LEGISTAR: 260138

April 14, 2026

TO: Public Works & Environmental Concerns Committee and
Public Safety & Transportation Committee

THROUGH: Carl Goldsmith, Director of Public Works

FROM: Dan Watson, P.E., Civil Engineer II

SUBJECT: **Westmore-Meyers Safety Enhancement Project – Preliminary Engineering Presentation**

Background

The Westmore-Meyers Safety Enhancement project is included within the approved 2026-2035 Capital Improvement Plan (CIP). The project budget includes $300,000 for design engineering in 2025/2026 and $3,000,000 for construction in 2028. The Village contracted Civiltech Engineering Inc. to perform preliminary engineering and advanced traffic simulation in May 2025. The purpose of this meeting is for Civiltech Engineering Inc. to present their findings and for the committees to recommend the desired alternative prior to requesting proposals for the next stage of engineering.

Westmore-Meyers Road is primarily a 4-lane roadway, which widens to a 5-lane cross section at some of the signalized intersections. The preliminary engineering portion of this project focused on the analysis of lane configuration alternatives along the corridor to increase safety. The primary safety consideration being investigated is the addition of a two-way left-tun lane (TWLTL). The creation of this will shift left-turning vehicles out of the through lanes and reduce the propensity for rear-end, sideswipe, and turning collisions throughout the corridor.

A roadway reconfiguration for the Westmore-Meyers corridor has been recommended to the Village in three previous studies. The 2016 Lombard Bicycle and Pedestrian Plan prepared by ALTA and ATA, the 2018 Westmore-Meyers Safety and Pedestrian/Bicycle Improvement Study prepared by CBBEL, and the 2023 Westmore-Meyers Road at Washington Boulevard Traffic Safety Evaluation prepared by KLOA.

Preliminary Engineering Findings

The Westmore-Meyers corridor, specifically between Jackson Street and St. Charles Road, is experiencing a higher level of injury crashes per year than predicted based on a traffic safety analysis performed using the Highway Safety Software. The analysis found that this segment of

Westmore-Meyers Road should be experiencing 19 injury crashes per year but based on 2020-2024 crash data this segment experienced 27 injury crashes per year.

The primary cause of accidents is the lack of exclusive left-turn lanes on Westmore-Meyers Road at intersections and at residential and business driveways. This configuration leads to angle crashes, rear ends, and sideswipes. This segment of Westmore-Meyers is experiencing more injury crashes than anticipated due to the higher speed difference between stopped cars waiting to turn and approaching vehicles, both from behind and the opposite direction, and confusion about the operation of the Rectangular Rapid Flashing Beacon at the Prairie Path crossing.

The study found that a roadway reconfiguration from four undivided lanes to two lanes with continuous left turn lane and bicycle lanes as the solution that addresses all crash types that occur along the corridor and has the potential to reduce injury crashes by 42%, or 11 to 12 fewer per year. These findings are consistent with the recommendations from the 2018 and 2023 safety evaluations.

Recommendation

Staff recommends pursuing a roadway reconfiguration from four undivided lanes to two lanes with continuous left turn lane and bicycle lanes to address the safety concerns within the Jackson Street to St. Charles Road section of Westmore-Meyers Road. The next phase of Design Engineering would occur in 2026 with construction of improvements anticipated in 2028.

Civiltech Engineering, Inc.
www.civiltechinc.com

Westmore-Meyers Road Safety Enhancement Study

Roosevelt Road to St. Charles Road

April 14, 2026

Study Team

Mike Folkening, P.E., PTOE
Project Manager and Primary Contact

Brian DeSalle, P.E., PTOE
Project Manager

Louis Pukelis, P.E.
Traffic Engineer

Anmol Shrivastava, P.E., PTOE, RSP2I
Traffic Safety Engineer

Study Location

Westmore-Meyers Road

- **Area of Study**
  Roosevelt Road to St. Charles Road
- **Enhancement Focus Area**
  Jackson Street to St. Charles Road

Study Purposes

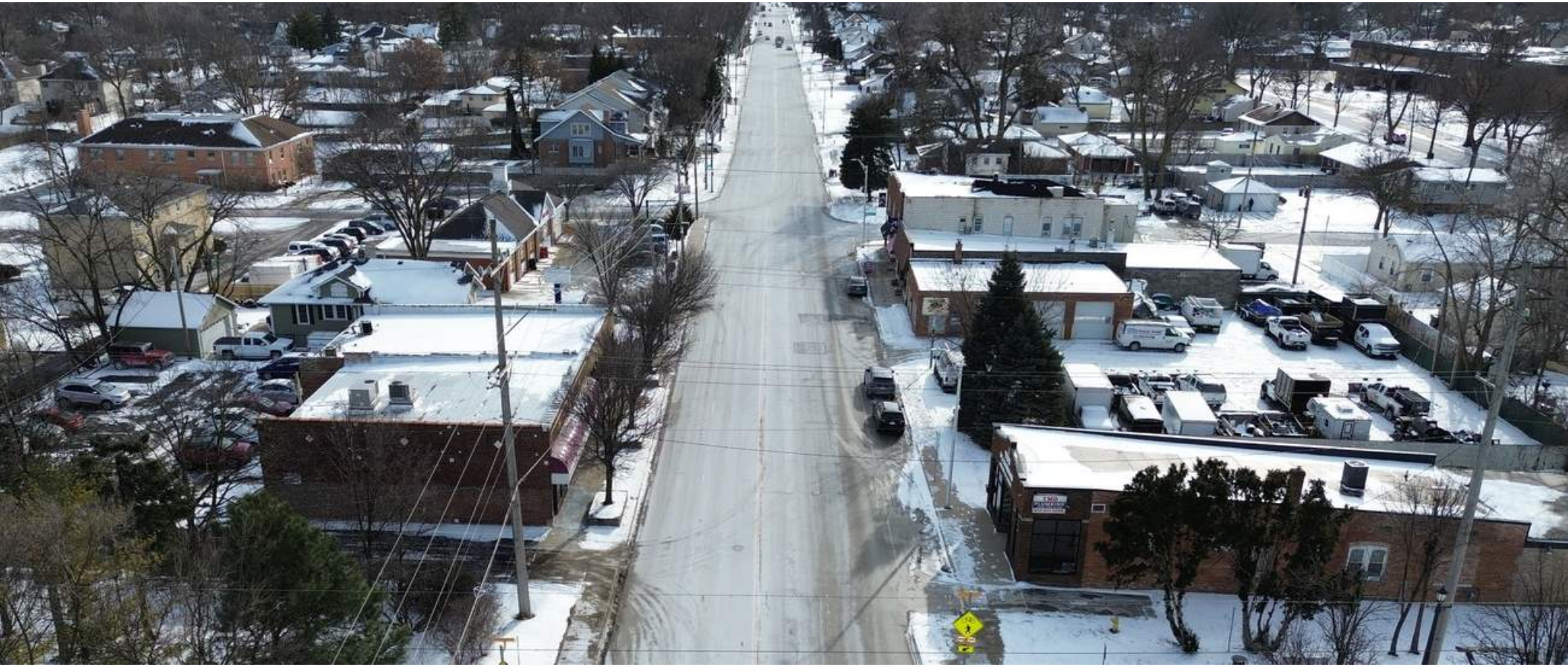
Current Study

- Evaluate Safety Along Westmore-Meyers Road
- Determine Potential Safety Enhancements Along Corridor

