La Crosse
At-Grade Railroad Crossing

Public Involvement Meeting

Hagar Street/Avon Street and
St. Cloud Street/Liberty Street Crossings

WELCOME

Kris Sommers, P.E.

WisDOT Project Manager
Railroad Engineering and Safety Supervisor

Aaron Bowe, P.E.

WisDOT Representative
TCMC Project Manager

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Study Analyst Lead
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PROJECT WEBSITE

PLEASE VISIT THIS WEBSITE TO VIEW EXHIBIT BOARDS AND PROVIDE COMMENTS:

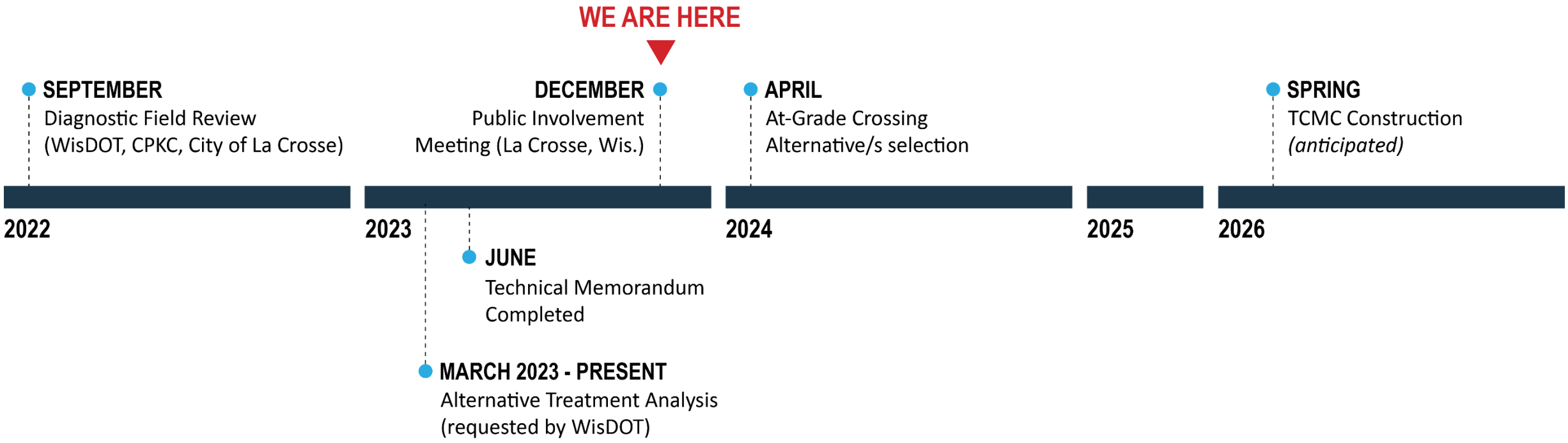
https://wisconsindot.gov/Pages/projects/multimodal/tcmc.aspx

A RECORDING OF THE PRESENTATION WILL BE AVAILABLE FOLLOWING THE MEETING.

AGENDA

1. Project Overview and Need
2. Existing Conditions
3. Alternative At-Grade Crossing Treatments
4. Next Steps

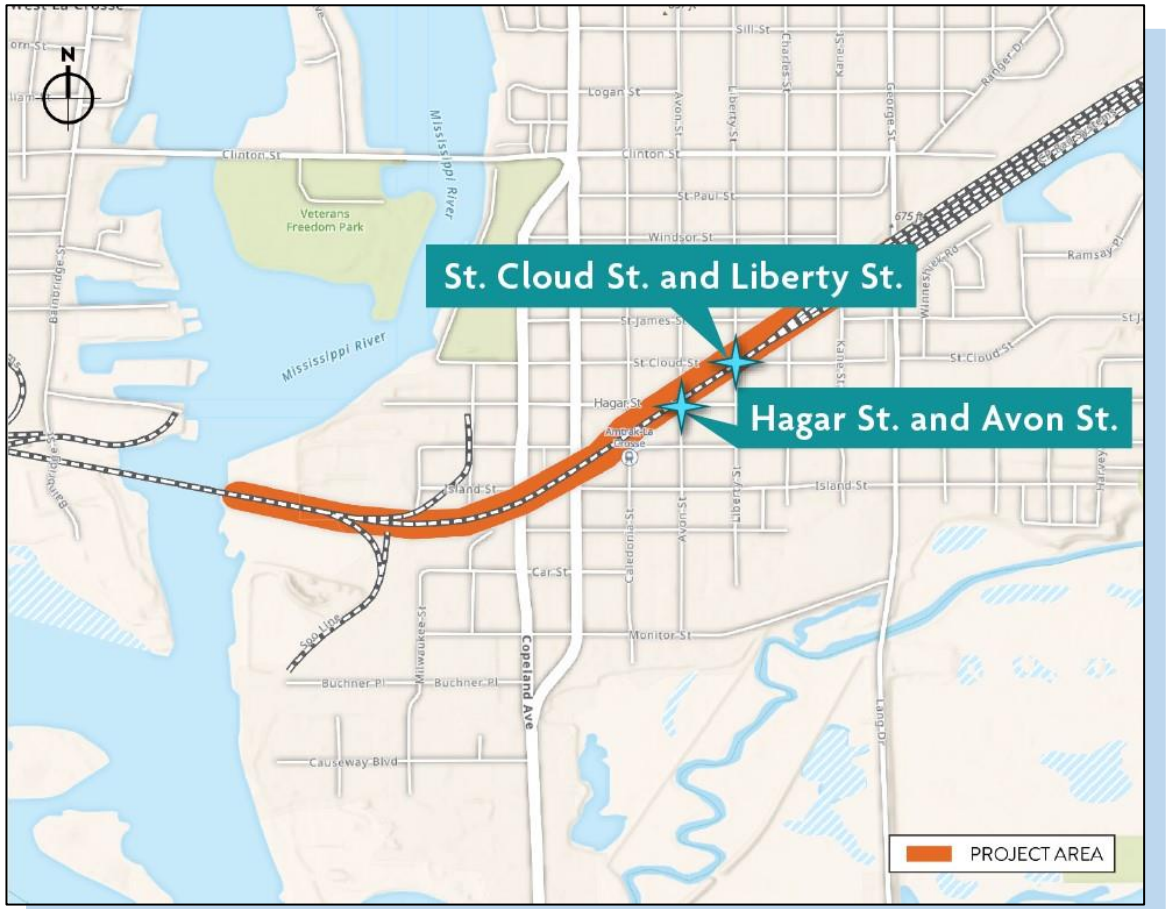
TIMELINE


WE ARE HERE
SEPTEMBER
Diagnostic Field Review
(WisDOT, CPKC, City of La Crosse)
DECEMBER
Public Involvement
Meeting (La Crosse, Wis.)
APRIL
At-Grade Crossing
Alternative/s selection
SPRING
TCMC Construction
(anticipated)
2022
2023
2024
2025
2026
JUNE
Technical Memorandum
Completed
MARCH 2023 - PRESENT
Alternative Treatment Analysis
(requested by WisDOT)

RELATIONSHIP TO TCMC INTERCITY PASSENGER RAIL PROJECT

LA CROSSE
DEPOT AREA

- Restore a second mainline track
- Extend yard lead west and add signals to re-establish old second mainline track through the La Crosse Depot
- Remove portion of existing platform for restored second track
- Reconstruct platform keeping historic awning
- Improve at-grade crossings at St. Cloud/Liberty streets and Avon/Hagar streets



PROJECT OVERVIEW AND NEED

- Evaluate at-grade crossing improvements to enhance safety at the two crossings in La Crosse
- Prepare for a third rail track and two additional daily passenger train movements with TCMC
- Address safety concerns:
  - Minimize crashes
  - Discourage illegally entering intersections
  - Discourage driving around crossing gates

EXISTING CONDITIONS

EXISTING CONDITIONS

CHARACTERISTICS
of **Avon**, **Hagar**, **St. Cloud** and **Liberty streets**

- Two-lane local streets
- Posted speed limit of 25 mph
- On-street parking is allowed on both sides of the street
- Medians at all railroad approaches are 4.5 ft. wide; 60-100 ft. length.

