. Install "Turning Vehicles Stop for Pedestrians" signage. 	 traffic signals: Between NW 91st Street and NW 92nd Street. Between NW 80th Street and NW 81st Street. 	Master Plan - Lane Repurposing Study (segment length = 1.5 miles) Between NW 103rd Street/SR 932 and NW 79 Street/SR 934, repurpose corridor from 6 to 4 lanes, install protected bike lanes, formalize left turns, and improve access.

Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

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² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Unincorp- orated	3	NW 95th Street & NW 6th			Inter- section	N/A	Conduct evaluation study for modifying left turn phasing to increase safety.	N/A
		Avenue					 Conduct evaluation study for reconfiguring westbound through approach. 	
Unincorp- orated	3	NW 22nd Ave	NW 34th St	NW 63rd St	Corridor	 At intersections (where warranted): Provide high emphasis crosswalks. Provide reflective borders on signal heads to improve visibility. Install "Turning Vehicles Stop for Pedestrians" signage. 	 Provide mid-block crosswalk controlled by a signal between NW 33rd Street and NW 34th Street. Provide crosswalk on the north leg at SR 112 eastbound ramps intersection. Provide directional median at NW 58th Street to restrict minor street left-turn and through movements and provide a midblock crossing 	Master Plan - Complete Streets Study (segment length = 2.3 miles) Lane repurposing from 6 to 4 lanes with protected bike lanes on NW 22nd Avenue from NW 41st Street to NW 79th Street/SR 934.
	0	CVA/ 10 Ail C	C) A / 100	C) A / 1 O 7 · l A		A	controlled by a traffic signal within the vicinity of the intersection.	N 1 / A
Unincorpo- rated	8	SVV 184th St	SW 122nd Ave	SW 127th Ave	Corridor	 At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Provide high emphasis crosswalks and improve pavement markings. Conduct evaluation study for modifying signal timing for safety. 	 SW 122nd Avenue: Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)² and other pedestrian feature improvements (e.g., pushbuttons to cross SVV 184th Street and "Stop for Pedestrians" signage). Conduct evaluation study for modifying left-turn 	N/A
						illilling for safety.	phasing for eastbound and westbound left-turn movements	
							 SW 127th Avenue: Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)². 	
							 Conduct evaluation study for modifying left-turn phasing for northbound and westbound left-turn movements. 	
Unincorp- orated	8	SW 147th Ave	SW 168th St	SW 192nd St	Corridor	N/A	 Provide acceleration lane for Eastbound left-turn movement (southern driveway at Publix). Provide midblock crosswalk controlled by Rectangular Rapid Flashing Beacons (RRFBs)³ around SW 181st Street. 	N/A
							Install a sidewalk on both the east and west sides of the roadway near the railroad.	

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² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Unincorp- orated	8	SW 184th St	SW 122nd Ave	SW 127th Ave	Corridor	 At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Provide high emphasis crosswalks and pavement markings (such as edge lanes, lane lines, and stop bars). Conduct evaluation study for modifying signal timing for safety. 	 SW 122nd Avenue: Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)² and other pedestrian feature improvements (e.g., pushbuttons to cross SW 184th Street and "Stop for Pedestrians" signage). Conduct evaluation study for modifying left-turn phasing for eastbound and westbound left-turn movements. SW 127th Avenue: Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)². Conduct evaluation study for modifying left-turn phasing for northbound and westbound left-turn movements. 	N/A
Unincorp- orated	8/9	Busway	Caribbean Blvd	Marlin Rd	Corridor	 At intersections (where warranted): Provide retroreflective borders on the signal heads. Provide "Turning Vehicles Stop for Pedestrians" signage. Improve crosswalk markings. Conduct lighting analysis. 	N/A	N/A
Unincorp- orated	9	Marlin Rd & SW 106th Ave			Inter- section	 General: Provide high emphasis crosswalk markings. Provide reflective borders on signal heads to improve visibility. 	 Improvements to address sight distance issues: Conduct evaluation study for modifying left-turn phasing on Marlin Road. Dual left-turn on westbound left-turn movement or offset westbound single left-turn lane and marking chevrons for remaining space. Install sidewalk on one side of Marlin Road between SW 188th Street and SW 106th Avenue. 	N/A

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



¹ Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Unincorp- orated	9/11	SW 136th Street	SW 157th Ave	SW 137th Ave	Corridor	 At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Provide high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. General: Provide speed feedback signs for speed management. 	 SW 137th Avenue: Conduct evaluation study for modifying left-turn phasing for northbound/southbound left-turn movements. SW 138th Avenue: Provide new traffic signal. 	Access Management Study (segment length = 2 miles) Restrict turn lanes and provide raised median and/or lane repurposing.
Unincorp- orated	10	SW 24th St	SW 102nd Ave	SW 97th Ave	Corridor	General: Conduct lighting analysis. At intersections (where warranted): Provide reflective borders on signal heads to improve visibility. Provide high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage.	SW 102nd Avenue: Conduct evaluation study for modifying left-turn phasing for the westbound and northbound movements.	N/A
Unincorp- orated	10	W Flagler St/ SW 92nd Ave	SW 92nd Ave & SW 8th St	Fontainebleau Blvd & W Flagler St	Corridor	 At intersections (where warranted): Close the box¹ (east leg crosswalk and mid-block crosswalk to the east). Provide high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. Extending raised median to increase vehicle turning safety. Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)². On Flagler Street: For the north side driveways headed southbound, provide "Turning Vehicles Stop for Pedestrians" signage. 	 Flagler Street & SW 92nd Avenue: Conduct evaluation study for modifying left-turn phasing. Conduct evaluation study for implementing Leading Pedestrian Interval (LPI)². 	 Analysis of bike path: Analyze trail connection on the north side of Flagler Street (power line easement) and installation of potential midblock crossing controlled by traffic signal to cross Flagler Street in the North-South direction. Analyze shared use path on Flagler Street (south side based on right-of-way), by widening the existing sidewalk to a trail. Lane repurposing on SW 92nd Avenue due to low Annual Average Daily Traffic and provide bike lane on west side.

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



¹ Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

Municipality	District	Roadway	From	То	Facility Type	Quick Builds/Short-Term Countermeasures	Medium (<5 years)	Long-Term (>5 years)
Unincorp- orated	10	SW 59th St	SW 133rd Ave	SW 137th Ct	Corridor	At intersections (where warranted): Improve pavement markings (such as edge lanes, lane lines, and stop bars). Provide "Turning Vehicles Stop for Pedestrians" signage. General: Install sidewalks to close existing gaps along the corridor.	 Provide roundabout at NW 137th Court intersection. Provide mid-block crosswalk controlled by traffic signal east of NW 133rd Avenue. 	N/A
Unincorp- orated	11	SW 104th St	SW 157th Ave	SW 142nd Ave	Corridor	Provide pushbuttons at applicable intersections. Provide speed feedback signs for speed management.	Provide mid-block crosswalk controlled by traffic signal east of Hammocks Blvd along with pedestrian channelization to reduce unsafe crossings (i.e., landscaping).	Master Plan - Complete Streets Study (segment length = 1.5 miles) Reduce lane widths and provide protected bike lanes.
Unincorp- orated	11	SW 152nd St	SW 132nd Ave	SW 137th Ave	Corridor	 At intersections (where warranted): Provide high emphasis crosswalks. Provide "Turning Vehicles Stop for Pedestrians" signage. Conduct lighting analysis for west side of the intersection. Provide reflective borders on signal heads to improve visibility. SW 13800 Block (Publix on north side): Close the box¹ (east leg crosswalk). 	SW 137th Avenue: • Provide crosswalk on the west leg (high emphasis).	N/A

³ Rectangular Rapid Flashing Beacon (RRFB): A traffic control device intended to increase driver awareness of crossing pedestrians/bicyclists through flashing LEDs installed below pedestrian warning signs.