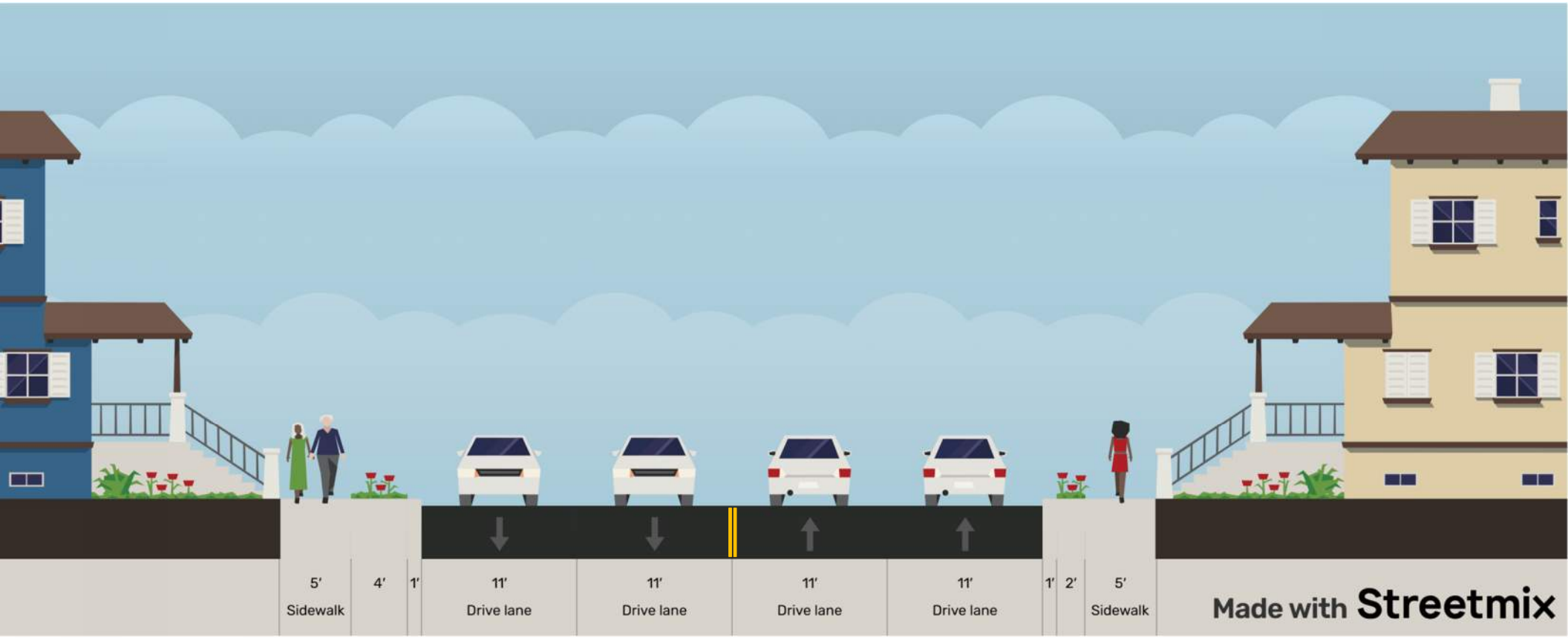
Previous Studies

- **2016 Lombard Bicycle and Pedestrian Plan (ALTA and ATA)**
  - Recommended Roadway Reconfiguration and Buffered Bicycle Lanes on Westmore-Meyers Road from Roosevelt Road to St. Charles Road
- **2018 Westmore-Meyers Safety and Pedestrian/Bicycle Improvement Study (CBBEL)**
  - Recommended Roadway Reconfiguration and Buffered Bicycle Lanes on Westmore-Meyers Road from Madison Street to St. Charles Road
- **2023 Westmore-Meyers Road at Washington Boulevard Traffic Safety Evaluation (KLOA)**
  - Recommended Roadway Reconfiguration with Continuous Left Turn Lanes from North of Jackson Street to St. Charles Road

Existing Conditions



Existing Roadway Characteristics



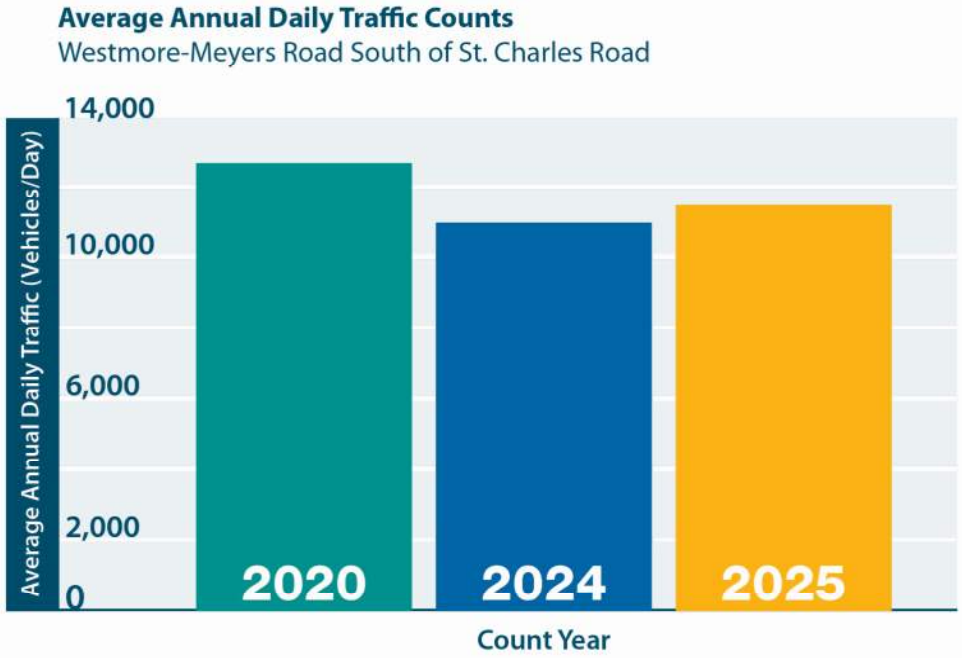
Traffic Volumes

Vehicle Volumes

- Volumes have been stable since 2020.
- Volume increases north to south from just below 12,000 south of St. Charles Road up to about 16,000 vehicles/day at Roosevelt Road.