WISCONSIN DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS

CHARACTERISTICS
of **both railroad crossing approaches**

- Railroad gate and flashing light signals for approaching traffic in all directions
- Uncontrolled crossings with no stop signs
- No wayside controls (train signaling equipment next to track)

VEHICLE DISTRIBUTION

	Avon St.	Hagar St.	St. Cloud St.	Liberty St.
Total Vehicles	513	491	184	521
A.M./P.M. Peak*	39/50	40/45	11/18	36/55
Majority	SB	EB	EB	SB
Cars	70%	53%	59%	61%
2-Axle	29%	43%	40%	39%

**A.M. peak hour is 7 to 8 A.M. | P.M. peak hour is 4 to 5 P.M.*
Recorded Wednesday, April 28, 2021

CRASH DATA AT CROSSINGS NOT INVOLVING A TRAIN

AVON STREET AND HAGAR STREET

Crashes By Year		Crashes By Severity		
Year	Total Crashes	Injury evident at the scene that is not incapacitating	Injury not evident at the scene	Personal Damage Only
2018	4		1	3
2019	5			5
2020	3			3
2021	3	1		2
2022	2			2

ST. CLOUD STREET AND LIBERTY STREET

Crashes By Year		Crashes By Severity		
Year	Total Crashes	Injury evident at the scene that is not incapacitating	Injury not evident at the scene	Personal Damage Only
2018	1	1		
2019	3			3
2020	0			
2021	2		1	2
2022	3	2		

AVON STREET AND HAGAR STREET

Total Crashes (2018 - 2022) **17**

Average Crashes Per Year **3.4**

Fatal and/or Injury **11.8%**

Crash Rate **9.28**

24 Hr. Entering Volume / ADT **1,004**

ST CLOUD STREET AND LIBERTY STREET

Total Crashes (2018 - 2022) **9**

Average Crashes Per Year **1.3**

Fatal and/or Injury **44.4%**

Crash Rate **7.00**

24 Hr. Entering Volume / ADT **705**

WISCONSIN DEPARTMENT OF TRANSPORTATION

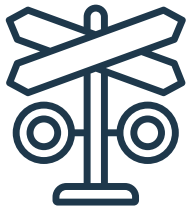
CRASH DIAGRAMS NOT INVOLVING A TRAIN

AVON STREET/ HAGAR STREET

ST. CLOUD STREET/ LIBERTY STREET

RAILROAD CONDITIONS

Railroad Characteristics



Crossing	Adjacent to	Average crossing activations per day	Total active crossing time per day
Avon Street and Hagar Street	La Crosse Amtrak Station	47	4 hours, 24 minutes
St. Cloud Street and Liberty Street	Train Yard	56	5 hours, 2 minutes

Accidents Involving Railroad

Crossing	Total 2016 - 2022	Notes
Avon Street and Hagar Street	2 accidents (Pedestrians)	WisDOT flagged crossing as one of top 10 crossings with highest rate of crash occurrence in the state
St. Cloud Street and Liberty Street	1 accident (bicyclist)	N/A

BOTH CROSSINGS

- Multi track crossing
- Located within a pre-rule quiet zone
- Have dual flashing lights and gates
- Do not have a wayside control device

City of La Crosse Plan Considerations

2040 COMPREHENSIVE PLAN, 2023

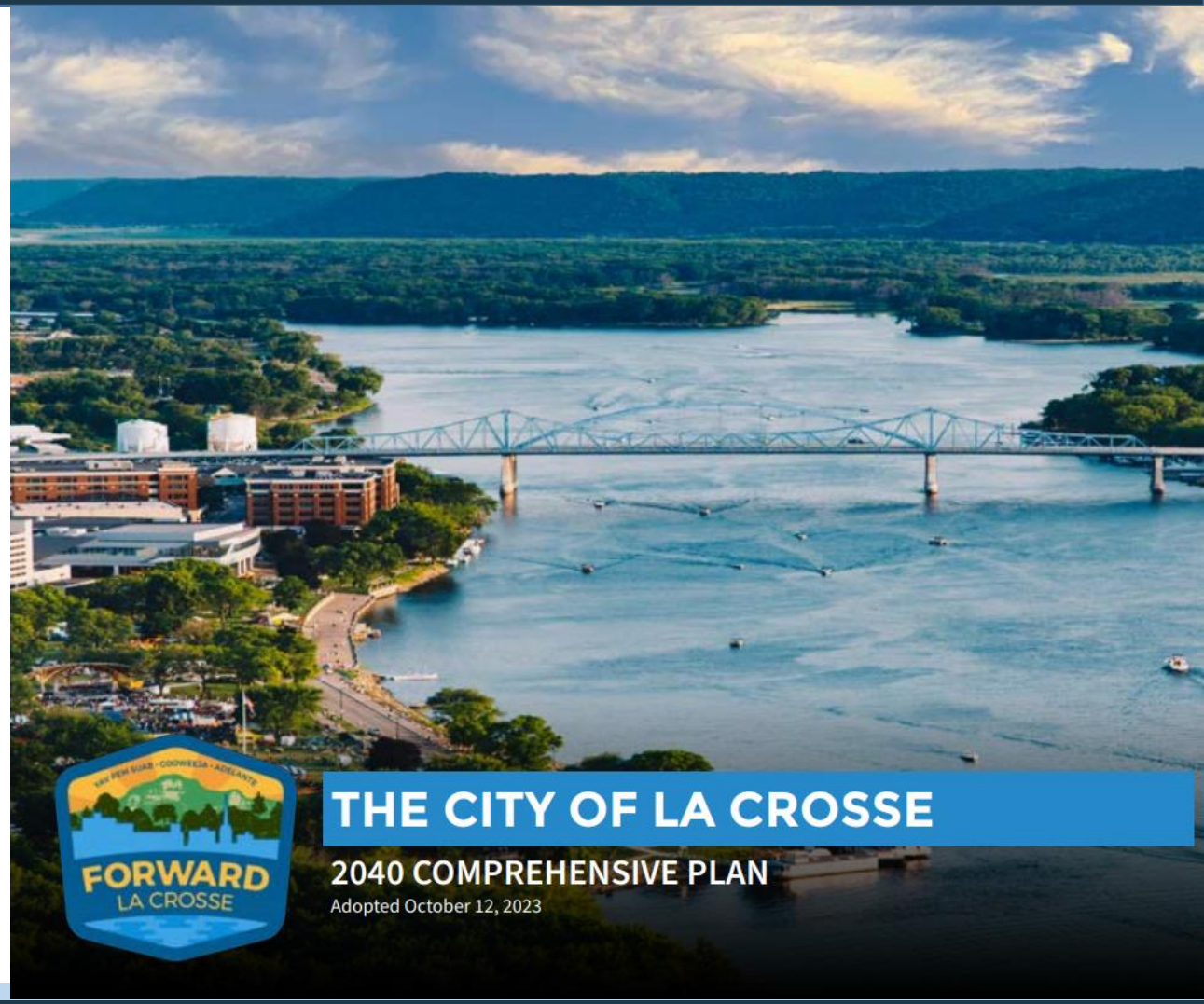
- Maintain viability of existing rail corridors while protecting connectivity for existing neighborhoods.
- Avon St. is a neighborhood greenway or “slow street.” Signage, pavement markings and other measures are required on it to facilitate a safe walking and bicycling experience.

SAFE ROUTES TO SCHOOL PLAN, 2021

- Avon St: Install bike wayfinding signage and reconstruct sidewalk approaches to allow bikes and wheelchairs to cross tracks at angle closer to 90 degrees.
- Create safe and smooth pedestrian crossings over railroad near schools, especially at Avon St. and Hagar St.

TRANSPORTATION VISION, 2015

- Two-way streets provide redundancy that is important for maintenance, special event planning, and emergency services.



AT-GRADE CROSSING ALTERNATIVES

Pedestrian and Bicyclist Considerations

DESCRIPTION

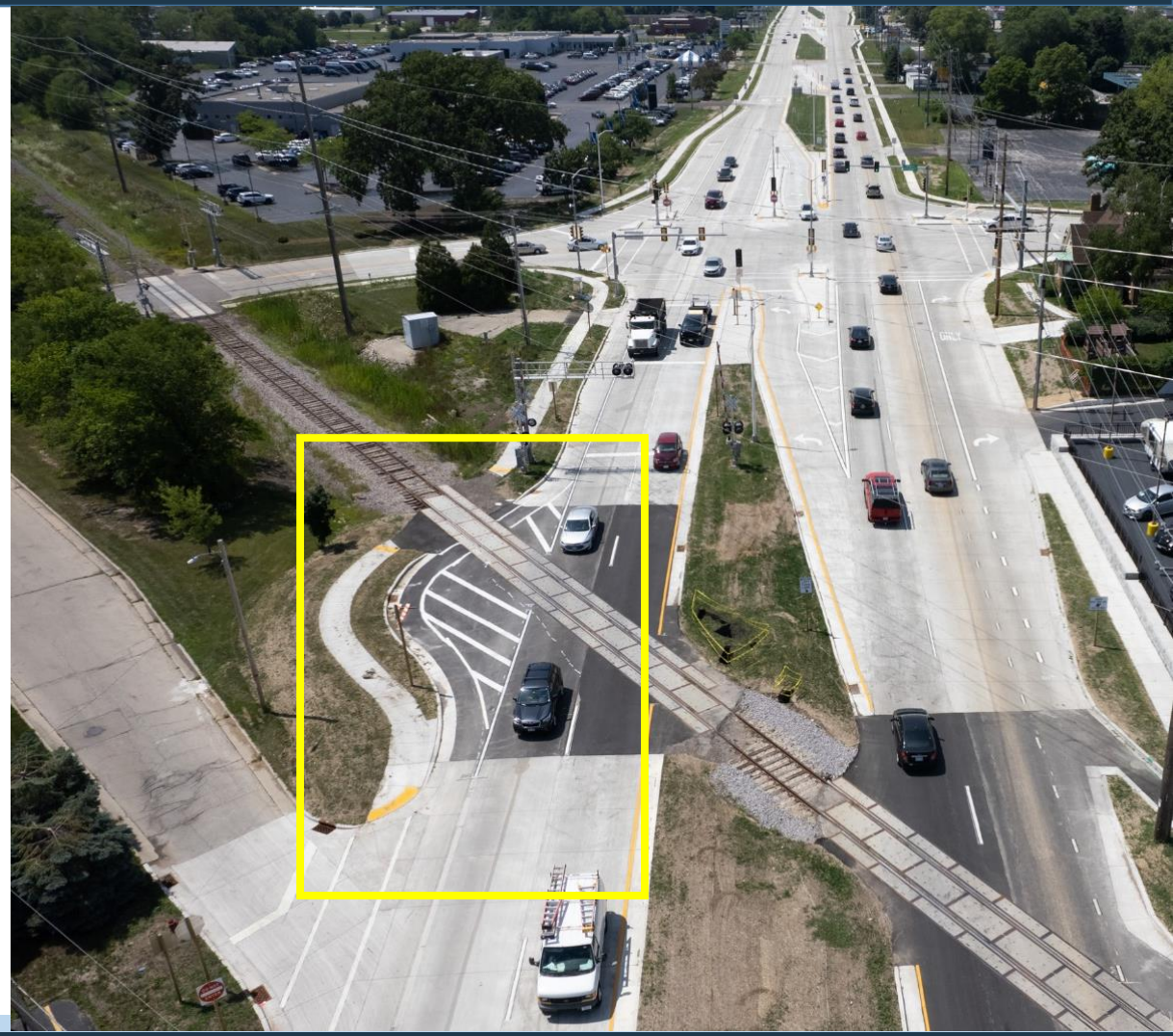
- Detectable Warning Fields (DWFs) on all sidewalk approaches to the crossings
- Cross pedestrians and bicyclists as close to 90-degrees as possible
- Orient flashing light signals such that they are visible to bicyclists and pedestrians

