



CITY OF NAPERVILLE
**Road Improvement
Plan Update**

MAY 1, 2025

TRANSPORTATION ADVISORY BOARD

OUTLINE



**ROAD IMPROVEMENT
PLAN OVERVIEW**



PUBLIC INPUT

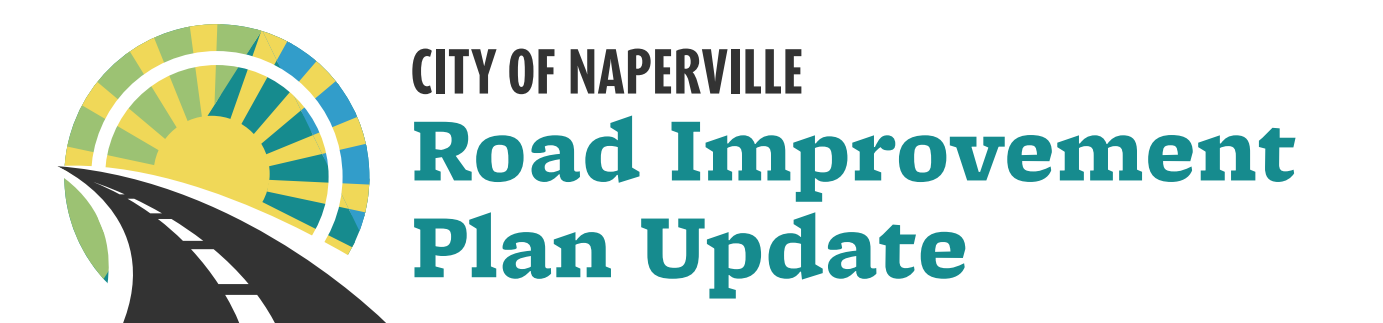


**EXISTING ROADWAY
NETWORK**



NEXT STEPS

Roadway Improvement Plan Overview



Plan Goals



Improve traffic flow on major streets to support City's mobility goals



Prepare cost estimates for future improvements to plan funding sources

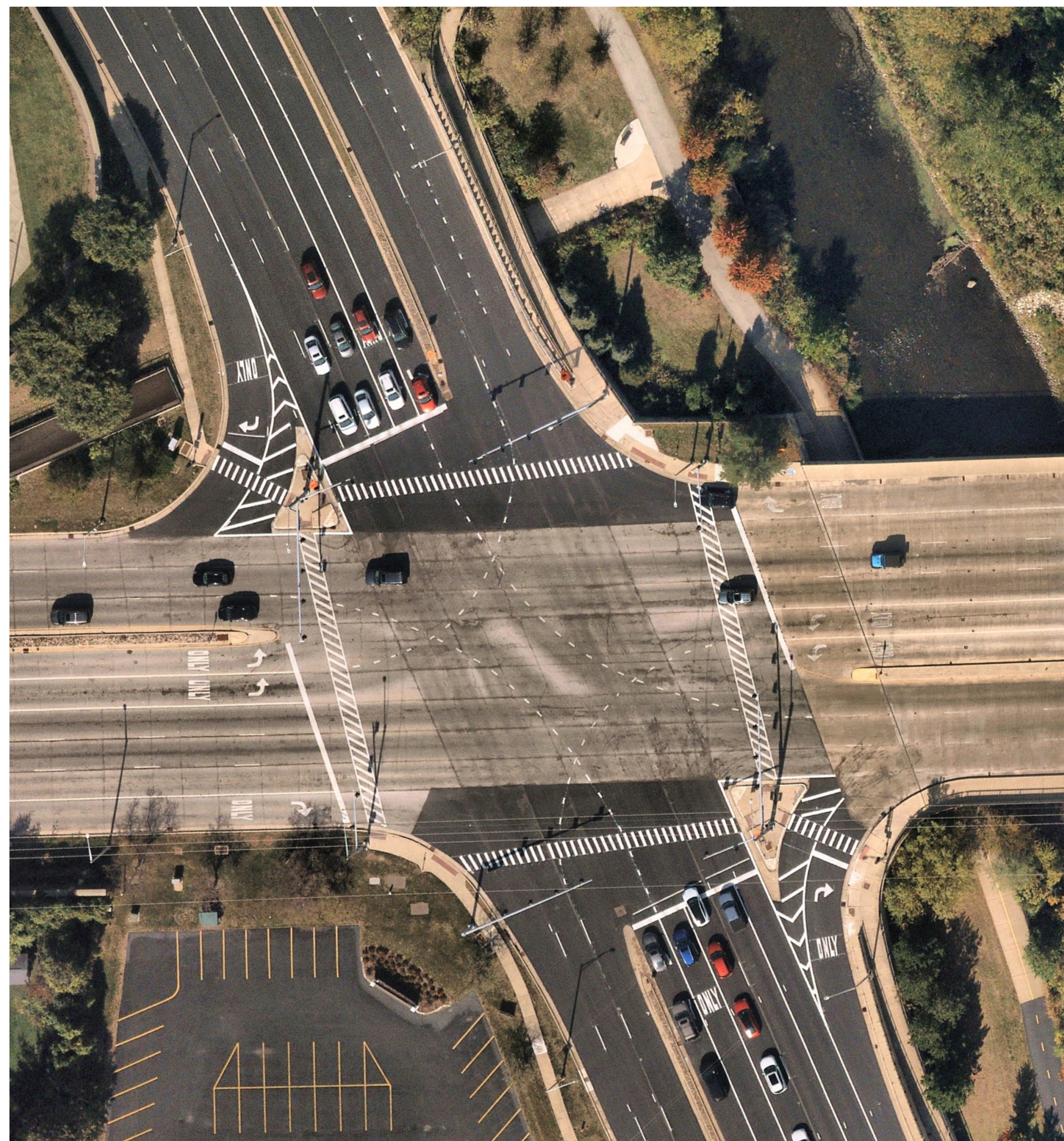


Lower greenhouse emissions to support sustainability efforts

Note: Bicycle and pedestrian improvements will be evaluated as part of the Bicycle and Pedestrian Plan, which is anticipated to occur in 2025-2026.

Project Highlights

Implemented Road Improvement Plan



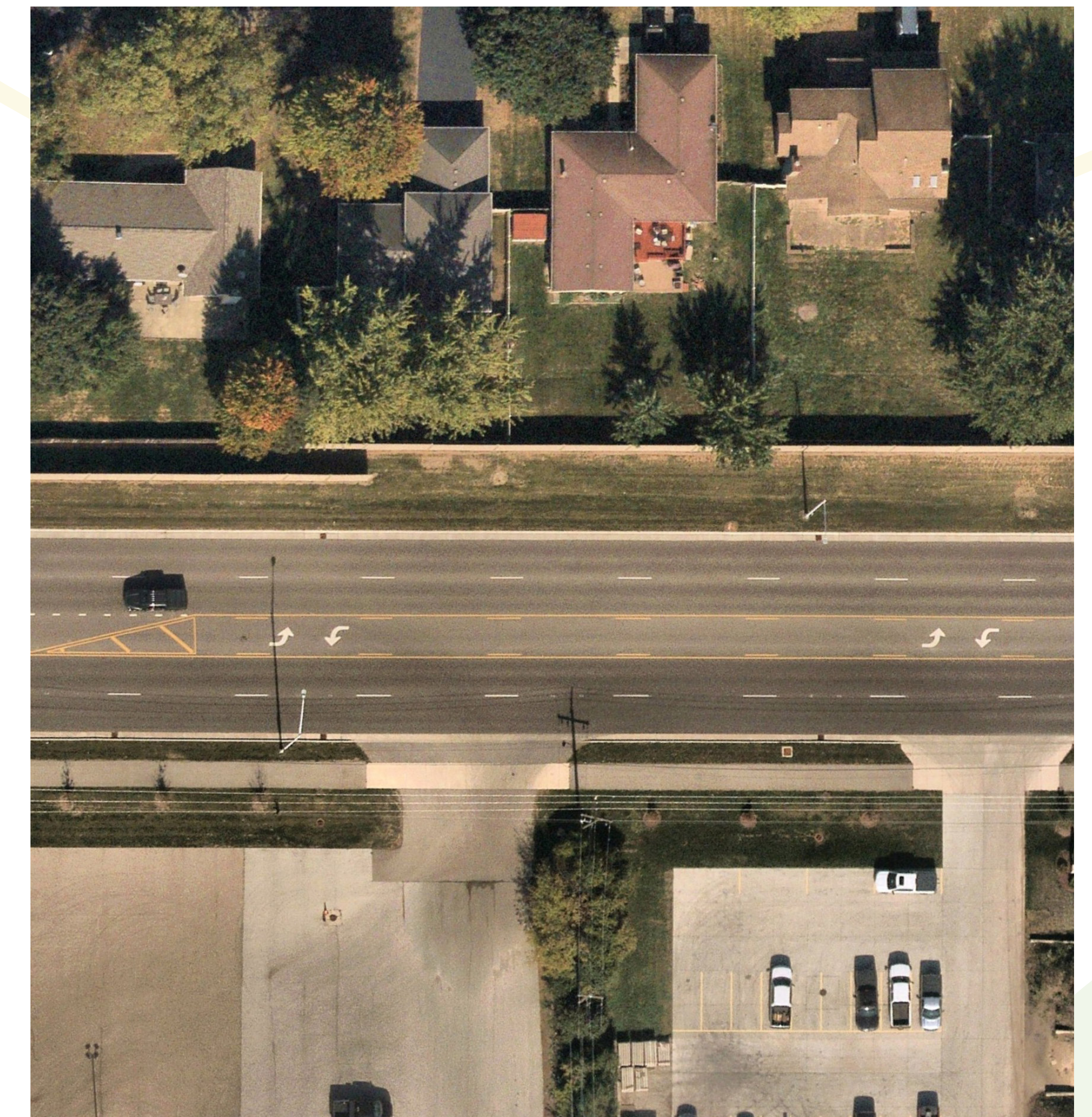
**75th St & Washington St
Intersection Improvements**

