



# HOUSE of REPRESENTATIVES

## STATE OF MICHIGAN

### Appropriations Requests for Legislatively Directed Spending Items

---

1. The sponsoring representative's first name:  
Reggie
2. The sponsoring representative's last name:  
Miller
3. The cosponsoring representatives' names. All cosponsors must be listed. If none, please type 'n/a.' A signed letter from the sponsor approving the co-sponsorship and a signed letter from the member wishing to co-sponsor are required. Attach letters at question #9 below.  
n/a
4. Name of the entity that the spending item is intended for:  
City of Belleville
5. Physical address of the entity that the spending item is intended for:  
6 Main Street, Belleville, Michigan 48111
6. If there is not a specific recipient, the intended location of the project or activity:  
6 Main Street, Belleville, Michigan 48111
7. Name of the representative and the district number where the legislatively directed spending item is located:  
Rep. Reggie Miller (MI-HD-31)
8. Purpose of the legislatively directed spending item. Please include how it provides a public benefit and why it is an appropriate use of taxpayer funding. Please also demonstrate that the item does not violate Article IV, S 30 of the Michigan Constitution.  
The City of Belleville is requesting \$3,000,000 for intersection improvements on Main St. This project will help promote roadway and pedestrian safety in the downtown corridor which will in turn support local businesses and residents that live in or near the corridor.
9. Attach documents here if needed:  
Attachments added to the end of this file.

10. The amount of state funding requested for the legislatively directed spending item.

3000000

11. Has the legislatively directed spending item previously received any of the following types of funding? Check all that apply.

["None"]

12. Please select one of the following groups that describes the entity requesting the legislatively directed spending item:

Local unit government

13. For a non-profit organization, has the organization been operating within Michigan for the preceding 36 months?

Not applicable

14. For a non-profit organization, has the entity had a physical office within Michigan for the preceding 12 months?

Not applicable

15. For a non-profit organization, does the organization have a board of directors?

Not applicable

16. For a non-profit organization, list all the active members on the organization's board of directors and any other officers. If this question is not applicable, please type 'n/a.'

n/a

17. "I certify that neither the sponsoring representative nor the sponsoring representative's staff or immediate family has a direct or indirect pecuniary interest in the legislatively directed spending item."

Yes, this is correct

18. Anticipated start and end dates for the legislatively directed spending item:

Year 1 (2025): Planning & Preliminary Engineering (Stakeholder Engagement, Funding, Design) Year 2 (2026): Infrastructure Development (Trail Markings, Sidewalk Enhancements, Signage) Year 3 (2027): Project Completion (Final Adjustments, Connectivity Enhancements, Compliance Review)

19. "I hereby certify that all information provided in this request is true and accurate."

Yes



3/20/2025

**City of Belleville**  
**Three-Year Plan for Compliance with PA 51, Section 10K**

**Introduction**

The City of Belleville is committed to achieving compliance with PA 51, Section 10K, through the implementation of nonmotorized transportation improvements. This plan outlines the identified projects, timeline, estimated costs, and funding commitment necessary to maintain compliance with Michigan Department of Transportation (MDOT) requirements.

**Project 1: Road Safety Audit (RSA) Non Motorized Improvements**

**Project Description**

The Road Safety Audit (RSA) identified necessary nonmotorized safety improvements along the Main Street Corridor from High Street to the “Five Points” Intersection (Main St., Sumpter Rd., Huron River Dr., Savage Rd./Columbia Ave.). The City intends to implement recommendations from the RSA to improve pedestrian and bicyclist safety at key intersections and along the corridor.

**Scope of Work**

Project Type: Pedestrian and bicyclist safety improvements

General Location: Main Street from High Street to the five-point intersection

Key Improvements:

- Upgrading pedestrian crosswalks with enhanced markings and signage
- Installation of pedestrian signals with countdown timers at applicable traffic lights
- Addition of curb extensions for safer pedestrian crossings
- Signage improvements to meet current MUTCD standards
- Speed control measures such as additional signage
- Demolition and removal of outdated pedestrian infrastructure

## **Estimated Costs**

The estimated cost for RSA-related nonmotorized improvements is \$500,000 - \$750,000, distributed as follows:

Pedestrian signal upgrades: \$200,000

Pavement markings and signage: \$30,000

Pedestrian facility upgrades: \$50,000

Miscellaneous pedestrian traffic calming measures: \$75,000

## **Implementation Timeline**

Year 1 (2025): Planning & Preliminary Engineering (Design, Funding, Approvals)

Year 2 (2026): Infrastructure Upgrades (Signal Modernization, Markings, Traffic Calming)

Year 3 (2027): Project Completion & Compliance Review (Final Safety Audits, Reporting)

## **Project 2: Iron Belle Trail Improvements**

### **Project Description**

The City of Belleville will support the extension of the Iron Belle Trail through the Main Street Corridor. This project will enhance connectivity for cyclists and pedestrians, linking Belleville to the broader regional nonmotorized trail network.