BENEFITS

- Improve bicyclist/pedestrian safety

CONSIDERATIONS

- Applies to all alternatives
- 90-degree crossings may be challenging to accomplish without additional right-of-way



WIS 50, Kenosha County, WI

At-Grade Crossing Alternatives

Alternative 1:
All Way Stop Control

Alternative 2:
8-Quadrant Gate System
(Add Gates)

Alternative 3:
Extend Medians

Alternative 4:
One-Way Street Pair East-West
(St. Cloud St. and Hagar St.)

Alternative 5:
One-Way Street Pair North-South
(Avon St. and Liberty St.)

Alternative 6:
Two One-Way Street Pairs
(East-West and North-South)

Alternative 7:
Close Crossing at St. Cloud St. and Liberty St.

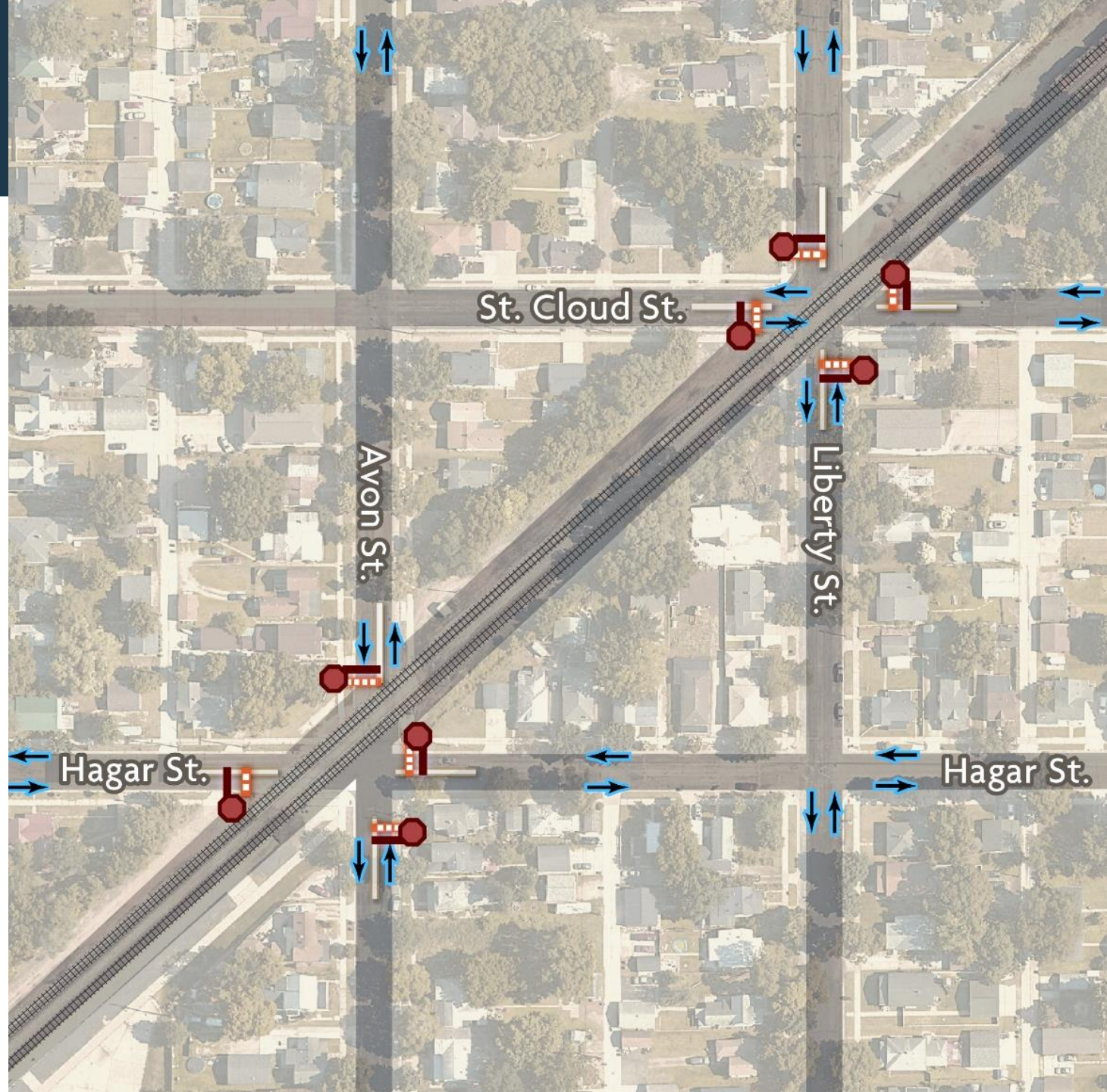
Alternative 8:
Leverage Technology

ALTERNATIVE 1:

All Way Stop Control

DESCRIPTION

- Baseline condition
- City committed to all-way stop signs/bars upstream of gates



ALTERNATIVE 1

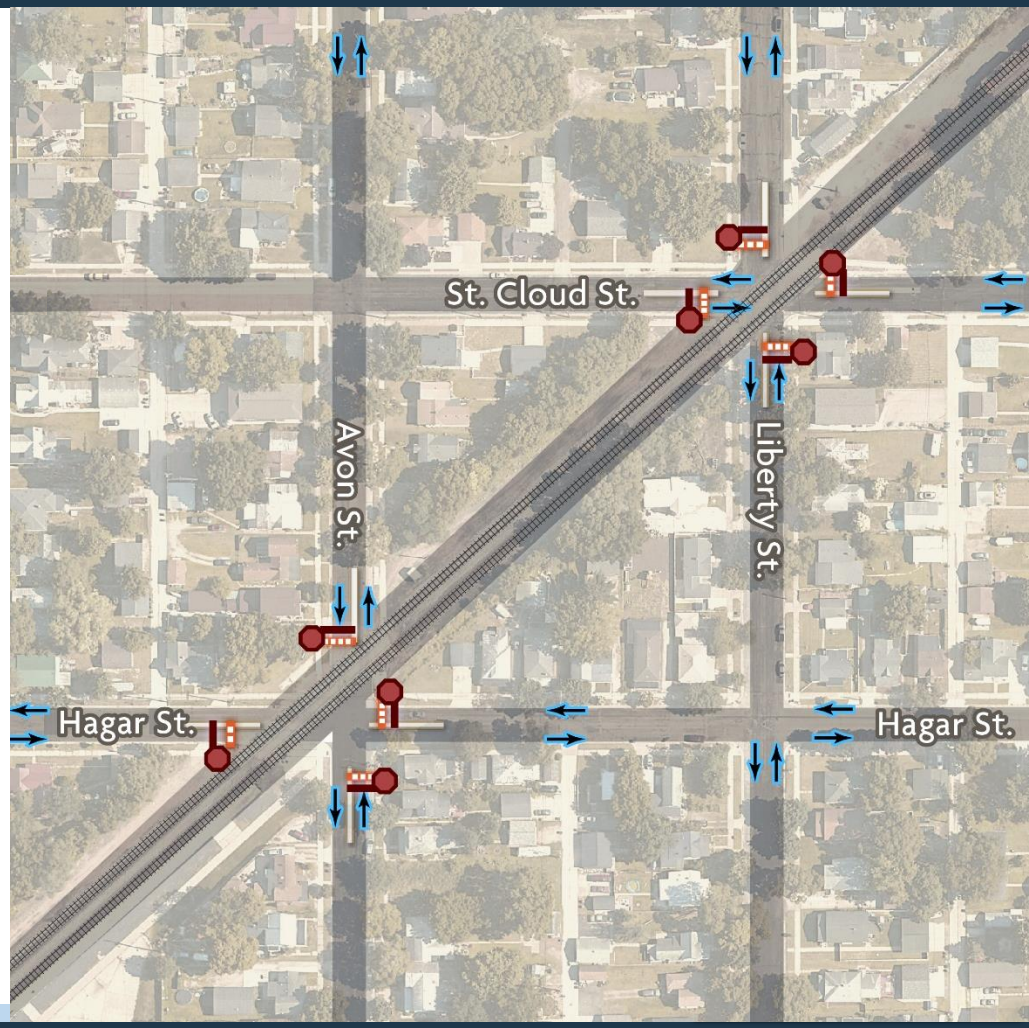
All Way Stop Control

BENEFITS

- Expected crash decrease between 51% to 70%
- Would minimally impact traffic

CONSIDERATIONS

- Traffic is not expected to divert to other routes
- Does not discourage drivers from driving around gates