COMPLETED 2012



**Route 59 at Diehl Rd, North
Aurora Rd, Aurora Rd**

COMPLETED 2016



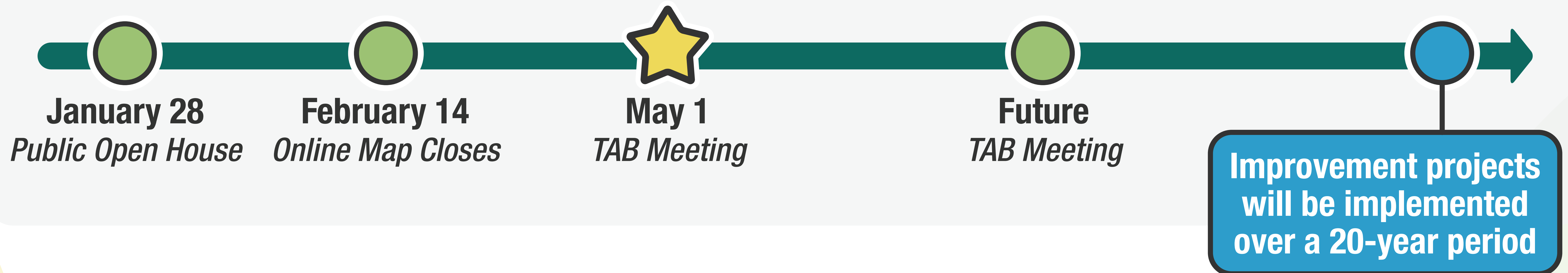
**North Aurora Widening,
Frontenac Rd to Fairway Dr**

COMPLETED 2023

2025 Plan Update



Stakeholder Engagement



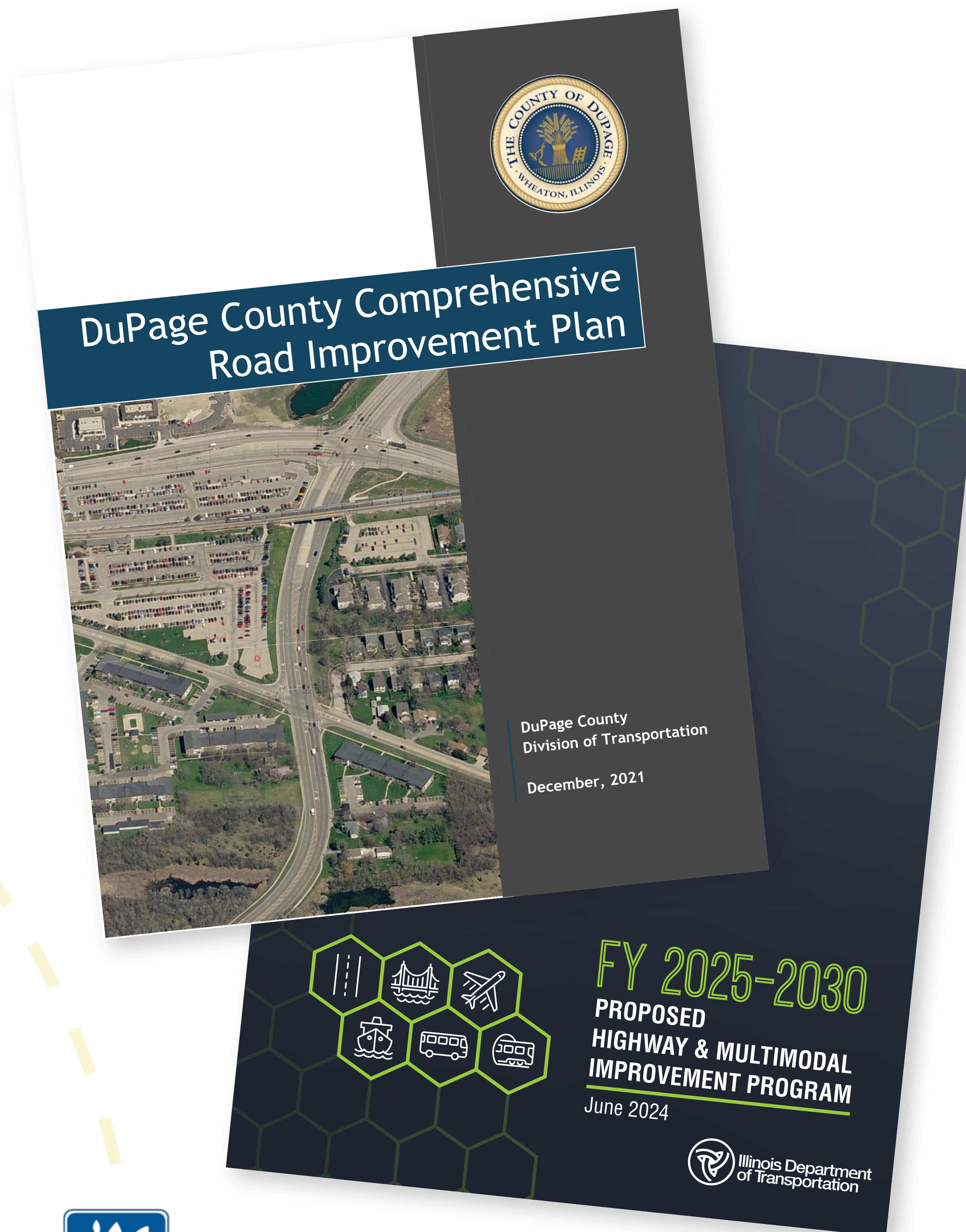
Note: Naperville Road Improvement Plan Update to be completed before December 2025

What is the RIP?

- Address mobility concerns identified in the *2023 Naperville Community Survey*
 - **54%** of respondents rated “Traffic Flow on Major Streets” as **good** or **excellent**
- Plan for intersection and roadway segments under City jurisdiction
 - Evaluate existing traffic conditions
 - Project Year 2050 traffic operations
 - Define capacity-driven improvements to improve traffic flow
 - Inform the City’s *Capital Improvement Plan (CIP)*
 - Opportunities for future input during the design process

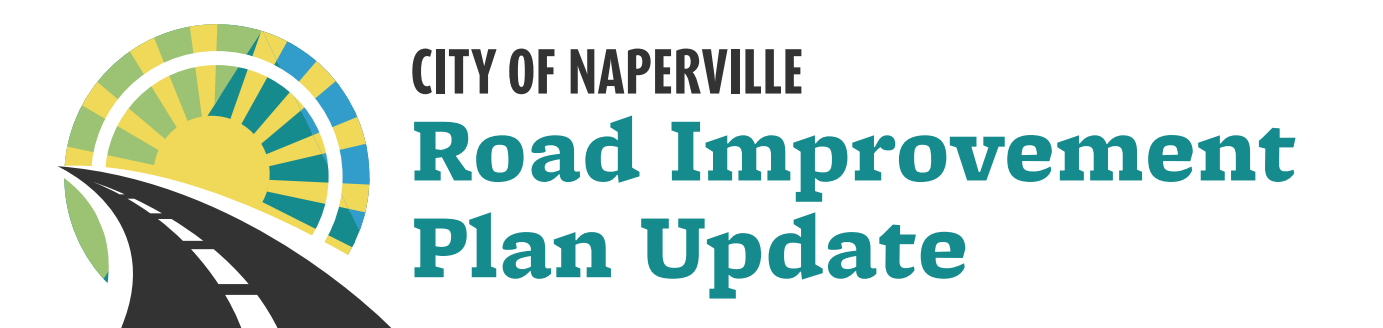


Not included in the RIP



- Improvements to IDOT, DuDOT, Will County, township roadways
- List of all potential intersection and roadway segment improvements
- Bicycle and pedestrian focused improvements
 - *Bicycle and Pedestrian Plan* anticipated 2025-2026
- Construction plans