¹ Close the Box: Stripe any unmarked intersection crossings to ensure crossing access in all four directions.

² Leading Pedestrian Interval (LPI): Gives pedestrians a 3-7 second head start when entering an intersection with a corresponding green signal in the same direction of travel.

2022 Safety Projects

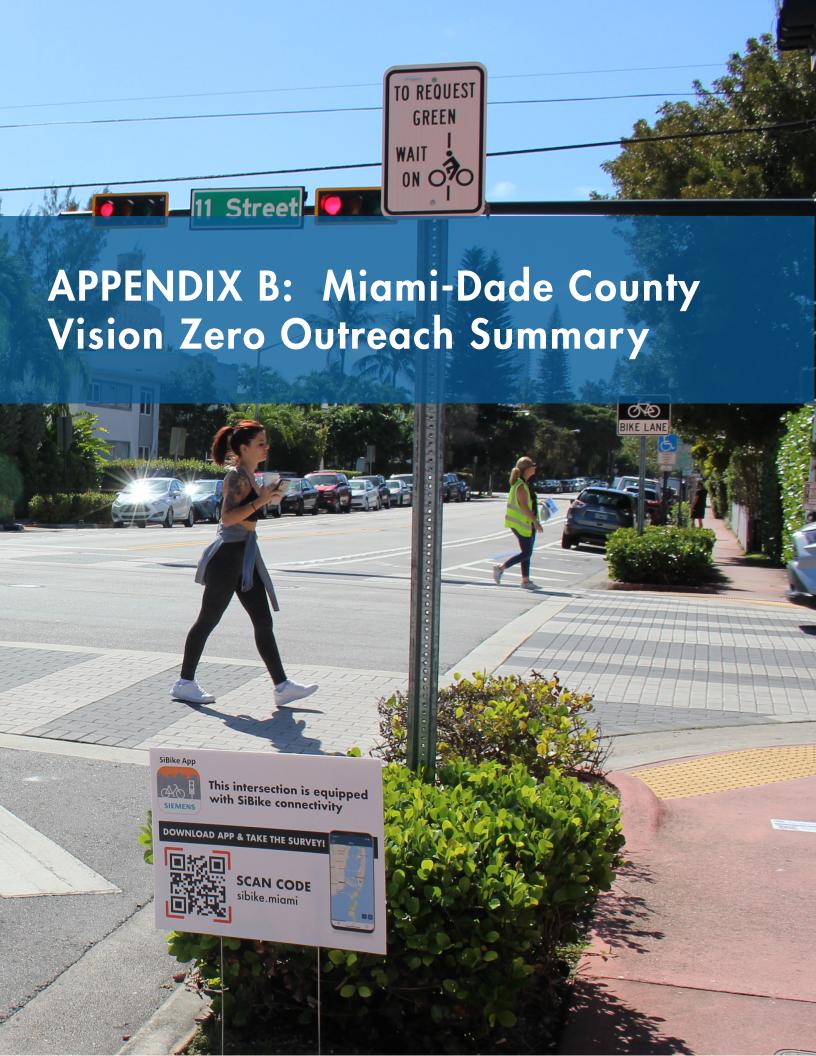
The DTPW Project Delivery Team has completed the design and is constructing 24 safety projects throughout the county (see **Table A-3** and **Figure 10** on page 20) with the objective of enhancing safety and convenience for all transportation modes. These projects encompass a wide range of improvements, such as adding signing and pavement markings, milling and resurfacing, installation of high-visibility crosswalks, buffered bicycle lanes, curb extensions, pedestrian-actuated crossing signals (also known as Rectangular Rapid Flashing Beacons or RRFBs), and Leading Pedestrian Intervals (LPIs). Funding for these projects has been secured until 2024.

Table A-3: 2022 Safety Projects

Project #	Location	Limits From	Limits To	Work Description	Current Project Phase
1	NW 62nd St.	and NW 6th Ave. and NW 5th Ct.		Intersection improvements (curb ramps, sidewalks, and high emphasis crosswalks).	Under Construction (as of November 2023).
2	Snake Creek Trail (Northeast Corridor)	NW 164th St. NE 21st Ave.	from NE 21st Ave. to NE 23rd Ave. from NE 164th St. to NE 165th	Concrete work, sharrow installation, high emphasis crosswalks.	Q2 2024 Construction Start Anticipated.
3	N Miami Ave.	NW 17th St.	NW 20th St.	Addition of green bicycle conflict markings.	Construction Completed.
4	SW 77th Ave. & North of SW 95th St.			Installation of pedestrian crossing north of the Kingston Square entrance.	Construction Completed.
5	SW 57th Ave. & SW 88th St.			Intersection reconstruction.	Under Design.
6	SW 27th Ave.	S Bayshore Dr.	US-1	Addition of green bicycle conflict markings.	Construction Completed.
7	SW 216th St.	SW 112th Ave.	Florida's Turnpike Ramp	Addition of green bicycle conflict markings.	Construction Completed.
8	Kendall Lakes Dr.	SW 127th Ave.	SW 147th Ave.	Pavement repair and addition of green bicycle conflict markings.	Design Completed.
9	Washington Ave. & 16th St.			Intersection improvements including installation of curb bulbouts, pedestrians signals and push buttons.	Q4 2023 Construction Start Anticipated.
10	NW 37th Ave. & NW 207th Dr.			Install speed feedback signs.	Construction Completed.
11	W 24th Ave. & W 60th St.			Intersection improvements, including adding "No Right on Red" signs, LPIs, and upgrading curb ramps.	Under Construction (as of November 2023).
12	NW 20th St. & NW 10th Ave.			Intersection improvements, including adding LPIs.	Design Completed.
13	SW 112th Ave. & SW 168th St.			Intersection improvements, including adding pedestrian signals, push buttons, signalization updates.	Construction Completed.
14	N Miami Ave.			Intersection improvements, including adding pedestrian signals and push buttons.	Under Construction (as of November 2023).

Project #	Location	Limits From	Limits To	Work Description	Current Project Phase
15	Miami River Trail Route B - NW 25th St. & NW 37th Ave.		S River Dr.	Sidewalk widening.	Q4 2023 Construction Start Anticipated.
16	Honey Hill Dr.	NW 57th Ave.	NW 52nd Ave.	Installation of an RRFB at NW 52nd Ave and Honey Hill Dr.	Q4 2023 Construction Start Anticipated.
17	NW 22nd Ave. & NW 62nd St.			Intersection improvements, including adding LPIs, pedestrian signals, push buttons, high emphasis crosswalks, and improving pedestrian ramps.	Under Construction (as of November 2023).
18	NW 127th Ave. & NW 12th St.			Intersection improvements.	Construction Completed.
19	NW 74th St.	NW 107th Ave.	NW 77nd Ct.	Addition of green bicycle conflict markings.	Under Construction (as of November 2023).
20	Venetian Way/Island Ave. & Century Ln.			Intersection improvements, including adding "No Right on Red" signs, pedestrian signals, push buttons, and upgrading curb ramps.	Under Construction (as of November 2023).
21	SW 142nd Ave.	SW 88th St.	SW 68th St.	Addition of green bicycle conflict markings.	Construction Completed.
22	SW 127th Ave. & SW 184th St.			Intersection improvements, including curb ramps.	Construction Completed.
23	SW 127th Ave. & SW 42nd St			Intersection improvements, including curb ramps.	Q1 2024 Construction Start Anticipated.
24	Downtown Micromobility Network Protection Elements (Bicycle Lane Protection)			Signing and pavement marking updates, and adding bicycle protection devices (delineators and concrete wheelstops) at: NW/NE 15th St. from N Miami Ave. to Venetian Cswy. N Miami Ave from SE 1st St. to NW 15th St. NW/NE 1st Ave. from SE 1st St. to NW 15th St. NW/NE 5 St. from NW 3rd Ave. to NE 2nd Ave. NW/NE 6 St. from NW 3rd Ave. to NE 2nd Ave.	Under Design: N Miami Ave. from NE 11th St. to NW 15th St. NW/NE 1st Ave. from NE 11th St. to NW 15th St. NW/NE 15th St. from N Miami Ave. to Venetian Cswy. Construction Complete: N Miami Ave. from SE 1st St. to NE 11th St. NW/NE 1st Ave. from SE 1st St. to NE 11th St. NW/NE 5th St. from NW 3rd Ave. to NE 2nd Ave. NW/NE 6th St. from NW 3rd Ave. to NE 2nd Ave.