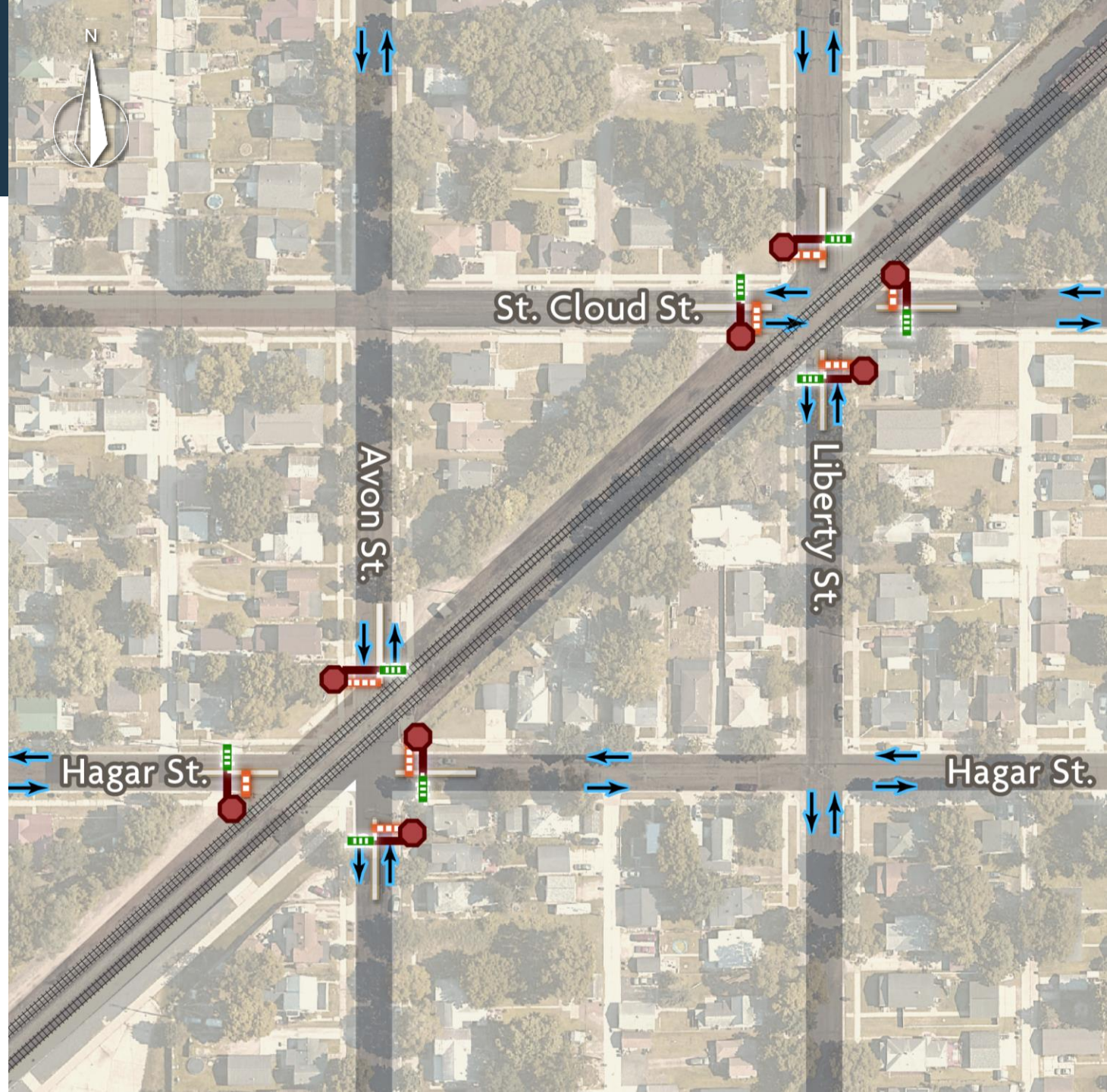


ALTERNATIVE 2:

8-Quadrant Gate System

DESCRIPTION

- Add exit gates to far side of crossing in departure lane



Existing Stop Sign

Flashing Light Signal w/ Gate

Existing Median

Stop Bar

Proposed Exit Gate

Two-Way Traffic Direction

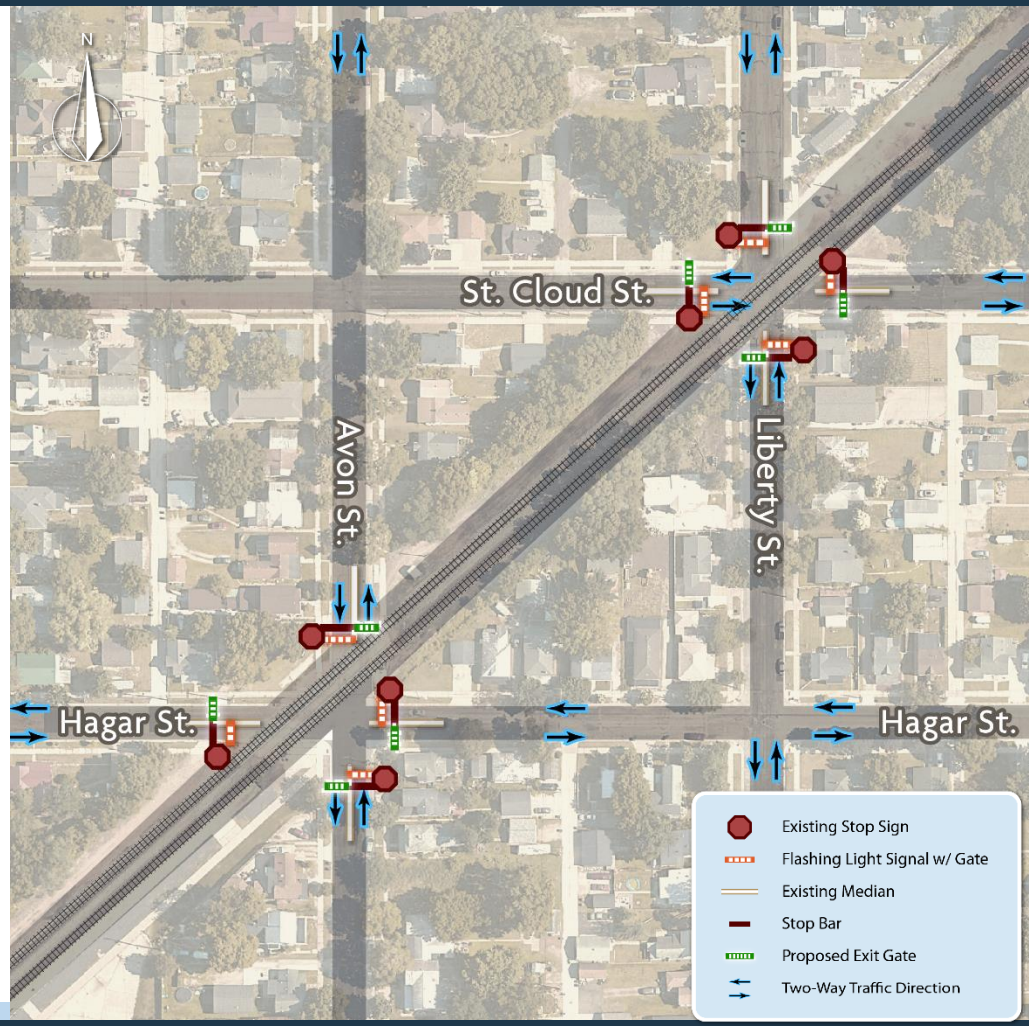
ALTERNATIVE 2:
8-Quadrant Gate System

BENEFITS

- Prevents drivers from entering crossing from opposite direction
- Avoids trapping vehicles between gates
- No net change in travel time is expected

CONSIDERATIONS

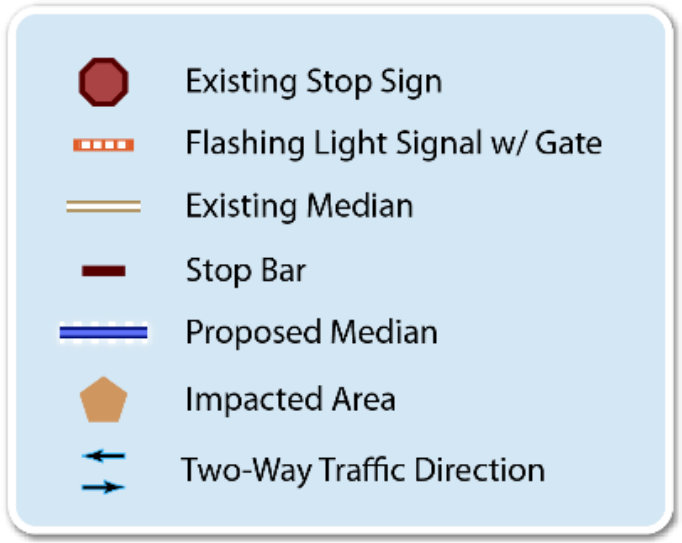
- Each crossing would require 4 additional gates
- Traffic redistribution is possible
- Likely the highest cost of all alternatives