Existing Conditions Analysis



Existing Conditions: ROADWAY REVIEW

MAJOR ARTERIAL

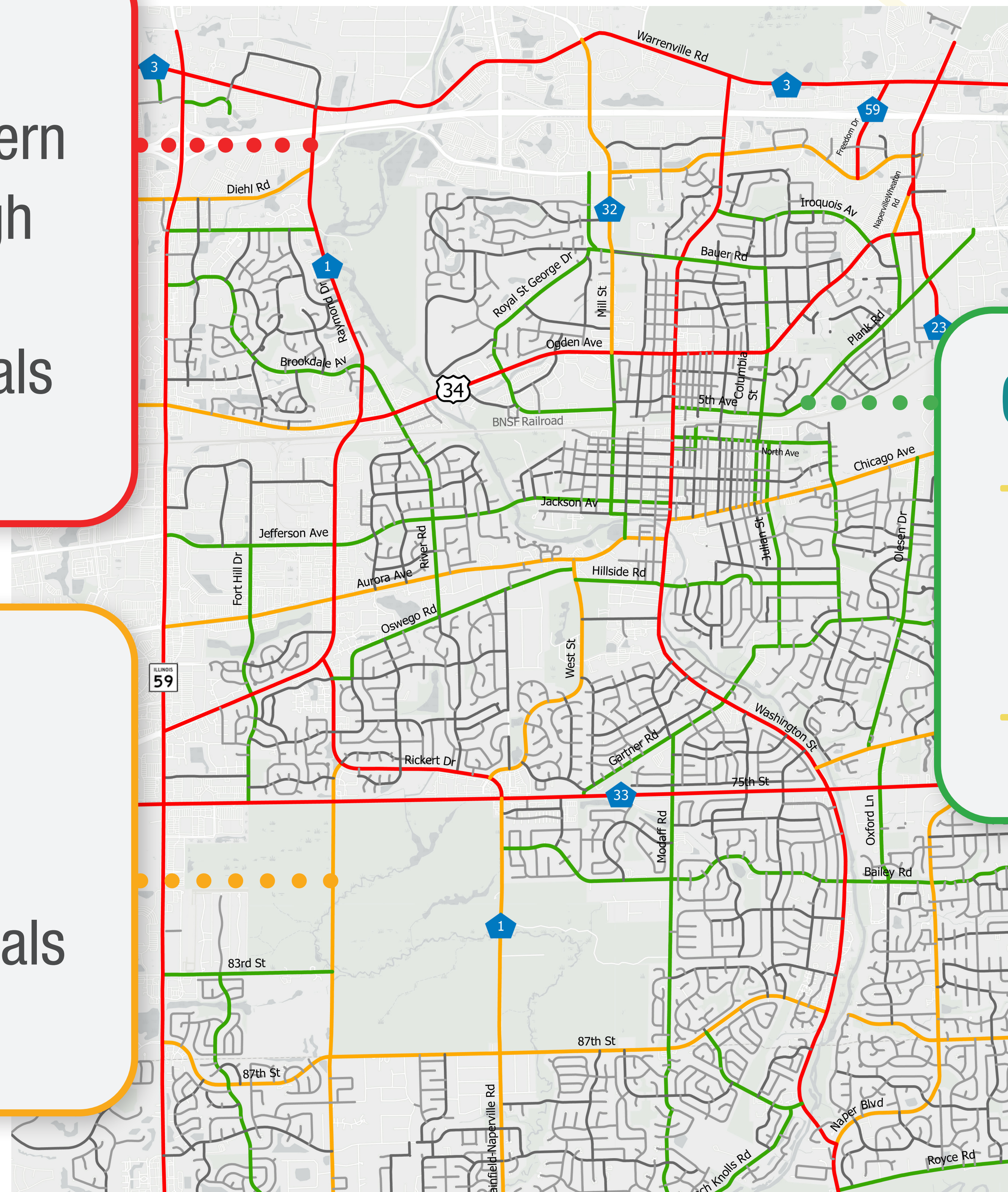
- Carry heavier traffic pattern
- Provide continuity through the city
- Limited access and signals at key intersections

MINOR ARTERIAL

- Provides connectivity within the city
- Interconnect major arterials and collector roadways

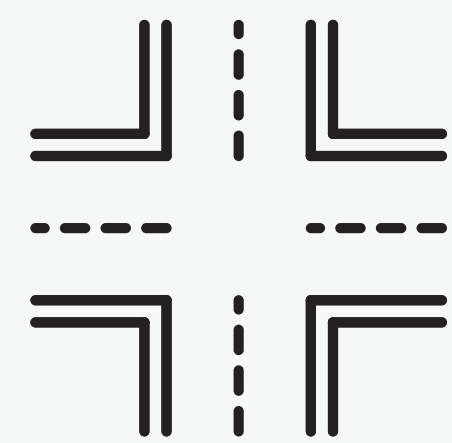
COLLECTOR

- Convey traffic from residential areas to the arterial network
- Carry some through traffic

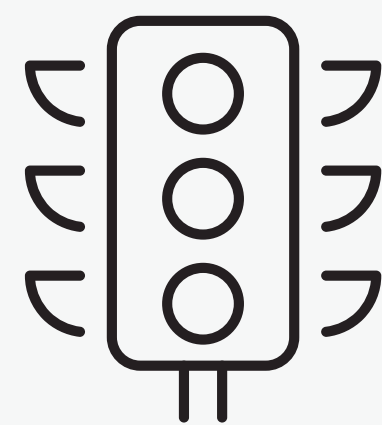


Existing Conditions: DATA REVIEW

ARTERIAL AND COLLECTOR ROADWAYS



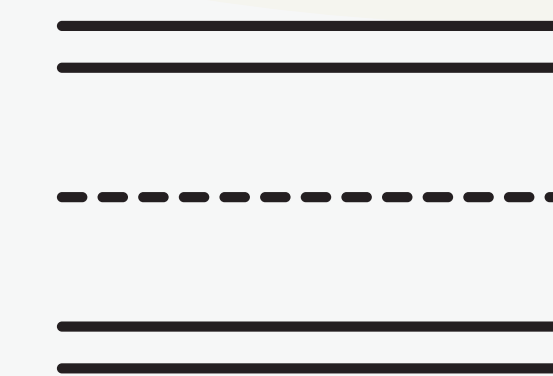
162 intersections



104 signalized



58 unsignalized
(two-way stop control,
all-way stop, yield)



177 roadway
segments

COUNT DATA SOURCES

Year 2020 data not included due to Covid-19

→ City → IDOT → Replica

SIGNAL TIMING DATA



Existing Conditions: LEVEL OF SERVICE

INTERSECTION ANALYSIS

- Synchro capacity analysis software
- LOS D or better typically acceptable
 - Minor-leg stop control: higher delay due to traffic volume on free-flow roadway
 - Signalized: higher delay on minor street and protected turn movements due to signal timings
- LOS E acceptable within downtown Naperville

ROADWAY SEGMENT ANALYSIS

- FHWA Simplified Capacity Calculation Method
 - Number of lanes
 - Traffic control
 - Divided/undivided

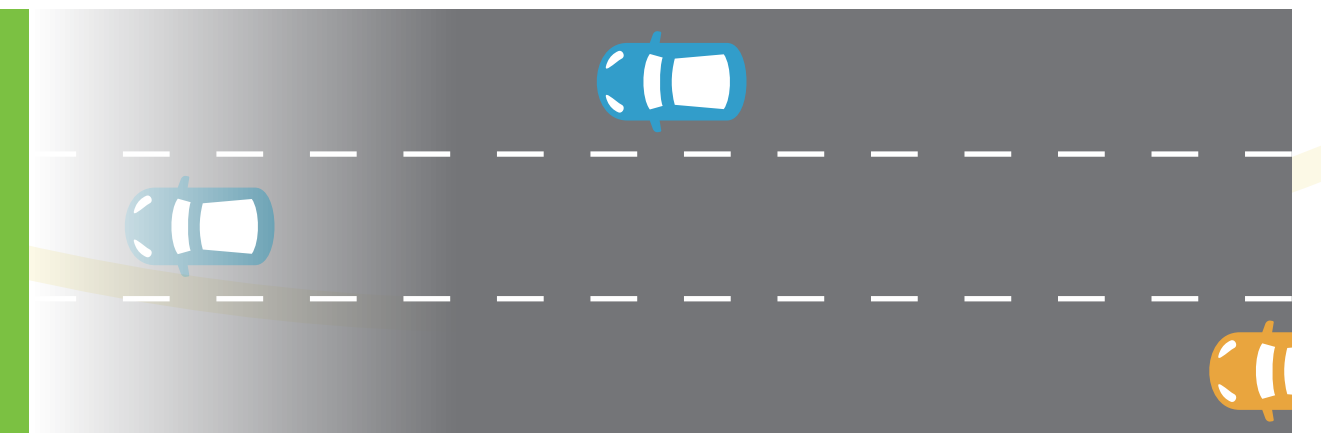
LEVELS OF SERVICE

FREE FLOW

Low volumes and no delays.

