

US 51 (Stoughton Road) South Corridor Study

Public Involvement Meeting

Robert M. La Follette High School, Madison, WI

November 19, 2024



Presentation Overview

- Study Background
- Purpose and Need
- Corridor Conceptual Alternatives
- Next Steps



US 51 South Study Area

Corridor Limits

Voges Rd./Terminal Dr. to South of WIS 30

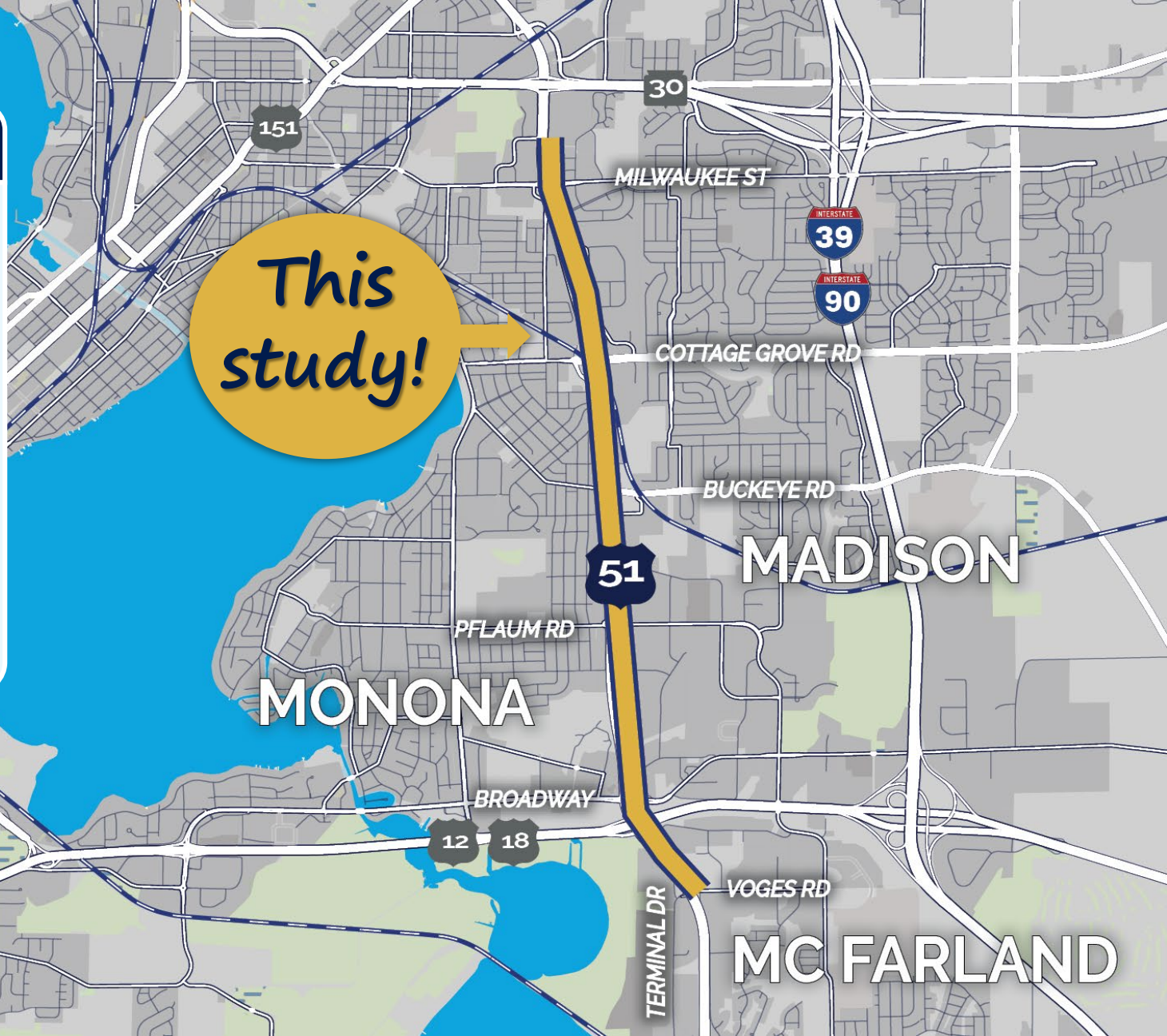
Corridor Length

4.4 Miles

Municipalities:

City of Madison, City of Monona, Village of McFarland,
Town of Blooming Grove

This study!