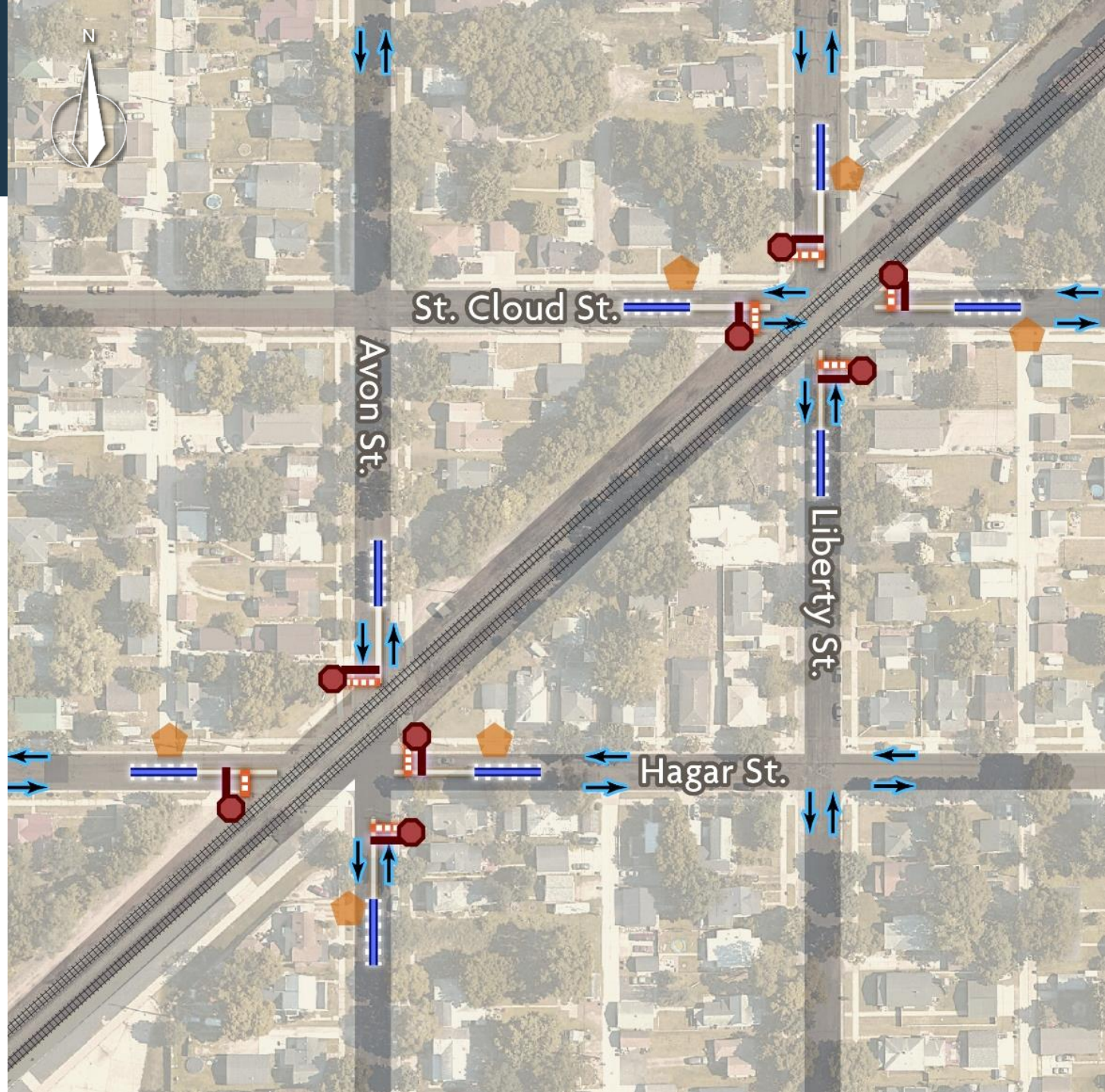


ALTERNATIVE 3:
Extend Medians

DESCRIPTION

- Extend all existing medians (traffic channelization devices) to 100 ft.





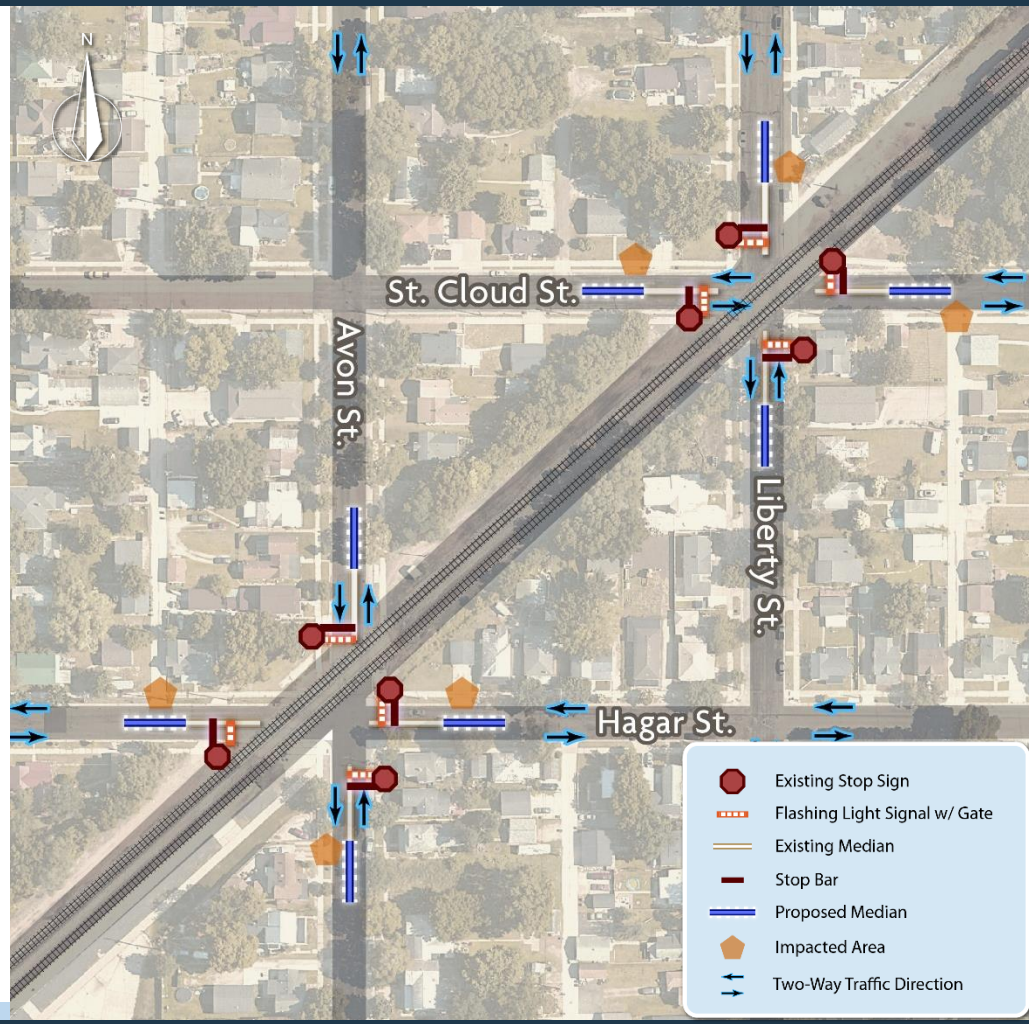
ALTERNATIVE 3:
Extend Medians

BENEFITS

- Estimated 68% reduction in risky driving behavior anticipated
- Limited impact on current traffic patterns

CONSIDERATIONS

- Median extensions would impact a total of 6 driveways and alleys by making them right in and right out
- Would make driving around medians more difficult, but not impossible