LOS

A

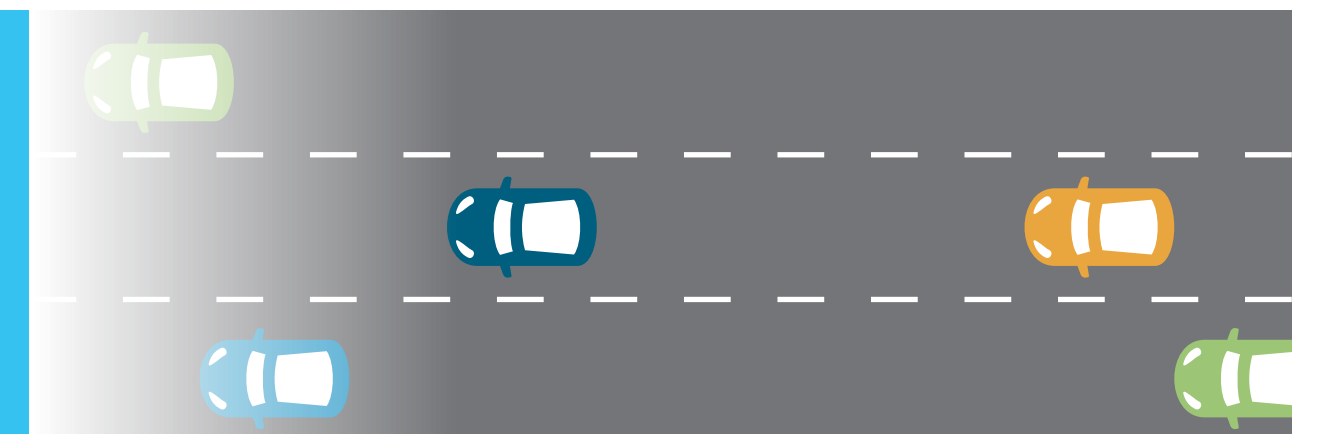


STABLE FLOW

Speeds restricted by travel conditions, minor delays.

LOS

B

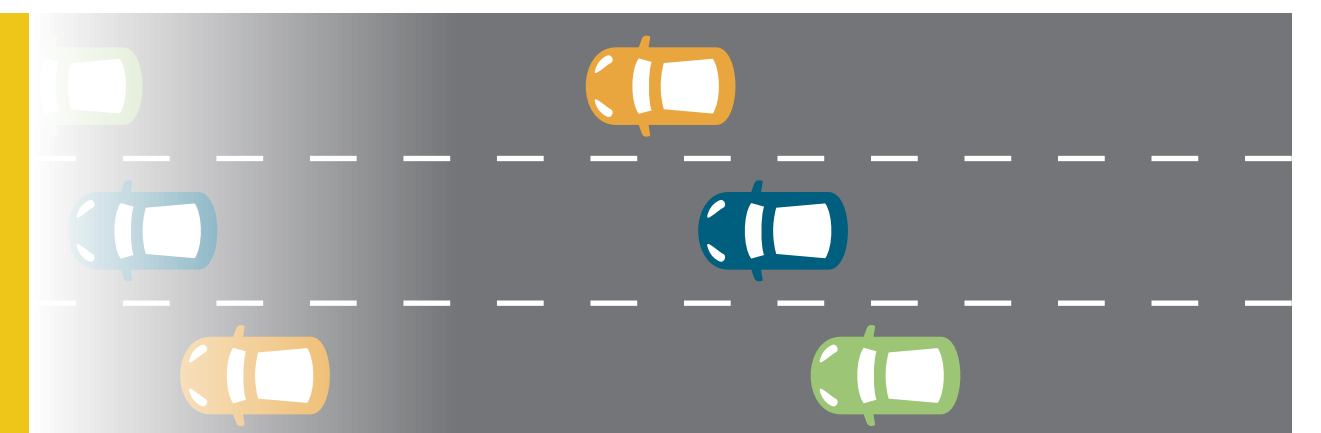


STABLE FLOW

Speeds and maneuverability closely controlled because of higher volumes.

LOS

C

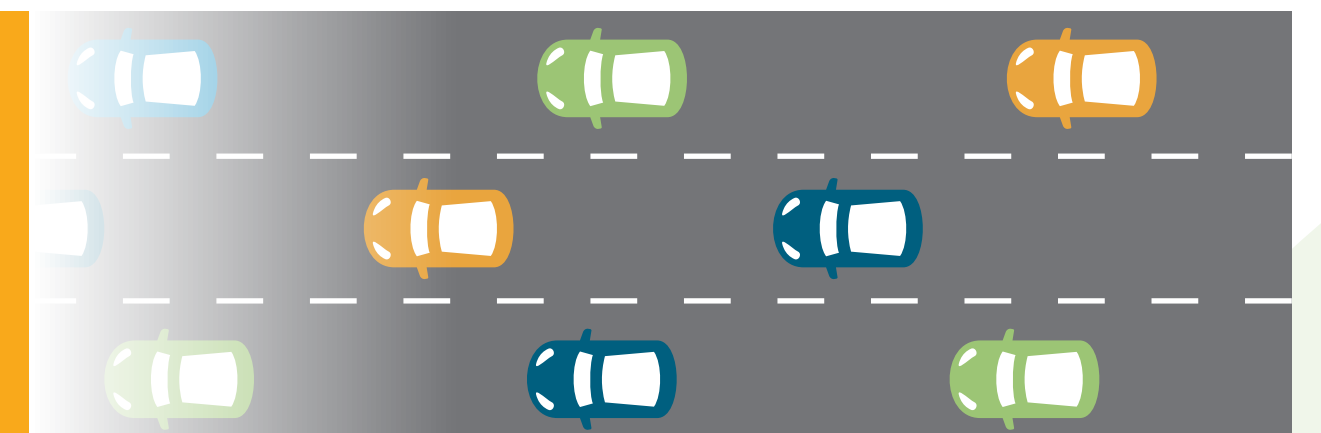


STABLE FLOW

Speeds considerably affected by change in operation conditions. High density traffic restricts maneuverability, volume near capacity.

LOS

D

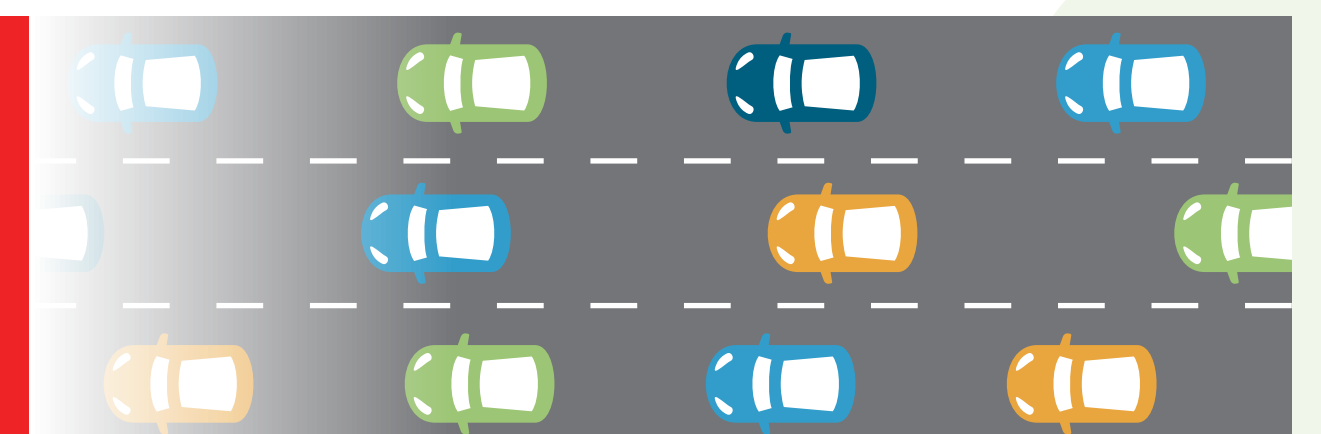


UNSTABLE FLOW

Low speeds; considerable delay; volume at or slightly over capacity.

