Setting safe speed limits is an important part of ensuring our streets are safe.

Historically, speed limits have been set based primarily on how fast people were already driving on a street. That hasn’t worked for cities. Speed-related crashes result in about one-fourth of all traffic fatalities in the United States. When a crash happens, the biggest factor in determining the likelihood of survival is speed. As someone drives faster, it will take longer to stop, their field of vision is smaller and the impact of the crash will be greater. Even a small difference in vehicle speed makes a big impact on the safety of someone walking, rolling or using a mobility device.

The National Transportation Safety Board recently recommended changing the approach to setting speed limits and the National Association of City Transportation Officials responded with new context-sensitive methods for reviewing speed limits in cities. The City of Madison has adopted this approach in reviewing speed limits - staff now take into account the context of the street and the people using it.

A speed limit sets the expectation for drivers and our speed limits take into account the needs and safety of people driving, walking, and biking along the street. In recent surveying, 78% of Madison residents told the City to prioritize safety over speed.

Setting a safe speed limit, however, is just the start of making safe streets. To meet the goal of zero fatal and serious crashes, streets must also be designed to reduce speeding. Most people have, at some point, been driving and realized they are traveling above the speed limit. Often times the street design gives the impression that there is no need to slow down or to even expect people to be crossing the street.

Street designs that narrow lanes and add elements like high visibility crosswalks, raised crosswalks, and protected bike lanes, serve as clues that drivers should expect users of different types and speeds. The City’s goal with each project is to make it easier for people to be safe through good design, and build streets that recognize that people sometimes make mistakes.

Reconstruction projects like W Wilson St, Broom St, Atwood Ave and Hammersley Rd offer an opportunity to make large changes to street design. In these projects, safety and mobility for all roadway users was emphasized. Additional projects, funded through the City’s Safe Streets Madison program, created high visibility crosswalks, flashing beacons at crosswalks, and new curb extensions to shorten pedestrian crossings.

In 2024, the City will finish reconstructing a safer W Wilson St and Hammersley Rd, and move forward with safer roadway design in locations like N Segoe Rd and Knuston Dr. In 2025, the John Nolen Drive project will start with lane reductions, improved intersections and more space to accommodate the needs of people walking and biking.

Safety, in all aspects of street design, is fundamental to the Vision Zero Madison initiative, and helps create the systems and standards used to make safety our top priority. Everyone, regardless of chosen mode of transportation, has a right to feel protected and safe on our streets.
In September of 2020, the City approved a corridor plan for Wilson St. that recommended that a protected, two-way cycle track (separate facility for bicyclists adjacent to or on the street) be installed on Wilson St. between John Nolen Dr. and S. Bassett St., along with recommendations to install protected bike facilities along Broom St. between John Nolen Dr. and W. Main St. The primary goal of this plan was to create a more comfortable, and well-connected, bike facility that leads into and thru downtown for people of all ages and abilities.

The City began to implement the recommendations of the corridor plan in 2022 with the reconstruction of the Wilson/Blair/Williamson/John Nolen intersection. This project included an improved crossing of John Nolen Dr. and extending the two-way cycle track through an improved crossing of railroad tracks.

In June of 2023, work began on the reconstruction project of W. Wilson St. (S. Henry to S. Broom) and S. Broom St. (John Nolen Dr. to W. Doty St.), which also includes extensions of the bike facilities on Wilson St., east and west of the reconstruction limits to S. Bassett St. and to S. Carroll St. It also includes work on S. Bassett St. to extend the parking-protected bike lane from where it currently ends at W. Main St. to W. Wilson St., connecting in with the new cycle track. Overall, this project adds approximately ¾ mile of protected bike facilities, providing key connections for the network. In addition to the new protected bike facilities, some other safety improvements of the project include:

- Raised bike/pedestrian crossings of the right-turn lanes at the intersection of Wilson & Broom
- Raised bike/pedestrian crossing along Wilson St. at the intersection with Henry & Hamilton
- Improved signal timing at the Wilson & Broom intersection
- Bus boarding islands for the stops on Broom at Doty and on Bassett at Doty

In 2024, the City plans to reconstruct a portion of E. Wilson St. As part of that project, the remainder of the Wilson corridor plan will be implemented, including connecting the two-way cycle tracks where the 2022 and 2023 projects left off near John Nolen Dr. and at S. Carroll St. With the completion of the 2024 project, there will be a continuous, protected, two-way bike facility along Wilson St. that connects between the Capital City Trail (John Nolen Dr., near Machinery Row) and the parking-protected bike lane on S. Bassett St. Public engagement for the 2024 project will be starting early this winter, with construction starting in the spring of 2024.

We’re very excited to see this plan get fully implemented as it will be a great asset for the City, improving connectivity and active transportation options for people of all ages and abilities.

**Safe Drivers Save Lives**

Human behavior is not a simple thing to change. While statistics and campaigns can inform the public on the issues, it sometimes boils down to the personal choices and behaviors made each moment by a person. Just taking a second to think about the potential outcome of a decision can save a life.

"Nearly 80% of crashes and 65% of near-crashes involved some form of driver inattention within 3 seconds before the event"

National Highway Traffic Safety Administration (NHTSA)
In the last five years, 68 people were killed on streets throughout Madison in traffic crashes. World Day of Remembrance is a day to demonstrate the devastating impact that traffic deaths cause in Madison and that traffic safety stakeholders are taking action to make our streets safer. Last year, the City of Madison held a press conference as well as a memorial of cut outs of every person who lost their life on City roadways in the past 5 years.