Pedestrian and Bicycle Volumes

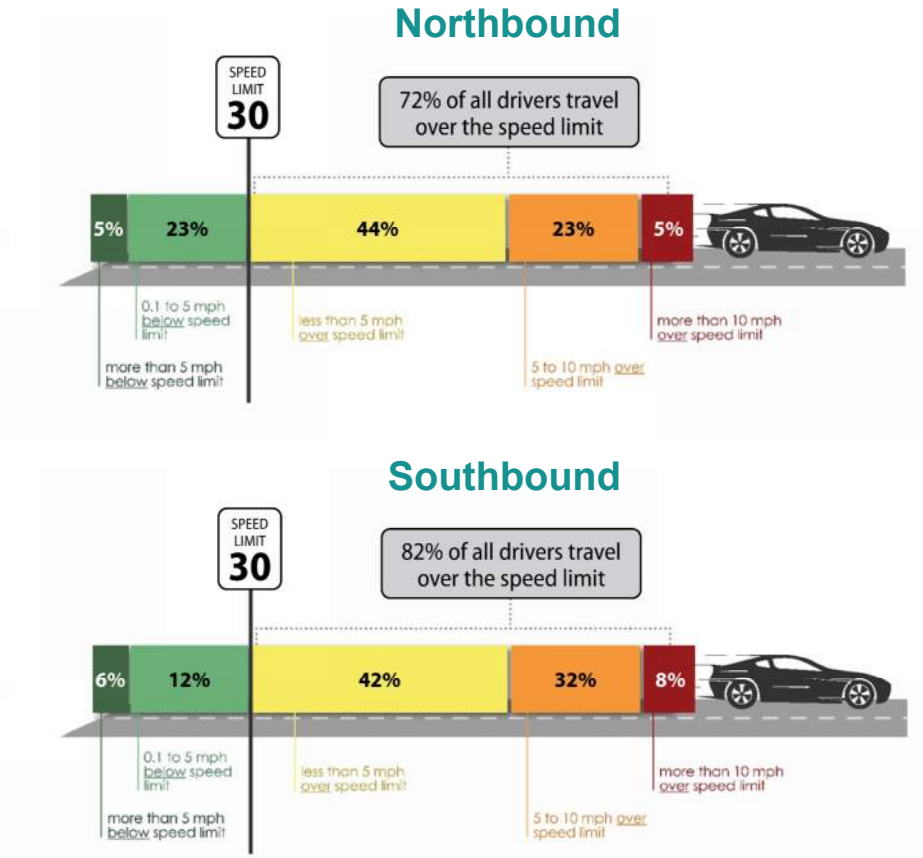
- Illinois Prairie Path had nearly 800 users crossing Westmore-Meyers Road on a typical weekday (September 2025)
- 35 to 45 crossings during vehicle peak hours
- Peak trail crossings occurred between 3:15 and 4:15 P.M., with 78.



Traffic Speeds

Radar Speed Data

- Data collected on four typical weekdays during the school year
- Data collected on midblock locations
- 85th percentile speed on average 36-37 mph.
- 6.5% of all drivers exceeded the posted speed by more than 10 mph.



Traffic Safety – Crash Types

Note:

- Crashes are classified as a single event, regardless of how many cars are involved and how many injuries occur. Crashes are classified by the highest injury level within each event.
- A three-car crash with one A-Injury and two C-Injuries is classified as a **single** A-injury crash.

Fatal
- One or more persons killed

A-Injury
- Person is Incapacitated
- Severe Cuts, Head Injuries, Broken Bones

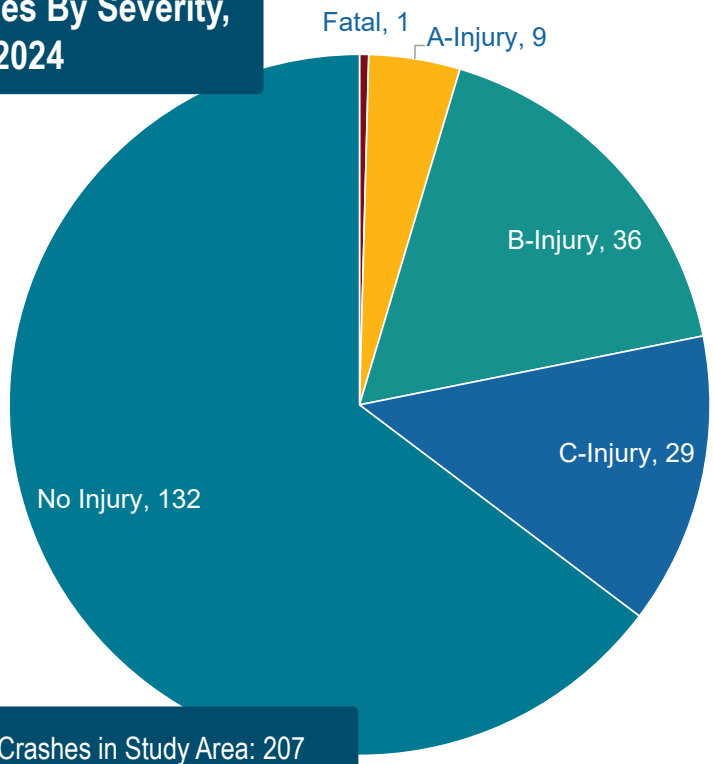
B-Injury
- Injury is Apparent to First Responders
- Bruises, Small Cuts

C-Injury
- Not Apparent to First Responders
- Aches, Pains

No Injury
- $1,000 Minimum in Property Damage

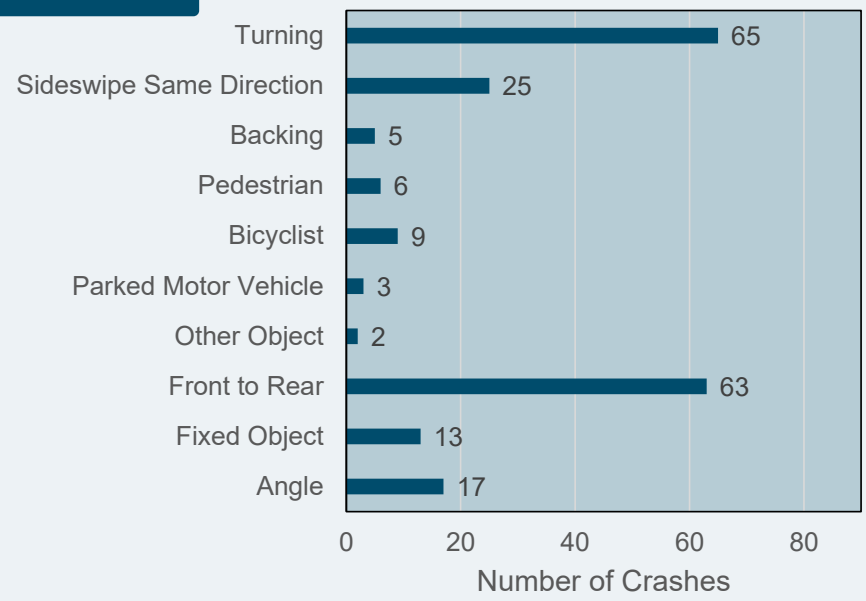
Traffic Safety

Crashes By Severity, 2020-2024



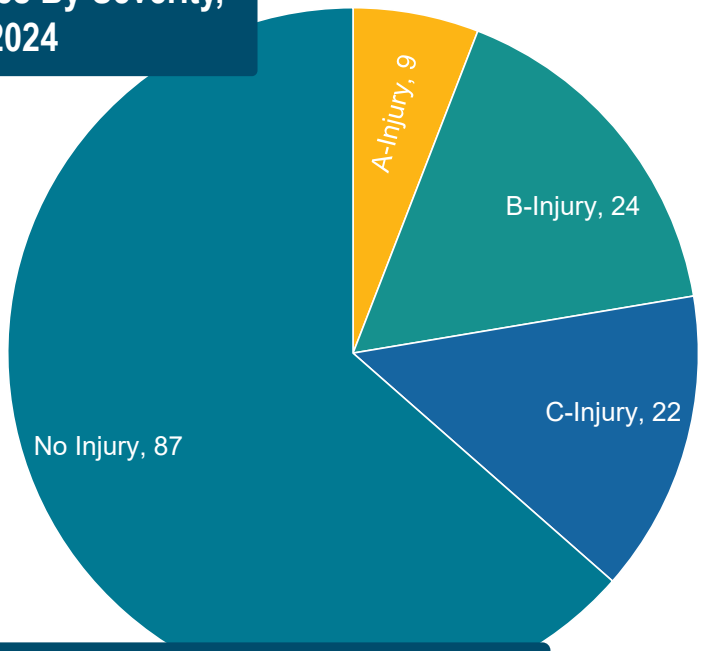
Total Crashes in Study Area: 207
(Roosevelt Road to St. Charles Road)

