Village of Wellington Vision Zero

Prepared for:

Village of Wellington

Submitted on: August 15th, 2024

THE VILLAGE OF WELLINGTON

50th ANNIVERSARY TJKM

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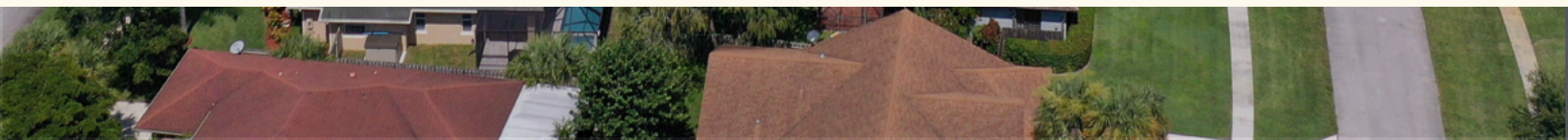

ACKNOWLEDGEMENT

The development of the Village of Wellington's Vision Zero Action Plan has been a collaborative endeavor, greatly benefiting from the involvement of a diverse group of stakeholders. The active participation of community members in the virtual community meetings has been crucial in ensuring the plan's comprehensiveness and responsiveness to the community's needs. We extend our heartfelt appreciation to these individuals for their invaluable input, which has played a vital role in successfully creating the Village of Wellington's Vision Zero Action Plan. We would also like to express our gratitude to the Village of Wellington staff and stakeholders for their contributions throughout this process. Their feedback has been instrumental in aligning the plan with local priorities, policies, and existing programs.

Note: Throughout this plan, reference to the "Village" refers to the Village of Wellington government.

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VISION ZERO TASK FORCE

Reaching the Vision Zero goal requires a strategic planning effort to build community consensus and regional political support. The development of the Village of Wellington's (VOW) Vision Zero Action Plan has been a collaborative endeavor, greatly benefiting from the involvement of a diverse group of stakeholders.

As part of Village's Vision Zero initiative, a multidisciplinary task force was convened to incorporate the unique perspectives of a variety of stakeholders and guide the development of the Action Plan. The active participation of community members in the in-person and virtual community meetings has been crucial in ensuring the plan's comprehensiveness and responsiveness to the community's needs. Their feedback has been instrumental in aligning the plan with local priorities, policies, and existing programs.

Task Force members include local government agencies and partner organizations, such as:

- Village of Wellington
- VOW Parks and Recreations Board Department
- VOW Emergency Management and Public Safety
- VOW Customer Service Department
- VOW Planning, Zoning, and Building Department
- VOW Public Works Department
- VOW Traffic Division
- Public Safety Committee
- District Four Safety Administrator
- Education Committee
- Planning, Zoning, and Adjustment Board (PZAB)
- PalmTran Connection (Paratransit)
- Transportation Disadvantaged Local Coordinating Board
- Palm Beach Transportation Planning Agency
- District Safety Office, Florida Department of Transportation
- VOW Community Services
- VOW Regional Medical Center
- Citizen of the Village of Wellington
- CycleFit Bicycles of Wellington
- Palm Beach County Sheriff's Office
- Palm Beach County Fire Rescue
- Palm Beach Transportation Planning Agency
- Facilities Management, School District of Palm Beach County
- Senior Advisory Committee Member
- Equestrian Preserve Committee Member

Every month, one person is killed or seriously injured on the Wellington's streets. On July 12th, 2022, the Village council issued a call to action by adopting a resolution and designated Wellington as a " Vision Zero Village", directing staff to create a Vision Zero Action Plan, establishing a goal of no incapacitating traffic injuries or fatalities by 2030; directing and authorizing the Village Manager to take all necessary actions to effectuate same; designating the public safety committee to provide recommendations; and providing an effective date.

To help reach this goal, the Village developed this Action Plan. The plan uses historic crash data to pinpoint the factors contributing to fatal and incapacitating injuries, and it identifies proven safety countermeasures and safety projects to address those factors through a safe system approach. Vision Zero is an international traffic safety philosophy that rejects the notion that traffic crashes are simply "accidents," but instead preventable incidents that can and must be systematically addressed. Through Vision Zero, the village and its partners are committed to working together, supported by a comprehensive data-driven process, to create safer streets and bring the number of people killed or seriously injured down to zero.

Through Vision Zero, the village approaches transportation safety differently – not only addressing spot improvements but taking a proactive, systemic, and comprehensive approach to our transportation environment.

Tackling such a complex challenge requires reaching across multiple disciplines, working together to evaluate data differently, and investing financial and staff resources in transportation safety.

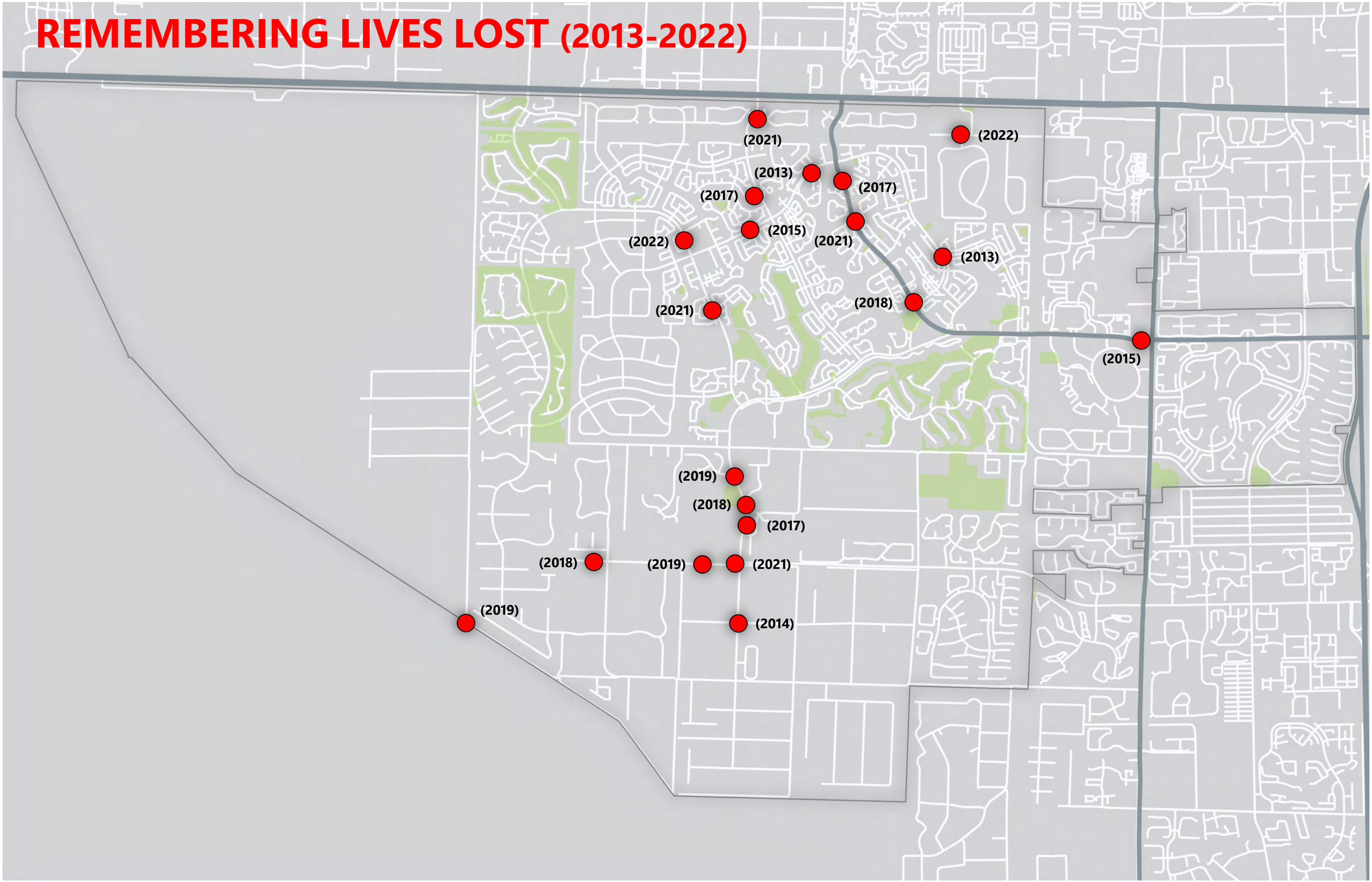
This report is dedicated to the

20 people who lost their lives

on Wellington streets over the **past ten years**.

Their loss reminds us that every life is precious and inspires us all to continue our efforts toward the vision of zero traffic deaths.

REMEMBERING LIVES LOST (2013-2022)



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LETTER FROM THE VILLAGE

To the residents of the Village of Wellington,

We believe that one traffic death is too many, so the Village of Wellington's Vision Zero Action Plan is essential to eliminate village-wide multimodal traffic fatalities and serious injuries. Through this plan, a goal is set to reduce fatalities and incapacitating injuries to zero. The Village believes that crashes can be prevented instead of just avoided, and we are committed to undertaking the complex tasks and investments that must be made to make this belief a reality.

We know the path to achieving Vision Zero is not smooth. It requires a fundamental and widespread commitment to a culture of safety that implements safer infrastructure and influences good driving behaviors in a way that speaks to everyone every time they get behind the wheel. Our robust Vision Zero Action Plan sets us on a course to achieve our shared goals, including safe streets for all.

Ensuring all users of Village roads – motorists, pedestrians, cyclists, schoolchildren, older people, and those with mobile impairments – have safe, comfortable, and easy access to their destinations is critical to a successful Action Plan, and the Village is dedicated to providing this to all Wellington's residents, employees, and visitors.

The goals and objectives in this Action Plan, based on quantitative data and inclusive and robust community outreach, will build upon previous Village commitments and investments to ensure optimal transportation safety.

With the Village Council's leadership, the Village Staff's hard work, and the community's input and feedback, this collaborative effort is a call to action for all who believe and want a safer Wellington for future generations. We look forward to your participation.

Sincerely,

Mayor & Village Manager

GLOSSARY

ACS- Abbreviation for American Community Survey: A U.S. Census survey that helps local officials, community leaders, and businesses understand the changes taking place in their communities.

ADT – Abbreviation for average daily traffic: Refers to vehicle traffic volumes.

ATP – Abbreviation for Active Transportation Plan.

BCR – Abbreviation for benefit-cost ratio: Indicator used to quantify project benefits about project costs.

CIP – Capital Improvement Plan

Crash Data – Information collected about crashes, including location, time, causes, and outcomes, is used to identify patterns and improve safety measures.

Crash Severity – Defined as the intensity of crashes typically in the following categories: fatal (Killed), incapacitating injury (incapacitating injury), non-incapacitating injury (other visible injury), and possible injury (complaint of pain), or property damage only (PDO). These are terms used in the report to address injury crashes.

Complete Streets: Streets designed and operated to enable safe, attractive, and comfortable access and travel for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

CRF – Abbreviation for crash reduction factor: The percentage of the expected effect of a countermeasure or safety project to decrease crashes.

Driver Behavior: Actions and reactions of drivers, which can impact road safety, such as speeding, distracted driving, or driving under the influence.

EMS – Abbreviation emergency medical services.

FHWA – Abbreviation for Federal Highway Administration: The federal agency responsible for managing the nation's highway system, including bridges and tunnels.

First Harmful Event – First event that resulted in injury, fatality, or property damage during a traffic crash.

High-Injury Network (HIN): A network of streets identified through crash data analysis as having the highest concentration of incapacitating and fatal traffic injuries.

KSI – Abbreviation for killed and severe injury crashes. Killed and severe injuries are similar to fatal and incapacitating injury crashes.

LRTP - Long Range Transportation Plan

Manner of Crash – It describes how the vehicles involved in the crash collided with each other or with other objects, which is the Type of Crash (e.g. Broadside, rear end)

MPOs - Metropolitan Planning Organizations

NHTSA – National Highway Traffic Safety Administration

Pedestrian Safety: Measures and design elements aimed at protecting pedestrians from traffic-related injuries and fatalities.

Primary Contributing Factor – Defined as contributing causes of crashes.

RTP - Regional Transportation Planning

RRFB - Abbreviation for Rectangular Rapid Flashing Beacon

Safe Routes to School (SRTS): Programs and infrastructure improvements designed to make it safer and easier for children to walk and bike to school.

SS4A – Abbreviation for Safe Streets and Roads for All. A federal funding program that provides $5 billion nationwide over five years (2022–2026) to help reduce roadway fatalities.

Traffic Fatality: A death resulting from injuries sustained in a motor vehicle crash.

Traffic Enforcement: Actions taken by law enforcement to ensure compliance with traffic laws, including issuing citations for speeding, running red lights, or other violations.

Vision Zero: A strategy to eliminate all traffic fatalities and incapacitating injuries, while increasing safe, healthy, and equitable mobility for all.

Walkability: The measure of how friendly an area is to walking, considering factors such as the presence of sidewalks, safety, and accessibility of destinations.

Zero Traffic Deaths: The ultimate goal of Vision Zero initiatives, is to eliminate fatalities caused by traffic crashes.

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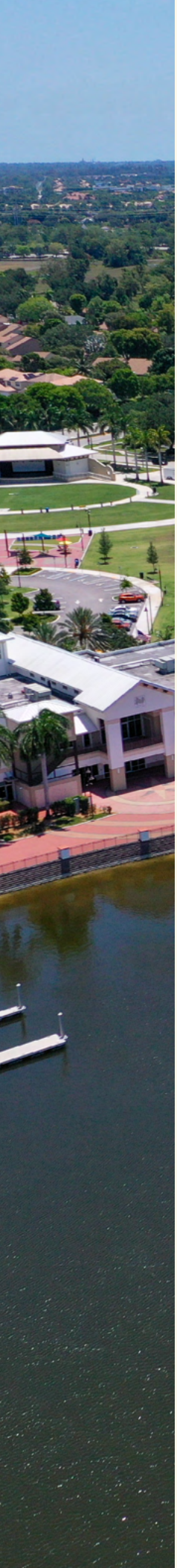
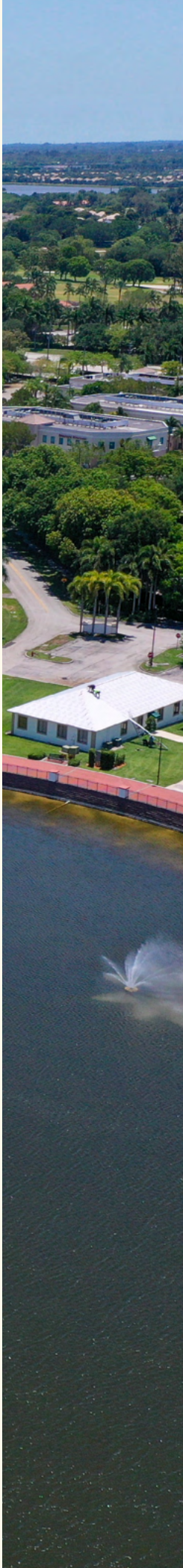


WHAT IS A VISION ZERO ACTION PLAN ?

A Vision Zero document serves as a roadmap for coordinating efforts across multiple sectors and stakeholders to create safer, more sustainable transportation systems and ultimately achieve the goal of zero traffic fatalities and incapacitating injuries. A Vision Zero document typically encompasses a comprehensive strategy to eliminate all traffic fatalities and incapacitating injuries while promoting safe, healthy, and equitable mobility for all road users. The specific contents of a Vision Zero document can vary depending on the jurisdiction and the goals of the initiative, but here are some common elements often included:

1. **Vision Statement:** A clear and concise statement outlining the ultimate goal of achieving zero traffic fatalities and incapacitating injuries within a specified timeframe.
2. **Policy Framework:** A set of guiding principles and policies that prioritize safety and promote a holistic approach to transportation planning, design, and operations.
3. **Data Analysis:** An analysis of crash data to identify high-risk areas, vulnerable road users, contributing factors, and trends in traffic crashes and injuries.
4. **Goals and Objectives:** Clear and measurable goals and objectives for reducing traffic fatalities and incapacitating injuries, often broken down by target groups, such as pedestrians, bicyclists, motorists, and public transit users.
5. **Strategies and Interventions:** Identifying and prioritizing specific strategies and interventions to improve safety, including engineering, enforcement, education, and evaluation measures. These may include road design improvements, speed management, targeted enforcement campaigns, public awareness campaigns, and policy changes.
6. **Action Plan:** A detailed plan outlining how each strategy and intervention will be implemented, including timelines, responsible agencies or departments, and funding sources.
7. **Performance Measurement:** Metrics and indicators to track progress towards safety goals, evaluate the effectiveness of implemented interventions, and adjust strategies as needed.
8. **Stakeholder Engagement:** Strategies for engaging with stakeholders, including government agencies, law enforcement, community organizations, advocacy groups, and the public, to ensure collaboration and support for Vision Zero initiatives.
9. **Evaluation and Continuous Improvement:** Mechanisms for evaluating the impact of Vision Zero interventions and making adjustments based on lessons learned and emerging best practices.



RESOLUTION NO. R2022-15

A RESOLUTION OF WELLINGTON, FLORIDA'S COUNCIL, TO DESIGNATE WELLINGTON AS A "VISION ZERO CITY", DIRECTING STAFF TO CREATE A VISION ZERO ACTION PLAN, ESTABLISHING A GOAL OF NO SEVERE TRAFFIC INJURIES OR FATALITIES BY 2030; DIRECTING AND AUTHORIZING THE VILLAGE MANAGER TO TAKE ALL NECESSARY ACTIONS TO EFFECTUATE SAME; DESIGNATING THE PUBLIC SAFETY COMMITTEE TO PROVIDE RECOMMENDATIONS; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the State of Florida is the most dangerous state for people walking, consistently ranking number 1 on the Pedestrian Danger Index by Smart Growth America, with the Miami-Fort Lauderdale-West Palm Beach urbanized area consistently ranking as one of the worst metropolitan areas in the country; and

WHEREAS, 176 people in Palm Beach County and 3,189 people statewide die annually on roadways; and

WHEREAS, Vision Zero starts with the ethical belief that everyone has the right to move safely in their communities, and that system designers and policy makers share the responsibility to ensure safe systems for travel; and

WHEREAS, death and serious injuries are not acceptable for citizens, commuters, guests, or others who live, work, or play in the Village of Wellington; and

WHEREAS, a key element of the Vision Zero system is to set a goal of no severe traffic injuries or fatalities by 2030, which can be achieved by reframing traffic fatalities as preventable; focusing on system failure; reducing the impact of collisions; adopting a safe system approach for vehicles, bicycles and pedestrians; data-driven decision making; and viewing road safety as a social equity issue; and

WHEREAS, a roadway system with frequent crashes causes travel delays, drains fiscal resources, and threatens the quality of life in Wellington as well as the reputation of Wellington as a desirable destination for future generations.

NOW, THEREFORE, BE IT RESOLVED BY WELLINGTON, FLORIDA'S COUNCIL that:

SECTION 1. The Wellington Council hereby establishes that the elimination of traffic fatalities and the reduction of serious injuries due to traffic accidents is a goal of the Village of Wellington.

SECTION 2. The Wellington Council hereby adopts Vision Zero as the policy for road and traffic safety in the Village of Wellington and directs that near and long-term traffic planning be based on Vision Zero principles.

SECTION 3: The Wellington Council directs staff to develop a Vision Zero Action Plan for achieving the goals of eliminating traffic fatalities and reducing serious injuries due to traffic crashes through the adoption of a safe system approach for vehicles, bicycles and pedestrians, equitable engineering, enforcement, education, data-driven decision making, and social equity considerations in road safety planning and implementation.

SECTION 4: The Wellington Council directs the Public Safety Committee to review, evaluate, and make recommendations to the Vision Zero Action Plan and related projects and plans to achieve the goals of eliminating traffic fatalities and reducing serious injuries due to traffic crashes.

SECTION 5: This Resolution shall become effective immediately upon adoption.

PASSED AND ADOPTED this 12th day of July 2022.

ATTEST:

By: _____
Chevelle Addie, Village Clerk

VILLAGE OF WELLINGTON

By: _____
Anne Gerwig, Village Mayor

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

By: _____
Laurie Cohen, Village Attorney

SS4A REQUIREMENTS

For cities seeking funding to improve road safety through the Safe Streets and Roads for All (SS4A) grant program, developing a Vision Zero Action Plan is a critical first step. This plan serves two key purposes. First, it aligns the Village's goals with the SS4A program's core objective of achieving zero roadway deaths and serious injuries. Second, the Action Plan outlines a comprehensive strategy for achieving these goals, demonstrating to SS4A a clear and well-defined path for utilizing grant funding. This not only strengthens a Village's grant application but also ensures resources are targeted towards the most critical safety needs within the community. Establishing a data-driven Vision Zero Action Plan, cities can significantly increase their chances of securing SS4A grant funding and ultimately safer streets for all residents.

Action Plan Components	Page Number	Section
Leadership Commitment & Goal Setting	Page 4 & 24	• Vision Statement • Setting up a Task Force Team
Planning Structure	Page 31 & 34-41	• Introduction • Community Engagement • Data Collection & Analysis
Safety Analysis	Page 42 & 54	• Data-Driven Approach • Crash Profiles
Engagement and Collaboration	Page 34 & 41	• Community Engagement
Policy and Process Changes	Page 66 - 105	• Action Plan • Transportation Technology • Educational Programs • Traffic Enforcement Program • Vision Zero and General Plan Update
Strategy and Project Selections	Page 66 - 96	• Action Plan • Safety Projects
Progress and Transparency	Page 34, 38 & 115-117	• Project Website and Updates • Regular Task Force Meetings/Project Timeline • Monitoring Implementation
Action Plan Adoption Date	August 15, 2024	• August 15th, 2024

1. ABOUT VISION ZERO

What Is Vision Zero?

Vision Zero is a strategy to eliminate all traffic fatalities and incapacitating injuries, while increasing safe, healthy, equitable mobility for all.

Vision Zero is a heartfelt belief that no one should be killed or seriously injured while traveling along, across, or around our streets and roadways. Thinking of our own family and circle of friends, which of them would we be willing to experience their death or being seriously injured and perhaps forever maimed in a traffic crash? We would not want any of them to be seriously injured or killed, thus, for us, the only acceptable value is zero. Recognizing that anyone is someone's friend or family member, the idea that no one should be seriously injured or killed can, and should, be extended to everyone who travels.

VISION ZERO IS A SIGNIFICANT DEPARTURE FROM THE STATUS QUO IN SEVERAL WAYS:

Vision Zero acknowledges that traffic deaths and incapacitating injuries are preventable, and it sets a goal of eliminating them in an established time frame with clear, measurable strategies.

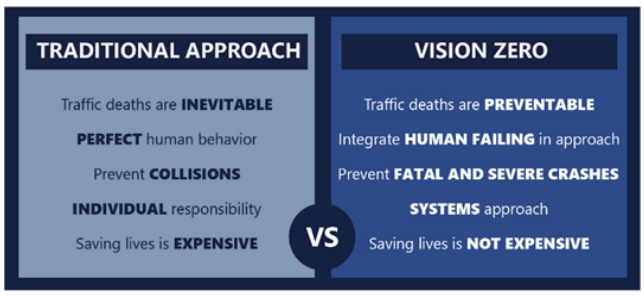
Vision Zero starts with the ethical belief that everyone has the right to move safely in their communities. In order to achieve a safe transportation system, it requires that everyone consider the system in its entirety.

Vision Zero believes that safe transportation systems and related policies should be designed to ensure that those inevitable mistakes do not result in result in life-altering injuries or death.

Vision Zero is a multidisciplinary approach that brings together a diverse set of stakeholders to address the complex problem of traffic safety.

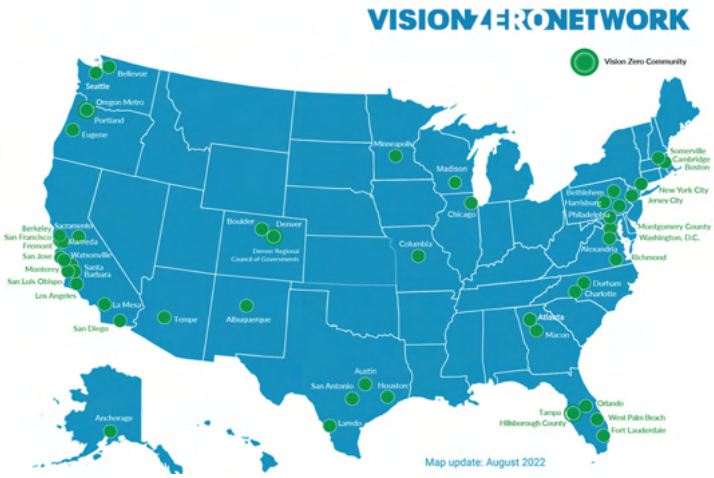
It acknowledges that there are many factors that contribute to safe mobility – including roadway design, speed, enforcement, behavior change, technology, and policies – and sets clear strategies to achieve the shared goal of zero fatalities and incapacitating injuries.

This is a fundamental shift from a traditional approach to traffic safety that accepts loss of live as inevitable and unpreventable. Vision Zero requires a comprehensive approach that seeks to achieve safe roads, safe speeds, safe vehicles, safe road users, and post-crash care.



Vision Zero began in Sweden in 1997, when the country's Parliament adopted a national transportation policy that "the long-term goal of traffic safety is that nobody shall be killed or seriously injured as a consequence of traffic crashes." Since 2014, Vision Zero has been building momentum in the United States. Starting with New York, Vision Zero policies have spread across American cities, adopted in places like Chicago, Seattle, San Francisco and Los Angeles. As of November 2020, the Vision Zero approach has been adopted by about 50 American cities. Early results are promising. In New York City, 2016 had the fewest traffic fatalities on record. Traffic deaths are down 30 percent since 2013, just before the City launched Vision Zero. The first three years of Vision Zero is the safest three-year period in New York City's history. The map below shows Vision Zero Communities in the county that have adopted Vision Zero.

Cities that have adopted Vision Zero



The Safe System approach requires a supporting safety culture that places **safety first and foremost in road system** investment decisions. **To achieve our zero deaths vision**, everyone must accept that fatal and incapacitating injury crashes are unacceptable and preventable.

SAFE SYSTEM APPROACH

Reaching zero deaths requires the implementation of a Safe System approach, which was founded on the principles that humans make mistakes and that human bodies have limited ability to tolerate crash impacts. In a Safe System, those mistakes should never lead to death. Applying the Safe System approach involves anticipating human mistakes by designing and managing road infrastructure to keep the risk of a mistake low. When a mistake leads to a crash, the impact on the human body doesn't result in a fatality or incapacitating injury. Road design and management should encourage safe speeds and manipulate appropriate crash angles to reduce injury severity. The chart below shows six principles of the Safe System Approach.

Six principles form the basis of the Safe System approach:

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

Committing zero traffic deaths means addressing all aspects of safety through the following five Safe System elements that, together, create a holistic approach with layers of protection for road users:

- **Safe Road Users -** The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.
- **Safe Vehicles -** Vehicles are designed and regulated to minimize the occurrence and severity of crashes using safety measures that incorporate the latest technology.
- **Safe Speeds -** Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.
- **Safe Roads -** Designing to accommodate human mistakes and injury tolerances can significantly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.
- **Post-Crash Care -** When a person is injured in a crash, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities. It can also include healthcare providers sharing anonymous emergency response data about collision victims that may not have been reported to law enforcement with local agencies that can help better identify collision trends, audiences for focused community engagement, or social needs like car seats and bicycle helmets.

The Safe System approach requires a **supporting safety** culture that places safety first and foremost in road system investment decisions. To achieve **our zero deaths vision,** everyone must accept that fatal and incapacitating injury collision.

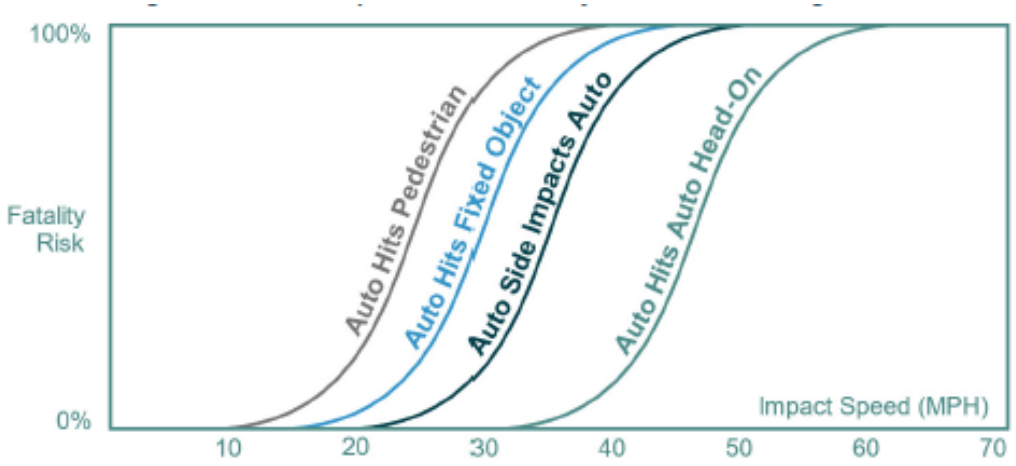
2. A CALL TO ACTION TO MAKE WELLINGTON'S STREETS SAFER

WHY DO WE NEED VISION ZERO?

12%
of all injury crashes in Village of Wellington are Fatal and Incapacitating Injuries.

In 2021, the estimated population of the Village of Wellington was 61,445[1]. Also, in 2021, there were 42,939 people killed in traffic crashes in the US, which is about two-thirds of the population of Wellington. If all of these fatalities happened at once in a single community, we would all be shocked and devastated and angry and demand that something be done in response. But, we as a society have become accustomed to this tragedy. We consider these horrific events inevitable side effects of our modern life. We call them "accidents", which is defined as "an unfortunate incident that happens unexpectedly and unintentionally, typically resulting in damage or injury" or, "an event that happens by chance or without apparent or deliberate cause." The term also implies that no one is at fault or is to blame, but in fact, the event may have been caused by unrecognized or unaddressed risks.

The more appropriate term is "crash" or "collision", which is the physical and violent interaction between an object moving at speed and another object, whether moving or stationary. It is an event of the laws of physics, and the human body is not designed to withstand the forces of crashes. We, unfortunately, have very good data from emergency rooms regarding the trauma that crash victims suffer and the likelihood of a person surviving the crash, given the speed of the crash. The graph below shows speed versus probability of crash being resulting in a death.



Speed vs. Probability of the Crash being resulting in a Death (Source: FHWA. Adapted from graphic created by Australian Roads and Traffic Authority of New South Wales.)

The significant loss of life exacts a tragic toll, extending beyond personal loss to profound community impacts, including personal economic costs and emotional trauma to those suffering, and significant taxpayer spending on emergency response and long-term healthcare costs. Because so many fear for their safety on our streets, there is no true freedom of mobility, and, as a result, we compromise our public health with increasing rates of sedentary diseases and higher carbon emissions.

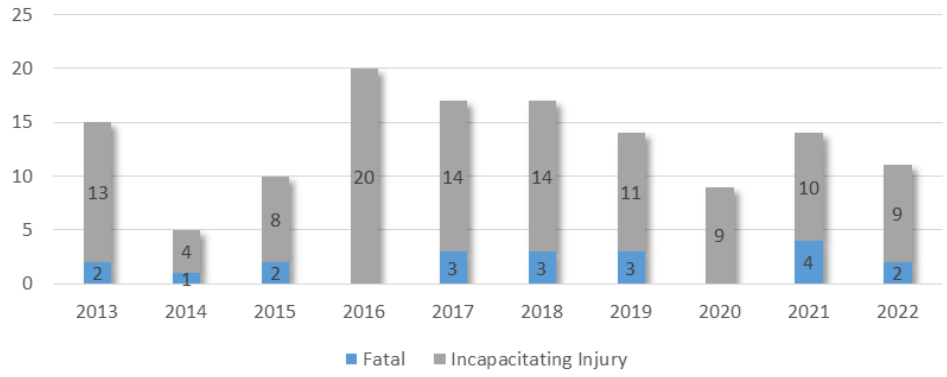
[1] US Census Quick Facts – Village of Wellington, Florida. https://www.census.gov/quickfacts/fact/table/wellingtonvillageflorida/PST045222#PST045222

In recent years, there has been a growing recognition that crashes are not just crashes but preventable incidents. Wellington has a significant and justifiable concern for the safety of all roadway users, with vulnerable users such as pedestrians and cyclists representing 16 percent of the fatal and incapacitating injury crashes and 84 percent of motor vehicle crashes. The list of victims includes residents from all corners of our Village and cuts across all boundaries – geographically and demographically. These injuries result in a tragic personal loss for family and friends and significantly impact the Village of Wellington community. The need for a comprehensive strategy to address this issue is underscored by the risk of fatal and incapacitating injury crashes at intersections and corridors.

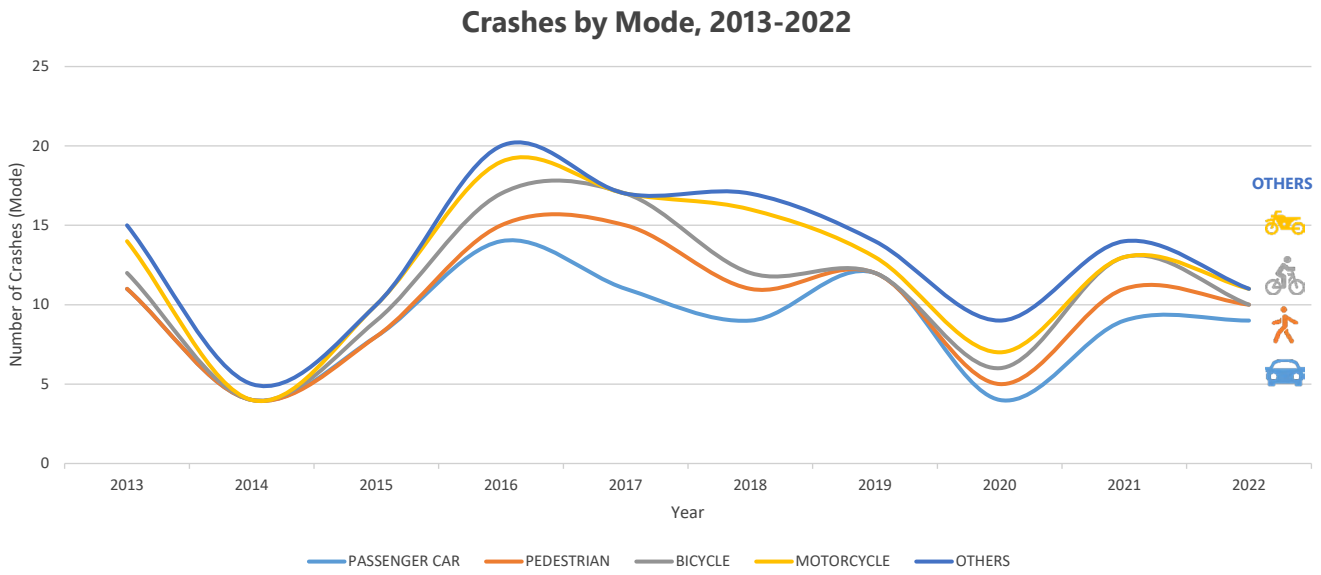
Between 2013 and 2022, the annual number of crashes in the Village of Wellington increased from 2016 to 2018, with a dip observed due to COVID-19 as shown in the graph below. During this period, crashes resulting in fatal or inacapacitating injuries decreased by eight percent in 2022. Hence, it has become crucial for the Village to protect all road users, including the most vulnerable users.

Although the total number of crashes in Wellington decreased in 2022, the number of fatal and incapacitating crashes remained steady, highlighting the need for a Vision Zero Action Plan. This plan will prioritize the safety of all roadway users by creating safe and livable streets, improving infrastructure, reducing speed limits, increasing public education and awareness, and enforcing traffic laws. By adopting Vision Zero, the Village of Wellington can create safer streets for everyone and reduce the number of fatal and incapacitating injuries from traffic crashes, as no loss of life is acceptable and these incidents are preventable. The graph below shows fatal and incapacitating injury crashes in the Village between 2013-2022.

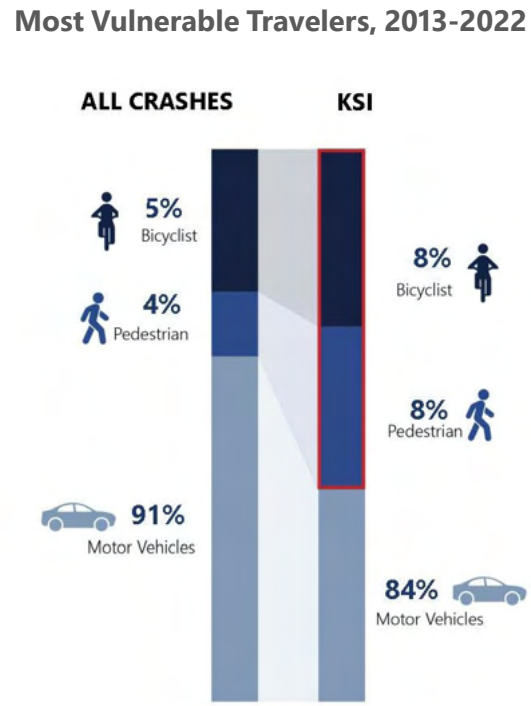
Fatal & Incapacitating Injury Crashes By Year (2013-2022)



The graph below illustrates the trends in incidents involving passenger cars, pedestrians, bicycles, motorcycles, and other modes of transportation from 2013 to 2022. For passenger cars, incidents decreased from 2013 to 2014, peaked around 2016, dropped significantly by 2018, and then fluctuated before rising again in 2021 and stabilizing in 2022. Pedestrian incidents followed a similar trend, peaking in 2016, dropping by 2018, and increasing in the subsequent years, stabilizing around 2021-2022. Bicycle incidents also showed a peak around 2016, followed by a decline and then fluctuations with a slight rise towards 2021-2022. Motorcycle incidents peaked in 2016, experienced a notable drop by 2018, and then fluctuated with an increase by 2021-2022. The "others" category also peaked around 2016, declined, and then rose and stabilized towards the end of the period. Overall, all categories exhibit a peak around 2016, a decline towards 2018, and a resurgence or stabilization towards 2021-2022. The graph below shows illustrated crashes by mode between 2013-2022.



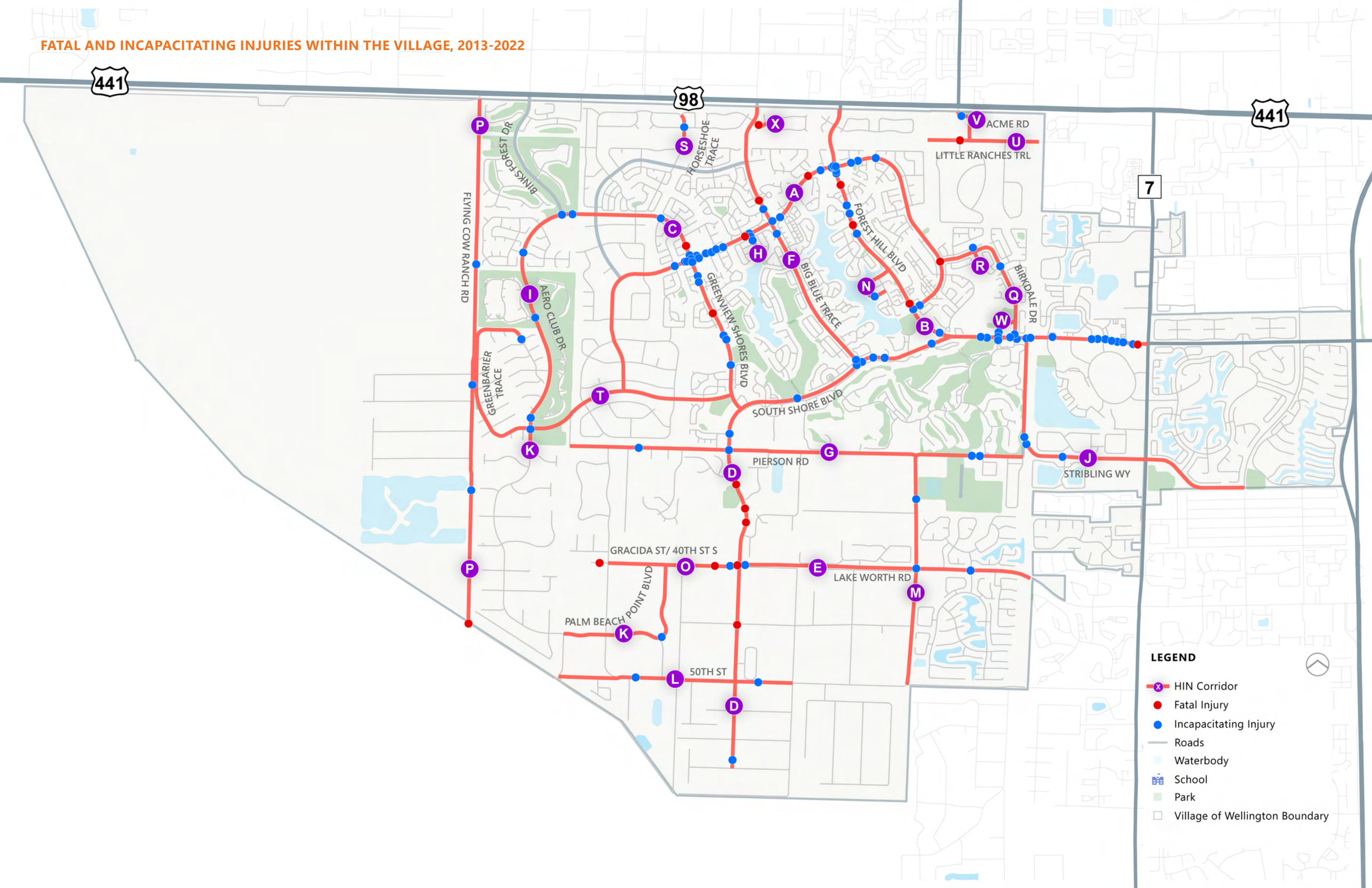
SHARE OF VICTIMS WHO WERE INVOLVED IN FATAL OR INCAPACITATING INJURY BY MODE



The graph on the left shows that pedestrian and bicycle crashes account for about 16 percent (21 crashes) of all fatal and incapacitating injury. While crashes involving vulnerable roadway users hold the strong majority, those in motor vehicles are victims as well. Even a crash between a cyclist and pedestrian can result in a fatality or incapacitating injury. The human body is not designed to withstand the forces of any crash, further affirming the need for improved road safety.

