

# RCKC TRANSPORTATION SAFETY ACTION PLAN



Full Plan: [www.kalamazooountyroads.com/upload/resources/91/RCKC%20Transportation%20Safety%20Action%20Plan%202023.pdf](http://www.kalamazooountyroads.com/upload/resources/91/RCKC%20Transportation%20Safety%20Action%20Plan%202023.pdf)

## PUBLIC INVOLVEMENT

# 324

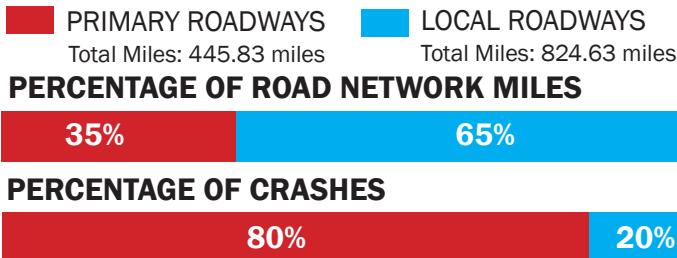
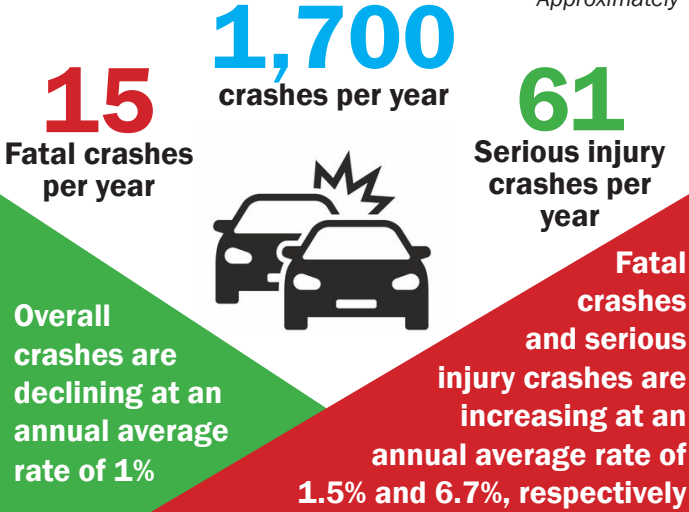
Survey responses

# 184

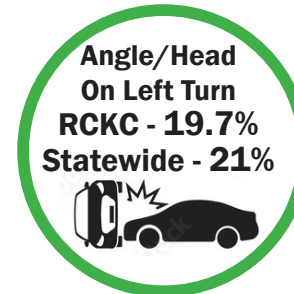
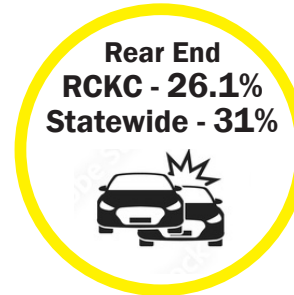
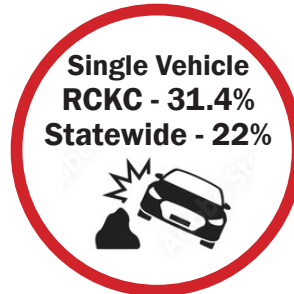
Location specific concerns collected

## AVERAGE FOR RCKC NETWORK:

Approximately



## MOST PREVALENT CRASH TYPES



## THEMES OF THE SURVEY FEEDBACK:

- Congestion
- Delineation
- Speeding
- Curves
- Lack of shoulders
- Narrow lanes
- Pavement conditions
- Signal timing
- Turning movements
- Visibility
- Wide roads
- Lack/condition of non-motorized facilities



## FREQUENT MENTIONED COUNTERMEASURES:

- Drainage maintenance or improvements.
- Signage review and improvements
- Shoulder improvements
- Signal optimization and coordination updates
- Installation of turn lanes
- Access management
- Intersection Improvements
- Removal of fixed objects from the right of way
- Manage vegetation overgrowth and sight distance



## EMPHASIS AREAS

(Highest fatalities/serious injuries associated)

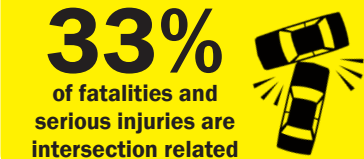
### Occupant Protection:



### Lane departure



### Intersection crashes:



### Senior Mobility and Safety:



### Impaired Driving:



The percentage of fatal and serious injury crashes is

## HIGHER

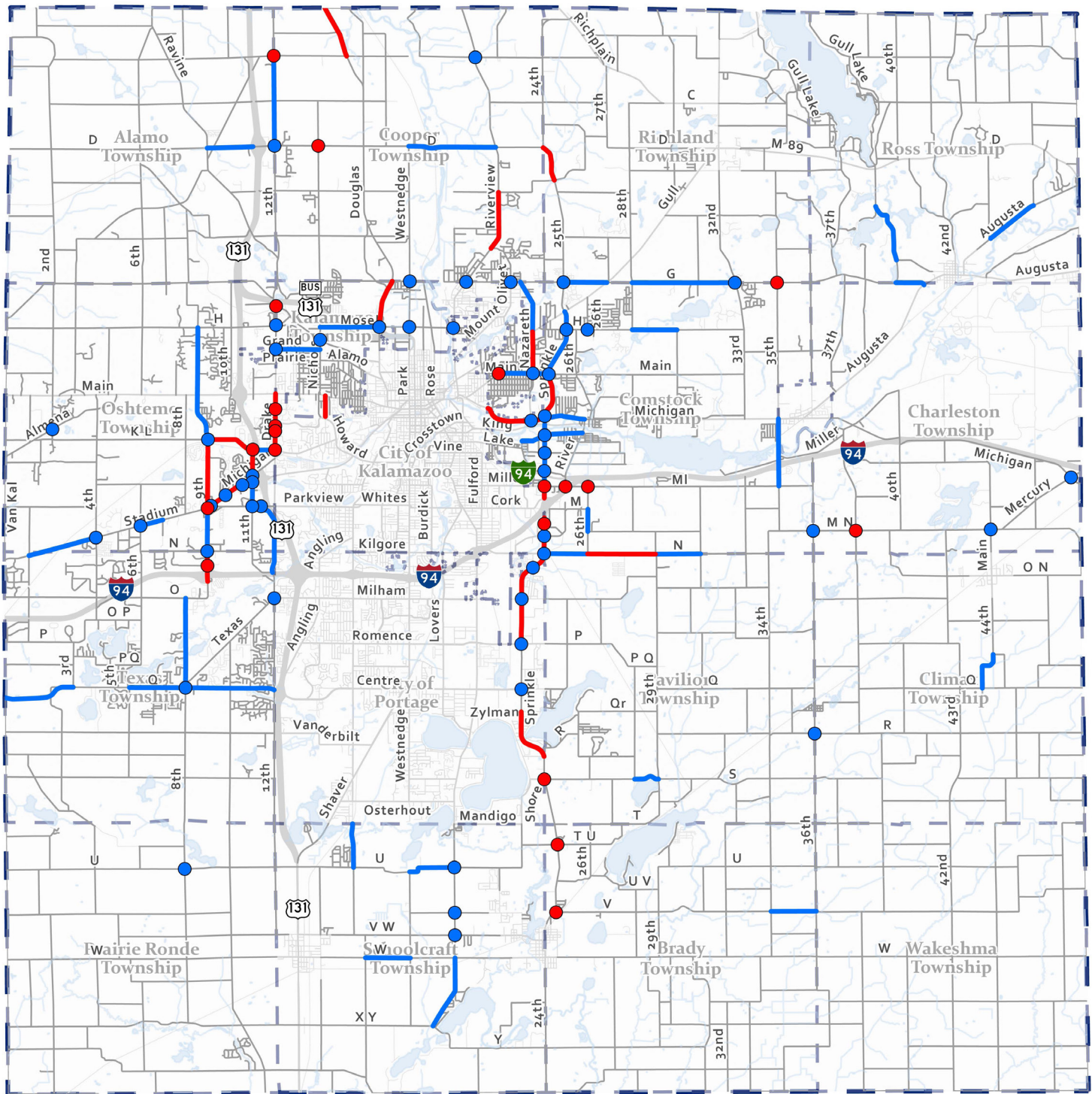
on RCKC's network than the overall county and statewide

Total crashes for the RCKC network are

## LOWER

on RCKC's network than the overall county and statewide

# RCKC HIGH RISK LOCATIONS 2017-2021 CRASHES



## LEGEND

- Kalamazoo County
- ▬ Municipal Boundary
- Hydrology
- RCKC Road
- Non RCKC Roads

