VISION ZERO MADISON

PROGRESS REPORT

2023–2024

CITY OF MADISON TRAFFIC ENGINEERING

Contents

VISION ZERO MADISON

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VISION ZERO OVERVIEW

Vision Zero Madison aims to eliminate all traffic deaths and serious injuries on city streets by 2035.

For too many years, transportation systems have focused disproportionately on moving vehicles as quickly as possible and treating all crashes as equal. Vision Zero represents a shift towards the prioritization of safe, healthy and equitable mobility for all roadway users, recognizing human errors, and focusing on the elimination of the most life-changing crashes.

This progress report documents projects and implementations made in Madison between 2023–2024 to achieve our Vision Zero goal.

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June 8, 2026

I am proud to share our latest Vision Zero Progress Report, an update grounded in data, collaboration, and our unwavering commitment to keeping everyone in our community safe. When we released Madison's first Vision Zero Progress Report in 2022, we reflected on the work completed since launching the initiative in 2020. Two years later, safety for all Madison residents remains one of my highest priorities.

Since we launched Vision Zero in 2020, the City and our stakeholder partners have made meaningful strides toward our Vision Zero goals. Using our High Injury Network and robust data analysis, we continue to plan and deliver projects through the Safe Streets Madison program. Together, we have instituted more context-sensitive speed limits on more than 40 miles of major roadways, built over 10 miles of sidewalks, shared-use paths, and protected bike lanes, and improved numerous pedestrian and bicycle crossings with proven low-cost high-impact safety measures. We have also secured significant federal funding, including a major U.S. Department of Transportation Safe Streets and Roads for All grant, which has also helped us accelerate several improvements through the use of over $6.5 million dollars of federal grant funding.

Major reconstruction projects, such as Atwood Avenue near Olbrich Park, Segoe Road, Pleasant View Road, Hammersley Road, East Wilson Street, and upcoming phases of John Nolen Drive—reflect our focus on safer street design. These corridors are being reshaped to reduce excessive speeding, protect people walking and biking, and reduce conflict points at intersections where past severe crashes have occurred. Redesigning our roadways is one of the most powerful tools we have in advancing Vision Zero.

Fatal and severe crashes on City-controlled roadways in 2024 reached the lowest we've seen since launching Vision Zero. From 2020 to 2024, traffic fatalities on City-controlled roadways reduced by 58% and serious injuries reduced by 26%. In the meantime, the national and the state trends are very different. This positive trend in Madison shows what is possible when we combine data, design, and a citywide commitment to safety.

Reaching zero deaths and serious injuries will not be easy, but we believe these tragedies are preventable. By continuing to work across departments, neighborhoods, and community partners, we will continue building a safer city for everyone—no matter how they choose to travel.

I invite all Madisonians to join us in this effort. Together, we can shape a future where every trip home is a safe one.

Sincerely,

Satya Rhodes-Conway
Mayor

MAJOR ACCOMPLISHMENTS

Madison continues to advance Vision Zero through a data-driven, equity-focused approach, with measurable safety improvements on City-controlled roadways and continued focus on reducing fatal and serious-injury crashes.

10 Major Projects / 8.8 Miles of Roadway
were constructed or resurfaced between 2023–2024, all designed using Vision Zero principles

Between 2023–2024, the City implemented
112 Community Projects
through the Safe Streets Madison program; focusing on proven low-cost, high-impact design strategies to improve safety on high-risk corridors.

16.3 miles of major roadways
received speed limit reductions between 2023–2024. These reductions support traffic calming, roadway redesigns, and policy changes aimed at reducing the likelihood and severity of crashes.

580 miles of neighborhood streets
were converted to 20 MPH in the citywide **20 is Plenty** program, reinforcing safer travel speeds in residential neighborhoods across the city.

City staff planned, attended, and worked
40+ Outreach Events
160+ School Safety Events
between 2023–2024, including events like Safety Saturday, Walk/Bike to School, and Parks Alive.

Crashes on city-controlled roadways have decreased by:
-58% Fatalities
-51% Fatal Crash Rate
(since 2020, the start of Vision Zero Madison)

What this shows:

These major accomplishments reflect a safe systems approach that combines roadway design, speed management, policy, enforcement, and community engagement. The following sections of this report provide additional detail on how safety data, equity analysis, and targeted investments have helped the City of Madison work toward our Vision Zero goal.

1. INTRODUCTION

ABOUT THESE ICONS

Throughout this report, icon bubbles identify the Vision Zero themes represented in each section. These visual cues help connect the narrative with the initiative's core principles and themes: Safe Streets, Safe Speeds, Safe People, Safe Fleet, Safety Focused Enforcement, Equity, Safety Data, and more.

1.1 WHAT IS VISION ZERO?

Vision Zero Madison is an initiative with the goal of reducing all traffic deaths and severe injuries on city roadways to zero by 2035.

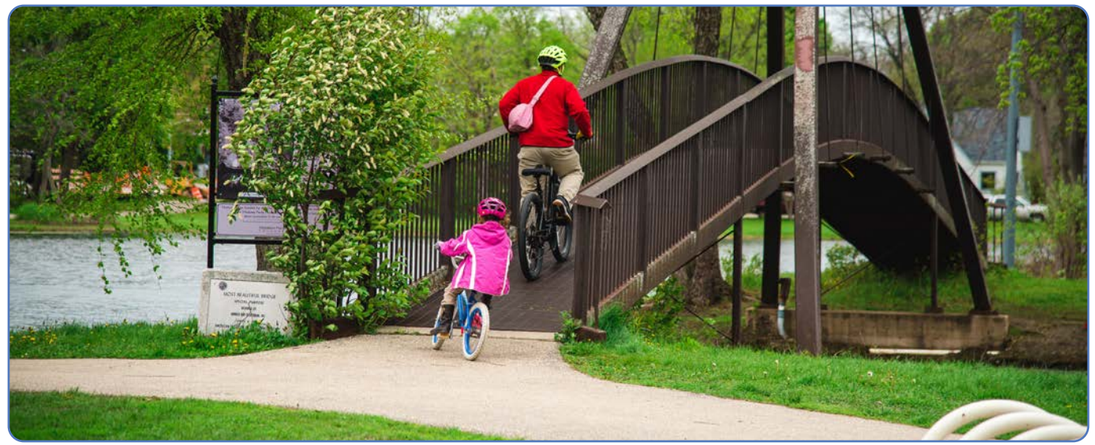
Vision Zero also focuses on increasing safe, healthy, and equitable mobility for all. It recognizes that people will sometimes make mistakes, so the road system and related policies should be designed to ensure those inevitable mistakes do not result in severe injuries or fatalities.

Why Zero?

Zero is the only justifiable target. Setting it as a shared goal is both bold and necessary. It reinforces the need for major shifts in the way we think about and design our transportation system.

Why 2035?

Setting a timeline brings urgency to this initiative and helps us hold ourselves accountable. In 2035, the City of Madison will evaluate its progress and develop a new action plan.



1.2 GUIDING PRINCIPLES

These guiding principles define how Vision Zero Madison approaches roadway safety—shaping decisions, investments, and trade-offs across the city.

PRIORITIZING SAFETY | **EQUITY** | **DATA DRIVEN** | **ENGAGEMENT**

Vision Zero Madison puts safety above all else, recognizing that roadway design and policy decisions must center people most at risk of serious injury or death. Instead of optimizing roadways for speed or vehicle throughput, the City focuses on creating a transportation network that supports safe mobility for all users. This approach acknowledges that public space is limited — meaningful safety improvements often require difficult trade-offs, like reallocating space previously only dedicated to motor vehicles.

To guide our decision making, Vision Zero Madison relies on a data-driven and community-informed approach. Crash data and safety analysis are used to identify patterns, prioritize investments, and proactively address risk, while recognizing that data alone does not capture the full lived experience of roadway users. Engagement with community members provides important context, making sure that our strategies reflect local knowledge, build trust, and respond to real-world conditions. Together, data and engagement inform transparent, accountable decisions that advance safety outcomes citywide.

1.3 EQUITY

All people deserve to move through Madison safely. Unfortunately, past transportation and land use decisions have led some historically marginalized communities to face higher crash rates, wide high-speed roadways, and gaps in sidewalks and pedestrian infrastructure. These conditions are often connected to long-term inequities in investment and access across the city.[1]

As one of Vision Zero Madison's guiding principles, equity integration helps ensure that past harms and current disparities are considered during the planning and implementation of safety projects, allowing the City to prioritize investments where they are most needed.

> *We cannot and should not rewrite history, but we must uncover and reconcile the historical and current injustices experienced by marginalized communities in Madison.*

Equity in Action

Between 2023 and 2024, the City implemented 26 community-input-based projects in Racial Equity & Social Justice Initiative (RESJI) areas. Using our independent equity index scoring, 38 projects were identified in equity focus areas (see page 62 for greater detail).

PROJECTS

Some examples of projects with high equity scores include:

- Badger Rd near Cypress Way/Lincoln Elementary — Curb bump outs
- Aberg Ave at N Sherman Ave — Road diet, new bike lanes
- School Rd at Mendota Elementary — Speed humps
- Milwaukee St/I-90 Bridge — Create designated pedestrian space on bridge
- Capital City Trl. at Nob Hill Rd — Bike crossing markings
- Schroeder Rd at Rayovac Dr — Median refuge island

RRFB installed at Milwaukee St. at Swanton Rd., located in a RESJI/Equity Focus Area

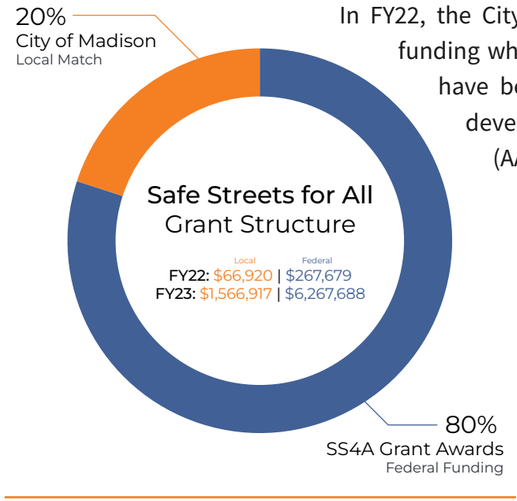
EXPANDING ACCESS

A major milestone in transportation access, equity, and traffic safety was the 2023 Metro Transit Network Redesign, which saw a 30% increase in bus service in neighborhoods with more BIPOC residents and a 20% increase for low-income residents.[2] The redesign paved the way for the launch of bus rapid transit (BRT) on the Rapid A line, which uses accessible stations that allow for level boarding, safe pedestrian crossings, and shelter for transit users. Learn more about traffic safety and BRT on page 21. For more details on BRT, visit cityofmadison.com/metro.

1.4 FUNDING

Vision Zero Madison is funded by federal and local sources. The large portion of funding for Vision Zero projects comes from the Safe Streets and Roads for All (SS4A) Grant, created by the Infrastructure Investment and Jobs Act. SS4A funding includes a local match of 20%.

Safe Streets and Roads for All (SS4A)



Safe Streets for All Grant Structure

In FY22, the City of Madison was awarded over $260,000 in federal funding which became available for use in late 2023. FY22 funds have been or will be used for multiple projects, including developing a Pedestrian Plan and All Ages and Abilities (AAA) Bicycle Network, as well as analyzing post-crash care data, among other projects.

The City of Madison was awarded over $6 million in federal funding in FY23, becoming available for use in mid 2024. FY23 funds have been or will be used to design and construct safety improvements for major travel corridors, such as East Washington and Schroeder Road, and develop programming to reduce crashes involving impaired drivers. SS4A funding also supports the role of a Safe Streets Program Coordinator.

Safe Streets Madison

Local funding for Vision Zero Madison comes from Safe Streets Madison, a City-led program that works to improve traffic safety, ensure Madison roadways are accessible for everyone, and make active transportation and access to transit safer.

This funding is used for small-scale, low-cost, and high-impact safety improvements requested by residents or elected officials on behalf of their constituents. Safe Streets Madison projects are prioritized using data, such as crash frequency and severity in the area, the expected impact of the improvement, and project cost, among other factors.

SAFE STREETS MADISON PROGRAM FOCUS:

1. Implementing traffic safety measures in a fair and equitable manner to eliminate traffic deaths and serious injuries on City roadways

2. Improving connectivity by closing gaps in the City's pedestrian and bicycle networks in a fair and equitable manner and to ensure that they are accessible for all ages and abilities

2. SAFE STREETS

Designing Streets for Safety

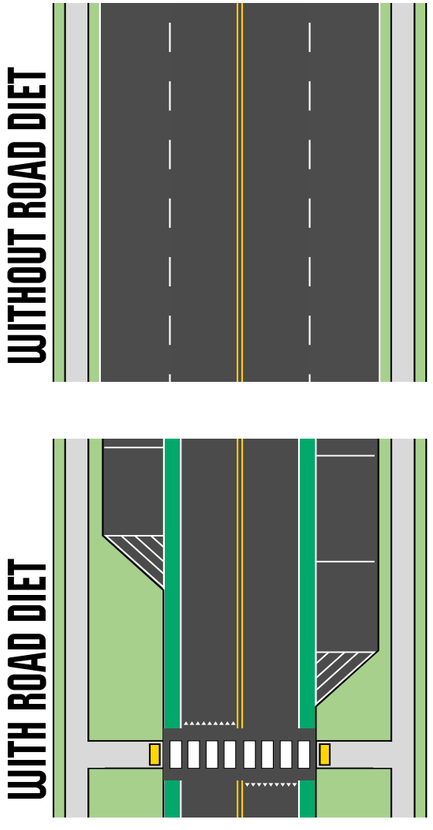
Vision Zero Madison is shifting the design and operation of roadways to prioritize human life over vehicle speed. Using a Safe Systems approach, the City focuses on redesigning high-risk corridors, reducing speeding, filling gaps in bike and pedestrian networks, and upgrading lighting and crossings — especially in areas with a history of underinvestment.

The projects and initiatives in this section demonstrate how systemic design changes can make our roadways safer and more equitable for all users.

In This Section:

2.1 PROVEN SAFETY MEASURES

Proven Safety Measures (PSMs) are roadway design and policy strategies with a strong track record of reducing crashes. These approaches are supported by national research and real-world implementation, and are a core part of Madison's Vision Zero strategy to prevent deaths and serious injuries on our roadways.[3] The following section is not a comprehensive list of all PSMs in Madison, but rather examples commonly found throughout the city.



Road Diets

A road diet is a PSM that reconfigures street space to better serve all users, not just drivers.

BEFORE:

A four-lane undivided road with alternating on-street parking encourages speeding, pushes people biking onto sidewalks, and creates unsafe crossings.

AFTER:

Converting the roadway to one travel lane in each direction, with bike lanes, protected parking, and curb extensions, improves visibility, shortens crossings, and creates space for all users.[4]

DESIGNED FOR EVERYONE

This redesign supports Vision Zero goals and creates a roadway that works better for drivers, transit users, cyclists, and pedestrians without significantly affecting travel times.

THERE'S MORE THAN ONE WAY!

One of the most common and effective road diets is the 4-to-3 conversion. This redesign reduces four travel lanes into one lane in each direction plus a center turn lane. The space gained is typically repurposed for bike lanes, on-street parking, or wider sidewalks.

This change has been shown to reduce crashes by up to 47%, according to the FHWA.[5]

Rectangular Rapid Flashing Beacons

Those bright, fast-flashing lights you see at some crosswalks are called RRFBs. They're designed to make people crossing the roadway more visible to drivers in places without traffic signals.

When someone presses the button, the lights start flashing in a quick pattern that grabs drivers' attention and encourages them to stop.

You'll often see RRFBs at busy crosswalks, near schools, parks, and bike paths—places where safe crossings are needed but a traffic light isn't the right fit.

SAFETY BENEFITS

- **Reduces pedestrian crash likelihood up to 47%**[6]
- **Increases motorist yielding rates up to 98%**[7]

Leading Pedestrian Intervals

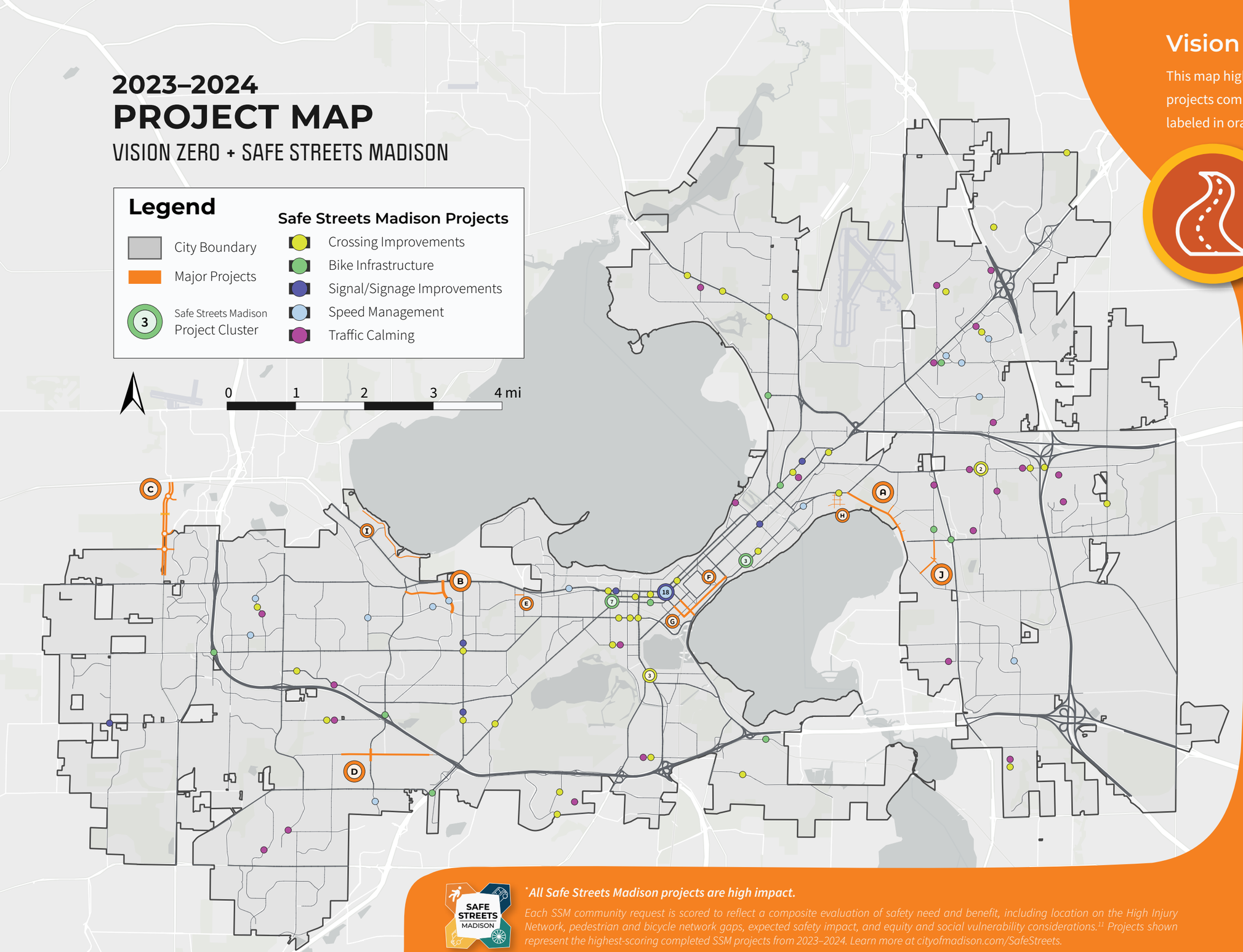
At most intersections, people walking get a few seconds to start crossing before the traffic signal turns green. This is called a Leading Pedestrian Interval (LPI). That small head start makes a big difference. It helps people become more visible in the crosswalk, reduces conflicts with turning cars, and gives extra time to anyone who walks a little slower.