APPENDIX B

Miami Dade County Vision Zero Outreach Summary

Vision Zero Outreach Methodology

The 2023 Miami-Dade County Vision Zero Public Engagement Plan provides a framework to facilitate robust stakeholder engagement to help educate and inform county residents about DTPW's Vision Zero goal and learn from them about the issues they are experiencing on their local roadways.

To ensure a comprehensive and successful public engagement process, the Vision Zero program is following the International Association of Public Participation (IAP2) Spectrum of Public Participation. The Spectrum is an internationally recognized model developed to help clarify the role of the public in planning and decision making, and how much influence the community has in the processes. The model identifies five levels of community engagement. A graphic explaining the Spectrum is shown in **Figure B-1** below. As illustrated below, the further to the right on the Spectrum, the more influence the community has over decisions, and each level is appropriate depending on the context. The levels of participation are flexible, as they can vary depending on the project's phase.

Figure B-1: IAP2 Spectrum of Public Participation

	Increasing leve	l of participation			
	Inform	? Consult	Involve	© V Collaborate	Empower
Public Participation Goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	The work directly with the public throughout the process to ensure that public concerns and aspirtations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the peferred solution.	To place final decision making in the hands of the public.
Promise to the Public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that you concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how the public influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.
Example of Tools	Fact sheets, websites, open houses, mailings, social media	Public comment, focus groups, surveys, public meetings	Workshops, deliberative polling	Stakeholder advisory, committees, consensus-building, participatory decision-making	Stakeholder Resident juries, ballots, delegated decisions



APPENDIX B

Miami Dade County Vision Zero Outreach Summary

Vision Zero Outreach Strategies: In-Person

Effective ongoing strategies for reaching community stakeholders and residents are outlined below.

Briefings with Elected and Appointed Officials

The Vision Zero project managers briefed all Miami-Dade County Commissioners and Mayor Daniella Levine Cava on 2022 efforts. In 2023, it is a continued goal to conduct briefings with local elected officials to ensure information is disseminated in a timely manner to constituents, including all the municipalities, as requested. All meetings include a summary of public outreach efforts and request the Commissioners' assistance in notifying their constituents of activities, events, and plan progress.

Municipality Coordination

A Municipal Workshop was held in August 2022 to introduce and update all cities on the program and its plans moving forward. All municipalities were requested to share the information about the program, the online survey and the website link with their residents. In May 2023, another workshop will be held with the municipalities and all updated information and public outreach tools were shared once again for distribution. The outreach team works with municipalities to participate in their community events to increase awareness of the Vision Zero program.

Fact Sheets

Invitational and informational fact sheets are distributed to elected and appointed officials, property owners/tenants, business owners/operators, and interested parties in three languages. The latest fact sheet is found on the program website. In addition to an overall program fact sheet, individual fact sheets were prepared for each Commission District to share with commissioners and their staff. Additional fact sheets are prepared as needed throughout the year.

Community Outreach Events

During community outreach events, the Vision Zero team engages the public by providing Vision Zero campaign information via fact sheets (in English, Spanish and Creole) and giving an overview of the Program goals. The team requests public participation through filling out a survey and/or by visiting the Vision Zero Social Pinpoint site via a QR code.

The public typically has a story of their own to share about traffic-related accidents or deaths that they have been affected by. Regularly, they state that there is an intersection or a stop sign in their neighborhood that they are concerned about. They may state that a crosswalk or a stop light would be beneficial for preventing crashes in a particular area. They are often concerned about pedestrian and bike safety, as they notice these types of crashes are happening regularly. Distractions while driving are common hot topics, such as driving and texting. Events are conducted throughout the county with an emphasis on equity priority areas. For a list of events, see **Table B-1**.

APPENDIX B

Miami Dade County Vision Zero Outreach Summary

Vision Zero Outreach Strategies: Online

Project Specific Website

The Vision Zero page is part of the Miami-Dade County DTPW section of the miamidade.gov website. The outreach team provides updates to the DTPW marketing and communications team on a regular basis. The website is the central point for the community to gather information, participate in surveys, and find the latest information on the program and its countermeasures. The website also provides information in Spanish and Creole. The outreach team monitors the analytics provided by the DTPW communications team to make adjustments and track community response to the website.

Social Media

The outreach team prepares social media posts monthly for review by the communications team and other key DTPW personnel for posting. Posts include messaging, events, and calls for action. Additionally, partnering with Miami-Dade County Commissioners, the TPO, and the municipalities, the outreach team leverages social media to target communications to key stakeholders.

Online Surveying via Social Pinpoint

Two types of surveys (an <u>online map</u> and a <u>neighborhood survey</u>) were created to obtain community feedback about the public's personal experiences regarding walking, biking, taking transit or driving in Miami-Dade County. The neighborhood survey invites suggestions or improvements that residents would like to see in their neighborhood, and is available in-person at events and via Social Pinpoint, which is an interactive tool that captures, visualizes, and analyzes feedback directly from the community using interactive mapping and surveys. The online survey is translatable to any language using Google Translate. The second survey, an online Social Pinpoint map, encourages residents to add a "pin" to locations of concern.