Crashes By Type, 2020-2024



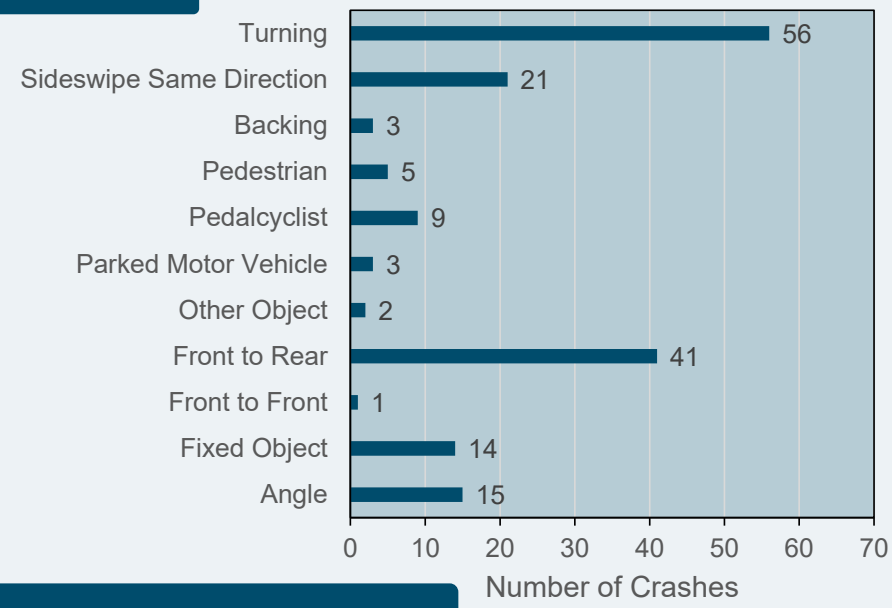
Traffic Safety – Jackson Street to St. Charles Road

Crashes By Severity, 2020-2024



Section Includes:
- 69% of Study Area Crashes (142 of 207)
- 73% of Study Area Injury Crashes (55 of 75)

Crashes By Type, 2020-2024



Section Includes:
- 72% of Study Area Turning and Angle Crashes
- 80% of Study Area Sideswipe Crashes
- 80% of Study Area Pedestrian/Bicyclist Crashes

Traffic Safety – Crashes by Location

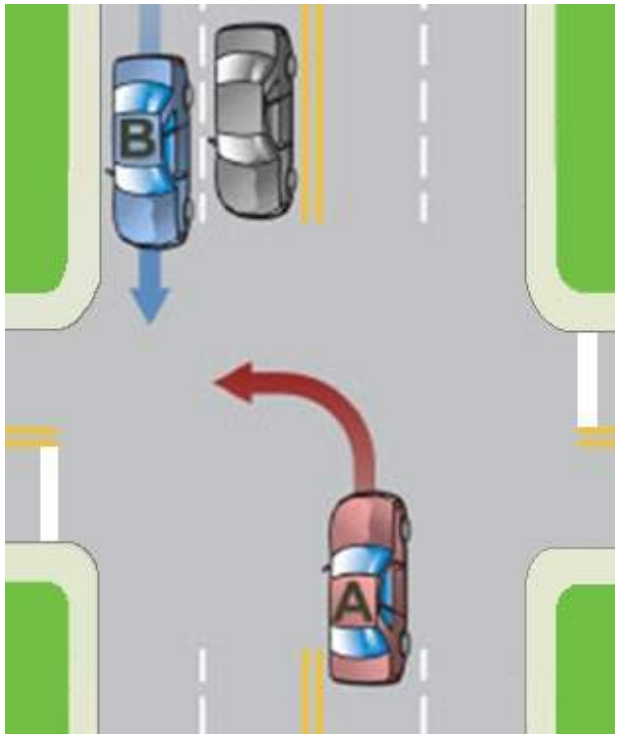
All Crashes, 2020-2024

Injury Crashes, 2020-2024

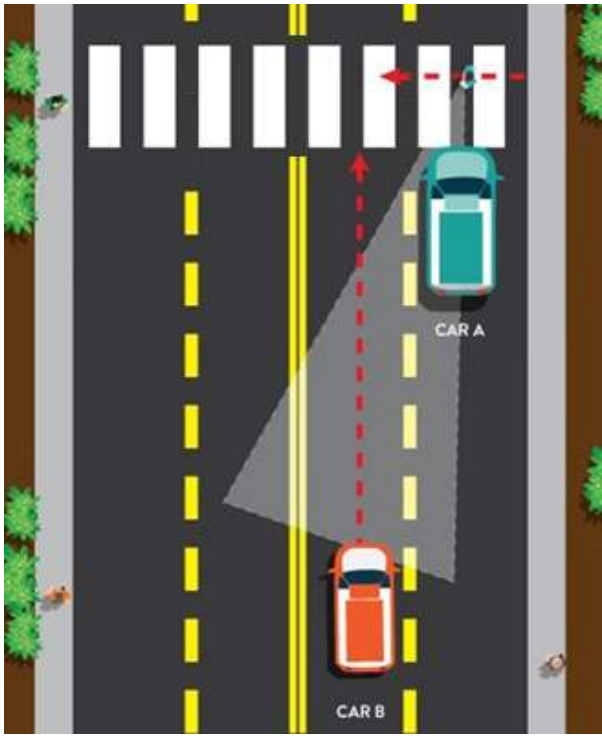
Traffic Safety – Jackson Street to St. Charles Road

"Multiple-Threat" Crashes

- Crashes that typically occur due to poor lines of sight for roadway users making a maneuver to or from a multi-lane roadway.
- Example 1: Car A attempts to turn left from an undivided four-lane roadway. Nearest opposing driver stops to allow the movement, but Car A cannot see that Car B is not stopping (and Car B cannot see Car A start its turn).
- Example 2: Near lane slows and stops to allow a pedestrian to cross at an unsignalized crosswalk. Car B cannot see the pedestrian due to Car A blocking their view, and the pedestrian cannot see Car B approaching due to Car A.



Example 1



Example 2

Traffic Safety Analysis

Highway Safety Software (HSS)

- Software Tool that Quantifies Roadway Safety Using Industry-Standard Methodologies
- Forecasts Safety Performance Based on Roadway Characteristics
  - Based on State and National Historic Crash Data
- Quantifies Potential Safety Benefits
  - Compares Baseline against Proposed Alternatives to forecast a percentage reduction in predicted fatalities and injuries.

Traffic Safety Analysis

Findings:

- The segment between Jackson and St. Charles **should** be experiencing 19 injury crashes per year.
- Based on the historical crash data from 2020-2024, the segment is **likely** to experience 27 crashes per year.
- Indicates that this segment of Westmore-Meyers Road has an overrepresentation of injury crashes.

Why is this segment experiencing more injury crashes than others?

- Higher speed differences between stopped cars waiting to turn and approaching vehicles (both from behind and opposite direction).
- Confusion about the operation of the Rectangular Rapid Flashing Beacon (RRFB) at the Prairie Path crossing leads to more bicycle/pedestrian crashes at that location.