LPIs can reduce pedestrian crashes by ***up to 13%****, making crossings safer and more predictable for everyone.*[8]

Bicycle Protection

To support Vision Zero's goal of eliminating serious and fatal crashes, the City is prioritizing safer infrastructure for people biking. Protected bike facilities (such as off-street paths, curb-separated lanes, and flex post-buffered lanes) reduce conflicts between drivers and cyclists, calm traffic, and create more predictable travel behavior for all roadway users.[9]

2023–2024
PROJECT MAP
VISION ZERO + SAFE STREETS MADISON



Vision Zero Projects Map [10]

This map highlights SSM and Vision Zero site and corridor projects completed between 2023 and 2024. Major projects are labeled in orange.

MAJOR PROJECTS

A. **Atwood Avenue**
B. **Segoe Road & Sheboygan Avenue**
C. **Pleasant View Road**
D. **Hammersley Road**
E. **Stevens Street**
F. **Wilson Street**
G. **Broom & Bassett Streets**
H. **Hudson Avenue**
I. **Lake Mendota Drive**
J. **Dempsey Road & Davies Street**

OTHER EXAMPLES OF HIGH IMPACT PROJECTS *

1. Sixth St and E Johnson St
2. Portage Rd
3. Jackson Quarry Ln
4. South Point Rd at Valley View Rd
5. Segoe Rd
6. E Washington Ave at Baldwin St
7. John Nolen Dr Causeway
8. N Thompson Dr at Jana Ln
9. E Washington Ave (East of Stoughton Rd)
10. University Ave at Randall Ave
11. Mineral Point Rd (West of Whitney Way)
12. S Park St at Olin Ave
13. Hoepker Rd path crossing
14. Dayton St at N Mills St
15. Dayton St at N Charter St
16. Dayton St at N Orchard St
17. Demetral Path at N Second St
18. Speedway Rd at Hammersley Ave
19. Fish Hatchery Rd at High St
20. Milwaukee St at Meadowlark Dr
21. Lake St & Frances St--campus area
22. Post Rd at Cannonball Path
23. Old Sauk Rd (Beltline Hwy to Westfield Rd)
24. Portage Rd near Clove Dr
25. Muir Field Rd at Cimarron Trl

SAFE STREETS MADISON

All Safe Streets Madison projects are high impact.

Each SSM community request is scored to reflect a composite evaluation of safety need and benefit, including location on the High Injury Network, pedestrian and bicycle network gaps, expected safety impact, and equity and social vulnerability considerations.[11] Projects shown represent the highest-scoring completed SSM projects from 2023–2024. Learn more at cityofmadison.com/SafeStreets.

2.2 PROJECTS

2.2.1 Atwood Avenue

Cottage Grove Road to Fair Oaks Avenue

The Atwood Avenue reconstruction added major safety and mobility improvements to one of Madison's most well-traveled corridors. The redesigned roadway now includes a shared-use path and bridge over Starkweather Creek, improved pedestrian crossings, and upgraded bus stops. These changes make it easier and safer to walk, bike, and travel to destinations like Olbrich Gardens, Olbrich Park, Lake Monona, and nearby neighborhoods.

VISION ZERO IN ACTION

Atwood Avenue was redesigned with safety at its core. By narrowing lanes, shortening pedestrian crossings, creating dedicated space for people walking and biking, and improving connections across busy areas, the project directly supports Madison's Vision Zero goal: eliminating serious and fatal crashes from our roads.

Figure A: Lake Loop connection via separated shared-use path and improved crossing.

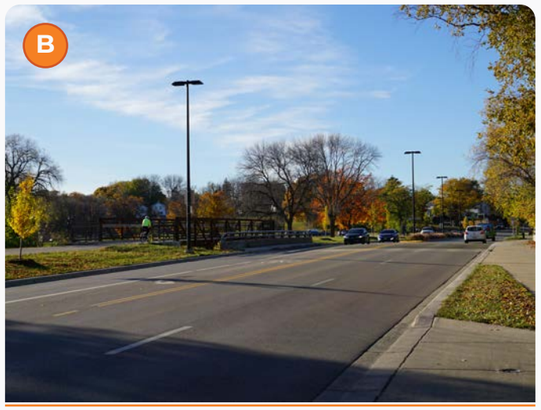


Figure B: Separated shared-use path bridge and lane reductions on Atwood Ave.

Figure C: Wide pedestrian-bike crossings at Atwood Ave. and Walter St.

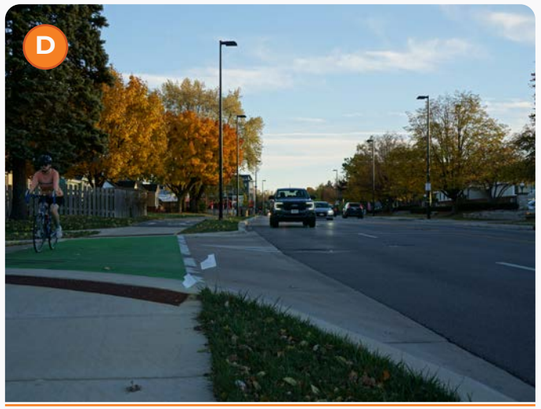


Figure D: Raised crossings at Atwood Ave. and Margaret St., Olbrich Ave.

2.2.2 Segoe Road and Sheboygan Avenue

This project reconstructed pavement, upgraded utilities, and redesigned the corridor to improve safety for people walking, biking, and driving. Improvements include new all-ages bike facilities, enhanced pedestrian crossings, and traffic-calming measures throughout the corridor.

Segoe Road was converted from four lanes to one lane in each direction, adding median-protected bike lanes and shorter, safer crossings to help manage speeds. Sheboygan Avenue received new buffered bike lanes, along with updated pavement markings and signage.

Figure A: Separated turn lane and protected bike lanes calm traffic at the intersection of Segoe Road and Sheboygan Avenue.

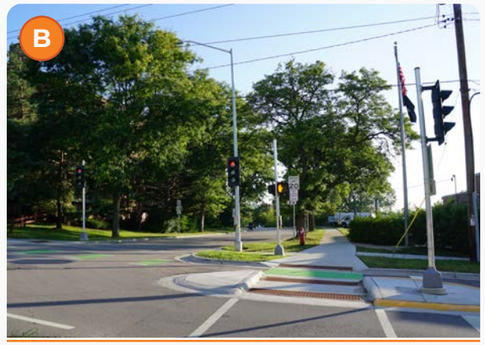


Figure B: Protected bike lanes, pedestrian islands, and bike signals build comfort at Sawyer Terrace and Segoe Road.

Figure C: Protected bike lanes and curb extensions improve visibility for pedestrians at Heather Crest and Segoe Road.

Figure D: Bright-green bike lane markings improve visibility at Vernon Boulevard and Segoe Road.

BUS RAPID TRANSIT

The project also incorporated Metro Transit's East-West Bus Rapid Transit (BRT) system, featuring 9.5 miles of bus lanes, new BRT stations, and Leading Pedestrian Interval-enhanced crossings paired with median refuge islands to improve transit access and pedestrian safety.

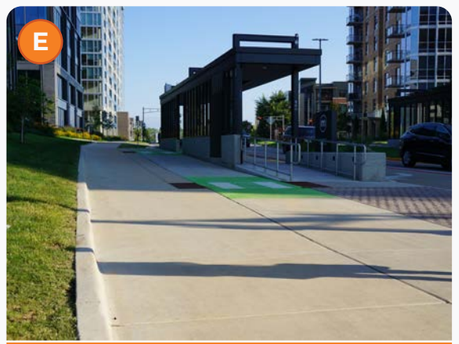
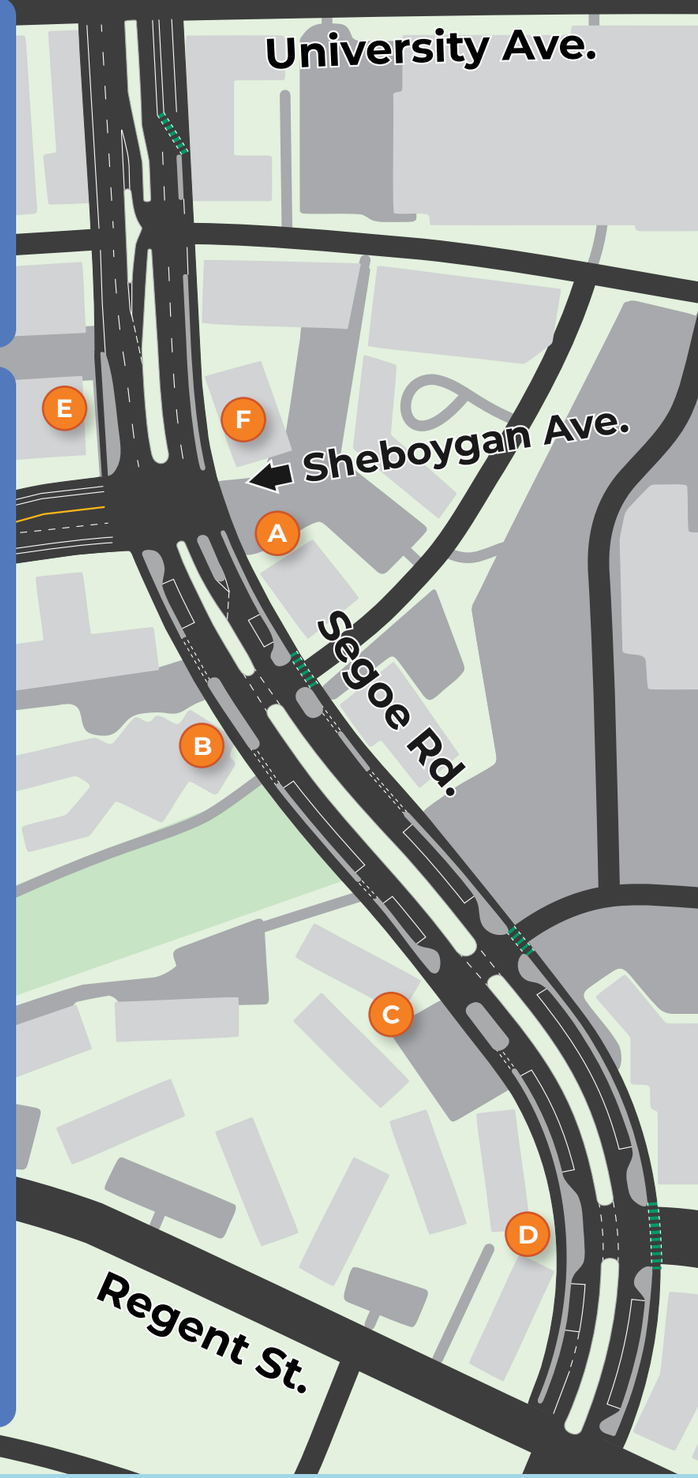


Figure E: The bike lane briefly turns into a cycle track to allow for boarding at the westbound Segoe BRT station.

Figure F: Leading Pedestrian Intervals (LPIs) and median islands create a safe environment for riders and pedestrians.



2.2.3 North Pleasant View Road

As part of a joint project with the City of Middleton, Pleasant View Road was reconstructed from Timber Wolf Trail to US Highway 14 (University Avenue). The project included the reconstruction of the existing roadway as an urban four-lane arterial. Improvements included constructing 3 new roundabouts, center medians, a new shared-use path and bridge, and new lighting.

VISION ZERO IN ACTION

This project applied Vision Zero Proven Safety Measures to keep drivers, pedestrians, and cyclists safe.

Figure A: Refuge Islands at roundabouts and lighting improvements keep path and sidewalk users visible and comfortable.

Figure B: Grade-separated crossings like the new shared-use bridge create safer active transportation connections.

Figure C: Bike ramps allow cyclists to enter and exit the road when approaching an intersection crossing, similar to a freeway ramp.

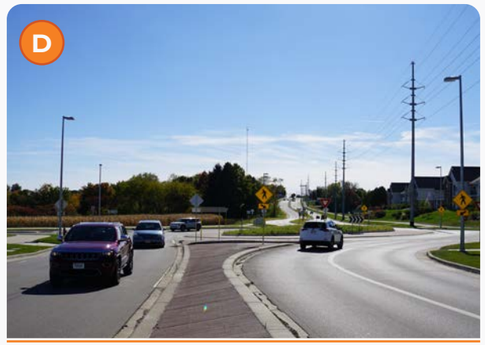
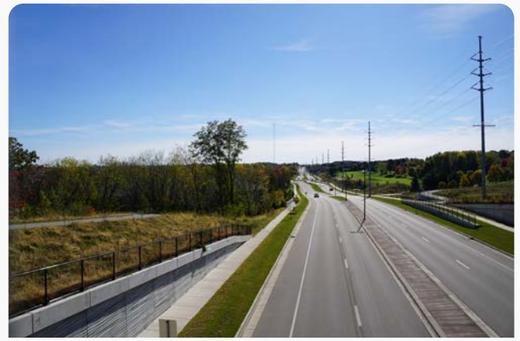


Figure D: Roundabouts, curved roads, and medians all help calm traffic and encourage drivers to maintain the speed limit.

B&A BEFORE & AFTER

Pleasant View Road was designed with Vision Zero in mind. Driver, bike, and pedestrian safety improvements allow for safer travel along the corridor.

Before: Pleasant View Road prior to its redesign. Image © Google Street View, August 2017.



After: Pleasant View Road following its reconstruction. Photo taken from shared-use path bridge, which connects to Greenway Station.

2.2.4 Hammersley Road

A new shared-use path was installed along Hammersley Road from Brookwood Road (near Hammersley Park) to the Southwest Commuter Path. This vital bike and pedestrian connection links the Orchard Ridge Neighborhood to the rest of Madison's active transportation network. Improvements include a speed limit reduction for Hammersley Road (30 → 25 MPH) and safer roadway crossings through a combination of RRFBs, raised crossings, and bright green pavement markings.

While cars may only turn right onto Whitney Way, shared-use path users can use the RRFB signal to safely cross the street to continue down Hammersley Rd.

Prior to 2023, Hammersley Rd. did not have any sidewalks. The new shared-use path fills a crucial gap in Madison's active transportation network.

2.2.5 Stevens Street

In the Regent Neighborhood, Stevens Street underwent a road diet in order to make space for a sidewalk adjacent to Stevens Street Park and to create an environment that discourages speeding. This improved design created a safer, more walkable environment for all users.

The narrowed street makes way for a new sidewalk and slows car traffic down.

2.2.6 Wilson Street Cycle Track

In Downtown, Wilson Street was narrowed down to one lane in order to install a bi-directional cycle track that connects the Capital City Trail to Capitol Square and the Bassett Neighborhood. Improvements included raised crossings, bike signals, and directional blocks for visually impaired pedestrians.

Watch for bikes and cars! Tactile blocks are used at crosswalks, while directional blocks are used beside the cycle track.

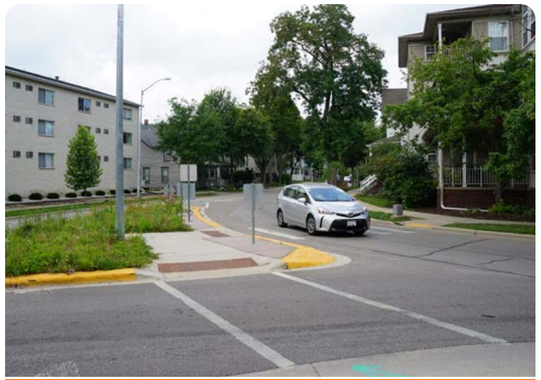
At Wilson, Henry, and Hamilton, raised crossings, pavement markings, and bike signals put cycle track and sidewalk users first.

2.2.7 Broom, Bassett, and Wilson Bike Improvements

Major bike improvements were installed in the Bassett Neighborhood — parking separated bike lanes, floating bus stop platforms, cycle tracks, median refuge islands, and bike signals were installed along the corridor to improve bike, pedestrian, and transit-rider safety.

Floating bus stops allow buses to stay in their lane and improve boarding for disabled passengers. These can be found along S Bassett and S Broom Streets.

Parking-protected bike lanes were installed along Bassett St. to add an extra layer of protection for bikes headed east.



At Bassett and Wilson, crossing improvements such as continental markings, "Yield to Pedestrians" signs, and lighting improve pedestrian comfort and safety.

Bikes and pedestrians can safely navigate busy intersections like this one at Wilson and Broom thanks to raised crossings, bike signals, and median refuge islands.

Road diets on Wilson and Broom made room for two bi-directional cycle tracks, accompanied by sidewalks.

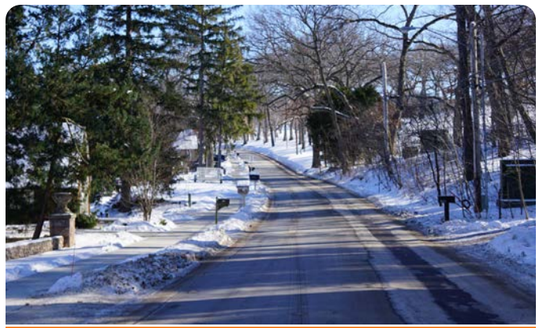
2.2.8 Hudson, Miller, Sommers, Center, and Willard Avenues

Pavement markings, crosswalks, and curb extensions were added to reduce speeding and improve pedestrian safety in this residential area.

New painted crosswalks include accessible curb ramps and clear sightlines, improving safety.
Image © Google Street View, June 2025.

2.2.9 Lake Mendota Drive

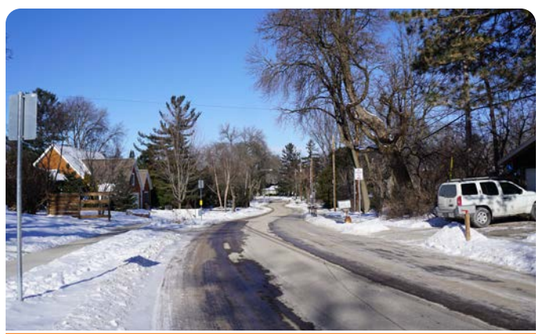
Sidewalks were installed along Lake Mendota Drive, filling a key gap in the pedestrian network and improving lakeside access. The project spanned from Baker Avenue to the Madison-Shorewood Hills boundary, near the Blackhawk Country Club. Speed control bumps were installed throughout the corridor. Parts of the street now have dedicated side parking — the varying width acts as a road diet. A median refuge island and a raised crosswalk were installed at the intersection with Spring Harbor Drive, near Spring Harbor Middle School. At Norman Way, a traffic circle calms traffic, working together with the newly-curved roadway to the north in order to prevent cars from speeding.



Varying street widths allow for pockets of parking in safe places, and discourage speeding.

Raised continental crosswalks and median refuge islands slow down drivers and give students a safer walk to school.

Traffic circles calm traffic and reduce conflict points at intersections. Improved crossings improve pedestrian comfort.