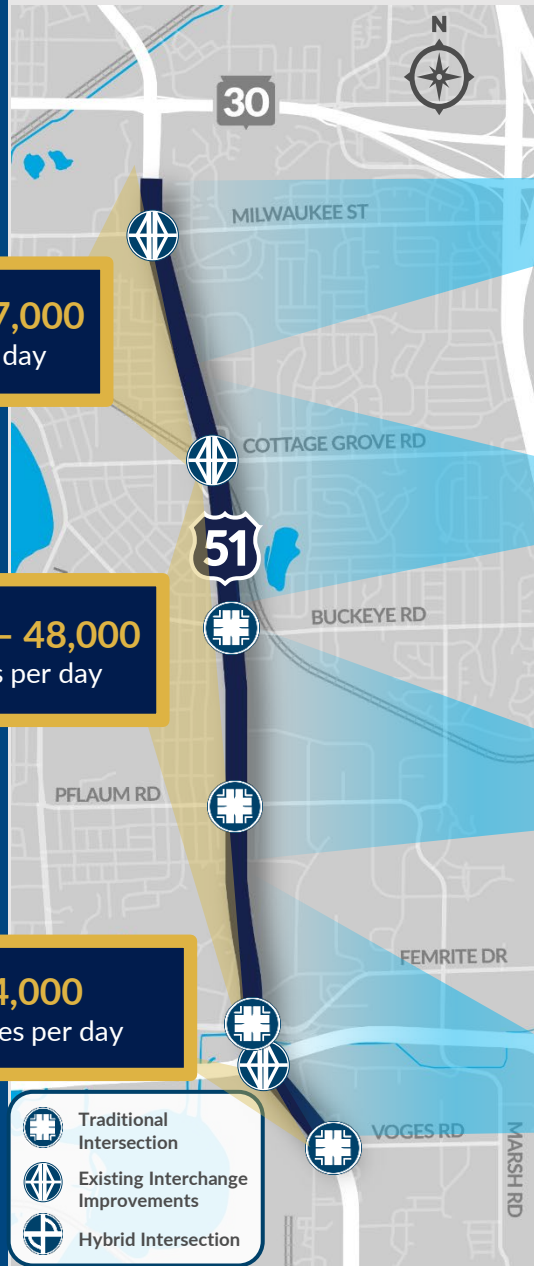


Existing Corridor

45,000 – 47,000
vehicles per day

42,000 – 48,000
vehicles per day

34,000
vehicles per day



SPEED
LIMIT
45



SPEED
LIMIT
55



SPEED
LIMIT
45

Purpose and Needs Summary

The **purpose** of the US 51 South Study is to improve safety and mobility for all modes of travel and improve community connectivity, guided by local community plans and goals.

Needs:



Safety

High number of crashes at US 51 intersections and safety concerns for all modes of travel



Mobility

Poor operations and long backups at US 51 intersections



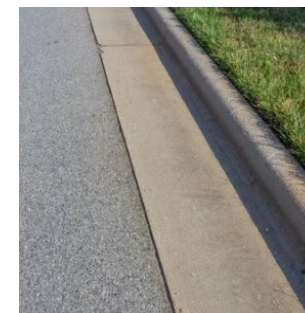
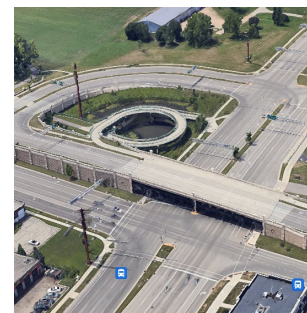
Connectivity

US 51 can act as a barrier, with limited east-west crossings

Study Process



Conceptual Alternatives



Conceptual alternatives presented are flexible. Your feedback will help combine, adjust, and refine the detailed alternatives.