### **Scope of Work**

Project Type: Trail and nonmotorized infrastructure enhancements

General Location: Main Street Corridor from Belleville Main Street to Huron River Drive

Key Improvements:

- Implementation of the Iron Belle Trail extension through the corridor
- Sharrow lane markings for shared bicycle and vehicle use
- Improved ADA-compliant ramps and sidewalk connectivity
- Upgraded pedestrian and bicycle-friendly signage

### **Estimated Costs**

The estimated cost for Iron Belle Trail improvements is \$225,000, distributed as follows:

- Sharrow lane markings and bicycle infrastructure: \$75,000
- Sidewalk and ADA ramp upgrades: \$100,000
- Trail-related signage and wayfinding: \$50,000

### **Implementation Timeline**

Year 1 (2025): Planning & Preliminary Engineering (Stakeholder Engagement, Funding, Design)

Year 2 (2026): Infrastructure Development (Trail Markings, Sidewalk Enhancements, Signage)

Year 3 (2027): Project Completion (Final Adjustments, Connectivity Enhancements, Compliance Review)

### **Additional Plans:**

Citywide Sidewalk Plan: In addition to the specific nonmotorized improvements outlined above, the City of Belleville is launching a comprehensive Citywide Sidewalk Plan in 2025. Over the next three years, this plan will focus on enhancing sidewalk connectivity, repairing damaged sections, and ensuring ADA compliance throughout the city. This initiative will further support nonmotorized transportation and pedestrian safety, aligning with the broader goals of accessibility and mobility improvements.

### **Council Resolution of Support**

The City of Belleville Council will pass a formal resolution committing to the implementation of both projects and allocating the necessary Michigan Transportation Funds (MTF) for project completion at their next Council Meeting on April 7, 2025.

### **Conclusion**

By following this structured three-year plan, the City of Belleville will achieve compliance with PA 51, Section 10K, ensuring continued receipt of MTF payments while significantly enhancing pedestrian, cyclist, and nonmotorized infrastructure. This commitment aligns with the City's broader goals of promoting safer, more accessible, and well-maintained roadways and nonmotorized corridors for all users.

# Main Street – High St to Columbia Ave Corridor

City of Belleville, Wayne County, MI

## Road Safety Audit

# FINAL REPORT

September 2024

Prepared for:



By:



# Main Street – High St to Columbia Ave Corridor

City of Belleville, Wayne County, MI

## Road Safety Audit

### Table of Contents

<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Project Location .....	1
<b>2.0 ROAD SAFETY AUDIT .....</b>	<b>3</b>
2.1 Road Safety Audit Team.....	3
2.2 Road Safety Audit Materials.....	3
2.3 Road Safety Audit Team and Process.....	4
<b>3.0 ROADWAY CHARACTERISTICS .....</b>	<b>6</b>
3.1 Intersection Conditions and Adjacent Land Uses .....	6
3.2 Traffic Control .....	6
3.3 Road User Characteristics .....	6
3.4 Collision Analysis.....	6
<b>4.0 POSITIVES .....</b>	<b>7</b>
<b>5.0 AUDIT FINDINGS AND SUGGESTIONS.....</b>	<b>10</b>
5.1 Crash Potential #1 (Risk Category F) – 5 Point Intersection .....	11
5.2 Crash Potential #2 (Risk Category E) – Pedestrian Facilities.....	13
5.3 Crash Potential #3 (Risk Category E) – Traffic Signals .....	15
5.4 Crash Potential #4 (Risk Category D) – Speeds .....	16
5.5 Crash Potential #5 (Risk Category D) – Signing .....	17
5.6 Crash Potential #6 (Risk Category C) – Pavement Markings.....	18
5.7 Other Items Considered .....	19
<b>6.0 ESTIMATED COSTS OF IMPROVEMENTS .....</b>	<b>20</b>
<b>7.0 CONCLUSION .....</b>	<b>21</b>

## APPENDICES

A      Information Packets

## **1.0 INTRODUCTION**

An RSA is a formal safety evaluation of planned or existing roadways by an independent, multidisciplinary audit team. The team looks for potential safety hazards that may affect any type of road user and suggests measures to mitigate those safety issues. The audit team is composed of transportation professionals and individuals with special skills ranging from safety, law enforcement, and emergency medical services from federal, state, and local transportation personnel. The RSA team leader and team members conduct field reviews (both day and night) and prepare the audit report with cost estimates. Procedures in performing an RSA are detailed in the FHWA Road Safety Audit Guidelines.