Existing Conditions HSS Analysis

Jackson Street to St. Charles Road

Predicted crashes are estimated based on historic data for all roadway segments of the same type as the analysis segment.**What would be **normal** for this type of roadway**

Expected crashes are the anticipated number of crashes for the analysis segment based on actual crash data for that segment. **What has **actually** happened on this roadway"*

Existing Conditions – Key Findings

- **Stable Traffic Volumes**
- **Poor Compliance with 30 mph Posted Speed**
  - Less than 30% of Drivers Obey Speed Limit
  - 85th Percentile Speed = 36-37 mph
- **Majority of Crashes Occur in Section North of Jackson Street**
  - 69% of all Crashes
  - 72% of all Injury Crashes
  - 80% of Bicycle and Pedestrian Crashes
  - Majority of Crashes are Turning Crashes
    - "Multiple Threat" Crashes
    - Lack of Dedicated Left Turn Lanes
- **Crashes Occur More Frequently than Typical for Roadway Type**
  - 42% More Injury Crashes (8 per year)
  - Speed differences; Pedestrian beacon misunderstanding among causes.

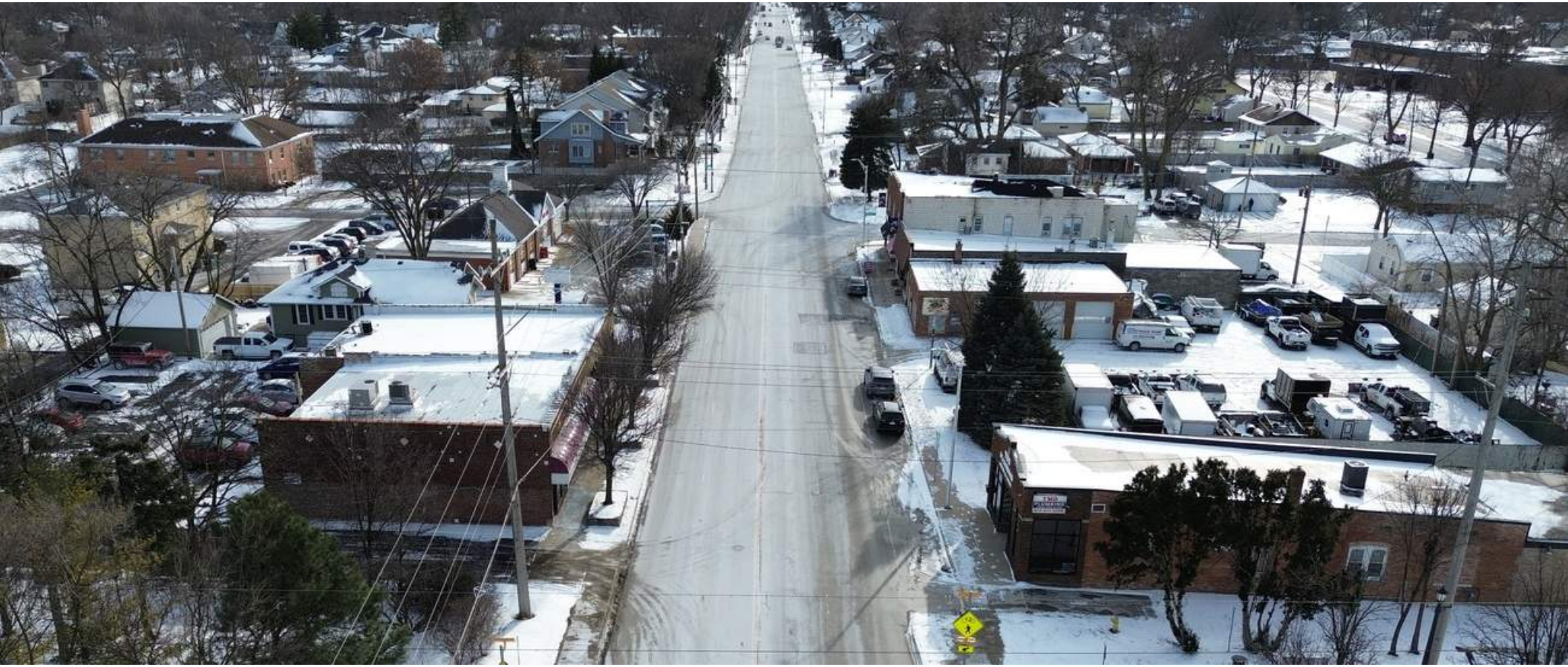
Westmore-Meyers Road at Jackson Street

Potential Solutions

Crash Type \ Treatment	Left Turn Lanes at Signals	Protected Left Turn Phasing	Continuous Left Turn Lanes	Roadway Reconfiguration	Narrow Travel Lane Widths	Bicycle Lanes	Pedestrian Refuge Islands	Pedestrian Hybrid Beacons	Leading Pedestrian Intervals at Signals
Turning	X	X	X	X					
Rear End	X		X	X					
Sideswipe Same Direction	X			X					
Right Angle	X	X	X	X					
Fixed Object				X	X				
Pedestrian				X	X		X	X	X
Bicyclist				X	X	X		X	

- There are several tools available that can address the safety concerns within the corridor.
- A cross-cutting solution that incorporates several of these features would be to reconfigure the roadway geometry, as shown in the chart on the left.