All corridor conceptual alternatives presented today will:



**Add one lane in
each direction**



Reduce speed



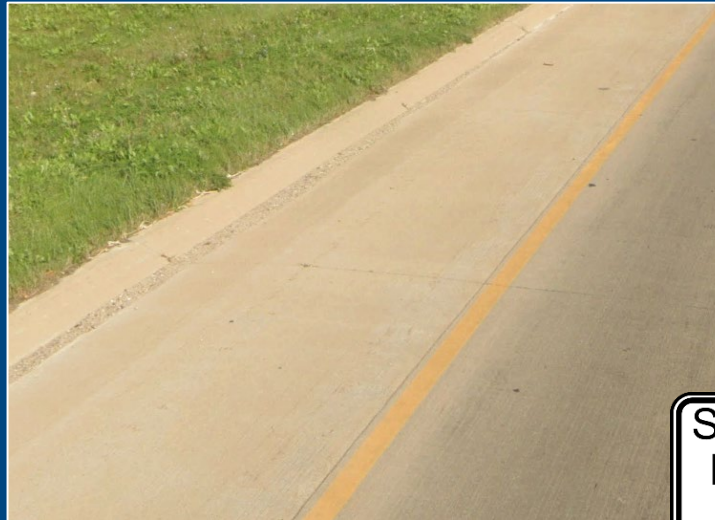
**Improve
multimodal
facilities**

Recommended Design Improvements

Minimal Shoulder,
Curb and Gutter



Wide Shoulder,
Mountable Curb



Wide Shoulder,
Ditch

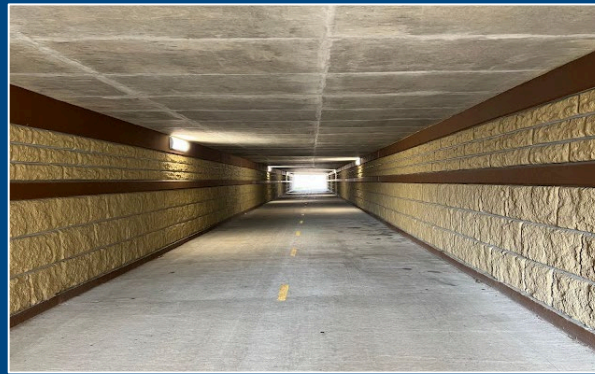


Types of Improvements

Options for multimodal facilities will be explored in all alternatives. Potential multimodal improvements include:



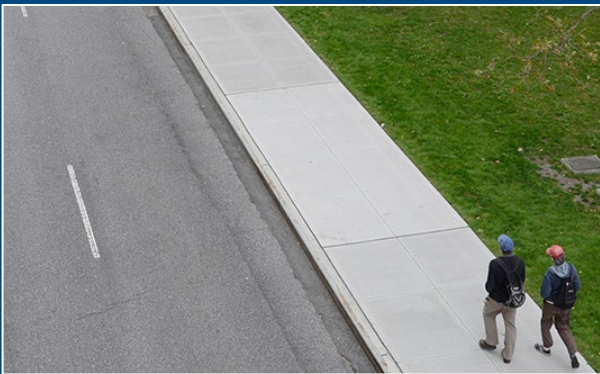
Separated Bike Lane



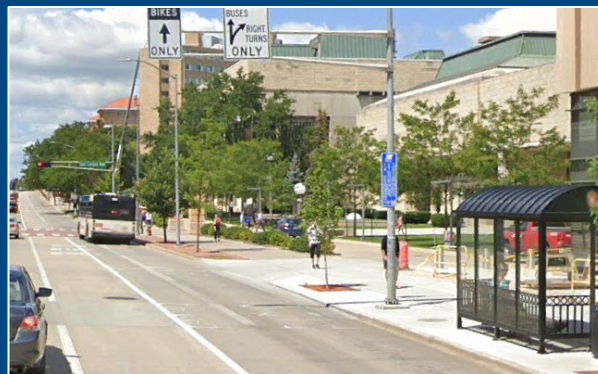
Bike/Pedestrian Over/Underpass



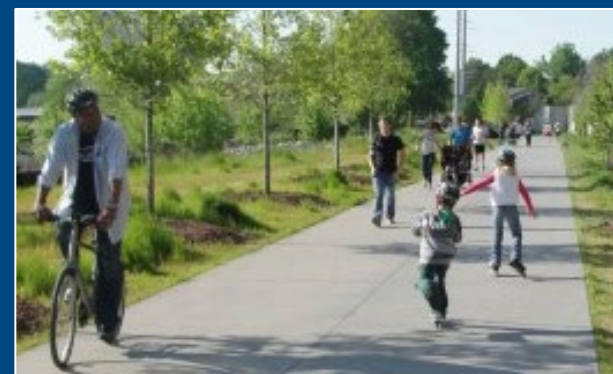
Bike Signals



Sidewalk



Bus Lane



Shared-Use Path

Key differences between corridor conceptual alternatives are:



Intersection Types



New Street Connections



Business Access:
South of Pflaum Road to
Buckeye Road



Speed Limit:
45 mph or 35 mph

Intersection Types



New Idea: Hybrid Intersection



Interchange

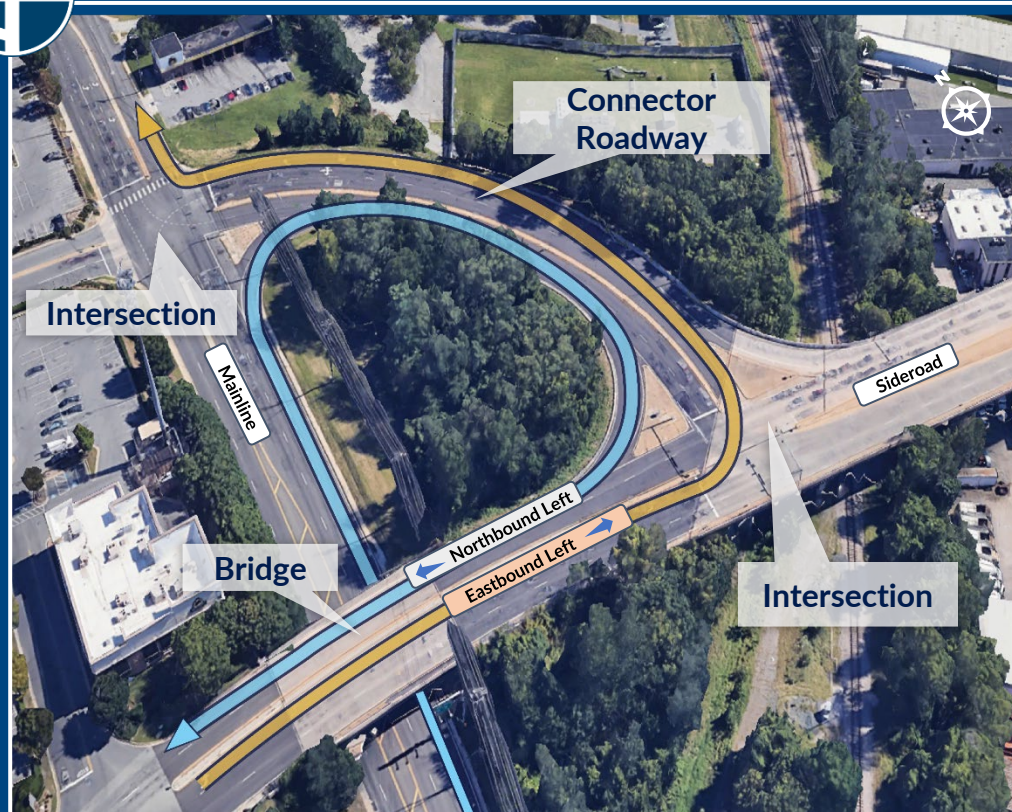


Traditional Intersection



Potential Locations:

Buckeye Road,
Pflaum Road,
Broadway,
Voges Road



Potential Locations:

Milwaukee Street, Cottage Grove Road, Buckeye Road, Pflaum Road, Broadway, Voges Road



Potential Locations:

Milwaukee Street,
Cottage Grove Road,
US 12/18 (Beltline)

Business Access Options



Direct Business Driveways

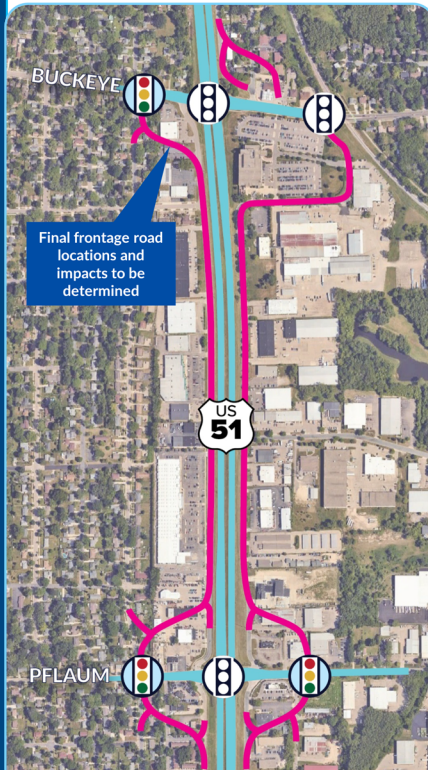


Frontage Roads

Frontage Road Options: Pflaum to Buckeye

Both Frontage Roads with Traditional Intersections

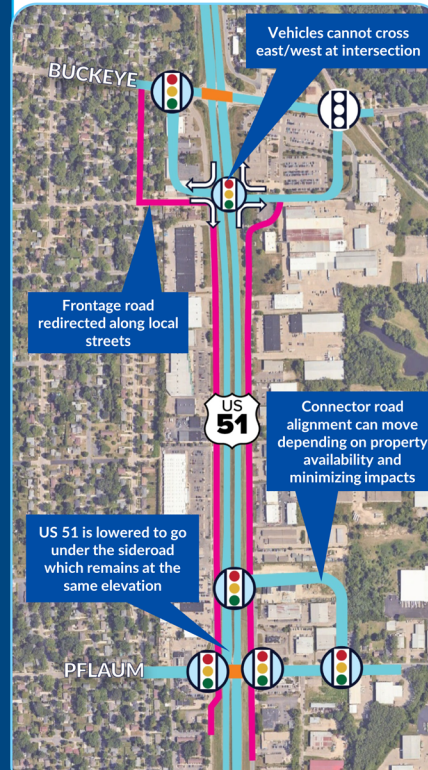
- Highest impacts to surrounding area to provide adequate intersection spacing



FRONTAGE ROAD CONFIGURATION
COMPATIBLE WITH:
45 mph, Expanded Intersections

Both Frontage Roads with Hybrid Intersections

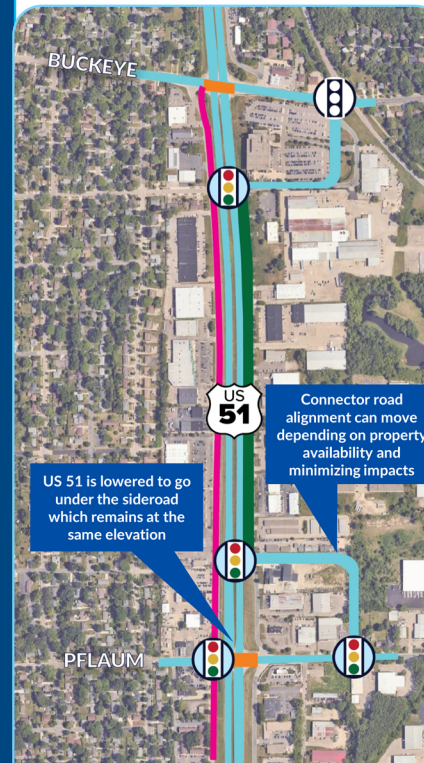
- Reduced frontage road impacts but hybrid intersections still have some impacts



