

# WELCOME

## MARSHALL AREA

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# HWY 23

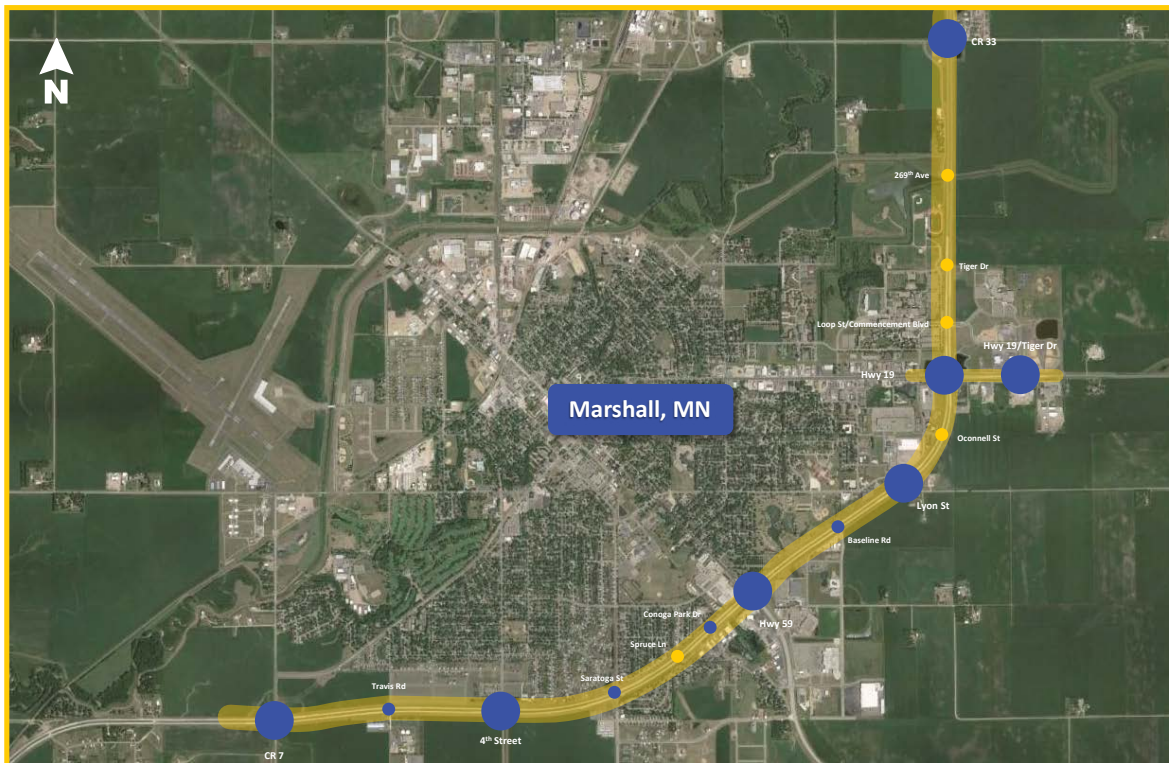
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## SAFETY ASSESSMENT



**MARSHALL AREA**  
**HWY 23**  
SAFETY ASSESSMENT

# OVERVIEW



## Safety Assessment:

- The Minnesota Department of Transportation (MnDOT) and its partners, the City of Marshall, Lyon County, and the Marshall Area Transportation Group, have conducted a safety assessment to evaluate the current and future performance of Highway 23 and develop short- and long-term strategies to manage the corridor now and into the future.
- The proposed strategies create a joint vision for the corridor between stakeholders and the public to help identify and prioritize improvements to take advantage of funding as it becomes available.
- Initial activities for the assessment began in January 2016 and the overall assessment is complete. The final assessment report will be available in Late Fall 2016. The assessment was conducted in three phases:
  - **Phase 1:** Identify the purpose and need.
  - **Phase 2:** Develop and evaluate alternatives.
  - **Phase 3:** Identify recommended strategies and implementation plan.