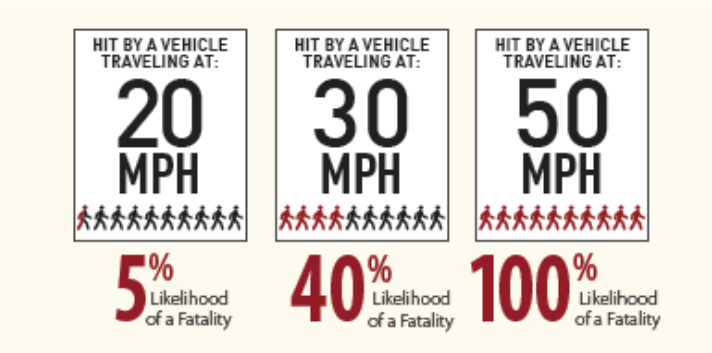
Pedestrians and bicyclists are involved in nine percent of all injury crashes but account for 16 percent of incapacitating injuries or fatalities.

FATAL AND INCAPACITATING INJURIES WITHIN THE VILLAGE, 2013-2022



SPEED KILLS

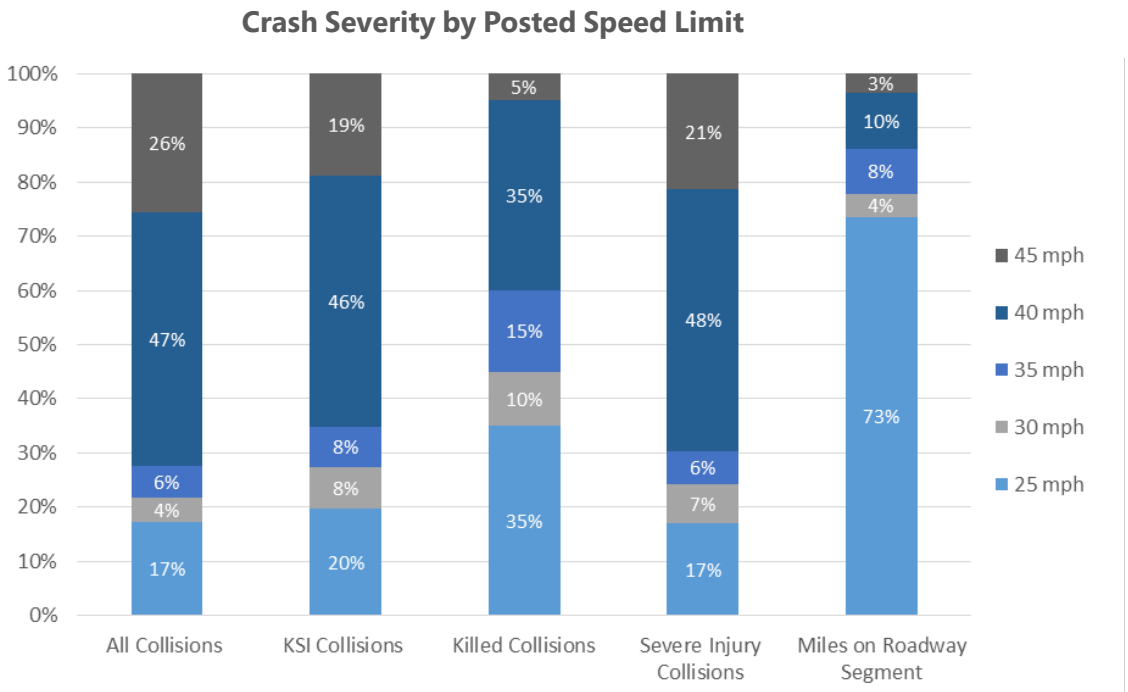
A significant component of Vision Zero is the recognition that speed kills. Research compiled by the U.S. Department of Transportation National Highway Traffic Safety Administration shows that the likelihood of fatality is 5 percent for a pedestrian struck by a vehicle traveling at 20 miles per hour, but the likelihood increases to 40 percent at 30 miles per hour and to 100 percent at 50 miles per hour. By designing our streets differently, we can lower the speeds at which vehicles travel to help reduce the severity of injuries. Street design changes, combined with public education and targeted enforcement efforts, have the potential to significantly reduce the number of people seriously injured or killed on Wellington's streets. The graph below illustrates crash severity by posted speed limit.



Unsafe speed is the leading cause of crashes, between 2013 and 2022,

65%

of KSI crashes occurred
on streets with posted speed limit of 40+ mph,
which account for just 13% of Village's street network.



3. VISION STATEMENT & GUIDING PRINCIPLES

The Vision Zero Task Force met in early 2024 to develop a vision statement and guiding principles to frame the development and implementation of the Vision Zero Action Plan. These principles form the foundation on which the Village will conduct its Vision Zero work.

VISION STATEMENT

Traffic safety impacts our community, neighborhoods, health, and Wellington's livability. No level of fatality or incapacitating injury is acceptable on our streets because crashes are preventable incidents that can be addressed through improved transportation infrastructure and programming. Villages Vision Zero is a community-driven and data-driven initiative to eliminate preventable traffic fatalities and serious injuries by 2030.

GUIDING PRINCIPLES

Vision Zero is guided by several key principles designed to create a transportation system where no fatalities or incapacitating injuries occur. Here are the Village's guiding principles of Vision Zero:

1. **Human Life and Health are Paramount:** The fundamental principle of Vision Zero is that human safety, life and health take priority over all other considerations in the transportation system. Safety is not just one of the goals but the primary objective. We will evaluate trade-offs and make both proactive and reactive decisions about street design based on this value.
2. **Traffic Deaths and Injuries are Preventable:** Vision Zero operates on the belief that traffic-related fatalities and incapacitating injuries are not accidents but preventable unacceptable incidents. By addressing the root causes, such as road design, vehicle technology, and user behavior, these incidents can be prevented.
3. **Human Error is Inevitable and Expected:** People will make mistakes. The transportation system should be designed to be forgiving and accommodate human error. Recognizing that people will make mistakes, the system should ensure that such errors do not result in incapacitating injuries or fatalities. We will not victim-blame but seek to understand and respond compassionately and objectively.
4. **Slower Streets are Safer Streets:** Mobility is the safe and efficient movement of people and goods through a transportation system. We will design, construct, and operate our streets for slower speeds to eliminate all fatal and incapacitating injury crashes and protect our most vulnerable street users.
5. **Safety is a Shared Responsibility:** Everyone involved in the transportation system, including policymakers, engineers, vehicle manufacturers, and road users, shares responsibility for safety. Collaboration across sectors and disciplines is essential to achieving Vision Zero goals.
6. **Systemic and Holistic Approach:** Vision Zero advocates for a comprehensive and systemic approach to road safety. This includes considering all aspects of the transportation system—road design, vehicle technology, laws and regulations, enforcement, and public education. It also requires a holistic approach to land use and transportation, including policy analysis and changes at the local and regional levels.
7. **Data-Driven Decision Making:** Effective Vision Zero strategies rely on accurate and comprehensive data to identify high-risk locations, behaviors, and populations. Data is used to prioritize interventions, allocate resources, and measure progress.

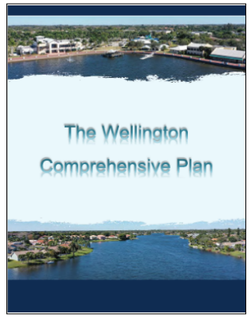
8. **Equity and Inclusivity:** Vision Zero emphasizes the importance of equity and inclusivity in transportation planning and safety efforts. Vulnerable road users, such as pedestrians, cyclists, children, older adults, and people with disabilities, should be given special consideration. Efforts should be made to ensure that all communities, especially those historically underserved, benefit from safety improvements.
9. **Proactive vs. Reactive Measures:** Vision Zero encourages proactive measures to prevent crashes before they occur, rather than reacting to incidents after they happen. Crash data reveals where the risk of being fatal and seriously injured in crashes has manifested. A proactive crash risk assessment identifies and prioritizes those locations where risk exists but crash experience has yet to materialize. This involves anticipating potential hazards and addressing them through design and policy.
10. **Sustainable and Healthy Communities:** Vision Zero aligns with broader goals of creating sustainable and healthy communities. Safe streets promote walking, cycling, and public transportation, contributing to public health, environmental sustainability, and overall quality of life.

Village's response will utilize proven safety countermeasures coupled with innovative strategies. We will perform annual monitoring, reporting, and evaluation through an equity lens. We will communicate clearly what resources are necessary to achieve Vision Zero, why street design modifications are proposed, and the basis for prioritizing competing improvements. By adhering to these guiding principles, Village aims to create a transportation system that prioritizes safety, reduces traffic-related fatalities and injuries to zero, and fosters a culture of shared responsibility and proactive prevention.

4. BACKGROUND & POLICIES

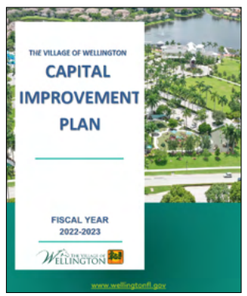
PLANS & POLICIES

THE WELLINGTON COMPREHENSIVE PLAN (2021)



The 2021 Comprehensive Plan seeks to manage the urban growth in an already built-out Wellington, emphasizing reinvestment and redevelopment of existing neighborhoods and commercial centers. The plan aims to provide high-quality services that create economic, environmental, and social sustainability for residents and encourage higher-density mixed-use developments. The plan emphasizes preserving and protecting the Equestrian Preserve Area, which is central to the equestrian community and lifestyle in the Village. The plan is categorized into 11 elements: land use and community, mobility, capital improvements, housing and neighborhoods, public facilities, parks and recreation, conservation, sustainability and resiliency, community partnerships, education, equestrian preservation, and private property rights. The mobility element identifies the need to meet residents' transportation and accessibility needs through a feasible and effective sustainable multimodal system. The plan promotes the development of an effective active transportation network consisting of sidewalks, bike lanes, multi-use pathways, and equestrian trails. The plan aims to ensure the safety of the transportation system for all users and adopts policy measures, including traffic calming and infrastructure development, to meet these goals. The VZAP will be guided by this plan's direction.

CAPITAL IMPROVEMENT PLAN | FY 2023-2027 (2022)



The Village of Wellington develops a five–year Capital Improvement Plan (CIP) each year to schedule its capital expenditures. They are incurred on expenditures that require large, multi-year spending to develop long-term assets and facilities. For the Village of Wellington, physical assets or constructions with a minimum cost of $25,000 and an expected use life of more than one year are considered capital improvement projects. The CIP lists the revenue and funding sources and categorizes the expenditure. The 2023-27 CIP lists improvements of about $151 million for capital projects and programs. The CIP project types include roadways & transportation; surface water management; public facilities; parks & recreation; and water & wastewater. The 2023-27 Capital Improvement Plan (CIP) for the Village lists three major transportation projects that can have a direct impact on safety that are of consequence for the VZAP. These are multi-purpose pathways and bicycle lane expansion, turn lane and traffic engineering works including traffic calming and intersection improvement, and streetscape that includes pedestrian enhancements. The plan also prioritizes those projects and describes implementation goals and objectives that will guide Village/County staff actions over the next several years. The Vision Zero Action Plan will take into consideration the projects listed in the CIP in finalizing recommendations.

2045 LONG RANGE TRANSPORTATION PLAN (LRTP), PALM BEACH (2019) | AMEND. (2020)

The Long Range Transportation Plan (LRTP) for the Palm Beach County Metropolitan Transportation Agency presents the current state of the county's transportation needs and network and lays the 25-year plan to envision a safe, efficient, and connected multi-modal transportation system for the county. The plan summarizes the progress of priority projects from the previous cycle of the LRTP and summarizes the demographic, travel, infrastructure, functional classification of county roadways, and safety trends. Lack of sufficient active transportation network, barriers to accessing transportation, and traffic-related fatalities and serious injuries have been listed among the challenges of the current system. The plan also captures the aspiration of residents to invest in pedestrian, bicycle, transit, and technology-based projects, in addition to roadway capacity improvements. The 561 plan for transit improvements also forms a part of the LRTP. The improvements identified in this plan will guide the safety improvements and connectivity strategies to be recommended in Wellington's VZAP.

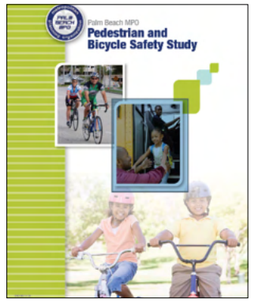
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) | FY 2024-28 (2023)

The Transportation Improvement Program is the four-year funding program for transportation projects in Palm Beach County, arrived at after a comprehensive planning process. It lists all projects that have federal funding and enables coordination with the South Florida Regional Transportation Authority and Palm Tran. The current iteration of the plan lists 427 projects totaling $4.2 billion in investments for the 2023-28 period. The TIP has projects fall under the categories of strategic intermodal system capacity programs, state road programs, local initiatives programs, transportation alternatives programs, other FDOT and local programs, major maintenance programs, roadways operations and maintenance, transit operations and maintenance, and airports, railroads, and seaports projects. This plan will help guide the safety improvements and strategies to be recommended in Wellington's VZAP to ensure consistency.

SOUTHEAST FLORIDA REGIONAL TRANSPORTATION PLAN 2045 (2020)

The Southeast Florida Transportation Council coordinates regional transportation planning (RTP) for the Metropolitan Planning Organizations (MPOs) representing the three counties of Miami-Dade, Broward, and Palm Beach. The RTP identifies regional needs, funding, and policies to enable collaboration between the Long-Range Plans drafted by the three MPOs, for a 25-year planning horizon. The plan scenarios include a strong regional multimodal transportation network-driven scenario and a growth and development scenario with transit-integrated land use changes. It develops projects for four categories. Overall, 76 percent of the funding has been earmarked for roadway-based projects, 18 percent for transit, 4 percent for complete streets and bicycle and pedestrian projects, and the rest for systems management/safety projects. The Plan identifies goals and objectives that would aid in the development of Wellington's VZAP.

PEDESTRIAN AND BICYCLE SAFETY STUDY (2017)



The study analyzed the county-wide bicycle and pedestrian crash data and identified high crash corridors and intersections for intervention within Palm Beach County. Based on the crash patterns, the study compiles countermeasures that fall into a 5-E model – Education, Encouragement, Engineering, Enforcement, and Evaluation. The study finds that Wellington is among the cities with higher concentration of bicycle and pedestrian routes, and usage within the county. The Village also offers a safer active mobility environment as compared to the rest of the county, as it has a low-medium crash density for all types of crashes. The countermeasure recommendations, safety initiatives, and performance measures outlined in this plan, along with the documents that are reviewed to inform the study will be critical to the current Vision Zero Planning efforts. The Plan focuses on the strengths of active transportation and strategies for safer corridors to be recommended in Wellington's VZAP.

VISION ZERO ACTION PLAN, PALM BEACH PTA (2021)

The Palm Beach MPO Vision Zero Action Plan lays a path to eliminate all traffic fatalities and incapacitating injuries throughout the county; however, it does not define a horizon year to achieve this. The TPA adopted Vision Zero in 2018, and this action plan was adopted in 2021. The plan identified environmental and human factors leading to crashes and identified the high-injury network and intersections. Portions of Forest Hill Boulevard and Wellington Trace within Wellington are part of this network. The plan lays the foundation upon which the Village can collaborate with the PTA to address safety risks on local roads. The findings, strategies, and recommendations as part of this plan will help in developing Wellington's VZAP.

COMPLETE STREETS DESIGN GUIDELINES, PALM BEACH PTA (2017)

The complete streets design guidelines guide local roadway owners in designing and implementing complete streets. It emphasizes a complete and integrated street network that supports all road users. PTA encourages all local jurisdictions to adopt local Complete Streets policies. The guideline supports safety and mode choice for residents, summarizes design best practices, and identifies street typology for the county to come up with blended typology-based design guidelines. Recommendations in the guidelines can be classified into the pedestrian realm, roadway realm, or intersections, and are directly applicable to projects undertaken as part of the county LRTP. The plan also offers implementation strategies for policy adoption and building complete streets for local roadway owners. In offering design guidelines, this document will inform the strategies that can be adopted as part of the VZAP.

FLORIDA SAFE ROUTES TO SCHOOL STRATEGIC PLAN (SRTS) | FDOT FLORIDA (2019)

Florida Safe Routes to School (SRTS) was adopted in 2019 as a five-year guide to help communities address safety concerns near schools and achieve an increase in number of students walking and biking to school. The strategic planning process identified strengths, weaknesses, opportunities, and threats in achieving a strong SRTS program through stakeholder engagement. Its six focus areas are geared towards helping local communities to implement SRTS through creating knowledge resources, increasing awareness and program visibility of the SRTS program, optimizing and expanding funding, facilitating partnerships between communities and stakeholders, and streamlining and shortening the application and selection process. The SRTS Infrastructure program is fully funded and managed by the Florida Department of Transportation. Communities with SRTS projects can apply for a grant to reimburse the cost of projects. The SRTS is a possible funding source for any school-related safety enhancement that forms part of this safety study. The program establishes objectives that can serve as a guide for Vision Zero as it works to create safe school environments.

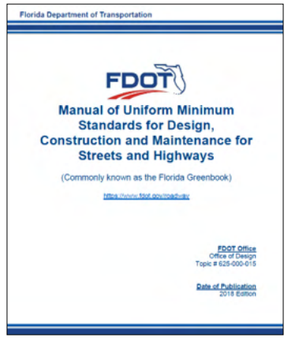
561 PLAN AND OKEECHOBEE BLVD AND SR 7 MULTIMODAL CORRIDOR STUDY, PALM BEACH TPA (2022)

TPA's 561 plan enhances five north-south and six east-west corridors connecting the county to the rest of Southeast Florida. Of the parts of this network, a multimodal corridor study was undertaken on the 13/5 mile Okeechobee Boulevard and State Route 7 corridor. Seven alternatives that encourage transit-oriented development along the corridor were studied, and a center-running light rail transit line was chosen as the desired alternative. At present, improvements like transit signal priority and enhanced transit shelters have been taken as part of the 2045 LRTP. The Plan focuses on multi-use, increases multi-modal connectivity, and better transit facilities and infrastructure to be recommended in Wellington's VZAP.

LAND DEVELOPMENT DESIGN STANDARDS MANUAL, PALM BEACH COUNTY (2018)

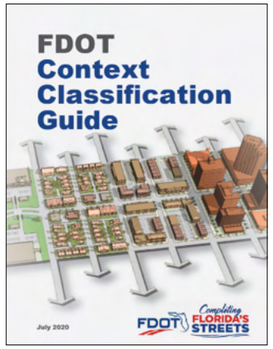
The Land Development Design Standards Manual provides guidelines for infrastructure development in Palm Beach County. The standards ensure uniformity in roadways, and sidewalks and thereby provide safety to all road users. The manual contains design details for street sections, street intersections, and connections, driveways and turnouts, pathways, traffic control, drainage, and off-street parking. These standards will inform the countermeasure design in achieving the goals of the Vision Zero Action Plan.

FLORIDA GREENBOOK (2018)



The Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways (the Florida Greenbook) published by the Department of Transportation provides criteria for the design, construction, maintenance, and operation of streets and highways. In ensuring uniformity across agencies in policy and implementation, and providing consideration for users of all ages and abilities, the Greenbook creates opportunities for coordination between different local agencies. Safety is at the forefront of the street design approach, which promotes design criteria that are adequate for all times of the day, weather, and reasonable driver deficiencies. The Greenbook also encourages the adoption of a context-sensitive design approach that is sensitive to local and regional land use and development goals, quality of life, and economic development. The traditional neighborhood development guidelines in the Greenbook that support multimodal smart growth are ideal for promoting safe and active lifestyles in compact neighborhoods within the Village. The Vision Zero Action Plan will consider the guidelines on design speed, pedestrian facilities, bicycle facilities, traffic claiming, and residential street design in evaluating roadways in the Village and proposing appropriate countermeasures. However, the VZAP will supplement guidelines for other travel modes, including equestrians, golf cars, micromobility, and associated devices, and traffic calming and intersection designs like roundabouts, beyond what is included in the Greenbook.

FLORIDA CONTEXT CLASSIFICATION GUIDE (2020)



Provides guidance on context classification for all non-limited-access state roadways in the State of Florida, which along with transportation characteristics and built form guides planners to understand travel demands and users for optimal design of roadway corridors. The manual uses four context-based design controls, namely design users, design vehicle, design speed, and traffic characteristics to classify roadways. The guide also presents a detailed matrix and methodology to evaluate and identify classifications for projects. Vision Zero Action Plan will follow the guidelines of this document to identify appropriate design and other countermeasures by roadway context classification that can improve safety for all road users.

RELEVANT COUNTY AND VILLAGE TRAFFIC POLICIES

TRAFFIC SIGNAL INSTALLATION/WARRANT, PALM BEACH COUNTY (2022)

The memorandum provides the minimum requirements that warrant a traffic signal within the county and details the procedure to respond to requests for installation of signals, including analyzing the request and installing the warrant when deemed necessary. The policy supplements the MUTCD signal warrants in specifying minor street volume calculations and makes special consideration for elderly residents in determining a warrant. This policy will guide the identification of locations for countermeasures involving new signals within the Vision Zero Action Plan.

INSTALLATION OF LEFT TURN SIGNALS, PALM BEACH COUNTY (2022)

The memo provides the criteria for installing left turn signals at a signalized intersection. It provides for two types of signals protected-permissive, or protection-only based upon peak hour traffic volumes, average delay, and crash patterns. It adapts the Institute of Transportation Engineer's recommendations from the Manual of Traffic Signal Design along with the HCM procedures. The policy allows consideration for a protected-only left turn phasing at intersections where there are no appropriate pedestrian safety measures, or with five or more crashes reported in 12 months. This policy can support safety improvements at the intersections as part of VZAP. It does not address pedestrian signalization improvements or ADA improvements.

PEDESTRIAN CROSSWALKS AT UNCONTROLLED LOCATIONS, PALM BEACH COUNTY (2021)

The memorandum provides the criteria for installing pedestrian crosswalks at uncontrolled locations on the county roadways. It also provides recommendations on traffic controls to be used at such crosswalks. The policy is supportive of VZAP in promoting pedestrian safety through measures such as removing minimum pedestrian demand to install crosswalks in certain scenarios, allowing the installation of crosswalks when the nearest controlled crossing is over 300 feet, and refuge islands where crossing distance is over 600 feet. Pedestrian crosswalk-related countermeasures in the Vision Zero Action Plan will adhere to these policies.

TURN LANE(S) REQUESTS, PALM BEACH COUNTY (2021)

The memorandum specifics the county's policy for turn lane(s) installation, which includes consideration of through traffic speeds and volumes, accident history, types of vehicles, and geometrics among other factors. It also established the procedure to respond to turn lane requests from the public, and the criteria to warrant a lane installation. This policy is of relevance to the Vision Zero plan.

SCHOOL ZONE, PALM BEACH COUNTY (2021)

The memorandum established procedures for creating safe and effective traffic control on streets serving a school and prioritizing pedestrian and motorist safety. It includes procedures for creating route maps, speed zones, school crossings, and traffic signals for school zones. Where priority locations are identified along school zones, these guidelines will inform the countermeasure development in the Vision Zero Action Plan.

COMPLETE STREETS POLICY, VILLAGE OF WELLINGTON (2022)

The complete streets policy establishes the Village's intent to create and maintain a comprehensive transportation system that meets the needs of all road users. It lists six policy goals, which include convenience for all transportation users, increased walking, bicycling, and public transit, equity, and community health and sustainability. The best practices and references listed in the policy will also inform the VZAP for the Village of Wellington.

VISION ZERO ACTION RESOLUTION, VILLAGE OF WELLINGTON (2022)

The Wellington Council designated the Village of Wellington as a Vision Zero in July 2022. This plan derives its need from the council's direction to the Village to adopt a Vision Zero Action Plan to reach the goal of zero traffic fatalities and incapacitating injuries by 2030. The resolution adopts the vision zero principles to reframe traffic fatalities as preventable and focus on system failures to reduce the impact of crash through a data-driven safe system approach. This resolution forms the primary basis of the Vision Zero Action Plan for the Village of Wellington, which will guide the near and long-term traffic planning.

SPEED HUMP POLICY, VILLAGE OF WELLINGTON (2018)

The Speed hump policy streamlines the installation of speed humps in residential streets impacted by cut-through traffic and speeding. It defines conditions that need to be met for installing speed humps including the nature of the street, an existing cut-through traffic or speeding problem identified through studies, and a project ADT of less than 2,500 vehicles. The process is request-driven, and requires a petition signed by 2/3rd of the residents living within 1,000ft of the proposed hump location, and endorsed by the homeowners association. The cost is split equally between the Village and the petitioning residents. However, installation of the speed humps is viewed within the policy as a last resort, with other appropriate measures considered and tested by the Village and residents. The policy also provides design criteria for speed humps.

QUERCUS SIGNAL MAINTENANCE/TRAFFIC CONTROL ILA, VILLAGE OF WELLINGTON (2023)

The policy is an amendment to an existing traffic control agreement between the Village of Wellington and Palm Beach County. The agreement also lists the authority over and responsibilities for maintaining traffic control devices and street lights within the Village's boundaries. It allows the Village to make modifications and improvements to the traffic signals on Forest Hill Boulevard and Quercus Lane/Quercus Court to install traffic cameras and golf cart-related traffic control devices.

STOP SIGN SECTION FROM FHWA MUTCD

The stop sign section from the FHWA MUTCD 2003 Edition Revision 1 contains warrants and guidance for installing stop signs as followed by the Village of Wellington.

A detailed list of relevant goals, policies and projects is listed in **Appendix A.**

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ALIGNING EXISTING IMPROVEMENTS WITH VISION ZERO

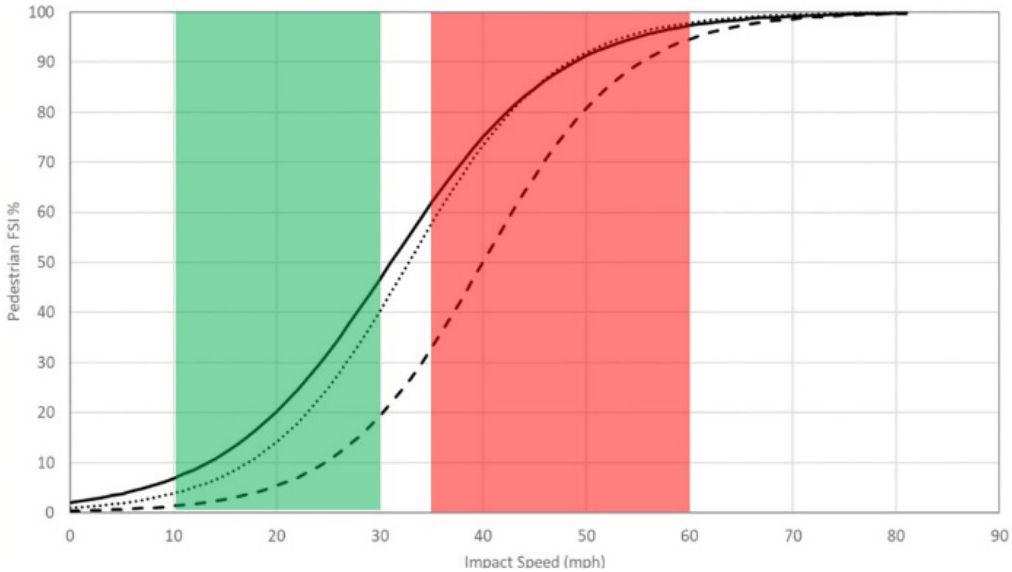
Any Improvement Program for corridors and intersection projects should be planned and designed with Vision Zero in mind. Traditionally, roadway design has been based on the tenets of highway design developed in the 1950s and 1960s, which focused on moving cars at highway speeds. While important for rural and interstate highways, this approach does not align with urban and suburban streets in multimodal contexts. Traditionally, a "design speed" is chosen that is higher than the anticipated speed limit to create a "factor of safety" for the motorist. What results in practice is the measured vehicular operating speed, typically expressed as the 85th percentile speed, is higher than the posted speed limit. Furthermore, the operating speed exceeds what the community deems appropriate for the given context, which is referred to as the "desired operating speed".

This situation creates a perception of the street or intersection as unsafe, particularly for vulnerable users inclusive of individuals with disabilities. These speeds also create higher risks of fatal and incapacitating injury crashes, violating the tenets of Vision Zero.

Instead, the "design speed" of our streets and intersections should be equivalent to the "desired operating speed". Such designs produce lower operating speeds that align with the expectations of the community, as determined through engagement and acknowledgment of the context. The process of setting speed limits is balanced between satisfying community needs and acknowledging the defensible procedure based on the 85th percentile free flow prevailing speed.

Adequate design and appropriate speed limits that produce desired operating speeds support Vision Zero, better meet community expectations, and allow valuable law enforcement resources to be deployed elsewhere. The graph below showcases this paradigm shift.

Prioritize multi-modal safety and quality of service over motor vehicle level of service and on-street parking. Consider providing signal prioritization and perhaps preemption for pedestrians, cyclists, and transit. Focus especially on the needs of people with disabilities. Prioritize protected and buffered bike lanes over on-street parking where right-of-way is limited.



Probability of Pedestrian Suffering Serious Injury or Death contrasted with speed Contrasted with Traditional Design Speeds in Red vs. Desired Operating Speeds in Green (FHWA)

The Village is already working to increase the availability of safe and comfortable multimodal transportation choices for all residents, helping meet village-wide goals to reduce carbon emissions, improve public health through increased physical activity, and improve the quality of life for everyone. The Vision Zero Plan builds on past and ongoing efforts to improve safety and multimodal access throughout the community.

The Villages Complete Street policy states that "Wellington will consistently plan, design, construct, and maintain transportation facilities that are safe, reliable, efficient, convenient and connected, and that enable secure and comfortable access and mobility for users of all ages, abilities, income levels, and transportation modes." With this pledge, the Village recognizes its commitment to promoting a healthy and safe environment through responsible stewardship of the transportation network. The adoption of Vision Zero makes the prioritization of safe travel for all modes a primary focus.

Village also adopted its Vision Zero policy in 2022, but the Village's effort to improve traffic safety did not just begin there. Numerous safety projects and programs have already been implemented throughout the Village. Below are the Village of Wellington's potential efforts through other planning programs on high-injury network identified through crash analysis:

CIP PROJECTS ALIGN WITH VISION ZERO ACTION PLAN

1. Multi-Purpose Paths and Bike Lanes Project:

- Description: Widen roadways for bike lanes and/or expand multi-purpose pathways
- Planned Effort: The Wellington Comprehensive Plan, Village of Wellington (2021)
- Locations: Aero Club Drive, Big Blue Trace, and Greenview Shores
- ***Vision Zero Alignment:*** Enhances multimodal safety by providing dedicated bike lanes and pathways, promoting safer, slower speeds.

2. C-21 Multi-Purpose Paths and Bike Lanes Project:

- Description: A master plan to improve walkability and bicycle circulation identifies missing non-vehicular connections to key destinations. Connections are planned for completion in conjunction with the Road & Pathway Overlay
- Planned Effort: Capital Improvement Plan 2023-2027, Village of Wellington (2022)
- Locations: Aeroclub Drive Improvements, Greenbriar Blvd Rebuild & Bicycle Lanes, Greenview Shores Blvd Bicycle Lanes.
- ***Vision Zero Alignment:*** Addresses gaps in pedestrian and bicycle networks, enhancing safety and connectivity for vulnerable users.

3. Streetscape Program:

- Description: Installation of landscape, hardscape, and pedestrian features on Village roadways according to a comprehensive engineering plan
- Planned Effort: Capital Improvement Plan 2023-2027, Village of Wellington (2022)
- ***Vision Zero Alignment:*** Improves pedestrian infrastructure, enhancing safety and accessibility.

4. **Turn Lanes & Traffic Engineering:**
   - Description: Traffic calming and intersection improvement projects identified through traffic engineering studies
   - Planned Effort: Capital Improvement Plan 2023-2027, Village of Wellington (2022)
   - ***Vision Zero Alignment:*** Implements traffic calming measures to reduce speeds and enhance intersection safety.

5. **Transit Projects:**
   - Forest Hill Blvd: Enhanced transit & associated multimodal improvements
   - Forest Hill Blvd to Okeechobee Blvd: Enhanced transit & associated multimodal improvements, Construction of enhanced transit shelters within existing ROW, Implementing transit signal prioritization
   - Planned Effort: 2045 Long Range Transportation Plan, Palm Beach TPA (2019)
   - Locations: Forest Hill Blvd from SR 7 to US 1, Lake Worth Rd from SR 7 to US 1, and SR 7 from Lake Worth Rd to Forest Hill Blvd, Okeechobee Blvd from SR 7 to US 1 and SR 7 from Forest Hill Blvd to Okeechobee Blvd, Southern Blvd from Seminole Pratt Whitney Rd to W of Royal Palm Beach Blvd
   - ***Vision Zero Alignment:*** Enhances safety and accessibility for transit users through improved infrastructure and prioritization.

6. **Roadway Project:**
   - Location: Southern Blvd from Seminole Pratt Whitney Rd to W of Royal Palm Beach Blvd: Add highway capacity through potentially widening from 6L to 8L
   - Planned Effort: 2045 Long Range Transportation Plan, Palm Beach TPA (2019)
   - ***Vision Zero Alignment:*** While focused on capacity, must consider safe design speeds and multi-modal elements.

7. **Local Initiatives Program Projects:**
   - Description: Construct 4' designated bike lanes
   - Planned Efforts: Transportation Improvement Program, 2024-28, Palm Beach TPA (2023)
   - Location: Greenview Shores Blvd from Binks Forest Dr to Wellington Tr, Greenbriar Blvd from Aero Club Drive to Greenview Shores Blvd, Greenview Shores Blvd to Bent Creek Rd
   - ***Vision Zero Alignment:*** Provides safe, dedicated space for cyclists, reducing crash risks, and enhances cyclist safety through dedicated infrastructure, and multimodal travel options for pedestrians and cyclists.

8. **Transportation Alternatives Program:**
   - Description: Construct 10' shared use path
   - Planned Efforts: Transportation Improvement Program, 2024-28, Palm Beach TPA (2023)
   - Location: C-8 Canal from Forest Hill Blvd to Stribling Way
   - ***Vision Zero Alignment:*** This enhances safety for pedestrians and cyclists, promotes active transportation, and reduces traffic-related fatalities and incapacitating injuries.

5. ESSENTIAL ELEMENTS OF VISION ZERO IN VILLAGE OF WELLINGTON

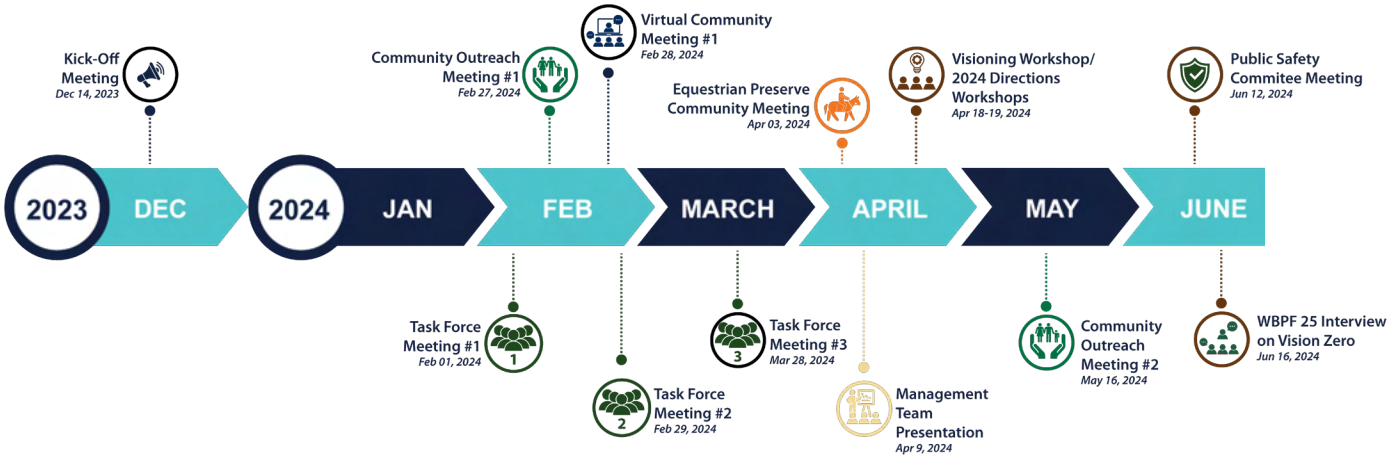
The Village sets a framework for vision zero efforts using two primary sources:

Community Feedback & Crash Records

Community & stakeholder comments received through meetings, workshops, online surveys & interactive map input, combined with a review of historic crashes within Village of Wellington, enabled the development of a robust set of recommendations that address safety concerns.

Everyone must accept that fatal and incapacitating injury crashes are unacceptable and preventable.

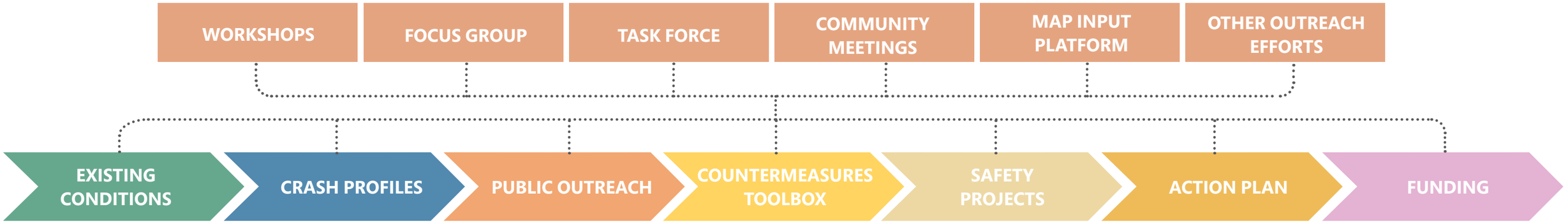
PROJECT TIMELINE



COMMUNITY ENGAGEMENT APPROACH

The Village is committed to achieving zero fatalities and serious injuries on its roadways by 2030 through the development and implementation of a comprehensive Vision Zero Action Plan. Public involvement and engagement was a critical component in shaping the Action Plan to ensure it addresses the community's top traffic safety concerns and priorities. Village led a robust engagement effort to obtain input from the stakeholders, task force team, and community members on their perception of traffic safety and concerns within the Village.

COMMUNITY ENGAGEMENT APPROACH



- 62 percent of the reported traffic concerns were attributed to motor vehicles, while 30 percent were pedestrians.
- 22 percent of the reported traffic concerns were attributed to intersection safety, while 15 percent were related to pedestrian safety and unsafe speed.

- 15 percent of maptool comments included speeding concerns.
- Seven percent of maptool comments related to traffic sign violations.

Among all reported intersection traffic concerns, Lake Worth Rd & 120th Ave S had the highest traffic concerns, followed by Greenview Shore Blvd & Foresteria Ave and Lake Worth Rd & Isles View Drive.

Among all reported traffic concerns on the corridors, Wellington Trace and Forest Hill Boulevard had the highest traffic concerns, followed by Lake Worth Road and Big Blue Trace. These corridors are also part of the High Injury Network identified from crash data between 2013 and 2022.