FRONTAGE ROAD CONFIGURATION
COMPATIBLE WITH:
45 mph, Improved Frontage

Only West Frontage Road

- East frontage road removed and replaced by direct driveway access to US 51



FRONTAGE ROAD CONFIGURATION
COMPATIBLE WITH:
Improved Frontage, Direct Access

No Frontage Roads

- Both frontage roads are removed and replaced with direct driveway access to US 51



FRONTAGE ROAD CONFIGURATION
COMPATIBLE WITH:
Direct Access, Wide Boulevard

LEGEND:



New signal



Improve existing signal

US 51, Sideroads, Connector Roadways

Frontage Road

Bridge

New green space

Right-in right-out turn



New Street Connections

Some corridor concepts allow the possibility of new street connections with local roads to improve access and offer more crossing opportunities.

Potential connection at:

Robertson Rd, Allis Ave, Helgesen Dr, and Tompkins Dr



Corridor Conceptual Alternatives

No Build Option

No improvements beyond routine maintenance.



Cross section from Pflaum Road to Buckeye Road

SPEED LIMIT	FRONTAGE ROAD (IN AREA OF BUCKEYE & PFLAUM ROADS)	NEW INTERSECTIONS	DRIVEWAYS ONTO US 51
Varies between 45 mph and 55 mph	Both Sides	None	None

Alt 1: 45 mph

Maintains 45 mph speeds compatible with hybrid intersections that improve east/west crossing.



Cross section from Pflaum Road to Buckeye Road

SPEED LIMIT	FRONTAGE ROAD (IN AREA OF BUCKEYE & PFLAUM ROADS)	NEW INTERSECTIONS	DRIVEWAYS ONTO US 51
45 mph	Both Sides	None	None

Alt 2: Expanded Intersections

Intersection delay is reduced by adding turn lanes and spacing to frontage road improved, but the footprint is large.



Cross section from Pflaum Road to Buckeye Road

SPEED LIMIT	FRONTAGE ROAD (IN AREA OF BUCKEYE & PFLAUM ROADS)	NEW INTERSECTIONS	DRIVEWAYS ONTO US 51
35 mph north of Beltline, 45 mph south of Beltline	Both Sides	None	None

Alt 3: Improved Frontage

Hybrid intersections minimize the impact of keeping frontage roads.

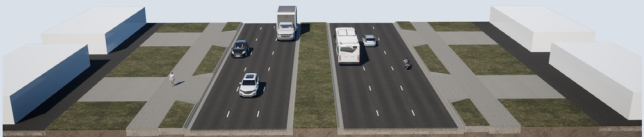


Cross section from Pflaum Road to Buckeye Road

SPEED LIMIT	FRONTAGE ROAD (IN AREA OF BUCKEYE & PFLAUM ROADS)	NEW INTERSECTIONS	DRIVEWAYS ONTO US 51
35 mph north of Beltline, 45 mph south of Beltline	Both sides or west only	1 Helgesen Drive	0-14

Alt 4: Direct Access

Driveways allowed directly onto US 51 improving access.



Cross section from Pflaum Road to Buckeye Road

SPEED LIMIT	FRONTAGE ROAD (IN AREA OF BUCKEYE & PFLAUM ROADS)	NEW INTERSECTIONS	DRIVEWAYS ONTO US 51
35 mph	West only or none	3 Tompkins Drive Helgesen Drive Robertson Road	14-73

Alt 5: Wide Boulevard

Moves US 51 to replace the existing frontage road system and connects business driveways directly onto US 51.