## Assessment Purpose:

- Evaluate existing conditions.
- Facilitate discussion between local partners, stakeholders, and the public.
- Provide a list of opportunities and recommendations, and establish priorities.
- Develop a common vision to identify, prioritize, and design future safety improvements.

# MARSHALL AREA

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# HWY 23

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## SAFETY ASSESSMENT

### SURVEY #1 - INFO GATHERING

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**Purpose:** to understand issues, concerns and priorities of stakeholders and the public along the Highway 23 corridor.

253

people responded to the survey

## TOP 3

### Critical issues for Hwy 23 in Marshall

- 1 Future growth (increased traffic)
- 2 Driver Behavior
- 3 Crossing Hwy 23 (delays)

### Best outlets to share info



newsletter  
19.35%



website  
22%



mail  
22.17%



email  
72.58%



social media  
20.96%



44.66%

moderately satisfied with how Hwy 23 currently functions

### Age of Responders

18 - 25	1 person icon	4.43%
26 - 34	4 person icons	16.12%
35 - 44	5 person icons	23.79%
45 - 54	5 person icons	26.2%
55 - 64	5 person icons	25%
65+	1 person icon	4.03%

### Top 4 zip codes:

Marshall  
Lynd  
Ghent  
Balaton

# MARSHALL AREA

# HWY 23

## SAFETY ASSESSMENT

### SURVEY #2 - CORRIDOR PRIORITIES

**Purpose:** to gather input from stakeholders and the public regarding priorities along the Hwy 23 corridor.

**459**

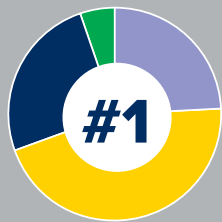
people responded to the survey

#### Age of Responders

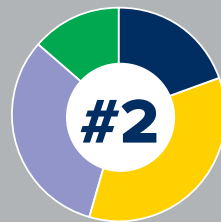
18 - 25		8.49%
26 - 34		18.35%
35 - 44		26.02%
45 - 54		19.17%
55 - 64		15.06%
65+		12.87%

**Top 3 zip codes:**  
Marshall  
Cottonwood  
Lynd

### Top Concerns Along Highway



Travel speeds along Hwy 23	24.4%
Safety at intersection	45.31%
Access to, from and across Hwy 23	25.05%
Safety for pedestrians and bicyclists	5.22%

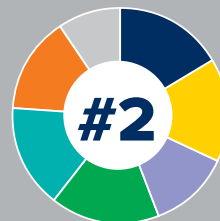


Travel speeds along Hwy 23	19.91%
Safety at intersection	34.79%
Access to, from and across Hwy 23	31.72%
Safety for pedestrians and bicyclists	13.56%

### Priority Location of Concerns



Hwy 23/CR 7	34.53%
Hwy 23/4th St	8.01%
Hwy 23/Hwy 59/Canoga Park Dr.	13.53%
Hwy 23/Lyon St/ Clarice St	15.46%
Hwy 23/Hwy 19	11.04%
Hwy 23/Tiger Dr/Commencement Blvd.	13.25%
Hwy 23/CR 33	4.14%



Hwy 23/CR 7	16.29%
Hwy 23/4th St	15.74%
Hwy 23/Hwy 59/Canoga Park Dr.	12.7%
Hwy 23/Lyon St/ Clarice St	16.02%
Hwy 23/Hwy 19	15.74%
Hwy 23/Tiger Dr/Commencement Blvd.	14.36%
Hwy 23/CR 33	9.11%

# HIGHWAY 23 PRIORITIES

## Priority 1

- **Implement improvements at CR 7**
- **Implement improvements at Lyon St/Clarice Ave**
- Implement other ongoing corridor-wide safety improvements
- Continue ongoing public education with improvements