SEMCOG retained OHM Advisors to facilitate the RSA for the Main Street corridor from High Street at the northern limit to Columbia Avenue at the southern limit in the City of Belleville, Wayne County. Including a 200' buffer for the approaches to the bookmarking intersections, this represents a project length of 0.55 miles. This RSA followed the 8-step process as detailed in the FHWA Road Safety Audit Guidelines:

- Step 1: Identify Project
- Step 2: Select an RSA Team
- Step 3: Conduct a Pre-Audit Meeting to Review Project Information and Drawings
- Step 4: Conduct Review Analysis and Prepare Report of Findings
- Step 5: Conduct Audit Analysis and Prepare Report of Findings
- Step 6: Present Audit Findings to Project Owner/Design Team
- Step 7: Prepare Formal Response
- Step 8: Incorporate Findings into the Project when Appropriate

This document is the final report of the RSA. The following sections will detail the process, methodology for this analysis, and data obtained throughout the study. The report will also present all significant findings and safety issues, as well as provide recommended mitigation strategies.

### ***1.1 Project Location***

This Existing Road Safety Audit of the Main Street corridor from High Street to Columbia Avenue in the City of Belleville has been completed per the request of SEMCOG. The project location is shown in Figure 1 on the next page.

The objectives of the study are to:

- Review traffic operations and safety on the corridor.
- Identify physical and operational problems that may affect traffic safety.
- Suggest mitigating measures.