Winding streets slow drivers down. This stretch of Lake Mendota Drive used to be a straightaway—to prevent speeding, the City installed bump outs and added slight turns.

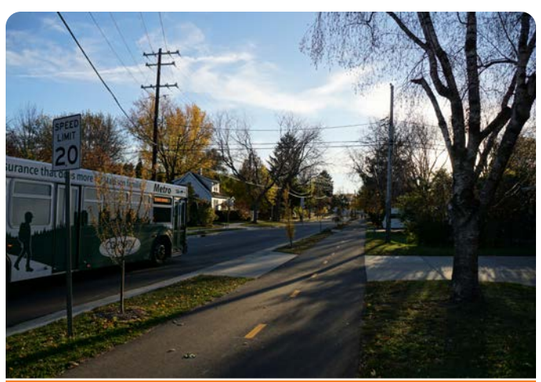
2.2.10 Davies Street and Dempsey Road

In the Lake Edge Neighborhood, a confusing 5-way intersection with 40 conflict points was reconstructed into two separate intersections. In addition, shared-use paths and sidewalks were installed along Davies Street and Dempsey Road to create a safer connection along the Lake Loop trail and to fill in a gap in Madison's pedestrian network. Raised crossings and bright green pavement markings emphasize bike safety along this corridor.

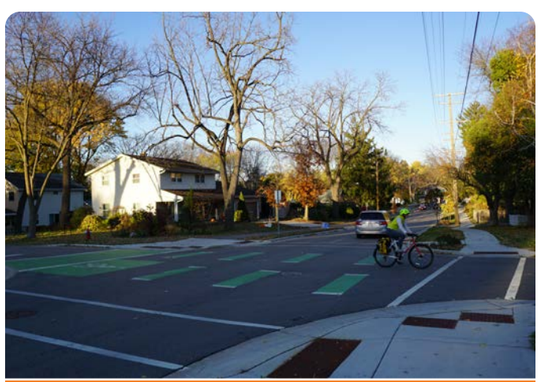
Prior to 2023, Dempsey Rd. and Davies St. lacked sidewalks or dedicated bikeways. Now, the corridor connects the neighborhood to the rest of Madison's active transportation network.

Five streets previously intersected at a single point. The reconstructed corridor now includes clear pavement markings, accessible curb ramps, and improved sightlines.

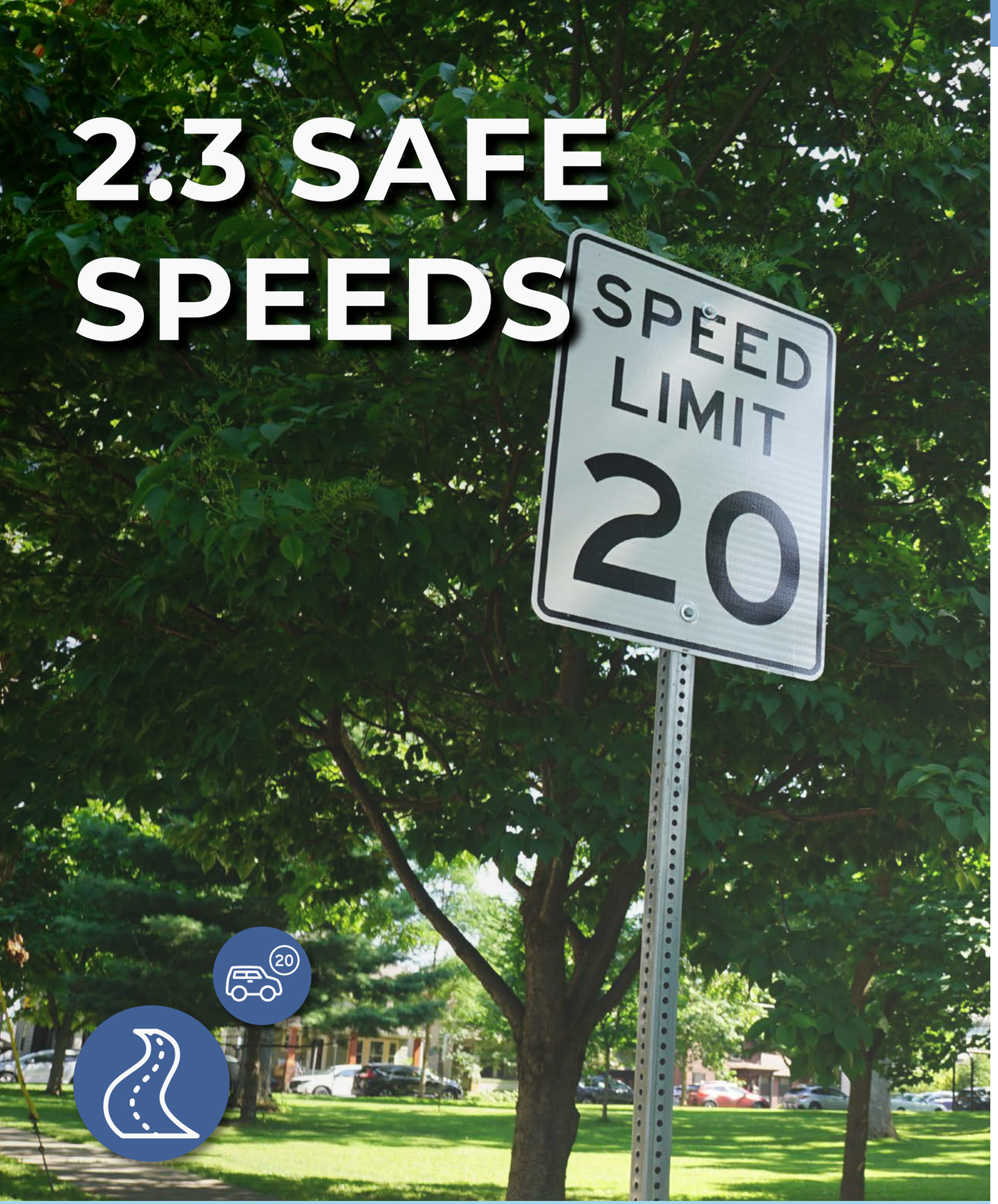
Raised crossings along the new shared-use path improve bike and pedestrian safety and comfort while making path users more visible to cars.



Bus stops along the corridor have proper concrete pads that allow accessible boarding for people with disabilities.



Bright green bike markings emphasize bike crossings to drivers, seen here at Davies St. and Major Ave.



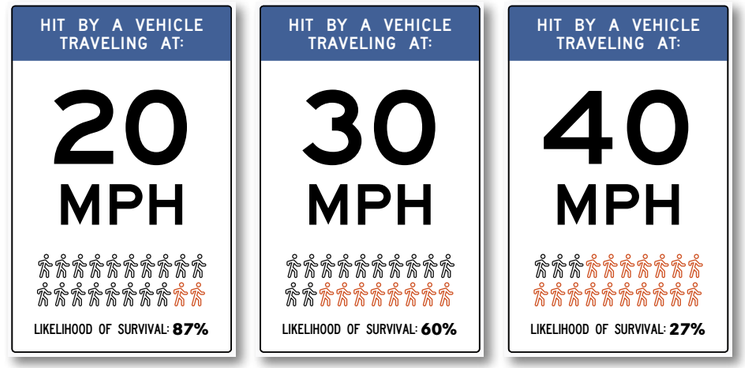
2.3 SAFE SPEEDS

2.3.1 LOWER SPEEDS, SAFER STREETS

Reducing speed limits is one of the most effective ways to prevent serious and fatal injury crashes.[12] Madison's Vision Zero initiative lowers speed limits on key corridors and neighborhood streets to make walking, biking, and driving safer for everyone.

20 is Plenty

As of 2024, all residential local streets in Madison are now 20 mph. At this speed, a person hit by a car has an 87% chance of survival, compared to just 27% at 40 mph.[13]



Why 20?

Twenty miles per hour is not an arbitrary number. Research shows that the risk of serious injury or death increases sharply as vehicle speeds rise, particularly for people walking and biking.[14] At lower speeds, drivers have more time to react, crashes are less severe, and streets are safer for everyone. Paired with traffic calming measures, a 20 mph target helps align how streets feel with how they are intended to function.

After piloting the 20 is Plenty program in the Tenney Lapham and Theresa Hammersley neighborhoods in 2021, Madison saw a **42% average crash reduction in pilot neighborhoods**. See more details on page 61.

MYTH VS. FACT:

Myth: A 5 mph reduction doesn't make a real difference.

Fact: Small reductions in speed can dramatically reduce the risk of serious injury or death.

Public Engagement and Outreach

Vision Zero staff frequently take part in public events like Safety Saturday and Parks Alive where community members can learn more about 20 is Plenty and how it plays a role in making our neighborhoods safer. Learn more about Vision Zero outreach on page 36.

cityofmadison.com/20iP

SPREAD THE WORD!

The City has 20 is Plenty signs that are available for free! Signs are printed in 4 languages (English, Spanish, Hmong, and Traditional Chinese). To get one, residents must contact Traffic Engineering Division with the sign language they would like to display.

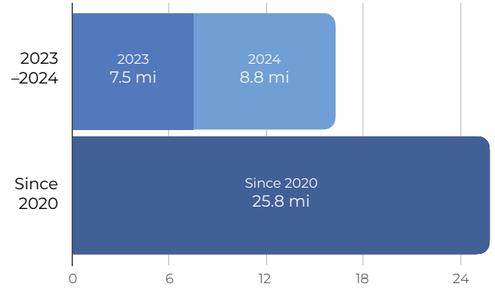
2.3.2 SPEED MANAGEMENT

Managing speed is one of the most effective ways to reduce the severity of crashes. In 2023 and 2024, the City of Madison expanded its efforts to lower speed limits on local, collector, and arterial roadways as part of our Vision Zero strategy. These targeted speed management projects aim to create safer, calmer streets.

OVER THE PAST TWO YEARS, SPEED LIMIT REDUCTIONS WERE IMPLEMENTED ACROSS A GROWING NUMBER OF ROADWAYS:

*2023: **7.5*** miles of roadway with reduced speed limits*

*2024: **8.8*** additional miles added*



** "20 is Plenty" speed limit reductions are not included in these metrics.*

These reductions include updates along major roads and collector roadways, along with speed limit changes near new Bus Rapid Transit (BRT) corridors. Projects were prioritized based on crash data, equity considerations, and proximity to schools, parks, and transit stops.

For each speed limit reduction, the City measures speed-related driver behavior changes, including speed limit compliance, the percentage of vehicles exceeding threshold speeds, and the volume of speeding vehicles. Evaluations conducted from 2020–2023 found that **13 of 14 evaluated corridors experienced reductions in vehicles exceeding evaluation threshold speeds following speed limit reductions**, demonstrating the effectiveness of speed management as a Vision Zero safety strategy.[15]

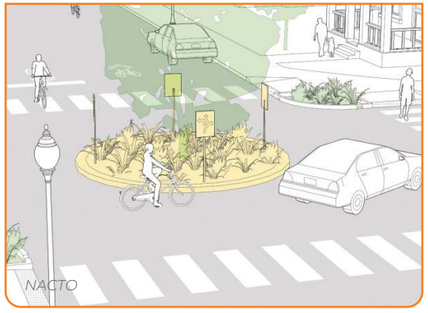
See page 32 for a map of all reductions, page 52 for reduction impacts, and page 61 for additional project data.

Proven Speed Management Measures

Speed management goes beyond signage. Many projects also incorporate physical and electronic traffic calming measures. These safety measures reinforce slower speeds and create safer conditions for everyone. This section is not a comprehensive list of all PSMMs in Madison. See page 26 for examples of how these measures are implemented on Lake Mendota Drive.

SPEED HUMPS

Designed to reduce speeding on low-volume, low-speed streets, speed humps are installed throughout Madison to encourage safer driving.[16] This safety measure typically reduces speeds to around 15 mph and is often found in residential neighborhoods and near schools. Speed humps are often referred to as “speed control bumps”.



RAISED CROSSWALKS

Raised crosswalks are pedestrian crossings built at a higher elevation than the adjacent roadway, usually at-grade with the sidewalk. These crossings not only slow drivers down, but also increase bike/pedestrian visibility, encourage motorist yielding, and enhance access for people with mobility challenges.[17] They also inform drivers that they are entering a slower, pedestrian-oriented street environment.

DRIVER FEEDBACK BOARDS

Driver feedback boards (DFBs), also known as speed radar signs, display a driver’s current speed to encourage safer driving behavior. These signs use radar to detect vehicle speeds and prompt drivers to slow down. In Madison, they are installed near schools and other safety-sensitive locations. Studies have shown that DFBs are effective at reducing vehicle speeds while in use, helping improve safety for people walking, biking, and driving.[18]

TRAFFIC CIRCLES

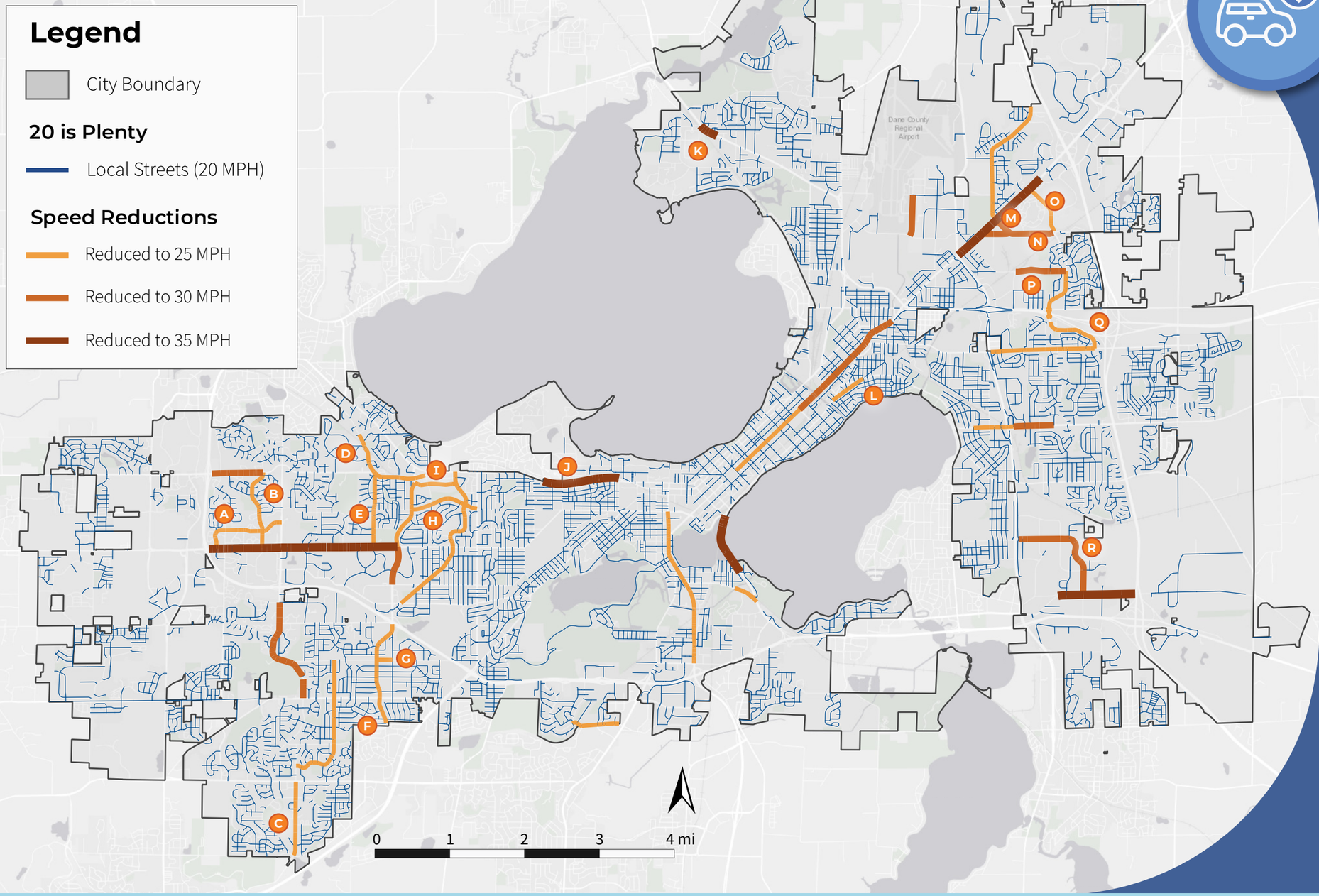
Traffic circles are installed at low-volume residential intersections to slow vehicle speeds and improve safety while maintaining traffic flow.[19] Unlike roundabouts, traffic circles typically require only one approach to stop or yield, but their design encourages all drivers to slow and navigate the intersection more carefully.

2023–2024 Project Highlight

It's also possible to reduce speeds without actually changing the speed limit. Here's an example of how we've done it through a Safe Streets Madison project.

Residents of the Leopold Neighborhood submitted a Safe Streets Madison request to reduce speeding and improve pedestrian safety. We responded by installing 4 speed humps to slow drivers down.

2020–2024
SPEED REDUCTIONS
VISION ZERO MADISON



2.3.3 SPEED LIMIT REDUCTIONS [20]

This map highlights corridors that have undergone a speed limit reduction. Corridors that have undergone changes from 2023 to 2024 are labeled.

*See **page 52** for reduction impacts and **page 61** for additional project data.*

2023–24 SPEED LIMIT REDUCTIONS

A. **Tree Ln:** Mineral Point to Gammon
B. **Westfield Rd:** Mineral Point to Old Sauk
C. **Maple Grove Rd:** McKee to Cross Country / Nesbitt
D. **Old Middleton Rd:** Eau Claire to Capital
E. **Rosa Rd:** Old Middleton to Mineral Point
F. **Whitney Way:** Raymond to Meadowood
G. **Hammersley Rd:** Whitney to Gilbert
H. **Regent St:** Midvale Blvd to Whitney Way
I. **Sheboygan Ave:** Segoe Rd to Whitney Way
J. **Campus Dr:** University Bay Dr to University Ave
K. **Northport Dr:** Knutson to Kennedy
L. **Eastwood Dr:** Riverside to Dunning
M. **Thierer Rd:** East Washington to Lien Rd
N. **Lien Rd:** East Washington to Thompson Dr
O. **Zeier Rd:** East Washington Ave to Lien Rd
P. **Sycamore Ave:** Walsh Rd to Thompson Dr
Q. **Thompson Dr:** Milwaukee to Swanton
R. **Pflaum Rd / Ag. Dr:** Stoughton Rd to Femrite Dr

2020–22 SPEED LIMIT REDUCTIONS

1. **Old Sauk Rd:** Beltline Hwy to Westfield Rd
2. **Mineral Point Rd:** Beltline Hwy to Whitney Way
3. **Gammon Rd / McKenna Blvd:** Watts Rd to Raymond Rd
4. **Prairie Rd (NB):** Raymond Rd to Hammersley Rd
5. **Prairie Rd:** Raymond Rd to Maple Grove Rd
6. **Whitney Way:** Sheboygan Ave to Mineral Point Rd
7. **Whitney Way:** Mineral Point Rd to Tokay Blvd
8. **Whitney Way:** Beltline Hwy to Raymond Rd
9. **Segoe Rd:** University Ave to Odana Rd
10. **Post Rd:** Fish Hatchery Rd to Irvington Way
11. **Park St:** Regent St to Badger Rd
12. **John Nolen Dr:** North Shore Dr to Lakeside St
13. **Olin Ave:** Wingra Creek Pkwy to John Nolen Dr
14. **East Washington Ave:** Pinckney St to Baldwin St
15. **East Washington Ave:** Baldwin St to Marquette St
16. **Pearson St:** Anderson St to Pierstorff St
17. **Portage Rd:** East Washington Ave to Churchill Heights Park
18. **East Washington Ave:** US-51 to East Springs Dr
19. **Milwaukee St:** US-51 to Thompson Dr
20. **Cottage Grove Rd:** Drexel Ave to US-51
21. **Cottage Grove Rd:** US-51 to Flora Dr
22. **Femrite Dr:** Dutch Mill Rd to I-90

3. SAFE PEOPLE

Designing Streets for Safety

Vision Zero Madison recognizes that safe streets require more than infrastructure. **Safe streets rely on people making safe choices.**

This section looks at the City's efforts to reduce vehicle dependence, expand education programs, and foster a traffic safety culture rooted in equity. From Safe Routes to School to public awareness campaigns, these actions seek to empower all residents to travel safely, regardless of their age, ability, or background.