## Priority 2

- **Implement improvements at 4<sup>th</sup> Street and Tiger Dr**
- Evaluate corridor for potential change in posted speed limit
- **Re-Evaluate Hwy 59 and Hwy 19 intersections for improvement needs**

## Priority 3

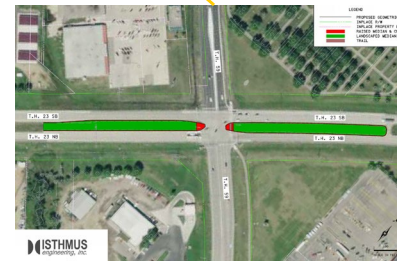
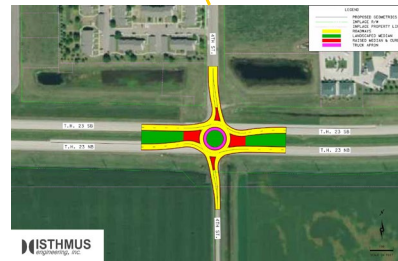
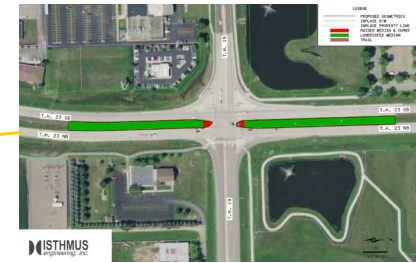
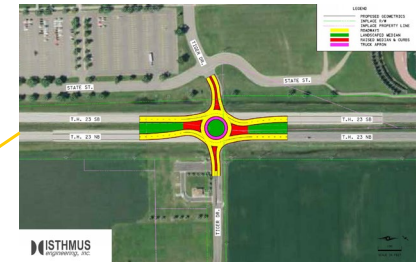
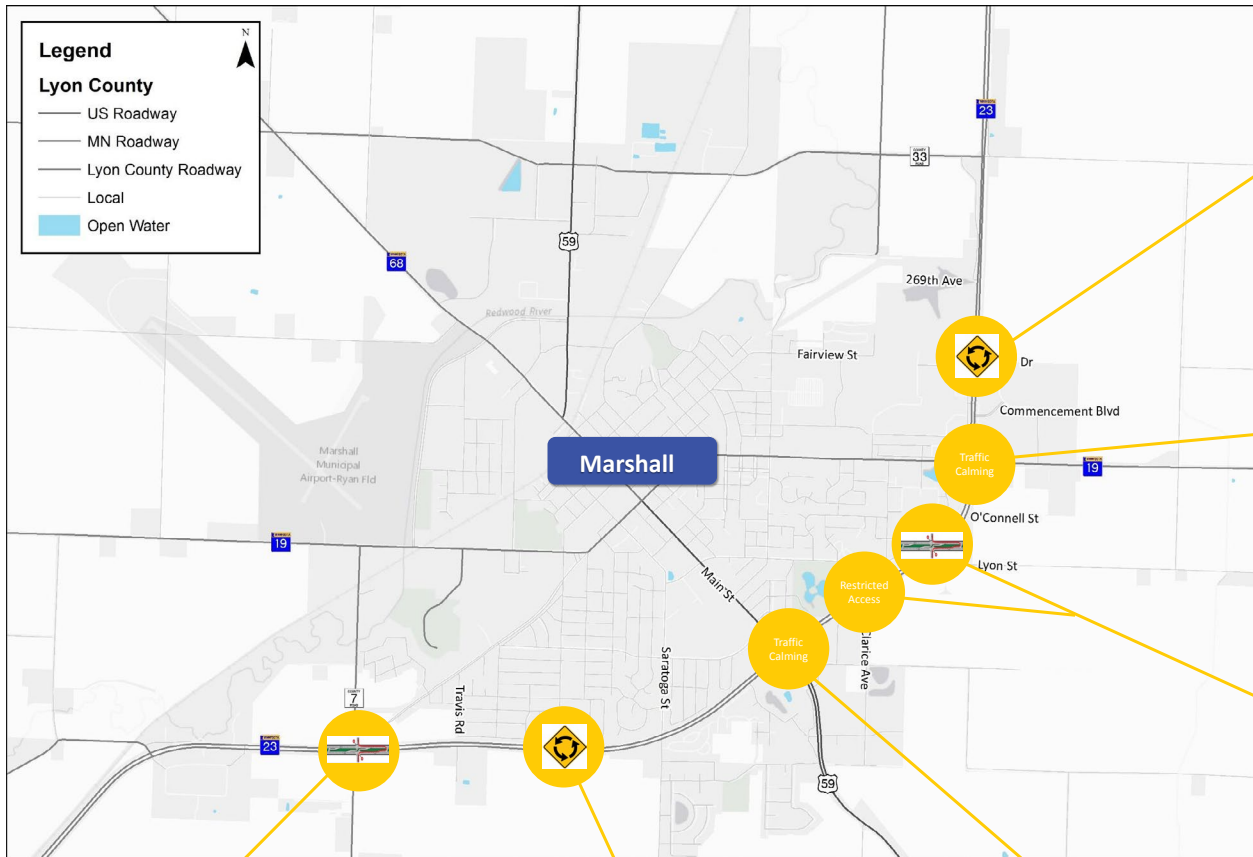
- Implement improvements at CR 33
- Restrict or close access at Canoga Park Dr
- Restrict or close access at Travis Rd
- Close access at 269th Avenue
- Restrict or close access at Spruce Ln
- Close access at O'Connell St