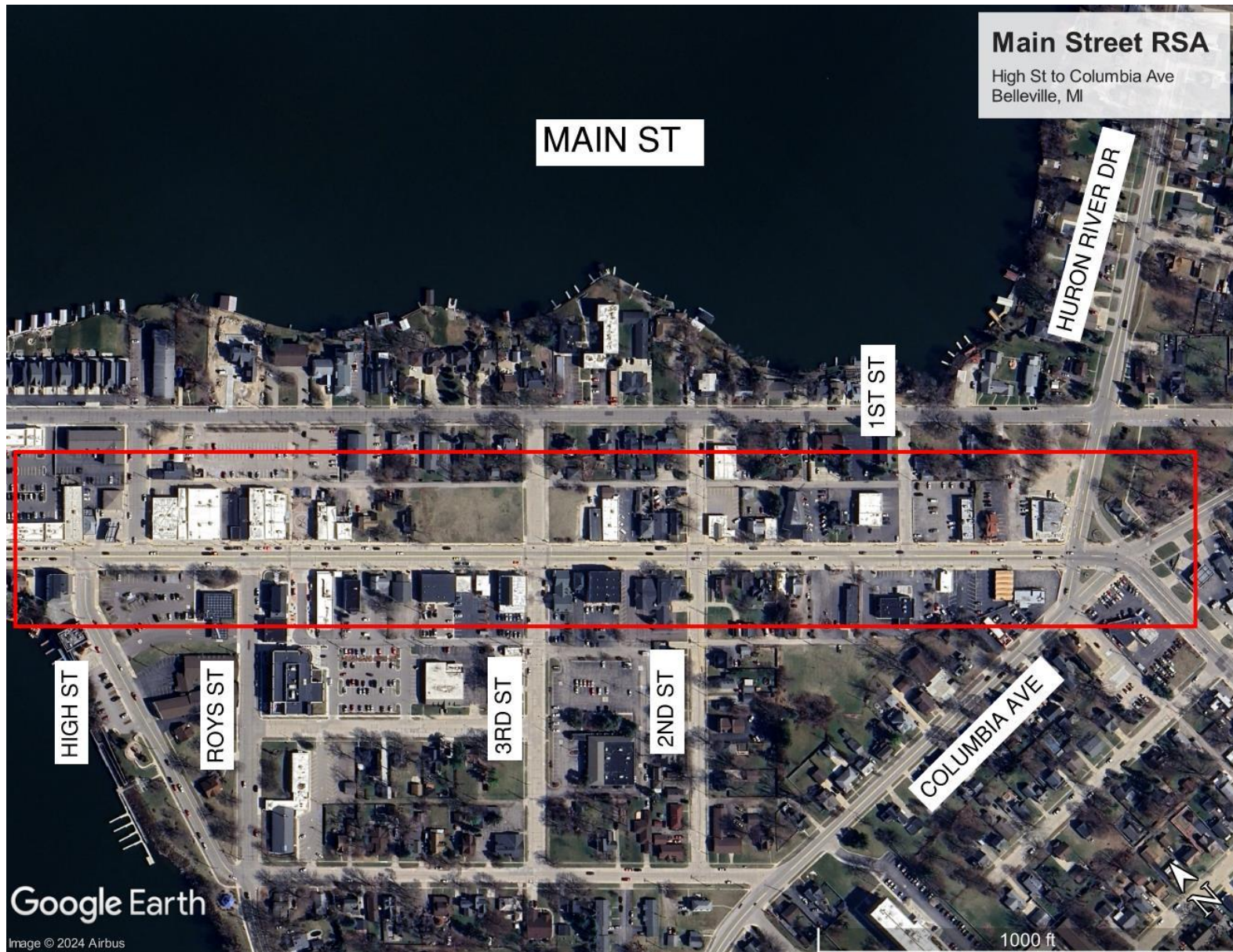


Figure 1 - Project Location

## 2.0 ROAD SAFETY AUDIT

### 2.1 Road Safety Audit Team

An RSA is a formal safety performance examination of an existing or future transportation facility or development by an independent, multidisciplinary team. RSAs help promote road safety by identifying safety issues during the planning, design, and implementation stages, promoting awareness of safe design practices, integrating multimodal safety concerns, and considering human factors.

Location: Wayne County – Main Street corridor from High Street to Columbia Avenue

Audit Team Members:	Stephan Maxe	RSA Facilitator	OHM Advisors
	Steve Loveland	Project Manager	OHM Advisors
	Stephen Dearing	Safety/Human Factors	OHM Advisors
	Scott Emmons	Geometric Design	OHM Advisors
	Emma Ritchie	Traffic	OHM Advisors

Project Owner: SEMCOG

Review Date: September 9-11, 2024

Audit Stage: Existing Road Safety Audit

Start Up Meeting: September 9, 2024, at 10:00 AM

Preliminary Findings Meeting: September 16, 2024, at 10:00 AM

Attended By: Jenya Abramovich – SEMCOG  
Vicky Swanson – SEMCOG  
Brian Pawlik – SEMCOG  
Alan Cruz – City Engineer, Hennessey Engineers  
Jason Smith – City Manager, City of Belleville  
Steve Jones – Assistant City Manager, City of Belleville  
Christopher Onolemhemen, Wayne County

The RSA team members conducted this audit to the best of their professional abilities within the on-site time available and by referring to the information provided. While every attempt has been made to identify significant safety issues, the project owner is reminded that responsibility of the design, construction, and performance of the roadway remains with the agency with jurisdictional authority.

### 2.2 Road Safety Audit Materials

The RSA was based on the following data and analyses:

Site Reviews: A site visit was conducted on September 9<sup>th</sup>, 2024, to review the roadway and intersection characteristics, existing traffic control measures, and adjacent land use. This was also to observe traffic operations and safety conflicts.

Traffic Counts: Average Daily Traffic (ADT) counts were provided by SEMCOG. They were collected on 5/26/2021. The existing ADT for Main Street northwest of 3<sup>rd</sup> Street was 12,862 vehicles per day (vpd) based on the volume study information provided.

Review of Crash Data and Analysis of Crash Trends: Crash data was provided by SEMCOG and reviewed by OHM Advisors for Main Street from High Street to Columbia Avenue for a five-year period ranging from January 1, 2019, through December 31, 2023.

Identification of Improvement: Countermeasures were identified to address the safety issues and collision causes.

### ***2.3 Road Safety Audit Team and Process***

The Road Safety Audit started on September 9th, 2024, with a pre-Audit meeting attended by the RSA team and the stakeholders listed above. During this meeting, OHM Advisors gave a presentation describing the RSA process, the goals and objectives of an RSA, the steps that have already been completed by SEMCOG, and the steps that would be completed by the RSA Team over the next few weeks. After the presentation, open discussion began about the corridor identifying known issues, concerns of the local stakeholders, any constraints that needed to be worked within, and any mitigations planned for future implementation.

#### **Local Stakeholder Known Issues and Concerns**

- Known visibility impaired resident that utilizes the pedestrian crosswalks on Main Street.
- Concerns for congested traffic on Main Street.
- Concerns regarding the intersection of Main Street, E Huron River Drive, W Columbia Avenue, E Columbia Avenue, and South Street including red light running and improper turning movements.
- Speeds along Main Street.