Event Highlight: Safety Saturday

At this annual community event on Capitol Square, Vision Zero Madison shared roadway safety tips with families and kids of all ages. Attendees spun the prize wheel, answered questions about safe walking and biking, and walked away with new knowledge (and a VZ sticker or squishy traffic cone to match).

Pedestrian/bicycle outreach specialist

Transportation Public Information Officer

Traffic Engineer I

Fleet Data Analyst

3.1 PUBLIC INFORMATION CAMPAIGNS

EVENTS AND PROGRAMS

Vision Zero Madison is not just a campaign; it is a movement to make Madison's roadways safer for everyone. Through education, events, and partnerships, we are raising awareness and building a culture that values human life above speed.

World Day of Remembrance

Each November, Madison joins cities around the world to honor those lost to traffic crashes. Vision Zero staff create a display and organize a press conference for community members and advocates. WDOR gives space to share stories and reaffirm our shared commitment to safer streets for all.

2024 World Day of Remembrance display

Let's Talk Streets

This citywide initiative invites residents to re-imagine how Madison's streets look and feel. Through conversations and community input, we are able to shape policies and designs that reflect shared values of safety, equity, and accessibility.

Parks Alive

Did you see us tabling over the summer? City staff set up our tent at Parks Alive events across Madison to meet with local residents in their neighborhoods and parks. These community gatherings provided a space to talk about safety, share resources, educate residents, and celebrate Madison's connected communities. Learn more at cityofmadison.com/parksalive.

BRT Engagement Sessions

To prepare local residents for the implementation of Madison's new Bus Rapid Transit system, Vision Zero, Metro Transit, and DOT staff helped educate transit users about how BRT would ensure safer, more accessible streets for everyone. These sessions discussed topics like station design and access, improved crossings, and safety for all users.

VISION ZERO NEWSLETTERS

The Vision Zero Madison newsletter highlights ongoing projects, safety campaigns, and community stories.

Each quarterly issue features updates from across City departments, covering topics like infrastructure improvements, speed-reduction programs, and ways residents can get involved.

The newsletters are available on the City's Vision Zero webpage at cityofmadison.com/VisionZero, where you can browse past issues or sign up to receive future editions directly by email.


QUARTERLY NEWSLETTER

Alcohol and Impaired Driving

A seasonal reminder to plan ahead and make safe choices when alcohol is involved.

DRINKING

DRINKING alcohol can create a false sense of body warmth in the winter and an overestimation of driving abilities.

"Have a shot of whiskey, crack open a beer— it'll warm you up!" You've likely heard this, but the idea that alcohol warms you up is a dangerous myth. You may think there's no harm in gearing up for a winter tailgate with a drink or two, but you could get hypothermia.

ICY ROADS

ICY ROADS and reduced visability make it hard to steer a vehicle.

Why? Alcohol increases blood flow to your skin's surface and causes heat loss. Your core body temperature actually lowers when you drink even though you may feel warm.

DRIVE SOBER

DRIVE 100% SOBER. Even one alcoholic beverage could be one too many.

Whether you're at an outdoor or indoor gathering, alcohol can also create a false sense of confidence, and you may think you're able to drive. There is no safe amount of alcohol that can protect you from injury or death while operating a vehicle. With icy roads and reduced visibility, drinking alcohol and driving is a deadly combination in the winter. Alcohol and drug impairment is a major contributor to fatal and serious injuries on Madison streets, and Vision Zero is working on initiatives to reduce impaired driving.

Plan your ride home before you start drinking alcohol. Remind yourself and those around you that alcohol does not actually warm you up in the winter and drinking can be dangerous in cold temperatures.

VISION ZERO MADISON

Vision Zero is a data driven strategy intended to eliminate traffic deaths and severe injuries on all roadways, bikeways, and sidewalks by 2035.

The City of Madison Vision Zero initiative strives to improve safety for all roadway users throughout the city and address identified high-injury intersections, all in an effort to prevent avoidable fatal crashes.

SAFETY STARTS WITH ALL OF US.

We can't control human error, but we can help create more forgiving infrastructure and change systems to prevent crashes from being serious or fatal.

www.cityofmadison.com/VisionZero

CITY OF MADISON WISCONSIN

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Madison, WI 53703
Phone: 608-266-4611
Email: VisionZero@cityofmadison.com

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3.2 VEHICLE MILES TRAVELED (VMT)

VMT measures the total distance driven by vehicles over a given time period. The Vision Zero Action Plan tracks annual changes in VMT because reducing the amount of driving can lower crash exposure and support safer, more sustainable transportation options.

Madison VMT[21]

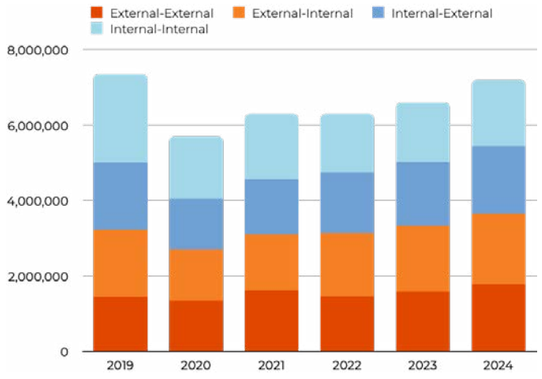
Over the past few years, Madison's total weekday VMT has steadily increased, trending upwards from the sharp dip seen during the height of the COVID-19 pandemic in 2020.

In 2024, average weekday VMT excluding pass-through trips (EE) reached approximately **5.4 million miles traveled on an average weekday**. Though travel activity has steadily increased since 2020, VMT remains approximately **8% below 2019 levels**, while Total VMT is approximately 2% below 2019 volumes.

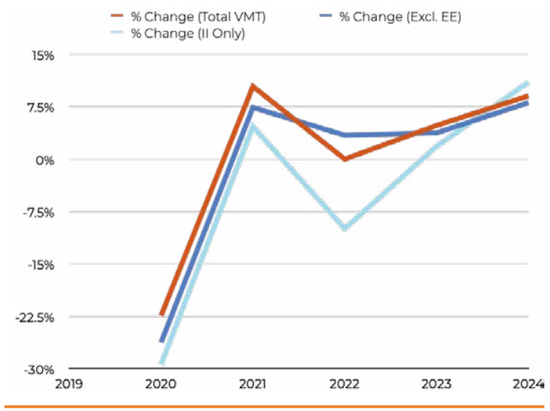
When accounting for population growth, per capita VMT also remains **19% below pre-pandemic levels**. This indicates driving has not increased at the same level as population growth, and also suggests the City's recent investments in transit, infrastructure improvements, and speed management efforts may be playing a role in slowing VMT growth.

Trip Types (EE, EI, IE, II)

Trips are categorized based on whether they begin and/or end inside Madison. Internal–internal (II) trips start and end within the city, while external–external (EE) trips pass through Madison without stopping. External–internal (EI) and internal–external (IE) trips represent travel entering or leaving the city.



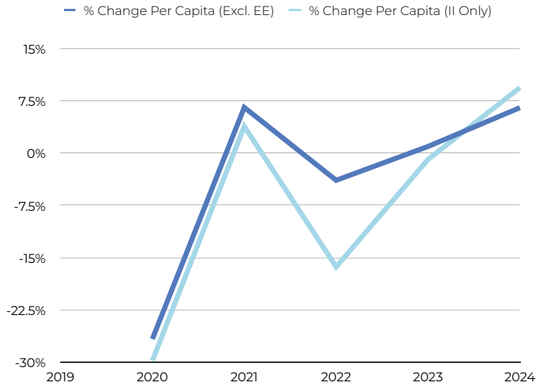
Yearly Weekday VMT Per Trip Type
VMT has been slowly rising since 2020.



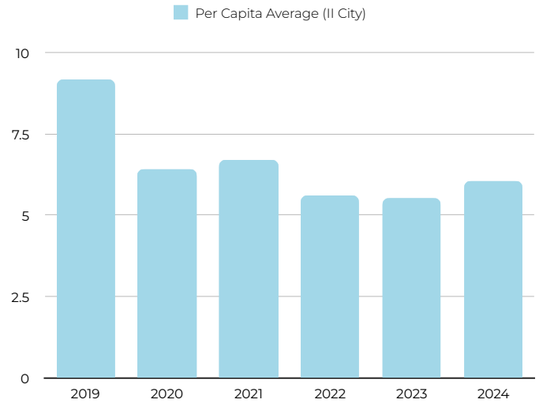
Citywide VMT Change
VMT has steadily recovered since 2020 but remains about 8% below 2019 levels when excluding EE trips.

Effects of Lowering VMT

Lowering VMT can greatly benefit the air quality, reduce traffic crashes, and support more walkable, transit-friendly neighborhoods. Less driving can lead to safer roadways, healthier communities, and a more sustainable city.[22]



Per Capita VMT Change
Trips per person remain below pre-pandemic levels despite population growth.



Daily VMT Per Capita (City)
Residents continue to drive fewer miles per person than before the pandemic.

TRAVEL DEMAND MANAGEMENT (TDM)

Adopted in 2022, Madison's TDM Ordinance requires new developments to implement strategies that reduce drive-alone trips and promote sustainable, multimodal transportation. Measures include supporting subsidized transit passes, new bike share stations, and unbundled parking. By managing travel demand, the City reduces congestion, emissions, and crash risk as the population grows.

Between 2023–2024, the City of Madison approved **47 TDM Plans** including 3,300 dwelling units and 1,526,828 square feet of non-residential tenant space.

Encouraging Sustainable Travel Through Site Design

As part of Madison's TDM program, new developments can earn points by providing amenities that make it easier to walk, bike, or take fewer car trips. These features include creating indoor bike parking near entrances, delivery storage areas, on-site services (such as food or childcare), and installing bicycle repair stations. These amenities promote less reliance on single-occupancy vehicles. Learn more about our TDM program by going to cityofmadison.com/tdm.

STREETLIGHT DATA

A major component of Madison's Vision Zero work is identifying and analyzing the High Injury Network (HIN), which locates corridors where serious and fatal crashes are most concentrated. StreetLight Data allows the City's Traffic Engineering staff to perform spatial analyses of travel data from the past decade so they can identify specific roadways and intersections for targeted investment and intervention. These areas include disproportionately affected communities of color, low-income residents, and people who walk, bike, or use transit.

3.3 SAFETY FOCUSED ENFORCEMENT

Madison's Safety Focused Enforcement (SFE) program is a cornerstone of Vision Zero. The approach is simple but intentional: prioritize enforcement where serious crashes happen while avoiding over-policing or unnecessary stops. MPD supports this by putting an emphasis on addressing behavior that directly endangers lives rather than enforcing minor technical violations.

WHY SFE?

By de-emphasizing non-hazardous violations and supporting alternative outcomes such as warnings, MPD is able to allocate more time and resources to targeting dangerous behavior.

Hazardous vs. Non-Hazardous Violations

We have defined several critical issues in Madison for which traffic enforcement can play an important role. These traffic safety offenses put all roadway users at the highest risk of death or serious injury.

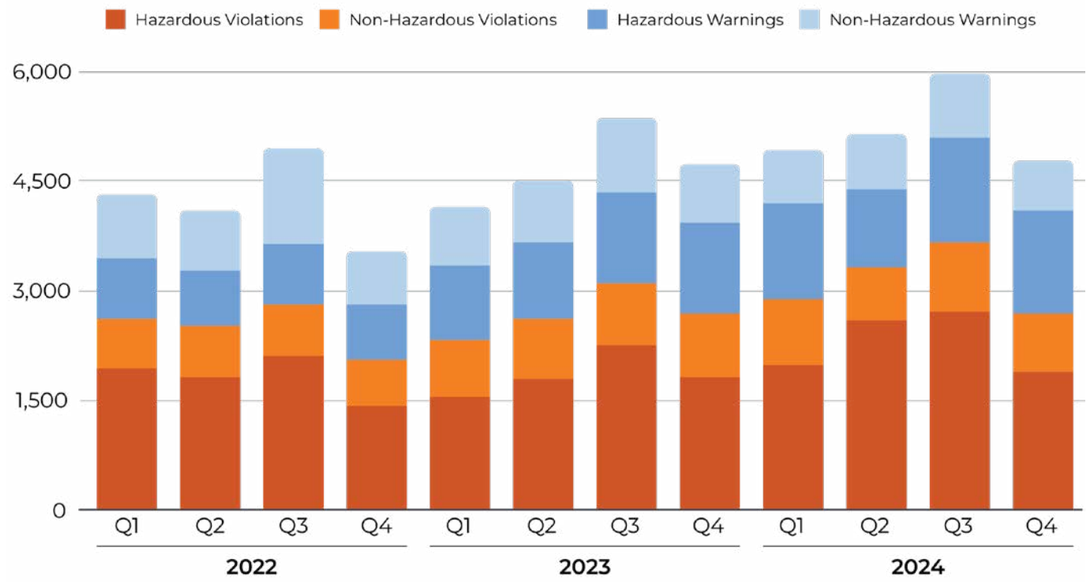
HAZARDOUS

- **Speeding**
- **Driving under the influence**
- **Reckless driving**
- **Running red lights, stop signs, or failure to yield**

NON-HAZARDOUS

- Vehicle Registration
- License and Equipment Violations
- Improper signaling
- Failing to use headlights

TRAFFIC ENFORCEMENT TRENDS



Madison Police Department traffic enforcement trends by year and quarter.[23]

From 2022 to 2024, overall traffic enforcement activity increased, with a growing share of enforcement focused on hazardous driving behaviors. At the same time, warnings for non-hazardous violations increased, reinforcing an emphasis on education and voluntary compliance.

KEY TAKEAWAYS

- Overall enforcement increased, with a continued focus on traffic safety.
- Citations for dangerous driving increased, especially during summer months.
- Enforcement shifted from warnings to citations for hazardous behaviors.
- Warnings increased for lower-risk violations, supporting education and compliance.
- Non-hazardous citations rose earlier and stabilized in 2024.
- Enforcement peaks in summer (Q3), aligning with higher traffic and crash risk.

ENFORCEMENT WITH PURPOSE

The Madison Police Department's Traffic Enforcement Safety Team (TEST) leads citywide traffic enforcement efforts using a data-driven approach focused on preventing serious and fatal crashes.

KEY STRATEGIES

TEST prioritizes enforcement on High Injury Network (HIN) corridors, where the majority of severe and fatal crashes occur. Enforcement priorities are guided by crash data, school zone concerns, and community feedback.

These efforts are supported through the WisDOT Bureau of Transportation Safety grants, including:

- **Impaired Driving Enforcement**
- **Seatbelt Enforcement**
- **Speed Reduction**
- **Pedestrian and Bicycle Safety**

This approach ensures enforcement is proactive, equitable, and focused on behaviors most likely to cause harm. A crucial part of this approach includes focused enforcement and coordination in school zones, where children and other vulnerable roadway users may be at greater risk.

SCHOOL ZONE SAFETY

Children are among the most vulnerable groups in our transportation system. Because school travel occurs at predictable times and locations, we are able to reduce risk in these high-exposure areas by focusing on managing speeds, improving driver awareness, and supporting safe crossings around schools through SFE.

Traffic Enforcement Safety in School Zones

Between 2023 and 2024, TEST officers began their day at specific schools three times a week. The officers worked closely with school staff, bus drivers, and crossing guards to address specific, chronic issues. The TEST officers also worked with the City's Traffic Engineering Division to ensure school zones have proper safety measures and enforcement.

This coordinated approach helped improve bike and pedestrian visibility, reinforced safe driving and drop-off behavior, and addressed safety concerns during peak arrival times. Though specific school zone enforcement has shifted based on crash data, fatal crashes, complaints, and resources, MPD continues to focus their efforts on the most dangerous roadways for pedestrian travel, to include areas near school zones. Both TEST and Parking Enforcement personnel work together to respond to specific issues identified by our City's Crossing Guards as well.

Safe Routes to School Plan

Safe Routes to School (SRTS) is one of Madison's most important tools for preventing crashes, reducing speeding in school zones, and building lifelong safe travel habits.

In 2024, in partnership with the Wisconsin Bike Fed and the Madison Metropolitan School District (MMSD), the City of Madison began developing a citywide SRTS Plan to improve walking, rolling, and biking to school. The plan is funded through WisDOT's Transportation Alternatives Program, with additional federal funding from the USDOT Safe Streets and Roads for All (SS4A) program. A draft was released in May 2026 and the plan is expected to be adopted during summer 2026.

The effort includes school-specific safety assessments, identification of unusually hazardous transportation locations, and development of targeted safety recommendations for approximately 21 MMSD schools. These findings will guide future school-zone safety infrastructure and system improvements, education, and safety-focused enforcement.

Learn more about Safe Routes to School by visiting cityofmadison.com/srts.

4. SAFE VEHICLES

Safer Fleet, Safer Streets

A safer fleet means safer streets. Part of Vision Zero Madison is working to modernize City vehicles with enhanced safety features like backup cameras, telematics, and automated braking systems, all while retiring older, high-risk vehicles.

Through improved training, monthly safety reporting through GeoTab, and a consistent vehicle replacement schedule, the City is building a fleet that protects both its drivers and the public.

Learn more about the Fleet Service Division at cityofmadison.com/fleet.

4.1 SAFE FLEET

City fleet vehicles are on Madison roadways all day, every day. Because the City directly controls how these vehicles are purchased, equipped, and driven, fleet safety is one of the City's most powerful Vision Zero tools.

Baseline Safety

Most City light-duty vehicles (sedans, pickup trucks, vans) already include the federally required baseline safety technologies, and we are extending these features into heavy-duty vehicles (city buses, tractor-trailer trucks, refuse trucks) where they are not federally required.

2024 UPGRADES

- **50 heavy-duty vehicles** now have rear cameras
- **6 heavy-duty vehicles** now have ABS

We strive to go above and beyond the federal safety standard. Heavy vehicles are about 3–4× more likely to cause death in a pedestrian crash than a passenger car.[24]

Crash Prevention Technology

Hundreds of City fleet vehicles now include technology that can actively prevent crashes, not just reduce damage after a crash. These systems actively intervene when a driver makes a mistake, a core Vision Zero principle.

FEATURES

- **Automatic emergency braking (271 vehicles)**
  Prevents rear-end and pedestrian crashes
- **Lane departure alerts (145 vehicles)**
  Prevents drift, sideswipes, run-off-road
- **Adaptive cruise (5 vehicles)**
  Helps manage speed & following distance

PROCUREMENT POLICY SHIFT

Safety is now a standard criterion in fleet purchasing.