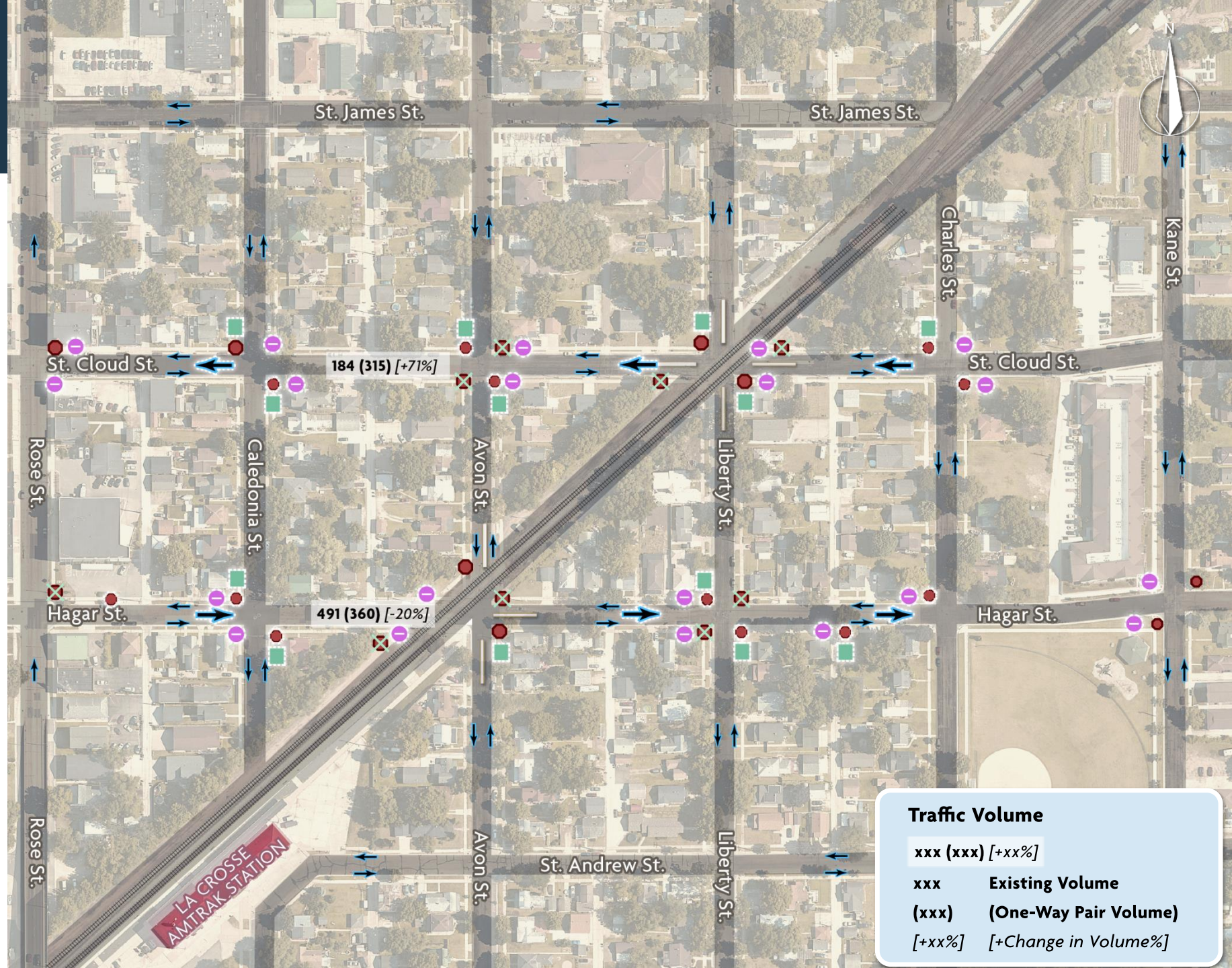


ALTERNATIVE 4:

One-Way Pair East-West

DESCRIPTION

- St. Cloud St. and Hagar St. converted to one-way streets
- Approximately 3-5 blocks of one-way



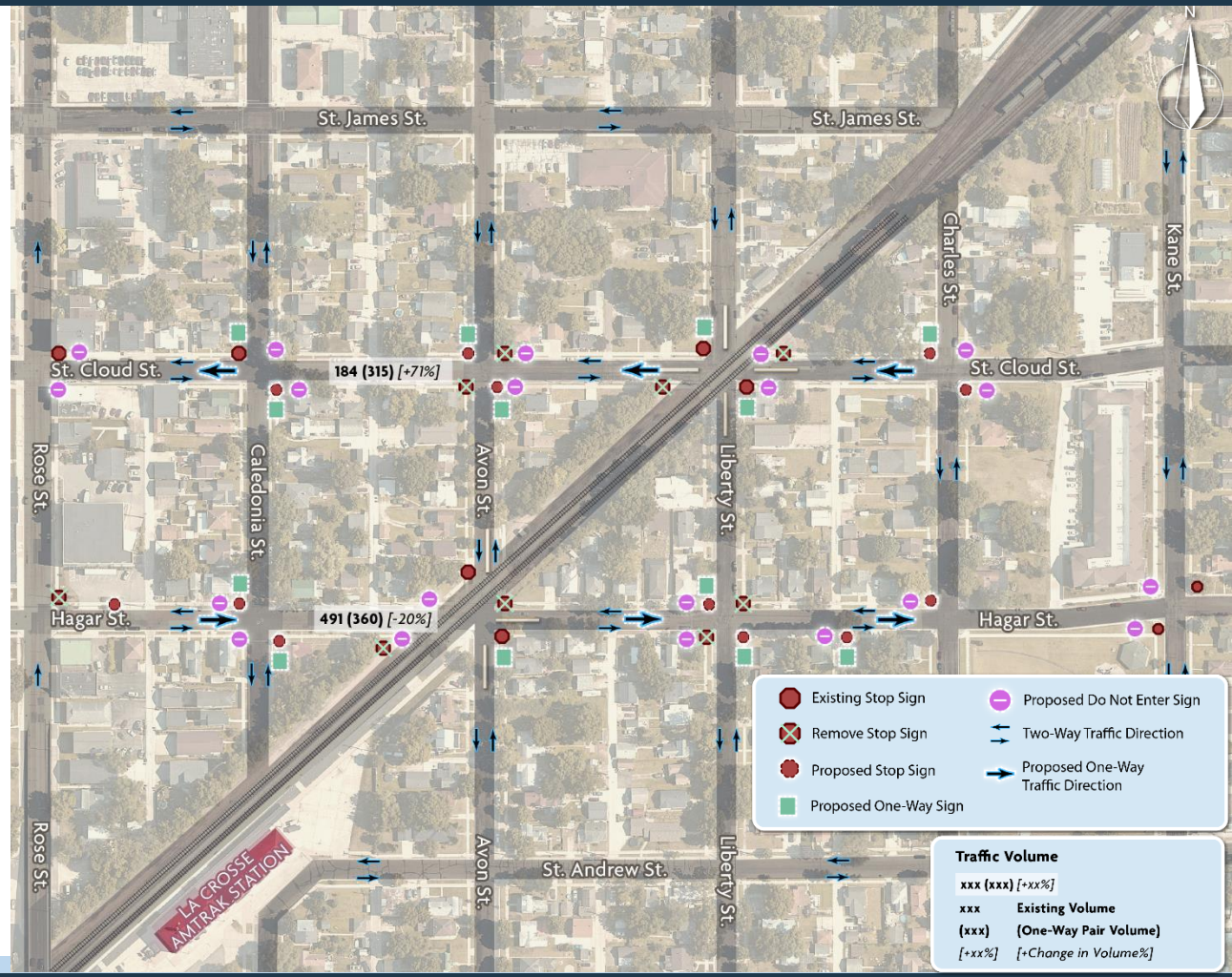
ALTERNATIVE 4:
One-Way Pair East-West

BENEFITS

- Traffic on Hagar St. estimated to decrease by 20%

CONSIDERATIONS

- Traffic on St. Cloud St. estimated to increase by 71%
- Travel time expected to increase by approximately 2 minutes
- On-street parking eliminated within 50 feet of crossing
- Medians would be removed
- Additional gate to be added or approach narrowed so crossing can be served by single gate
- Wrong-way drivers would not be stopped by a gate
- Does not address risky north-south behaviors on Avon and Liberty streets
- Additional alternatives may be needed in combination with this alternative

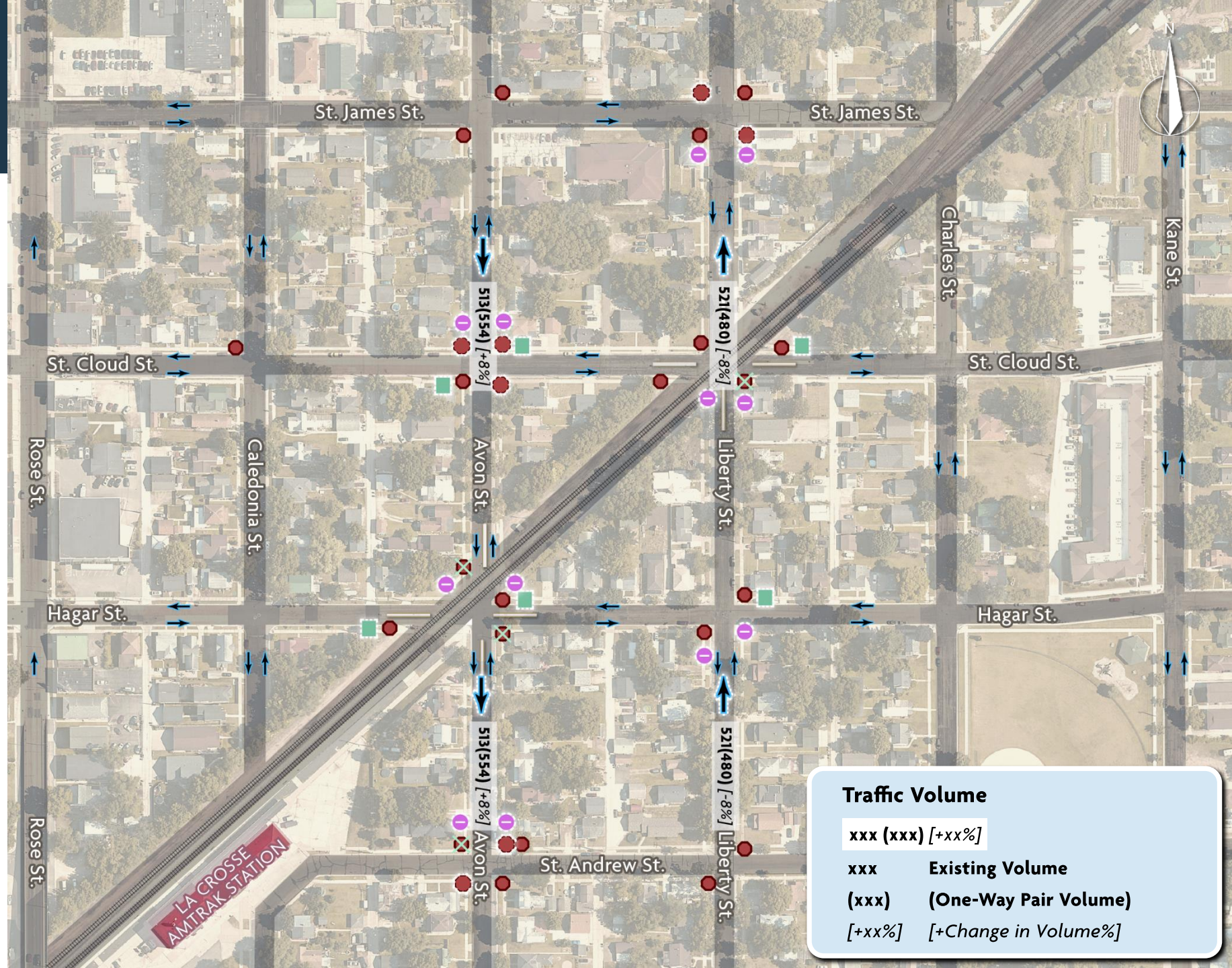


ALTERNATIVE 5:

One-Way Pair North-South

DESCRIPTION

- Avon St. and Liberty St. converted to one-way streets
- Approximately 3-9 blocks of one-way



Existing Stop Sign

Remove Stop Sign

Proposed Stop Sign

Proposed One-Way Sign

Proposed Do Not Enter Sign

Two-Way Traffic Direction

Proposed One-Way Traffic Direction

Traffic Volume

xxx (xxx) *[+xx%]*

xxx	**Existing Volume**
(xxx)	**(One-Way Pair Volume)**
[+xx%]	*[+Change in Volume%]*

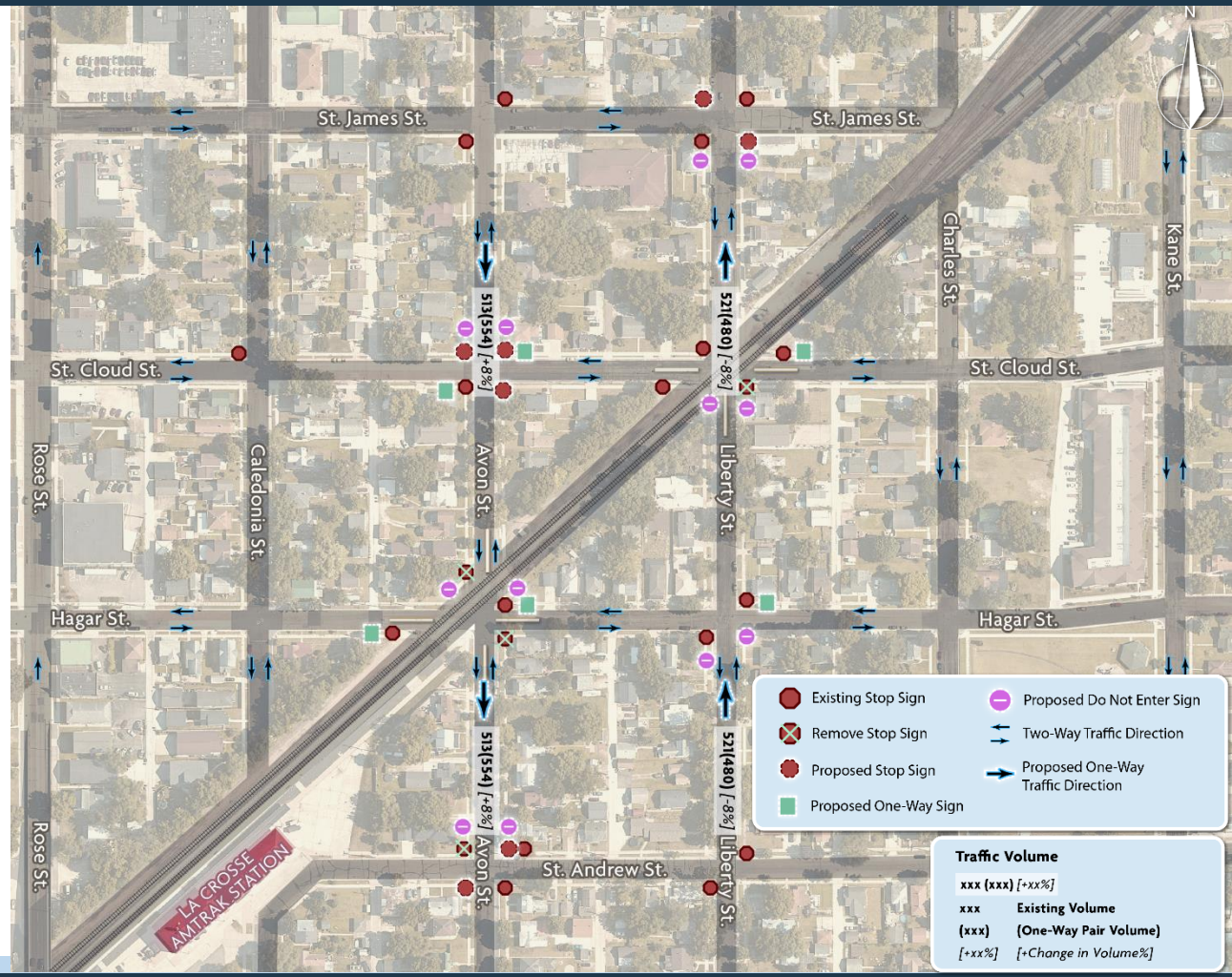
ALTERNATIVE 5:
One-Way Pair North-South

BENEFITS

- Liberty St. traffic estimated to decrease by 8%

CONSIDERATIONS

- Avon St. traffic estimated to increase by 8%
- Travel time expected to increase by approximately 2 minutes
- On-street parking eliminated within 50 feet of crossing
- Existing medians would be removed
- Additional gate would be added or approach narrowed so crossing can be served by single gate
- Wrong-way drivers would not be stopped by a gate
- Does not address risky east-west behaviors on Hagar and St. Cloud streets
- Additional alternatives may be needed in combination with this alternative

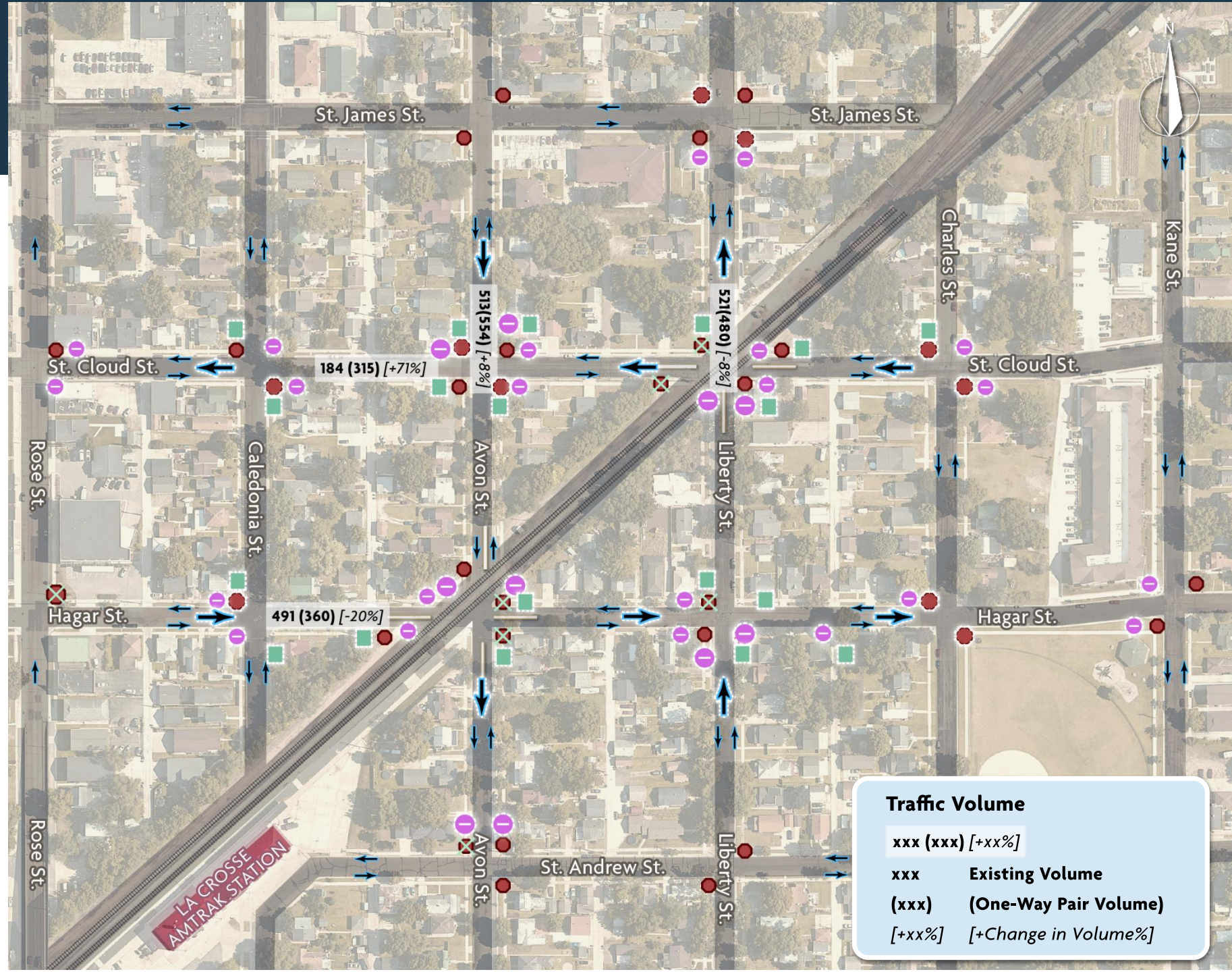


ALTERNATIVE 6:

Two One-Way Pairs

DESCRIPTION

- Avon St. and Liberty St. converted to one-way streets
- St. Cloud St. and Hagar St. converted to one-way streets