#### **Constraints**

- Budget – finances are limited.
- Right-of-Way – purchasing ROW was discouraged.
  - Victory Park located at the corner of South Street/E Huron River Drive and E Columbia Avenue should not be disturbed.

#### **Planned/Potential Mitigations**

- Planned Iron Belle Trail extension through Belleville, utilizing Main Street from 2<sup>nd</sup> Street to E Columbia Avenue.

Field visits were conducted by the RSA team on September 9<sup>th</sup>, 2024 thru September 11<sup>th</sup>, 2024. The corridor was driven from each direction multiple times during the AM peak, off-peak, PM peak, and night periods. The team also walked around certain areas to observe issues on foot. While out driving and walking the corridor, the team verified issues discussed during the pre-Audit meeting and discussed additional concerns, while taking notes and photos to document the findings.

Once the field reviews were completed, the team met again to discuss the findings. Each team member spoke to deficiencies observed and positives found at the site. A comprehensive list of the findings was compiled. This list was then put into groupings to arrive at a list of seven key safety focus areas according

to an analytical hierarchy process guided by the “Prioritize Safety Issues: Risk Matrix” (developed by the FHWA). The team also discussed potential recommendations to address each of the safety concerns.

The preliminary audit findings were then recorded and assigned levels of risk and consequence. The safety issues were ranked from highest to lowest priority using the risk matrix. Based on the findings, a presentation was developed reflecting the activities of the RSA.

## **3.0 ROADWAY CHARACTERISTICS**

### ***3.1 Intersection Conditions and Adjacent Land Uses***

The Main Street corridor from High Street to Columbia Avenue is in the City of Belleville, Wayne County and is 0.55 miles long. The posted speed limit for Main Street through the corridor is 25 MPH. The southern limit is the five-point intersection of Main Street, E Huron River Drive, E Columbia Avenue, South Street, and W Columbia Avenue. NB Huron River Drive and E Columbia Avenue both have one shared use lane. All other approaches W Columbia Avenue, South Street, and Main Street have two lane approaches.

At the intersection of Main Street and 3<sup>rd</sup> Street, all approaches are single lane. Main Street and 3<sup>rd</sup> Street has on-street parking on both bounds of the roadway. The posted speed limit on 3<sup>rd</sup> Street is 25 MPH.

At the T-intersection of Main Street and High Street, EB Main Street has one right turn lane and one thru lane, and WB Main Street has one shared use lane. NB High Street has a dedicated right turn lane and a left lane. High Street has a posted speed limit of 25 MPH.

### ***3.2 Traffic Control***

The intersections of Main Street and High Street, Main Street and 3<sup>rd</sup> Street, and Main Street/Columbia Avenue and E Huron River Drive/South Street are under signal control. None of these intersections have left turn phasing or detection present. All other intersections on Main Street have the side streets (1<sup>st</sup> Street, 2<sup>nd</sup> Street, 4<sup>th</sup> Street, Roys Street, and 5<sup>th</sup> Street) under stop control.

### ***3.3 Road User Characteristics***

The primary travel modes through the corridor are passenger and commercial vehicles. Secondary travel modes include walking and cycling that utilize the sidewalks throughout the corridor. This includes crosswalks at the signalized intersections and mid-block crosswalks as well.

### ***3.4 Collision Analysis***

A crash analysis was reviewed by OHM Advisors for Main Street from High Street to Columbia Avenue for a five-year period ranging from January 1, 2019, through December 31, 2023.

During the 5-year analysis period, there were 166 crashes, which represents a crash frequency of 60.4 crashes per mile per year. Factoring in the ADT for the corridor, the crash rate is 1,285.8 crashes per hundred million vehicle miles of travel. Of the crashes, 35% are rear-end collisions (58 total), 16% of the crashes involve an angle collision (27 total), 16% are sideswipe collisions (26 total), and 5% are head-on collisions (8 total). The remainder of the crashes were from fixed object, single or multiple vehicle collisions, backing or other collisions. Animal crashes were excluded from this analysis. During this time frame, there were no crashes which resulted in a fatality and 5 crashes which resulted in Type-A injuries. There were 30 injury crashes in total.



#### 4.0 POSITIVES

During the field visit, the RSA team looked for positive aspects of safety along the corridor. During the post field review discussions, the team documented these positives. The team agreed that the following items should continue to be implemented and incorporated into future designs (as applicable).

- Sidewalk Conditions – sidewalks were found to be in generally good condition.