APPENDIX B

Miami Dade County Vision Zero Outreach Summary

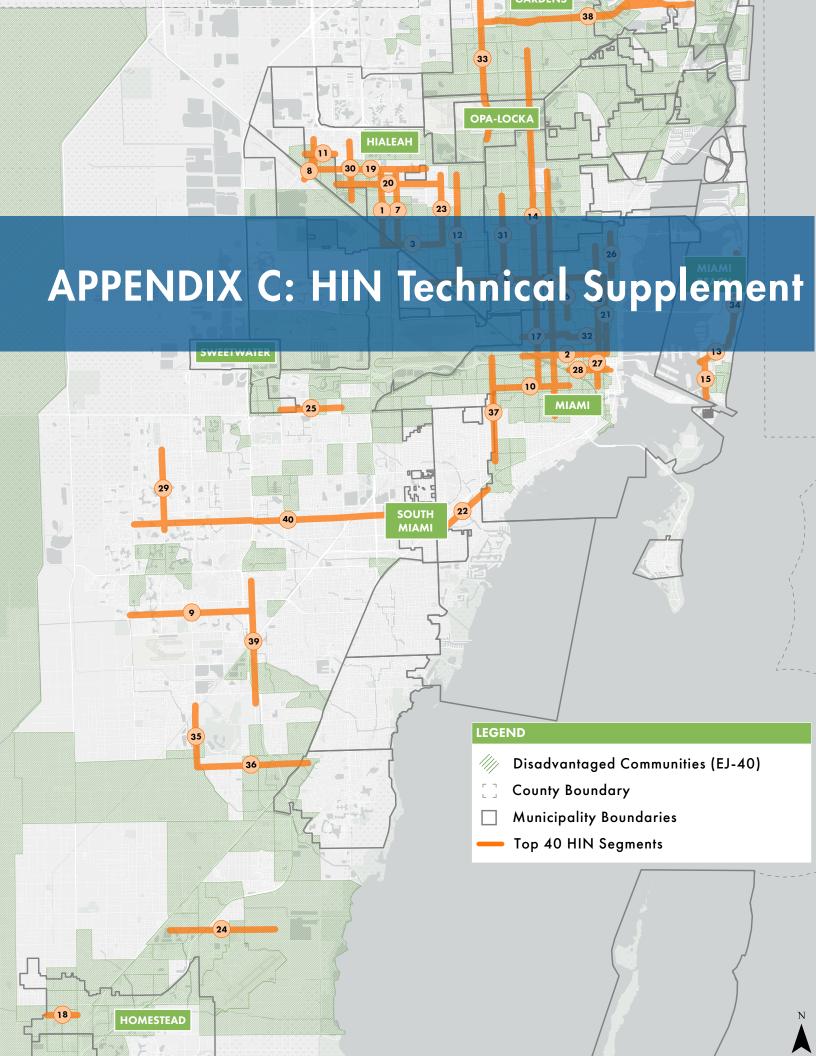
Table B-1: 2022-2023 Vision Zero Community Outreach Events

Event #	Date	Event	District
1	August 2022	Children's Trust Family Expo - North Miami-Dade	1
2	August 2022	Annual Joe A. Martinez Health and Safety Exposition	11
3	August 2022	Food Drive - Be Strong International	9
4	August 2022	DCA Back to School Giveaway & Popup Shop	1
5	August 2022	North Bay Village School Supply Drive	4
6	August 2022	Miami Kids Magazine Back to School	7
7	August 2022	Block Party, Back to School Community Fair	9
8	August 2022	N. Miami Beach Movies on the Lawn: Back to School Addition	1
9	August 2022	Campbell Drive K-8 Back to School Meet the Teacher Event	8
10	August 2022	Civic Center Metrorail Station	3
11	August 2022	Allapattah Metrorail Station	3
12	August 2022	Palmetoo/Medley Metrorail Station	12
13	August 2022	Northside Metrorail Station	2
14	August 2022	Miami Beach City Hall	5
15	August 2022	Tri-Rail Transfer Station	13
16	August 2022	Hialeah Marketplace Metrorail Station	13
17	August 2022	Government Center Metrorail Station	5
18	August 2022	Brickell Metrorail Station	5
19	August 2022	Miami Dade College Homestead Campus	8
20	August 2022	Okeechobee Metrorail Station	6
21	August 2022	Miami International Airport	6
22	August 2022	University Metrorail Station	7
23	August 2022	Dadeland North Metrorail Station	7
24	August 2022	Miami-Dade College West Campus	12
25	August 2022	Aventura Mall Transit Station	4
26	August 2022	Panther Station	10
27	August 2022	West Dade Regional Library in Westchester	10
28	August 2022	West Kendall Toyota	
29	October 2022	GO Miami-Dade Mobility Week	
30	November 2022	Miami-Dade College West Campus - Safety Day	12
31	November 2022	NAVRA Event	12
32	January 2023	Miami-Dade College Kendall Campus - Pop Up Event	8
33	February 2023	Miami-Dade College Medical Campus - Community Health Fair	3
34	February 2023	Bike Ride Event - Gibson Park	3

VISION ZERO IN MIAMI-DADE COUNTY

Miami Dade County Vision Zero Outreach Summary

Event #	Date	Event	District
35	February 2023	Zoo Miami Rodeo Event	9
36	March 2023	Biscayne Everglades Greenway Inaugural Ride Event	8
37	March 2023	Bike Ride 305	2
38	March 2023	Miami-Dade County at the People Matter Fest	2
39	April 2023	Miami Kids Magazine Easter Event	7
40	April 2023	City of Hialeah Easter Eggventure	13
41	May 2023	Be the Change South Florida	8
42	August 2023	Miami Kids Magazine Back to School Event	7
43	August 2023	Back to School Resource Fair	3
44	September 2023	Miami Kids Magazine Fall Event	7
45	September 2023	Miami Lakes Bike Rodeo/Transportation Outreach Event	12
46	September 2023	MDC Medical Campus Public Safety Day 2023	3
47	September 2023	MDC North Campus Public Safety Day 2023	2
48	October 2023	Miami Kids Magazine Halloween Event	7
49	November 2023	Miami Dade County Book Fair Street Festival - World Day of Remembrance (WDoR) Event	5
50	November 2023	Tabling Event – Post WDoR @ Stephen P. Clark (Government Center)	5
51	November 2023	Tabling Event – Post WDoR @ Stephen P. Clark (Government Center)	5
52	November 2023	Tabling Event – Post WDoR @ Stephen P. Clark (Government Center)	5
53	November 2023	Tabling Event - Allapattah Branch Library	3
54	December 2023	Miami Kids Magazine Christmas Parade Event	7
55	December 2023	Tabling Event - Model City Branch Library	3



HIN Technical Supplement

Data Sets Used

- 1. Reported Killed or Serious Injury (KSI) crashes in Miami-Dade County from January 1, 2018 through December 31, 2022.
- 2. Street Centerline geographic layer, maintained and created by Miami-Dade County.

Crash Data Cleaning

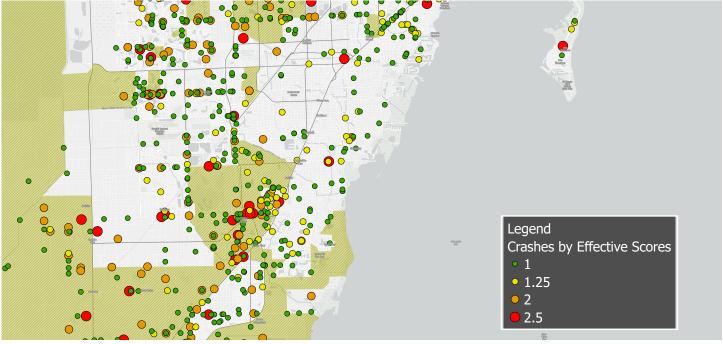
- Crashes were downloaded on February 8, 2023 from Signal 4 Analytics, a web-based system developed by and hosted at the University of Florida Geoplan Center.
- Downloaded crashes were provided in a comma-delimited format, with latitude, longitude, and a qualitative description of the crash location, as reported by officials present at the scene.
- Using ArcGIS Pro and Microsoft Excel, the project team:
 - Narrowed the roadway type to include only county, local, and other roadways (excluding FDOT roadways).
 - Identified and removed outlying crash points that did not have any other identifying location factors.
 - In some instances, the crash latitude and longitude was missing. This was added if adequate supplemental information was available (e.g., crash coded as an intersection crash, and cross streets were provided).
- Below is a summary of the number of crashes in the cleaned dataset:
 - 7,314 Crashes: Reported KSI Crashes in Miami-Dade County on all roads for the 5-year study period, originally downloaded from S4 Analytics website.
 - 3,968 Crashes: Number of crashes once data set was narrowed to county/local/other roadway types using Microsoft Excel, eliminating interstate, state, parking lot, private road, etc.
 - 3,934 Crashes: Crashes assigned a latitude/longitude if supplemental data was available. Crashes assigned previously as "other" were assigned to local or county based on available data. Crashes without reliable location data (latitude/longitude and/or nearby address information) were eliminated.
 - 2,512 Crashes: The project team completed a second analysis to eliminate state road crashes which were originally improperly coded as local or county road crashes in the S4 database. The "select by nearest function" in ArcGIS Pro was used to verify and remove remaining crashes that were mistakenly placed on state roadways. These selections were verified by review of the reported cross street locations.
 - 2,505 Crashes: The project team completed a manual Quality Control (QC) of the data to eliminate any remaining miscoded crashes (e.g. crashes on interchanges over local roadways or loop ramps to/from state roadways that ended up originally coded as local roadway crashes).