\* **Priorities are contingent on funding and project delivery opportunities.**

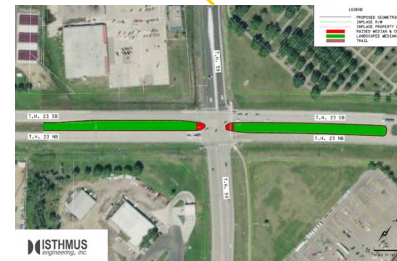
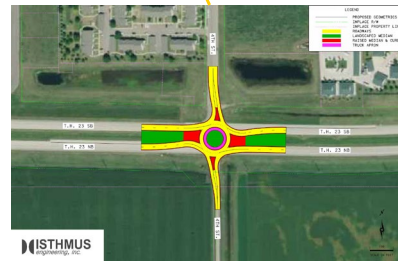
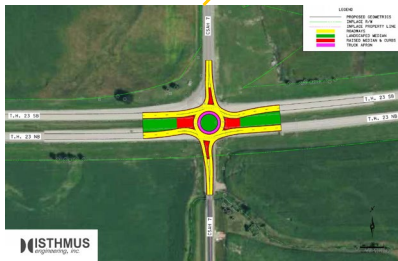
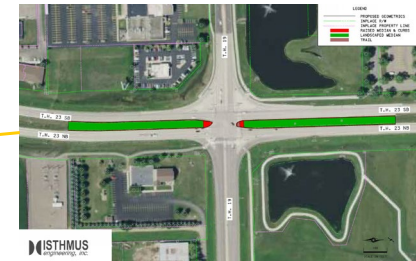
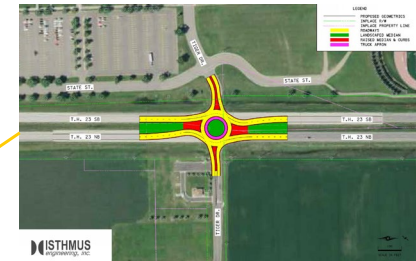
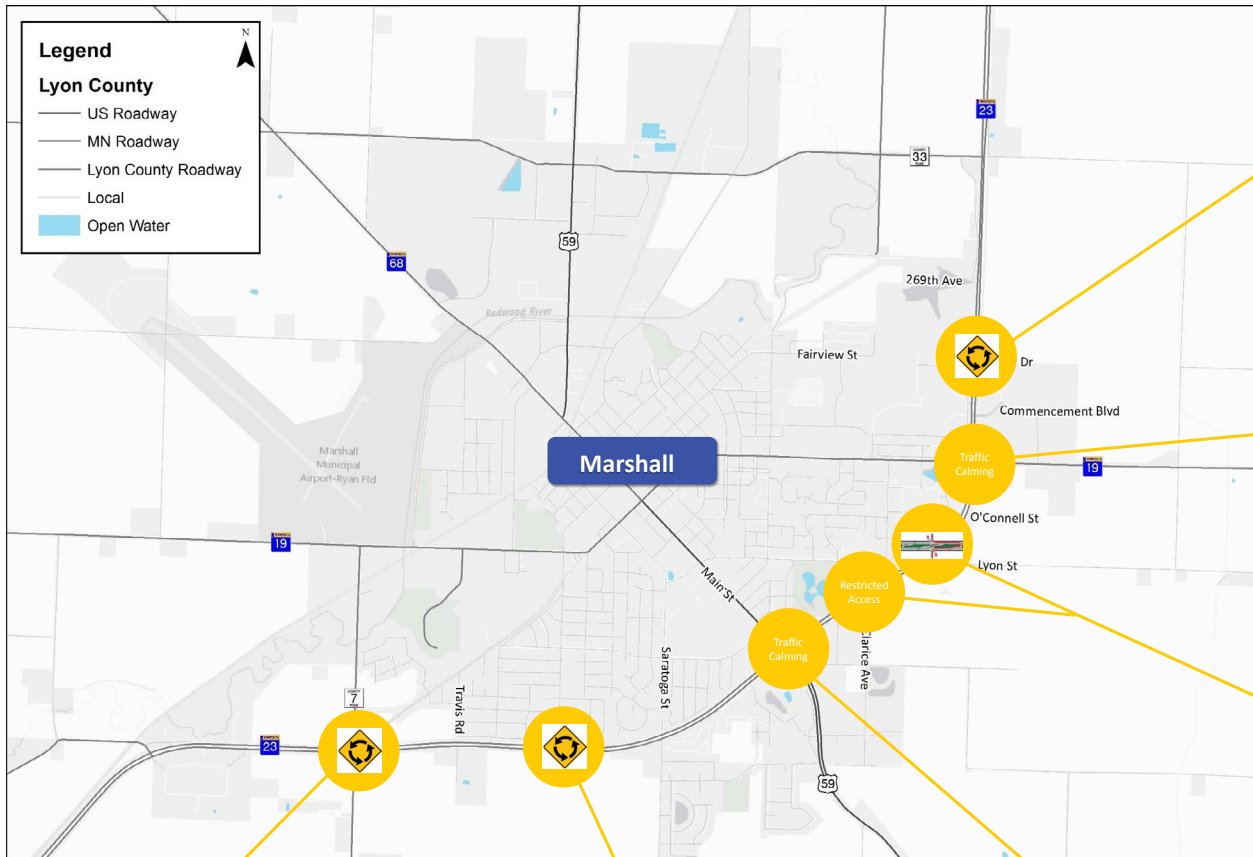
# CORRIDOR IMPROVEMENT PLANS

Corridor Plan	CR 7	4th Street	Hwy 59	Clarice Avenue/ Lyon Street	Hwy 19	Tiger Drive
<b>Corridor Plan A:</b> Lower Posted Speed Limit	55 MPH		45 MPH			
<b>Corridor Plan B:</b> Grade-Separated Facility with Three Interchanges		X		X		X
<b>Corridor Plan C:</b> J-Turns at CR 7, 4th Street, Lyon St, and Tiger Dr			Traffic Calming		Traffic Calming	
<b>Corridor Plan D:</b> Roundabouts at 4th Street, Lyon St, and Tiger Dr J-Turn at CR 7			Traffic Calming		Traffic Calming	
<b>Corridor Plan E:</b> Roundabouts at 4th Street, and Tiger Dr J-Turn at CR 7 and Lyon St			Traffic Calming		Traffic Calming	
<b>Corridor Plan F:</b> Roundabouts at CR 7 and Tiger Dr J-Turns at 4th Street and Lyon St			Traffic Calming		Traffic Calming	
<b>Corridor Plan G:</b> Roundabouts at CR 7, 4th Street, and Tiger Dr J-Turn at Lyon St			Traffic Calming		Traffic Calming	