- Ramp Conditions – the ramps were found to be ADA compliant and generally in good condition.



- Corridor Lighting – ample lighting was observed along the corridor from streetlights and businesses.



- Pavement Condition and Maintenance – pavement is generally in good condition and has been well maintained.





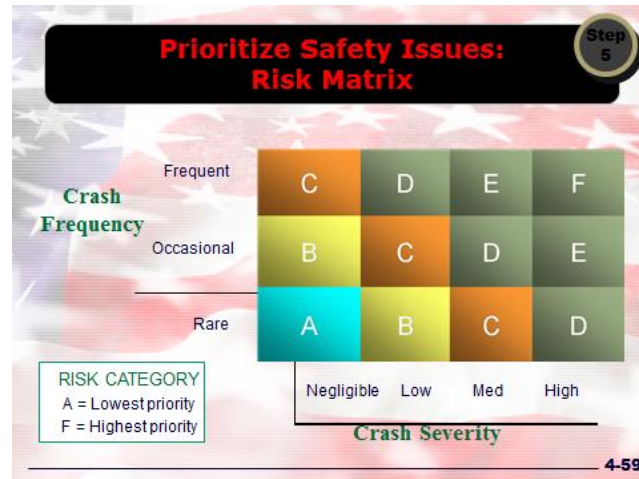
- Plan for Activities – evidence shows that the streets are well maintained and organized for city events.





## 5.0 AUDIT FINDINGS AND SUGGESTIONS

The issues identified by the RSA team were prioritized using the Prioritize Safety Issues: Risk Matrix provided by FHWA. For each of the safety issues, the team developed potential mitigation measures for review by SEMCOG. The safety issues were prioritized based on observed and perceived crash frequency and the anticipated and observed severity of crashes resulting from each safety issue. As a result, each safety issue was prioritized on the basis of ranking between A (lowest risk and lowest priority) to F (highest risk and highest priority). A table identifying the ranking system is shown in Figure 2 below.



**Figure 2: Prioritize Safety Issues: Risk Matrix**

The safety deficiencies discovered during the RSA were categorized into seven primary categories, with an additional category for “Other Items Considered”. A discussion of each of the sub-components which comprise these groups follows.

### **5.1 Crash Potential #1 (Risk Category F) – 5 Point Intersection**

#### Observations:

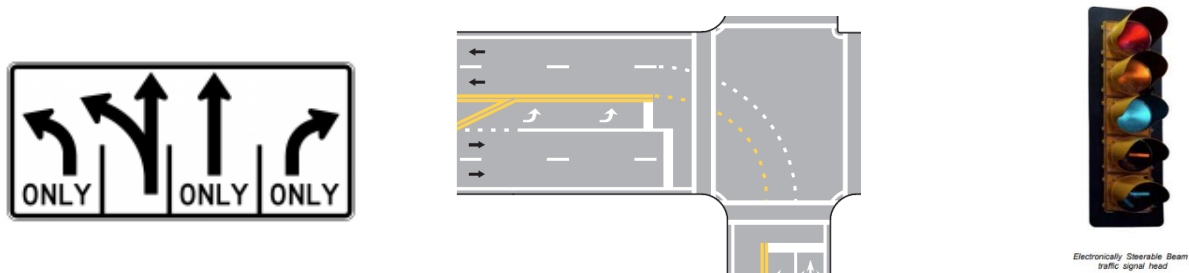
- The existing lane configuration is confusing to drivers due to the lack of signs or markings.
- There is an unconventional signal head configuration and phasing at this intersection that causes many red-light running incidents.
- The visibility of the signals for some approaches is poor due to signal head placement on the diagonal spans.



## Suggested Improvements:

### Sort term:

Lane arrows and guideline pavement markings can help mitigate the drivers to know where they are supposed to be going for their next movement. Lane designation signing can also help mitigate the issues at the intersection with allowing signage to illustrate where certain directions of traffic will be going. The intersection can also benefit from a modernize signal to box span with programmable lenses and countdown pedestrian signals. The programmable lenses will cause drivers to only view the signal once they are at/approaching the signal. This allows drivers to not misinterpret the signals ahead of them and minimize red light running.



A long-term improvement would be to install a single lane roundabout in place of this complicated intersection. A roundabout will help lower crash severity along with providing better safety to pedestrians. The proposed roundabout will allow for bigger vehicles like trucks and school buses to easily pass through. The proposed roundabout will also be able to accommodate snowplows/trucks during winter months or when harsh weather conditions are experienced. A similar shaped roundabout was recently built in Michigan at S Dearing Rd and McClain Road in Jackson County, Michigan. Another example is at Golden Hill Rd and Union Rd in Paso Robles, California.