Where available, the City will purchase vehicles with lane departure alerts, adaptive cruise control, automatic emergency braking, side cameras, and other newly available technologies. Safety technology is now a standard requirement in fleet purchasing, not an add-on.

4.2 TELEMATICS

Safety exceptions are trending downward. More City fleet vehicles are being actively monitored for speeding, distraction, and unsafe driving. Telematics data is then used for coaching, policy, and department-level accountability.

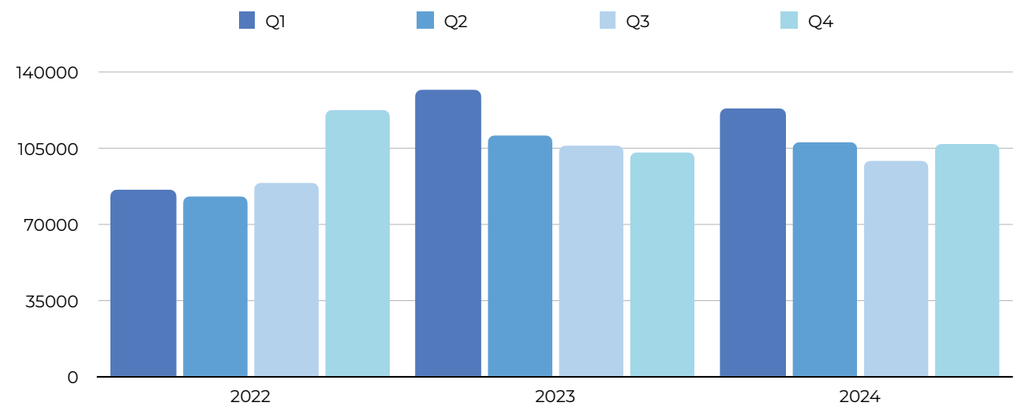
VEHICLES WITH TELEMATICS

2023: *674* **2024:** *705*

Telematics supports coaching, accountability, and safer driving behavior.

SEATBELT USE[25]

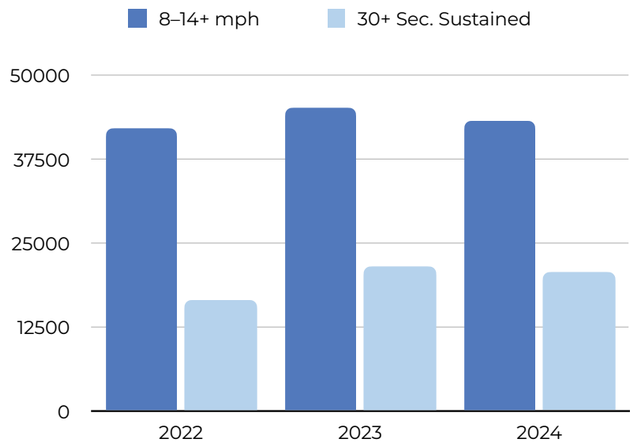
Telematics tracks seatbelt exceptions (a moment of no-seatbelt driving) across the City's fleet to reinforce basic, lifesaving safety behavior. This data helps departments identify patterns and ensure safety standards are being followed.



Seatbelt Exceptions by Quarter, 2021–2025

SPEEDING [26] (8+ MPH AND 14+ MPH)

Telematics shows how often City fleet vehicles exceed the speed limit by meaningful amounts (incidents). After rising in 2023, speeding declined in 2024, indicating that monitoring and driver coaching may be improving compliance.



Speeding incidents (2022–2024)

SUSTAINED SPEEDING [27] (30+ SECONDS)

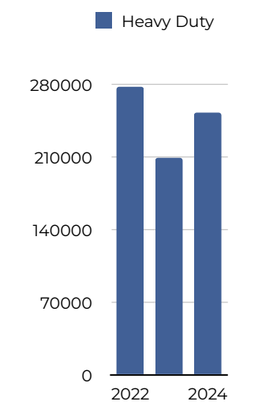
Driving above the speed limit for 30 seconds or more represents the highest risk.[28] Sustained speeding peaked in 2023 and declined in 2024, showing a reduction in the most dangerous speeding behavior.

IDLING

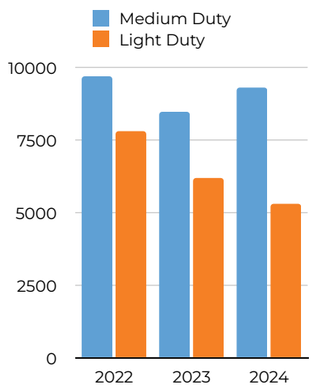
Telematics tracks total idling time, which contributes to emissions, noise, and fuel waste. Idling declined in 2023 and remains closely monitored to support cleaner and safer fleet operations.

HARD ACCELERATION [29]

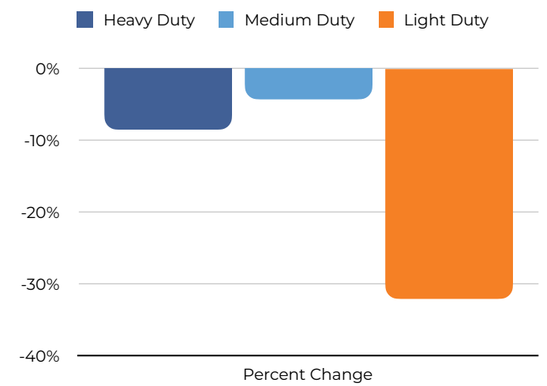
Hard acceleration reflects aggressive driving. All three vehicle classes—heavy, medium, and light—had fewer hard-acceleration events in 2024 than in 2022, indicating more smooth, safer driving across the fleet.



Heavy-duty hard acceleration incidents (2022–2024)



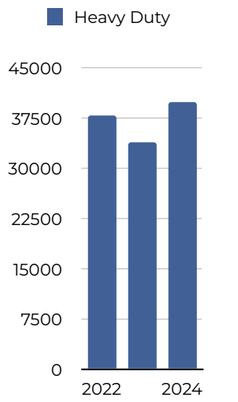
Medium- and light-duty hard acceleration incidents (2022–2024)



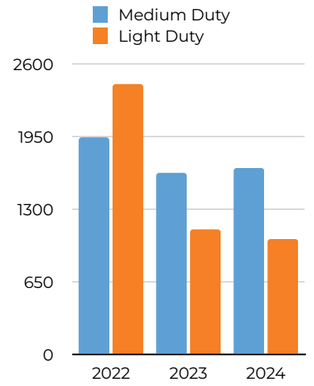
Hard acceleration incidents percent change (2022–2024)

HARSH BRAKING [30]

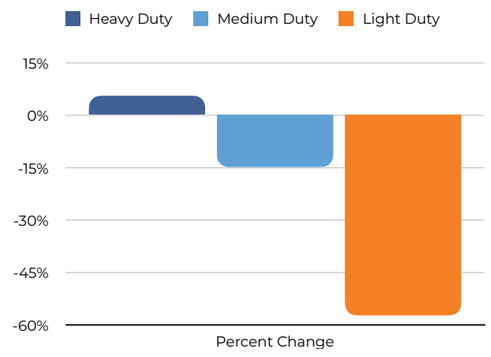
Harsh braking often reflects near-miss situations. Telematics data shows improving braking behavior, suggesting better anticipation and safer driving.



Heavy-duty harsh braking incidents (2022–2024)



Medium- and light-duty harsh braking incidents (2022–2024)



Harsh braking incidents percent change (2022–2024)

4.3 TRAINING AND ENFORCEMENT

DEFENSIVE DRIVING

In 2023, a total of 240 City employees completed Defensive Driving (DD) training. This training includes:

- **Speed management**
- **Following distance best practices**
- **Distraction and phone use**
- **Defensive driving techniques**

Defensive training is planned to take place again in 2026.

FOLLOW THE RULES

In 2023–2024, the Fleet Service Division studied whether reminder decals on City vehicles informing drivers their behavior was being tracked would encourage safer driving. Conducted by researchers from the Harvard Kennedy School, the study found that visual reminders alone had limited impact on changing long-standing driving habits. Improving driver behavior may require both behavioral nudges and stronger policies such as mandates or penalties.

5. SAFETY DATA

Data-Driven Approach

Safety Data helps tell the story of how Madison's roadways are changing. By visualizing and mapping out crash trends, equity areas, and looking at our performance metrics, we can better understand how well Vision Zero Madison is working.

Through a Safe Systems, data-driven approach, this section highlights where progress is being made and where targeted safety investments are still needed.

In This Section:

5.1 PERFORMANCE METRICS OVERVIEW

This section provides a snapshot of our progress across all key Vision Zero focus areas. From safer roadway design to education, enforcement, and equity, these metrics highlight the tangible steps Madison is taking each year to eliminate serious and fatal crashes by 2035.

SAFE STREETS

See pages 12–33 for full analysis.

SPEED LIMIT REDUCTIONS: (ON MAJOR ROADWAYS)

16.3 miles reduced citywide (Year-over-Year)

REDUCTION IMPACT: [31]

-47% crashes in **10 MPH** reduction corridors
-30% crashes in **5 MPH** reduction corridors

PED/BIKE GAPS CLOSED:

Significant progress in eliminating sidewalk/bike network gaps

PROTECTED BIKE LANES ADDED:

0.55 miles installed (2024)

PROJECTS ON HIN:

46 projects improved safety on Madison roadways

LED CONVERSIONS:

11% of existing city lighting upgraded

SAFE PEOPLE

See pages 34–39 and page 56 for full analysis.

VMT REDUCTION: [32]

1.98% decrease in VMT since 2019
8.02% decrease in VMT (excl. EE) since 2019

EDUCATION PROGRAMS:

160+ Safe Routes to School & walk/bike events

PUBLIC INFO CAMPAIGNS:

40+ outreach efforts completed

SAFE VEHICLES

See pages 44–49 for full analysis.

FLEET SAFETY UPGRADES:

265 fleet vehicles upgraded with safety features
9% of fleet replaced each year

DRIVER TRAINING:

240 City drivers trained

SAFETY DATA

See pages 54–67 for full analysis.

FATAL / SERIOUS CRASHES (WITHIN CITY LIMITS): [35]

2023: **16** fatal crashes | **17** fatal injuries
2024: **13** fatal crashes | **13** fatal injuries

81 serious injury crashes | **93** total serious injuries
90 serious injury crashes | **100** total serious injuries

FATAL / SERIOUS CRASHES (CITY-CONTROLLED ROADWAYS): [34]

2023: **11** fatal crashes | **12** fatal injuries
2024: **5** fatal crashes | **5** fatal injuries

58 serious injury crashes | **62** total serious injuries
58 serious injury crashes | **60** total serious injuries

FATAL/SERIOUS CRASH TRENDS (2020–2024): [33]

Fatal Crash Rates: **-50.9%** city-controlled roadways | **-4.3%** within city limits
Serious Injury Crash Rates: **-22.3%** city-controlled roadways | **-8.6%** within city limits
Fatal Injuries: **-58.3%** city-controlled roadways | **-13.3%** within city limits
Serious Injuries: **-25.9%** city-controlled roadways | **-9.9%** within city limits

EQUITY

See page 10 and page 62 for full analysis.

SPEED REDUCTIONS:

2.3 miles of major roadways reduced in RESJI areas
4.1 miles of major roadways reduced in VZEQI areas

LOCAL IMPROVEMENTS RATIO:

34% of Safe Streets Projects in RESJI areas
70% of Safe Streets Projects in VZEQI areas

(RACIAL EQUITY AND SOCIAL JUSTICE INITIATIVE) RESJI TIP PROJECTS:

5.62 miles of project coverage within city limits

SAFETY FOCUSED ENFORCEMENT

See pages 40–43 for full analysis.

CITATION TRENDS:

2023: **7,412** Hazardous | **3,338** Non-Hazardous | **8,056** Warnings
2024: **9,194** Hazardous | **3,388** Non-Hazardous | **8,287** Warnings

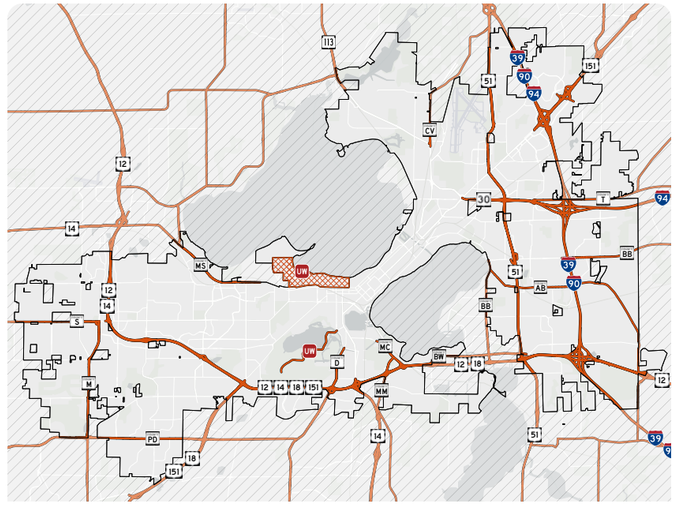
5.2 CRASH TRENDS

5.2.1 Data Sources

Crash data was sourced from Wisconsin Department of Transportation (WisDOT) crash records processed through the Traffic Operations and Safety Laboratory (TOPS Lab) and are classified using the KABCO injury severity scale[36]. Rates are shown per 100,000 residents using annual population estimates from Wisconsin Department of Administration. Data reflect reported motor vehicle crashes occurring within the City of Madison and the State of Wisconsin.

CITYWIDE DATA VS. CITY-CONTROLLED ROADWAY DATA[37]

This report presents citywide crash data, City-controlled roadway crash data (**CC**), and non-City-controlled crash data (**NCC**) to better understand roadway safety trends across Madison.



Roadways excluded from the city-controlled roadway analysis.

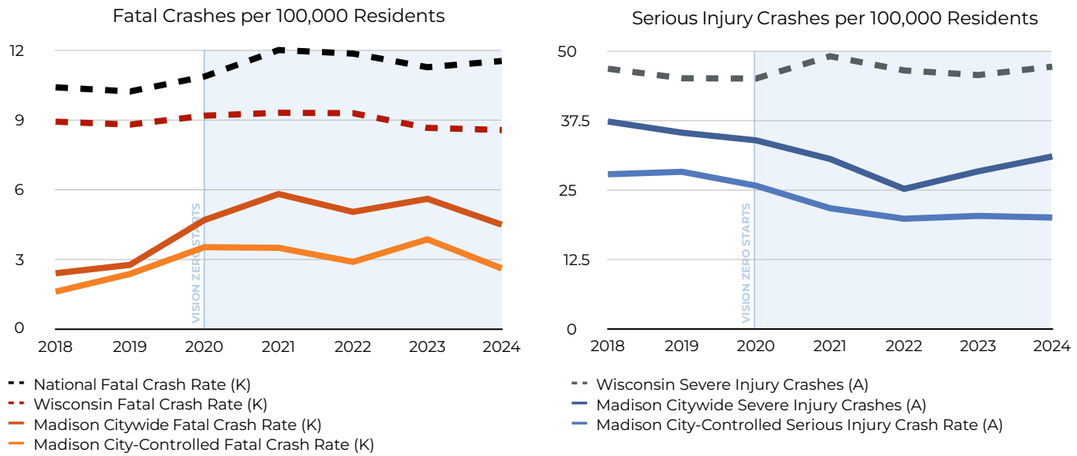
While citywide data includes all roadways within city limits, City-controlled data focuses on roadways where the City of Madison has some degree of authority and control over roadway design, traffic operations, speed management, and implementation of Vision Zero safety improvements. Examples of partially-controlled roads included in this data include South Park Street, East Washington Avenue, and Packers Avenue.

Several roadways within Madison, including the Beltline Highway, streets on the UW Campus, and other highways highlighted in the map above are fully controlled by partner agencies such as WisDOT, Dane County, and UW–Madison. These roadways are considered non-City-controlled because they are under the complete jurisdiction of partner agencies, meaning the City cannot dictate safety improvements on them. Safety outcomes on these roadways can differ significantly from those on City-controlled roadways.

By presenting both datasets, this report identifies where the City can directly implement safety improvements and where continued partnership with other agencies remains critical to achieving Vision Zero Madison's goal of zero traffic fatalities and serious injuries citywide.

5.2.2 Crash Rates

While total crashes and injuries declined sharply in 2020 due to reduced travel during the COVID-19 pandemic, crash trends since then show a gradual rebound across most crash types. Fatal and serious injury crashes remain a key concern. From when the City started Vision Zero in 2020, Madison saw a much better trend compared to nationwide and statewide trends. Traffic fatalities and serious injuries are declining, especially on City-controlled roadways.



Fatal (left) and serious injury crash rates (right) per 100,000 Residents from 2018–2024.

FATAL CRASH RATES (K) [38]

Citywide: fluctuating | -4.3% since 2020

City-Controlled Roadways: declining | -50.9% since 2020

Fatal crash rates in Madison remain lower than nationwide and statewide averages but have increased substantially since 2018. After a sharp rise through 2021, Madison's fatal crash rate has fluctuated year to year, emphasizing the volatility of fatal crashes and the ongoing challenge of preventing traffic deaths but the trend in Madison is positive.

Madison's City-controlled fatal crash rate has declined, reaching pre-pandemic levels in 2024.

SERIOUS INJURY CRASH RATES (A) [39]

Citywide: fluctuating | -8.6% since 2020

City-Controlled Roadways: declining | -22.3% since 2020

Serious injury crash rates in Madison declined steadily between 2018 and 2022, followed by an increase in 2023 and 2024 on non-City-controlled roadways. City-controlled roadways have generally seen improvement since the start of Vision Zero, though Madison remains far from zero traffic deaths and serious injuries.

While Madison continues to experience lower serious injury crash rates than Wisconsin overall, recent increases highlight the need to sustain and expand proven safety measures.

VMT CRASH RATES [40]

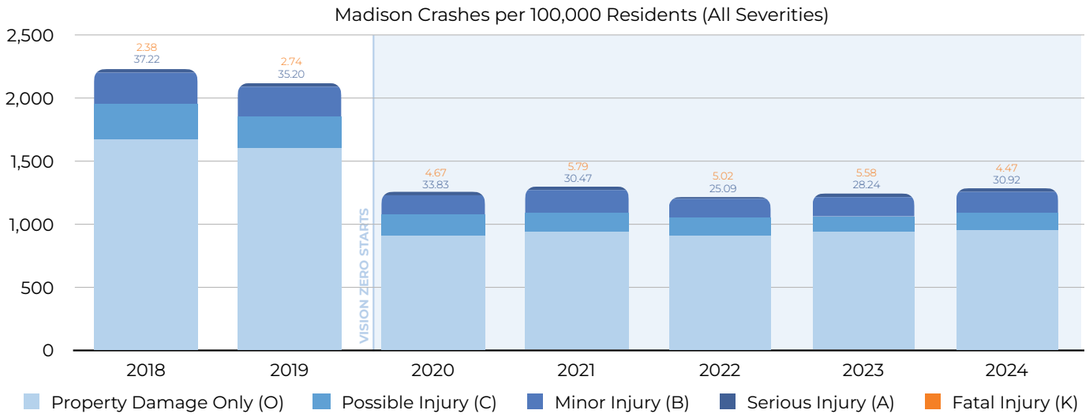
Citywide: declining | -16.6% since 2020

City-Controlled Roadways: declining | -32.6% since 2020

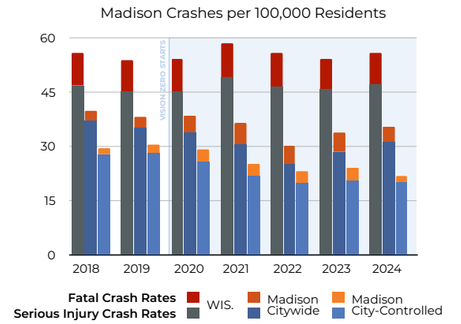
Crash rates per Vehicle Miles Traveled (VMT) help account for changes in travel activity over time. From their peak in 2020, fatal and serious injury VMT crash rates on City-controlled roadways have declined for four consecutive years, reaching their lowest level since the start of Vision Zero. Rates on all roadways within Madison remain higher than rates on City-controlled roadways, reflecting the influence of regional corridors that are not City-controlled roadways. See page 38 to learn more about VMT.