# RECOMMENDED CORRIDOR PLAN E



# RECOMMENDED CORRIDOR PLAN G





# COMPARISON OF CORRIDOR IMPROVEMENT PLANS

Corridor Plan	Reduces travel speeds along Hwy 23?	Improves safety at intersections?	Improve safety of access to, from and across Hwy 23?	Improves safety for pedestrians and bicyclists?	Estimated Project Cost
<b>Corridor Improvement Plan A:</b> Lower Posted Speed Limit	●	●	●	●	\$
<b>Corridor Improvement Plan B:</b> Grade-Separated Facility with Three Interchanges	●	●	●	●	\$\$\$\$\$
<b>Corridor Improvement Plan C:</b> J-Turns at CR 7, 4 <sup>th</sup> Street, Lyon St, and Tiger Dr	●	●	●	●	\$\$\$
<b>Corridor Improvement Plan D:</b> Roundabouts at 4 <sup>th</sup> Street, Lyon St, and Tiger Dr J-Turn at CR 7	●	●	●	●	\$\$\$
<b>Corridor Improvement Plan E:</b> Roundabouts at 4 <sup>th</sup> Street and Tiger Dr J-Turn at CR 7 and Lyon St	●	●	●	●	\$\$\$
<b>Corridor Improvement Plan F:</b> Roundabouts at CR 7 and Tiger Dr J-Turns at 4 <sup>th</sup> Street and Lyon St	●	●	●	●	\$\$\$
<b>Corridor Improvement Plan G:</b> Roundabouts at CR 7, 4 <sup>th</sup> Street, and Tiger Dr J-Turn at Lyon St	●	●	●	●	\$\$\$

\* Recommended corridor plans are contingent on funding and project delivery opportunities.

- Does not meet objective      \$ = <\$5M
- Acceptably meets objective      \$\$\$ = \$5M-\$10M
- Best meets objective      \$\$\$\$\$ = \$60M-\$80M



# OTHER ONGOING STRATEGIES

## ENGINEERING:

- (ES) Install advanced signing for reduced speed ahead
- (SC) Install trees and landscaping along Hwy 23 to serve as speed calming measures
- (SC) Strategically locate driver feedback signs to assist with speed calming
- (SC) Review posted speed limit in conjunction with highway characteristic changes