HIN Technical Supplement

Assigning Crash Weights

- The project team selected factoring weights and categories based on a review of the HIN development in peer cities and counties, and direction from the Action Plan's Technical Committee.
- The project team developed weights for relevant safety factors, including:
 - Weighting bicycle and pedestrian crashes by 1.25.
 - Weighting fatal crashes by 2.
- The weights assigned to the 2,505 crash points throughout the county varied based on whether the given crash event satisfied one or more of the above factors (i.e. a bicycle or pedestrian fatal crash would receive the greatest weight, at 2.5). This scaled crash score was called an **Effective Crash**.
- After approval of the weights from the Vision Zero Technical Committee, these weights were applied to the 2,505 crash points throughout the county, yielding 3,194 Effective Crashes (see Figure C1 below).

Figure C1: Screenshot of Crash Points with Effective Scores Colored



Crash Weights:

- Severe Automobile Crash Weight: 1 (1,557 of 2,505 crashes)
- Severe Bicycle/Pedestrian Crash Weight: 1.25 (450 of 2,505 crashes)
- Fatal Automobile Crash Weight: 2 (341 of 2,505 crashes)
- Fatal Bicycle/Pedestrian Crash Weight: 2.5 (157 of 2,505 crashes)

HIN Technical Supplement

Calculating Segment Crash Rates and Developing the HIN

- Centerline segments were buffered by 50 feet in ArcGIS Pro to effectively capture crash points along that roadway. This technique also ensured that crashes were counted for all roadways at intersections.
- With crash points scaled by their respective weight and assigned to segments, HIN development involved tweaking two attributes:
 - Minimum HIN Segment Length: Smaller segments in the Miami-Dade County Centerline dataset (which includes
 a total of 9,402.9 centerline miles) were combined into longer corridors and crash rates were subsequently
 evaluated based on the crash history of the total segment. Increasing the minimum segment length caused
 short corridors with higher rates of Effective Crashes to be eliminated from inclusion in the HIN. This effort
 involved the discretion of the project team to determine trade-offs to capture the "worst" segments and develop
 a representative and prioritized HIN.
 - Percent of Effective Crashes Captured in HIN: This value was used to determine the extent of segments that were highlighted for HIN inclusion. For example, seeking to capture a greater share of the 3,194 Effective Crashes would lead to a larger HIN being developed.
- The project team originally tested not filtering any segments by length. **Figure C2** shows that the original HIN with no length filtering was not usable, because a short segment with a low absolute volume of crashes was found to generate a disproportionately high crash rate.

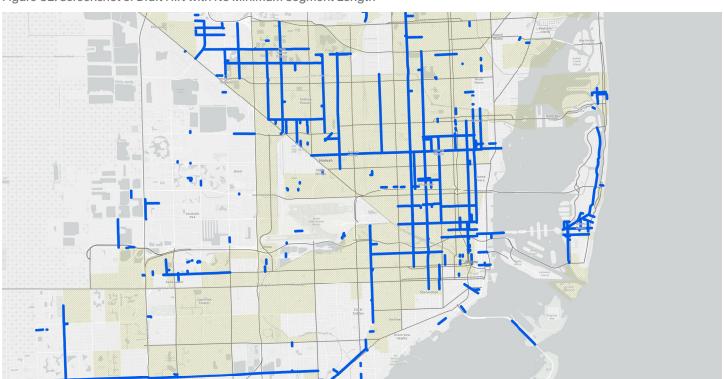


Figure C2: Screenshot of Draft HIN with No Minimum Segment Length

HIN Technical Supplement

- From here, crash rates were calculated for the remaining segments, totaling 5,135.5 miles in length. Since only county and local roadways were being analyzed, the length value was compared to the total Miami-Dade County roadway network length (excluding state roads) of 8,754.2 miles.
- Next, these were tabulated by descending rate of Effective Crashes per mile, then sorted to capture 25% of
 Effective Crashes on segments, working backwards to obtain the percent of local/county road centerline miles
 captured. It should be noted that because of crashes being double counted at intersections, the total number of
 Effective Crashes captured in segments ended up being higher than 3,194.
- The final *draft* HIN ended up representing 24.98% Effective Crashes on 1.07% of Miami-Dade County county/local road length (see **Figure C3**).

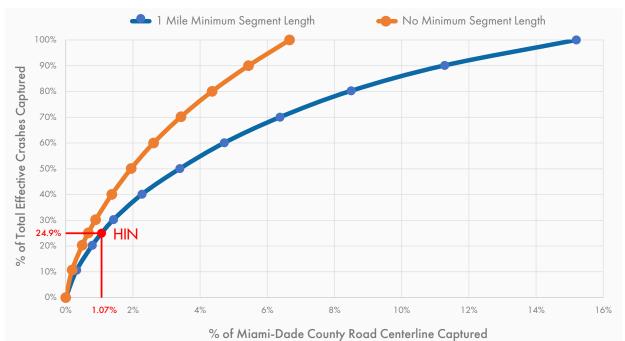


Figure C3: Effective Crashes Captured vs. HIN Road Centerline with Different Minimum Segment Lengths

Manual Adjustment of HIN

- Quantitative, replicable analysis was done up to this point, with the understanding that the network would undergo a final qualitative analysis to deliver a final HIN.
- Using engineering judgment, fragmented corridors were combined into a continuous HIN and unnecessarily long
 corridors were trimmed. This was done to ensure the HIN was manageable when advancing into project delivery.
- All classes of roadway were re-introduced into the analysis to calculate a total breakdown of share of Miami-Dade County road centerline length.
- The final HIN ended up being 31.2% of Effective Crashes on 1.2% of total county centerline miles, with a total of 40 corridors included. As shown in **Table C1** below, a large portion of the HIN is located on major, arterial roadways.

HIN Technical Supplement

Table C1: Breakdown of MDC and HIN Roadway Classification

Miami-Dade	County Roadway Class	Share of Miami-Dade County Roadways	Miami-Dade County Roadway % Captured on HIN	Share of HIN
0	Expressway Ramp	2.5%	0%	0%
1	Expressway	3.1%	0%	0%
2	Highway	3.8%	0%	0%
3	Major Road	10.3%	1.10%	92%
4	Feeder Road	5.5%	0.02%	2%
5	Minor Road	62.5%	0.07%	6 %
6	Alley	0.2%	0%	0%
7	Non-Paved	5.3%	0%	0%
8	Driveway	4.5%	0%	0%
9	New Subdivision	2.3%	0%	0%

Miami-Dade County roadway classes 3, 4 and 5 (highlighted above) were those considered in the local and county HIN analysis.



MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION & PUBLIC WORK

SPONSOR



Crash Statistics by Municipality

Table D-1: KSI Crash Contributing Factors by Municipality

Killed or Serious Injury (KSI) Involved Crash Percentage is Higher¹ than Overall Miami-Dade County Percentage

Municipality ²	Total Crashes	Aggressive Driving KSI Involved %	Alcohol-Related KSI Involved %	Drug-Related KSI Involved %	Speeding KSI Involved %	Aging Driver KSI Involved %	Teenage Driver KSI Involved %	Distracted Driver KSI Involved %
Overall Miami- Dade County	2505	7.6%	3.6%	1.0%	4.1%	18.5%	11.8%	6.9%
Aventura	17	5.9%	5.9%	0.0%	5.9%	29.4%	11.8%	23.5%
Bay Harbor Islands	2	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Coral Gables	79	2.5%	6.3%	1.3%	1.3%	22.8%	10.1%	24.1%
Doral	41	4.9%	2.4%	2.4%	4.9%	2.4%	12.2%	7.3%
El Portal	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Florida City	30	13.3%	6.7%	0.0%	3.3%	6.7%	23.3%	6.7%
Golden Beach	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hialeah	309	4.5%	2.6%	1.3%	3.2%	26.9%	12.0%	1.6%
Hialeah Gardens	15	13.3%	6.7%	0.0%	13.3%	20.0%	6.7%	6.7%
Homestead	48	10.4%	2.1%	0.0%	8.3%	14.6%	20.8%	10.4%
Key Biscayne	2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%
Medley	15	6.7%	0.0%	0.0%	6.7%	13.3%	0.0%	20.0%
Miami	486	5.6%	2.7%	0.8%	2.5%	11.7%	7.4%	2.9%
Miami Beach	108	8.3%	6.5%	0.0%	5.6%	11.1%	1.9%	10.2%
Miami Gardens	124	25.8%	1.6%	1.6%	16.9%	12.1%	12.9%	14.5%
Miami Lakes	2	50.0%	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%
Miami Shores	8	12.5%	0.0%	0.0%	12.5%	12.5%	0.0%	0.0%
Miami Springs	9	11.1%	0.0%	0.0%	11.1%	44.4%	22.2%	0.0%
North Miami	20	5.0%	10.0%	0.0%	5.0%	15.0%	10.0%	0.0%

¹ Percentages are rounded to the nearest whole number; values higher than the overall Miami-Dade County rate pre-rounding were highlighted in red.

² Crashes attributed to Unincorporated Miami-Dade County and those where the police report was blank or incomplete were not included in this analysis.



Crash Statistics by Municipality

Table D-1: KSI Crash Contributing Factors by Municipality

Killed or Serious Injury (KSI) Involved Crash Percentage is Higher¹ than Overall Miami-Dade County Percentage

Municipality ²	Total Crashes	Aggressive Driving KSI Involved %	Alcohol-Related KSI Involved %	Drug-Related KSI Involved %	Speeding KSI Involved %	Aging Driver KSI Involved %	Teenage Driver KSI Involved %	Distracted Driver KSI Involved %
Overall Miami- Dade County	2505	7.6%	3.6%	1.0%	4.1%	18.5%	11.8%	6.9%
North Miami Beach	29	0.0%	0.0%	3.4%	0.0%	17.2%	3.4%	6.9%
Opa-Locka	21	28.6%	9.5%	4.8%	28.6%	9.5%	9.5%	14.3%
Palmetto Bay	21	0.0%	0.0%	0.0%	0.0%	23.8%	4.8%	4.8%
Pinecrest	8	0.0%	0.0%	0.0%	0.0%	37.5%	12.5%	0.0%
South Miami	7	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%
Surfside	2	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%
Sweetwater	15	13.3%	0.0%	0.0%	0.0%	20.0%	6.7%	6.7%
West Miami	2	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%

² Crashes attributed to Unincorporated Miami-Dade County and those where the police report was blank or incomplete were not included in this analysis.



¹ Percentages are rounded to the nearest whole number; values higher than the overall Miami-Dade County rate pre-rounding were highlighted in red.

Crash Statistics by Municipality

Table D-2: KSI Crashes by Day of the Week

Daily Percent Breakdown Higher¹ than Overall Miami-Dade County Breakdown

	T.IC.I			Daily	Percent Break	down		
Municipality ²	Total Crashes	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Overall Miami-Dade County	2505	15.2%	15.0%	12.8%	13.8%	13.4%	15.5%	14.3%
Aventura	17	0.0%	11.8%	11.8%	5.9%	23.5%	29.4%	17.6%
Bay Harbor Islands	2	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%
Coral Gables	79	11.4%	16.5%	21.5%	20.3%	8.9%	16.5%	5.1%
Doral	41	4.9%	29.3%	4.9%	12.2%	9.8%	14.6%	24.4%
El Portal	1	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Florida City	30	23.3%	10.0%	6.7%	16.7%	13.3%	10.0%	20.0%
Golden Beach	1	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Hialeah	309	10.4%	16.8%	18.4%	10.4%	14.9%	16.5%	12.6%
Hialeah Gardens	15	13.3%	6.7%	0.0%	0.0%	6.7%	26.7%	46.7%
Homestead	48	20.8%	10.4%	10.4%	12.5%	10.4%	20.8%	14.6%
Key Biscayne	2	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Medley	15	6.7%	20.0%	6.7%	26.7%	26.7%	6.7%	6.7%
Miami	486	18.3%	15.0%	12.6%	15.4%	12.1%	14.2%	12.3%
Miami Beach	108	13.0%	13.9%	13.0%	13.9%	11.1%	23.1%	12.0%
Miami Gardens	124	13.7%	13.7%	16.9%	11.3%	16.9%	14.5%	12.9%
Miami Lakes	2	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%
Miami Shores	8	12.5%	50.0%	0.0%	0.0%	0.0%	12.5%	25.0%
Miami Springs	9	11.1%	11.1%	33.3%	0.0%	11.1%	33.3%	0.0%
North Miami	20	20.0%	15.0%	10.0%	25.0%	5.0%	5.0%	20.0%

¹ Percentages are rounded to the nearest whole number; values higher than the overall Miami-Dade County rate pre-rounding were highlighted in red.

² Crashes attributed to Unincorporated Miami-Dade County and those where the police report was blank or incomplete were not included in this analysis.



Crash Statistics by Municipality

Table D-2: KSI Crashes by Day of the Week

Daily Percent Breakdown Higher¹ than Overall Miami-Dade County Breakdown

AA	Tulcul	Daily Percent Breakdown						
Municipality ²	Total Crashes	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Overall Miami-Dade County	2505	15.2%	15.0%	12.8%	13.8%	13.4%	15.5%	14.3%
North Miami Beach	29	6.9%	27.6%	10.3%	10.3%	13.8%	10.3%	20.7%
Opa-Locka	21	14.3%	19.0%	28.6%	9.5%	0.0%	23.8%	4.8%
Palmetto Bay	21	14.3%	14.3%	9.5%	14.3%	4.8%	19.0%	23.8%
Pinecrest	8	12.5%	37.5%	12.5%	0.0%	25.0%	0.0%	12.5%
South Miami	7	28.6%	14.3%	14.3%	14.3%	0.0%	14.3%	14.3%
Surfside	2	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%
Sweetwater	15	26.7%	13.3%	6.7%	6.7%	20.0%	20.0%	6.7%
West Miami	2	50.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%

² Crashes attributed to Unincorporated Miami-Dade County and those where the police report was blank or incomplete were not included in this analysis.