ALL CRASHES [41]

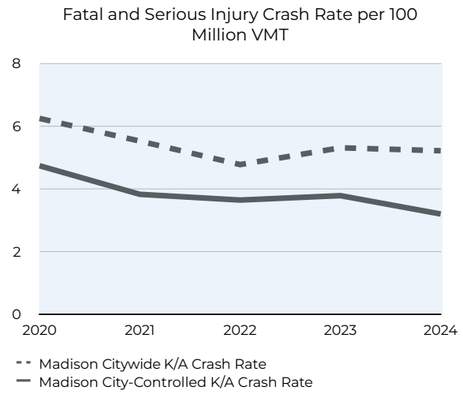
Total crash rates in Madison declined sharply in 2020, reflecting reduced travel during the COVID-19 pandemic. Since then, crashes have gradually increased. Lower-severity crashes account for the majority of total crashes, while fatal and serious injury crashes represent a small but critical share of overall harm. Because fatal crashes occur relatively infrequently, rates per 100,000 residents are used to better compare safety trends over time and across geographies.



Crash rates based on KABCO level, from 2018–2024. K/A crash rates are displayed above each bar.



Statewide, Citywide, and City-Controlled K/A crash rates.



Fatal and serious injury crash rates per 100 million VMT, 2020–2024.

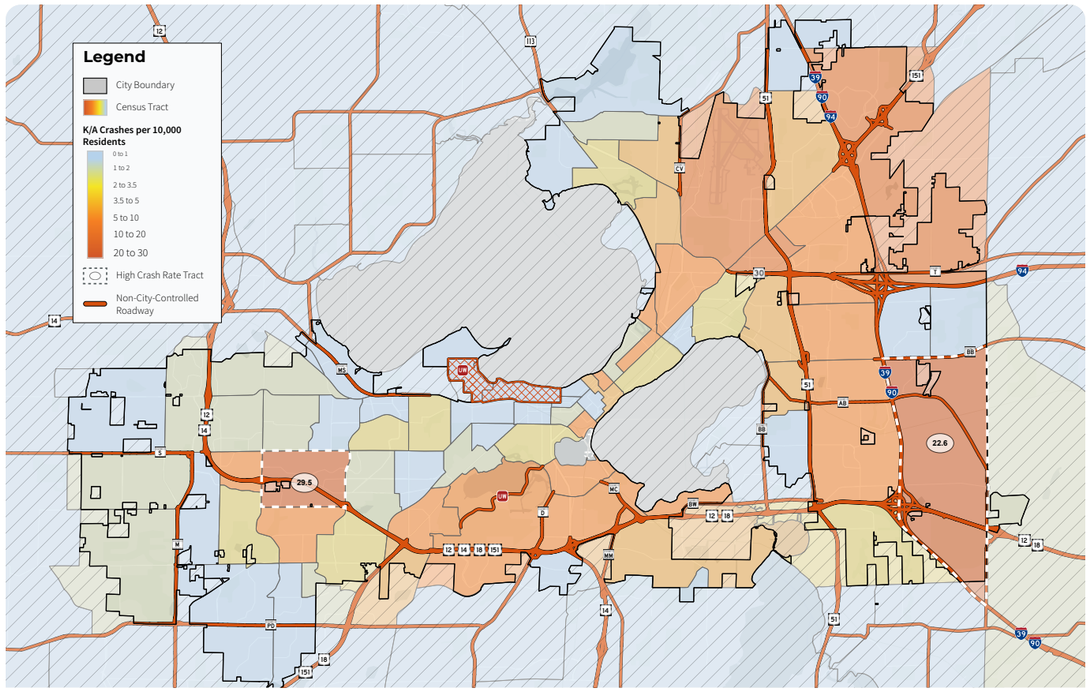
5.2.3 Fatal and Serious Injury Crash Rate Maps

These maps display the rate of fatal and serious injury (KABCO: K/A) crashes per 10,000 residents by census tract between 2023–2024. Instead of using crash counts, the rates allow for comparison across tracts of different sizes and highlight areas where residents experience a high burden of severe traffic crashes.

Because fatal and serious-injury crashes are unacceptable under Vision Zero, areas with lower crash rates are not treated as "better" outcomes, but as progress toward zero. Census tracts shown in light blue represent crash rates below 1 crash per 10,000 residents, while tracts with rates above that transition from yellow to orange. Census tracts with the highest crash rates are highlighted with a dashed-white outline and are located near major highway corridors.

CRASH RATE MAP (ALL ROADWAYS) [42]

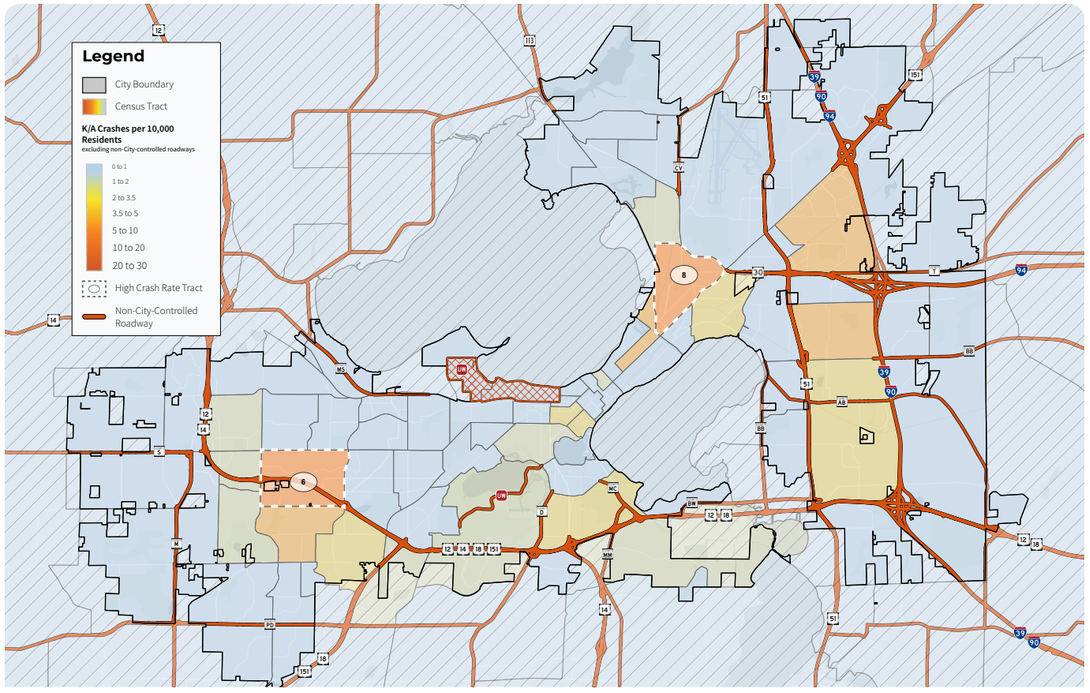
This map includes all fatal and serious injury crashes occurring within Madison city limits, including crashes on state highways, interstate corridors, county highways, and other non-City-controlled roadways. These corridors often carry higher vehicle speeds, contributing to elevated severe crash rates in nearby census tracts.



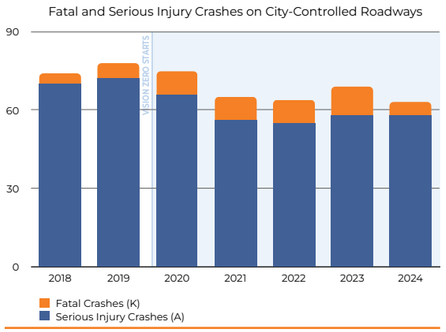
Fatal and serious injury crash rate per 10,000 residents by census tract. Tracts outside city limits are not considered in this map.

CRASH RATE MAP (CITY-CONTROLLED ROADWAYS) [43]

This map excludes crashes occurring on non-City-controlled roadways and instead focuses on roadways where the City of Madison has direct authority over street design, traffic operations, speed management, and implementation of Vision Zero safety improvements. Compared to the citywide map, crash rates on City-controlled roadways are significantly lower and more concentrated along major urban corridors and activity centers.



Fatal and serious injury crash rate per 10,000 residents by census tract excluding non-City-controlled roadway crashes. Tracts outside city limits are not considered in this map.

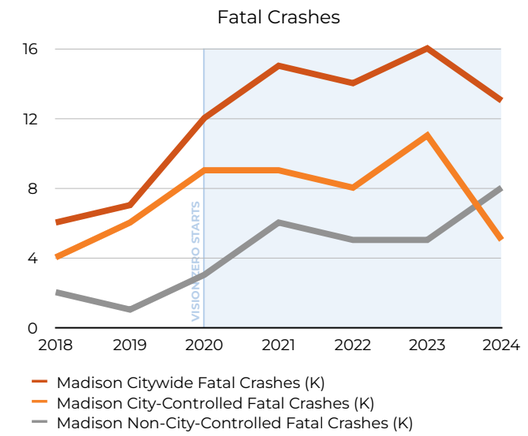


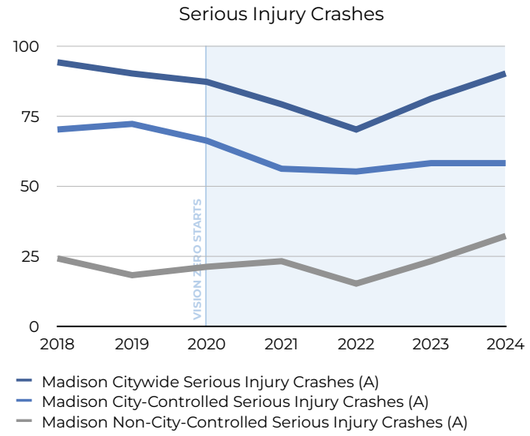
K/A severity crashes from 2018–2024 on City-controlled roadways.

5.2.4 Fatal and Serious Injury Crashes

RAW DATA

While crash rates clarify trends, Vision Zero Madison has one main goal: achieving zero fatal and serious injury crashes. While yearly crash totals can vary, particularly for fatal crashes, these trends show where progress is being made and where continued safety improvements are still needed.





Fatal (left) and serious injury crashes (right) from 2018–2024.

FATAL CRASHES (K) [44]

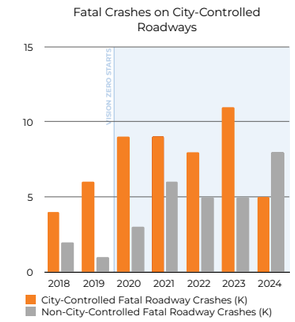
Citywide: fluctuating | +8.3% since 2020

City-Controlled Roadways: declining | -44.4% since 2020

Non-City-Controlled Roadways: increasing | +166.7% since 2020

Since the COVID-19 Pandemic, fatal crashes have remained a significant challenge both locally and nationally. Fatal crashes on all roadways within Madison city limits have increased, then declined. On City-controlled roadways, fatal crashes remained lower overall, with 9 fatal crashes recorded in 2020, 11 in 2023, and a reduction to 5 in 2024 — **a 44% reduction since 2020**.

Because fatal crashes are relatively low-frequency events, yearly totals can vary significantly. However, the recent decline on City-controlled roadways reflects the continued implementation and success of Vision Zero strategies, including speed management, traffic calming, safer crossings, and street redesign projects.



Fatal crashes on city-controlled roadways have decreased since 2020.

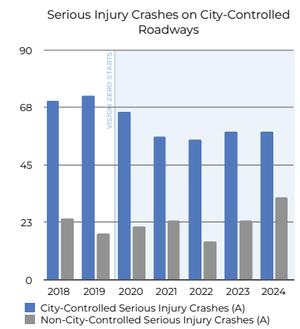
SERIOUS INJURY CRASHES (A) [45]

Citywide: fluctuating | +3.4% since 2020

City-Controlled Roadways: declining | -12.1% since 2020

Non-City-Controlled Roadways: increasing | +52.4% since 2020

Serious injury crashes provide a broader measure of severe roadway harm and can better reflect longer-term safety trends. Across all roadways within Madison, serious injury crashes declined from 79 to 70 between 2021 and 2022 before increasing again to 90 in 2024.



Serious injury crashes on city roadways have also declined while non-city-controlled crashes have increased.

On City-controlled roadways, serious injury crashes showed a slow but consistent downward trend, decreasing from 66 to 58 between 2020–2024 — a **12% reduction**. The overall reduction on City-controlled roadways may reflect the collective impact of Vision Zero safety improvements implemented since its start in 2020.

K/A CRASH MAP

See pages 66–67 for crash map.

5.2.5 Fatal and Serious Injuries

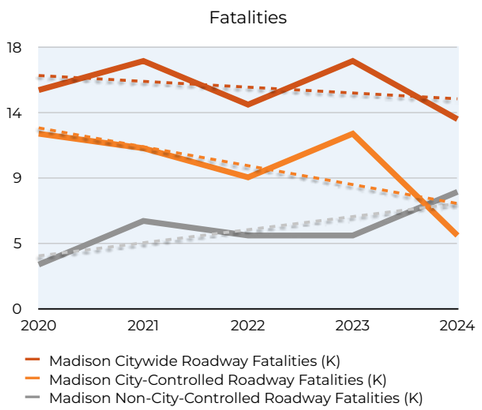
FATALITIES [46]

Citywide: fluctuating | -13.3% since 2020

City-Controlled Roadways: declining | -58.3% since 2020

Non-City-Controlled Roadways: increasing | +166.7% since 2020

Traffic fatalities remain the most severe outcome of roadway crashes and are a central focus of Vision Zero. Fatalities on City-controlled roadways in Madison decreased from 12 in 2020 to the current **low of 5 in 2024**.



Roadway fatal injuries in Madison between 2020–2024.

Based on recent trends, fatalities on City-controlled roadways are declining at a substantially faster rate than overall citywide fatalities. However, year-to-year fatal crash variability remains high, and continued progress toward zero fatalities will depend on sustained infrastructure, policy, vehicle, and behavioral safety improvements.

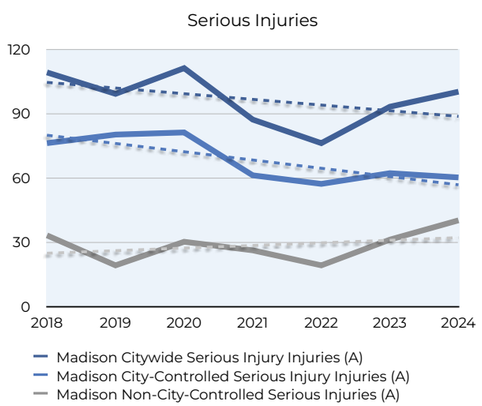
SERIOUS INJURIES [47]

Citywide: declining | -9.9% since 2020

City-Controlled Roadways: declining | -25.9% since 2020

Non-City-Controlled Roadways: increasing | +33.3% since 2020

Serious injury trends have remained more stable than fatal crashes, though similar downward patterns are observed citywide and on City-controlled roadways. On City-controlled roadways, serious injuries have not rebounded to pre-pandemic levels as other crash categories have. On non-City-controlled roadways, serious injuries have increased in recent years, surpassing pre-pandemic levels in 2023.

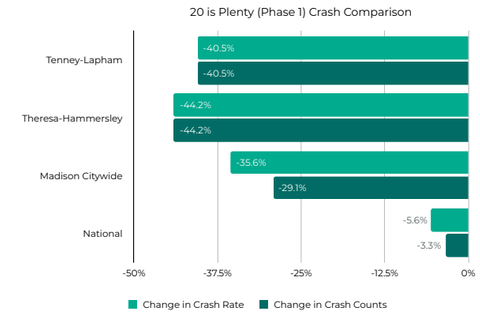


Roadway serious injuries in Madison between 2020–2024.

5.2.6 20 is Plenty Crash Data [48]

As part of Madison's Vision Zero Action Plan, the 20 is Plenty (20iP) program lowers speed limits on local residential roadways to improve safety for all roadway users.

Following the implementation of 20 mph neighborhood speed limits in the Tenney-Lapham and Theresa-Hammersley pilot areas, both neighborhoods experienced larger reductions in crashes than Madison overall and national trends during the same time period. The two neighborhoods saw crash rates **decrease by -40.5%** and **-44.2%**, respectively.



Top: Change in crashes (2017–2020 vs. 2021–2024)
Bottom: Change in crash rates (2017–2020 vs. 2021–2024).

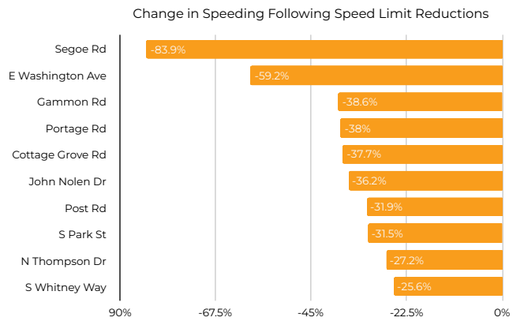
Following the success of the 20 is Plenty pilot (Phase 1), all local residential roadways were re-signed and converted to 20 mph (Phase 2). The 20 is Plenty program was completed in late 2025, with data collection continuing through 2029.

Learn more about 20 is Plenty on page 29 or visit cityofmadison.com/20iP.

5.2.7 Speed Limit Reduction Data [49]

Speed limit reduction projects implemented on non-local residential roadways between 2020 and 2022 were analyzed using StreetLight speed study data collected before and after speed limit re-signing. Evaluations found reductions in higher-end speeding following implementation, suggesting that lower posted speed limits can influence driver behavior even in the absence of additional physical roadway changes.

Several corridors experienced reductions of more than 30% in the percentage of vehicles exceeding evaluation threshold speeds.



Top five evaluated corridors by reduction in vehicles exceeding threshold speeds, 2020–2023.