“We wanted to remember all the lives lost on our City streets. The lives lost to traffic violence not only effect those lives lost, but they have lasting effect on those loved ones directly related. Here in Madison we want to acknowledge those lives lost but yet push us forward to designing and protecting our streets to make them safer for all no matter if walking, biking or traveling by car or bus.” Yang Tao, Director of Traffic Engineering.

Traffic related deaths are preventable and the City of Madison and the Vision Zero Stakeholder Task Force want to highlight changes that will make our City safer – including lowering speed limits and re-designing roads that support those reduced speed limits as well as providing safe spaces for people walking and bicycling. Madison joins many other cities across the United States and the globe, in supporting changes to make travel safe and remember the lives lost to traffic crashes. A remembrance display will be at the top of State Street all week with a press conference on Thursday, November 16 at 10 AM.

The World Day of Remembrance is an international event, started in 2005, honoring the 1.35 million people killed and millions more injured on the world’s roads each year and organizing change to prevent such tragedies.

Davies Street/Dempsey Road Reconstruction Project

This project will reconstruct Davies Street and Dempsey Road from Buckeye Road to Cottage Grove Road. The project is a full rural-to-urban design that will include a narrowed, 26-ft wide street (two, 11-ft travel lanes), new curb & 2-ft gutter, 5-ft concrete sidewalk on the easterly-side, and a 10-ft shared-use asphalt path on the westerly-side with a varying-width grass terrace between the sidewalk/path and the street. The shared-use path will provide an all ages and ability bike route, as well as a safe pedestrian facility, both of which were previously missing from Davies Street and Dempsey Road. The shared-use path will serve the Monona Lake Loop Route from Cottage Grove Road to Major Avenue. This design maintains the vast majority of existing street tree canopy while also provide safe accommodations for all modes of transportation, including the Metro Transit Routes C & G. Phase One will occur in Summer/Fall 2023 and will include Davies Street from Buckeye Road to Maher Avenue.

Phase Two will occur in Spring/Summer 2024 and will include Dempsey Road from Maher Avenue to Cottage Grove Road.

Other safety improvements include:
- Path-specific lighting along the shared-use path from Cottage Grove Road to Maher Avenue. The remaining portion of the path will be lit by improved street lighting.
- Reconfigure the existing bike signal at Cottage Grove Road and Dempsey Road to the westerly-side of the street, including a new 4-inch, near-side bicycle signal.
- Reconfigure the 5-way intersection at Davies Street, Dempsey Road, Maher Avenue (N & S), and Pinchot Avenue into two separate intersections with more typical alignments in order to improve visibility, calm traffic, and reduce unnecessary pavement.

Visit the project page for more information.
Together for Safer Roads

Together for Safer Roads (TSR) is an international non-government organization focused on reducing traffic-related injuries and fatalities in cities. To improve fleet trucking safety, TSR has an active project addressing blind zones in truck cabs. City of Madison Fleet is one of TSR’s partners on this. 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 improve the identified high injury intersections and roadway segments, 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 and fatal.

www.cityofmadison.com/VisionZero

A blind zone refers to an area around the vehicle that is not visible to the driver. These zones are areas where other vehicles, pedestrians, or objects are not easily seen by the driver, making them a potential safety hazard. Blind zones increase the risk of collision particularly when changing lanes, merging onto highways, making turns, or when reversing. Meanwhile, it should come as no surprise that trucks have potentially even larger blind zones than smaller vehicle types.

Figure 1. TSR’s Direct Vision Standards

TSR developed a scoring system for truck direct vision, employing a rating system for front and side visions. The direct vision star standards aims to measure the distance at which a driver can spot a preschool child (shoulder height of 36") assuming the child is approaching the truck from the front and side. If the driver sees the kid at the distance of more than 10 ft from the front or 8 ft from the side, the truck will get one star as a vision score. Similarly, if the driver sees the child in less than 4 ft or less than 3 feet, the truck will get five star as a vision score. The star scores are illustrated in Figure 1.

We evaluated a side loader, rear loader, bucket truck, fire truck, and box van body truck in our fleet for their blind spots using this scoring system. The front and side scores of these vehicle classes are presented in Table 1. The front scores of these trucks varies between one and two stars. The tree service with overhead bucket truck has the lowest front score on the front vision. The box van body truck and fire truck have the highest score with three stars on the front vision. The rear loader truck, fire-truck and bucket truck have one star on the side score. The box van body truck (Figure 2) has the highest score on side score with five stars while other trucks have one or two stars on the side scores.

Figure 2. The Box Van Truck

In conclusion, Fleet plans to work with TSR and our truck manufacturers to use this data to improve the design of trucks for us and also other fleets to make them as safe as possible.

Table 1. Vision Scores for 5 Types of Trucks in City of Madison

<table>
<thead>
<tr>
<th>Vehicle Class</th>
<th>Front Score</th>
<th>Side Score</th>
</tr>
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<tbody>
<tr>
<td>141-Truck, Compactor, Side Loading, Articulating Load Arm</td>
<td>★★</td>
<td>★★</td>
</tr>
<tr>
<td>120-Truck, Compactor, Rear Loading</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>6G1-Truck, Box Van Body</td>
<td>★★★★</td>
<td>★★</td>
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<tr>
<td>743-Fire Truck, Pumper, With Foam Generator</td>
<td>★★★★</td>
<td>★★</td>
</tr>
<tr>
<td>5F2-Truck, Tree Service W/Overhead Bucket</td>
<td>★</td>
<td>★</td>
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