

Executive Summary

In response to observed safety concerns along MO-115 (Natural Bridge Avenue), MoDOT funded the construction of several geometric improvements, implemented between 2020 and 2021, with the goal of slowing travel speeds and reducing injury crashes. These traffic-calming improvements were focused on three MO-115 corridor segments:

- The Western Zone – Darby Street to Siemers Lane
- The Central Zone – Siemers Lane to Shreve Avenue
- The Eastern Zone – Shreve Avenue to Parnell Street



The types of improvements implemented generally included **road diets with raised center medians, mid-block pedestrian crossings, curb extensions, negative-offset left-turn lanes, signal improvements, and roundabouts**, but the specifics varied within the three different segments of the corridor. Public feedback indicated less desire / less need for improvements within the Central Zone, and therefore modifications were less extensive

through this area. Specifically, the Central Zone

April 2026 – Final Report

Use Restricted and Protected 23 U.S.C. § 407.

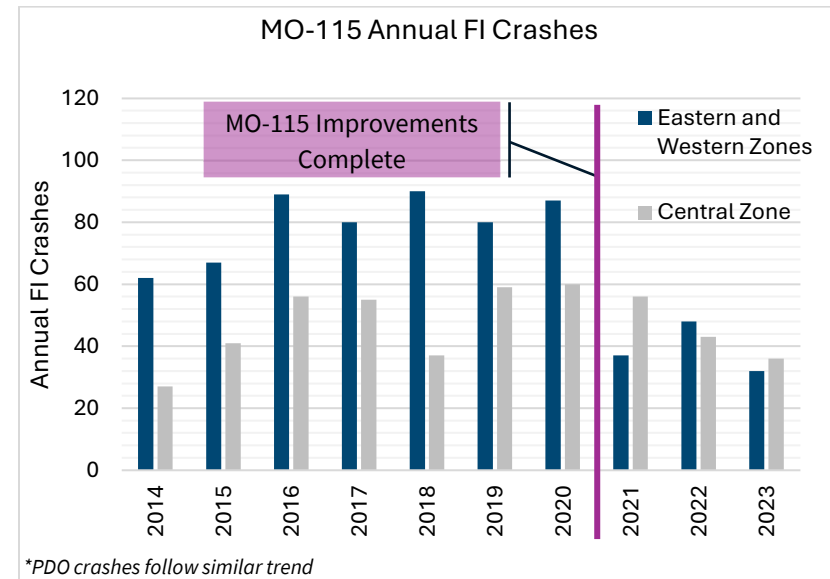
improvements did not include road diets or roundabouts.

This report compares the effectiveness of the more



In the three years since the implementation of these improvements, only one fatal crash has been recorded within the road diet sections. Six fatal crashes occurred in the three years prior.

comprehensive improvements (road diet, roundabouts) of the East and West Zones with the basic improvements in the Central Zone.



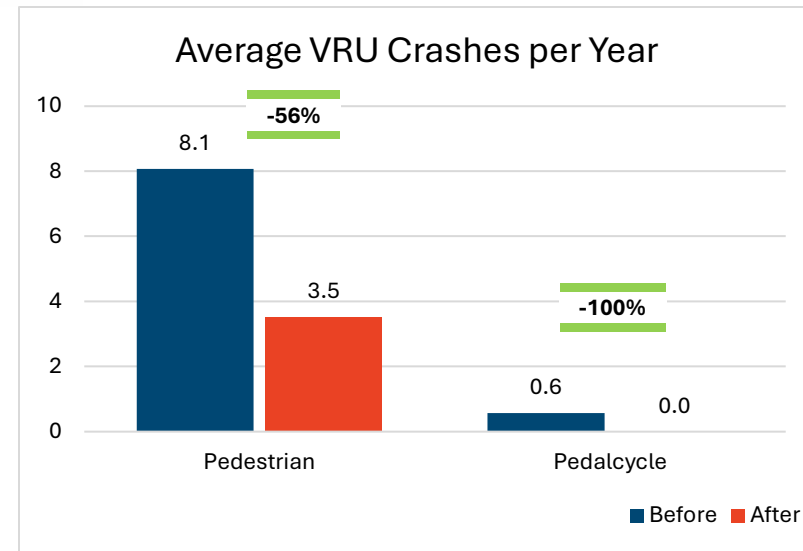
Looking at 10 years of crash data from 2014 to 2023, a clear reduction in fatal and injury (FI) crashes can be noted in the Eastern and Western zones after the implementation of the

improvements. **The annual average number of fatal and injury crashes in the Eastern and Western Zones decreased from 69 in the before condition to 37 in the after condition, a reduction of 51%.**

Historic crash data also indicated that the MO-115 corridor had an elevated concentration of crashes involving Vulnerable Road Users (VRU), like pedestrians and cyclists. In fact, the corridor had among the highest fatal crash frequencies for VRUs in the entire state. Many of the improvements implemented with this project specifically targeted VRU safety. In particular, one focus was on reducing crossing distances for pedestrians by narrowing the vehicular travel way, constructing island refuges, bulb-outs, etc. As a result of these types of improvements, **annual pedestrian crashes were reduced by 56% and bicycle crashes were reduced by 100%** between the before and after conditions, within the Eastern and Western sections of the corridor. Additionally, at locations where pedestrian crossings were reduced by more than 5 feet, VRU crashes were significantly reduced, in some cases by 100%.

Overall, observations of the before and after conditions along MO-115, particularly in the Eastern and Western Zones of the project where the road diet was implemented, indicate a dramatic safety benefit to the roadway environment, without increasing vehicle congestion.

Based on these positive outcomes of the safety improvements in the Western and Eastern Zones of the



After the safety improvements on MO-115 where the road diet and roundabouts were implemented:



- Fatal crashes reduced by 84%
- Injury crashes reduced by 51%
- Pedestrian crashes reduced by 56%
- Excessive speeding reduced from 1.5% to 0.2%. This is a drop of 155 fewer cars traveling over 60 mph on the corridor per day.
- Drivers did not avoid traveling on the road diet sections
- Travel time did not substantially increase

project area, it is recommended that similar road diet improvements be considered for the Central Zone of the study area. This project should be considered a best practice for similar arterial roadways throughout St. Louis and across the State of Missouri. Indeed, this project can be seen as an example to be followed on similar corridors across the nation.

Although the improvements were highly successful, fatal and serious injury crashes continue to happen on the MO-115 corridor. Vehicle speeds remain higher than optimal for a corridor with high pedestrian and cyclist usage that is served by transit and provides access to many community amenities and services. A corridor like this would have further improved safety outcomes, especially for pedestrians and cyclists, if observed vehicle operating speeds above 35 mph were reduced even further.

To continue advancing safety and slowing vehicle speeds on MO-115, additional safety improvements should be considered, focusing on the Safe System Approach pillars of Safer Speeds, Safer Vehicles, and Safer Users. This would serve to continue the positive momentum on MO-115 and help achieve the goal of zero deaths on Missouri roadways.