LOS

E

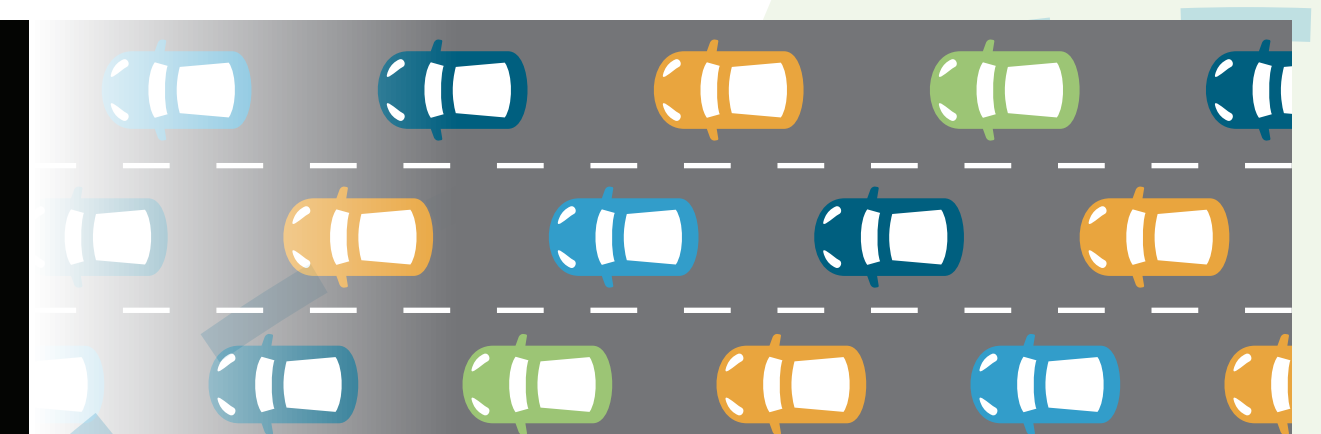


FORCED FLOW

Very low speeds; volumes exceed capacity; long delays with stop-and-go traffic.

LOS

F



Existing Levels of Service

NORTHWEST QUADRANT

Segment Level of Service

— A	— D
— B	— E
— C	— F

Intersection Level of Service

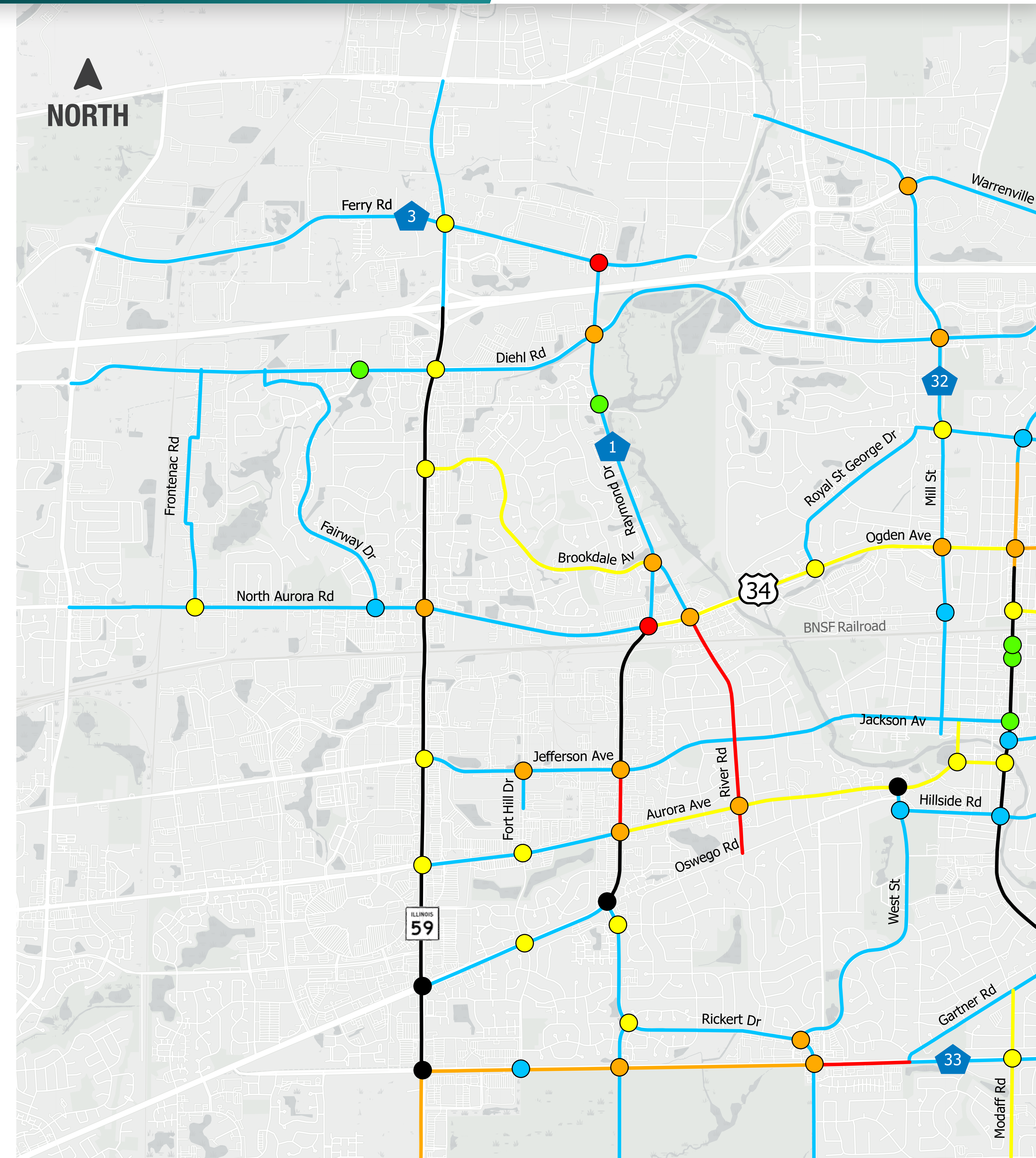
● A	● D
● B	● E
● C	● F

SEGMENTS

- *Route 59*
- *Ogden Avenue*
- *River Road*

INTERSECTIONS

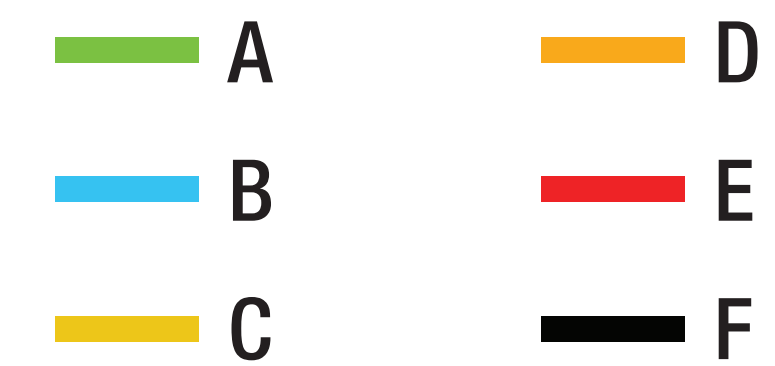
- *Raymond Drive / Ferry Road*
- *Ogden Avenue / North Aurora Road*
- *Ogden Avenue / Rickert Drive*
- *Route 59 / Ogden Avenue*
- *Route 59 / 75th Street*