## High Risk Segments

- Top 10 by Total or Fatal & Serious Injury Crashes
- Top 50 by Total or Fatal & Serious Injury Crashes

## High Risk Intersections

- Top 10 by Total or Fatal & Serious Injury Crashes
- Top 50 by Total or Fatal & Serious Injury Crashes

0 1.25 2.5 5 7.5 10 Miles



**HRC**  
HUBBELL, ROTH & CLARK, INC.  
CONSULTING ENGINEERS SINCE 1915



# SAFE STREETS INITIATIVE:

## Enhancing Road Safety in Kalamazoo County

### Kalamazoo County Overview:

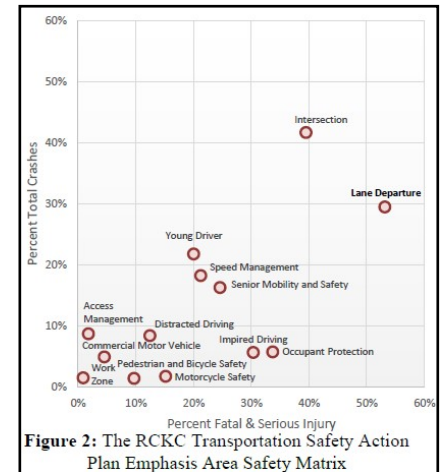
Located in southwest Michigan; 9th most populous county in the state of Michigan at approximately 261,000. The Road Commission of Kalamazoo County (RCKC) maintains 1,270.70 miles of road throughout the 576 square mile county. The primary road system consists of 445.95 miles; the remaining 824.75 miles comprise the local system year ending 2024. Along with our maintenance operations, we maintain 63 bridges, over 28,500 signs, 49 traffic signals and 40 flashing beacon at intersections

### Road Safety Statistics:

- Nearly 1,700 crashes annually resulting in 76 fatalities and serious injuries.
- Fatal and serious injury crash rates are nearly double that of Michigan.
- Lane departure identified as the most critical safety issue, causing over 50% of all fatalities and serious injuries.

### Transportation Safety Action Plan:

- Plan developed in 2023.
- Aims to eliminate all roadway fatalities and serious injuries by 2050.
- Guided by Safe System Approach (SSA) and 5 E's of Safety (Engineering, Education, Enforcement, Emergency Response, and Equity).
- Focuses on data-driven, collaborative safety improvements for all road users.

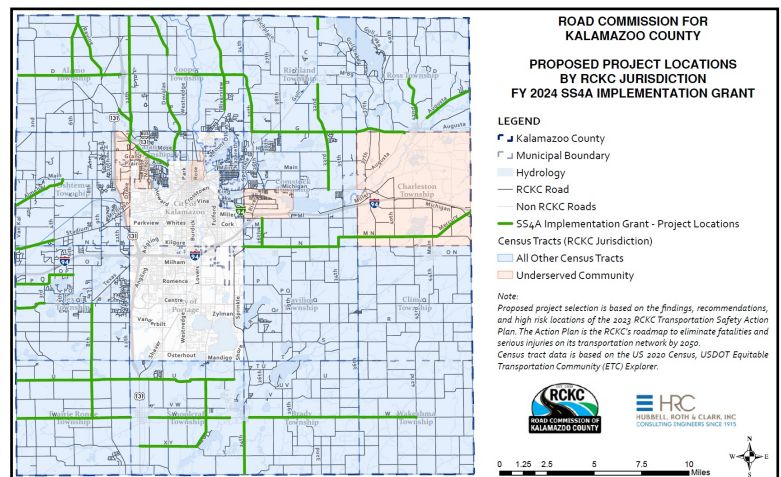


### Key Safety Improvements Identified:

- **Rumble Strips:** Installation along 130 miles of primary roads to reduce lane departure crashes.
- **Shoulder Widening:** 16 miles of primary roads to accommodate vulnerable road users & reduce crashes.
- **Clear Zone Improvements:** Tree removal and roadside flattening to reduce collision risks.
- **Pavement Markings and Signage:** Enhancements for improved visibility and safety.
- **Left-Turn Lanes:** Installation at high-risk locations to reduce intersection crashes.