5.3 EQUITY ANALYSIS

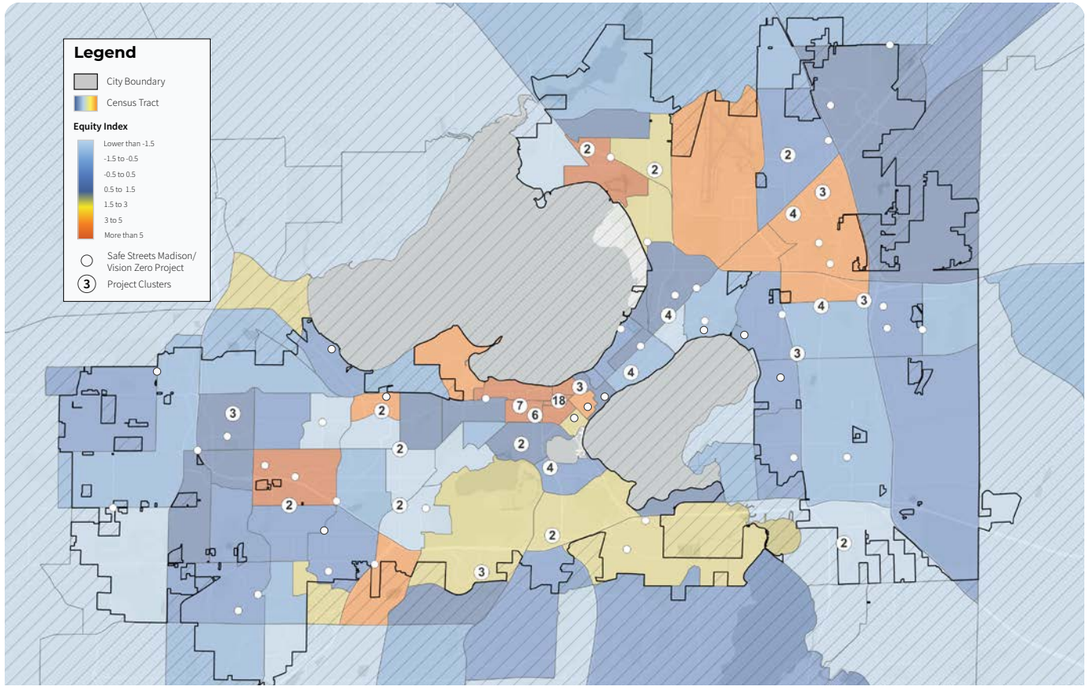
To support equitable safety planning, a Vision Zero Equity Index (VZEQI) was created at the census tract level using American Community Survey (ACS) data. The index combines multiple indicators associated with social vulnerability and transportation exposure, including:

- Percentage of residents living below the poverty line
- Percentage of people of color
- Percentage of residents with disabilities
- Percentage of households with at least one resident aged 65 or older

Each indicator was normalized using z-scores and combined into a single composite value. Unlike some transportation equity indices, the VZEQI does not include vehicle access as an indicator. In Madison, the large student population can artificially inflate measures of transportation disadvantage based on vehicle ownership. Additionally, residents with lower vehicle access may rely more on walking, biking, and transit, increasing their exposure to unsafe traffic environments.

5.3.1 Equity Index Map [50]

Higher index values of 1.5 or greater (yellow/orange) represent tracts with greater equity and mobility vulnerability, while lower values below 1.5 (blue) indicate comparatively lower levels of vulnerability.



Equity Index per Census Tract within the City of Madison with Safe Streets Madison/Vision Zero projects.

5.4 HIGH INJURY NETWORK

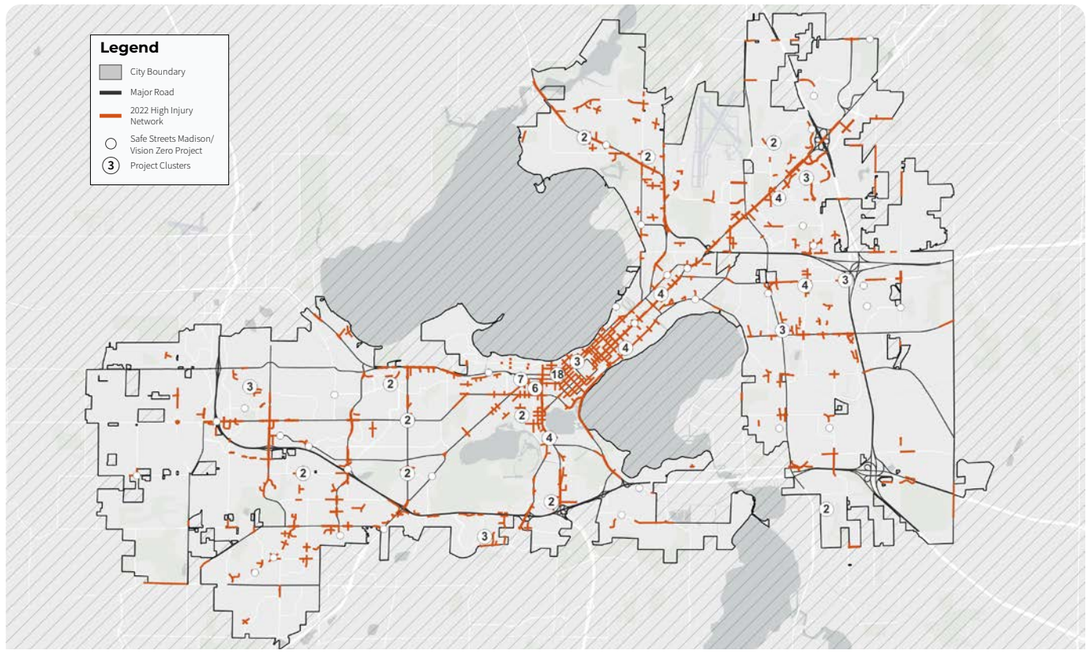
The High Injury Network (HIN) was created to help focus Vision Zero efforts on roadways where serious and fatal crashes are most likely to occur. Rather than spreading resources evenly across the city, the HIN helps identify locations where safety improvements can have the greatest impact.

The HIN methodology was developed in collaboration with the University of Wisconsin–Madison Traffic Operations and Safety Laboratory (TOPS Lab). It evaluates crash patterns at both intersections and roadway segments, accounting for differences in roadway type, design, and traffic control. To better reflect the human impact of crashes, the analysis places greater emphasis on fatal and serious-injury crashes compared to less severe crashes.

For the 2022 HIN, thousands of intersections and roadway segments across Madison were analyzed, including city streets and arterial roadways with varying configurations. Locations with the highest likelihood of fatal or serious-injury crashes are included on the HIN map.

5.4.1 2022 High Injury Network Map [51]

The map shown below uses the 2022 HIN to provide context for Safe Streets Madison and Vision Zero projects implemented in 2023–2024. While an updated HIN is coming soon, the 2022 HIN continues to represent persistent high-risk locations and serves as a consistent baseline for understanding how recent safety investments align with historical crash patterns.



2022 High Injury Network with Safe Streets Madison/Vision Zero projects from 2023–24 overlaid.

VISION ZERO MADISON

HIGH INJURY NETWORK FOCUS

HAMMERSLEY ROAD SHARED-USE PATH

Orchard Ridge Neighborhood

This Vision Zero project is located on the 2022 High Injury Network, at the intersection of Whitney Way and Hammersley Road. Since its construction in 2023, this intersection has not seen a fatal, serious, or suspected injury.

Learn more about Rectangular Rapid Flashing Beacon (RRFB) enhanced crossings on page 15, and learn more about this project on page 24.

5.5 SUMMARY

Crash data from TOPS Lab show that total citywide crashes in Madison remain below 2018 levels, largely due to reductions in lower-severity crashes; however, fatal and serious-injury crashes continue to challenge Vision Zero goals. Fatal crash rates remain lower than state and nationwide averages but continue to fluctuate. Serious-injury crashes have shown little long-term improvement, highlighting the need for continued investment in proven safety strategies.

Crash trends on City-controlled roadways tell a different story. Since the adoption of Vision Zero in 2020, fatal crash rates have declined by 50.9%, serious-injury crash rates have declined by 22.3%, and fatalities have declined by 58.3%. These trends suggest that roadway redesigns, speed management, safer crossings, engagement, enforcement, and other Vision Zero safety improvements are contributing to safer outcomes where the City has direct influence over roadway design and operations.

Spatial analysis shows that the burden of severe crashes is not evenly distributed across the city. Census tracts with the highest rates of fatal and serious-injury crashes are concentrated near major highway corridors and other high-volume roadways, many of which are not City-controlled. Addressing safety on these facilities will require continued coordination between the City of Madison and its partner agencies, especially WisDOT and Dane County.

Equity analysis further shows that areas with higher social and mobility vulnerability often overlap with locations experiencing higher crash rates. By incorporating factors such as poverty, disability, age, and race, the Vision Zero Equity Index helps identify communities where unsafe roadway conditions may have the greatest impact on residents' daily travel.

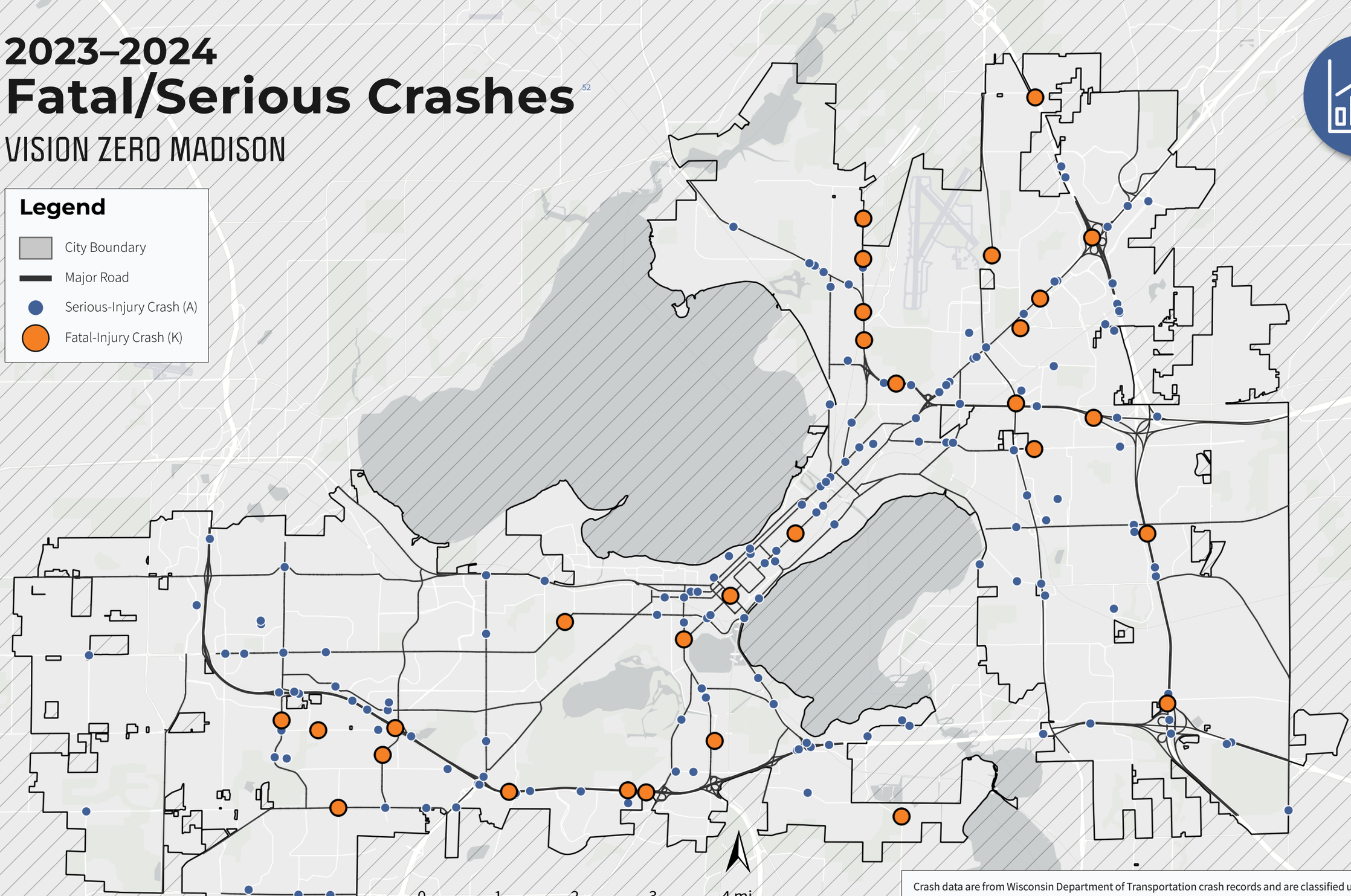
Together, these findings reinforce the importance of a focused, data-driven Vision Zero approach. The City of Madison will continue to focus safety investments on the High Injury Network, incorporate equity considerations into project selection and implementation, and advance Safe Systems strategies to reduce fatal and serious-injury crashes. Through continued collaboration with partner agencies and sustained investment in proven safety measures, Madison will continue working toward its goal of eliminating traffic deaths and severe injuries for all roadway users.

2023–2024
Fatal/Serious Crashes[52]

VISION ZERO MADISON

Legend

- City Boundary
- Major Road
- Serious-Injury Crash (A)
- Fatal-Injury Crash (K)



Crash data are from Wisconsin Department of Transportation crash records and are classified using the KABCO injury severity scale. Data reflects reported motor vehicle crashes occurring within the City of Madison.

Pedestrians walk down shared-use path along Atwood Avenue.

ACKNOWLEDGMENTS

This report was developed through collaboration between City of Madison agencies and partner organizations working to advance Vision Zero goals across Madison. The Traffic Engineering Division would like to thank other agencies serving on the Vision Zero Steering Team for the partnership, including the Mayor's Office, Department of Transportation, Engineering Division, Police Department, Fleet Division, Public Health, Metro Transit, Finance Department, and the Greater Madison Metropolitan Planning Organization.

We also recognize the valuable contributions of the Vision Zero Stakeholder Task Force, community organizations, researchers, and residents whose engagement, feedback, and advocacy continue to shape safer and more equitable transportation systems across Madison.

Additional thanks to elected and appointed officials for their guidance and support, and staff across City agencies for their work supporting traffic safety analysis, planning, communications, engineering, public outreach, maintenance, transit operations, and implementation efforts that help make Vision Zero possible.

Achieving Vision Zero requires long-term collaboration, shared responsibility, and continued investment in safer roadways for all Madisonians.

ENDNOTES AND REFERENCES

1 **Equity**; Vision Zero Network. Prioritizing Health Equity in Vision Zero Planning. Vision Zero Network, 2023. Available at: Vision Zero Network Equity Planning Guide

2 **Metro Transit Title VI**; Metro Transit Network Redesign Equity Analysis Summary

3 **Proven Safety Measures (PSMs)**; Federal Highway Administration (FHWA). Proven Safety Countermeasures. U.S. Department of Transportation (USDOT). Available at: FHWA Proven Safety Countermeasures

4 PSMs - **Road Diets**; FHWA. Road Diets (Roadway Reconfiguration). USDOT. Available at: FHWA Road Diets Guide
National Association of City Transportation Officials (NACTO). Neighborhood Main Street. Available at: NACTO Neighborhood Main Street.

5 PSMs - **Two-Way Turn Lane Conversions**; FHWA. Road Diets (Roadway Reconfiguration). USDOT. Available at: FHWA Road Diets Guide.

6 PSMs - **RRFB Safety Benefits**; FHWA. Rectangular Rapid Flashing Beacons (RRFBs). USDOT. Available at: FHWA RRFB Guidance

7 See item 6.

8 PSMs - **LPI Safety Benefits**; FHWA. Leading Pedestrian Intervals (LPIs). USDOT. Available at: FHWA Leading Pedestrian Intervals

9 PSMs - **Bicycle Protection**; NACTO Protected Bike Lanes. Available at: NACTO Protected Bike Lane Design Guide

10 **Vision Zero Project Map**; City of Madison Department of Transportation. Vision Zero and Safe Streets Madison project locations (2023–2024). Based on City of Madison GIS data and project records.

10[a] **2023–2024 Safe Streets Madison and Vision Zero Projects Summary**

Project Category	2023–2024 Projects
Crossing Improvements	38
Traffic Calming	25
Bike Infrastructure	17
Signal/Signage Improvements	12
Speed Management	10
Vision Zero Projects	12
Total	112

10[b] **2023 Safe Streets Madison Projects**

Year	Location	Project Type
2023	Park St at Regent St	Crossing Improvements
2023	Badger Rd at Cypress Way	Traffic Calming / Crossing Improvements
2023	Milwaukee St at Milo Ln	Traffic Calming / Crossing Improvements
2023	Nakoma Rd (Thoreau Elementary)	Crossing Improvements
2023	Milwaukee St at N Thompson Dr	Traffic Calming / Crossing Improvements
2023	Northport Dr at Northridge Terrace	Crossing Improvements
2023	Williamson St	Continental Crosswalks
2023	E Washington Ave at Pawling St	Continental Crosswalks
2023	Fish Hatchery Rd at Park St	Crossing Improvements / Bike Infrastructure
2023	Milwaukee St Bridge over I-90	Pedestrian Improvements
2023	McKenna Blvd at Putnam Rd	Traffic Calming
2023	Portage Rd near Clove Dr	Traffic Calming
2023	Schroeder Rd	Traffic Calming / Crossing Improvements
2023	Hayes Rd	Traffic Calming
2023	Sherman Ave	Traffic Calming
2023	South Point Rd at Valley View Rd	Signal/Signage Improvements
2023	E Washington Ave at Baldwin St	Signal/Signage Improvements
2023	Rosa Rd	Speed Management
2023	Whitney Way	Speed Management
2023	Tree Lane	Speed Management
2023	Eastwood Dr	Speed Management
2023	University Ave at Randall Ave	Signal/Signage Improvements / Crossing Improvements
2023	Westfield Rd at Walnut Grove Park	Traffic Calming / Crossing Improvements / Speed Management
2023	Fourth St (East High)	Traffic Calming / Crossing Improvements
2023	Hoepker Rd Path Crossing	RRFB

10[c] **2024 Safe Streets Madison Projects**

Year	Location	Project Type
2024	Lake St & Frances St	Signal/Signage Improvements
2024	Dayton St at N Lake St	Bike Infrastructure
2024	Donald Dr at Sandburg Elementary	Crossing Improvements
2024	Atwood Ave at Waubesa/Miller	Crossing Improvements
2024	Midvale Blvd at Mineral Point Rd	Crossing Improvements / Signal Improvements
2024	Aberg Ave at N Sherman Ave	Bike Infrastructure
2024	Randall Ave Corridor Bike Improvements	Bike Infrastructure
2024	Dayton St Corridor Bike Improvements	Bike Infrastructure
2024	Beltline Ramp Crossing Improvements	Bike Infrastructure
2024	Capital City Trail Crossings	Bike Infrastructure
2024	Whitney Way Ramps at Beltline	Bike Infrastructure
2024	Muir Field Rd at Cimarron Trl	Traffic Calming
2024	Owl Creek Neighborhood	Traffic Calming / Crossing Improvements
2024	University Ave / Johnson St Corridor	Pedestrian Countdown Signals
2024	Sheboygan Ave	Speed Management
2024	Zeier Rd	Speed Management
2024	Regent St	Speed Management
2024	Lien Rd	Speed Management
2024	Thierer Rd	Speed Management
2024	Pflaum Rd / Agriculture Dr	Speed Management
2024	Sycamore Ave	Speed Management
2024	Campus Dr	Speed Management
2024	Lien Rd Road Diet	Bike Infrastructure / Traffic Calming
2024	Northport Dr at Goodland Dr	RRFB
2024	Sprecher Rd at Dominion Dr	RRFB
2024	Regent St at Brooks St	RRFB
2024	Jackson Quarry Ln	Speed Humps
2024	Traceway Dr	Speed Humps
2024	School Rd at Mendota Elementary	Speed Humps
2024	Drake St	Speed Humps / RRFB / Crossing Improvements
2024	Tompkins Dr	Speed Humps
2024	Meadowlark Dr	Speed Humps
2024	Milky Way	Speed Humps
2024	Sixth St at E Johnson St	Signal/Signage Improvements

Note: Some Safe Streets Madison projects are spread across a corridor, not just one site.