ENGAGEMENT GOALS & OBJECTIVES

- Raise awareness of Wellington's commitment to improve road safety for all mobility users, Vision Zero goal, and Vision Zero Action Plan.
- Listen to public perspectives about concerns, issues, and opportunities and key stakeholder input to inform projects, programs, and policies for inclusion in the Vision Zero Action Plan.
- Maintain an open, transparent, and collaborative process to gather meaningful feedback and share back what we heard and learned in developing the Action Plan.

HOW WE ENGAGED THE COMMUNITY

The Village has set a framework for Vision Zero efforts using three primary sources: stakeholder meetings, community feedback, and crash records. Stakeholder and public comments received through meetings, workshops, online engagement activities, online map input platforms and combined with a review of historic crashes within the Village, enabled the development of a robust set of recommendations that address safety concerns. The feedback received during these events has provided valuable insights into the lived experiences, problem areas, and desired solutions from those who travel on Village's roads daily. The input from the community helped verify the results of the safety analysis and identify additional safety concerns not identified through the crash data. Engagement efforts to develop the Village's Vision Zero Plan included:

- **Public and Stakeholder E-Notifications-** Sent from the Village of Wellington.
- **Media Release** – Information distributed to local media outlets to announce the engagement process and encourage broad participation.
- **Newsletter** - Insertion in Village of Wellington newsletters, including Play Wellington, to community members who have signed up for updates from the Village.
- **Posters and Large Signage** – A-frame signs on Forest Hill Blvd. informed the public of meetings. Posters were put up or distributed at community events.
- **Website Content** – A dedicated website, linked to the Village's website, was developed to inform about the SS4A Action Plan, Vision Zero, and Wellington crash data. The site also included information about how the public can be involved in the engagement process. The site also included a geo-mapping tool, allowing the public to share comments and concerns, and, also, to geolocate them.
- **Social Media -** Regular postings on the Village's social media channels including Facebook and Twitter to encourage participation in the process and announce public events.
- **Word of Mouth Notification** - Village staff, Mayor, and Council assisted to spread the word about the process and generate interest in the community about Vision Zero and the Action Plan.

- **Community Meetings and Workshops:** Community members participated in two workshops where they shared feedback on their current traffic safety concerns and their preferred approaches to improving the safety of the Villages roadway network. Three community outreach meetings were held on February 27th, February 28th (virtual meeting) & May 16th 2024. The Village also engaged with members of the public, local business owners, other local government and agencies, interest groups including transportation and mobility groups and neighborhood groups, and members of the public. Communications were made available to speakers of Spanish, upon request.

- **Vision Zero Task Force Group:** An interdisciplinary focus group provided comments on the Villages Vision Zero planning process during three meetings. The group included village employees, local business owners, transportation experts, law enforcement officials, school districts, regional medical centers, emergency officials, mobility groups, FDOT, TPA, PZAB, Paratransit, and residents. The outreach was supplemented by three task force meetings, held on February 1st & 29th, & March 28th, 2024.

- **Other Outreach Efforts:** There were various other additional outreach meetings and presentations made to the Equestrian Preserve Committee on April 3rd, 2024, the Management Team Presentation on April 9th, 2024, the Visioning and 2024 Direction Workshop on April 18th and 19th, 2024, and Public Safety Committee Meeting on June 12th, 2024. Village staff also participated at the WBPF 25 channel interview on May 16th, 2024, and talked about Villages Vision Zero Initiative.

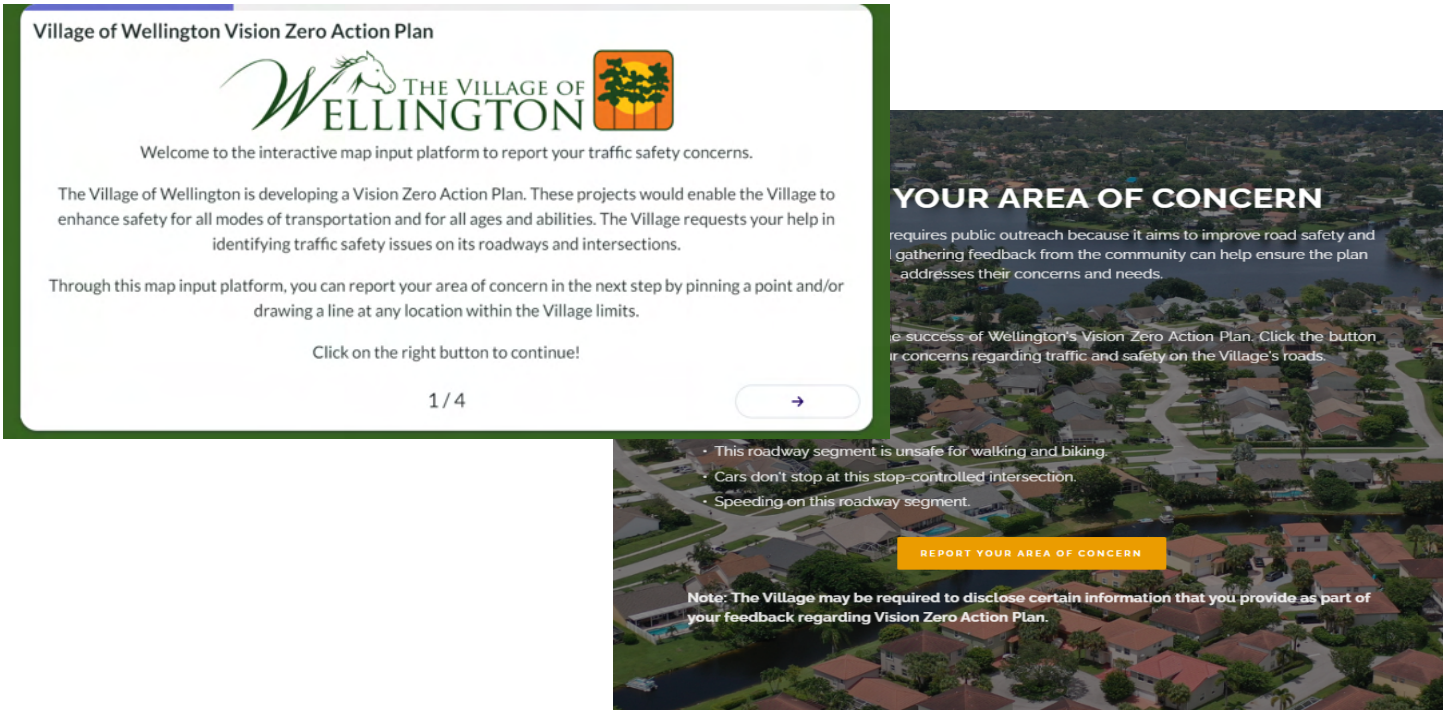
- **Website & Interactive Map Input Platform:** The Vision Zero website provided background information, the Vision Zero pledge, data of the crash analysis, and information on upcoming meetings and events for engagement. The website also provided links to online surveys and interactive maps that were key components of public outreach. This plan also considered the comments and input received by the Village through the interactive map tool platform posted to the Village's website. The interactive map was used to solicit feedback from Wellington residents and stakeholders outside the confines of traditional meetings.

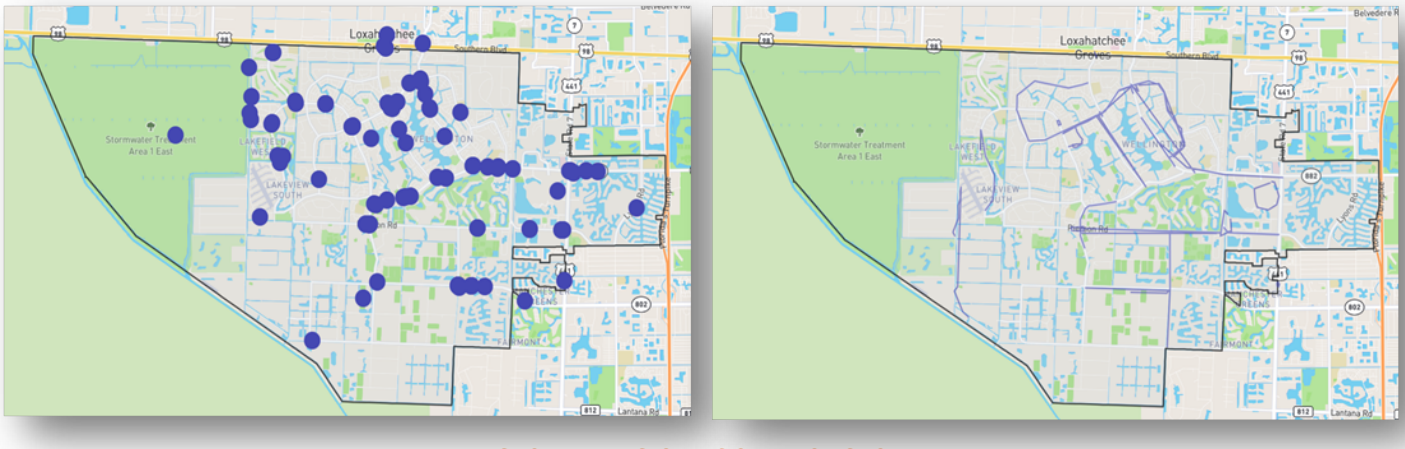
ONLINE MAP TOOL

Community members and stakeholders shared their observations and concerns regarding locations and situations where crashes are occurring but are not necessarily being reported. They shared their knowledge and experiences of places where "near-miss" crashes were occurring. They also indicated locations that did not "feel safe" and that a heightened risk of crashes could occur despite a lack of documented crash data. In other words, there was a risk of a crash, but that risk had yet to materialize as an actual event. This is more than a general fear of a crash occurring, but an intuitive and rational sense that a particular location was unsafe.

In total, 96 comments were received through the project website. Most of the comments received were about Aero Club Drive, Forest Hill Boulevard, Wellington Trace, Pierson Road, Big Blue Trace, Flying Cow Ranch, and 120th Avenue S the most common concerns involved pedestrian safety and speeding. The results of the interactive map are shown below. In the screenshot of the map input platform below, each dot and line represents a comment provided by a community member. Comments received from the community are attached in **Appendix B.**

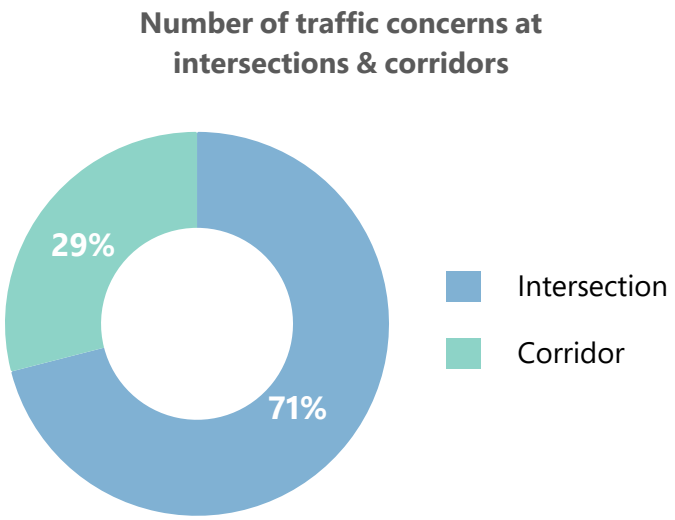
Map Input Platform

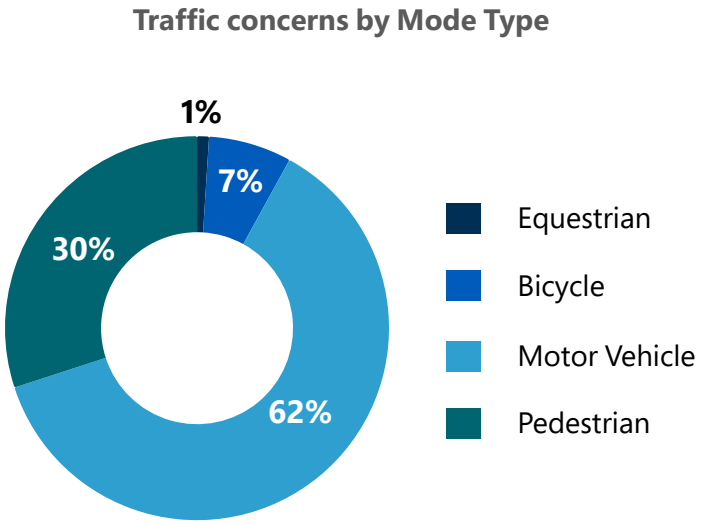




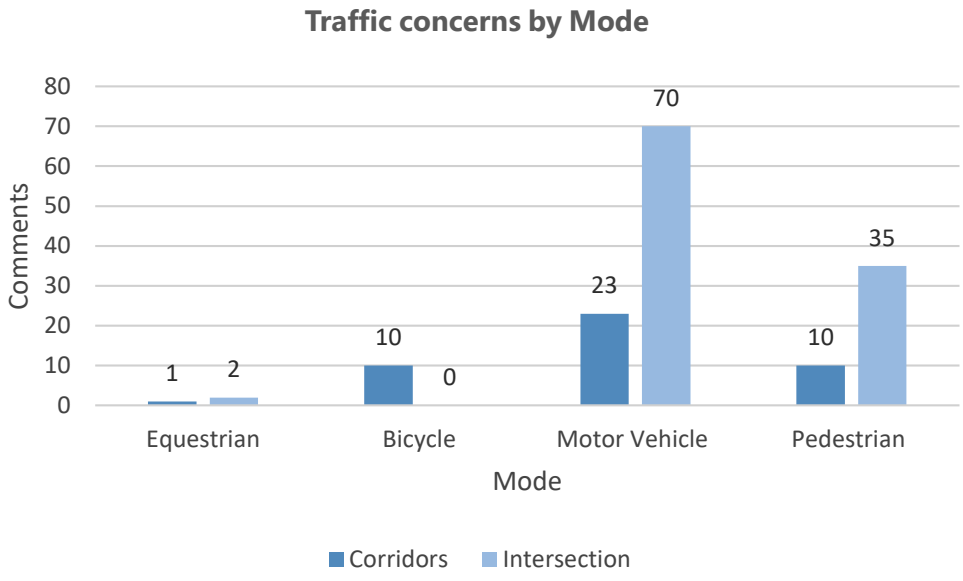
SUMMARY OF TRAFFIC CONCERNS RECEIVED FROM THE COMMUNITY

The engagement effort obtained 90 point comments at intersections (73 percent), 34 line comments related to corridor (30 percent), and there were 33 un-submitted surveys from the community. 62 percent of the traffic concerns were related to motor vehicles, while 30 percent were related pedestrians followed by bicycle and equestrian related issues. The chart below illustrates the total number of traffic concerns reported, categorized by equestrian, bicycle, pedestrian, and motor vehicle incidents.

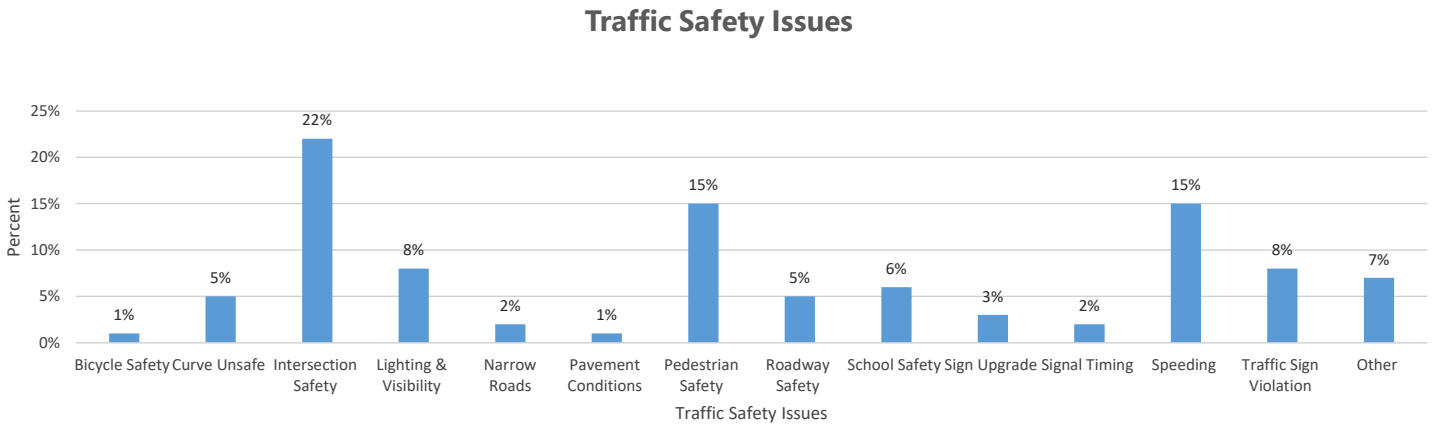




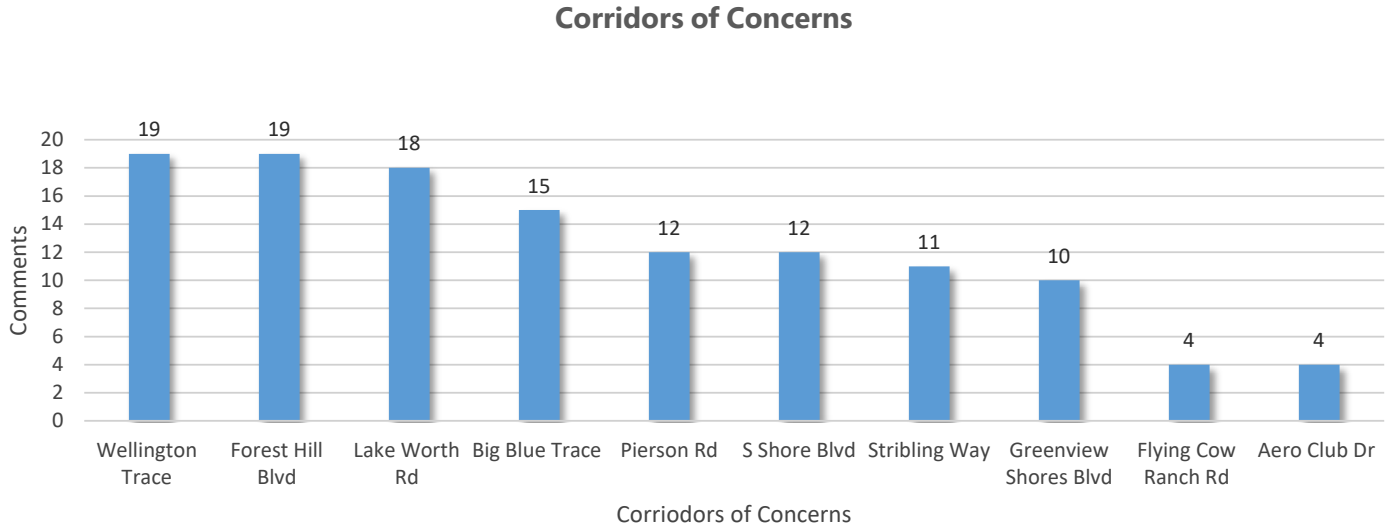
Of the reported traffic concerns, 70 comments were attributed to motor vehicles at intersections, while 23 comments were related to corridors. The graph above illustrates number of pedestrian and bicycle safety concerns, with reported incidents at both intersections and along the corridors.



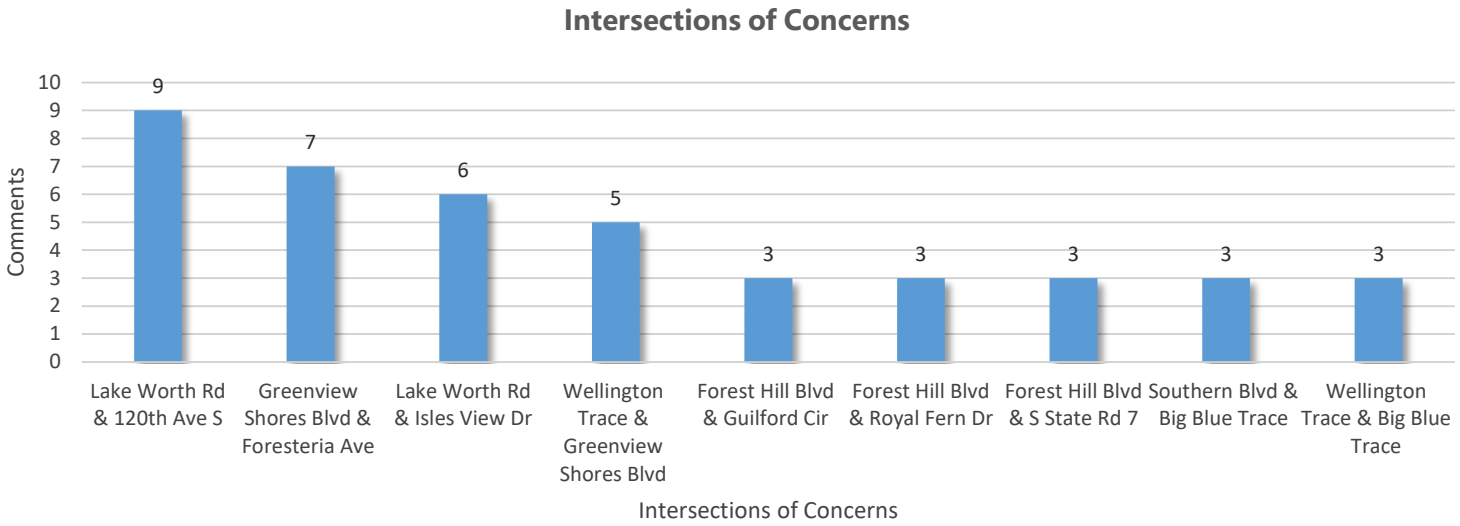
The graph below illustrates 22 percent of the reported traffic concerns were attributed to intersection safety, while 15 percent were related to pedestrian safety and unsafe speed. Lighting and visibility, traffic sign violations, school safety, improper turning, signage, signal timing, and bicycle safety were some of the other reported concerns.



As shown on the graph below, community has major traffic concerns on Wellington Trace and Forest Hill Boulevard corridor, followed by Lake Worth Road and Big Blue Trace. It should be noted that these corridors are also identified as High Injury Corridor based on the crash data between 2013 and 2022. Additionally, the community highlighted several other corridors of concern, including Pierson Road, South Shore Boulevard, Stribling Way, Greenview Shores Boulevard, Flying Cow Ranch Road, and Aero Club Road.



Among all reported intersection, Lake Worth Road & 120th Avenue S had the highest traffic concerns, followed by Greenview Shore Boulevard & Foresteria Avenue and Lake Worth Road & Isles View Drive. The graph below illustrates all the intersections with the most reported traffic concerns.



Feedback from public meetings, visioning workshops, and website inputs highlight several key themes: concerns about speeding, especially near schools like Wellington Landings Middle School, and in residential areas; the need for improved road striping, signage, and traffic signals; suggestions for more roundabouts and traffic calming measures; and calls for enhanced education and enforcement, particularly for young drivers.

There is strong support for exploring technologies like neighborhood traffic calming, speed management measures, and emergency preemption and pedestrian safety improvements. Specific problematic locations identified include Lyons Road and Olympus Circle, Greenview Shores Boulevard, Wellington Trace, and Forest Hill Boulevard intersections. Additionally, there are suggestions for targeted education campaigns and public awareness efforts, with a focus on pedestrian and bicycle safety.

6. DATA-DRIVEN PROCESS

The stories and perceptions others share are essential to a successful discussion and consideration of Vision Zero. While traffic safety is frequently couched in terms of data analysis, we understand that no one wants their family members or their neighbors to be viewed as a statistic. However, data gives us a place to start an objective conversation about roadway safety in Wellington.

Understanding where and why deadly and life-altering injury crashes are happening more frequently helps planners, engineers, and policymakers to better understand the various environmental, behavioral, and systemic factors that contribute to these types of crashes, as well as strategies for how to address them.

An in-depth crash analysis dug into these details to determine rates of crash types by mode, locations, behaviors, and environmental conditions that may have influenced the incident and severity of the crash. Detailed crash analysis is included in the **Appendix C** of the report. Accounting for deadly and life-altering injury crashes acknowledges the magnitude of these crashes on people's lives and focuses the Village's efforts on improvements with the greatest potential to achieve the goal of zero.

This action plan is informed by an analysis of crashes occurring in Village between 2013 and 2022, the most recent ten years for which data are available from the State of Florida's Signal Four Analytics database. This information has been used to identify locally specific patterns and hot spots and develop strategies to be proactive in identifying high-risk locations and prevent future crashes. Over 1,109 crashes occurred in Village during this time, of which 132 resulted in fatal or incapacitating injuries (KSI). This data is a primary resource for the Village of Wellington Vision Zero Action Plan. The data-driven process includes the following:

1. **Identifying Collision Trends:** Review of crash data to assess patterns and trends related to the when, where, and why crashes occur and who is involved.
2. **Identifying High Injury Network:**
   - **High Injury Corridors:** Identify corridors where a significant number of fatal and incapacitating injury crashes frequently occur.
   - **High Injury Intersections:** Identify specific intersections where a significant number of fatal and incapacitating injury crashes frequently occur.
3. **Identifying Collision Profiles:** Integration of various crash factors to categorize and recognize the nine most common types of crashes.
4. **Developing a Countermeasure Toolbox:** Compile effective countermeasures based on nationwide research and best practices, aligning them with corresponding crash profiles
5. **Identifying Priority Project Locations:** The selection of priority projects on high injury network based high crash frequency and density and verify by input from the community engagement process.

COLLISION TRENDS

By analyzing crash records, the Village gained insights into the individuals involved, the factors contributing to the crashes, timing, locations, and reasons behind crashes, especially those leading to fatalities or incapacitating injuries. Between 2013 and 2022, the Village observed 1,109 injury crashes on local streets, including 20 fatal and 112 incapacitating injuries (132 KSI), 416 non-incapacitating injuries, and 561

possible injury crashes. The crash analysis and the identification of high-crash segments and intersections reveal that incapacitating and fatal crashes are concentrated along the Village's primary thoroughfares.

Crash by Severity (2013 to 2023)

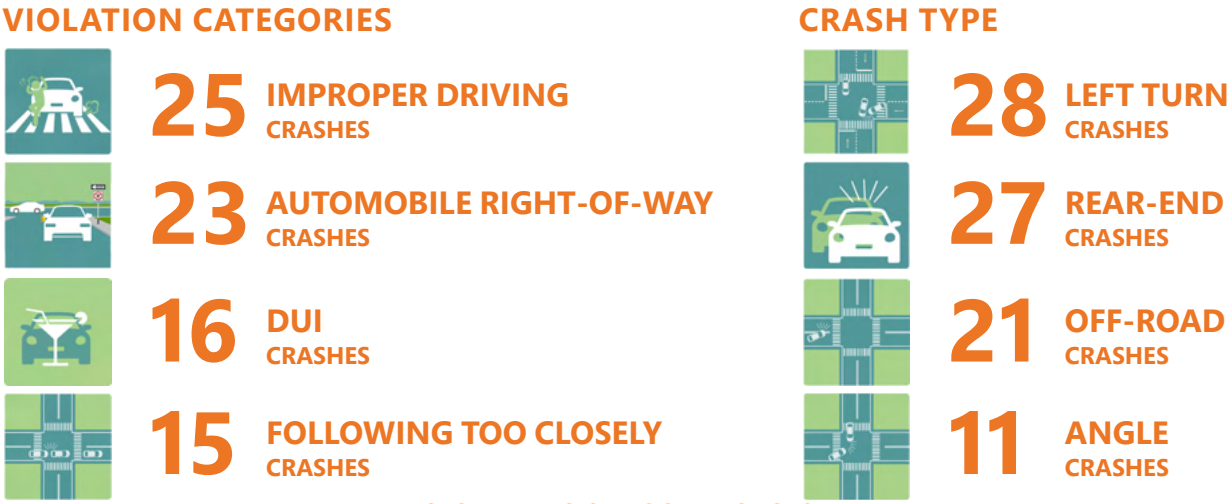
Crash Severity	Roadway Segment	Intersection	Total
Fatal	14	6	20
Incapacitating Injury	59	53	112
Non-Incapacitating Injury	202	214	416
Possible Injury	321	240	561
Total	**596**	**513**	**1,109**

Map on the next page illustrates the locations of 132 KSI crashes within the Village. Of these 132 KSI crashes, 73 crashes (55 percent) occurred along roadway segments between intersections of which 17 crashes led to rear end type of crashes. Of the total KSI's 59 crashes (45 percent) occurred at intersections, with 24 of those due to left-turning vehicles. Additionally, 86 crashes (65 percent) occurred on streets with a posted speed of 40+ mph, which account for 13 percent of the Village's street network. Furthermore, 54 crashes (41 percent) occurred during nighttime within the Village, and 28 (21 percent) of these KSI injuries took place between 12 PM and 2 PM in the afternoon.

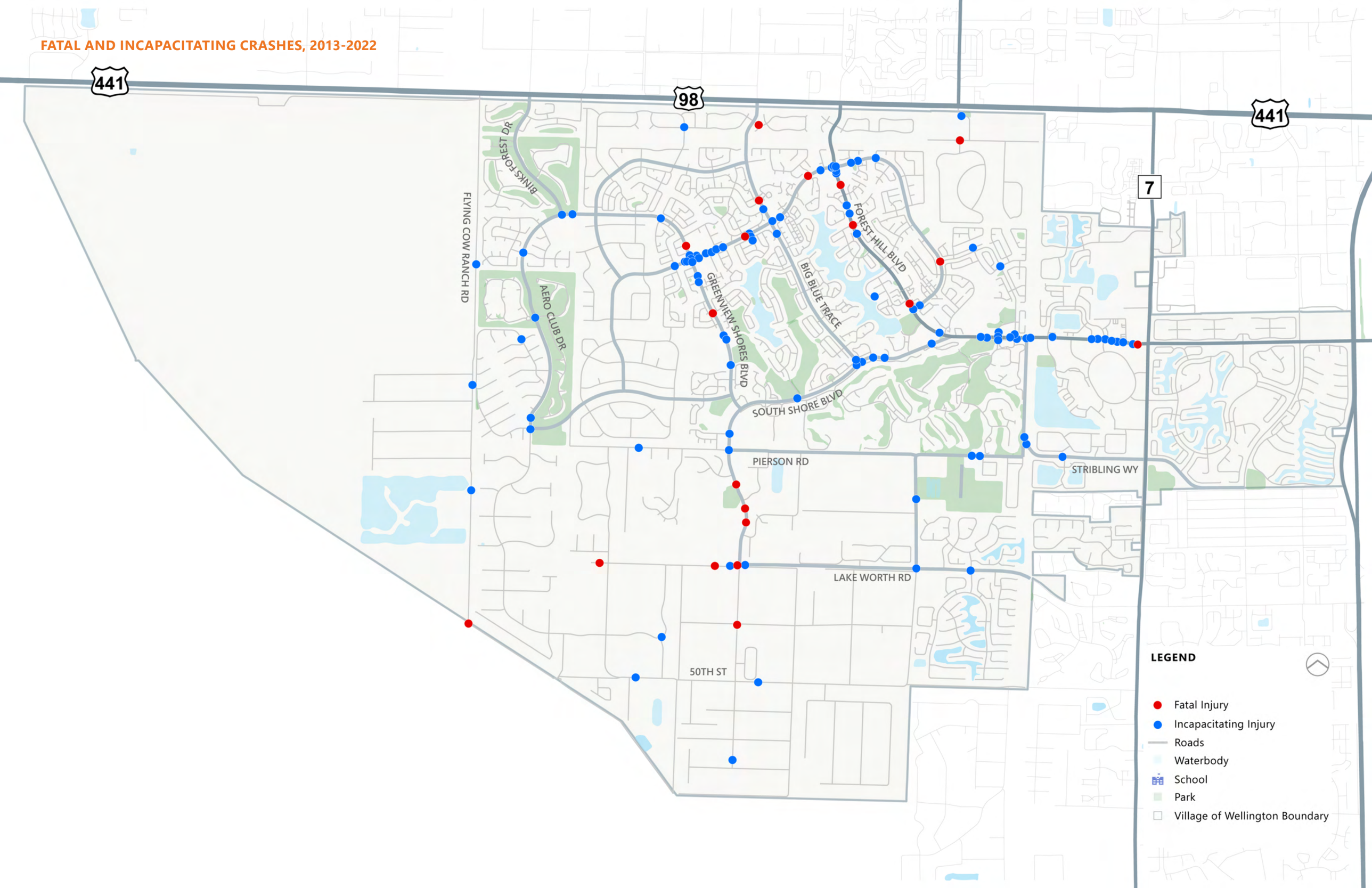
Distracted driving continues to pose a serious threat to road safety, as evidenced by crash data showing its involvement in one fatal crash and nine incidents resulting in incapacitating injuries. Ten crashes (eight percent) of KSI crashes contribute to distracted driving. These statistics underscore the urgent need for effective interventions to combat distracted driving. Efforts such as stricter enforcement of distracted driving laws, public education campaigns, and the promotion of hands-free technologies are essential in mitigating these risks.

Addressing distracted driving is crucial to reducing fatalities and severe injuries, ultimately making roads safer for all users. Out of the ten crashes related to distracted driving seven occurred during night time. Also, four of the ten crashes were due to DUI violation.

Collision Profiles highlight various violation categories and crash types. Key violation categories include automobile right-of-way violations (23 crashes), DUI incidents (16 crashes), improper driving (25 crashes), and following too closely (15 crashes). Crash types feature left turn crashes (28 crashes), rear-end crashes (27 crashes), off-road crashes (21 crashes), and angle crashes (11 crashes). A detailed list of all injury crashes is attached in **Appendix C.**

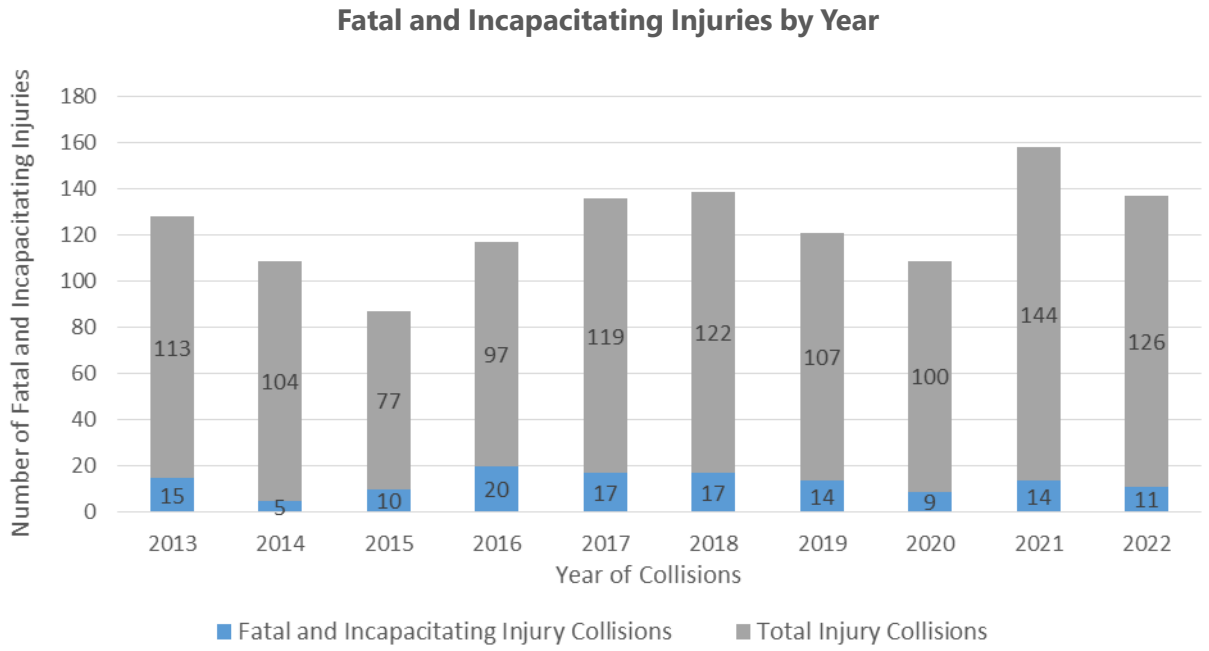


FATAL AND INCAPACITATING CRASHES, 2013-2022



FOCUSING ON FATAL AND INCAPACITATING INJURIES

Vision Zero is an approach aimed at eradicating all fatal and incapacitating injury traffic crashes while simultaneously promoting safe, equitable, and healthy mobility for everyone. By prioritizing fatal and incapacitating injury crashes, Vision Zero recognizes the significant impact of such tragic events. Initiatives and enhancements to prevent these crashes yield substantial advantages, aligning with the Villages' pledge to eliminate all fatal and incapacitating injury traffic crashes.



The graph above illustrates the total number of crashes and the occurrences of fatal and incapacitating injury crashes for years 2013 through 2022. Various factors, including driving behavior or changes in traffic patterns and roadway utilization, may have influenced this increase (2021) or decrease (2020). Based on conversations with the Village, the local police department changed its procedure for collecting and processing crash data in 2020, which may have contributed to the spike observed after 2020. Additionally, increased tourism following the COVID-19 pandemic lockdown could also explain the observed rise in incidents.

EQUITY

Vision Zero work has also highlighted the disproportionate burden traffic crashes have on vulnerable populations, such as Schools and Disadvantaged Communities. The Village incorporated roadway characteristic and demographic datasets into its crash analysis to understand how these patterns play out locally.

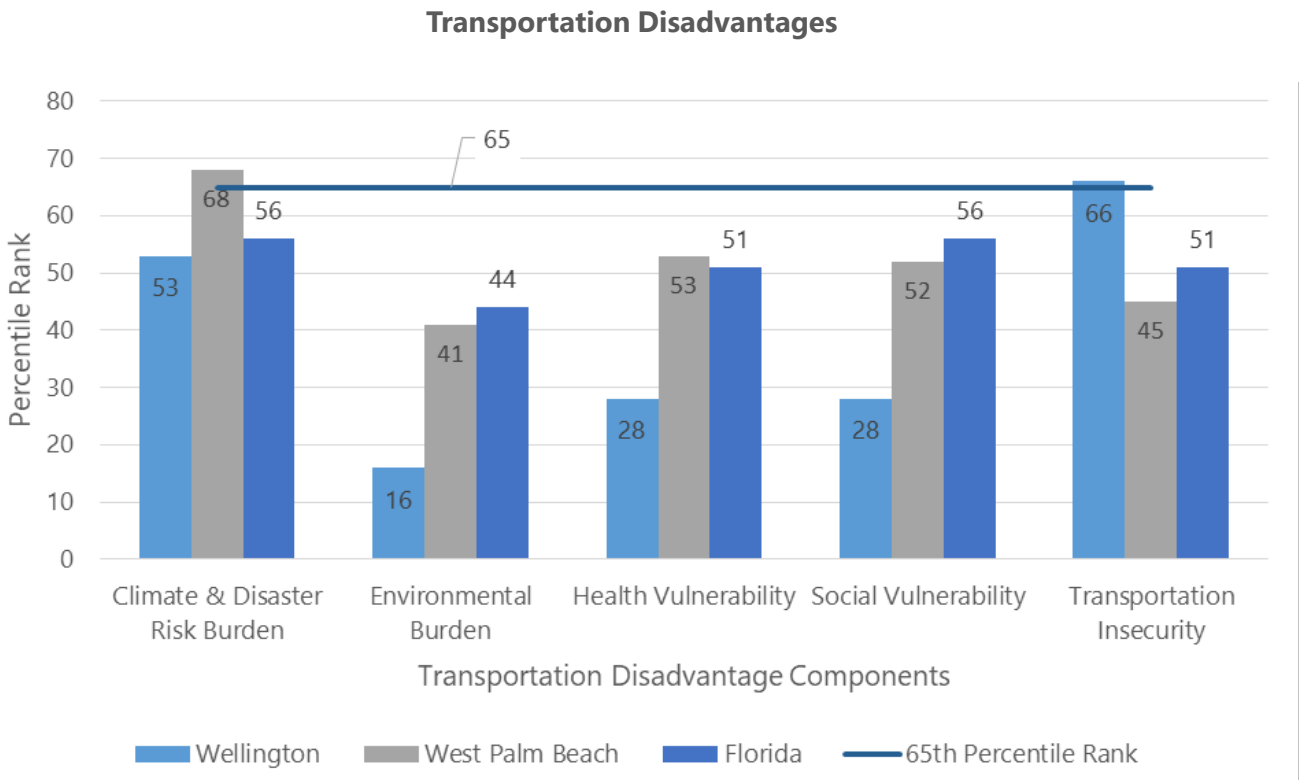
The Village's progress towards Vision Zero is built upon the foundation of equity, both in understanding how different communities within the Village experience roadway safety and ensure that safety investments and improvements benefit those communities facing the most disadvantaged.