### Belleville 5 Points:

Main St, South St, Hudson River Dr,  
East Columbia Ave and West Columbia Ave.



### Roundabout Concept:

- \* Single lane approaches / departures
- \* Inscribe circles ~100' dia.
- \* Circulating road lane width ~15'
- \* Approach /departure lane width 12' flare to ~ 14'

Approximate Scale  
100'-0"

Prepared for Belleville Main St Road Safety Audit  
By OHM Advisors

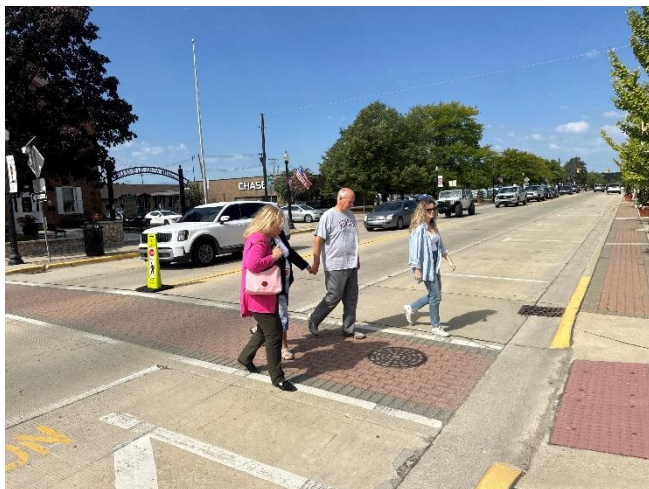
Sept. 11, 2024



## 5.2 Crash Potential #2 (Risk Category E) – Pedestrian Facilities

### Observations:

- Some pedestrian signals throughout the corridor were non-functional and not providing any direction to pedestrians trying to cross the street.
- Most of the pedestrian signals did not have countdown indication or pedestrian detection.
- The signs placed in the crosswalk (R1-6) did not have the correct sign legend, there is not a State Law in Michigan stating to stop for pedestrians within crosswalk. The sign should say yield, or if a local ordinance is in place the legend should say LOCAL LAW.
- The pedestrian ramps did not line up correctly when crossing South Street at E. Columbia Ave.





#### Suggested Improvements:

- Add table-top (aka speed hump) pedestrian crossings at existing mid-block pedestrian crossings within the corridor to allow safer passage for pedestrians across the roadway by slowing down vehicles. (4<sup>th</sup> Street)
- Add curb extensions within the corridor to help with providing a shorter crossing distance for pedestrians (2<sup>nd</sup> Street, 3<sup>rd</sup> Street)
- Install RRFB at mid-block crosswalks to provide better visibility of pedestrians to drivers.
- Install pushbuttons at signalized intersections with crosswalks.



### 5.3 Crash Potential #3 (Risk Category E) – Traffic Signals

#### Observations:

- The existing spans are diagonal spans for all intersection in the corridor.
- There are some signal heads that utilizing eight-inch lenses.
- The traffic signals do not have great visibility and are lacking backplates.
- The pedestrian signals are not countdown pedestrian signals.



#### Suggested Improvements:

- Install box span signals with backplates to increase the visibility of the signals to drivers.
- Install countdown pedestrian signals so pedestrians know how much time they have to cross.





#### 5.4 Crash Potential #4 (Risk Category D) – Speeds

##### Observations:

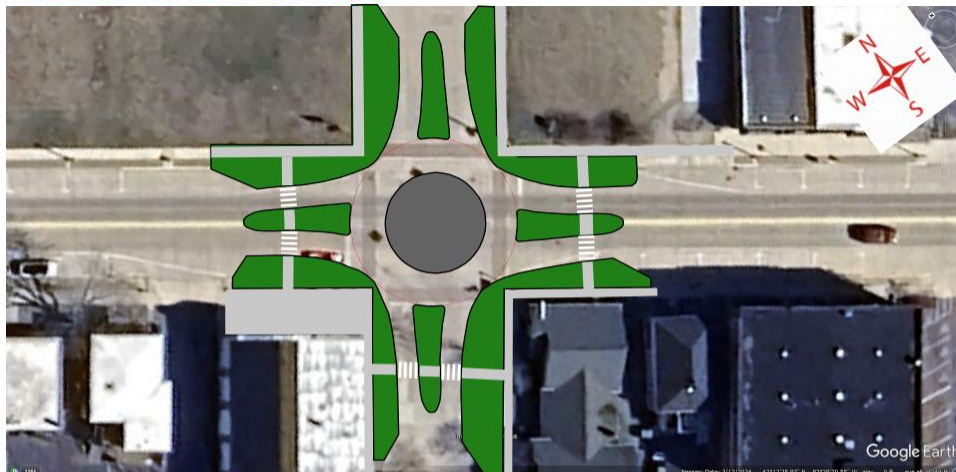
- Drivers “race to merge” on the roadway causing increased speeds.
- Police officer reports speeding issues on north end and throughout downtown area.