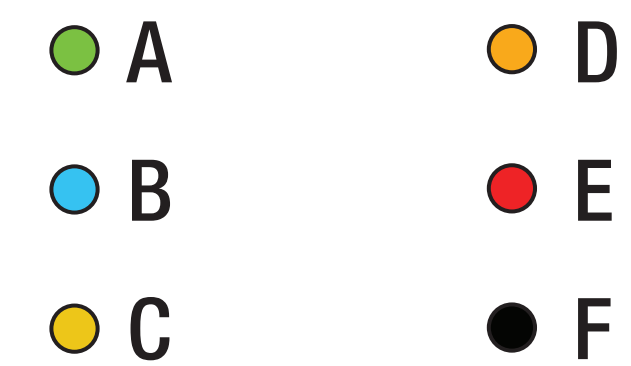
Existing Levels of Service

NORTHEAST QUADRANT

Segment Level of Service



Intersection Level of Service

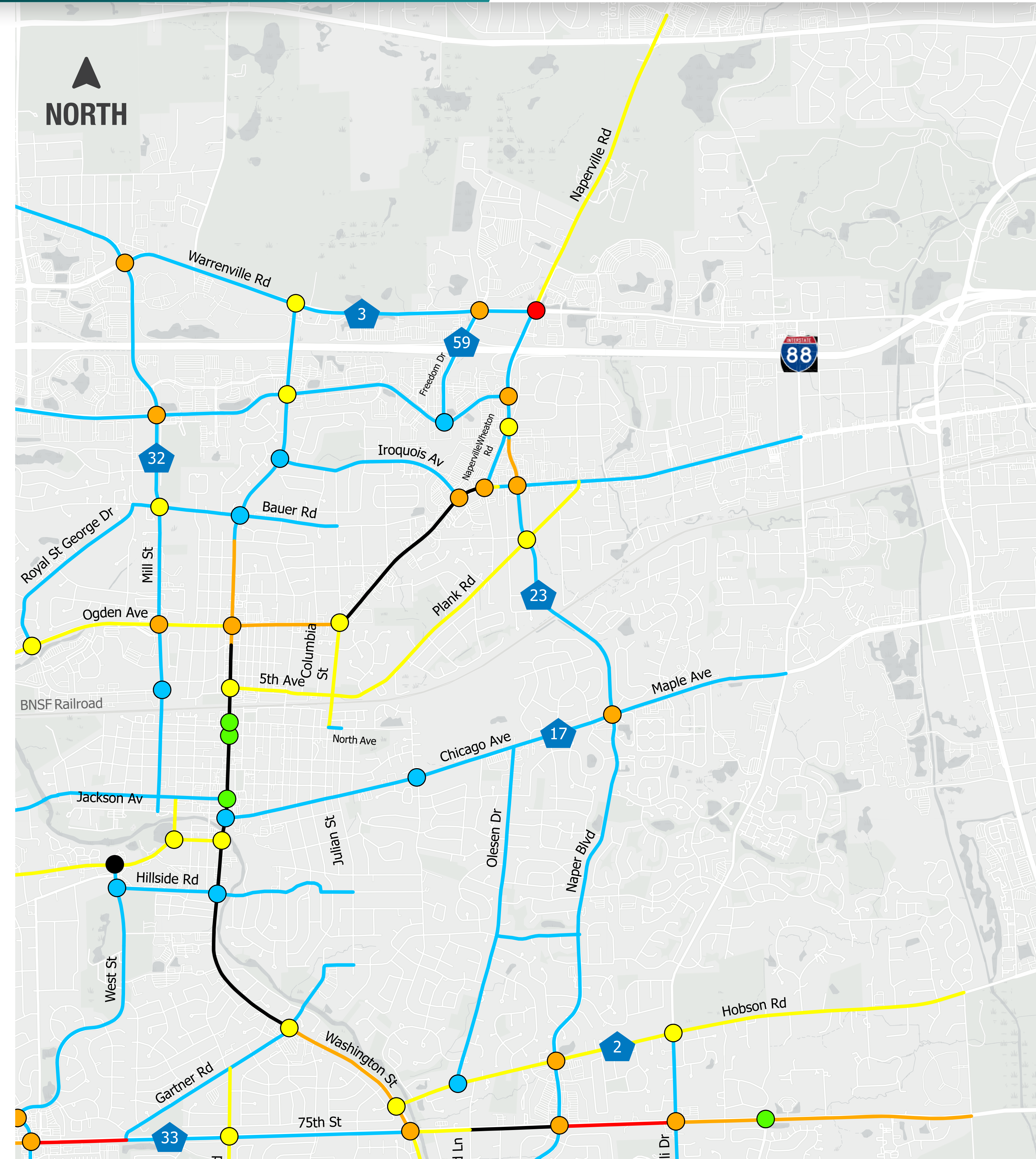


SEGMENTS

- *Washington Street*
- *Ogden Avenue*
- *75th Street*

INTERSECTIONS







- *Naperville Road / Warrenville Road*
- *Aurora Road / West Street-Private Driveway*