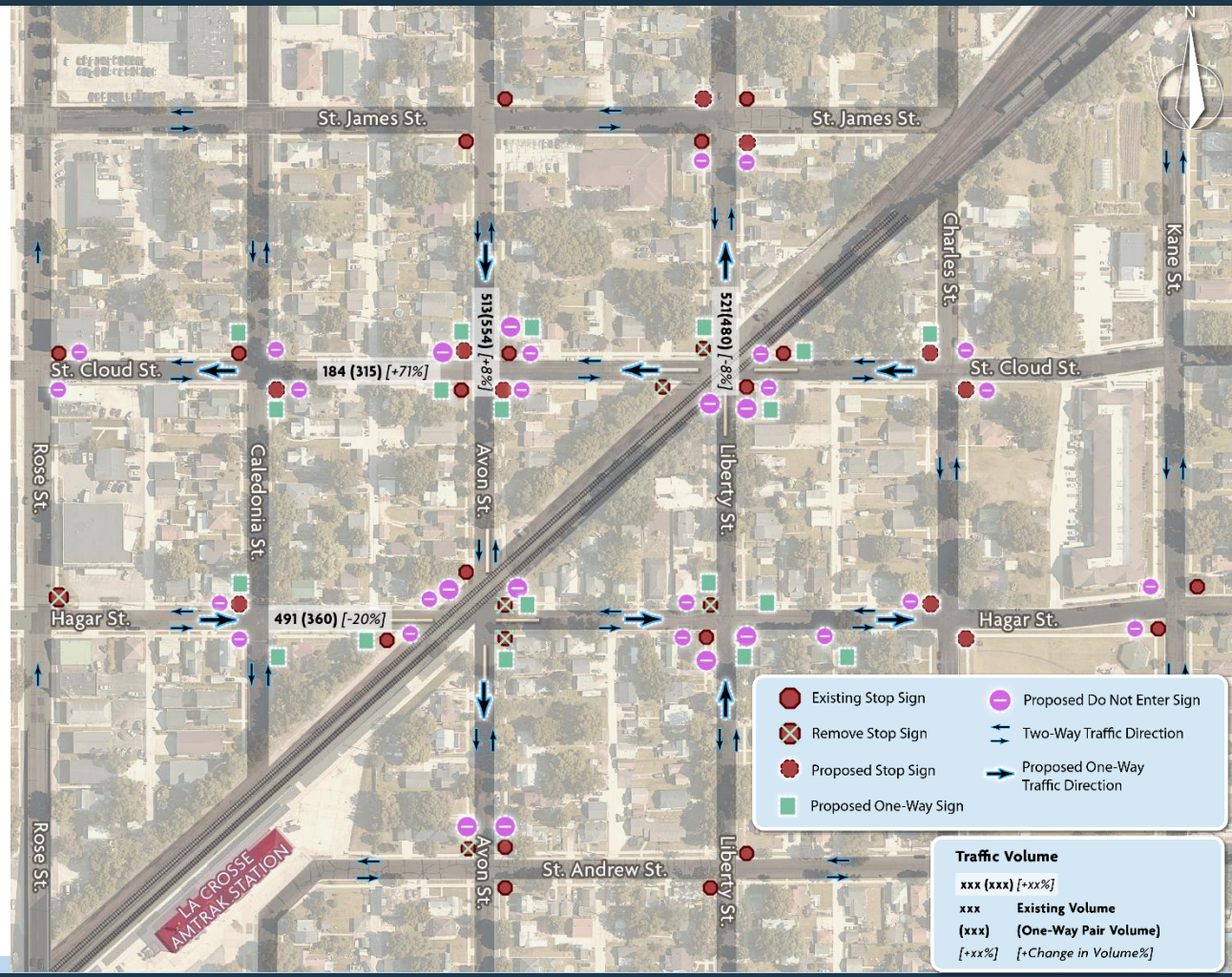
ALTERNATIVE 6:
Two One-Way Pairs

BENEFITS

- All 4 approaches at both intersections would be addressed

CONSIDERATIONS

- Additional gates would be added
- Wrong-way drivers would not be stopped by a gate
- Approach would be narrowed so crossing can be served by a single gate
- Avon St. traffic estimated to increase by 8%
- St. Cloud St. traffic estimated to increase by 71%
- Travel time expected to increase by approximately 2 minutes
- On-street parking would be eliminated within 50 feet of crossing
- Existing medians would be removed



ALTERNATIVE 7:
Close St. Cloud Street/Liberty Street Crossing

DESCRIPTION

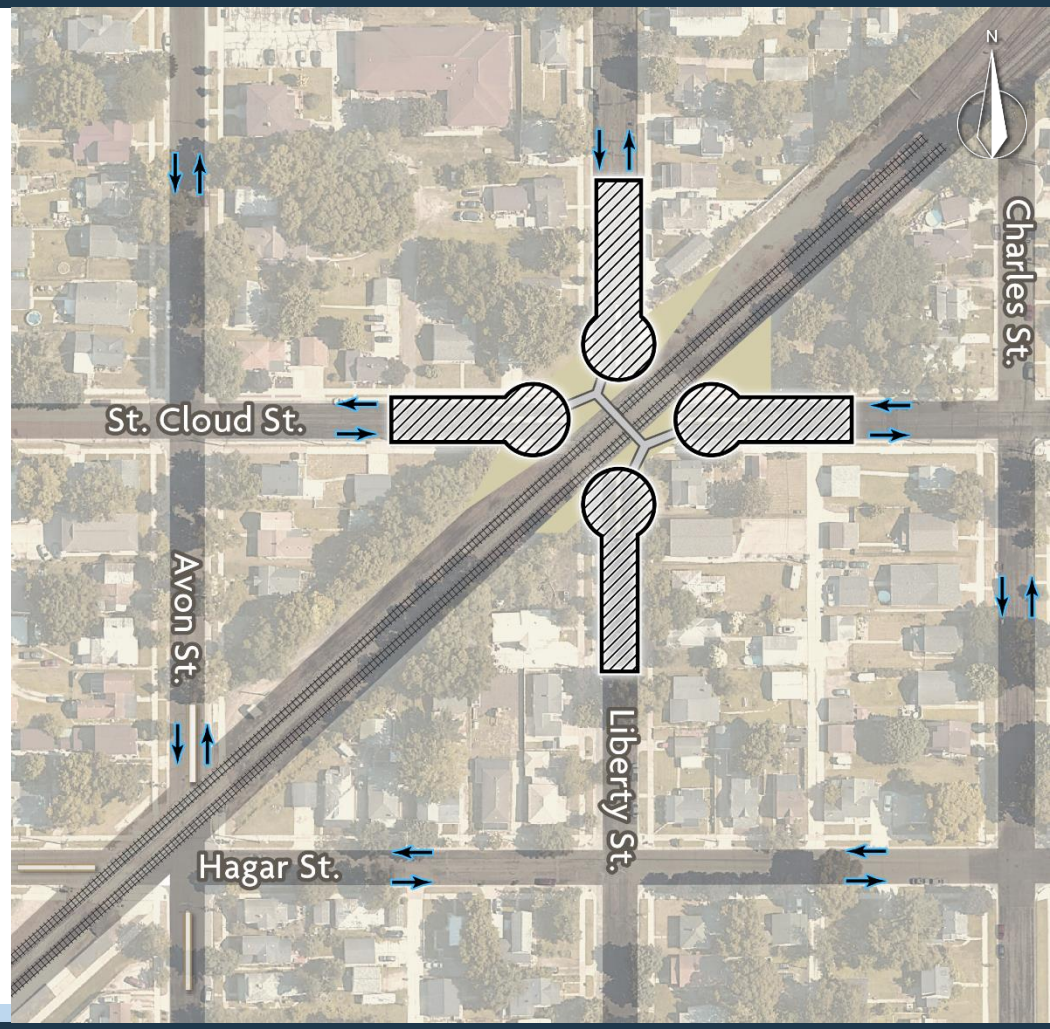
- Close crossing intersection to automobile traffic by creating cul-du-sacs within existing right of way

BENEFIT

- Elimination of the crossing is the safest alternative

CONSIDERATIONS

- Roadway would be rebuilt with space for emergency vehicles to turn around within the existing right of way
- Sidewalks would provide pedestrian connectivity through the crossing
- 100% of traffic would be diverted to Avon St. and Hagar St. intersection
- Would not address risky behaviors at Hagar St. and Avon St; additional alternatives may need to be considered



ALTERNATIVE 8:
Leverage Technology

DESCRIPTION

- Variable message signs or another device to notify drivers when crossing is or will soon be occupied by a train

BENEFITS

- Drivers are notified in advance of the crossing so they can change routes to avoid delays

CONSIDERATIONS

- Benefit of system is not known due to a lack of peer reviewed studies
- Cost dependent on system deployed and distance needed in advance of crossing to maximize potential for rerouting

Fort Valley, Georgia. Sign installed by Georgia DOT, 2022.

NEXT STEPS

1. **Review**
   feedback
2. **Continue**
   ongoing coordination with stakeholders, i.e., City of La Crosse, CPKC, FRA
3. **Select**
   At-Grade Crossing Treatment Alternative/s
4. **Proceed**
   with Office of the Commissioner of Railroads (OCR) Petition and Decision

THANK YOU

QUESTIONS?

https://wisconsindot.gov/Pages/projects/multimodal/tcmc.aspx

LA CROSSE AT-GRADE RAILROAD CROSSING

PUBLIC INVOLVEMENT MEETING

Hagar Street/Avon Street and St. Cloud Street/Liberty Street crossings