Wellington follows the U.S. Department of Transportation's equity measurement tool, the Equitable Transportation Communities Explorer (ETCE), to understand the disadvantages communities face. ETCE assesses the effect of underinvestment in transportation as seen in five areas (components), developed using data including from the 2020 American Community Survey, as described below[1]:

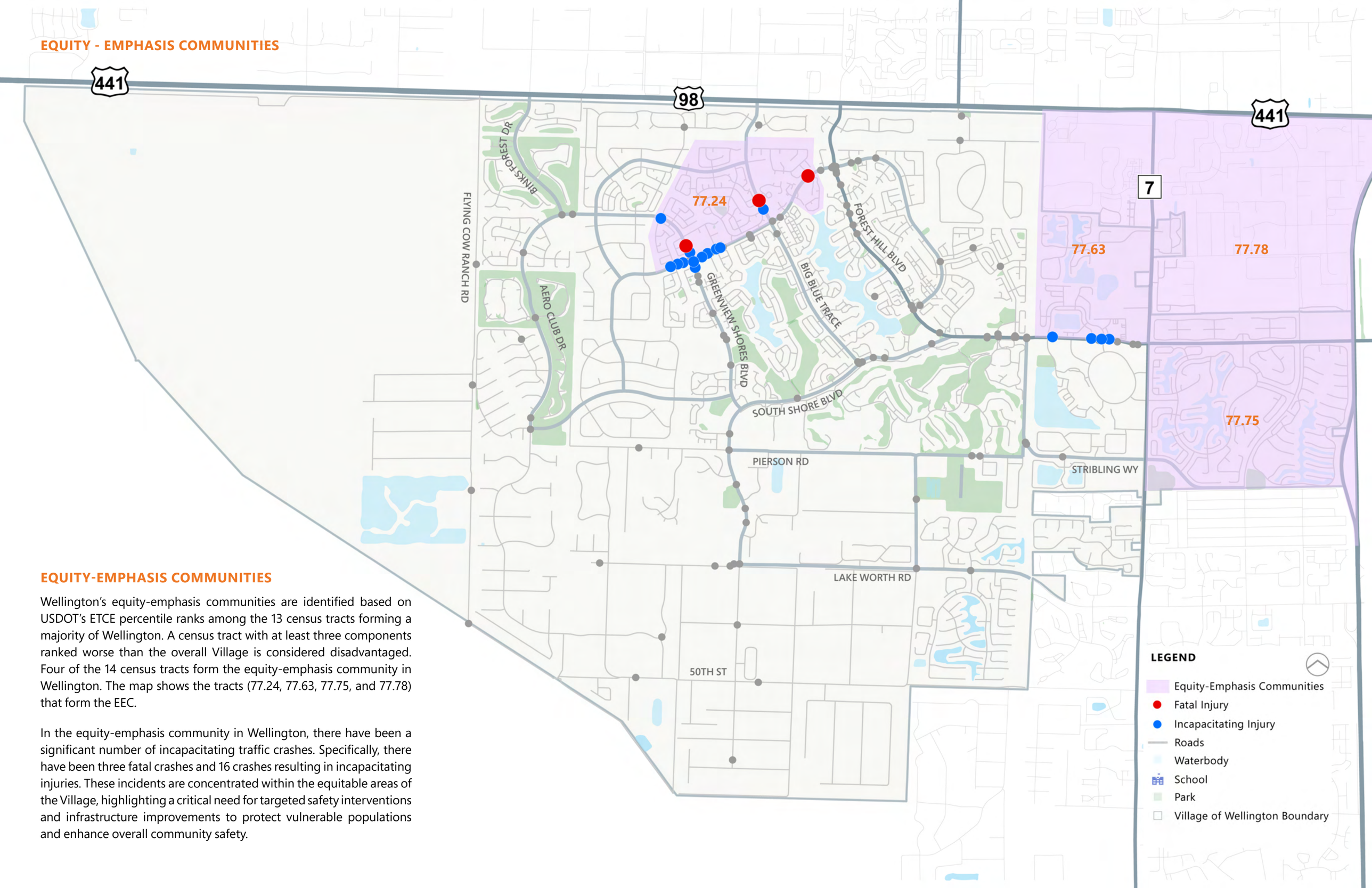
- **Climate and Disaster Risk Burden:** measures current and future risks to an area from climate and natural disasters based on potential losses from existing hazard exposure and vulnerability.
- **Environmental Burden:** measures factors such as pollution, hazardous facility exposure, water pollution and the built environment.
- **Health Vulnerability:** measures the prevalence of health conditions such as asthma, cancer, high blood pressure, diabetes, and poor mental health
- **Social Vulnerability:** identifies populations that are at a higher risk due to certain social conditions.
- **Transportation Insecurity:** The condition in which people are unable to regularly and reliably satisfy the travel necessary to meet the needs of daily life.

Overall, the Village ranks favorably as per the ETCE, which quantifies the vulnerabilities experienced by communities due to historic underinvestment in transportation. However, among the five areas assessed by the ETCE, Wellington experiences transportation insecurity (66th percentile) at rates higher than the County of Palm Beach and the state of Florida. The Village ranks below the 65th percentile threshold for disadvantage in other areas, namely, climate and disaster risk burden (53rd percentile), environmental burden (16th percentile), health vulnerability (28th percentile), and social vulnerability (28th percentile). In all these metrics, the Village performs better than the County and the State. The graph on next page shows how Village performs in different components when compared to State and West Palm Beach County.

1 https://www.transportation.gov/priorities/equity/justice40/etc-explorer-indicator-table



On average, Village residents are less likely to be killed in a crash than a County or State resident. The average annual fatality rate (AAFR) for the Village is 3.68 persons killed per 100,000 residents for 2018-2022, which is lower than the comparable rate for the State of Florida (15.98 persons) and Palm Beach County (13.08 persons). AAFR has been calculated based on the methodology provided by the Safe Streets for All grant program. The calculation worksheet and methodology are available in **Appendix C**.



EQUITY-EMPHASIS COMMUNITIES

Wellington's equity-emphasis communities are identified based on USDOT's ETCE percentile ranks among the 13 census tracts forming a majority of Wellington. A census tract with at least three components ranked worse than the overall Village is considered disadvantaged. Four of the 14 census tracts form the equity-emphasis community in Wellington. The map shows the tracts (77.24, 77.63, 77.75, and 77.78) that form the EEC.

In the equity-emphasis community in Wellington, there have been a significant number of incapacitating traffic crashes. Specifically, there have been three fatal crashes and 16 crashes resulting in incapacitating injuries. These incidents are concentrated within the equitable areas of the Village, highlighting a critical need for targeted safety interventions and infrastructure improvements to protect vulnerable populations and enhance overall community safety.

7. HIGH INJURY NETWORK ANALYSIS

A major component of a Vision Zero Action Plan is to identify the High Injury Network (HIN): the network of roads where the majority of a village's deadly and life-altering injury crashes happen. Through a more thorough analysis of crash data, we can start to identify factors contributing to fatalities and serious injuries on our roadways across the differing modes of transportation. The analysis of the high-injury network utilizes crash dataset information sourced from Signal Four Analytics, encompassing complete data from 2013 to 2022. In developing the High Injury Network, factors considered were understanding the effects of how the crashes occurred spatially and considering the geographic extent of these crashes so that the most critical hot spots and corridors could be identified.

A spatial examination of crash data was conducted to pinpoint the corridors with the highest level of fatal and incapacitating injuries for pedestrians, bicyclists, and motorists on the streets. These streets referred to as a high-injury network, were determined by selecting those with the highest crash densities and considering the fatal and incapacitating injuries. Incidents resulting in fatal or life-altering injuries were given greater weight than other injury-related crashes. The analysis encompasses crashes involving all road users.

By conducting a comprehensive analysis of crash data, we can begin to pinpoint the factors contributing to fatalities and incapacitating injuries on our roadways, encompassing various modes of transportation. In addition to utilizing the Signal Four Analytics Data to establish the High Injury Network (HIN), we used an improved approach to prioritize these corridors. This approach helps identify segments along the Village's most hazardous corridors, categorized by mode of transportation.

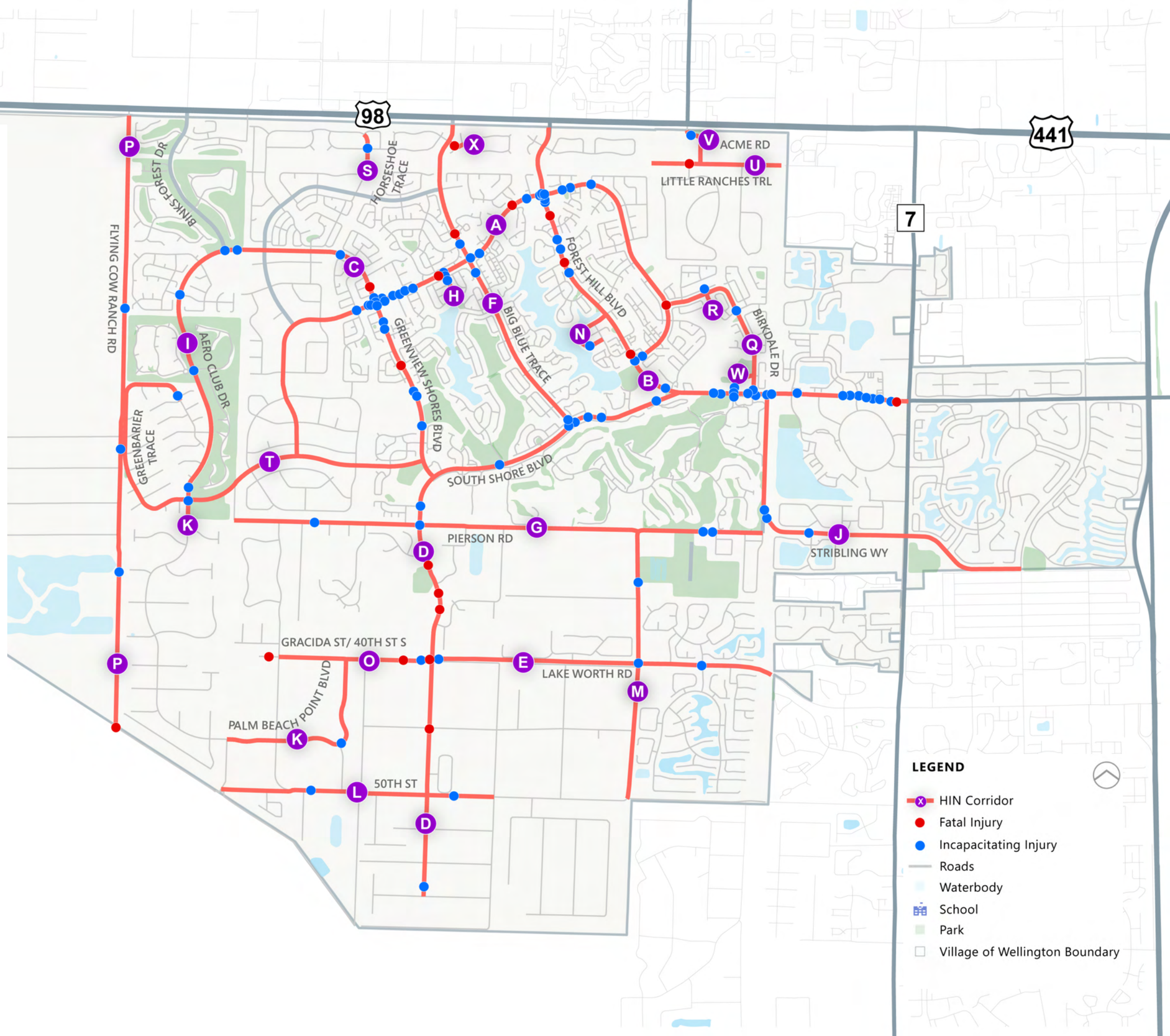
Criteria taken into account to prioritize these corridors:

- Crashes involving fatal and incapacitating injuries.
- Crashes involving non-incapacitating and possible injuries.
- Crashes involving pedestrians.
- Crashes involving bicyclists.
- Crashes occurring at intersections.

To optimize the allocation of funds for capital improvement projects and prioritize traffic safety efforts, the Village of Wellington will utilize the identified high-injury network of corridors and intersections. This Vision Zero Action Plan incorporates several measures derived from the high injury network analysis. By concentrating on these high-priority streets, the Village can efficiently allocate limited resources, such as funding and staff time, where they can have the most significant impact on enhancing traffic safety.

HIGH INJURY NETWORK-CORRIDORS, 2013-2022

- **A. Wellington Trace:** Greenbriar Boulevard to Forest Hill Boulevard
- **B. Forest Hill Boulevard:** Southern Boulevard (Interstate 98) to S State Road 7
- **C. Greenview Shores Boulevard:** Binks Forest Dr to South Shore Boulevard
- **D. South Shore Boulevard:** Forest Hill Boulevard (SR 882) to 57th Pl S
- **E. Lake Worth Road:** S Shore Boulevard to 1000 ft east of Barefoot Lake Drive
- **F. Big Blue Trace:** Southern Boulevard (Interstate 98) to S Shore Boulevard
- **G. Pierson Road:** Ousley Farms Road to Fairlane Farms Road
- **H. Skipton Avenue:** Wellington Trace to Chelmsford Street
- **I. Aero Club Drive:** Greenbriar Boulevard to Binks Forest Drive
- **J. Stribling Way:** Forest Hill Boulevard to Lyons Road
- **K. Palm Beach Point Boulevard:** Greenbriar Boulevard to Golden Point Lane & Ousley Farms Road to 40th Street S
- **L. 50th Street S:** Ousley Farms Road to 130th Avenue S
- **M. 120th Avenue S:** Pierson Road to 50th Street S
- **N. Westhampton Cir:** Forest Hill Boulevard to Montauk Drive
- **O. 40th St S/Gracida Street:** Lake Worth Road to 500 ft West of South Road
- **P. Flying Cow Ranch Road:** Southern Boulevard (Interstate 98) to Indian Mound Road
- **Q. Birkdale Drive:** Forest Hill Boulevard to Wellington Trace
- **R. Pine Valley Drive:** Anhinga Drive to Whitemarsh Drive
- **S. Horseshoe Trace:** Greentree Trail to Stirrup Ln
- **T. Greenbriar Boulevard:** Sunward St to Greenview Shores Boulevard
- **U. Acme Road:** Little Ranches Trail to Acme Road
- **V. Little Ranches Trail:** Southern Boulevard to Acme Road
- **W. Royal Fern Drive:** Forest Hill Boulevard to Birkdale Drive
- **X. Doubletree Trail:** Big Blue Trace to Mid Pines Terrace



HIGH INJURY NETWORK CORRIDORS

Between 2013 and 2022, corridors on high injury network in the Village of Wellington accounted for 132 fatal and incapacitating injury crashes. Corridors in the Village accounted for 55 percent (73 crashes) of fatal and incapacitating injury crashes. A detailed list of fatal and incapacitating crashes is attached in **Appendix E.**

The corridors that are included in the High Injury Network are:

A. Wellington Trace: Greenbriar Boulevard to Forest Hill Boulevard
B. Forest Hill Boulevard: Southern Boulevard (Interstate 98) to S State Road 7
C. Greenview Shores Boulevard: Binks Forest Dr to South Shore Boulevard
D. South Shore Boulevard: Forest Hill Boulevard (SR 882) to 57th Pl S
E. Lake Worth Road: S Shore Boulevard to 1000 ft east of Barefoot Lake Drive
F. Big Blue Trace: Southern Boulevard (Interstate 98) to S Shore Boulevard
G. Pierson Road: Ousley Farms Road to Fairlane Farms Road
H. Skipton Avenue: Wellington Trace to Chelmsford Street
I. Aero Club Drive: Greenbriar Boulevard to Binks Forest Drive
J. Stribling Way: Forest Hill Boulevard to Lyons Road
K. Palm Beach Point Boulevard: Greenbriar Boulevard to Golden Point Lane & Ousley Farms Road to 40th Street S
L. 50th Street S: Ousley Farms Road to 130th Avenue S
M. 120th Avenue S: Pierson Road to 50th Street S
N. Westhampton Circle: Forest Hill Boulevard to Montauk Drive
O. 40th Sreet S/Gracida Street: Lake Worth Road to 500 ft West of South Road
P. Flying Cow Ranch Road: Southern Boulevard (Interstate 98) to Indian Mound Road
Q. Birkdale Drive: Forest Hill Boulevard to Wellington Trace
R. Pine Valley Drive: Anhinga Drive to Whitemarsh Drive
S. Horseshoe Trace: Greentree Trail to Stirrup Ln
T. Greenbriar Boulevard: Sunward St to Greenview Shores Boulevard
U. Acme Road: Little Ranches Trail to Acme Road
V. Little Ranches Trail: Southern Boulevard to Acme Road
W. Royal Fern Drive: Forest Hill Boulevard to Birkdale Drive
X. Doubletree Trail: Big Blue Trace to Mid Pines Terrace

ALIGNING HIGH INJURY NETWORK WITH COMMUNITY ENGAGEMENT APPROACH

Integrating the High Injury Network (HIN) with community engagement can significantly enhance road safety efforts. By combining data-driven identification of high-risk areas with insights and feedback from local residents, resources can be effectively prioritized and interventions tailored to address specific local challenges. This collaboration fosters transparency, trust, and a sense of ownership among community members, leading to more effective and sustainable safety measures. Additionally, educational campaigns informed by HIN data and delivered through community networks can promote behavioral changes that further reduce traffic-related injuries and fatalities.

Community engagement efforts have highlighted significant traffic concerns that align closely with the High Injury Network (HIN) data. The majority of fatal and incapacitating injury crashes (73 percent) occur at intersections, with Forest Hill Boulevard and Wellington Trace identified as high-risk corridors. Community feedback points to motor vehicle incidents as the primary concern (62 percent), followed by pedestrian safety issues (30 percent). Specific intersections such as Lake Worth Rd & 120th Ave S and corridors including South Shore Boulevard and Big Blue Trace were flagged as problematic, matching HIN's crash data from 2013-2022. This correlation between community-reported issues and HIN data underscores the need for targeted safety interventions in these high-risk areas, fostering a collaborative approach to enhancing road safety and reducing traffic-related injuries and fatalities.

8. COUNTERMEASURE TOOLBOX & COLLISION PROFILES

The Village has developed a comprehensive set of key countermeasures for the implementation of safety projects. These countermeasures encompass strategies in the fields of engineering, education, and enforcement. The toolbox consists of countermeasures, covering aspects of roadway design, pedestrian safety, bicyclist safety, operations and signal timing, speed management, signage, and marking, and even includes elements of education, public awareness, and enforcement. This toolbox is intended to assist the Village in identifying the most suitable countermeasure for specific safety measures, recognizing that not all treatments are appropriate for all roadway types. In the following section, crash profiles have been identified, and the relevant countermeasure has been assigned to each of them. This toolbox can be considered as roster of countermeasures the Village has at its disposal to address safety-related concerns in the village.

The countermeasures have been evaluated using three criteria: Efficacy, Cost, and Complexity, and assigned each criterion a score:

Efficacy: This refers to the expected safety benefit, determined through academic research and industry standards.

Cost: The overall expense involved in designing and implementing the countermeasure.

Complexity: The anticipated level of difficulty the Village may encounter when implementing the countermeasure.

High: ■■■

Medium: ■■□

Low: ■□□

The countermeasures listed in the following tables have been sorted into categories: Roadway Design, Pedestrian Safety, Bicycle Safety, Equestrians, Operational and Signal Timing, Speed Management, Signage and Marking, Education and Public Awareness and Enforcement. Pedestrian and bicycle related countermeasures have been included in each of these categories, as the consideration of non-motorized travel is important for all roadway classifications and locations.

The Federal Highway Administration (FHWA) CMF Clearinghouse guides where to apply the countermeasures including the crash types each countermeasure would address, and a Crash Reduction Factor (CRF) for each countermeasure. The (FHWA) CMF Clearinghouse and published research papers were reviewed by the project team to gain additional insight into CRFs and the effectiveness of specific countermeasures. When selecting countermeasures and CMFs to apply to their specific safety needs, local agency safety practitioners should consider the availability, applicability, and quality of CMFs.

The countermeasures provided in this section include Crash Types, CRF's and Expected Lives. Definition of these fields are provided below:

Crash Types - "All", "Ped-Bike" (Pedestrian and Bicycle), "Night", "Emergency Vehicle", or "Animal".

CRF - CRF stands for Crash Reduction Factor. It represents the percentage or proportional reduction in crashes resulting from the implementation of a specific safety measure or intervention compared to a baseline condition without that intervention. CRFs are derived from empirical studies, research, and data analysis conducted to evaluate the effectiveness of various traffic safety strategies.

Expected Life - Expected life typically refers to the anticipated duration or lifespan of a product, asset, or infrastructure before it needs replacement, major maintenance, or becomes obsolete. It indicates the expected durability and reliability of individual components.

The detailed countermeasure toolbox is attached in the **Appendix D** of the report.

COLLISION PROFILES

The Village has identified top ten collision profiles that emphasizes the trends observed in crashes resulting in people being killed or seriously injured. These profiles are developed through the analysis of crash data and relevant environmental factors. Each profile identifies a crash type that is considered a priority concern. Accompanying each profile are safety countermeasures that are most applicable to the specific crash and location context. These countermeasures, form a toolbox of safety interventions that the Village of Wellington will utilize to implement projects tailored to address unique safety issues.

The collision profiles encompass diverse collision attributes, such as unsafe speed and other improper driving or traffic signal and sign violation (as documented in the crash reports), alongside contextual factors like the crash location on a corridor, at an intersection, or in proximity to a school. Notably, individual crashes could align with multiple profiles. To illustrate, a crash might simultaneously fall under both a unsafe speed incident and involve a driver under the influence of drugs or alcohol.

The ten collision profiles are presented on the following pages with a description and relevant countermeasures. Each collision profile is paired with up to five safety countermeasures effective at addressing the crash type. Additional countermeasures may be effective at reducing crashes under a given profile, beyond the five highlighted here, and these are included in the technical **Appendix F.**

Profile 1: Under Influence of Drugs or Alcohol (DUI)

Profile 2: Left-turn at Intersections (Signalized and non-signalized)

Profile 3: Nighttime Crashes

Profile 4: Unsafe Speed and Other Improper Driving

Profile 5: Following too Closely

Profile 6: 40+mph Streets

Profile 7: Pedestrian and Bicycle Crashes/60+year Old

Profile 8: Crashes within 0.25 miles of School

Profile 9: Traffic Signal and Sign Violation

Profile 10: Age Group 20-49 Crashes

Collision Profile Statistics

Collision Profiles	Percentage of all fatal & incapacitating injuries	Percentage of all Auto fatal & incapacitating injuries	Percentage of bicycle fatal & incapacitating injuries	Percentage of pedestrian fatal & incapacitating injuries
Driving under influence (DUI)	12% (16)	11% (15)	0% (0)	1% (1)
Left-turn crashes occurred at intersections	21% (28)	21% (28)	0% (0)	0% (0)
Nighttime crashes	41% (54)	33% (44)	3% (4)	5% (6)
Unsafe speed and other improper driving	26% (35)	23% (30)	1% (2)	2% (3)
Following too closely	11% (15)	11% (15)	0% (0)	0% (0)
40+ mph streets	65% (86)	55% (73)	4% (5)	6% (8)
40+ mph pedestrian and bicycle crashes/60+year-old	13% (17)	10% (13)	1% (1)	2% (3)
Crash within 0.25 miles of school	15% (20)	14% (19)	0% (0)	1% (1)
Traffic signal and sign violation	5% (7)	4% (6)	1% (1)	0% (0)
Age group 20-49	52% (69)	47% (62)	3% (4)	2% (3)

Please Note: Due to the possibility of a single crash being classified under multiple profiles, the figures in the table do not total up to 100 percent. In cases where a cell lacks a fatal or incapacitating percentage, it signifies that there were zero fatal and incapacitating crashes recorded for the indicated mode within that particular profile.

PROFILE 1: DRIVING UNDER INFLUENCE (DUI)

FACTORS

Drinking alcohol or using drugs while driving is a dangerous epidemic. The ability to safely operate a motor vehicle is impaired by alcohol and drugs. Unfortunately, the decision-making process to not drive after drinking alcohol or using drugs is also impaired.

MODES

COUNTERMEASURES

ALCOHOL USE DISORDER (AUD) ASSESSMENT & TREATMENT PROGRAMS

EFFICACY ■□□ COST ■■■ COMPLEXITY ■■■

HIGH VISIBILITY ENFORCEMENT

EFFICACY ■■□ COST ■■□ COMPLEXITY ■■■

EDUCATIONAL CAMPAIGNS

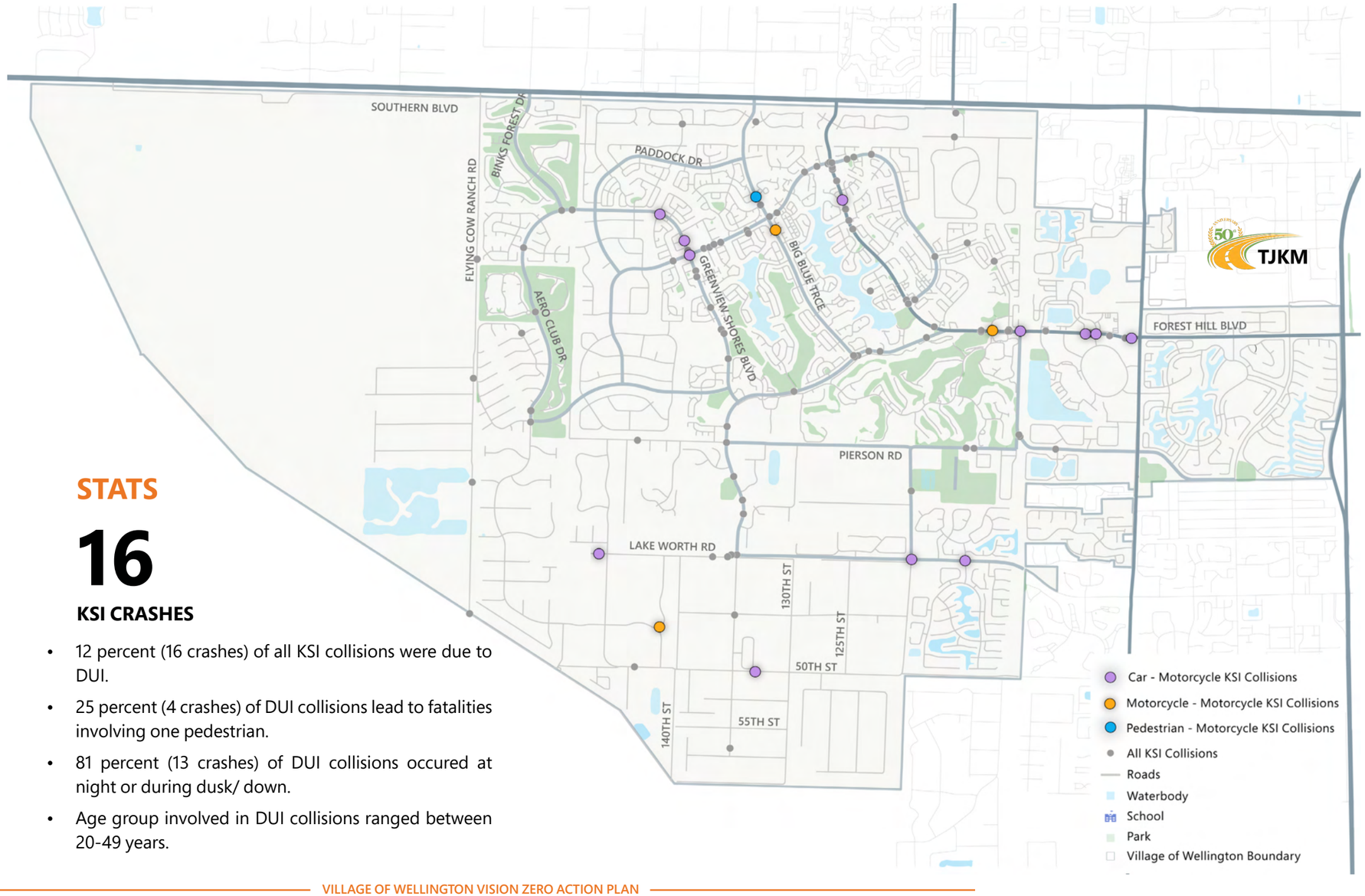
EFFICACY ■□□ COST ■■□ COMPLEXITY ■■□

VEHICLE SPEED FEEDBACK SIGN

EFFICACY ■■□ COST ■■□ COMPLEXITY ■□□

EDUCATIONAL INITIATIVE OVER CITATIONS

EFFICACY ■□□ COST ■■□ COMPLEXITY ■■□



STATS

16

KSI CRASHES

- 12 percent (16 crashes) of all KSI collisions were due to DUI.
- 25 percent (4 crashes) of DUI collisions lead to fatalities involving one pedestrian.
- 81 percent (13 crashes) of DUI collisions occured at night or during dusk/ down.
- Age group involved in DUI collisions ranged between 20-49 years.

PROFILE 2: LEFT TURN AT INTERSECTION (SIGNALIZED & NON-SIGNALIZED)

FACTORS

A left turn at intersections involves maneuvering a vehicle to change direction onto a perpendicular road to the left. This typically requires yielding to oncoming traffic, signaling the turn, and safely navigating the intersection to ensure a smooth transition onto the new roadway. Left turn crashes usually occur when fails to ensure safety while approaching the intersection.

MODES

COUNTERMEASURES

PROTECTED LEFT TURN SIGNAL

■■■ EFFICACY ■■□ COST ■■□ COMPLEXITY

LEADING PEDESTRIAN INTERVAL (LPI)

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

BULBOUTS AND CURB EXTENSIONS

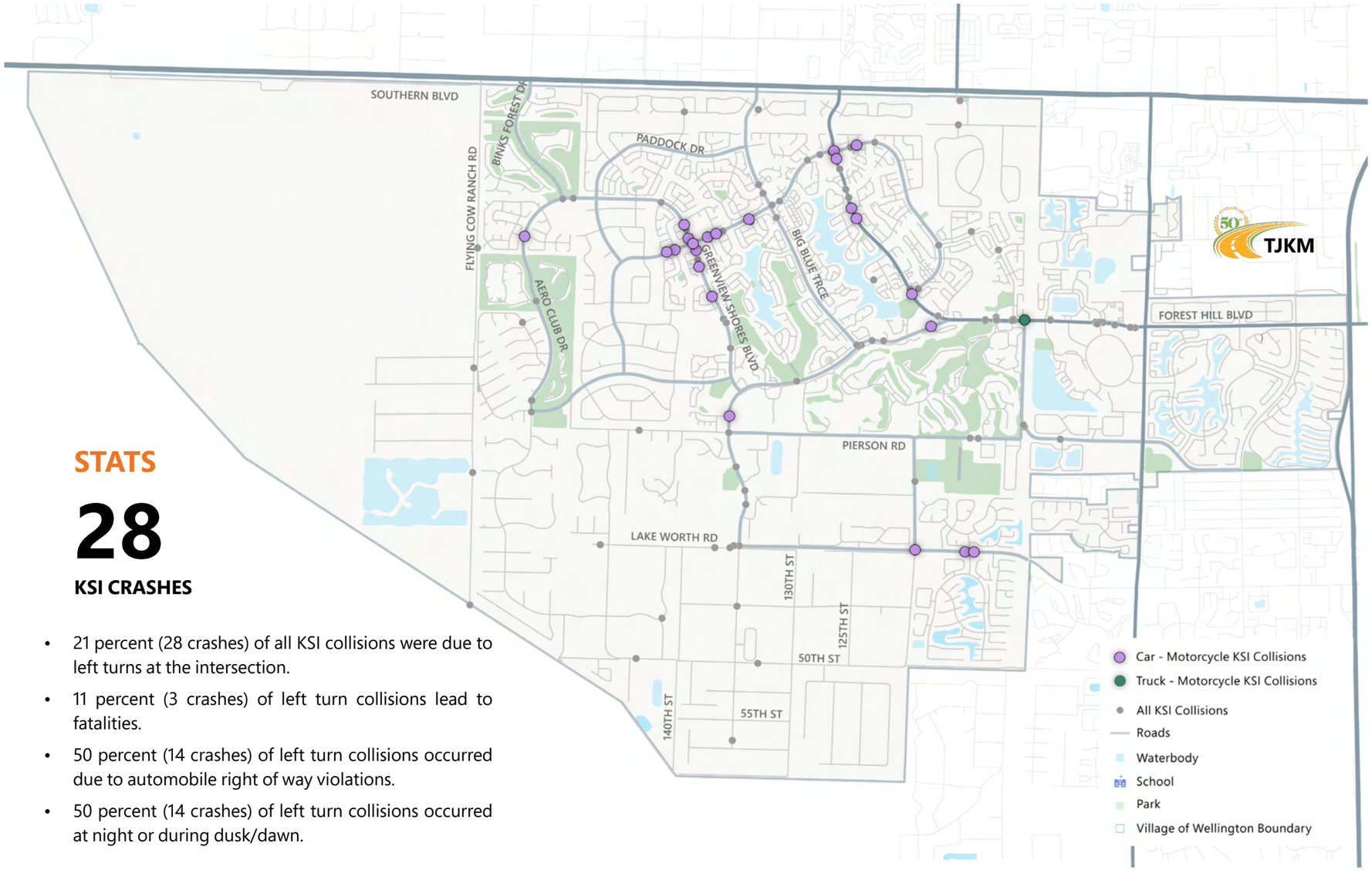
■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

SIGNAL TIMING & PHASING IMPROVEMENTS

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

TURN CALMING PROGRAM

■□□ EFFICACY ■□□ COST ■□□ COMPLEXITY



STATS

28

KSI CRASHES

- 21 percent (28 crashes) of all KSI collisions were due to left turns at the intersection.
- 11 percent (3 crashes) of left turn collisions lead to fatalities.
- 50 percent (14 crashes) of left turn collisions occurred due to automobile right of way violations.
- 50 percent (14 crashes) of left turn collisions occurred at night or during dusk/dawn.

PROFILE 3: NIGHTTIME CRASHES

FACTORS

Nighttime crashes are accidents that occur after dark, often due to reduced visibility and increased difficulty in judging distances. Factors such as impaired vision, fatigue, and reduced reaction times contribute to the higher risk of accidents during nighttime driving.

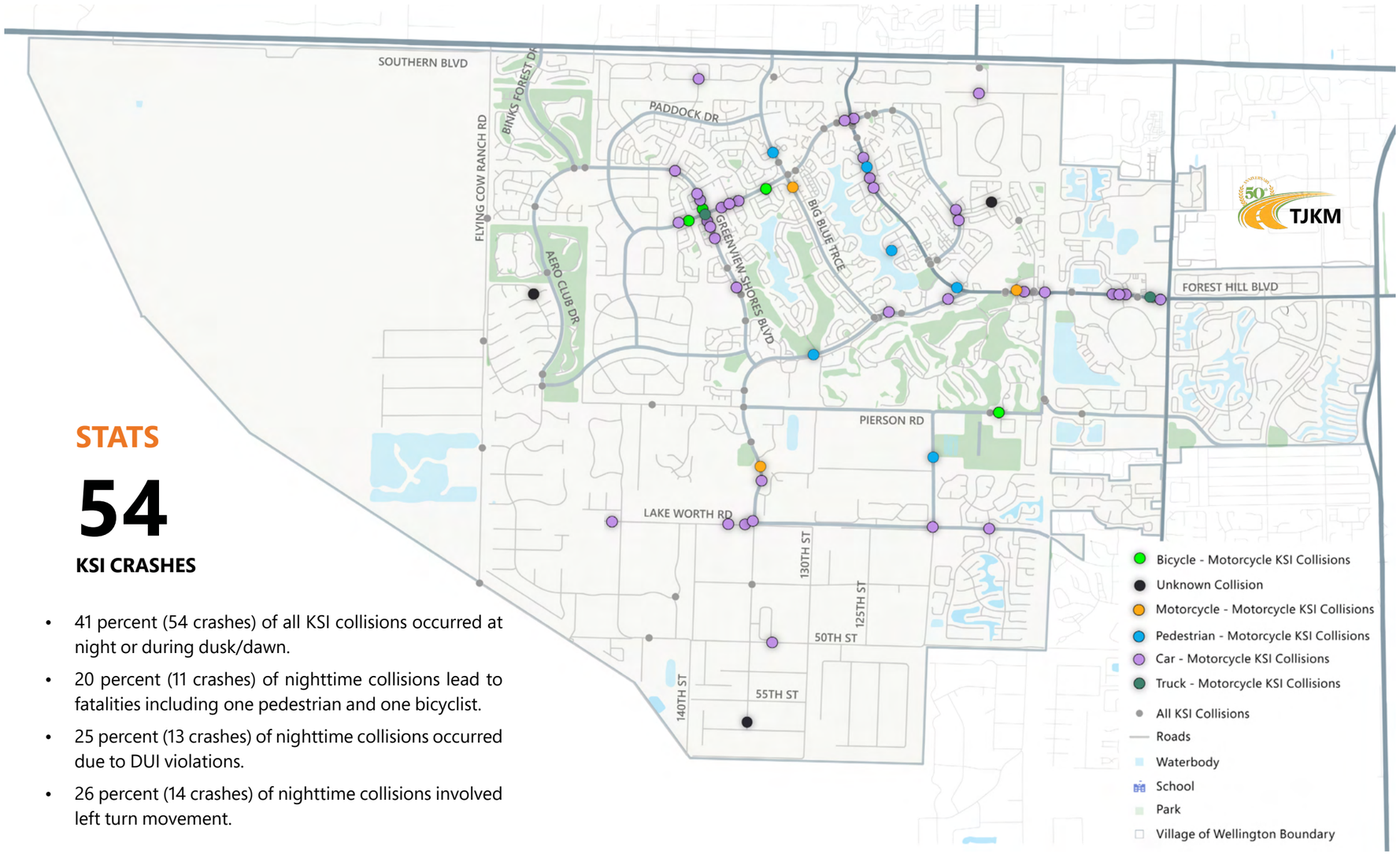
MODES

STATS

54

KSI CRASHES

- 41 percent (54 crashes) of all KSI collisions occurred at night or during dusk/dawn.
- 20 percent (11 crashes) of nighttime collisions lead to fatalities including one pedestrian and one bicyclist.
- 25 percent (13 crashes) of nighttime collisions occurred due to DUI violations.
- 26 percent (14 crashes) of nighttime collisions involved left turn movement.



COUNTERMEASURES

ROADWAY AND INTERSECTION SAFETY LIGHTING

■■■ EFFICACY ■■■ COST ■■□ COMPLEXITY

INSTALL EDGE LINE AND CENTERLINE STRIPES/ RUMBLE STRIPS, GUARDRAIL

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

RETROREFLECTIVE STRIPS ON SIGNPOSTS

■■□ EFFICACY ■■□ COST ■■□ COMPLEXITY

PROTECTED LEFT TURN SIGNAL

■■■ EFFICACY ■■□ COST ■■□ COMPLEXITY

DELINEATORS & GUARDRAIL

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

CHEVRON SIGNS

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

VEHICLE SPEED FEEDBACK SIGN

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

CURVE WARNNG SPEED FEEDBACK SIGNS

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

PROFILE 4: UNSAFE SPEED & OTHER IMPROPER DRIVING

FACTORS

The primary collision factor of "unsafe speed" and "improper driving" indicates that one of the parties involved was driving at a speed greater than was reasonable or prudent. Reducing vehicle speed can give drivers additional time to respond to potentially dangerous situations. Lower speeds decrease the severity of injuries by lessening the impact of the crash. The subsequent countermeasures suggest potential strategies for reducing travel speeds on our roads, discouraging unsafe driving, and encouraging better compliance with posted speed limits.