Proposed Enhancements

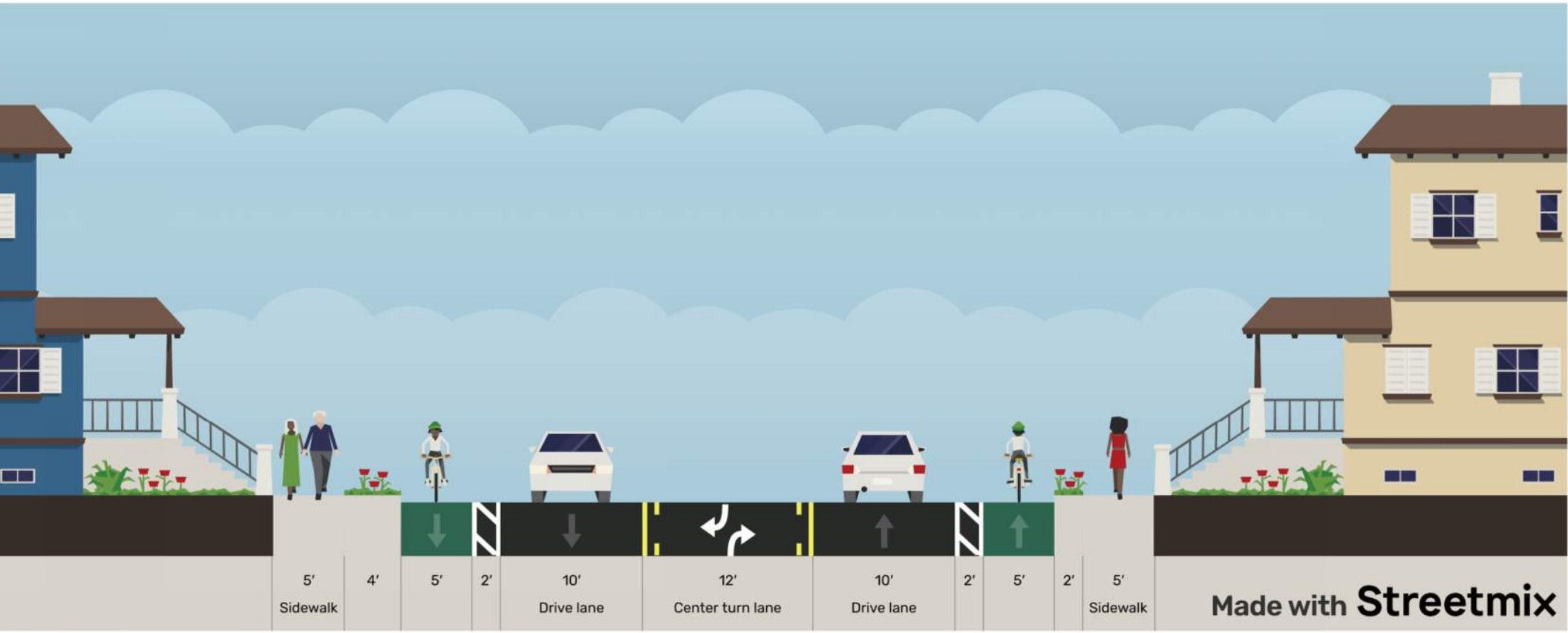


Safety Enhancements Recommended

Location	Enhancement	Benefit	Crashes Addressed
All Roadway Segments and Unsignalized Intersections	• Roadway Reconfiguration • Continuous Left Turn Lane • Bike Lanes	• Reduce "Multiple-Threat" Crash Risk • Improve Pedestrian/Bicyclist Visibility • Move Turning Vehicles from Through Lanes • Reduce Speeds	• Turning • Angle • Pedestrian/Bicyclist • Rear End • Sideswipe Same Direction
Signalized Intersections*	• Roadway Reconfiguration • Left Turn Lanes • Left Turn Signal Phasing Crosswalk Reconfiguration	• Reduce "Multiple-Threat" Crash Risk • Improve Pedestrian/Bicyclist Visibility • Move Turning Vehicles from Through Lanes • Reduce Speeds	• Turning • Angle • Pedestrian/Bicyclist • Rear End • Sideswipe Same Direction
Prairie Path Crossing	• Roadway Reconfiguration • Refuge Island • Pedestrian Hybrid Beacon (PHB)	• Reduce "Multiple-Threat" Crash Risk • Improve Pedestrian/Bicyclist Visibility • Reduce Speeds	• Pedestrian • Bicyclist • Rear End

***Leading Pedestrian Intervals (LPIs)** at signals with high pedestrian volumes or crash history should be investigated after implementation of the roadway reconfiguration if pedestrian crashes continue to occur. LPIs provide a few seconds of pedestrian walking time where no vehicles are moving before each through vehicle green phase to allow pedestrians to begin crossing the intersection, which increases their visibility to motorists, especially right-turning vehicles.

Enhancement Concept – Jackson Street to St. Charles Road



Note: Dimensions shown are conceptual; final dimensions will be determined during design.

Roadway Reconfigurations in Local Communities

Main Street in Downers Grove

- Franklin Street to Downers Grove North High School
  - Originally four lane undivided roadway
  - 14,000 vehicles per day
  - Reconfigured to two lanes with a continuous left turn lane
  - Completed in 2024
  - Reconfiguration identical to the proposed concept for Westmore-Meyers Road.

Roadway Reconfigurations in Local Communities

Madison Street in Oak Park

- Harlem Avenue to Austin Boulevard
  - Originally four lanes with landscaped medians and on-street parallel parking
  - 19,100 vehicles per day
  - Reconfigured to two lanes with continuous left turn lane, parallel parking, bike lanes, and pedestrian refuge islands
  - Completed in 2019

Pedestrian Crossing Beacon Treatments

Rapid Rectangular Flashing Beacon (RRFB)

- Combines a pedestrian warning sign with user-activated light-emitting diodes (LEDs). The device flashes amber when activated through pedestrian detection (usually a pushbutton) and then remains dark when not in use.

Pedestrian Hybrid Beacon (PHB)

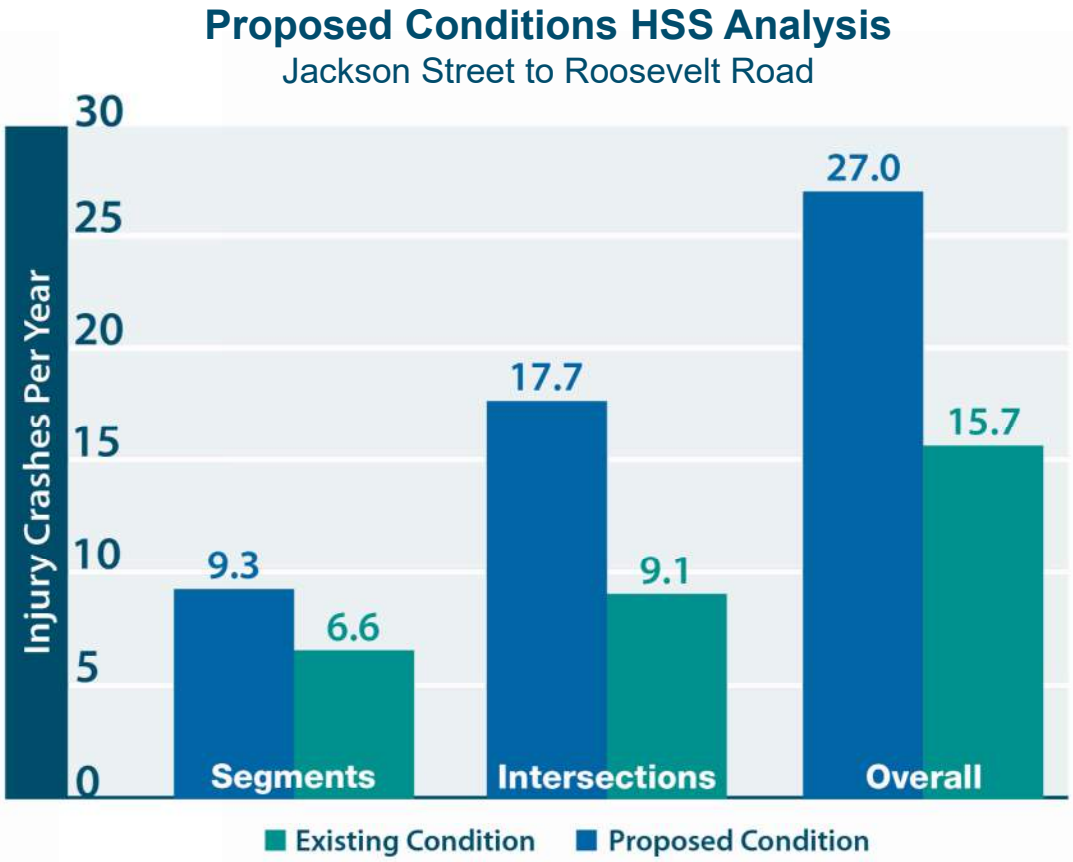
- Designed to help pedestrians safely cross higher-speed roadways at midblock crossings and uncontrolled intersections.
- Consists of two red lenses above a single yellow lens. The lenses remain “dark” until a pushbutton activation, initiating a yellow to red lighting sequence of flashing and steady lights that direct motorists to slow and come to a stop, providing the right-of-way to the pedestrian to safely cross the roadway.

Illinois Prairie Path – Pedestrian Hybrid Beacon

Despite the installation of a Rapid Rectangular Flashing Beacon in 2018, there continues to be pedestrian and bicyclist crashes at the Prairie Path crossing, with six occurring between 2020 and 2024. Drivers and pedestrians alike seem to experience confusion about the signal.