Speed Calming = SC  
Enhanced Signing = ES



Advanced  
Signing



Driver  
Feedback Signs

## ENFORCEMENT:

- Work with law enforcement to enhance enforcement of posted speed limit



Enforcement  
Campaign

## EDUCATION:

- Conduct education campaign regarding speeding and distracted driving

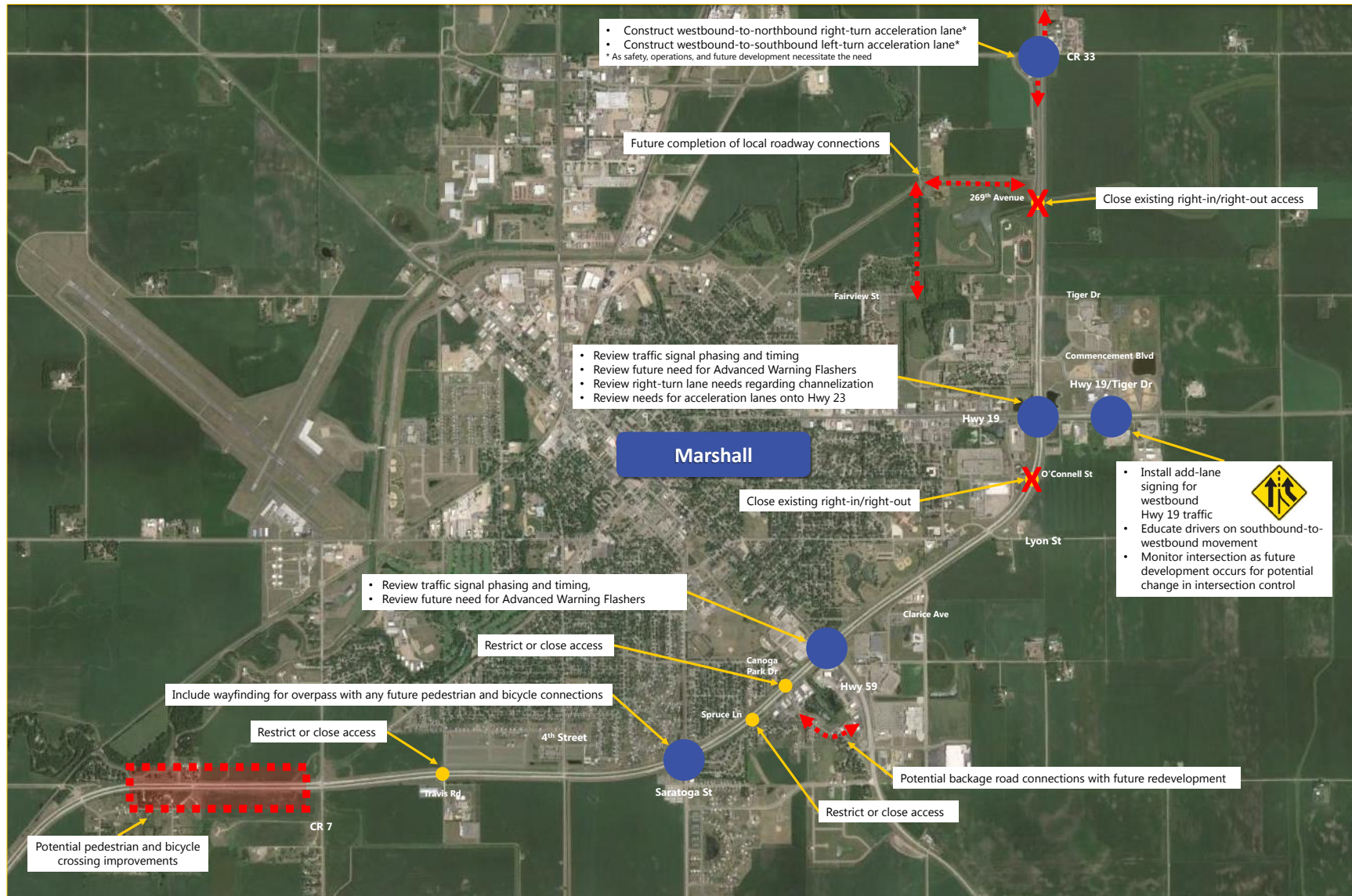


Education  
Campaign

## EVALUATION:

- Evaluate changes in travel speeds following any improvements
- Evaluate for local frontage/backage road connections with future development
- Evaluate potential removal of advanced warning flashers at traffic signals

# OTHER ONGOING STRATEGIES



# PROJECT DEVELOPMENT AND DELIVERY PROCESS

## Planning

- Identify projects needs and priorities
- Develop project scope and schedule
- Identify funding opportunities
- Public outreach

## Design

- Develop construction plans
- Obtain appropriate permits
- Public outreach

## Construction

- Construct project
- Public outreach

It takes approximately 2-5 years to develop and deliver a project!