¹ Percentages are rounded to the nearest whole number; values higher than the overall Miami-Dade County rate pre-rounding were highlighted in red.

Crash Statistics by MunicipalityTable D-3: Miami-Dade County Municipal Planning Zones Reference Table

Municipality ¹	Planning Zone
Aventura	Beach
Bay Harbor Islands	Beach
Golden Beach	Beach
Miami Beach	Beach
North Miami Beach	Beach
Surfside	Beach
Bal Harbour	Beach
Indian Creek Village	Beach
North Bay Village	Beach
Sunny Isles Beach	Beach
Key Biscayne	CBD
Miami	CBD
Coral Gables	Central
Miami Springs	Central
South Miami	Central
West Miami	Central
Virginia Gardens	Central
El Portal	North
Miami Gardens	North
Miami Shores	North
North Miami	North
Opa-locka	North
Biscayne Park	North
Doral	Northwest
Hialeah	Northwest
Hialeah Gardens	Northwest
Medley	Northwest
Miami Lakes	Northwest
Sweetwater	Northwest
Florida City	South
Homestead	South
Palmetto Bay	South
Pinecrest	South
Cutler Bay	South

Table D-4: Crashes by Planning Zone

Planning Zone	KSI Crash #
Beach	159
CBD	488
Central	97
North	174
Northwest	397
South	107

Notes

¹ Crashes attributed to Unincorporated Miami-Dade County and those where the police report was blank or incomplete were not included in this analysis.



Figure D-1: KSI Crashes by Hour in Beach Planning Zone

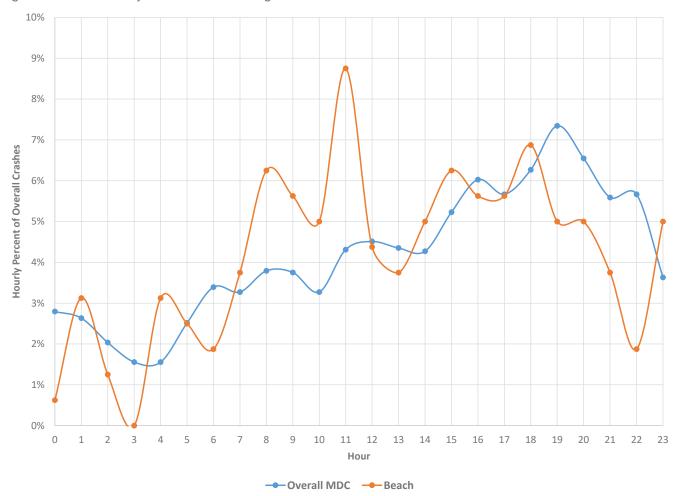




Figure D-2: KSI Crashes by Hour in CBD Planning Zone





Figure D-3: KSI Crashes by Hour in Central Planning Zone

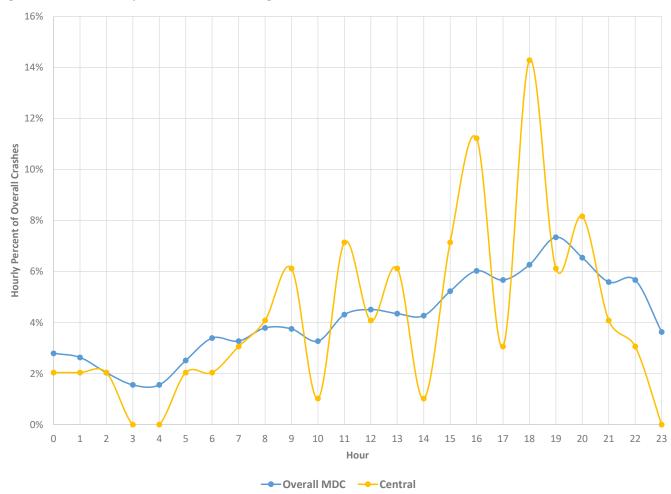




Figure D-4: KSI Crashes by Hour in North Planning Zone

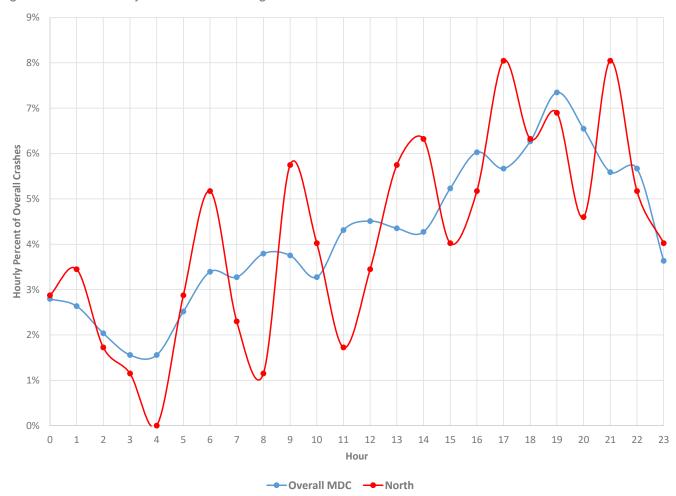
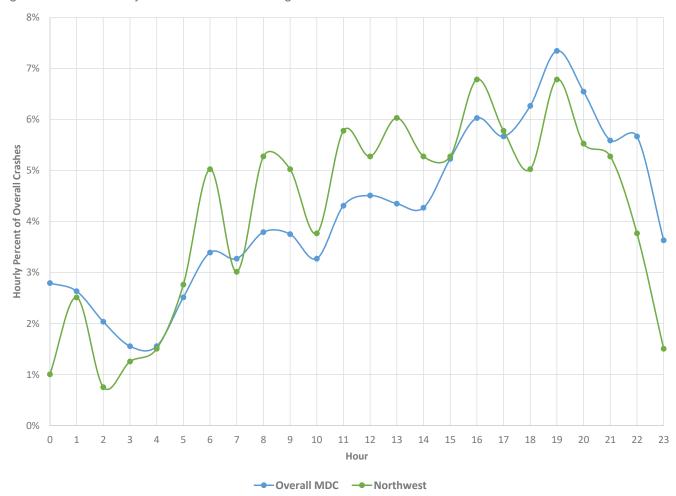




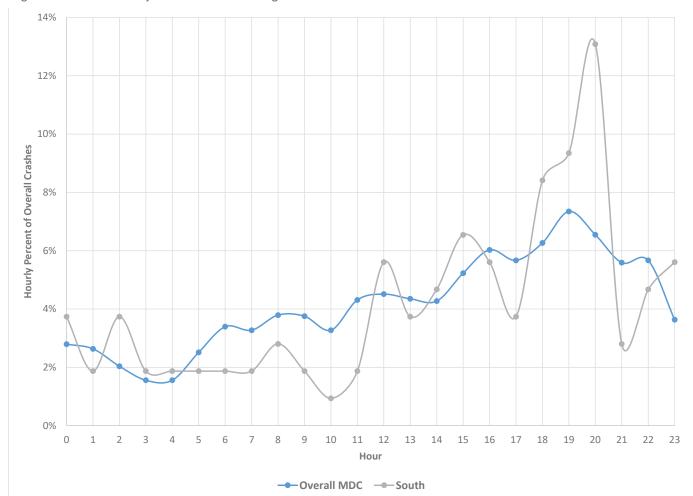
Figure D-5: KSI Crashes by Hour in Northwest Planning Zone