With the roadway reconfigured to a three-lane section, a Pedestrian Hybrid Beacon and refuge island can be installed, providing clearer instructions to drivers and added protection for pedestrians and bicyclists.

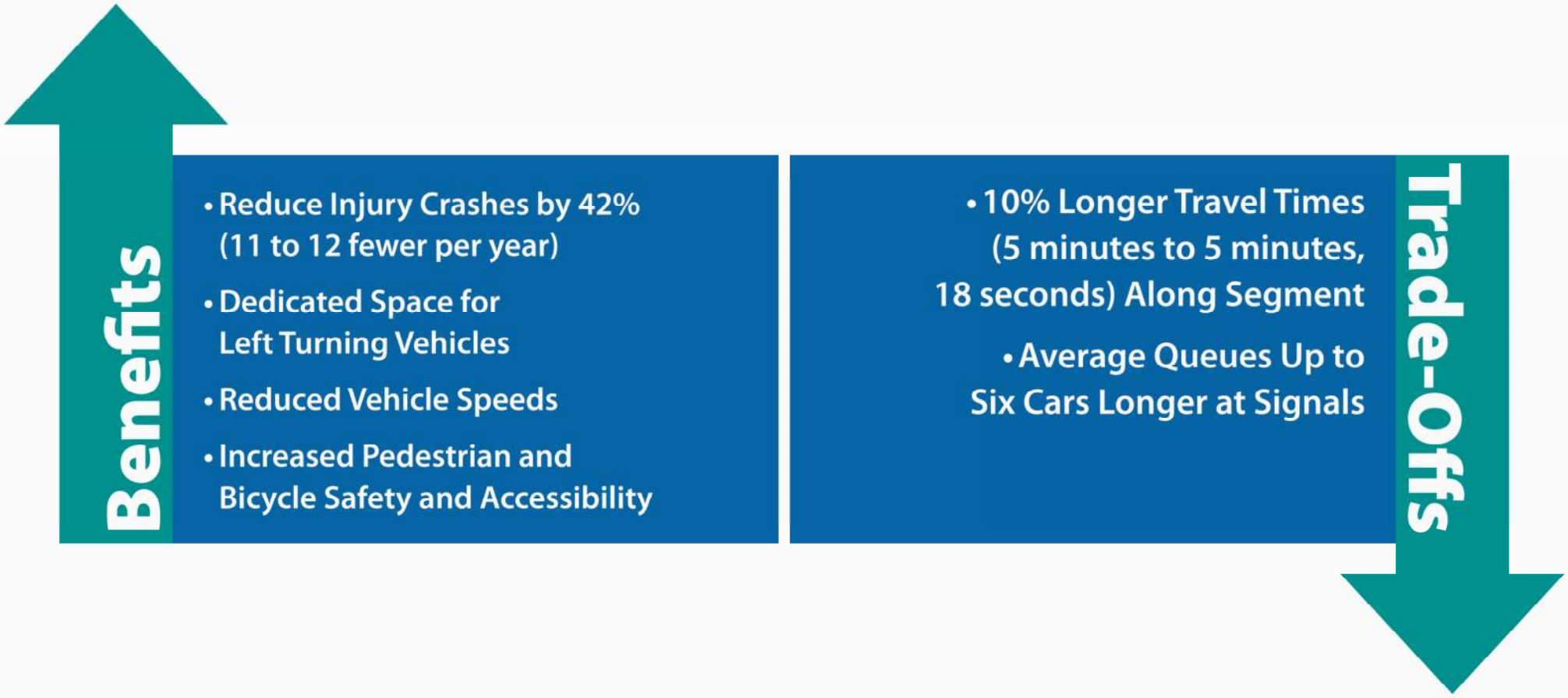
Enhancement Concept Safety Benefits



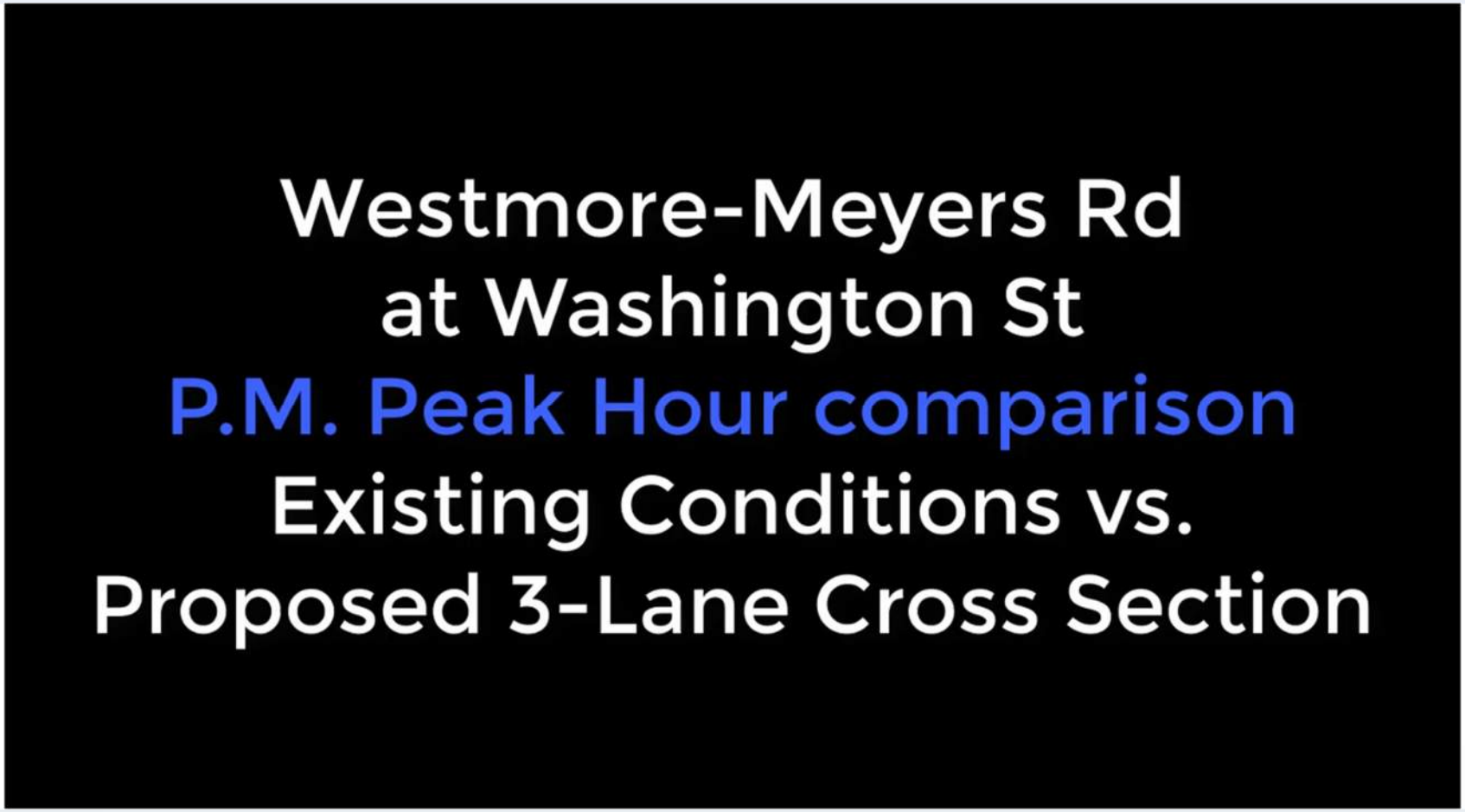
Anticipated Safety Benefits of Proposed Enhancements