11 **Safe Streets Madison Scoring Methodology**; City of Madison Traffic Engineering Division.

12 **Speed Reduction Benefits**; FHWA. Appropriate Speed Limits for All Road Users. USDOT. Available at: FHWA Appropriate Speed Limit

13 **Chance of Survival Based on Vehicle Speed**; City of Madison Department of Transportation, Toole Design. 20 is Plenty. Available at: City of Madison 20 is Plenty Program

14 **Chance of Survival Based on Vehicle Speed**; FHWA. Safe System Approach for Speed Management. USDOT. Available at: FHWA Safe System Speed Management

15 **Speed Limit Reduction Evaluation**; See item 49[b].

16 **Speed Limit Reduction Evaluation**; NACTO. Speed Humps. Available at: NACTO Speed Hump Design Guide

17 Proven Speed Management Measures (PSMMs) - **Speed Humps**; FHWA. Safe Transportation for Every Pedestrian (STEP). USDOT. Available at: FHWA STEP Program

18 PSMMs - **Digital Feedback Boards**; National Highway Traffic Safety Administration (NHTSA). Countermeasures That Work: Speeding and Speed Management. USDOT. Available at: NHTSA Dynamic Speed Display Signs

19 PSMMs - **Traffic Circles**; FHWA. Traffic Calming ePrimer. USDOT. Available at: FHWA Traffic Calming ePrimer
NACTO. Traffic Circle. Available at: NACTO Urban Street Design Guide

20 **Speed Limit Reductions Map**; City of Madison Department of Transportation. Speed limit reduction locations (2020–2024), including 20 is Plenty implementation areas. Based on City of Madison GIS data and Transportation Department records.

21 **Madison Vehicle Miles Traveled (VMT), 2019–2024**; StreetLight Data. Average weekday Vehicle Miles Traveled (VMT) estimates for the City of Madison (2019–2024). Population estimates obtained from the Wisconsin Department of Administration (WI DOA) and U.S. Census Bureau. VMT values exclude External-External (EE) trips and are used to calculate crash rates per 100 million vehicle miles traveled.

21[a] **Average Weekday VMT in Madison (2019–2024)**

Year	External-External (EE)	External-Internal (EI)	Internal-External (IE)	Internal-Internal (II)	Total Average Weekday VMT	Total Average Weekday VMT (Excl. EE)
2019	1,444,578	1,769,225	1,793,188	2,343,199	7,350,190	5,905,612
2020	1,347,598	1,357,995	1,343,202	1,654,783	5,703,578	4,355,980
2021	1,619,046	1,486,762	1,460,508	1,732,109	6,298,425	4,679,379
2022	1,459,052	1,683,636	1,596,812	1,560,065	6,299,564	4,840,512
2023	1,581,282	1,754,822	1,679,558	1,589,189	6,604,851	5,023,569
2024	1,773,152	1,882,992	1,784,029	1,764,622	7,204,794	5,431,642

21[b] **VMT Change Metrics (2020–2024)**

Year	% Change (Total VMT)	% Change (Excl. EE)	% Change (II Only)
2020	-22.4%	-26.2%	-29.4%
2021	10.4%	7.4%	4.7%
2022	0.0%	3.4%	-9.9%
2023	4.9%	3.8%	1.9%
2024	9.1%	8.1%	11.0%

21[c] **Per Capita VMT Trends (2019–2024)**

Year	Daily VMT per Capita (Excl. EE)	Daily VMT per Capita (II Only)	% Change Per Capita (Excl. EE)	% Change Per Capita (II Only)
2019	23.10	9.17	—	—
2020	16.94	6.43	-26.7%	-29.8%
2021	18.05	6.68	6.6%	3.9%
2022	17.35	5.59	-3.9%	-16.3%
2023	17.52	5.54	1.0%	-0.9%
2024	18.66	6.06	6.5%	9.4%

22 **MPD Enforcement Quarterly Totals**; Madison Police Department.

Year	Quarter	Hazardous Violations	Non-Hazardous Violations	Hazardous Warnings	Warnings
2022	Q1	1,949	669	822	894
2022	Q2	1,820	706	763	824
2022	Q3	2,123	694	820	1,321
2022	Q4	1,443	629	747	730
2023	Q1	1,544	784	1,029	806
2023	Q2	1,789	840	1,050	849
2023	Q3	2,249	857	1,237	1,025
2023	Q4	1,830	857	1,248	812
2024	Q1	1,988	892	1,327	727
2024	Q2	2,591	746	1,059	758
2024	Q3	2,712	957	1,431	891
2024	Q4	1,903	793	1,421	673

23 **VMT Reduction Benefits**; Pedestrian and Bicycle Information Center (PBIC). Environmental Benefits of Walking and Bicycling. Available at: PBIC Environmental Benefits of Walking and Biking

24 **Vehicle Class Risks**; Insurance Institute for Highway Safety (IIHS). Vehicles with Higher, More Vertical Front Ends Pose Greater Risk to Pedestrians. Available at: IIHS Pedestrian Vehicle Front-End Study

25 **Fleet Telematics Seatbelt Compliance Events (2021–2024)**; Fleet Service Division.

Year	Q1	Q2	Q3	Q4	Annual Total
2021	10,676	135,130	141,436	94,555	381,797
2022	85,766	82,449	89,233	122,788	380,236
2023	131,422	110,862	105,836	102,720	450,840
2024	122,977	108,002	98,962	105,909	435,850

26 **Fleet Telematics Speeding Events (2022–2024)**; Fleet Service Division.

Year	8 mph Speeding Events	14 mph Speeding Events	30+ Second Sustained Speeding Events	Combined 8–14+ mph Speeding Events
2022	40,842	1,112	16,388	41,954
2023	43,304	1,776	21,572	45,080
2024	41,641	1,478	20,794	43,119
2024	122,977	108,002	98,962	105,909

27 **Fleet Telematics Sustained Speeding Events (2022–2024)**; See item 26.

28 **Fleet Telematics Hard Acceleration Events (2022–2024)**; Fleet Service Division.

Year	Heavy Duty Hard Acceleration Events	Medium Duty Hard Acceleration Events	Light Duty Hard Acceleration Events
2022	276,743	9,714	7,796
2023	208,589	8,443	6,164
2024	252,870	9,290	5,286

29 **Fleet Telematics Harsh Braking Events (2022–2024)**; Fleet Service Division.

Year	Heavy Duty Harsh Braking Events	Medium Duty Harsh Braking Events	Light Duty Harsh Braking Events
2022	37,799	1,945	2,423
2023	33,783	1,622	1,120
2024	39,925	1,660	1,031

30 **Fleet Telematics Analysis (2023–2024)**; City of Madison Fleet Service Division. FHWA. Safe System Approach for Speed Management. USDOT. Available at: FHWA Safe System Speed Management

31 **Speed Limit Reduction Crash Impacts**; City of Madison Traffic Engineering Division. Speed Limit Reduction Crash Analysis (2020–2024). Reported crashes evaluated before and after implementation on corridors with speed limit reductions. Supporting corridor-level results are provided below.

Corridor	Before Crashes	After Crashes	Change
Cottage Grove Rd	33	18	-45.5%
S Whitney Way (Raymond–Meadowood)	28	15	-46.4%
Segoe Rd	14	10	-28.6%
S Park St	178	117	-34.3%
N Thompson Dr	27	10	-63.0%

32 **VMT Reduction**; See item 21[b].

33 **K/A Crash Trends**; See items 38–39 and 46–47.

34 **City-Controlled K/A Raw Crash Totals**; See items 44–47.

35 **K/A Raw Crash Totals**; See items 44–47.

36 **KABCO Scale**; University of Wisconsin–Madison Traffic Operations and Safety Laboratory (TOPS Lab) Crash User Data Guide. Available at: TOPS Lab Crash Data User Guide.

37 **Citywide vs. City-Controlled Data**; Roadways excluded from "City-Controlled" data. Wisconsin Department of Transportation (WisDOT), Dane County, City of Madison.

Jurisdiction	Route	Local Name	Segment
Dane County	CTH MC	John Nolen Drive	John Nolen WB Off Ramp to Olin Avenue
Dane County	CTH MC	Olin Avenue	John Nolen Drive to Wingra Creek
Dane County	CTH MM	Rimrock Road	John Nolen WB Off Ramp to City Limit
Dane County	CTH BW	W. Broadway	Beltline Ramps to Stoughton Road (USH 51)
Dane County	CTH BB	Monona Drive	Beltline Ramps to Cottage Grove Road
Dane County	CTH BB	Cottage Grove Road	Thompson Drive to City Limit
Dane County	CTH AB	Buckeye Road	Monona Drive (CTH BB) to City Limit
Dane County	CTH T	Commercial Avenue	STH 30 Roundabout to City Limit
Dane County	CTH CV	Packers Avenue	STH 113 to City Limit
Dane County	CTH MS	University Avenue	Shorewood Boulevard to City Limit
Dane County	CTH S	Mineral Point Road	Junction Road to City Limit
Dane County	CTH M	Pleasant View Road	City Limit to Mineral Point Road
Dane County	CTH PD	McKee Road	Fish Hatchery Road (CTH D) to City Limit
Dane County	CTH D	Fish Hatchery Road	Wingra Drive to City Limit
WisDOT	STH 30	STH 30	E. Washington Avenue Ramps to City Limit
WisDOT	USH 151	E. Washington Avenue	Annamark Drive to City Limit
WisDOT	USH 51	Stoughton Road	City Limit to City Limit
WisDOT	USH 12/14/18	Beltline	City Limit to City Limit
WisDOT/US DOT	IH 39/90	IH 39/90	City Limit to City Limit
University of Wisconsin	—	Arboretum Drive	Wingra Drive to Arboretum Drive
University of Wisconsin	—	Arboretum Drive	Arboretum Drive to End

38 **Fatal Crash Rates**; WisDOT crash records processed by the TOPS Lab and the City of Madison. National fatal crash data from the NHTSA Fatality Analysis Reporting System (FARS). Rates shown per 100,000 residents.

Metric	2018	2019	2020	2021	2022	2023	2024	Change (2018–2024)	Change (2020–2024)
Madison Citywide	2.38	2.74	4.67	5.79	5.02	5.58	4.47	88.0%	-4.3%
Wisconsin	8.90	8.77	9.16	9.28	9.26	8.63	8.54	-4.1%	-6.7%
United States	10.38	10.20	10.84	11.98	11.83	11.24	11.51	10.9%	6.2%
City-Controlled	1.58	2.35	3.50	3.47	2.87	3.84	1.72	8.5%	-50.9%

39 **Serious Injury Crash Rates**; WisDOT crash records processed by the TOPS Lab and the City of Madison. Rates shown per 100,000 residents.

Metric	2018	2019	2020	2021	2022	2023	2024	Change (2018–2024)	Change (2020–2024)
Madison Citywide	37.22	35.20	33.83	30.47	25.09	28.24	30.92	-16.9%	-8.6%
Wisconsin	46.72	45.00	44.95	48.97	46.41	45.58	47.09	0.8%	4.8%
City-Controlled	27.72	28.16	25.66	21.60	19.71	20.22	19.93	-28.1%	-22.3%

40 **Vehicle Miles Traveled (VMT) Crash Rates**; WisDOT crash records processed by the TOPS Lab and the City of Madison. VMT estimates obtained from StreetLight Data . Rates represent fatal and serious injury (K/A) crashes per 100 million VMT.

Metric	2020	2021	2022	2023	2024	Change (2020–2024)
Citywide K/A Rate	6.23	5.50	4.75	5.29	5.20	-16.6%
City-Controlled K/A Rate	4.72	3.81	3.62	3.76	3.18	-32.6%

41 **All Crash Rates**; WisDOT crash records processed by the TOPS Lab and the City of Madison. Rates shown per 100,000 residents.

Severity	2018	2019	2020	2021	2022	2023	2024	Change (2018–2024)	Change (2020–2024)
Fatal (K)	2.38	2.74	4.67	5.79	5.02	5.58	4.47	88.0%	-4.3%
Serious Injury (A)	37.22	35.20	33.83	30.47	25.09	28.24	30.92	-16.9%	-8.6%
Minor Injury (B)	242.33	230.00	145.03	177.06	150.89	155.87	156.68	-35.3%	8.0%
Possible Injury (C)	285.89	247.60	167.96	147.36	135.12	127.97	137.44	-51.9%	-18.2%
Property Damage Only (O)	1661.88	1601.80	909.42	936.22	903.90	928.92	951.08	-42.8%	4.6%

42 **Crash Rate Map (All Roadways)**; City of Madison Department of Transportation. Roadway classifications based on roadway ownership and jurisdiction. Crash data from WisDOT crash records processed by the TOPS Lab and the City of Madison.

43 **Crash Rate Map (City-Controlled Roadways Only)**; City of Madison Department of Transportation. Roadway classifications based on roadway ownership and jurisdiction. Crash data from WisDOT crash records processed by the TOPS Lab and the City of Madison.

44 **Fatal Crashes**; WisDOT crash records processed by the TOPS Lab and the City of Madison.

Metric	2018	2019	2020	2021	2022	2023	2024	Change (2018–2024)	Change (2020–2024)
Madison	6	7	12	15	14	16	13	116.7%	8.3%
City-Controlled	4	6	9	9	8	5	5	25.0%	-44.4%
Non-City-Controlled	2	1	3	6	6	11	8	300.0%	166.7%

45 **Serious Injury Crashes**; WisDOT crash records processed by the TOPS Lab and the City of Madison.

Metric	2018	2019	2020	2021	2022	2023	2024	Change (2018–2024)	Change (2020–2024)
Madison Citywide	94	90	87	79	70	81	90	-4.3%	3.4%
City-Controlled	70	72	66	56	55	58	58	-17.1%	-12.1%
Non-City-Controlled	24	18	21	23	15	23	32	33.3%	52.4%

46 **Fatalities**; WisDOT crash records processed by the TOPS Lab and the City of Madison. Fatality counts represent people killed in traffic crashes and may differ from fatal crash counts

Metric	2018	2019	2020	2021	2022	2023	2024	Change (2018–2024)	Change (2020–2024)
Madison Citywide	7	7	15	17	14	17	13	85.7%	-13.3%
City-Controlled	5	6	12	11	9	12	5	0.0%	-58.3%
Non-City-Controlled	2	1	3	6	5	5	8	300.0%	166.7%

47 **Serious Injuries**; WisDOT crash records processed by the TOPS Lab and the City of Madison. Serious Injury counts represent people seriously injured in traffic crashes and may differ from serious injury crash counts.

Metric	2018	2019	2020	2021	2022	2023	2024	Change (2018–2024)	Change (2020–2024)
Madison Citywide	109	99	111	87	76	93	100	-8.3%	-9.9%
City-Controlled	76	80	81	61	57	62	60	-21.1%	-25.9%
Non-City-Controlled	33	19	30	26	19	31	40	21.2%	33.3%

48 **20 is Plenty Crash Data**; City of Madison Traffic Engineering Division. Analysis of combined KABCO crashes and crash rates following implementation of 20 mph speed limits in the Tenney-Lapham and Theresa-Hammersley neighborhoods. Crash data provided by WisDOT and processed by the TOPS Lab and the City of Madison.

48[a] **20 is Plenty Phase 1 Neighborhood Crash Counts** (2017–2024)

Year	Theresa-Hammersley Crashes	Tenney-Lapham Crashes
2017	15	23
2018	6	23
2019	16	23
2020	6	10
2021	7	8
2022	6	15
2023	5	12
2024	6	12

48[b] **20 is Plenty Phase 1 Crash Count Summary**

Area	2017–2020 Average	2021–2024 Average	Change
Theresa-Hammersley	10.75	6.0	-44.2%
Tenney-Lapham	19.75	11.75	-40.5%
Madison	4,964	3,517	-29.1%
United States	6,298,592	6,088,156	-3.5%

48[c] **20 is Plenty Phase 1 Crash Rates**

Area	Pre-Implementation Average (2017–2020)	Post-Implementation Average (2021–2024)	Change
Tenney-Lapham	5.04	3.00	-40.5%
Theresa-Hammersley	3.31	1.85	-44.2%
Madison	19.59	12.61	-35.6%
United States	19.22	18.15	-5.6%

Note: Rates shown as reported crashes per 1,000 residents.

49 **Speed Limit Reduction Data**; City of Madison Department of Transportation. Speed Management Evaluation Program (2020–2023). Vehicle speed data obtained through StreetLight Data using Location-Based Services (LBS) and Connected Vehicle Data (CVD) methodologies. Evaluations compare vehicle speeds before and after implementation of speed limit reductions.

49[a] **Corridor Speed Management Evaluation Results (2020–2023)**

Corridor	Speed Limit Change	Higher-End Speeding Before	Higher-End Speeding After	Change
Segoe Rd	30→25 mph	3.1%	0.5%	-83.9%
E Washington Ave	40→35 mph	3.6%	1.5%	-59.2%
Gammon Rd	35→30 mph	8.1%	4.9%	-38.6%
Portage Rd	30→25 mph	15.2%	9.4%	-38.0%
Cottage Grove Rd	35→30 mph	5.7%	3.5%	-37.7%
John Nolen Dr	45→35 mph	28.4%	18.1%	-36.2%
Post Rd	30→25 mph	12.6%	8.6%	-31.9%
S Park St	30→25 mph	9.6%	6.6%	-31.5%
N Thompson Dr	30→25 mph	15.1%	11.0%	-27.2%
S Whitney Way	Mixed	18.0%	13.4%	-25.6%
Old Sauk Rd	35→30 mph	11.3%	8.5%	-24.7%
Milwaukee St	35→25 mph	24.1%	18.8%	-22.0%
Prairie Rd	30→25 mph	7.7%	7.2%	-5.9%
McKenna Blvd	35→30 mph	8.0%	10.1%	26.3%

Note: Values represent the average percentage of vehicles exceeding the evaluation threshold speed before and after implementation. Results are averaged across monitoring locations within each corridor.

49[b] **Key Findings from Speed Management Evaluations (2020–2023)**

Metric	Value
Corridors Evaluated	14
Corridors with Reduced Speeding	13
Corridors with Increased Speeding	1

Success Rate	**92.9%**
Median Reduction in Speeding	**31.7%**

50 **Vision Zero Equity Index (VZEQI) Map**; U.S. Census Bureau American Community Survey (ACS) 2019–2023 5-Year Estimates and IPUMS NHGIS. Demographic and socioeconomic data used to develop the Vision Zero Equity Index (VZEQI). Available at: American Community Survey and IPUMS NHGIS

51 **2020–2022 High Injury Network Map**; TOPS Lab. 2022 High Injury Network (HIN) methodology and roadway network analysis identifying corridors and intersections with a disproportionate concentration of fatal and serious injury crashes. Available at: TOPS Lab Traffic Safety Program

52 **2023–2024 K/A Crash Location Map**; WisDOT crash records processed by the TOPS Lab and the City of Madison. Fatal (K) and serious injury (A) crash locations, 2023–2024. Based on City of Madison GIS data.

VISION ZERO MADISON

CITY OF MADISON TRAFFIC ENGINEERING

2023–2024 Vision Zero Progress Report

CITY OF MADISON TRAFFIC ENGINEERING DIVISION

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