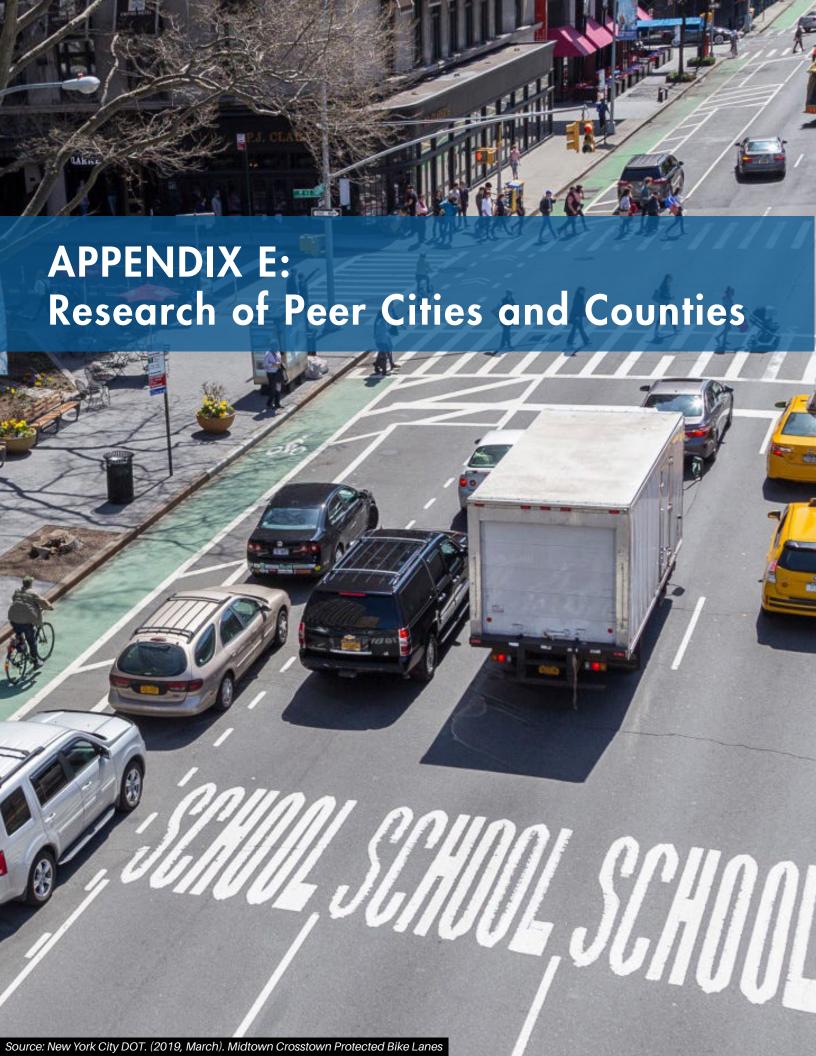


Crash Statistics by Municipality

Figure D-6: KSI Crashes by Hour in South Planning Zone







APPENDIX E

Research of Peer Cities and Counties

Peer cities/counties were selected to inform key milestones in Miami-Dade County's Vision Zero Action Plan development, such as establishing the HIN network and organizing KPIs.

The methodology for selecting peer cities/counties included:

- Those of similar population size
- Those with a similar sized transportation network
- Those considered peers through affiliations such as National Association of City Transportation Officials (NACTO)
- Those with demonstrated program success and those with consistent tracking towards Vision Zero progress

Peer city/county Action Plans shared critical similarities in structure, commitment, use of KPls and data-driven progress tracking. A number of peer city KPls, including Portland, San Francisco, Philadelphia, and Denver followed Miami-Dade County's chosen approach of organizing action areas by a tailored Safe System Approach (safe streets, safe people, safe vehicles, safety data, etc.). Transparency, accountability, and leadership commitments were related KPI themes. Hillsborough County took a more aspirational approach, organizing Action Plan goals by the major themes of: Paint Saves Lives; One Message, Many Voices; Consistent & Fair, and The Future Will Not Be Like the Past.

DTPW plans to continue coordination with Peer Cities, through NACTO meetings and conferences, to ensure ongoing collaboration and best practices.

Vision Zero Community Outreach Best Practices

Given the strong emphasis on culture change and education in Vision Zero, Miami-Dade County investigated best practices from two cities (Portland, OR and Seattle, WA) with an outstanding track record of context-sensitive community outreach.

PORTLAND

"PBOT will utilize the Two-Year Transportation Justice Partnership program to share the dashboard with community members twice a year (in-language and culturally relevant). Community-based organizations will share relevant trends with community members and help foster discussion about street safety."

Portland's community outreach approach shifted in 2021 with dissolving its Vision Zero Task Force and "moving to targeted action with specific partners and more transparent progress reporting." The city's renewed focus centers on Black, Indigenous, and People of Color (BIPOC)-centered education and outreach with cross-jurisdictional Safe System collaboration also prioritized. The city anticipates feedback gathered during this process will inform message and outreach materials development, in addition to supporting the vision for a future community grant program. Furthermore, the city plans to focus on automated enforcement outreach and the Vision Zero/Safe System dashboard (City of Portland Oregon, 2021).

APPENDIX E

Research of Peer Cities and Counties

SEATTLE

Seattle's community outreach approach aligns with the transportation equity framework, including engaging with the new (as of 2022) transportation equity work group. Projects are prioritized by the <u>racial and social equity index map</u>. The city's 2019 plan update highlighted the implementation of Vision Zero Street Teams. The 2022 "Top to Bottom Review" established 12 recommendations and five momentum-building actions to advance in 2023. Furthermore, the city placed an emphasis on community partnerships to achieve safety objectives, including working with Lyft on holiday and event-oriented promotions and King County, Commute Seattle and Cascade Bicycle Club (Seattle Department of Transportation, 2023).

Vision Zero Project Implementation Best Practices

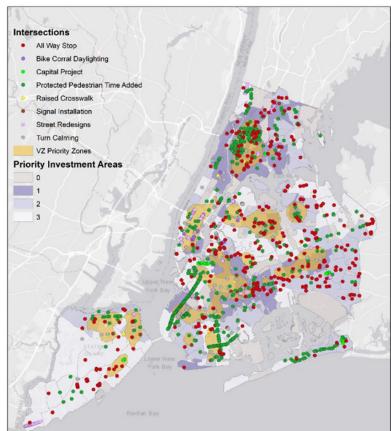
As DTPW continues to prioritize the implementation of safety projects countywide, New York City (NYC) stands out as a stellar peer city example of rapid, effective Vision Zero oriented project implementation.

NEW YORK

Vision Zero become an official NYC policy in 2014 and traffic fatalities have decreased by onethird since the year 2013. Given the prevalence of traffic injuries at intersections, NYC DOT announced a robust effort in 2022 to install safety enhancements at 1,000 intersections across the city and completed a full street safety toolkit (at over 1,200 intersections) before the end of the year (see Figure E1).

Previously, NYC focused investment on "Great Streets" - five major projects on roadways notorious for their high number of crashes and lack of pedestrian and bicyclist infrastructure. The current focus of NYC's Vision Zero toolkit deployment is on enhanced bicycle lane separation materials, launched in small scale tests throughout 2022 and 2023. These targeted implementation opportunities allow the city to evaluate the durability, winter functioning, and effectiveness of new separator types, opening the door for scaling the most effective options longer-term (NYC Vision Zero, 2022).

Figure E1: NYC Map of Intersection Improvements



Source: NYC Vision Zero. (2023). What We Are Going: Engineering.

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