- 29% Reduction in Segment Injury Crashes
- 49% Reduction in Intersection Injury Crashes
- 42% Reduction in Overall Injury Crashes

Enhancement Concept Benefits and Trade-Offs

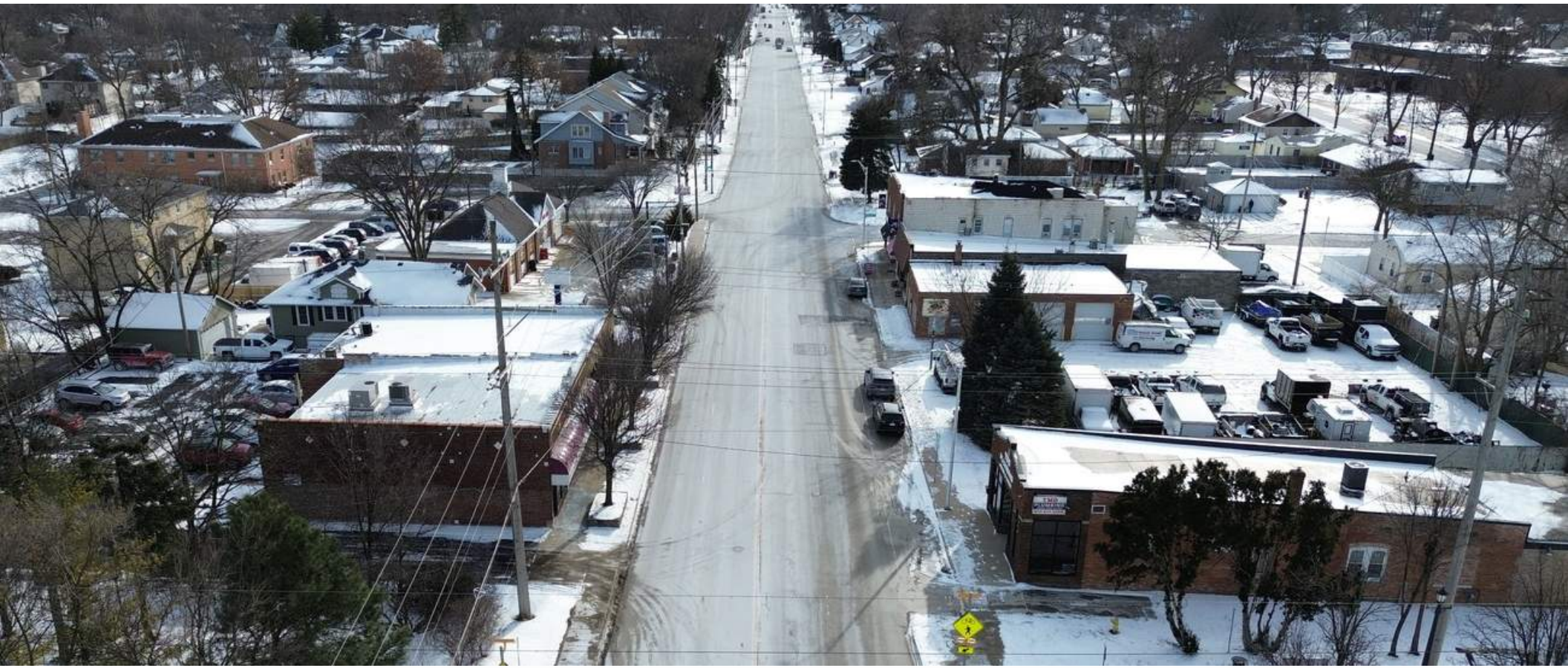


Traffic Simulation – Existing and Proposed Conditions



Traffic Simulation – Unsignalized Left Turn Operations

Recommendations and Conclusions



Recommendations and Conclusions

Based on the existing data and analyses, there is a need for safety improvements on Westmore-Meyers Road, particularly in the section between Jackson Street and St. Charles Road. Injury crashes occur in this segment at a higher frequency than would be considered typical for the roadway design.

A roadway reconfiguration from four undivided lanes to two lanes with a continuous left turn lane and bicycle lanes is recommended to address the safety concerns within the Jackson Street to St. Charles Road section of Westmore-Meyers Road.

It is anticipated that the reconfiguration will decrease the occurrence of injury crashes by an average of 42% (11 to 12 fewer crashes per year) within the corridor, while impacts to traffic operations will be negligible.

It is also recommended to upgrade the existing Rectangular Rapid Flashing Beacon at the Prairie Path crossing with a Pedestrian Hybrid Beacon to strengthen the pedestrian and bicyclist protection at the crossing. A median refuge island should be installed at this location to improve visibility between pedestrians, bicyclists, and motorists.

Next Steps – Alternatives

Do Nothing

- Corridor will continue to have more injury crashes than expected
- Meeting the 2016 Lombard Bicycle and Pedestrian Plan recommendations to provide buffered bike lanes in this corridor will be more costly, requiring roadway widening or shared-use path construction

Regulate Corridor Access

- Implement left turn restrictions
- Convert side streets to one-way operation

Install Dedicated Left Turn Lanes Without Reconfiguration

- More costly solution with right-of-way acquisition needed to widen intersection approaches
- Does not address residential and business driveway crash risk

Roadway Reconfiguration

- Potentially reduce injury crashes by up to 42% (11-12 crashes per year), improving resident safety and freeing up Village Police and Fire resources
- Provide safe multi-modal transportation options as recommended by the 2016 Lombard Bicycle and Pedestrian Plan recommendations

Roadway Reconfiguration Next Steps

- Hold a Public Information Meeting
- Notify the Board of Trustees of the selected alternative
- If approved to proceed, update estimated improvement costs, request design engineering proposals, and review funding opportunities
  - Approved CIP currently includes $300,000 for Design Engineering in 2026 and $3,000,000 for Construction in 2028.
  - Staff overview of grant opportunities.
- Present costs and contracts to Committees and Board for approval to proceed
- Construct improvements and update signal timings to optimize north-south movements with new roadway configuration
- Approximately one-year post construction
  - Confirm crash reduction. If not reduced as anticipated, review and pursue signal operation updates such as protected left turns or leading pedestrian intervals.
- Field verify corridor signal timings
  - Review and update corridor timings if not achieving anticipated level of service.

Traffic Safety – Jackson Street to St. Charles Road

Intersections with Injury Crashes and/or Crashes with Bike/Ped Involvement, 2020-2024

Intersection	Injury Type			Bike/Ped		Primary Crash Types
	A	B	C	Bike	Ped	
Jackson Street	2	7	5	0	2	Left Turn, Pedestrian, Rear End
Madison Street	0	5	5	0	2	Left Turn, Rear End, Pedestrian, Right Angle
Washington Boulevard	1	4	3	1	0	Right Angle, Rear End, Bicyclist
Woodrow Avenue	1	1	0	0	0	Sideswipe Same, Rear End
Division Street	0	4	1	0	2	Left Turn, Right Angle, Fixed Object
Illinois Prairie Path	6	1	0	4	2	Bicyclist, Pedestrian, Rear End
Maple Street	0	2	3	1	0	Left Turn, Right Angle, Bicyclist
Emerson Avenue	1	0	0	0	1	Pedestrian
Kenilworth Avenue	0	1	2	2	0	Bicyclist, Rear End
St. Charles Road	2	3	2	1	1	Left Turn, Head-On, Pedestrian, Bicyclist