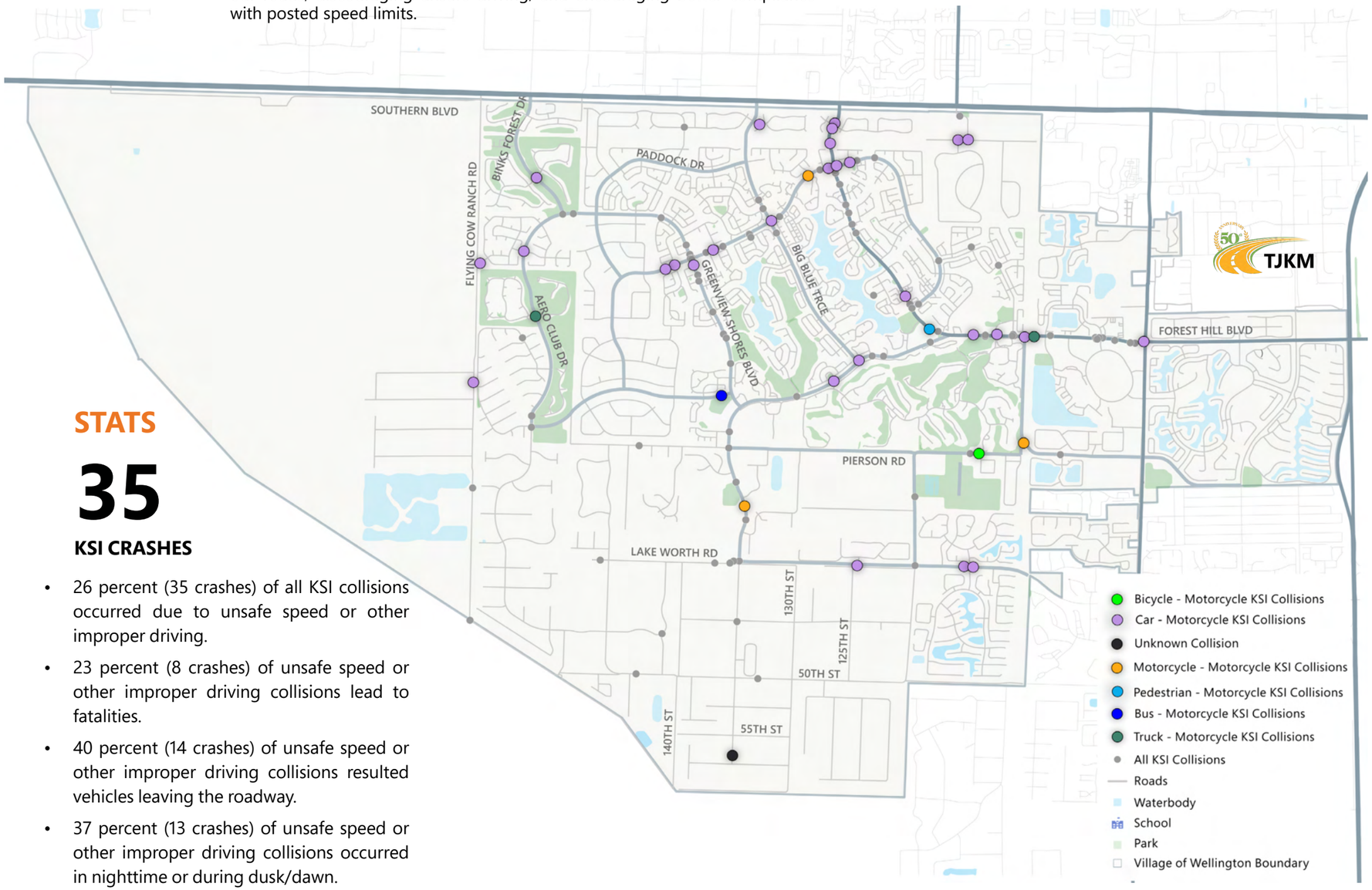
MODES

STATS

35

KSI CRASHES

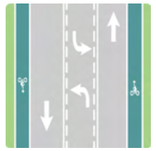
- 26 percent (35 crashes) of all KSI collisions occurred due to unsafe speed or other improper driving.
- 23 percent (8 crashes) of unsafe speed or other improper driving collisions lead to fatalities.
- 40 percent (14 crashes) of unsafe speed or other improper driving collisions resulted vehicles leaving the roadway.
- 37 percent (13 crashes) of unsafe speed or other improper driving collisions occurred in nighttime or during dusk/dawn.



COUNTERMEASURES

PROTECTED BIKE LANES

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY



LANE RECONFIGURATION

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

VEHICLE SPEED FEEDBACK SIGNS

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

SPEED CUSHIONS, HUMP & TABLE

■■■ EFFICACY ■■□ COST ■□□ COMPLEXITY

REDUCED SPEED SCHOOL ZONE

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

AUTOMATED SPEED ENFORCEMENT

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

VARIABLE SPEED WARNING SIGNS

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

PROFILE 5: FOLLOWING TOO CLOSELY

FACTORS

Crashes caused by following too closely, or tailgating, typically occur when a driver does not maintain a safe distance from the vehicle ahead. This behavior reduces reaction time, making it difficult to stop or maneuver safely if the leading vehicle suddenly slows down or stops. Tailgating often leads to rear-end crashes, especially in heavy traffic, during sudden stops, or under adverse weather conditions. These incidents are frequently associated with distracted driving, aggressive driving behaviors, and a lack of awareness of safe following distances.

MODES

COUNTERMEASURES

VARIABLE SPEED WARNING SIGNS

EFFICACY ■■■ COST ■■■ COMPLEXITY ■■■

AUTOMATED SPEED ENFORCEMENT

EFFICACY ■■□ COST ■■■ COMPLEXITY ■■■

SPEED CUSHIONS, HUMP & TABLE

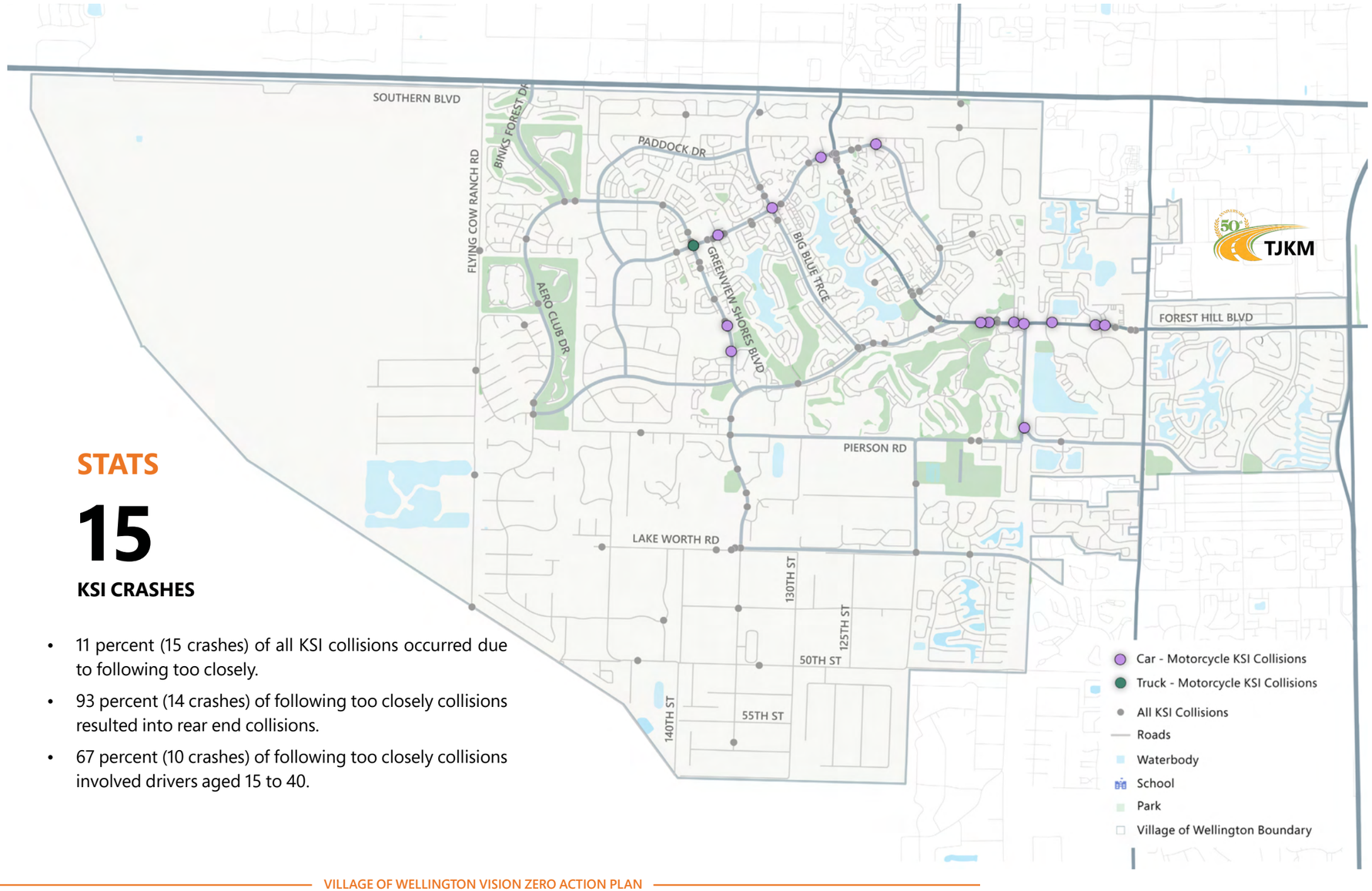
EFFICACY ■■■ COST ■■□ COMPLEXITY ■■□

ROUNDABOUTS

EFFICACY ■■□ COST ■■■ COMPLEXITY ■■■

SPEED REDUCTION SIGNS

EFFICACY ■■□ COST ■■■ COMPLEXITY ■■■



STATS

15

KSI CRASHES

- 11 percent (15 crashes) of all KSI collisions occurred due to following too closely.
- 93 percent (14 crashes) of following too closely collisions resulted into rear end collisions.
- 67 percent (10 crashes) of following too closely collisions involved drivers aged 15 to 40.

PROFILE 6: 40+ MPH STREETS

FACTORS

Serious crashes occur on streets with posted speeds of 40+ mph or higher. Given that these streets account for only a small portion of the Village's roadway network, the streets have an outsized impact on the safety of the residents. By implementing countermeasures that slow vehicles down, we can increase the time drivers have to react to potentially dangerous situations, reduce the severity of injuries, and increase the visibility of more vulnerable road users.

MODES

COUNTERMEASURES

VARIABLE SPEED WARNING SIGNS

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

SPEED FEEDBACK SIGNS

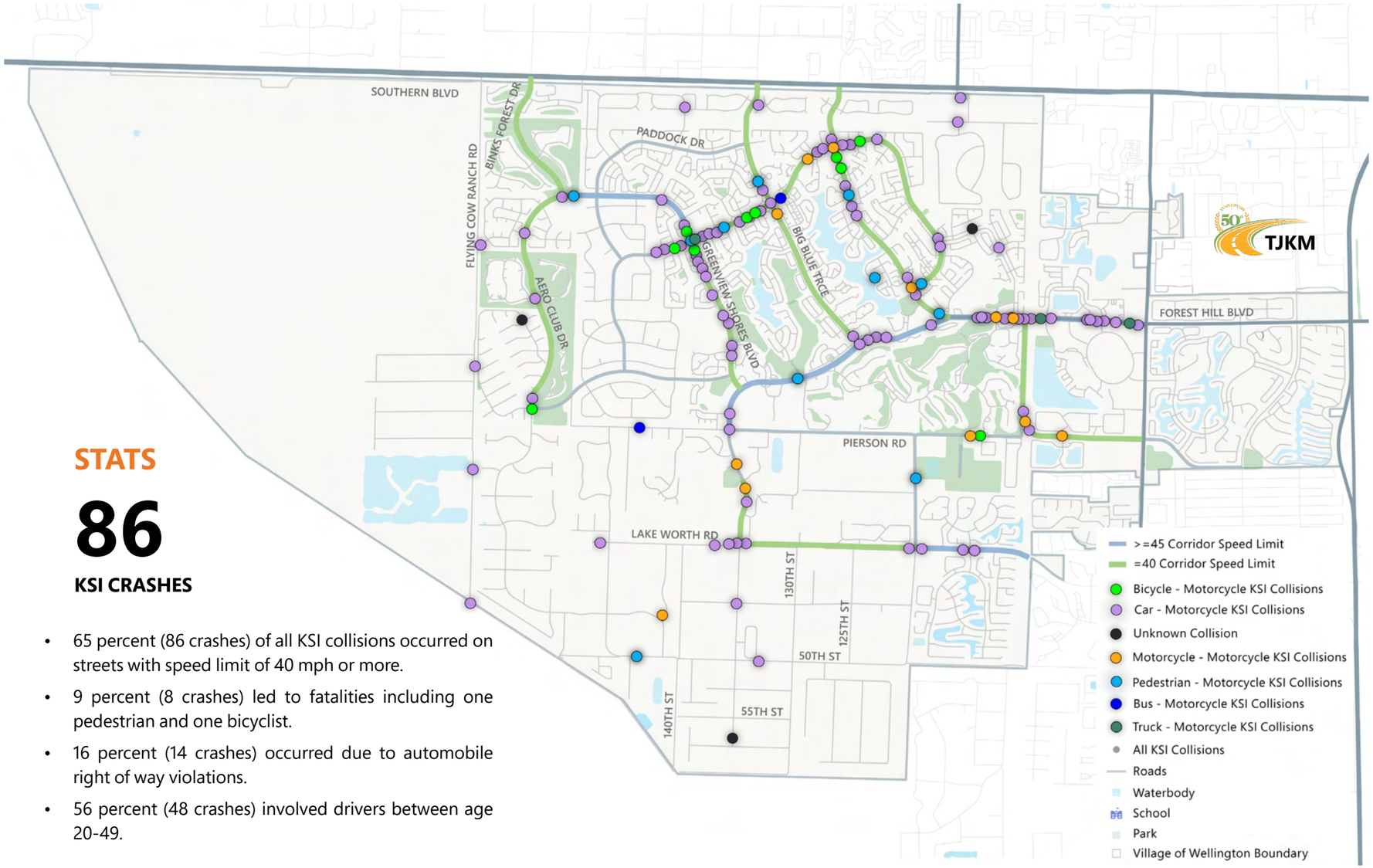
■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

REDUCED SPEED SCHOOL ZONE

■■□ EFFICACY ■□□ COST ■□□ COMPLEXITY

AUTOMATED SPEED ENFORCEMENT

■■□ EFFICACY ■■■ COST ■■■ COMPLEXITY



STATS

86

KSI CRASHES

- 65 percent (86 crashes) of all KSI collisions occurred on streets with speed limit of 40 mph or more.
- 9 percent (8 crashes) led to fatalities including one pedestrian and one bicyclist.
- 16 percent (14 crashes) occurred due to automobile right of way violations.
- 56 percent (48 crashes) involved drivers between age 20-49.

PROFILE 7: 40+ MPH PEDESTRIAN & BICYCLE CRASHES

FACTORS

Pedestrians and bicyclists do not have the protection of a "steel box" as they travel along our roadways. Weather conditions, pavement deficiencies, and lack of safe and usable facilities add to the risks pedestrians and bicyclists face every day.

MODES

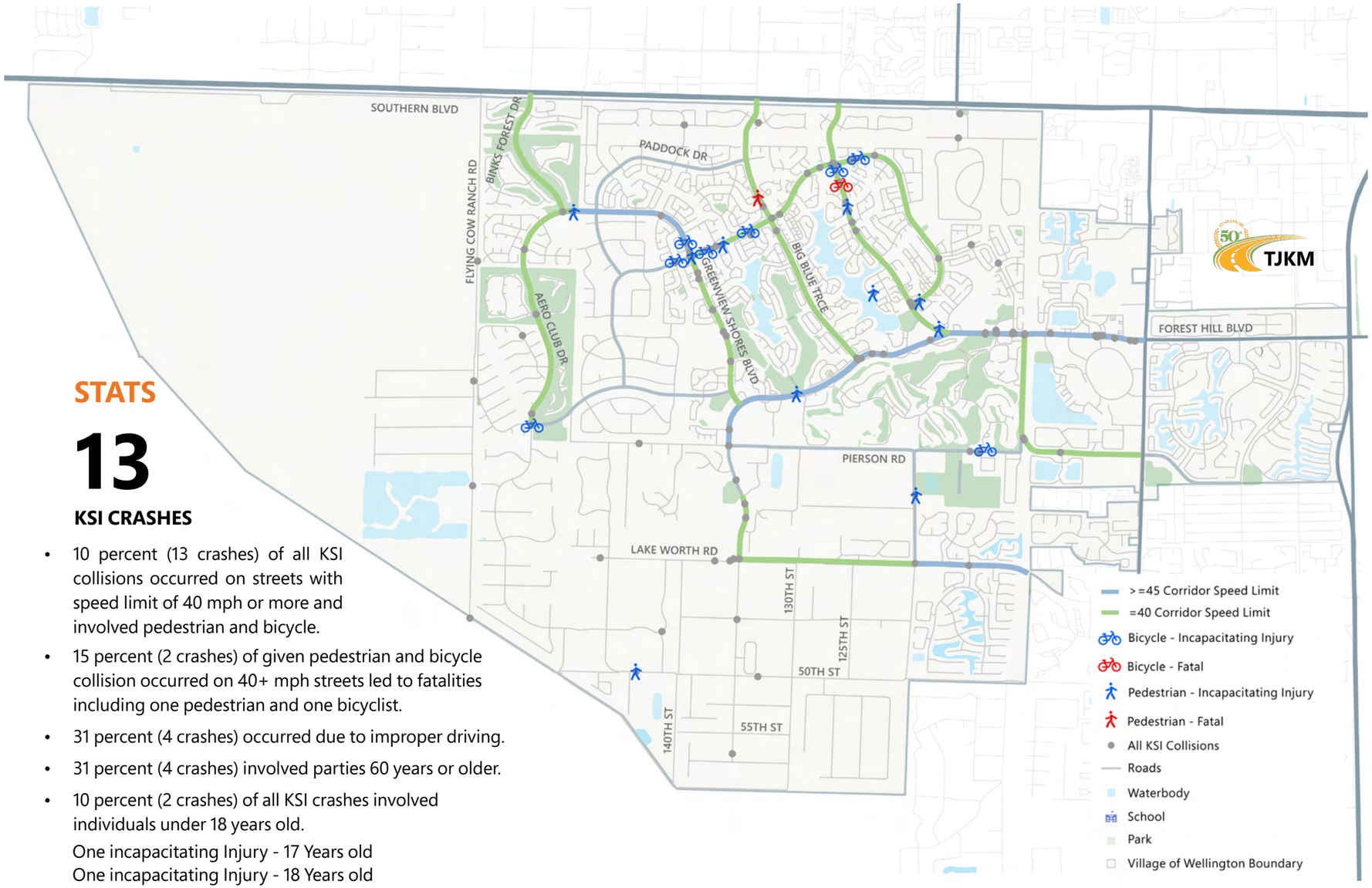
STATS

13

KSI CRASHES

- 10 percent (13 crashes) of all KSI collisions occurred on streets with speed limit of 40 mph or more and involved pedestrian and bicycle.
- 15 percent (2 crashes) of given pedestrian and bicycle collision occurred on 40+ mph streets led to fatalities including one pedestrian and one bicyclist.
- 31 percent (4 crashes) occurred due to improper driving.
- 31 percent (4 crashes) involved parties 60 years or older.
- 10 percent (2 crashes) of all KSI crashes involved individuals under 18 years old.

  One incapacitating Injury - 17 Years old
  One incapacitating Injury - 18 Years old



COUNTERMEASURES

ROADWAY AND INTERSECTION SAFETY LIGHTING

■■■ EFFICACY ■■■ COST ■■□ COMPLEXITY

GREEN PAVEMENT

■□□ EFFICACY ■■□ COST ■□□ COMPLEXITY

PROTECTED BIKE LANES

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

RAISED CROSSWALKS

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

SPEED TABLES

■■■ EFFICACY ■■□ COST ■■□ COMPLEXITY

MARKED CROSSWALKS

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

PEDESTRIAN REFUGE ISLAND

■■■ EFFICACY ■■□ COST ■■□ COMPLEXITY

RECTANGULAR RAPID FLASHING BEACON

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

PROFILE 8: CRASHES WITHIN 0.25 MILES OF SCHOOL

FACTORS

A lack of bicycle and pedestrian facilities or higher than appropriate vehicle speeds contribute to increased risk in areas where there are concentrations of younger travelers. Additionally, less emotional and mental maturity as compared to an adult may result in younger people making crossing decisions when it is not safe to do so.

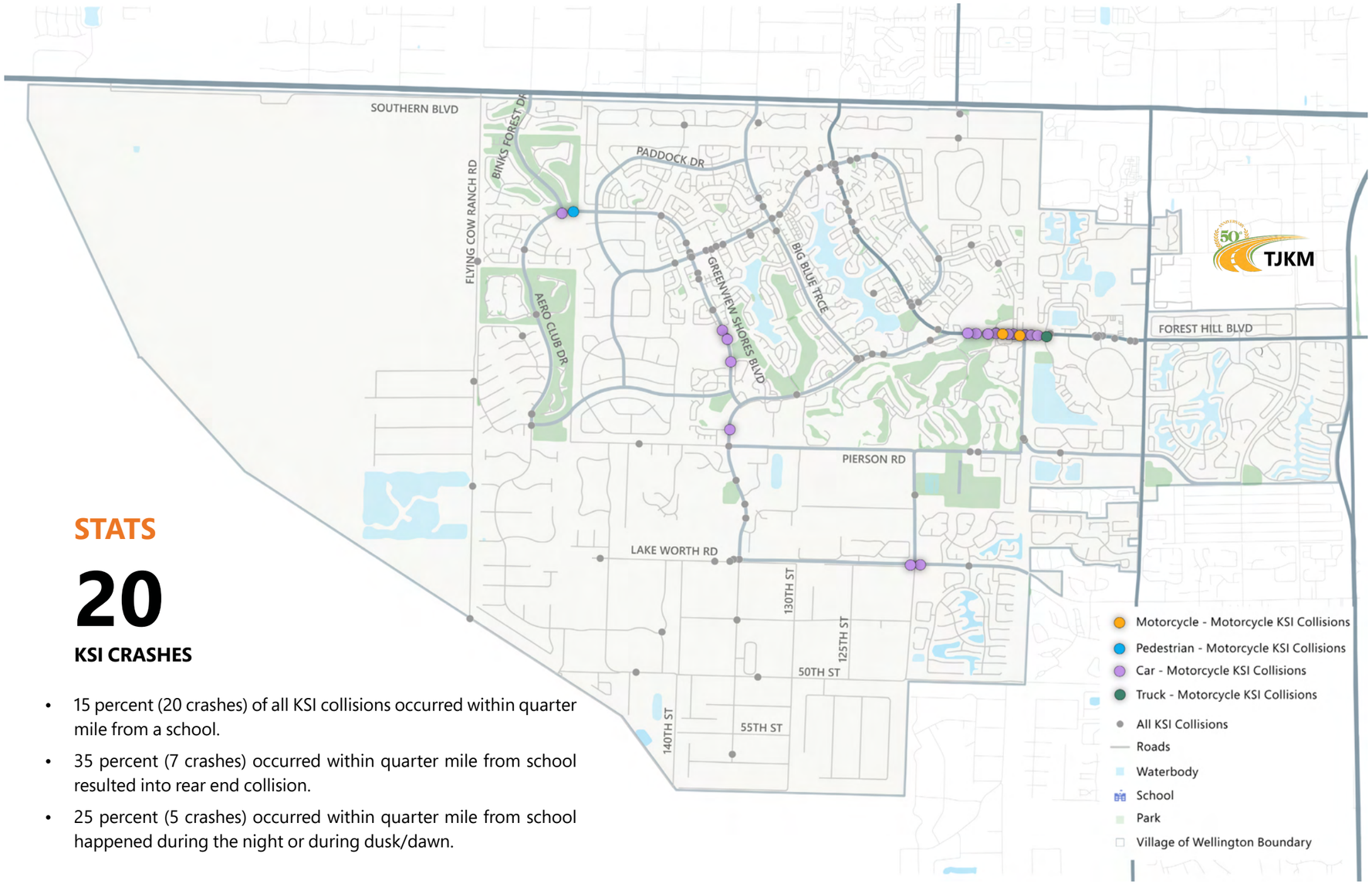
MODES

STATS

20

KSI CRASHES

- 15 percent (20 crashes) of all KSI collisions occurred within quarter mile from a school.
- 35 percent (7 crashes) occurred within quarter mile from school resulted into rear end collision.
- 25 percent (5 crashes) occurred within quarter mile from school happened during the night or during dusk/dawn.



COUNTERMEASURES

SAFE ROUTES TO SCHOOL PROGRAM (SRTS)

■■□ EFFICACY ■■□ COST ■□□ COMPLEXITY

REDUCE SPEED SCHOOL ZONE

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

BICYCLE SIGNAL

■■□ EFFICACY ■■□ COST ■■□ COMPLEXITY

PROTECTED BIKE LANES

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

FLASHING YELLOW RIGHT TURN

■□□ EFFICACY ■■□ COST ■■□ COMPLEXITY

HIGH VISIBILITY ENFORCEMENT

■■□ EFFICACY ■■□ COST ■■■ COMPLEXITY

VARIABLE SPEED WARNING SIGNS

■■■ EFFICACY ■■■ COST ■■■ COMPLEXITY

AUTOMATED SPEED ENFORCEMENT

■■□ EFFICACY ■■■ COST ■■■ COMPLEXITY

PROFILE 9: TRAFFIC SIGNAL & SIGN VIOLATION

FACTORS

Traffic signal and sign violation refers to the failure to adhere to the rules indicated by traffic lights or road signs, often leading to dangerous situations such as crashes or pedestrian accidents. These violations are enforceable by law enforcement and can result in fines, penalties, or other legal consequences.

MODES

COUNTERMEASURES

ADVANCED DILEMMA-ZONE DETECTION

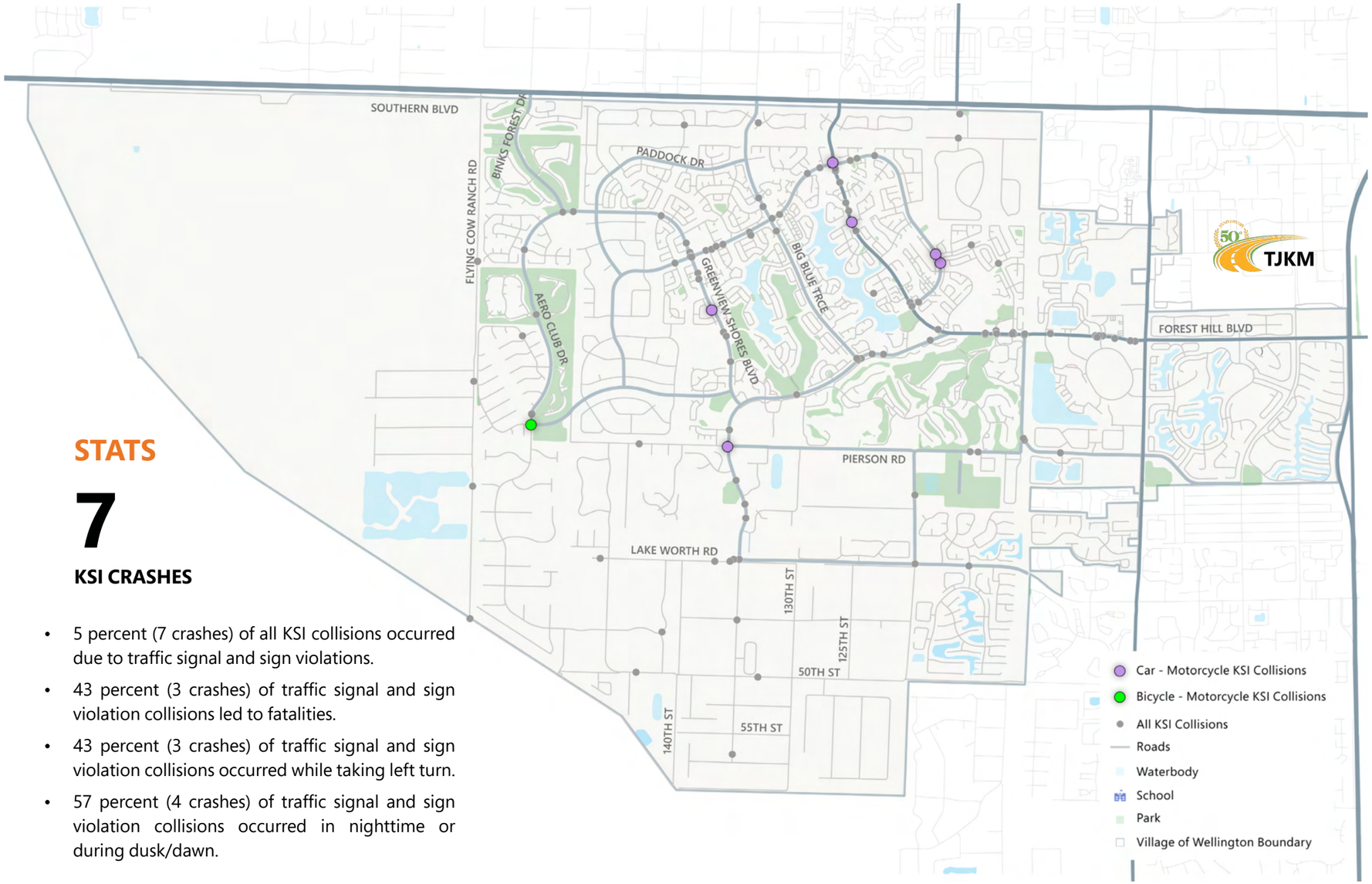
■■□ EFFICACY ■■■ COST ■■□ COMPLEXITY

HIGH VISIBILITY ENFORCEMENT

■■□ EFFICACY ■■□ COST ■■■ COMPLEXITY

BACK PLATES WITH RETROREFLECTIVE BORDERS

■■□ EFFICACY ■■□ COST ■■□ COMPLEXITY



STATS

7

KSI CRASHES

- 5 percent (7 crashes) of all KSI collisions occurred due to traffic signal and sign violations.
- 43 percent (3 crashes) of traffic signal and sign violation collisions led to fatalities.
- 43 percent (3 crashes) of traffic signal and sign violation collisions occurred while taking left turn.
- 57 percent (4 crashes) of traffic signal and sign violation collisions occurred in nighttime or during dusk/dawn.

PROFILE 10: AGE GROUP 20-49 CRASHES

FACTORS

Crashes involving individuals aged 20-49 often result from a mix of risk-taking behaviors and increased time spent on the road. This age group may exhibit higher instances of distracted driving, speeding, and driving under the influence, contributing to a significant proportion of traffic accidents. Their active lifestyles, including commuting for work and social activities, further elevate their exposure to potential crashes.

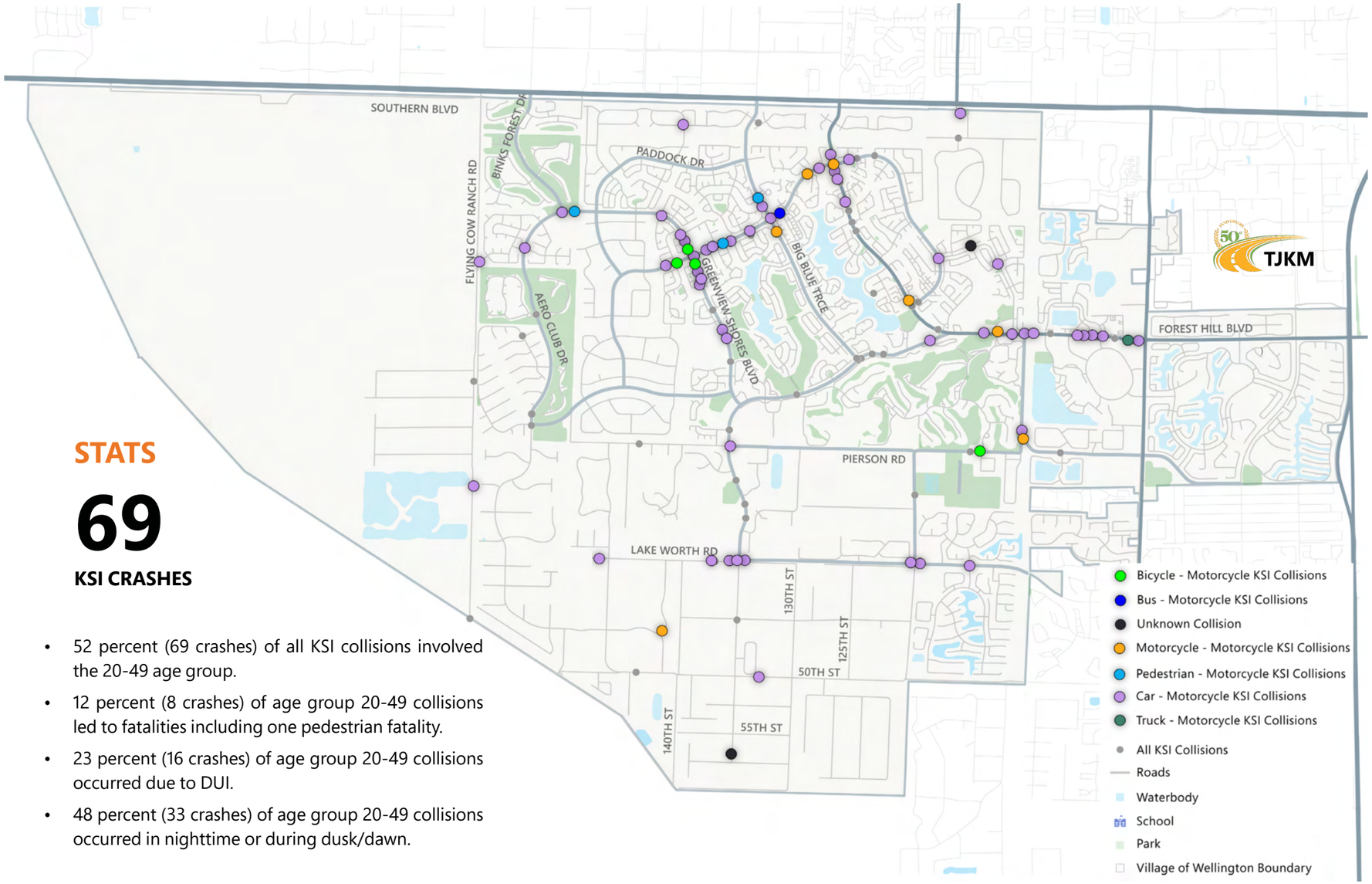
MODES

STATS

69

KSI CRASHES

- 52 percent (69 crashes) of all KSI collisions involved the 20-49 age group.
- 12 percent (8 crashes) of age group 20-49 collisions led to fatalities including one pedestrian fatality.
- 23 percent (16 crashes) of age group 20-49 collisions occurred due to DUI.
- 48 percent (33 crashes) of age group 20-49 collisions occurred in nighttime or during dusk/dawn.



COUNTERMEASURES

ROADWAY AND INTERSECTION SAFETY LIGHTING

■■■ EFFICACY ■■■ COST ■■□ COMPLEXITY

EDUCATIONAL CAMPAIGN

■■□ EFFICACY ■■□ COST ■■□ COMPLEXITY

IMPROVED SIGNAGE

■■□ EFFICACY ■■□ COST ■■□ COMPLEXITY

PEDESTRIAN CROSSING

■■□ EFFICACY ■■□ COST ■■□ COMPLEXITY

ALCOHOL USE DISORDER (AUD) ASSESSMENT & TREATMENT PROGRAMS

■□□ EFFICACY ■■■ COST ■■■ COMPLEXITY

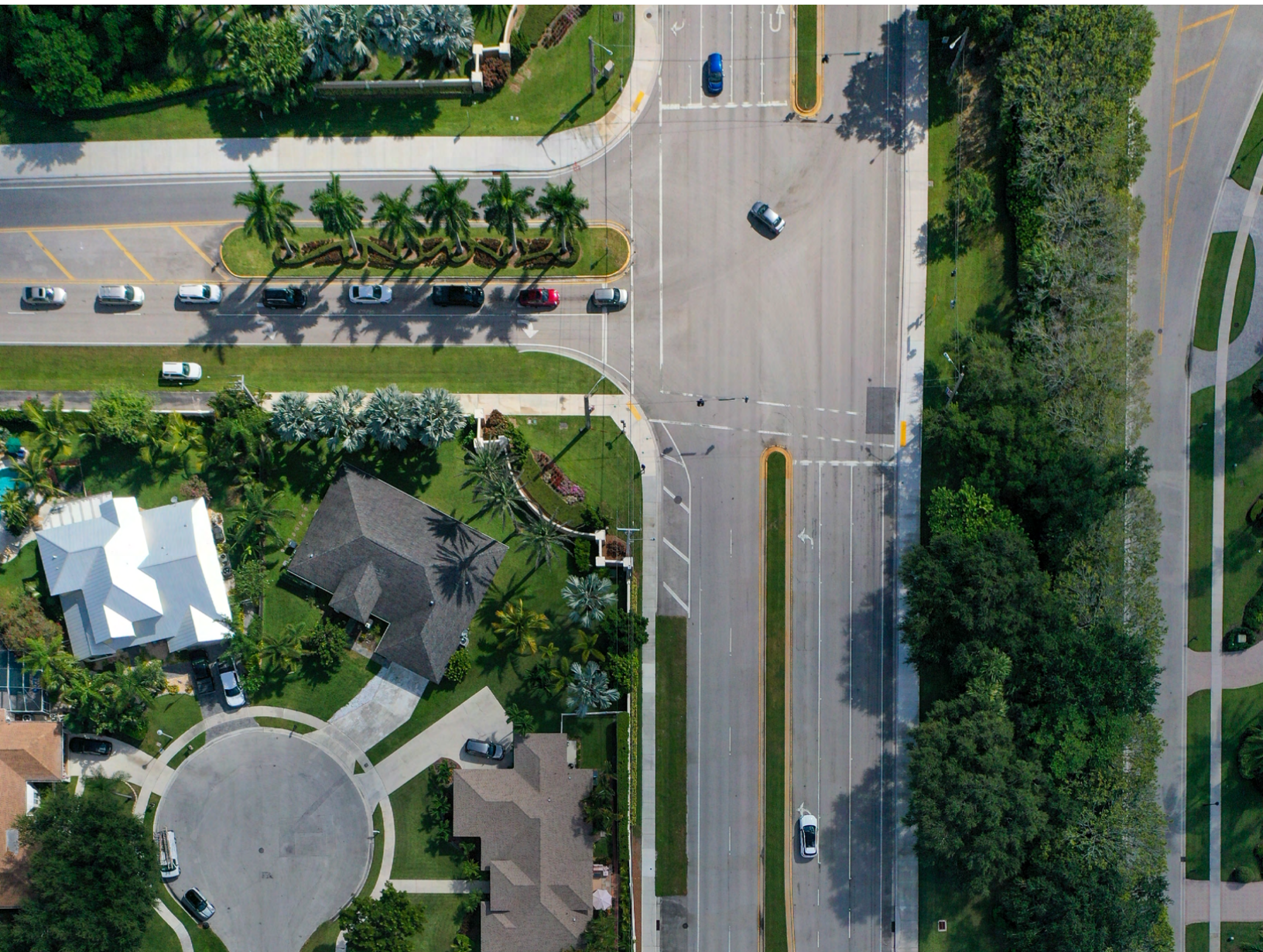
HIGH VISIBILITY ENFORCEMENT

■■□ EFFICACY ■■■ COST ■■■ COMPLEXITY

9. ACTION PLAN

With the firm foundation of its Vision Zero building blocks and crash profiles, the Village is ready to continue progress toward eliminating fatalities and incapacitating injuries. The Village will work to meet this goal through targeted investments at the recommended priority project locations and a set of actions to implement immediately and over the coming years. Leveraging its Vision Zero Action Plan's comprehensive framework, the Village strategically positions itself to synchronize future initiatives and other planning documents. By identifying critical corridors as a high priority within the Vision Zero framework, Village ensures that these vital thoroughfares are focal points for cohesive and synergistic safety enhancements across various planning efforts. This approach streamlines efforts and maximizes resources, enabling the village to address safety concerns systematically and comprehensively. As Village commits to reducing fatalities and incapacitating injuries, Vision Zero emerges as the guiding compass, steering the collective efforts of multiple plans toward a shared vision of safer streets and enhanced mobility for all. There are two aspects to the Action Plan:

- Priority Projects (includes design and planning projects on priority corridors and village-wide)
- Implementable Actions



PRIORITY PROJECTS (CORRIDORS, INTERSECTIONS & VILLAGE-WIDE)

The Village focuses on 11 priority projects: five corridor improvement projects, three intersection improvement projects, and four Village-wide initiatives. These critical locations are part of the High Injury Network (HIN), identified for their high crash densities and significant public feedback on safety concerns. While every street is essential, the Village needs to start somewhere, and these priority corridors have historically seen frequent crashes and significant stakeholder and public input regarding safety issues.

These recommended projects were selected based on a comprehensive crash analysis, identifying leading factors in Wellington's fatal and incapacitating injury crashes. Countermeasures were identified through extensive study, observations, Village staff input, and stakeholder/community input. These are the most applicable and appropriate measures to make high-injury locations safer.

The Vision Zero Task Force will evaluate the success of these recommended projects after their completion, using the progress measures outlined in the Action Plan and the Task Force work plan.

This section includes descriptions and conceptual layouts for the 11 priority projects. These projects serve as representative examples for further development and encompass a range of contexts, typologies, and challenges. The conceptual layouts are not specific proposed improvements but help stakeholders and residents visualize potential real-life applications of various countermeasures and treatments. Based on public comments, the projects were refined to produce the final conceptual layouts. These layouts illustrate treatments that could be applied at various locations throughout the Village, pending further evaluation, engineering analysis, and design development. A detailed methodology to calculate cost estimates is in the **Appendix E.**

The Village of Wellington is focused on prioritizing the following ten corridors along the High Injury Network (HIN):

- Wellington Trace: Greenbriar Boulevard to Forest Hill Boulevard
- Forest Hill Boulevard: Southern Boulevard (Interstate 98) to S SR 7
- Greenview Shores Boulevard: Binks Forest Drive to South Shore Boulevard
- South Shore Boulevard: Forest Hill Boulevard (SR 882) to 57th Pl S
- Lake Worth Road: S Shore Boulevard to 1000 ft east of Barefoot Lake Drive
- Big Blue Trace: Southern Boulevard (Interstate 98) to S Shore Boulevard
- Pierson Road: Ousley Farms Road to Fairlane Farms Road
- Skipton Avenue: Wellington Trace to Chelmsford Street
- Aero Club Drive: Greenbriar Boulevard to Binks Forest Drive
- Stribling Way: Forest Hill Boulevard to Lyons Road

Each major corridor passing through the equity-emphasis areas—Forest Hill Blvd, Big Blue Trace, Greenview Shores, and Wellington Trace—will receive at least one improvement per project within these sections. In general, this plan doesn't recommend any changes to any of the private streets or State Route 7.