### Safe Streets and Roads for All (SS4A):

- Seeks to systematically eliminate fatalities and serious injuries, focusing on lane departures and accommodating Vulnerable Road Users (VRUs).  
TOWARD ZERO DEATHS
- 28 areas identified in the Transportation Safety Action Plan on the high crash lists. Of these, 3 locations are listed in the top 10 areas for fatal or serious crashes.
- Improves 50.3 miles of primary roadways through reconstruction and rehabilitation.
- Improvements made to 14 roadways projects on the RCKC Capital Improvement Program totaling approximately \$16,000,000.
- Anticipated cost for the project at \$38,300,000 with \$25,000,000 from the SS4A Implementation Grant (The LARGEST grant received for the RCKC and the LARGEST SS4A implementation grant in the State as of 9/3/24) and \$13,300,000 as the RCKC share.

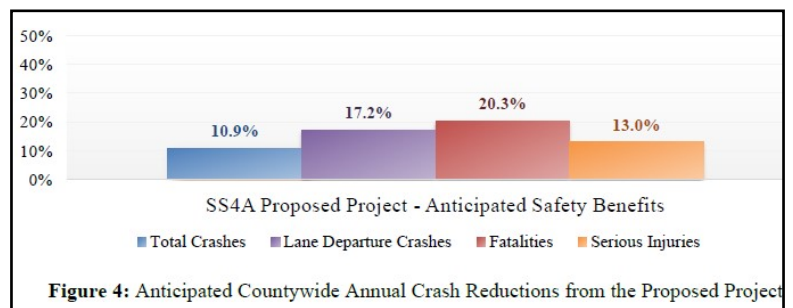


## **Rumble Strip Installation**

- **Lane departure crashes are the greatest concern for the RCKC roadway system as data from our roadways indicates 50% of fatal and serious injury crashes occur during these types of crashes.**  
Installation of centerline and shoulder rumble strips along 130.84 miles of primary roadways. This fix was selected among the potential safety solutions as it is a proven safety countermeasure for reducing lane departure crashes. Additionally, single vehicle crashes (such as lane departure crashes) represent the most prevalent crash type on our roadways and occur more frequently on the RCKC roadway network than the statewide average.
- Rumble strip location would be in accordance with national and statewide guidance and generally limited to primary roads with over 1,500 average daily traffic (ADT), high speed (45 mph or more), and rural areas or where driveway density is less than 30 per mile).
- The roads chosen for this proposed project allow for a systemic implementation of safety measures to optimize effectiveness of the improvements and money spent.
- Approximately 20 miles of roads with insufficient width (less than 11' lanes and 3' paved shoulders) would be widened to accommodate the rumble strips.
- Approximately 28.5 miles of roads with poor PASER ratings would be overlayed or reconstructed to ensure rumble strips are installed in a quality surface.
- Approximately 33 miles of roads located on RCKC Non-motorized Routes would not receive shoulder rumble strips as they would be in the paved shoulder where bikes are anticipated to use. With this proposed project 3.74 miles of primary roads with Non-motorized Routes would be widened to provide a 3' paved shoulder which would make them safer for vulnerable road users (VRU's) such as cyclists or pedestrians. Roads included in this proposed project would be those with recent crash data or were cited in the RCKC Transportation Safety Action Plan where lane departure crashes are recorded.