##### Suggested Improvements:

- Install speed limit signs after each cross street and ensure that current signs are visible.
- Install a mini-roundabout or mini-circle at 3<sup>rd</sup> Street and Main Street as a traffic calming device.

##### Belleville Main St at 3rd St



##### Roundabout Concept:

- \* Single lane approaches / departures
- \* Inscribe circles ~70' dia.
- \* Circulating road lane width ~14'
- \* Approach /departure lane width 11' flare to ~ 13'

Prepared for Belleville Main St Road Safety Audit  
By OHM Advisors

Sept. 12, 2024

## 5.5 Crash Potential #5 (Risk Category D) – Signing

### Observations:

- Some signs have outdated designs (pedestrian crossing warning) and are very old with poor retroreflectivity.
- There is a lack of lane designation and speed limit signs within the corridor.
- Signs on the corridor are mounted too low for pedestrians.
- There are signs sharing post with stop signs that are not permitted per the MUTCD.



### Suggested Improvements:

- Upgrade signs throughout the corridor for proper messaging, sizes, placement, and retroreflectivity.
- Install lane designation and turn prohibition signing.



## **5.6 Crash Potential #6 (Risk Category C) – Pavement Markings**

### Observations:

- Existing transverse and special markings are faded and not visible to drivers.
- Lane designation arrows are missing on existing roadway. These lane use markings along with proper signing help drivers to know which lanes they should be in.



### Suggested Improvements:

- Refresh pavement markings with durable markings.
- Add lane designation arrows onto roadway.

### ***5.7 Other Items Considered***

There was one other item discussed following the field reviews which did not neatly fit into any of the seven highlighted crash potentials. This item is summarized next.

#### **Advance Lane Drop**

Observations:

- Main Street before Denton Road is missing signage to illustrate a dropped lane at Denton Road.



Suggested Improvements:

- Install advance lane drop signage north of Denton Road.

## **6.0 ESTIMATED COSTS OF IMPROVEMENTS**

Individual suggested improvements are listed below with estimated costs for each item.

### **Crash Potential #1 – 5-Point Intersection**

- Short term: Modernize signal with programmable lenses  
Cost: \$350,000
- Short term: Pavement markings and signing improvements  
Cost: \$15,000
- Long term: Reconstruct intersection as a roundabout  
Cost: \$2,500,000-\$3,000,000

### **Crash Potential #2 – Pedestrian Facilities**

- Tabletop pedestrian crossing  
Cost: \$10,000
- Curb Extensions  
Cost: \$5,000-10,000
- Add pushbuttons and countdown pedestrian signals  
Cost: Included in signal modernization

### **Crash Potential #3 –Traffic Signals**

- Modernize signals with backplates and pedestrian facilities  
Cost: Cost: \$250,00-350,000 per intersection

### **Crash Potential #4 – Speeds**

- Additional speed limit signs  
Cost: \$500 per sign
- Mini Roundabout at 3<sup>rd</sup> Street  
Cost: \$500,000

### **Crash Potential #5 – Signs**

- Corridor Sign upgrade  
Cost: \$15,000

### **Crash Potential #6 – Pavement Markings**

- Refresh pavement markings throughout corridor  
Cost: Cost: \$15,000

## **7.0 CONCLUSION**

This audit has been prepared to assist the responsible road authorities in the identification and actualization of opportunities to improve safety within the study area. The audit is based on observations to improve safety within the study area through observations made between September 9<sup>th</sup>, 2024 and September 11<sup>th</sup>, 2024 and with information available at the time of the safety review. This RSA has been performed in accordance with the FHWA guidelines and policies. The suggestions it contains are for consideration only and are in no way intended to serve as design or operational recommendations.

This report does not preclude the identification of additional issues pertaining to safety by the responsible road authorities, or the emergence of new issues over time.

It is recommended that the responsible agencies review this report; document their responses to the issues identified in a formal response report; and track their progress towards the implementation of safety improvements prompted by this audit.