Existing Levels of Service

SOUTHWEST QUADRANT

Segment Level of Service

 A	 D
 B	 E
 C	 F

Intersection Level of Service

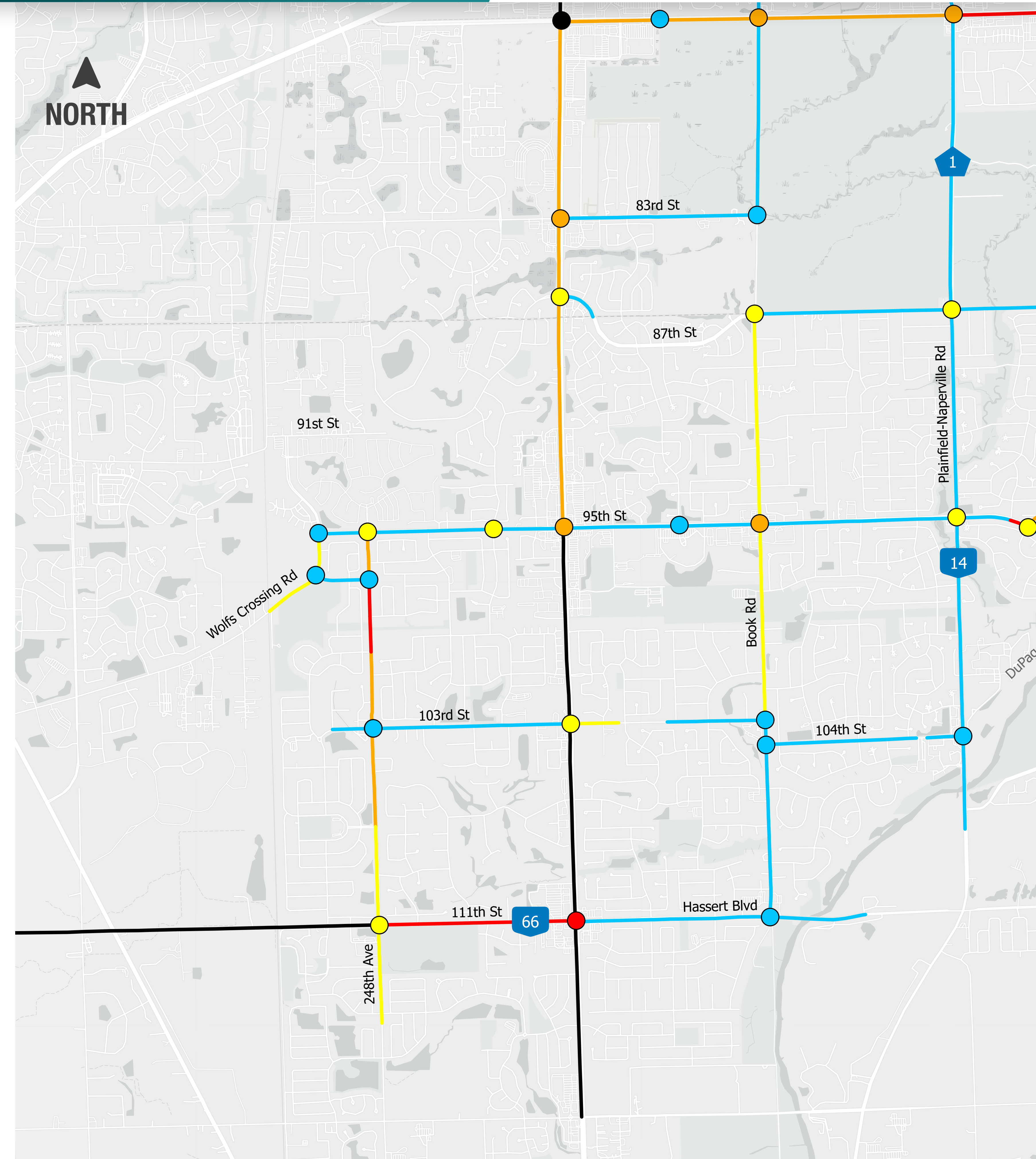
 A	 D
 B	 E
 C	 F

SEGMENTS

- ➔ *Route 59*
- ➔ *248th Avenue*
- ➔ *111th Street*

INTERSECTIONS

- ➔ *Route 59 / Hassert Boulevard-111th Street*



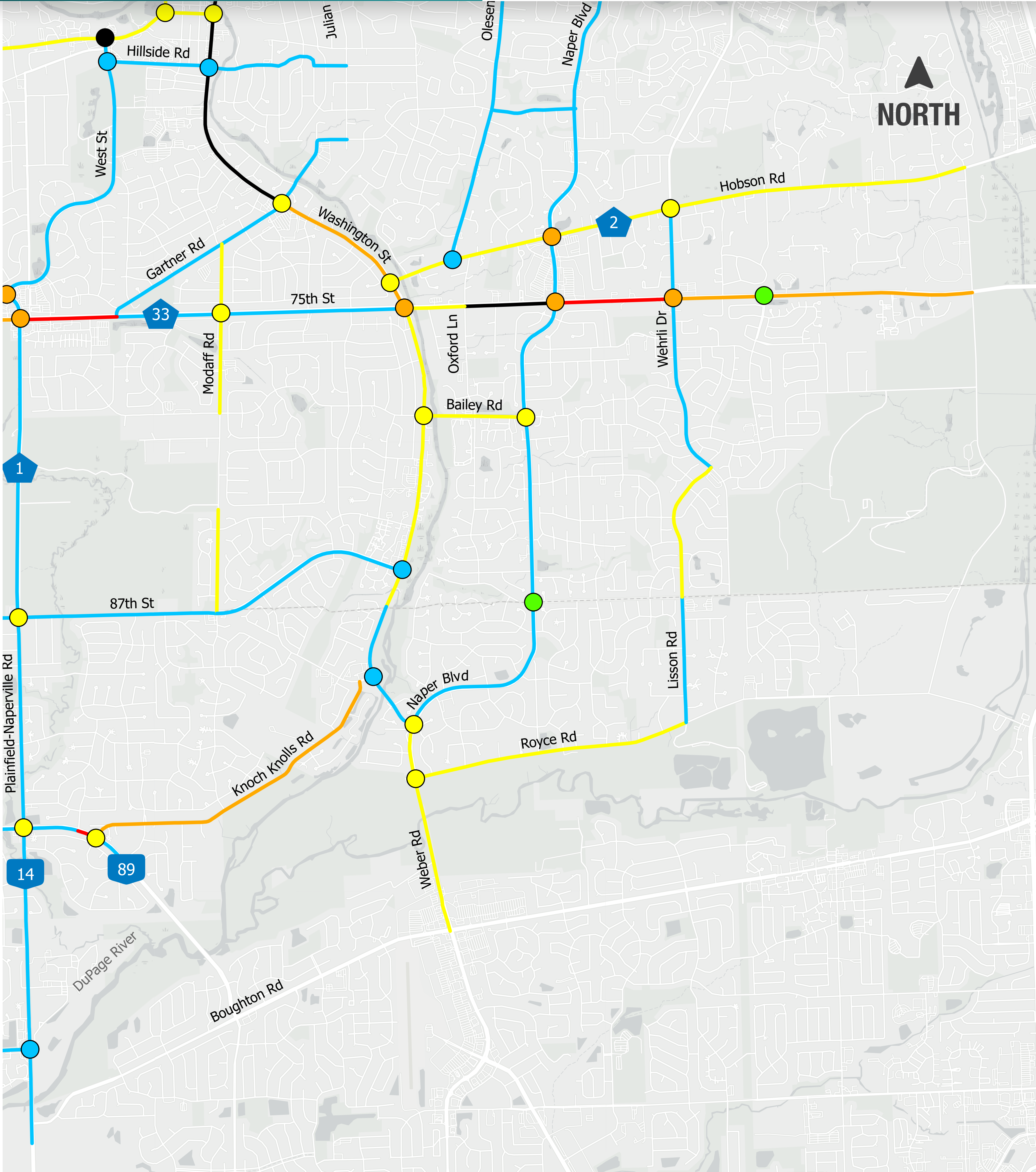
Existing Levels of Service

SOUTHEAST QUADRANT

Segment Level of Service		Intersection Level of Service	
— A	— D	● A	● D
— B	— E	● B	● E
— C	— F	● C	● F

SEGMENTS

➔ 95th Street (Knoch Knolls Road to Cheyenne Drive)



Existing Conditions: INTERSECTION SUMMARY

SUMMARY OF OVERALL INTERSECTION LOS E

INTERSECTION	JURISDICTION
Naperville Road / Warrenville Road	DuDOT jurisdiction (both approaches, signal)
Raymond Drive / Ferry Road	DuDOT jurisdiction (both approaches, signal)
Ogden Avenue / North Aurora Road	IDOT jurisdiction (Ogden Avenue and signal)
Route 59 / Hassert Boulevard-111th Street	IDOT jurisdiction (Route 59 and signal)

Existing Conditions: INTERSECTION SUMMARY

SUMMARY OF OVERALL INTERSECTION LOS F

INTERSECTION	JURISDICTION
Aurora Avenue / West Street-Private Driveway	Naperville jurisdiction
Ogden Avenue / Rickert Drive	IDOT jurisdiction (Ogden Avenue and signal) Naperville jurisdiction (Rickert Drive)
Route 59 / Ogden Avenue	IDOT jurisdiction (both approaches, signal)
Route 59 / 75th Street	IDOT jurisdiction (Route 59, signal) DuDOT jurisdiction (75th Street)

Existing Conditions: SEGMENT SUMMARY

SUMMARY OF ROADWAY SEGMENTS AT LOS E		
ROADWAY	SEGMENT	JURISDICTION
75th Street	East of Rickert Drive to Gartner Road	DuDOT
75th Street	Naper Boulevard to Wehrli Road	DuDOT
95th Street	West of Knoch Knolls Road to Cheyenne Drive	Naperville
111th Street	Between 248th Avenue and Route 59	Naperville
Ogden Avenue	North of Aurora Avenue to Jefferson Avenue	IDOT
River Road	South of Ogden Avenue to Oswego Road	Naperville
248th Avenue ¹	South of Trumpet Avenue to Honey Locust Drive	Naperville

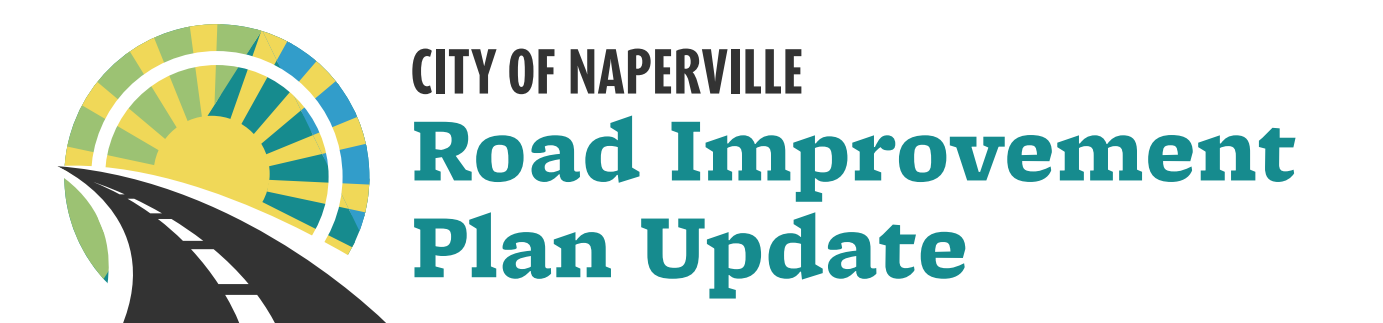
¹The City of Naperville 248th Avenue Improvement project is currently underway.

Existing Conditions: SEGMENT SUMMARY

SUMMARY OF ROADWAY SEGMENTS AT LOS F

ROADWAY	SEGMENT	JURISDICTION
75th Street	West of Naper Boulevard to Naper Boulevard	DuDOT
111th Street	West of 248th Avenue	Naperville
Route 59	South of 95th Street	IDOT
Route 59	South of I-88 Interchange to 75th Street	IDOT
Ogden Avenue	South of North Aurora Road to Jefferson Avenue	IDOT
Ogden Avenue	South of Aurora Avenue to Rickert Drive	IDOT
Ogden Avenue	West of Naperville-Wheaton Road to Columbia Street	IDOT
Washington Street	South of Ogden Avenue to Gartner Road	Naperville

Public Input



Public Input Opportunities

REQUEST

Solicit input on City's existing roadway network and opportunities for future improvements

PURPOSE

Define locations with unique operational characteristics that may not be readily evident in the analysis of existing conditions

OPPORTUNITIES

Public Open House from 4-8 PM on January 28, 2025



40 attendees



22 written comments



2 emails

»»PublicCoordinate Online Map Tool
open through February 14, 2025



470 unique map comments

Summary of Comments

Total of
494 comments
organized by categories:

CONGESTION
queues, delay

NEW TRAFFIC CONTROL
signal, stop sign, other

PARKING

PEDESTRIAN/BICYCLE

OTHER

161

comments

33%

*regarding non-City
jurisdiction intersections
or roadways*

66

comments

13%

*focused on pedestrian/
bicycle conditions or
improvements*

4

comments

*where City improvement
is planned or underway*

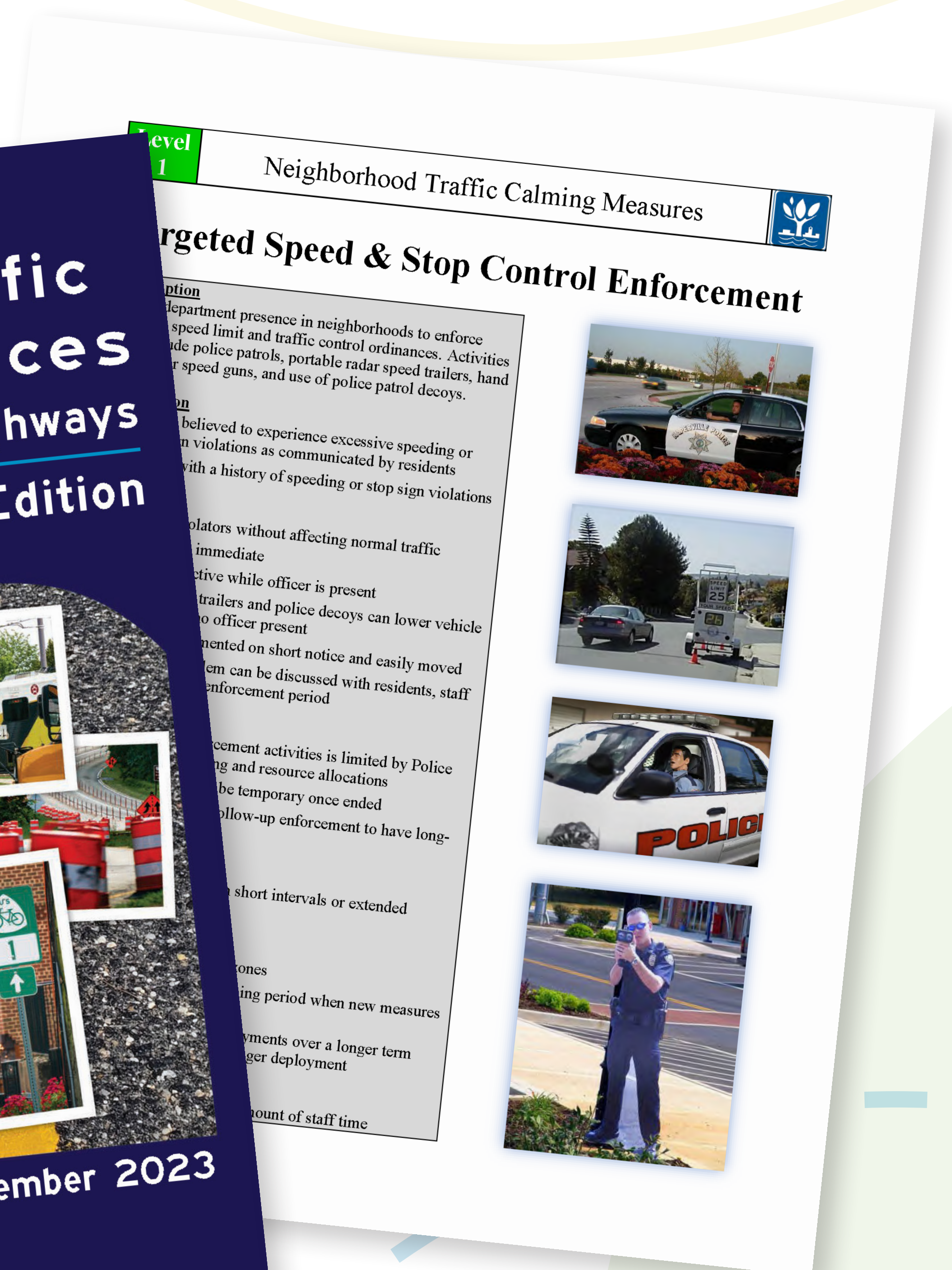
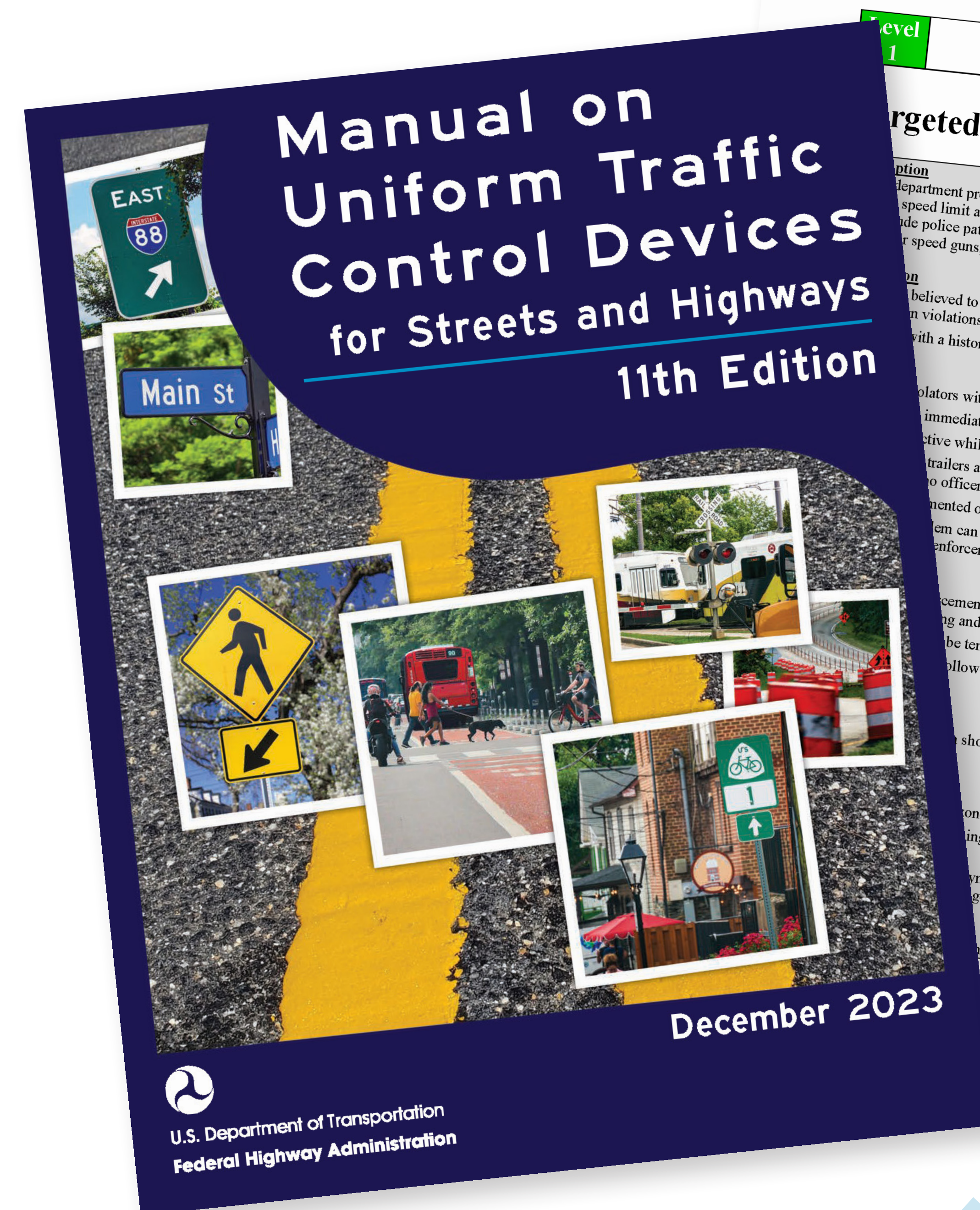
29

comments

*where IDOT improvement
is planned or underway*

Other (Non-RIP) Comments

- Pedestrian/bicycle comments to be considered with City's *Bicycle and Pedestrian Plan* (anticipated 2025-2026)
- Other comments to be reviewed by City staff
 - Traffic control review
 - Speed studies
 - On-street parking
 - Maintenance
 - Landscaping
 - Pavement markings
 - Street signs



Frequent Comments

OGDEN AVENUE / IROQUOIS AVENUE

- Additional traffic due to recent development
- Suggested improvements include left-turn phase from Iroquois to Ogden and signal timing modifications



RESPONSE

- Ogden Avenue and traffic signal under IDOT jurisdiction (not included in RIP Update).
- Signal modifications planned for this intersection to include protected/permitted left-turn phase from Iroquois; permit application under IDOT review.

Frequent Comments

NAPER BOULEVARD

- Vehicle speed along Naper Boulevard from Plank Road to 75th Street
- Signal timing between Hobson Road and 75th Street



RESPONSE

- Naper Boulevard is a 4-lane arterial roadway with approximately 24,000 vehicles per day. The posted speed limit is 35 mph. Vehicle speed reduction markings.
- Signal timing has been optimized; limitations associated with spacing distance between signals and DuDOT priority green time along 75th Street.

Frequent Comments

OGDEN AVENUE / NAPERVILLE-WHEATON ROAD

- Intersection alignment
- Sight distance for northbound left-turn movement
- Increased traffic related to area development



RESPONSE

- Ogden Avenue and traffic signal under IDOT jurisdiction (not included in RIP Update).
- IDOT improvement planned to provide new mast arms for the signal and a protected/permitted westbound left-turn phase.

Next Steps: FUTURE CONDITIONS



DEVELOP

*year 2050
traffic predictions*

- IDOT and CMAP data



ANALYZE

future traffic conditions

- 162 intersections
- 177 roadway segments



IDENTIFY

*operational
challenges*



DEFINE *improvements*

- City jurisdiction
- Feasibility review
 - ➡ ROW, utility conflicts, setbacks and structures, wetlands, maintenance, sustainability
- 20+ year implementation

Next Steps: FUTURE TAB MEETING



IDENTIFY

*locations with capacity
challenges and opportunities*



EVALUATE

*alternative
improvements*



DEFINE

*preliminary
improvements*