Each project in the following sections lists the applicable corridors and intersections, categorizing them into High, Medium, and Low priority based on the following criteria:

High Priority

- The corridor is listed among the top ten high-injury corridors.
- A fatal crash occurred on this corridor and is directly addressed by the corresponding countermeasure or involved a pedestrian or bicyclist (e.g., a fatal head-on crash on a curve is being addressed by curve improvements).
- The improvement is near a school zone.
- The corridor has overwhelming community and task force support.

Medium

- An incapacitating injury crash occurred on this corridor and is directly addressed by the corresponding countermeasure.
- The corridor has strong community and task force support.

Low

- Other non-fatal and incapacitating type crashes occurred at or near this location, indicating a pattern of roadway deficiencies.

PRIORITY PROJECTS (CORRIDORS)

Project R1: Enhanced Delineation on Curves and Median Delineators

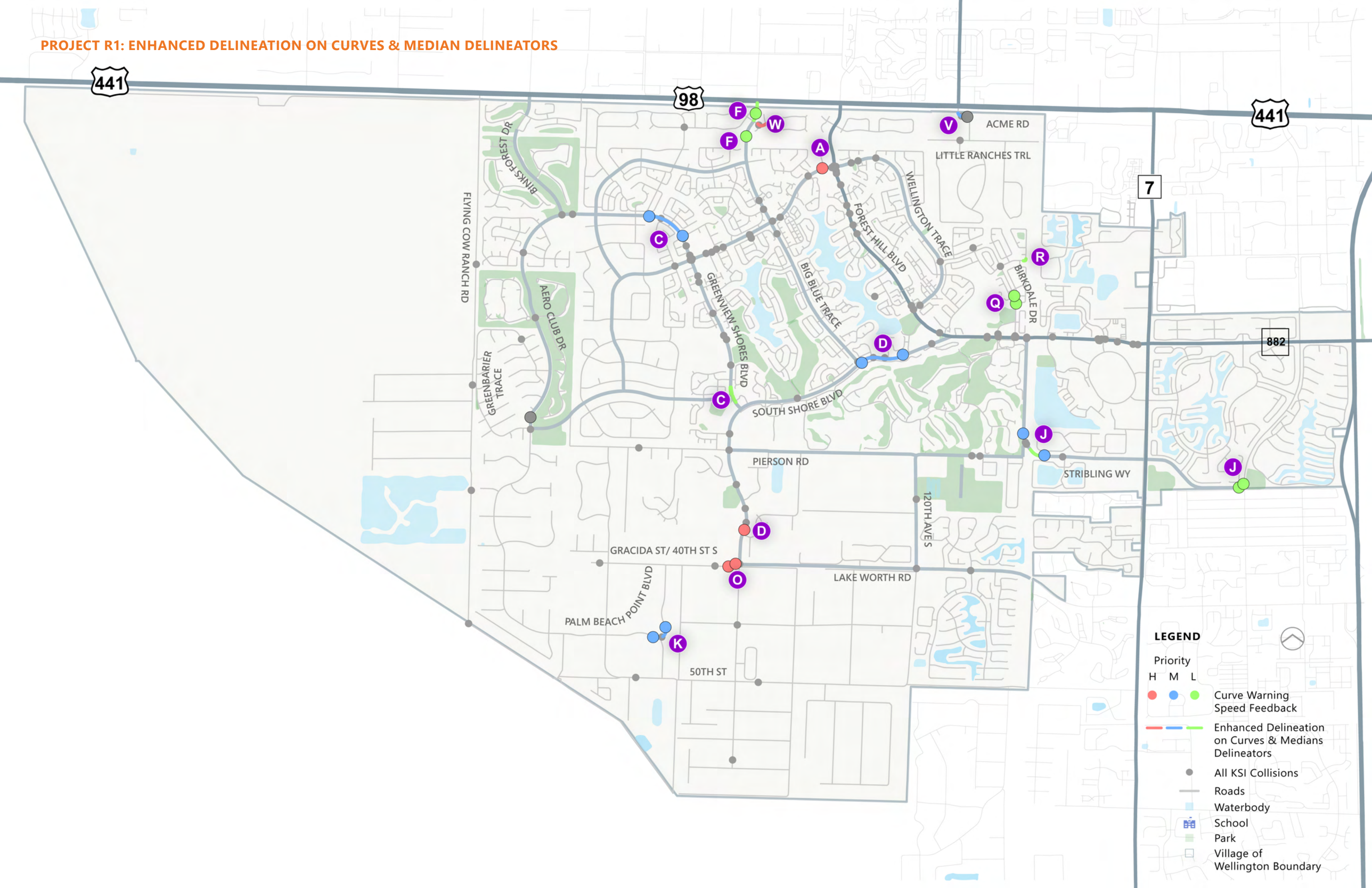
This project addresses crashes that occur on relatively sharp curves by warning drivers of the upcoming curve and enhancing the visibility of curvature to help motorists better navigate the curve at a safe speed. Variable speed warning signs help get the driver's attention and warn them that they may be traveling over the recommended speed for the curve.

Improvements: This project includes enhancements to pavement marking and striping, installation of retro-reflective strips on signposts, delineators, chevron signs, improved visibility of signs, and curve warning signs.

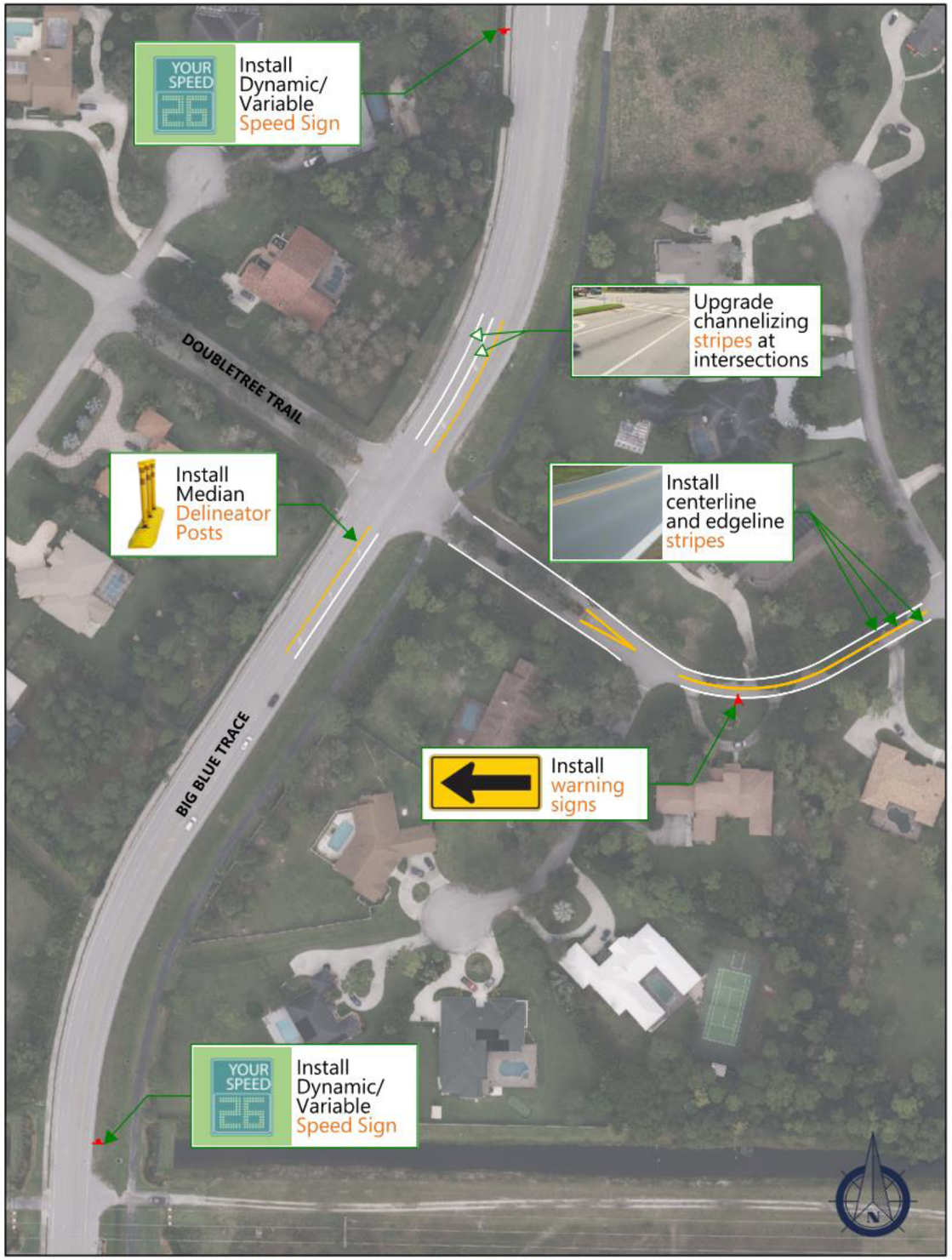
Crash type addressed: These countermeasures specifically address lane departure crashes, including off-road, head-on, and sideswipe crashes.

Corridor (HIN)	Locations	Priority	Budget
A	Wellington Trace	High	$36,000
C	Greenview Shores Blvd	High	$103,000
D	South Shore Blvd	High	$133,000
F	Big Blue Trace	High	$83,000
J	Stribling Way	Medium	$78,000
K	Palm Beach Point Blvd	Medium	$79,000
O	40th St S	High	$70,000
Q	Birkdale Dr	Low	$63,000
R	Pine Valley Dr	Low	$8,000
V	Little Ranches Trl	Medium	$10,000
W	Doubletree Trl	High	$11,000

PROJECT R1: ENHANCED DELINEATION ON CURVES & MEDIAN DELINEATORS



PROJECT R1: ENHANCED DELINEATION ON CURVES & MEDIAN DELINEATORS



Project Description:
Install signing and striping improvements along in advance of curves to alert drivers to upcoming curves, advisory speed reductions, and highlight lane positioning on curves.

Countermeasures:
- Install 6" channelizing stripes and 8" turn lane stripes at intersection approaches on curves.
- Install delineator posts along centerline at intersection approaches on curves
- Install speed feedback warning sign in advance of curve approaches.
- Install centerline and edgeline striping on curves
- Install curve warning signs and chevron signs
- Upgrade existing signs for enhanced conspicuity

Collision Types Addressed:
Lane Departure Collisions:
- ✓ Off Road
- ✓ Head On
- ✓ Side Swipe

Project Corridors:
A. Wellington Trace - HIGH
C. South Shore Boulevard - HIGH
D. Greenview Shores Boulevard - HIGH
F. Big Blue Trace - HIGH
K. Palm Beach Point Boulevard- MEDIUM
J. Stribling Way - MEDIUM
O. 40th St S - HIGH
Q. Birkdale Drive - LOW
R. Pine Valley Drive - LOW
V. Little Ranches Trail- MEDIUM
W. Doubletree Trail - HIGH

Estimated Project Cost:

Conduct ballbank test to determine speed reduction	$20,000
Install Curve Warning Sign with Speed Feedback	$255,000
Install Sign and Post	$21,500
Install Striping	$16,450
Install Median Delineators	$33,800
Traffic Control and Mobilization	$69,400
Contingency	$83,200
Total Construction Cost	**$500,000**
Preliminary Engineering	$99,900
Construction Engineering	$74,900
Total Project Cost	**$674,000**

Project R2: Advanced Warning Signs & Flashing Beacons

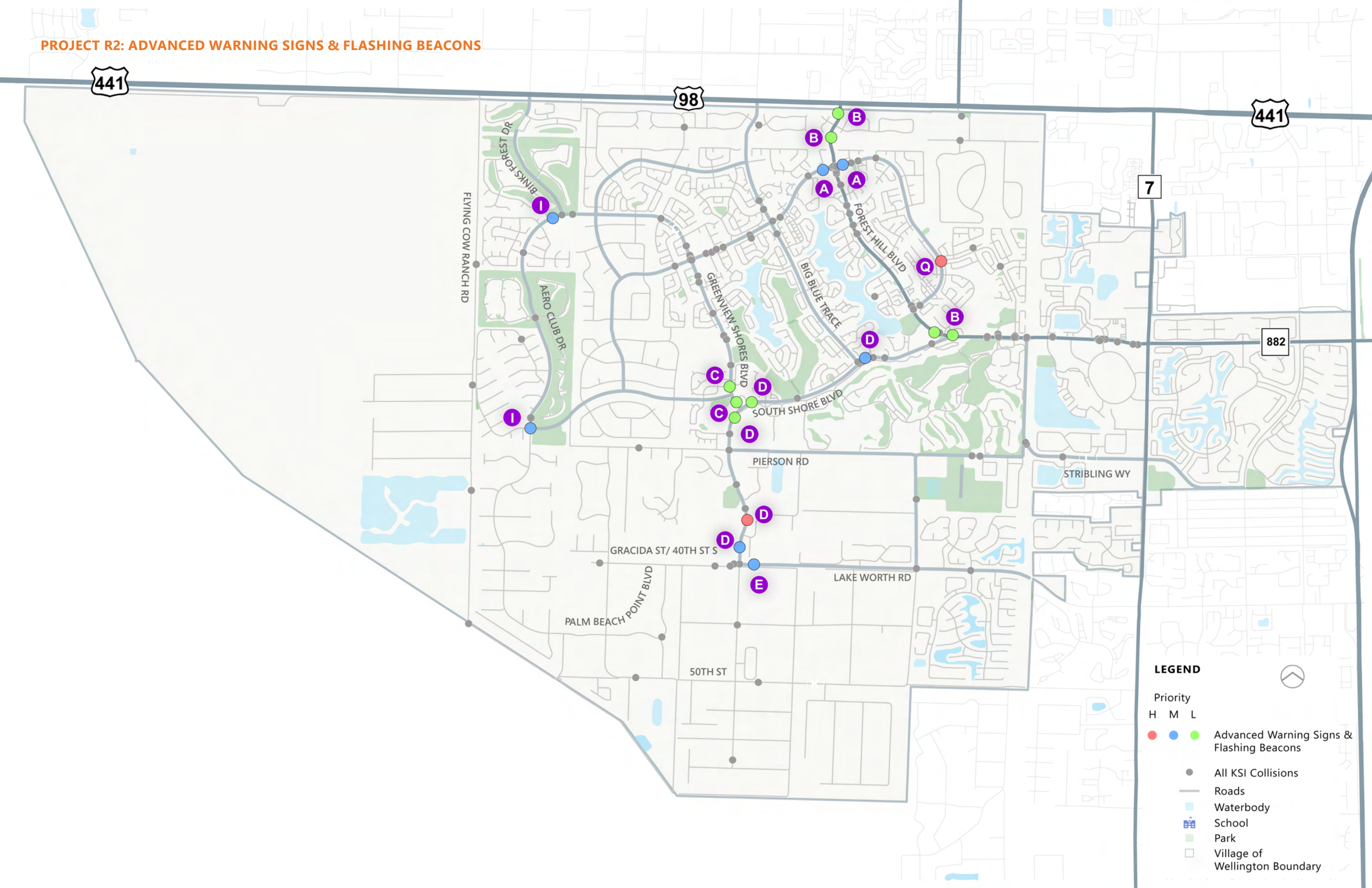
This project includes installing advanced warning signs and flashing beacons to enhance the visibility of upcoming intersections or changes in the roadway. Rear-end and angle crashes can occur at intersections when drivers are unaware of the forthcoming intersection or cannot see the traffic control device in time to comply.

Improvements: Advance flashing beacons can supplement and call driver attention to intersection control signs.

Crash type addressed: These countermeasures address rear-end and angle crashes.

Corridor (HIN)	Locations	Priority	Budget
A	Wellington Trace	High	$58,000
B	Forest Hill Blvd	High	$117,000
C	Greenview Shores Blvd	High	$58,000
D	South Shore Blvd	High	$146,000
E	Lake Worth Rd	High	$29,000
I	Aero Club Dr	High	$117,000
M	120th Ave	High	$58,000
Q	Birkdale Dr	Low	$29,000

PROJECT R2: ADVANCED WARNING SIGNS & FLASHING BEACONS



PROJECT R2: ADVANCED WARNING SIGNS & FLASHING BEACONS

Project Description:
Install flashing beacons on advance warning signs and stop signs to enhance conspicuity of upcoming intersections or changes in roadway alignment.

Countermeasures:
- ➢ Install flashing beacon on warning signs
- ➢ Install flashing beacon/flashing LED stop signs

Collision Types Addressed:
Collisions that are a result of low visibility of changes in roadway conditions/traffic control devices:
- ✓ Rear-End
- ✓ Angle
- ✓ Side Swipe

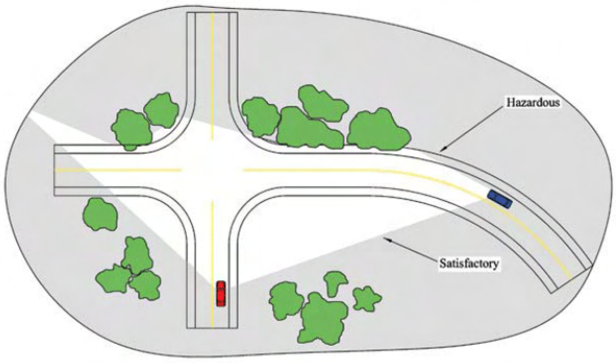
Project Corridors:
A. Wellington Trace - HIGH
B. Forest Hill Boulevard - HIGH
C. Greenview Shores Boulevard - HIGH
D. South Shore Boulevard - HIGH
E. Lake Worth Road - HIGH
I. Aero Club Drive - HIGH
M. 120th Avenue - HIGH
Q. Birkdale Drive - HIGH

Estimated Project Cost:

Install Flashing Beacon System	$315,000
Traffic Control and Mobilization	$63,000
Contingency	$76,000
Total Construction Cost	**$454,000**
Preliminary Engineering	$90,000
Construction Engineering	$68,000
Total Project Cost	**$612,000**

Project R3: Improve Intersection Geometry for Left and Right Turns

This project includes reconfiguring intersections along the corridor to optimize left and right turns, reduce crossing distances, and improve sight lines for left- and right-turning vehicles. It also includes installing roundabouts at intersections with a high frequency of left-angle and right-angle crashes.

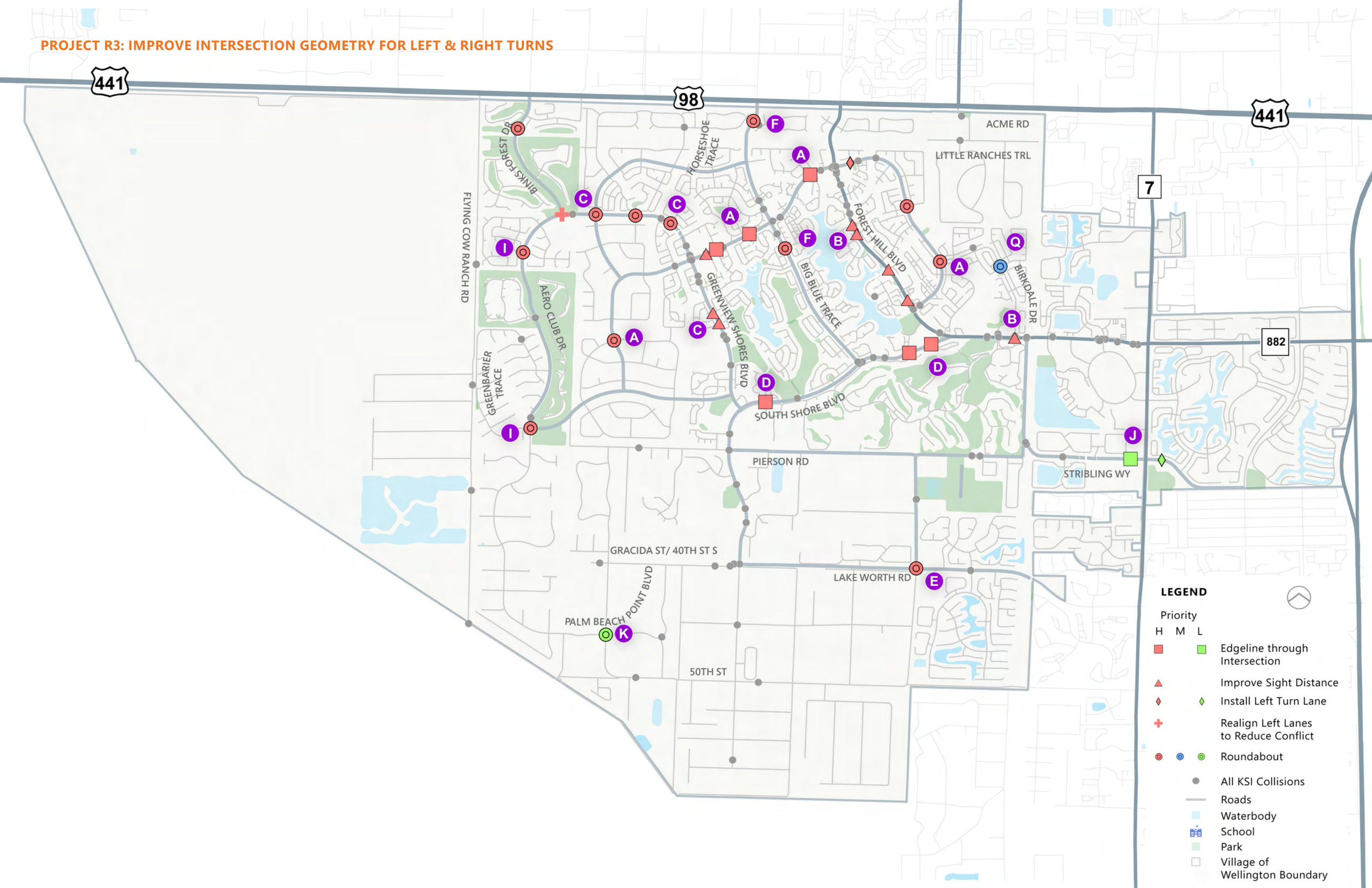


Improvements: Roundabouts help mitigate crash severity by lowering intersection approach speeds and eliminating the risky right-angle approach when vehicles enter simultaneously.

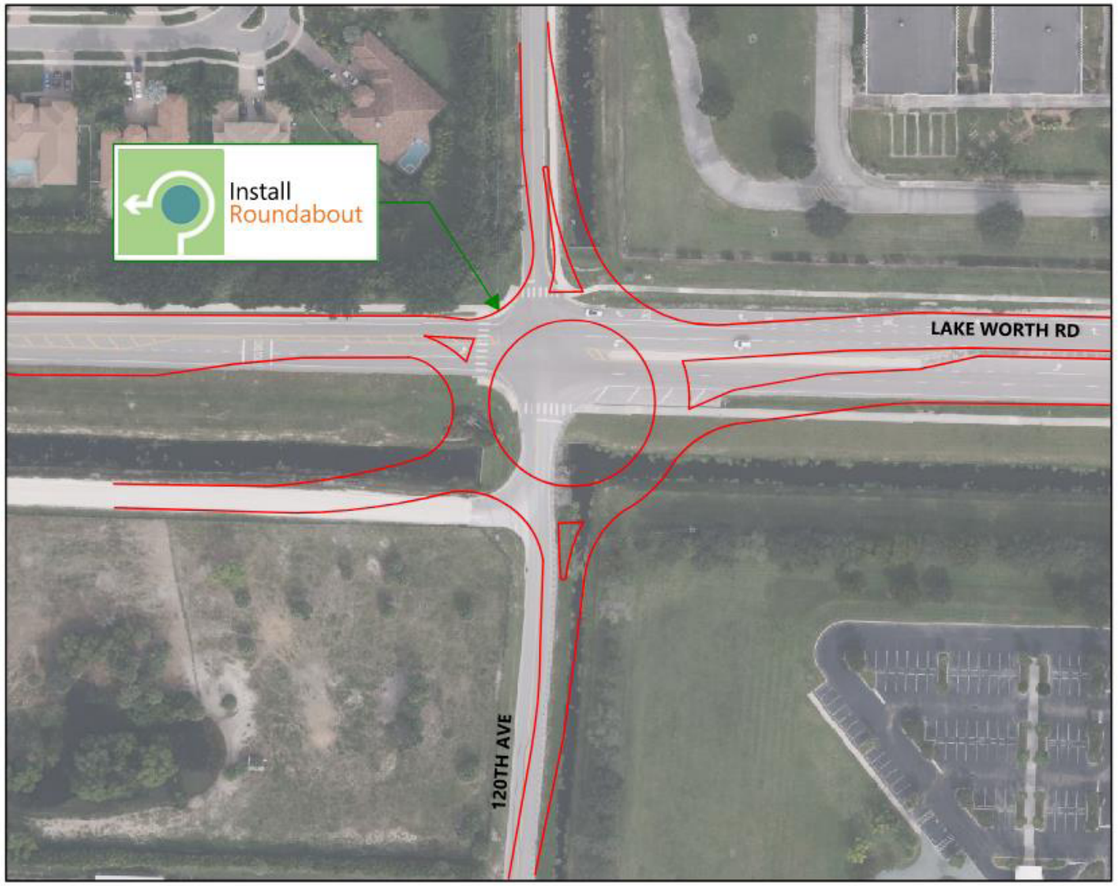
Crash type addressed: These countermeasures address angle and left-turn crashes, off-road incidents, right-of-way violations, and crashes involving pedestrians and bicyclists.

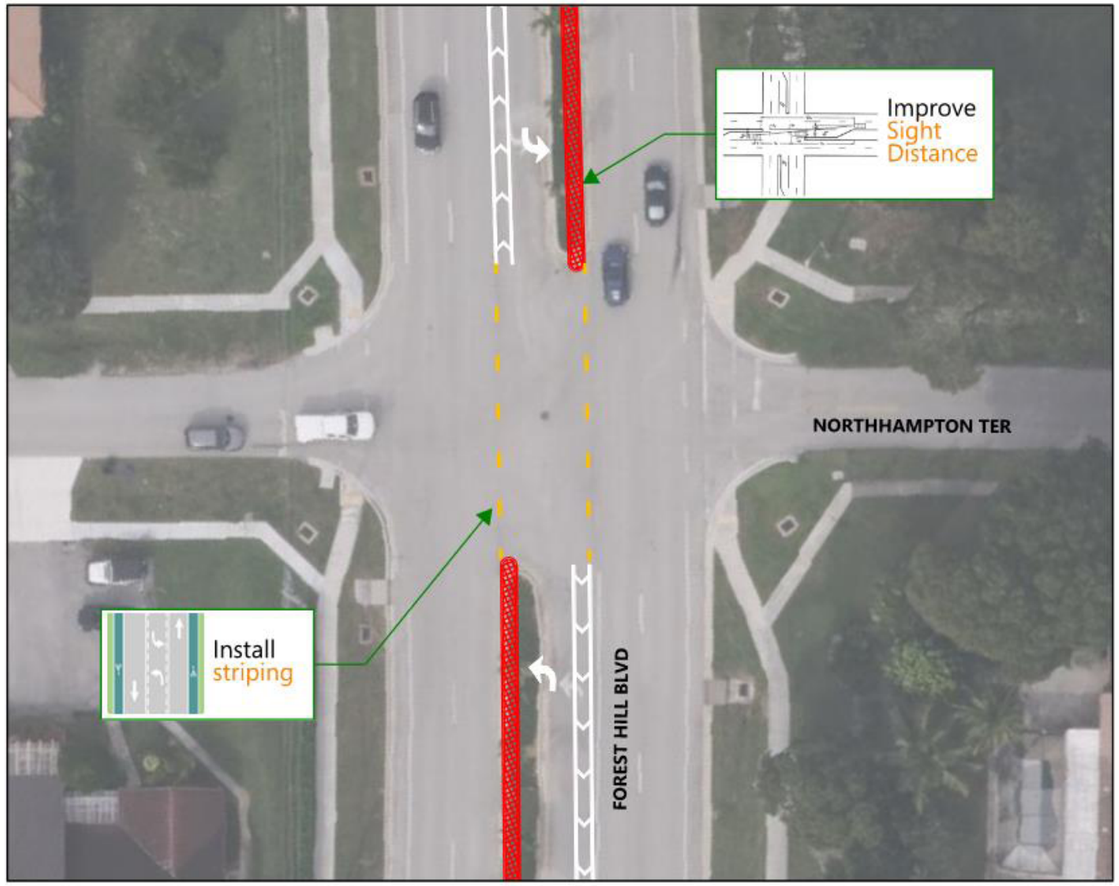
Corridor (HIN)	Locations	Priority	Budget
A	Wellington Trace	High	$116,000
B	Forest Hill Blvd	High	$3,018,000
C	Greenview Shores Blvd	High	$2,028,000
D	South Shore Blvd	High	$15,000
E	Lake Worth Rd	High	$4,000,000
F	Big Blue Trace	High	$1,965,000
I	Aero Club Dr	Medium	$983,000
J	Stribling Way	Low	$4,000
K	Palm Beach Point Blvd	Low	$983,000
Q	Birkdale Dr	Medium	$983,000

PROJECT R3: IMPROVE INTERSECTION GEOMETRY FOR LEFT & RIGHT TURNS



PROJECT R3: IMPROVE INTERSECTION GEOMETRY FOR LEFT & RIGHT TURNS





Project Description:
Improve intersections along the corridor to improve sight distance, reconfigure left turn lanes, improve signing and striping, and install roundabouts.

Countermeasures:
- ➢ Install Roundabout
- ➢ Install Signing and striping
- ➢ Reconfigure medians for sight distance

Collision Types Addressed:
- ✓ Off Road
- ✓ Head On
- ✓ Side Swipe
- ✓ Left turn/angled
- ✓ Right-of-way violations
- ✓ Pedestrian and bicyclist

Project Corridors:
A. Wellington Trace - HIGH
B. Forest Hill Boulevard - HIGH
C. Greenview Shores Blvd - HIGH
D. South Shore Boulevard - HIGH
E. Lake Worth Road - HIGH
F. Big Blue Trace - HIGH
I. Aero Club Drive - MEDIUM
J. Stribling Way - LOW
K. Palm Beach Pint Boulevard - LOW
Q. Birkdale Drive - MEDIUM
Non-HIN. Binks Forest Drive & Cypress Park Dr - LOW

Estimated Project Cost:

Install Striping	$6,000
Install pavement markings, curb paint, and markers	$8,000
Modify Medians	$135,000
Install Roundabout	$8,191,000
Traffic Control and Mobilization	$1,251,000
Contingency	$1,918,000
Total Construction Cost	**$11,509,000**
Preliminary Engineering	$1,843,000
Construction Engineering	$1,726,000
Total Project Cost	**$15,078,000**

Project R4: Install/Upgrade Bike Lanes

This project includes installing bike lanes and buffered bike lanes to provide bicyclists with a designated travel way that can protect and separate them from motor vehicles.

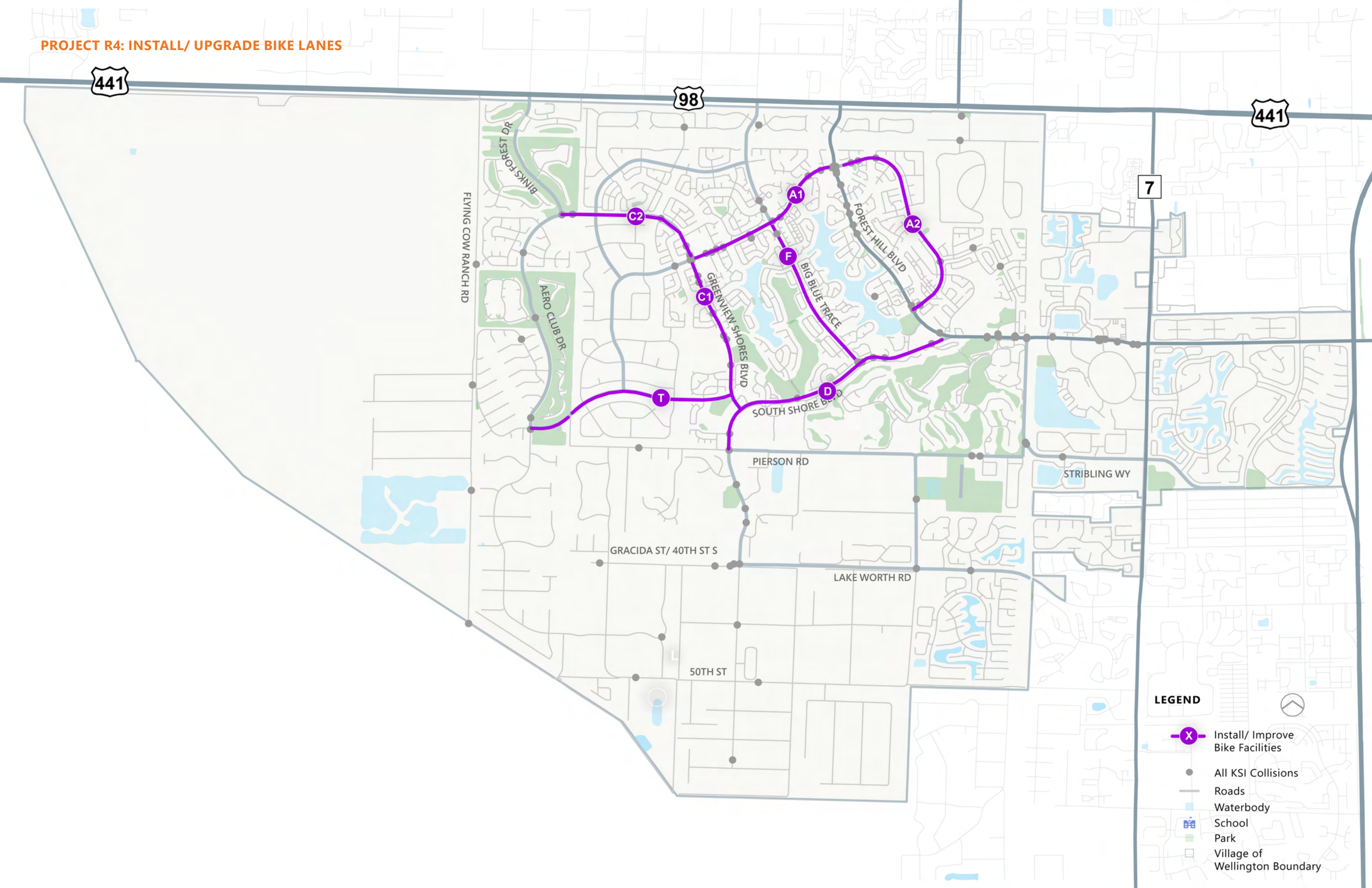
Improvements: Installation of new bike lanes can include widening of roadways, installation of striping, pavement marking, and signs.

Crash type addressed: These countermeasures aim to improve bicycle and pedestrian crashes.

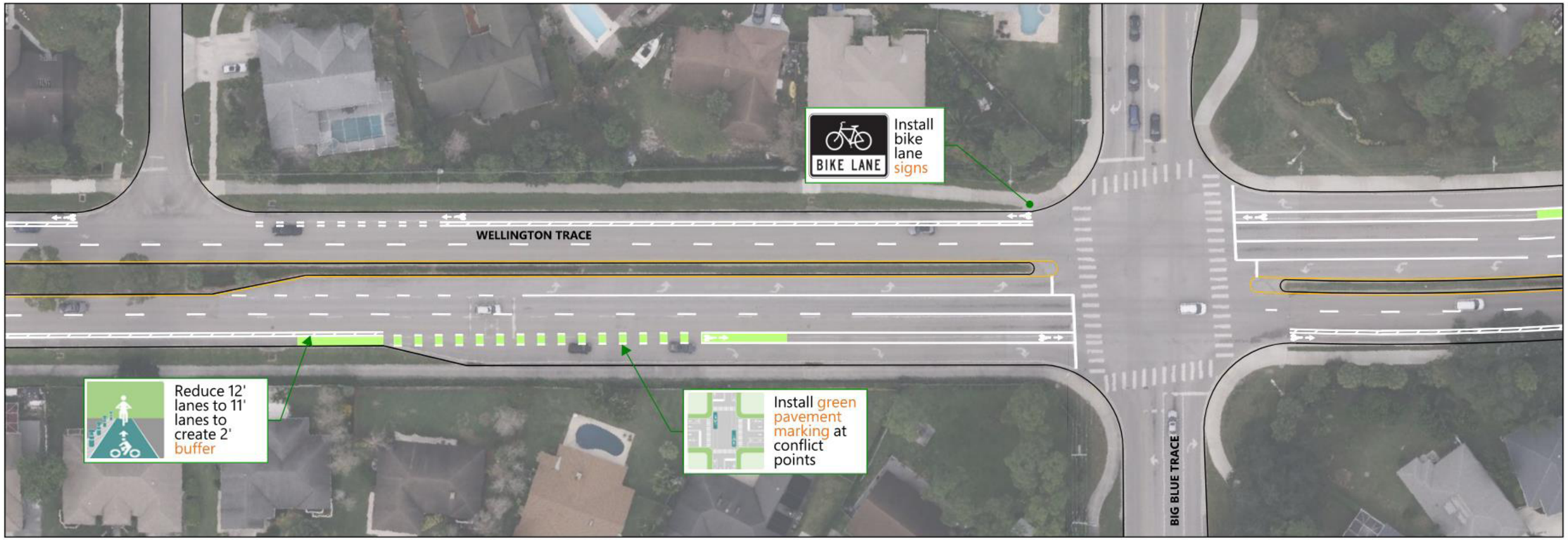
Corridor (HIN)	Locations	Priority	Budget
A1	Wellington Trace: Greenview Shores to Forest Hill Blvd	High	$612,000
A2	Wellington Trace: Forest Hill Blvd to Forest Hill Blvd	High	$5,054,000
C1	Greenview Shores Blvd: Binks Forest Dr to Wellington Trace	High	$2,500,000*
C2	Greenview Shores Blvd: Wellington Trace to S Shore Blv	High	$556,000
D	South Shore Blvd: Forest Hill Blvd (SR 882) to Lake Worth Rd	High	$1,349,000
F	Big Blue Trace: Wellington Trace to S Shore Blvd	High	$3,664,000
T	Greenbriar Blvd: Aero Club Drive to Greenview Shores Boulevard	High	$2,000,000*

Note: *Project is currently in design development as of July 2024. The costs shown here are estimated for construction only, not including design development.

PROJECT R4: INSTALL/ UPGRADE BIKE LANES



PROJECT R4: INSTALL/ UPGRADE BIKE LANES



Project Description:
Install new bike lanes and upgrade existing bike lanes with buffers, pavement markings and signage improvements.