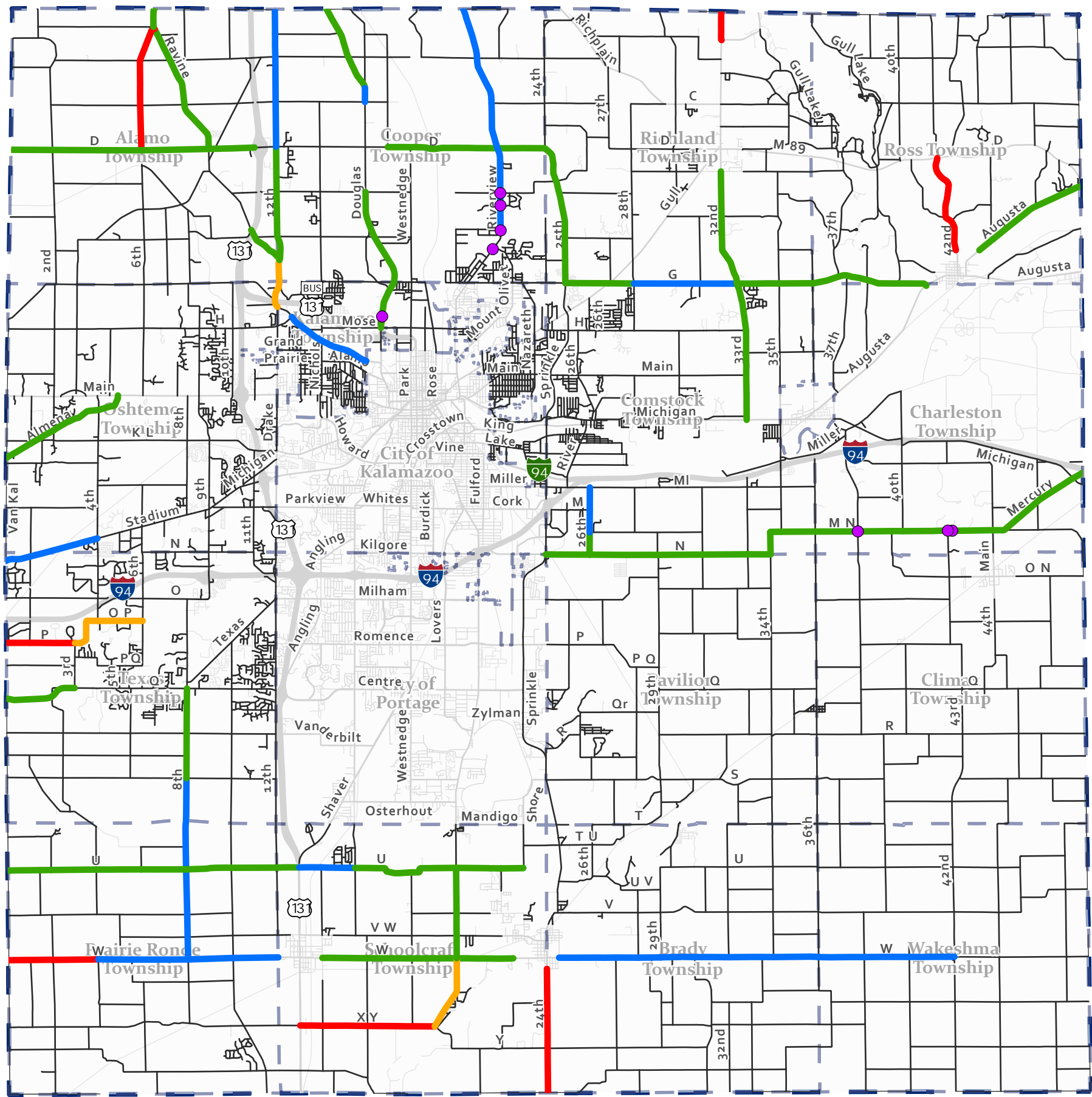
## **Impact and Community and Equity Focus:**

- Project includes 130 miles of primary road improvements with a focus on high-risk areas, 10.2% of total RCKC road network.
- Expected to reduce 63.1% of total crashes, eliminating 10.9% of crashes, 20.3% of fatalities, and 13% of serious injuries annually.
- Supports our organizational goal of having 90% of the roads with a PASER rating of good or fair.
- Supports our mission of the RCKC related to providing the safest and most convenient road systems possible.
- Ensures equitable investment in safety across rural and underserved communities.
- Incorporates public input and engagement throughout the project phases.
- Promotes active transportation and environmental sustainability through the use of reclaimed asphalt and improved non-motorized routes.
- Supports job creation with an estimated 460 good-paying jobs during the project.



## **Project Readiness:**

- No anticipated right-of-way acquisition required, with the project primarily utilizing existing public roads.
- Design and construction to begin following SS4A grant award, with a timeline extending through 2029.



ROAD COMMISSION OF  
KALAMAZOO COUNTY

SAFE STREETS INITIATIVE: ENHANCING  
ROAD SAFETY IN KALAMAZOO COUNTY

LEGEND

- Kalamazoo County
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Safe Streets Initiative - Project Locations

- Road Reconstruction, Shoulder Widening, Clear Zone Improvements, Rumble Strips, Pavement Markings, and Signage
- Road Resurfacing, Shoulder Widening, Clear Zone Improvements, Rumble Strips, Pavement Markings, and Signage
- Road Resurfacing, Clear Zone Improvements, Rumble Strips, Pavement Markings, and Signage
- Clear Zone Improvements, Rumble Strips, Pavement Markings, and Signage
- Left-Turn Lanes