Countermeasures:
- ➢ Install bike lane pavement marking and signage in existing striped shoulders
- ➢ Upgrade existing bike lanes by reducing travel lane width from 12' to 11' and adding bike lane buffers with green pavement markings.
- ➢ Widen Roadway for new bike lane

Collision Types Addressed:
- ✓ Bicycle Collisions

Project Corridors:
A1. Wellington Trace: Greenview Shores Blvd to Forest Hill Blvd (SR 882) - HIGH
A2. Wellington Trace: Forest Hill Blvd to Forest Hill Blvd - HIGH
C1. Greenview Shores Blvd: Wellington Trace to S Shore Blvd - HIGH
C2. Greenview Shores Blvd: Binks Forest Dr to Wellington Trace - HIGH
D. South Shore Blvd: Forest Hill Blvd (SR 882) to Lake Worth Rd - HIGH
F. Big Blue Trace: Wellington Trace to S Shore Blvd - HIGH
T. Greenbriar Blvd: Aero Club Dr to Greenview Shores Blvd - HIGH

Estimated Project Cost:

Install New Striping and Pavement Markings and Widen Roadway	$8,905,300
Traffic Control and Mobilization	$1,781,000
Contingency	$2,137,300
Total Construction Cost	**$12,824,000**
Preliminary Engineering	$1,664,000
Construction Engineering	$1,247,000
Total Project Cost	**$15,735,000**

Project R5: Enhanced Edgelines, Centerlines, Guardrail

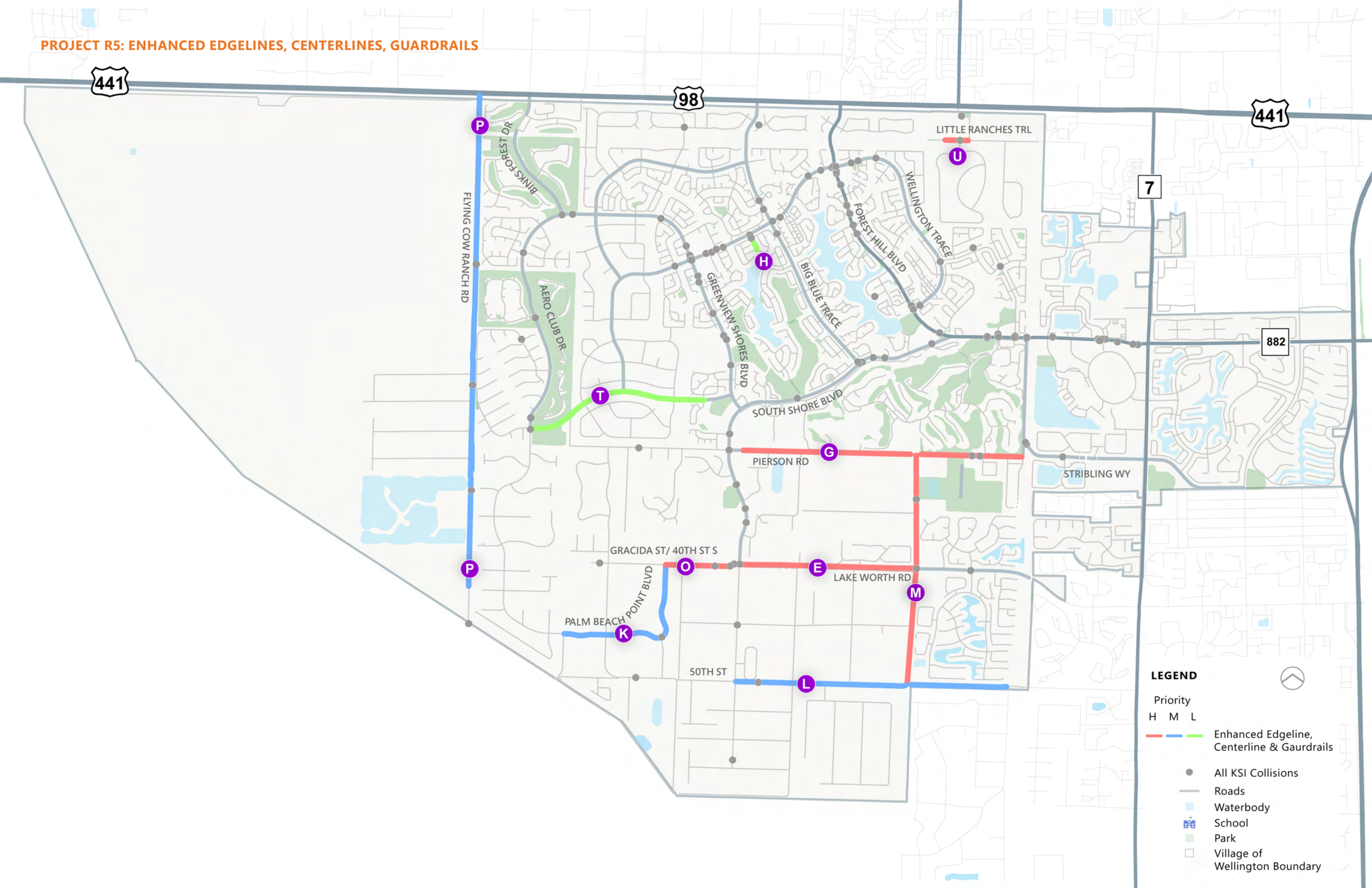
This project proposes to install a new edge line where visibility of the roadway edge is deficient in nighttime conditions. This project also includes the installation of centerline and edgeline rumble strips that provide an auditory and tactile indication that a motorist has unintentionally departed their lane into opposing traffic or is about to depart the roadway.

Improvements: This project includes the installation of edge line striping, centerline striping, rumble strips along the centerline, and installation or improvement of guardrail.

Crash type addressed: These countermeasures aim to address lane departure crash types such as off-road, side-swipe, and head-on.

Corridor (HIN)	Locations	Priority	Budget
E	Lake Worth Rd: S Shore Blvd to 120th Ave	High	$70,000
G	Pierson Rd: S Shore Blvd to Fairlane Farms Rd	High	$81,000
H	Skipton Ave: Wellington Trace to Chelmsford St	Low	$4,000
K	Palm Beach Point Blvd: Ousley Farms Rd to 40th St S	Medium	$149,000
L	50th St S: S Shore Blvd to Homeland Rd	Medium	$84,000
M	120th Ave S: Pierson Road to 50th St S	High	$132,000
O	40th St S: S Shore Blvd to Palm Beach Point	High	$20,000
P	Flying Cow Ranch Rd: Southern Blvd (Interstate 98) to 1700 feet North of Indian Mound Rd	Medium	$248,000
T	Greenbriar Blvd: Aero Club Drive to Greenview Shores Boulevard	Low	$58,000
U	Acme Rd: Little Ranches Trail to Acme Rd	High	$8,000

PROJECT R5: ENHANCED EDGELINES, CENTERLINES, GUARDRAILS



PROJECT R5: ENHANCED EDGELINES, CENTERLINES, GUARDRAILS

Project Description:
Install edgeline and centerline stripes and rumble strips to increase visibility of lane positioning and alert the driver that the vehicle has left the travel lane. Install guardrail to prevent vehicles from entering dangerous conditions

Countermeasures:
- ➢ Install new Centerline and edgeline stripe
- ➢ Install rumble strips in centerline and edgeline
- ➢ Install guardrail

Collision Types Addressed:
Lane Departure Collisions:
- ✓ Off Road
- ✓ Head On
- ✓ Side Swipe

Project Corridors:
E. Lake Worth Road: S Shore Blvd to 120th Ave - HIGH
G. Pierson Rd: S Shore Blvd to Fairlane Farms Rd - HIGH
H. Skipton Ave: Wellington Trace to Chelmsford St - LOW
K. Palm Beach Point Blvd: Ousley Farm Rd to 40th St S - MEDIUM
L. 50th St S: S Shore Blvd to Homeland Rd - MEDIUM
M. 120th Ave S: Pierson Rd to 50th St S - HIGH
O. 40th St S: S Shore Blvd to Palm Beach Point Blvd - HIGH
P. Flying Cow Ranch Rd: Southern Blvd (Interstate 98) to 1700 feet north of Indian Mound Rd - MEDIUM
T. Greenbriar Blvd: Aero Club Dr to Greenview Shores Blvd - LOW
U. Acme Rd: Little Ranches Trail to Acme Rd - HIGH

Estimated Project Cost:

Install Striping	$282,800
Install Rumble Strip	$45,300
Install Guardrail	$47,800
Traffic Control and Mobilization	$75,200
Contingency	$90,200
Total Construction Cost	**$541,000**
Preliminary Engineering	$108,300
Construction Engineering	$81,200
Total Project Cost	**$731,000**

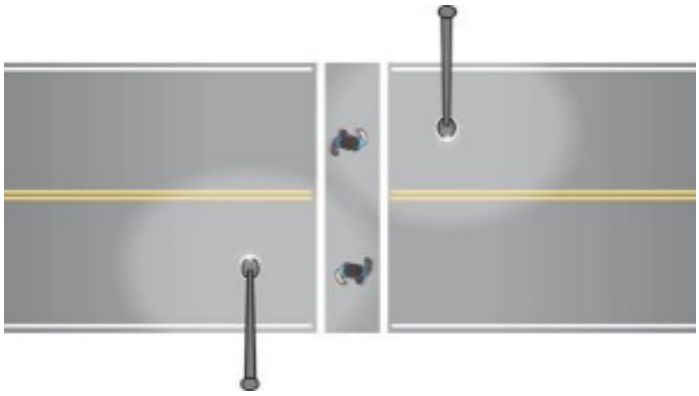
PRIORITY PROJECTS (INTERSECTIONS)

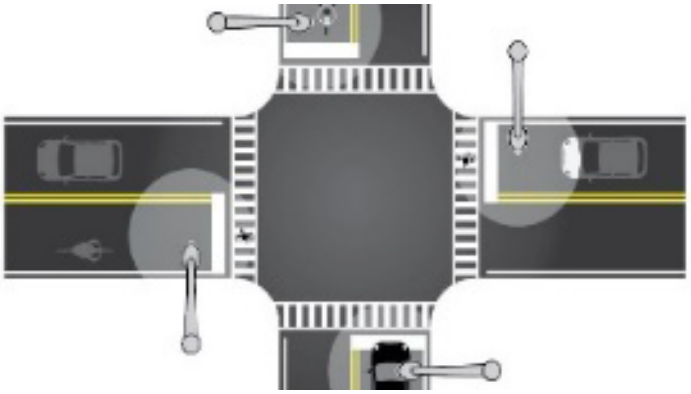
Project I1: Install/Upgrade intersection lighting at Non-Signalized intersections

This project includes the installation of street lights at non-signalized intersections where visibility is poor at night.

Improvements: By enhancing lighting conditions at intersections, both motorist and pedestrian safety is improved by increasing visibility of roadway features such as curb lines and medians, making pedestrians within crosswalks more visible to motorists, and increasing the range of driver's sight distance.

Crash type addressed: This countermeasure addresses night-time crashes where the edge of the roadway and pedestrians/bicyclists in crosswalks can be hard to see.





Corridors (HIN)	Locations	Priority	Cost
A	Wellington Trace (10 Locations)	High	$2,107,000
B	Forest Hill Blvd (7 Locations)	High	
C	Greenview Shores Blvd (7 Locations)	High	
D	South Shore Blvd (7 Locations)	High	
E	Lake Worth Rd (2 Locations)	High	
F	Big Blue Trace (5 Locations)	High	
G	Pierson Rd (3 Locations)	High	
I	Aero Club Dr (1 Locations)	High	
J	Stribling Way (2 Locations)	Medium	$436,000
L	120th Ave S (2 Locations)	High	
Q	Birkdale Dr (2 Locations)	Medium	
R	Pine Valley Dr (1 Locations)	Low	$242,000
S	Horseshoe Trace (1 Locations)	Low	
T	Greenbriar Blvd (2 Locations)	Low	

PROJECT I1: INSTALL/ UPGRADE INTERSECTION LIGHTING AT NON-SIGNALIZED INTERSECTIONS

441
98
441
7
882
SOUTHERN BLVD
FLYING COW RANCH RD
BINKS FOREST DR
PADDOCK DR
AERO CLUB DR
GREENVIEW SHORES BLVD
BIG BLUE TRCE
FOREST HILL BLVD
PIERSON RD
LAKE WORTH RD
130TH ST
125TH ST
50TH ST
140TH ST
55TH ST

LEGEND

Priority
H M L

- Install Street Light/ Upgrade HPS to LED
- All KSI Collisions
- Roads
- Waterbody
- School
- Park
- Village of Wellington Boundary

PROJECT I1: INSTALL/ UPGRADE INTERSECTION LIGHTING AT NON-SIGNALIZED INTERSECTIONS

Project Description:
Install Street Lighting at Non-Signalized Intersections

Countermeasures:
Install New Street Lights

Collision Types Addressed:
Night-time and Low-light Collisions

Estimated Project Cost:	
Install New Street Light	$1,546,000
Traffic Control and Mobilization	$309,200
Contingency	$371,000
Total Construction Cost:	**$2,226,000**
Preliminary Engineering	$333,900
Construction Engineering	$222,600
Total Project Cost:	**$2,783,000**

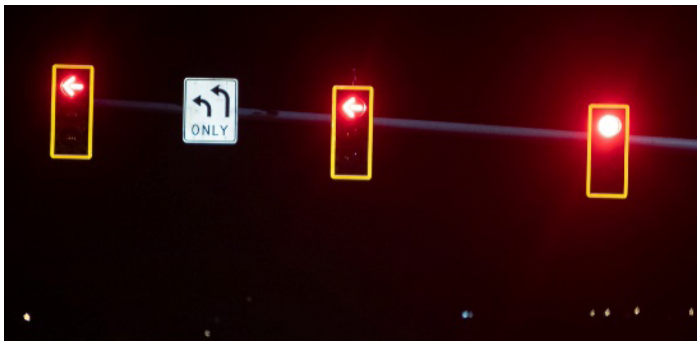
Project I2: Improve Signal Hardware & Operations

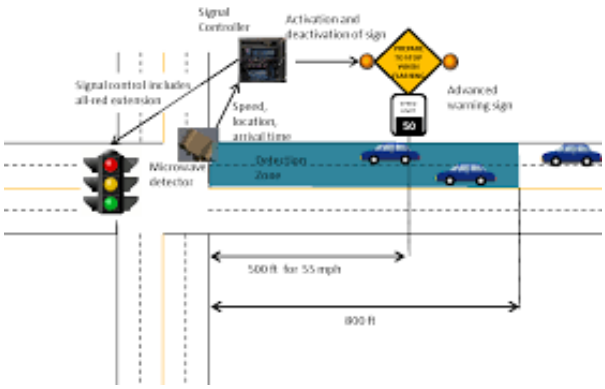
Signalized intersections experiencing a high frequency of right-angle and rear-end crashes can occur from low visibility of traffic signals where drivers may not have sufficient time to react to and safely navigate the upcoming signal control. Installing additional signal heads on the approach side of the intersection can help with visibility on wide, high-speed intersections.

Signalized intersections with a high frequency of left-turn crashes and right-of-way violations can occur when the permissive left turn and right turn movements are left at the driver's discretion to determine safe crossing conditions. Providing protected left turn phases provides a safer turning opportunity and removes the need for drivers to navigate through gaps in oncoming traffic. Additionally, drivers focused on navigating the gaps of oncoming cars in the distance may have reduced awareness of pedestrians and bicyclists at the crosswalk.

Improvements: This project proposes to upgrade street lighting at signals, improve signal timing and dilemma zone detection, implement a leading pedestrian Interval (LPI), install new traffic signals at uncontrolled intersections, and install emergency vehicle pre-emption detection.

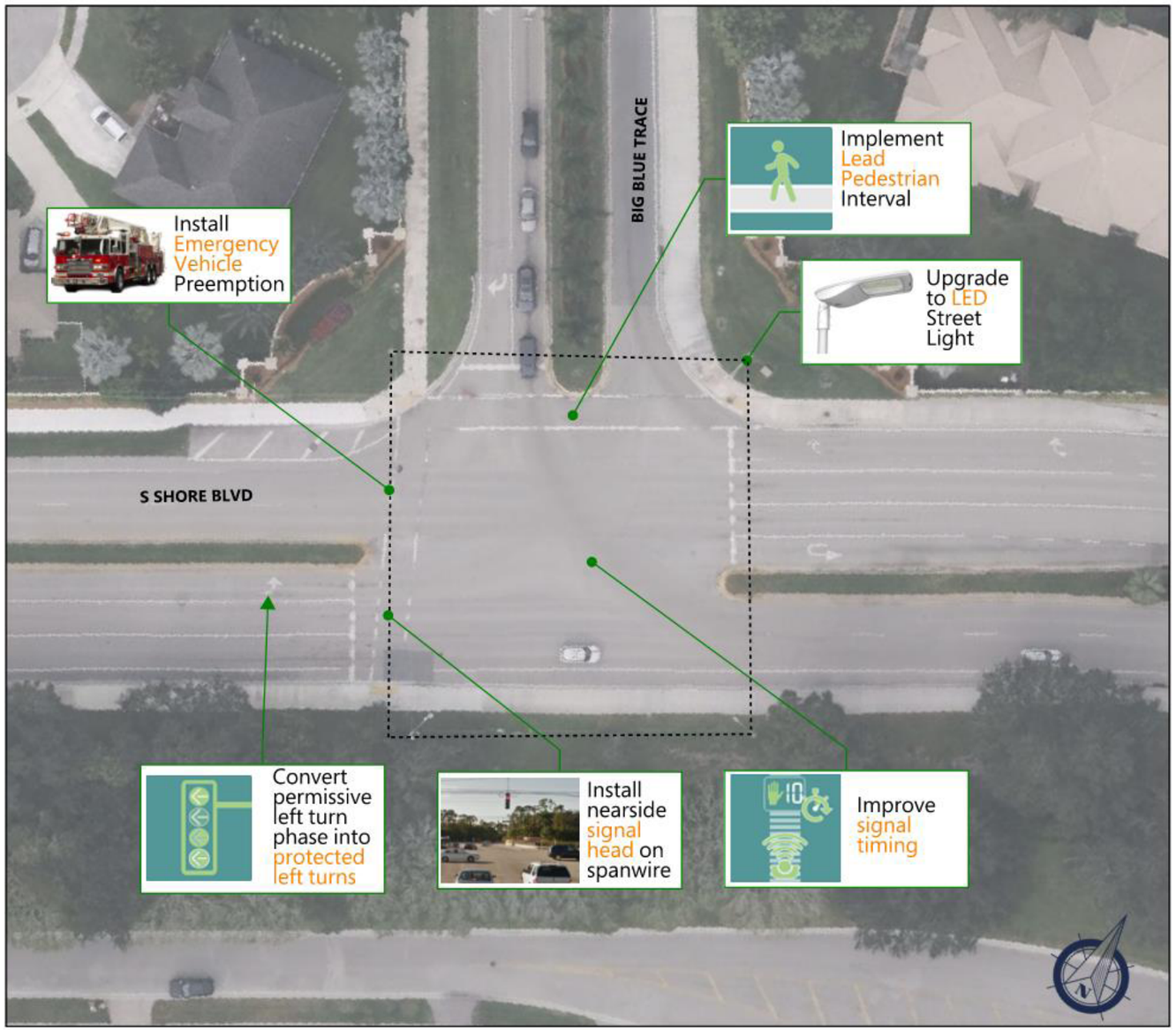
Crash type addressed: These countermeasures aim to address crashes at intersections, including left turns, rear-end, head-on, pedestrian, and bicycle.





Intersections	Locations	Priority	Cost
1	Greenview Shores Blvd & Wellington Trace	High	$73,000
2	Stribling Way & Forest Hill Blvd	High	$46,000
3	Forest Hill Blvd & Wellington Trace	High	$48,000
4	Forest Hill Blvd & Wellington Edge Blvd	High	$45,000
5	S Shore Blvd & Big Blue Trace	High	$62,000
6	Lake Worth Rd & Isles View Dr (Polo Park Middle School)	High	$972,000
7	S Shore Blvd & Lake Worth Rd	High	$47,000
8	Aero Club Dr & Binks Forest Dr	High	$58,000
9	Wellington Trace & Big Blue Trace	High	$77,000
10	S Shore Blvd & Pierson Road	High	$48,000
11	Aero Club Dr & S Club Dr	High	$1,000
12	Greenview Shores Blvd & East Driveway (Wellington High School)	High	$40,000
13	Forest Hill Blvd and South Shore Blvd	High	$21,000
14	Greenview Shores Blvd & Binks Forest (Wellington Landings Middle School)	High	$30,000

PROJECT I2: IMPROVE SIGNAL HARDWARE & OPERATIONS



Project Description:
Upgrade signal hardware with emergency vehicle pre-emption and nearside signal heads, improve signal timing and include a lead pedestrian interval, and remove flashing yellow permissive left turns at intersection with high left turn collisions.

Countermeasures:
- Install signal head on nearside spanwire at wide intersections
- Remove Flashing Yellow Left Operation
- Improve Signal Timing (all-red, yellow timing for dilemma zone)
- Implement Lead Pedestrian Interval
- Install Emergency Vehicle Pre-emption
- Upgrade to LED Lighting

Collision Types Addressed:
Intersection Collisions
- ✓ Left turn
- ✓ Rear End
- ✓ Head On
- ✓ Angle/Broadside

Project Corridors:
1. Greenview Shores Blvd & Wellington Trace - HIGH
2. Stribling Way & Forest Hill Blvd - HIGH
3. Forest Hill Blvd & Wellington Trace - HIGH
4. Forest Hill Blvd & Wellington Edge Blvd - HIGH
5. S Shore Blvd & Big Blue Trace - HIGH
6. Lake Worth Rd & Isles View Dr (Polo Park Middle School) - HIGH
7. S Shore Blvd & Lake Worth Rd - HIGH
8. Aero Club Dr & Bink Forest Dr - HIGH
9. Wellington Trace & Big Blue Trace - HIGH
10. S Shore Blvd & Pierson Road - HIGH
11. Aero Club Dr & S Club Dr - HIGH
12. Greenview Shores Blvd & East Driveway (Wellington High School) - HIGH
13. Forest Hill Blvd and South Shore Blvd - HIGH
14. Greenview Shores Blvd & Binks Forest (Wellington Landings Middle school) - HIGH

Estimated Project Cost:

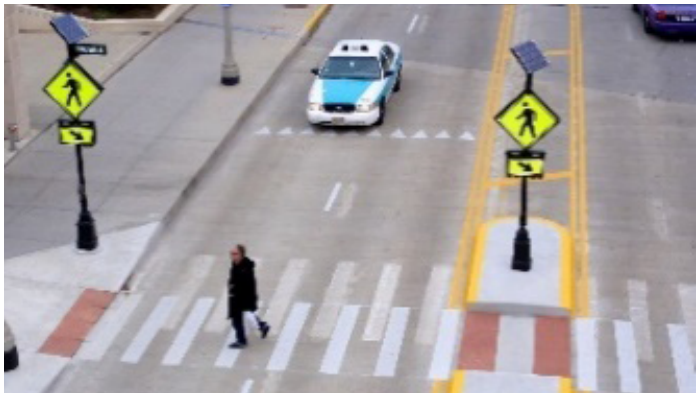
Signal Hardware Improvements	$271,000
Signal Timing and Operations	$36,000
Install New Traffic Signal	$500,000
Traffic Control and Mobilization	$161,000
Contingency	$194,000
Total Construction Cost	**$1,162,000**
Preliminary Engineering	$232,000
Construction Engineering	$174,000
Total Project Cost	**$1,568,000**

Project I3: Improve Pedestrian Safety at Non-Signalized Intersections

This project aims to improve safety at uncontrolled intersections where pedestrian visibility and awareness of pedestrian activity may be deficient.

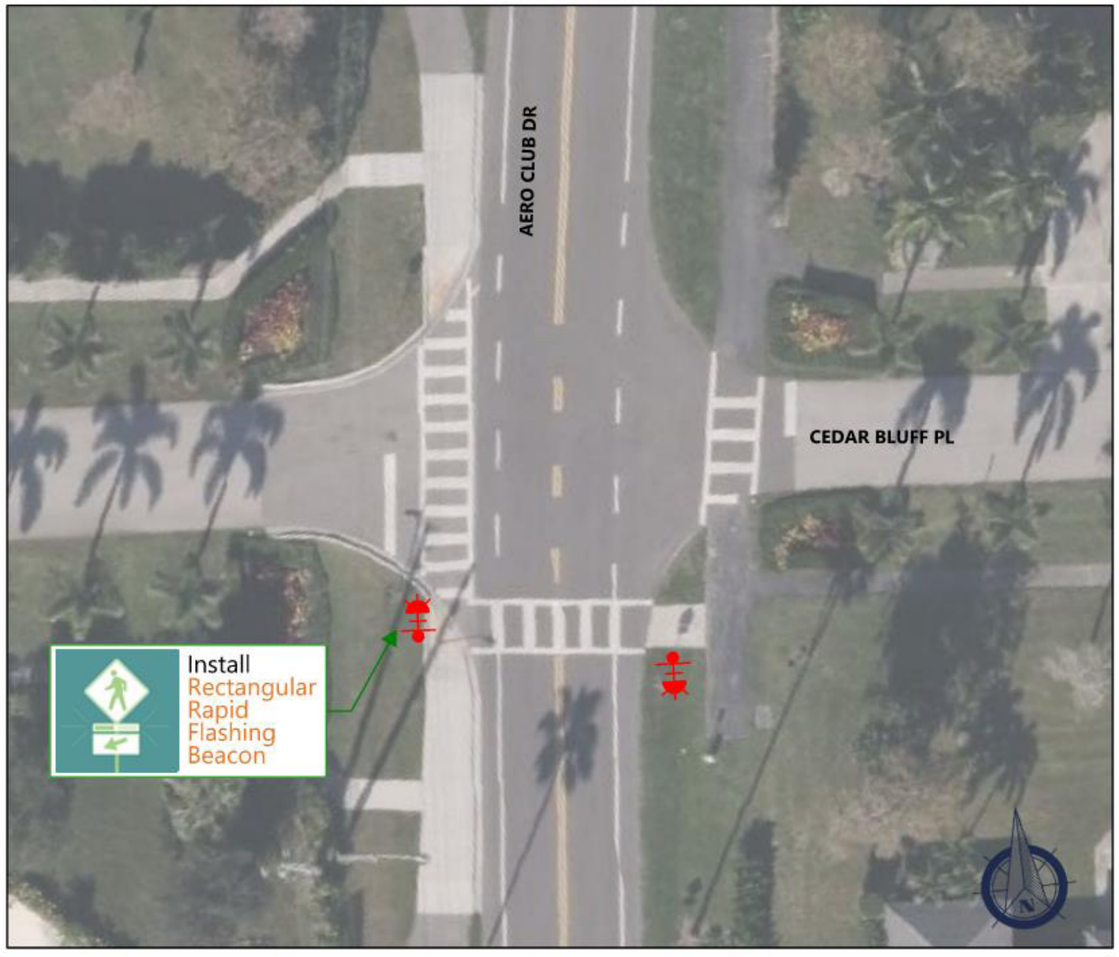
Improvements: This project includes crosswalk improvements, such as the installation of high-visibility crosswalks, pedestrian refuge islands, rectangular rapid flashing beacons, and flashing LED signs to enhance pedestrian visibility and warn motorists of an upcoming crossing.

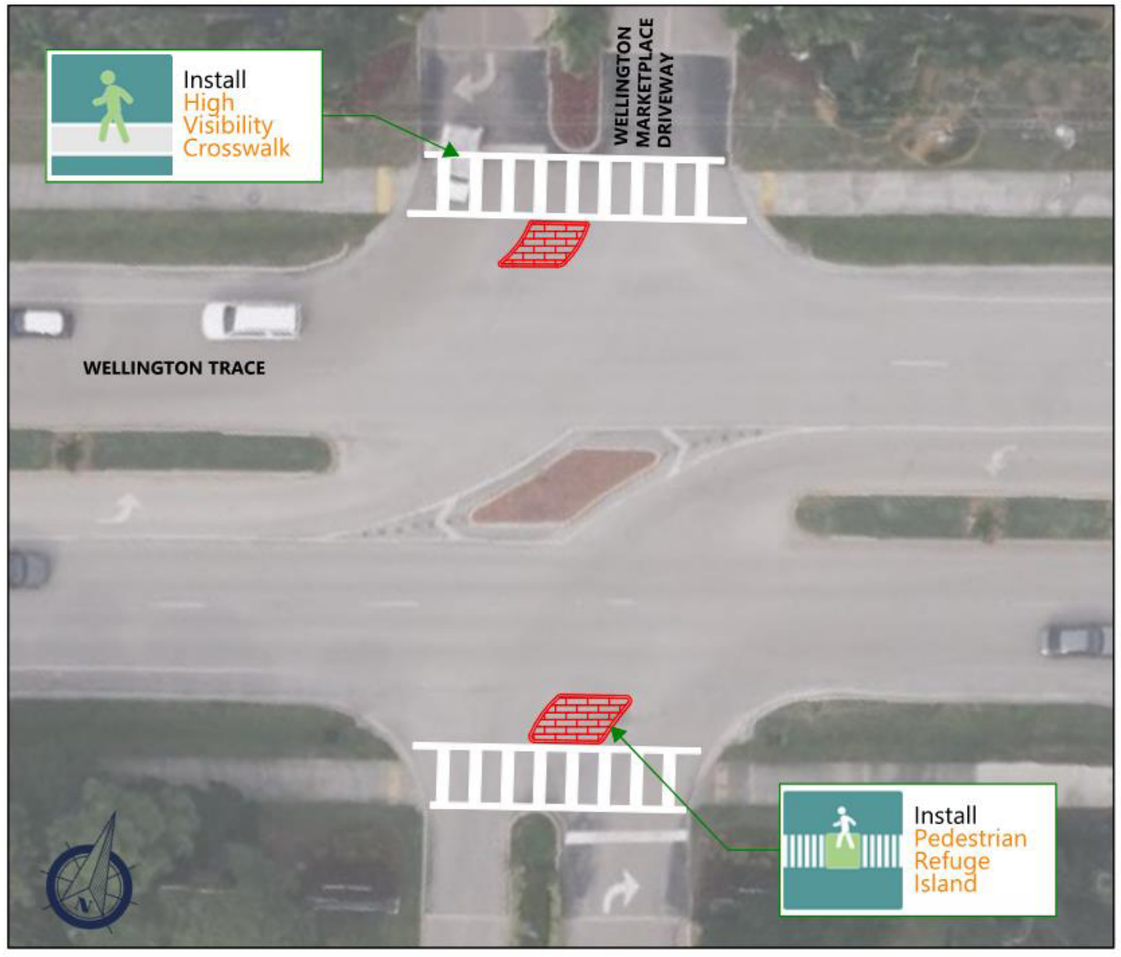
Crash type addressed: These countermeasures address crashes involving pedestrians at uncontrolled intersections.



Intersections	Locations	Priority	Cost
1	Wellington Trace & Skipton Ave	High	$2,000
2	Wellington Trace & Corporate Center Way	High	$38,000
3	Wellington Trace & Mulberry Pl/Hyacinth Pl	High	$20,000
4	Greenview Shores Blvd & Chatsworth Village Dr	High	$2,000
5	Greenview Shores Blvd & Periwinkle Pl	High	$7,000
6	Wellington Trace & Birkdale Dr	High	$48,000
7	Forest Hill & Guilford Cir/Way	High	$4,000
8	South Rd & 40th St	High	$6,000
9	Anhinga Dr & Pine Valley Dr	High	$13,000
10	S Shore Blvd & St Andrews Pl	High	$4,000
11	Wellington Trace & Wild Pine Rd	High	$2,000
12	Wellington Trace & Old Country Rd	High	$2,000
13	S Shore Blvd & Chancellor Dr	High	$2,000
14	Aero Club Dr & Cedar Bluff	High	$49,000
15	Wellington Trace & Stratford St	High	$49,000

PROJECT I3: IMPROVE PEDESTRIAN SAFETY AT NON-SIGNALIZED INTERSECTIONS





Project Description:
Install high visibility crosswalks, rectangular rapid flashing beacons, and pedestrian refuge islands to improve pedestrian visibility and safety at non-signalized crosswalks.

Countermeasures:
- ➢ Install high visibility crosswalk
- ➢ Install rectangular rapid flashing beacons
- ➢ Install pedestrian refuge islands

Collision Types Addressed:
- ✓ Pedestrian Collisions

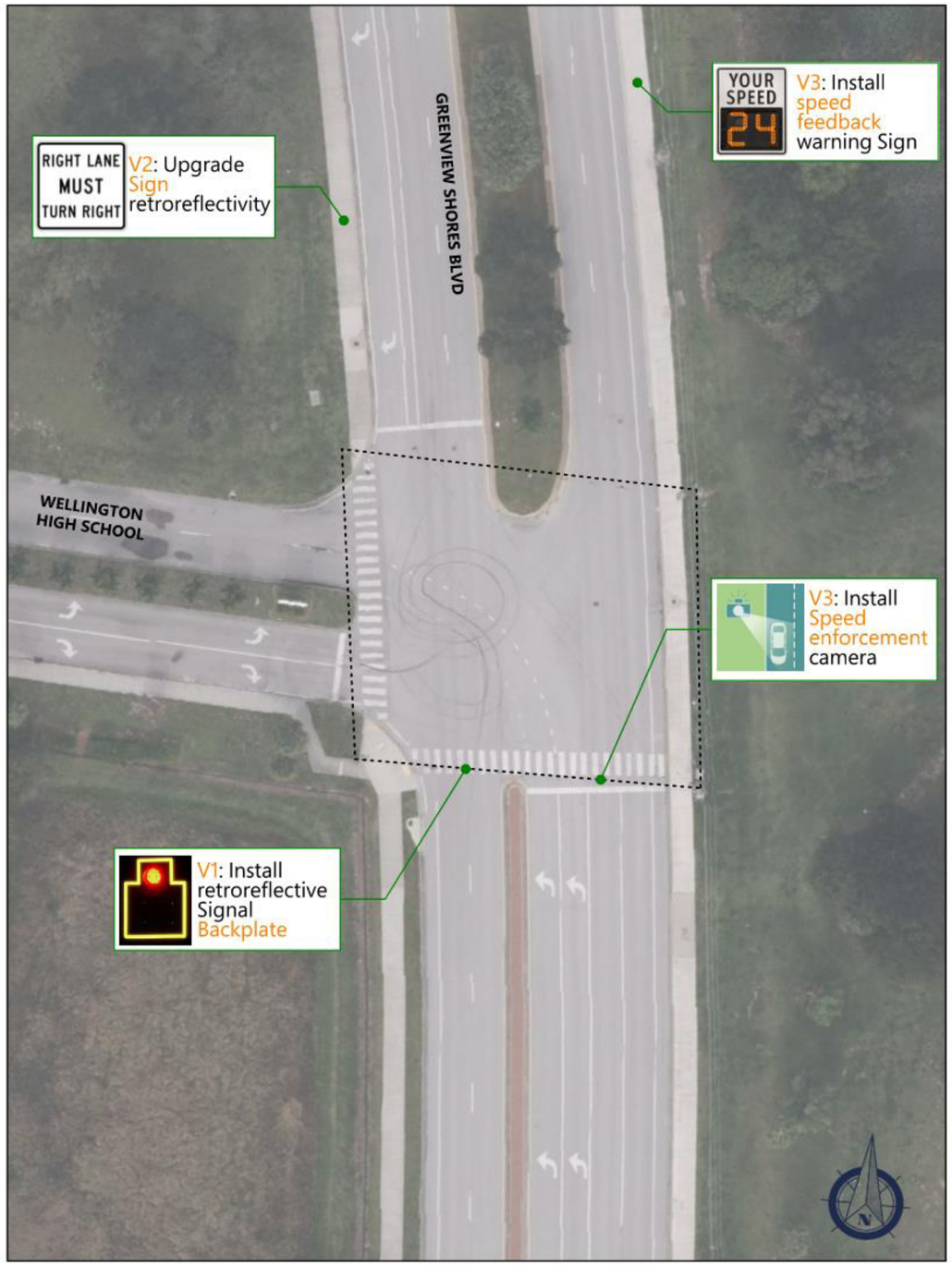
Project Locations:
1. Wellington Trace & Skipton Ave - HIGH
2. Wellington Trace & Corporate Center Way - HIGH
3. Wellington Trace & Mulberry Pl/Hyacinth Pl - HIGH
4. Greenview Shores Blvd & Chatsworth Village Dr - HIGH
5. Greenview Shores Blvd & Periwinkle Pl - HIGH
6. Wellington Trace & Birkdale Dr - HIGH
7. Forest Hill & Guilford Cir/Way - HIGH
8. South Rd & 40th St - HIGH
9. Anhinga Dr & Pine Valley Dr - HIGH
10. S Shore Blvd & St Andrew Pl - HIGH
11. Wellington Trace & Wild Pine Rd - HIGH
12. Wellington Trace & Old Country Rd - HIGH
13. S Shore Blvd & Chancellor Dr - HIGH
14. Aero Club Dr & Cedar Bluff - HIGH
15. Wellington Trace & Stratford St - HIGH

Estimated Project Cost:

Install High Visibility Crosswalk	$18,400
Install Rectangular Rapid Flashing Beacon	$72,000
Install Pedestrian Refuge Island	$32,500
Traffic Control and Mobilization	$25,000
Contingency	$30,000
Total Construction Cost	**$178,000**
Preliminary Engineering	$44,000
Construction Engineering	$26,000
Total Project Cost	**$248,000**

VILLAGE-WIDE PROJECTS

Project V1:	Project V2:	Project V3:
Village-Wide Retro-Reflective Signal Backplates	**Village-Wide Retro-Reflective Sign Replacement**	**Village-Wide Variable Speed Warning Signs & Speed Enforcement Cameras In School Zones**
This includes the installation of backplates with yellow retro-reflective on existing traffic signal heads.	Includes replacing and upgrading all signs that do not meet current minimum retro-reflectivity standards.	Install variable speed feedback warning signs villagwide and speed enforecement cameras in school zones.
Countermeasures for crashes at intersections that may be caused by poor visibility of signal heads.	Countermeasures for crashes that may be caused by poor visibility of regulatory and warning signs.	Countermeasures for unsafe speeds and improper driving.



Project V1: Install Retroreflective Signal Backplates
Install traffic signal backplates with yellow retroreflective border per FDOT standard at all signalized intersections.

Collision Types Addressed:
Intersection Collisions
- ✓ Left Turn
- ✓ Head On
- ✓ Side Swipe
- ✓Angled

V1 Estimated Project Cost:	
Install retroreflective signal backplates (53 intersections)	$763,200
Traffic Control and Mobilization	$152,600
Contingency	$183,200
Total Construction Cost	**$1,099,000**
Preliminary Engineering	$219,900
Construction Engineering	$164,900
Total Project Cost	**$1,483,800**

Project V2: Retroreflective Sign Replacement
Upgrade and replace existing signs that do not meet current night-time standards for retroreflectivity

Collision Types Addressed:
- ✓ Night-time and Low-Light Collisions

V2 Estimated Project Cost:	
Replace Sign Panel	$1,200,000
Traffic Control and Mobilization	$240,000
Contingency	$288,000
Total Construction Cost	**$1,728,00**
Preliminary Engineering	$345,600
Construction Engineering	$259,200
Total Project Cost	**$2,332,800**

Project V3: Variable Speed Feedback Warning Signs and Speed Enforcement Cameras*
Install variable speed feedback warning signs villagewide and speed enforcement cameras in school zones.

Collision Types Addressed:
- ✓ Unsafe Speeds

V1 Estimated Project Cost:	
Install Speed Feedback Warning Sign	$150,000
Install Speed Enforcement Camera	$200,000
Traffic Control and Mobilization	$70,000
Contingency	$84,000
Total Construction Cost	**$504,000**
Preliminary Engineering	$100,800
Construction Engineering	$75,600
Total Project Cost	**$680,400**

*Speed Enforcement Camera locations must be warranted by an engineering study and approved by city council

OTHER PLANNING & POLICY RECOMMENDATIONS

- **Forest Hill Boulevard Complete Street Study** (proposed):

  This project is essential to enhance safety, mobility, and accessibility. By implementing traffic calming measures and dedicated lanes for pedestrians and cyclists, the study aims to reduce crashes and ensure safe crossings for all, including children and the elderly. It promotes multi-modal transportation, reducing car dependency and ensuring accessibility for users with disabilities. Quality of life improvements come from promoting active transportation and enhancing community cohesion. Through data-driven decisions, comprehensive planning, and identifying funding sources, the study aims to create a safe, accessible, and sustainable Forest Hill Blvd that meets current and future needs.

- **Multimodal Paths Design Standards: Feasibility Study and Development of Standards to Improve Multimodal Paths** (ongoing):

  The feasibility study and development of design standards for multimodal paths in the Village of Wellington aim to enhance the connectivity and safety of walking, bicycling, and other non-motorized transportation options. By establishing clear guidelines for designing and constructing these paths, the initiative seeks to create a cohesive network that accommodates all users, including pedestrians, cyclists, and those with disabilities. This effort will promote active transportation, reduce reliance on cars, and improve residents' overall quality of life by ensuring safe, accessible, and well-integrated multimodal paths throughout the community.

- **Neighborhood Traffic Calming Program** (proposed)**:**

  The program is designed to enhance safety and improve the quality of life in residential areas by reducing vehicle speeds and discouraging cut-through traffic. The program employs various measures such as speed humps, traffic circles, and enhanced signage to create safer streets for pedestrians, cyclists, and drivers. The program aims to address specific local concerns, promote active transportation, and foster a sense of community by involving the community in the planning and implementation process. Overall, it seeks to create a safer and more pleasant environment for all neighborhood residents.

- **Safe Routes to School (SRTS)** (proposed):

  This program ensures that students can travel to and from school safely and efficiently. The program aims to create a safer environment for children walking or biking to school by improving sidewalks, crosswalks, and bike paths and implementing traffic calming measures around school zones. It also promotes active transportation, helping reduce traffic congestion and enhance air quality near schools. Involving the community, parents, and local authorities, SRTS fosters a collaborative approach to improving student safety and encouraging healthier lifestyles.

- **Equestrian Crossing Design Guidelines and Improvements** (ongoing):

  These guidelines ensure the safety and convenience of both riders and drivers. Wellington is known for its vibrant equestrian community and requires dedicated infrastructure to accommodate the frequent movement of horses across roadways. The initiative aims to reduce accidents, enhance visibility, and create safer, more predictable interactions between equestrians and motorists by developing clear guidelines and implementing improved crossing designs. These improvements support Wellington's unique lifestyle and bolster its reputation as a premier equestrian destination while ensuring the well-being of all road users.

IMPLEMENTABLE ACTIONS

The implementation of Vision Zero requires dedicated collaboration among Village departments, the local community, and partner organizations. The project team has developed a set of crucial steps to serve as a strategic pathway towards achieving Vision Zero. Each step is assigned a specific timeline and performance metric to track progress. Short-term actions are planned for completion within two years, medium-term actions within two to five years, and extensive long-term actions within five to ten years. Achieving the Village's Vision Zero goal necessitates immediate action while allowing for a practical approach with incremental improvements over time. The actions outlined in this plan will undergo continuous evaluation and refinement, with successful execution dependent on funding availability.

The Implementable Actions are organized into the following four action areas:

- Vision Zero Program Initiatives and Evaluation
- Street Design
- Dangerous Behavioral Changes
- Vulnerable Roads Users

ACTION AREAS

The Village of Wellington Vision Zero Program will begin by establishing a framework for its approach to achieving its Vision Zero goal. Program initiatives include Vision Zero promotion, integration of Vision Zero into other planning efforts, and improved Vision Zero data collection and program evaluation. A task force is crucial for the success of Vision Zero, as it fosters essential cross-departmental collaboration to achieve the program's goal of eliminating traffic fatalities and serious injuries. Vision Zero's core principle is to break down silos and unite local stakeholders; A task force enables this by bringing together key representatives from all significant Village functional divisions. For example, cities like New York, Los Angeles, Washington D.C., and San Francisco have established task forces that include management-level staff from multiple city departments, ensuring comprehensive buy-in and coordinated action.

In New York City, the Vision Zero task force, led by the Mayor's Office of Operations, has been pivotal in aligning various agencies towards common goals, fostering accountability, and facilitating regular inter-agency meetings to discuss progress and address challenges. These task forces set shared goals and create subcommittees to tackle specific issues, enhancing collaboration and ensuring that Vision Zero's objectives are integrated into everyday departmental operations. This structured approach, supported by regular tracking and reporting, ensures that all stakeholders remain committed and accountable to the Vision Zero goals. This makes the task force indispensable in driving the initiative's success.

No.	Safety Strategy	Description	Timeline	Progress Measure	Key Partners	Village Resource
Vision Zero Program Initiative						
A.1	Vision Zero Task Force	Establish an interdisciplinary Vision Zero Task Force responsible for supervising the execution of the plan and facilitating collaboration among village departments for project and program coordination.	Short-Term	A task force was established, and regular meetings were held.	Palm Beach County Sheriff's Office, Department of Public Works, School District of Palm Beach County, Department of Planning and Zoning, Department of Emergency Management and Public Safety, Department of Parks & Recreation, Wellington Regional Medical Center, Multimodal, Palm Beach Transportation Planning Agency, Palm Beach County Fire Rescue Department of Community Services, Bike/ Pedestrian Palm Beach TPA, Transportation Disadvantaged Local Coordinating Board, Palm Beach, Transportation Planning Agency Superintendent, Roads Division, VOW, District Safety Office, Florida, Department of Transportation, Traffic Division, Office of Inspector General Palm Beach County, VOW, Education Committee, Palm Tran Connection Operations, Roads Division, VOW.	Low
A detailed Vision Zero Task Force Work Plan is provided in the 'Vision Zero Task Force Work Plan' Chapter of this Report.						
A.2	Dedicated and Permanent Funding	Identify a sustainable and dedicated funding stream for the execution and management of Vision Zero.	Short-Term	Amount of funding available for Vision Zero	Village Council, Village Manger's Office, Department of Engineering	Medium to High
Funding sources are listed in the following section of this Chapter.						
A.3	Media Workshop	Develop a workshop for the Communications Department to improve its proficiency in communicating traffic crash and roadway safety concepts.	Short-Term	Number of Media Professionals Participating	Village Manager's Office	Low
Promotion and Integration						
A.4	Public Meetings	Throughout 2024, Vision Zero should be included on the agendas of the public, community groups, stakeholder meetings, and village-sponsored meetings.	Short-Term	Number of meetings with Vision Zero on the agenda	Village Council, Department of Engineering, Village Manager's Office, Communications	Low

A.5	Future Plans & Policy	Integrate Vision Zero safety principles into forthcoming Village plans and design documents.	Continuous	Number of plans and policies incorporating Vision Zero	Community Development Department, Department of Engineering	Low
Data Collection & Program Evaluation						
A.6	Monitoring Speed Limits	Continue monitoring existing speed limits on Village streets.	Continuous (every street is checked for seven extendible to 14 years)	Percent of roadway network designated as a Safety Corridor. Average speed limit by functional classification.	Department of Engineering	Medium
A.7	Community-Based Safety Reporting System/Tool	Create an easy-to-use, accessible, and digitally secure public reporting platform for the community to report problem areas, near misses, or any safety concerns.	Continuous	Number of comments addressed	Department of Engineering	Low
A.8	Data Completeness	Enhance data collection about speed, impairment, cell phone use, and distraction in KSI.	Medium-Term	Proportion of Crash records including this information	Sheriff's Office	Low
A.9	Bicycle and Pedestrian Count Data	Set up periodic pedestrian and cyclist counts at standardized locations	Medium-Term	Number of counts conducted	Department of Engineering	Medium

STREET DESIGN

Village of Wellington's Vision Zero initiative strongly emphasizes prioritizing top-notch enhancements for the High-Injury Network (HIN) as the primary approach to eliminating traffic fatalities and incapacitating injuries. Alongside these improvements, the village will also focus on optimizing signal operations and implementing more rigorous design review processes to enhance street layouts. All street improvements will adhere to the compatible General Plan Design Guidelines.

No.	Safety Strategy	Description	Timeline	Progress Measure	Key Partners	Village Resource
High Injury Network Infrastructure						
B.1	Priority Location	Create and obtain grant funding for the critical project sites identified in the plan, emphasizing enhanced roadway designs to improve safety.	Medium-Term	Number of funded projects	Department of Engineering	High
B.2	List Prioritized Projects	Create a carefully ranked roster of extra safety projects.	Medium-Term	List of safety projects in order of priority	Department of Engineering	Medium
A roster of implementable countermeasures is listed in the appendix.						
B.3	Quick Build Demonstration Projects or Tactical Urbanism	Install quick, light, flexible, and adaptable projects proven to achieve tangible benefits. These demonstrations could stay in place indefinitely or (more typically) form the basis of the design for a permanent project to come later.	Short-Term	Number of locations where quick builds have been implemented	Community Development Department, Department of Engineering	Low
B.4	Low-Cost Improvements	Implement cost-effective safety enhancements, encompassing the installation of new road markings, signage, and minor signal adjustments.	Medium-Term	Number of locations where enhancements have been applied	Department of Engineering	Medium
Operations & Technology						
B.5	Signal Timing Updates	Updated signal timing plans to enhance safety for all modes of transportation, which may include adjustments to all-red intervals and pedestrian crossing times.	Short-Term	Percentage of signals in updated	Department of Palm Beach County	Medium
B.6	Intelligent Transportation Systems (ITS)	Integrate Vision Zero safety principles into forthcoming Village plans and design documents.	Long-Term	Incorporation of Intelligent Transportation Systems (ITS) technologies to enhance traffic safety	Department of Palm Beach Traffic	High

Policies & Design						
B.7	Design Review	Create an internal procedure for evaluating and, where possible, implementing Vision Zero countermeasures on projects located within HIN.	Long-Term	Percentage of public and private projects that integrate Vision Zero components	Community Development Department, Department of Engineering	Low
B.8	Complete Streets	When identifying Safety enhancements, take into account all individuals using the road and ensure that countermeasures align with the Village's Complete Streets Policy.	Medium-Term	Reduction in crashes	Department of Engineering	Low

BEHAVIORAL CHANGES

The Village of Wellington's Vision Zero initiative promotes safe travel behaviors through outreach and education efforts, enforcement measures, and providing alternatives to driving, especially during holidays, special events, and late evenings. This approach recognizes the collective responsibility for making safe choices and fostering a safety culture.

No.	Safety Strategy	Description	Timeline	Progress Measure	Key Partners	Village Resource
Education and Outreach						
C.1	Education Campaign	Initiate high-impact educational campaigns targeting issues like speeding, distracted driving, impaired driving, and other high-risk behaviors. To maximize their effectiveness, these campaigns will concentrate specifically on HIN corridors.	Medium-Term	Number of people reached and educated	Village Manager's Office, Sheriff's Office, and School District	High
C.2	Speed Feedback Signs	Promote the utilization of speed feedback signs to deter speeding.	Medium-Term	Number of signs installed	Department of Engineering and Sheriff's Office	Medium
C.3	Targeted Outreach	Discourage impaired driving by directing education and outreach efforts towards locations in proximity to alcohol-serving establishments.	Medium-Term	Several establishments have been engaged or reached through the outreach efforts.	Sheriff's Office	Medium
Providing Alternatives to Driving						
C.4	Incentivize & Prioritize Transit Use	Work with Transit Agencies to expand and improve transit networks, using technology to optimize transit schedules and provide real-time tracking. Ensure transit stops and stations are well-lit, secure, and monitored to enhance user safety.	Long	Number of people taking transit (ridership data)	Department of Engineering	High

VULNERABLE ROAD USERS

The strategies of Village acknowledge that individuals at both ends of the age spectrum, as well as those who are biking or walking, are more susceptible to incapacitating traffic injuries and fatalities due to variations in their reaction time and agility.

No.	Safety Strategy	Description	Timeline	Progress Measure	Key Partners	Village Resource
Bicyclist and Pedestrian						
D.1	Bicycle Network	Continued bicycle network development and enhancement align with the Village of Wellington Pedestrian and Bicycle Safety Study (2017).	Long-Term	Lane miles of low-stress bicycle facilities were installed	Department of Engineering	High
D.2	Pedestrian Crossing	Install or enhance pedestrian crossing features along the High-Injury Network (HIN).	Medium-Term	Number of upgraded crossings	Department of Engineering	High
D.3	Turning Vehicles	Complete projects that enhance bicycle and pedestrian safety by turning vehicles at intersections.	Long-Term	Number of projects that have been implemented	Department of Engineering	High
D.4	Develop and Maintain an Active Transportation Plan	Developing an ATP will advance Vision Zero goals by creating safer, more accessible infrastructure and reducing traffic fatalities and serious injuries.	Long-Term	Reduction of the number of pedestrian and bicycle facilities	Department of Engineering	High
Children and Seniors						
D.5	High-Visibility Crosswalk	Install high-visibility crosswalks in proximity to the school.	Medium-Term	Several crosswalks near schools have been designated as "high visibility."	Department of Engineering	Medium
D.6	Senior Awareness	Create an educational campaign targeting drivers to enhance safety for pedestrians aged for pedestrian aged 60 and above.	Medium-Term	Monitor crash data	Village Manager's Office, AARP, Library and Community Center, Senior Club.	Medium
D.7	Increasing investments in Safe Routes to School and maintaining a dedicated Safe Routes to School coordinator	Utilizing the Vision Zero data on crashes and priority corridors to feed into a comprehensive village-wide Safe Routes to School plan. Update Safe Routes to School maps for every school by conducting walk audits and prioritizing projects in corridors that link multiple schools that are also Vision Zero priorities.	Continuous	Reduction in the number of crashes around schools	Department of Public Works	Low

D.8	Reduce speeding and speed limits around schools.	Partnering with other cities and jurisdictions to advocate for state legislation allowing them to utilize automated speed enforcement (such as safety cameras) near school zones.	Continuous	Reduction in the number of crashes around schools	Department of Public Works	Low
D.9	Offer comprehensive bicycle and pedestrian safety education to all children.	Engaging elementary, middle, and high school students in Traffic safety through Safe Routes to School. It empowers young people as leaders to promote safe transportation in their communities. To this end, universal bike skills training for all middle school graders in public schools, a traffic safety curriculum, and its teaching in all elementary schools should be mandated.	Continuous	Number of in-person safety training sessions conducted	School Districts, Department of Public Works	Medium
D.10	Traffic Education for Safe Routes to School	Organize traffic safety classes for both students and parents.	Medium-Term	Several individuals reached or were impacted.	School Districts, Department of Public Works	Medium

10. VISION ZERO TASK FORCE WORK PLAN

The Vision Zero Task Force aims to eliminate all traffic fatalities and incapacitating injuries in the village while increasing safe, healthy, and easily accessible mobility. This work plan outlines the key actions, responsible parties, timelines, and desired outcomes to achieve these goals.

GOALS

- Eliminate traffic fatalities and incapacitating injuries.
- Improve safety for vulnerable road users.
- Enhance crash and injury data quality.
- Strengthen local and regional partnerships.

1. ANNUAL TRAFFIC FATALITY AND INCAPACITATING INJURY REPORTING

- Action: Collect, analyze, and report data.
- Outcome: Data-driven decision-making.

2. REVIEW ANNUAL TRAFFIC ENFORCEMENT, CITATIONS FOR TOP 5 FATAL AND INCAPACITATING INJURIES CAUSES

- Action: Analyze and adjust enforcement strategies.
- Outcome: Targeted enforcement to reduce incapacitating incidents.

3. REACH VULNERABLE ROAD USERS VIA EXISTING EFFORTS

- Action: Integrate safety messages into village programs.
- Outcome: Increased safety awareness.

4. COLLABORATE WITH FDOT FOR SAFER TRANSIT AREAS

- Action: Conduct safety audits and implement improvements.
- Outcome: Safer transit stops.

5. COORDINATE EDUCATION CAMPAIGNS WITH ENFORCEMENT

- Action: Launch campaigns timed with enforcement blitzes.
- Outcome: Increased public compliance with traffic laws.

6. IMPROVE CRASH AND INJURY DATA QUALITY

- Action: Update data collection protocols and train staff.
- Outcome: Reliable data for safety initiatives.

PERFORMANCE METRICS

- Reduction in traffic fatalities and incapacitating injuries.
- Number of citations for five fatal and incapacitating injury causes.
- Safety improvements around transit stops.
- Public awareness levels.
- Quality of crash and injury data.

REPORTING

- Frequency: Annual reports to the Village Council and the public.
- Review: Annual review meetings for effectiveness adjustments.

The Vision Zero Task Force will use collaboration, data-driven strategies, and community engagement to make the Village's streets safer for all.

11. TRANSPORTATION TECHNOLOGY

The technology related to transportation is evolving rapidly. From smartphone apps to regional infrastructure, the trend of creating "smart cities" extends strongly through this spectrum and into transportation. Some broad areas are offered:

Intersections represent the greatest challenge for vulnerable roadway users. Technology assistance can include:

- Bicycle Detection, Pedestrian Detection.
- Wayfinding and Orientation assistance devices for blind and visually impaired persons.
- Accessible Pedestrian Signals with custom speech messages (not tones, chirps, percussive sounds, etc.) for walk and flashing don't walk; countdown displays; leading pedestrian intervals (LPIs).

In the event of a crash, law enforcement personnel are exposed to the risks of active traffic while investigating the crash scene. A fatal crash results in crime scene protocols, which require longer and more detailed investigation, resulting in even greater exposure to moving vehicular traffic hazards.

- Deploy next-generation emergency vehicle preemption to reduce response times and increase safety.
- Provide technology and training for officers to record better and preserve crash details and site evidence.
- Employ dynamic traffic rerouting strategies to minimize exposure to moving traffic.

Analysis should not be just reactive to documented crashes. Technology can provide a proactive view.

- Deploy automated speed data collection technology to assess speeding patterns and conduct frequent road safety audits based on findings.
- Enhance signal system software and equipment to detect red lights running and use data for enforcement and engineering.
- Implement Near-Miss Traffic Incident Identification Systems that monitor for patterns and frequency of near-miss crashes within signalized intersections.

The Village should take a leadership role in changing the characteristics of the vehicles traveling along our streets.

- Require that all new vehicles added to the Village fleet vehicles beginning in 2040 have the latest crash reduction technology such as lane departure warning, forward crash avoidance sensors, school zone approach warnings, and other built-in safety equipment.
- Right-size village-owned vehicles by updating vehicle purchasing standards to ensure the village phases smaller vehicles with the latest crash reduction and safety technology into its fleet where possible.
- Equip all Village fleet vehicles with safety-related devices, designs, and technology that record and report dangerous driving behaviors.

Actively partner with Transit Agency to improve safety for transit patrons:

- Evaluate opportunities to expand existing and/or implement new transit priority treatments.
- Implement new transit vehicle engineering principles (such as rear-of-vehicle chevrons, right-side illumination during turns, and lane departure technology) to reduce crashes.
- Provide protected crossings for transit patrons to cross streets to reach transit stops. Partner for the funding of design, installation, and maintenance of such devices as RRFBs and PHBs.

Getting people goods and services to their ultimate destination requires a fine-grained approach in the urban landscape. Automated modes and services have the potential to minimize the risk of mistakes resulting in a safer environment. Technology and actions include:

- Autonomous Vehicles, Micro Mobility
- Vehicle-to-Vehicle (V2V) and Vehicle-to Infrastructure (V2I) interconnection and interaction
- Working with tech companies and organizations to pioneer autonomous vehicle testing and adoption to improve safety while protecting privacy
- Enact ordinances and enabling legislation that balance the needs of technology service providers and societal expectations
- Pursuing vehicle automation and micro-mobility adoption as a complement to rather than in replacement of improved public transportation and active transportation, with the goals of reduced VMT and risk of crashes

12. EDUCATIONAL PROGRAMS

The establishment of a Vision Zero policy should not be the end of the discussion. Continued community focus requires ongoing education and encouragement. For some, the answer to the question of what Vision Zero means to them personally or collectively requires an ongoing discussion. These suggested events and programs can help to continue the discussion and empower people to put a voice to what they may feel or are perceiving as they travel Wellington's streets.

SAFE ROUTES TO SCHOOL

Safe Routes to School is a movement that aims to make it safer and easier for students to walk and bike to school. The first federally funded Safe Routes to School program was created in 2005. Safe Routes to School programs have benefited more than 14,000 schools in all 50 states. The demand continues to grow, especially in low-income communities, communities of color, and rural communities, where it is hard for anyone to safely and conveniently walk, bicycle, or get physical activity. The most successful Safe Routes to School programs incorporate the Six E's: evaluation, education, encouragement, engineering, engagement, and equity. At the regional and state level, Safe Routes to School practitioners work to find new funding and ensure proper spending of existing funding for Safe Routes to School. At the federal level, the Safe Routes Partnership and its allies maintain a steady voice for policy and funding support in Washington and provide a source of expert help, ideas, and resources for leaders at all levels.

Florida Safe Routes to School (SRTS) was adopted in 2019 as a five-year guide to help communities address safety concerns near schools and achieve an increase in number of students walking and biking to school. The SRTS Infrastructure program is fully funded and managed by the Florida Department of Transportation. Communities with SRTS projects can apply for a grant to reimburse the cost of projects. The SRTS is a possible funding source for any school-related safety enhancement that forms part of this safety study. The program establishes objectives that can serve as a guide for Vision Zero as it works to create safe school environments. More information can be found at https://www.fdot.gov/Safety/programs/safe-routes.shtm.

AMERICANS WITH DISABILITIES ACT ENGAGEMENT

In Wellington, accessibility for people with disabilities remains a significant challenge. Traveling independently is hindered by various factors like missing sidewalks, damaged routes, and confusing traffic signals. These issues often compel individuals to forgo independent travel entirely. Collaborations with national organizations like AARP, Lighthouse for the Blind, ADAPT, and others present opportunities to partner with communities, share expertise, and enhance awareness.

Events that simulate disabilities, such as blindfolded experiences or wheelchair navigation along busy streets, offer invaluable perspectives. These initiatives foster understanding and inclusivity by allowing participants to grasp the daily obstacles faced by those with disabilities. Similarly, walking with gait restraints provides insight into the needs of individuals with ambulatory disabilities.

Proactively involving marginalized groups in planning and engineering processes is crucial. Understanding the needs and perceptions of people with disabilities leads to better planning, programming, and design for ADA (Americans with Disabilities Act) improvements.

The introduction of the Public Right of Way Accessibility Guidelines (PROWAG) Final Rule in September 2023 marks a significant step. It aims to ensure that pedestrian facilities within the public right-of-way are accessible and usable for people with disabilities. Despite ongoing efforts, pedestrians with disabilities across the United States still

encounter substantial challenges due to inaccessible sidewalks, crosswalks, and other pedestrian facilities.

PROWAG introduces two empowering aspects for ADA planning and design practitioners:

It allows the use of alternative designs, products, or technologies that offer equal or better accessibility than the guidelines' requirements (R102.1 ADA-Covered Facilities and Equivalent Facilitation).

It mandates compliance with requirements to the maximum extent feasible in cases where existing physical constraints make full compliance technically infeasible (R202.3 Existing Physical Constraints).

Constructive partnerships with ADA advocates and interest groups foster consensus and proactive improvements. This collaborative approach ensures that efforts align with the context and are implemented with mutual trust and belief in their effectiveness. For further information, refer to https://www.access-board.gov/prowag/.

WALKING/ CYCLING/TRANSIT FIELD DAYS

These events take the form of activities like "Ride Your Bike to Work Day", "Walk Your Child to School Day", or "Take the Bus to Work Day". They encourage people to consider traveling by other modes than driving. What also happens is that the challenges of these other modes become apparent, especially where such travel feels uncomfortable or unsafe. Other events can include community walking or cycling assessments. Led by a knowledgeable and seasoned practitioner, groups walk or cycle around their community and identify and document deficiencies and challenges of the built environment. These events can result in written reports and presentations to owning jurisdictions and elected officials.

COMMUNITY WALKING AUDITS

A walk audit is an assessment of the pedestrian safety, accessibility, and comfort of a particular area. In addition to documenting specific issues and engaging the community in advocating for improvements, walk audits can be most effective when public officials and community members of varying backgrounds, ages, and abilities are intentionally invited and welcomed along so they can experience and react to the conditions directly.

The Walk2Connect program of America Walks helps to build a more human and connected world by empowering individuals, community groups, and businesses to experience the benefits of person-to-person, shoulder-to-shoulder connection – what is called "life at 3 mph." Rooted in the simple act of walking, Walk2Connect grows the walking movement by inviting communities down pathways toward sustained communal health and stronger community relationships.

Some suggestions for success include:

- **SET SOME GOALS-** Decide what you want to accomplish
- **PICK YOUR PLACE-** Choose the route carefully, scout it ahead of time, and make sure everyone will be safe
- **GRAB A GEAR-** Bring along clipboards, printed guides, and pens, as well as tape measures and a camera
- **TAKE PAUSE-** Stop every few blocks to analyze the conditions, make notes, and take photos
- **KEEP IT SHORT** – Don't make it too long, a one-mile walk audit can easily last an hour with stops for discussion
- **CURATE YOUR CREW** – Identify participants from the neighborhood and others whom you want to recruit as advocates
- **BRING IN LOCAL LEADERS** – Invite one or two public officials such as planners, engineers, or Village Council members

- **USE TOOLS** – Choose a specific guide such as the AARP Walk Audit Tool Kit and send it to participants in advance
- **CHAT AND ASSESS** – At the end, ask everyone to share their "take-aways"

More information can be found at https://americawalks.org/

MEDICAL SERVICE PROVIDERS

Communities aiming for Vision Zero policies should partner with local healthcare and emergency services. These entities witness firsthand the impact of traffic incidents and hold valuable data, such as anonymous emergency room visit records. These records reveal unreported crash locations and details that can guide community engagement and educational initiatives to enhance traffic safety.

For instance, the collaboration between Austin, Texas, and Dell Children's Hospital showcased the power of such partnerships. Dell Children's provided GIS-based crash data, including heat maps of motor vehicle, bike, and pedestrian incidents seen in their emergency room. This data uncovered unreported crashes, especially in lower socioeconomic areas and communities of color. It highlighted incidents involving intoxicated individuals and revealed details like bike helmet usage in cyclist crashes and child seat information in motor vehicle incidents involving children.

This partnership enabled targeted educational efforts, distribution of free safety gear, and improvements in traffic signal operations, sidewalks, and pedestrian facilities based on crash data. Additionally, it aided in directing traffic enforcement actions, investigating overserving in drinking establishments, and identifying areas needing better safety measures.

IMPROVING ACCESS TO TRANSIT

The Federal Transit Administration (FTA) offers programs and funding opportunities to enhance the understanding and need for effective public transit. For example, their Enhanced Mobility of Seniors & Individuals with Disabilities - Section 5310 program provides formula funding to states and designated recipients to meet the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meet these needs. The program aims to improve mobility for older adults and people with disabilities by removing barriers to transportation services and expanding transportation mobility options. More information is available at https://www.transit.dot.gov/.

Another resource is the National Alliance of Public Transportation Advocates (NAPTA), a national organization representing grassroots transit coalitions, grassroots transit rider organizations, and advocates that support increasing investment in public transportation. Their objectives are:

- To create a diverse, committed, and visible national alliance of local public transit coalitions.
- To generate a heightened level of advocacy through constituent visits, calls, e-mails, and letters at necessary and appropriate times in the congressional decision-making process.
- To link local transit coalitions with new advocacy tools and resources.

NAPTA supports the Transit-Walkability Collaborative, which consists of national, state-level, and local leaders in the walkability and public transit advocacy movements who recognize the synergies between these two transportation modes and the benefits of collaboration.

Learn about NAPTA at https://www.publictransportation.org/napta/.

13. TRAFFIC ENFORCEMENT PROGRAMS

Traffic regulations are in place to establish a sense of order and guarantee the safety of all individuals navigating Wellington. Promoting compliance with these road rules will enable law enforcement to foster secure and inviting streets within the Village. These suggested traffic enforcement strategies and programs will help keep the Village of Wellington streets safe.

HIGH VISIBILITY ENFORCEMENT

High-visibility enforcement is a multifaceted approach to law enforcement that captures the public's attention by employing highly visible patrols, such as checkpoints, saturation patrols, or message boards. The fundamental purpose of high-visibility enforcement is to encourage voluntary adherence to traffic laws, and according to research conducted by the National Highway Traffic Safety Administration (NHTSA), it stands out as one of the most effective strategies for improving safety outcomes.

Important to note that traditional traffic law enforcement methods have led to concerns about racial profiling, police violence, and negative impacts on communities of color. According to the US Department of Justice, Black and Hispanic individuals face a higher likelihood of experiencing police force during stops compared to white individuals. In response, cities are transitioning to equity-focused approaches that prioritize safety for all, targeting the most dangerous reckless behaviors while addressing enforcement disparities. This shift involves various strategies, including implementing fairer fine structures and analyzing demographic data in traffic citations.

TRAFFIC VIOLATORS SCHOOL

In numerous jurisdictions, drivers who have accumulated a specific number of demerit points on their driver's licenses may be offered the opportunity to enroll in a Traffic Violator School as a means to reduce their punishment. Typically, upon successful completion of Traffic Violator School, their traffic offenses are dismissed or expunged from their driving records.

Negotiated plea agreements are an indispensable component of a well-functioning and efficient court system. Nevertheless, these agreements can lead to the reduction or elimination of penalties for offenders, such as in cases where a driver is permitted to avoid a suspension of their driver's license by attending a Traffic Violator School.

VARIABLE SPEED FEEDBACK WARNING SIGNS AND SPEED ENFORCEMENT CAMERAS*

Variable speed feedback warning signs and speed enforcement cameras are key countermeasures under the Vision Zero initiative. These tools play a crucial role in enhancing road safety by actively monitoring and managing vehicle speeds. Speed feedback signs alert drivers to their current speed, encouraging compliance with posted limits, while speed enforcement cameras deter speeding through automated monitoring and penalties. Together, these measures aim to reduce speeding-related incidents, contributing to the overall goal of eliminating traffic fatalities and serious injuries.

TRAFFIC SAFETY DIVERSION PROGRAM

Design a traffic safety diversion program specifically for bicycle and pedestrian traffic violations, with the primary goal of facilitating access to safety courses and programs centered on biking and walking. The program would provide a way for people who bike and walk to remove or reduce a traffic violation fine while also learning pedestrian and bicycle laws and safe walking and riding skills.

PUBLICIZED SOBRIETY CHECKPOINTS

Law enforcement officers establish sobriety checkpoints to inspect vehicles for signs of driver impairment. These checkpoints can involve either stopping every vehicle passing through or stopping vehicles at predefined intervals, such as every third or tenth vehicle. The fundamental goal of these checkpoints is to discourage individuals from driving under the influence by heightening the perceived likelihood of encountering law enforcement and facing arrest. To achieve this objective, sobriety checkpoints must be conspicuously positioned, widely advertised, and consistently carried out as an integral component of an ongoing sobriety checkpoint initiative.

HIGH VISIBILITY SATURATION PATROLS

A saturation patrol, which can also be referred to as a blanket patrol or a dedicated DWI patrol, involves a substantial contingent of law enforcement officers (LEOs) conducting surveillance within a designated region to identify impaired drivers. Typically, these patrols are scheduled for periods and locations where incidents of impaired driving-related crashes frequently transpire. Similar to well-publicized sobriety checkpoint initiatives, the primary objective of widely announced saturation patrol programs is to discourage individuals from driving under the influence by elevating the perceived likelihood of being apprehended. Therefore, it is crucial to extensively promote and regularly carry out saturation patrols as part of an ongoing program dedicated to this purpose.

14. PARTNERSHIP

The Village of Wellington will require partnerships to increase the efficacy of the Vision Zero Action Plan. Several strategies have been identified below. As conditions and strategies evolve, the strategies and supporting elements will evolve as well.

COLLABORATION WITH NEARBY CITIES

Partner with neighboring cities to advocate and engage with the State Legislature and the Governor to pass legislation. This legislative change will allow Wellington to enhance the enforcement of traffic safety laws.

PUBLIC HEALTH AND MEDICAL INSTITUTION

Establish partnerships with local public health organizations, hospitals, and trauma centers to integrate crash data with health outcome information. This data linkage will provide a more comprehensive understanding of the impact of crashes and will support evidence-based solutions in Wellington's Vision Zero initiatives.

PRIVATE SECTOR ENGAGEMENT

Collaborate with private sector entities, including businesses heavily reliant on Wellington streets, such as delivery companies and transportation network companies (TNCs). This partnership will ensure that private companies actively contribute to Vision Zero efforts and prioritize street safety in their operations.

ADVOCACY FOR SAFER DELIVERY VEHICLES

Collaboratively pursue local and state regulations that mandate the use of smaller, safer delivery vehicles in urban environments. Wellington can work with partner cities and organizations to promote the adoption of these regulations where appropriate.

TRAFFIC SAFETY EDUCATION IN SCHOOLS

Work with the State Department of Education to integrate traffic safety education into school curriculums across Wellington. This initiative aims to educate and raise awareness among students about the importance of safe road behaviors.

COMMUNITY AND SCHOOL AMBASSADOR PROGRAMS

Launch community and school-based outreach programs in Wellington. Utilize resources available on Village's Vision Zero website to create materials and activities that increase awareness and engagement in preventing future injury crashes. These programs will involve local communities and schools in promoting road safety within the village.

PARTNER WITH TRANSIT AGENCIES

Forge partnerships with regional transit agencies to implement coordinated safety measures aimed at reducing traffic fatalities and injuries. By collaborating with transit agencies, Village can explore strategies such as enhanced driver training programs, implementation of advanced safety technologies in public transit vehicles—including crash avoidance systems and real-time monitoring—and the development of shared safety data systems. Additionally, joint initiatives can focus on improving infrastructure around transit hubs to enhance pedestrian and cyclist safety. By working together, the Village of Wellington and transit agencies can create a safer and more integrated transportation system that aligns with Vision Zero principles. By adapting these strategies, the Village of Wellington can enhance the efficacy of its Vision Zero plan, fostering a safer and more secure environment for its residents.

15. PRIORITIZATION, FUNDING & IMPLEMENTATION

While all the safety projects identified address critical safety improvements for the Village, the following prioritization criteria guide the implementation of the location-specific design projects to meet best the safety and related goals outlined in the Wellington Comprehensive Plan.

These are the following key criteria to score and prioritize the design projects:

- Crash Frequency/History
- Crash Severity
- Crash Types
- Safety Benefits
- Roadway Characteristics
- Benefits to Vulnerable Road Users
- School Safety Impact
- Equity Impact
- Public Engagement
- Cost-Effectiveness
- Ease of Implementation

PRIORITIZATION MATRIX:

Criteria	Description
Crash Frequency/History	Looking at the number of crashes that have occurred at a location over a set time period (e.g. 5- 10 years).
Crash Severity	Prioritizing projects with locations having a higher proportion of fatal and serious injury crashes.
Crash Types	Prioritizing projects with locations which prevalent crash types like run-off-road, head-on, and angle crashes.
Safety Benefits	This evaluates the collision severity risk associated with the project location based on a 10-year collision history. To calculate the safety benefit score, a severity index is first determined by weighting each collision-KSI collisions are assigned 5 points, non-incapacitating injury collisions 3 points, and possible injury collisions 1 point. The corridor ranking system also includes crashes that occurred at intersections. This criterion includes both Crash Severity and Crash Frequency/History.
Roadway Characteristics	Factoring in attributes like roadway geometry, lane/shoulder widths, sight distances, etc.

Benefits to Vulnerable Road Users	Projects that include improvements benefiting pedestrians, bicyclists, transit users, or persons with disabilities.
School Safety Impact	Projects that improve safety on roadways and intersections within 0.25 miles of an existing school.
Equity Impact	Projects located fully or partially in, or adjacent to, transportation-disadvantaged census tracts.
Public Engagement	Projects that have garnered community support through prior planning efforts or outreach processes.
Cost-Effectiveness	Evaluating the cost estimates of potential countermeasures.
Ease of Implementation	Projects are prioritized based on the complexity of their countermeasures - for high-ease improvements like signs, lights, striping, and crosswalks; for medium-ease improvements like sidewalks, medians, and new signals; and for low-ease improvements requiring lane/geometry changes, right-of-way acquisition, or utility or drainage work.

FUNDING

The Village has numerous avenues through which it can finance and carry out the actions listed below. For example, integrating safety improvements into pavement management programs, other transportation capital projects, and new development initiatives is a viable approach. To secure dedicated funding for safety projects, the Village may consider seeking support from state or regional sources such as the Florida Department of Transportation (FDOT), including the Highway Safety Improvement Program (HSIP) and the Safe Routes to School (SRTS) program. Palm Beach Transportation Planning Agency (TPA) can assist with funding for pedestrian, bicycle, and traffic safety projects. Metropolitan Planning Organization (MPO), often working with the TPA, can fund regional transportation projects, including those focused on safety improvements. Florida Highway Safety and Motor Vehicles (FLHSMV) funds initiatives to reduce traffic fatalities and serious injuries. State and Community Highway Safety Grant Program (Section 402) supports state and local efforts to improve traffic safety, including educational campaigns and enforcement initiatives. Florida Safe Routes to School (SRTS) Program funds infrastructure projects and non-infrastructure activities that promote safe walking and biking to school. Transportation Alternatives (TA) Set-Aside, administered through FDOT and the MPO, provides funding for smaller-scale transportation projects such as pedestrian and bicycle facilities, which can enhance safety. Community Traffic Safety Teams (CTST), the local CTSTs often work on safety initiatives. They can provide support or partnership opportunities for Vision Zero projects. Public-Private Partnerships (PPPs), which engage with local businesses and private sector partners, can provide additional funding or resources for safety projects. Federal Highway Administration (FHWA) Grants, such as the Surface Transportation Block Grant (STBG) and the Highway Safety Improvement Program (HSIP), offer federal funds that can be used for local safety projects.

IMPLEMENTATION

Successful implementation of the Vision Zero Action Plan requires close coordination with identified safety partners such as local municipalities, FDOT, law enforcement, emergency responders, community groups, and relevant state/regional agencies. It is recommended to extend the current Task Force to meet regularly, coordinate activities, review progress, and address challenges. The safety strategies and countermeasures should be systematically integrated into the transportation planning processes, capital improvement program, and project development efforts. This includes prioritizing safety projects for funding, incorporating countermeasures into all new projects during design, and coordinating with FDOT and local municipalities to implement improvements on their respective road networks. Funding is a critical component of implementing any safety project. Securing adequate funding through pursuit of federal, state, and local sources, as well as other opportunities like grants or public-private partnerships is critical.

16. MONITORING & EVALUATION

Continuous monitoring and periodic evaluation are critical to ensure the Vision Zero Action Plan achieves its intended goals. A set of quantifiable performance measures should be established, such as number of KSI collisions, citations, observational data, and public feedback. Consistent data collection protocols must be implemented village-wide to accurately track these measures, involving compilation of collision data, roadway data from FDOT, observational studies, citation data from law enforcement, and public feedback tools.

It is recommended that the Village of Wellington designate a lead agency or working group (e.g. Vision Zero Task Force) to oversee data compilation from all pertinent sources on a recurring schedule. Developing a regularly updated collision dashboard and GIS-based monitoring platform could enable the Village to track implementation progress over time. To validate effectiveness of higher-cost, area-specific countermeasures, detailed before/after studies should evaluate baseline conditions prior to implementation and compare changes in collision patterns, speeds, conflicts, etc. after a sufficient time period.

The compiled data and performance measure evaluations should undergo an annual review process with key stakeholders and partners. This will identify areas not meeting goals, allow for adjustments or new strategies, reveal emerging issues, and inform updates made to the Vision Zero Action Plan every two to five years. Continual monitoring, evaluation, and updating based on observed performance is essential for driving sustained safety improvements over time.

MEASURING EFFECTIVENESS OF SAFETY PROJECTS

Implementing effective countermeasures and validating their success is crucial for achieving the goals of the Vision Zero Plan. This section outlines the key activities and protocols for monitoring and evaluating the performance of individual safety projects.

PRE-IMPLEMENTATION DATA COLLECTION

Before any safety project is implemented, comprehensive baseline data should be collected within the project area to enable future before/after comparison analysis. Data to be compiled includes:

Collision Data:

- Collision types (pedestrian, angle, rear end, etc.)
- Collision severity levels
- Locations and corridors
- Contributing factors

Traffic Data:

- Vehicle traffic volumes
- Pedestrian and bicycle traffic counts

Operations Data:

- 85th percentile and pace speeds
- Vehicle/pedestrian/bicycle conflict observations
- Observable road user behavior and compliance levels

STATISTICAL ANALYSIS METHODOLOGY

Appropriate statistical techniques can be applied to account for regression-to-mean effects, traffic volume changes over time, and other potential biases. Recommended approaches include Empirical Bayes method and advanced regression modeling.

Using these techniques, an estimate of the predicted long-term safety performance should be calculated assuming no safety improvements were implemented. This becomes the baseline for comparison.

POST-IMPLEMENTATION DATA COLLECTION

After allowing sufficient time following project implementation (typically one-to-three years), the same scope of "after" data can be re-collected to enable before/after comparison.

PERFORMANCE EVALUATION MEASURES

The following key safety performance measures can be evaluated by comparing predicted vs. actual post-implementation conditions:

- Total collisions
- KSI Collisions
- Collisions by type (pedestrian, intersection, roadway departure, etc.)
- Operating speeds
- Conflicts between modes (vehicle/pedestrian/bicycle)

SUPPLEMENTAL MEASURES FOR BEHAVIORAL SAFETY PROJECTS

For safety initiatives focused on influencing driver, pedestrian, or bicyclist behavior (e.g. education campaigns, enforcement activities), leading indicators of compliance can be tracked, such as:

- Speeding violations
- Impaired driving arrests/citations
- Distracted driving violations
- Pedestrian and bicycle traffic counts
- Observed yielding/compliance behavior

PROJECT EVALUATION REPORT

All findings from the before/after analysis should be documented in a comprehensive Project Evaluation Report

containing:

- Project scope and description of implemented countermeasures
- Implementation costs
- Data collection processes and sources
- Statistical analysis methodology
- Summary of before/after performance results
- Assessment of whether intended benefits were achieved
- Lessons learned and recommendations
- Supplemental policy, program or design guidance as applicable

CONTINUAL MONITORING PROCESS

To ensure ongoing effectiveness evaluation, the Village of Wellington should establish:

- Routine schedules for MOE (Measure of Effectiveness) data collection and analysis
- Designated staff responsibilities for MOE activities
- Integration of MOE findings into annual performance reviews
- Mechanism for refining project approach based on evaluation results

PLAN UPDATE

The Wellington Vision Zero Action Plan should be treated as a living document, recommended to be updated every two-to-five years after adoption. The update process should involve reviewing the latest collision data, transportation network changes, and newly available data sources to identify any shifting needs. A thorough evaluation of implemented strategy effectiveness, using the monitoring process, is recommended. Stakeholder engagement through the Vision Zero Task Force and public outreach is critical to solicit feedback and identify areas for modification. Based on these review findings, the goals, strategies, countermeasures, implementation plan, and performance measures may require updates to address persisting or emerging safety issues more effectively. Regular updates ensure the plan's continued relevance.

APPENDIX A

GOALS & POLICIES OF EXISTING PLANNING DOCUMENTS

APPENDIX B

PUBLIC COMMENTS WITH MAP INPUT DATA

APPENDIX C

CRASH DATA & ANALYSIS

APPENDIX D

COUNTERMEASURE TOOL BOX

APPENDIX E

COST ESTIMATES OF SAFETY PROJECTS