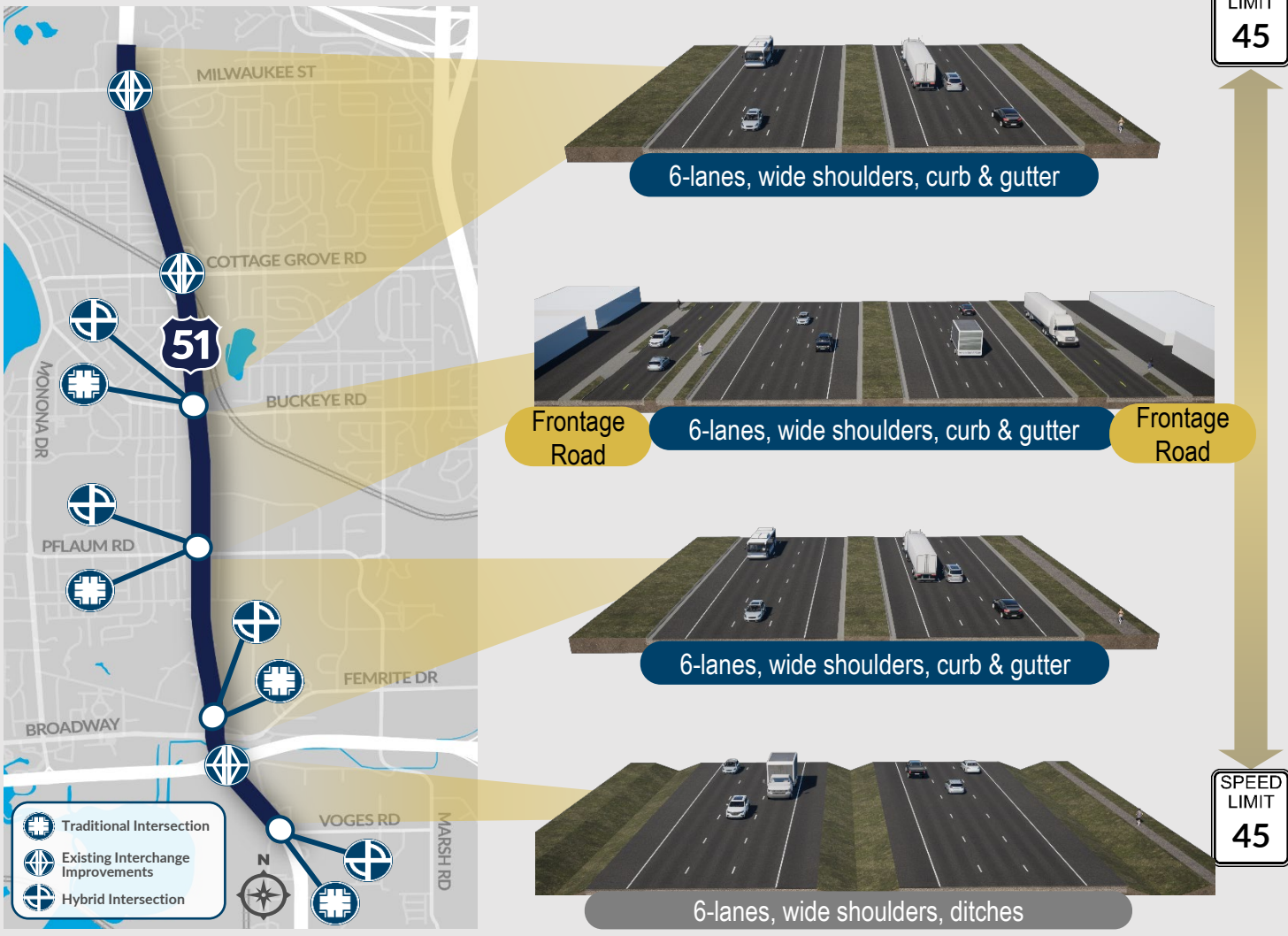


Cross section from Pflaum Road to Buckeye Road

SPEED LIMIT	FRONTAGE ROAD (IN AREA OF BUCKEYE & PFLAUM ROADS)	NEW INTERSECTIONS	DRIVEWAYS ONTO US 51
35 mph	None	4 Tompkins Drive Helgesen Drive Allis Avenue Robertson Road	41-73

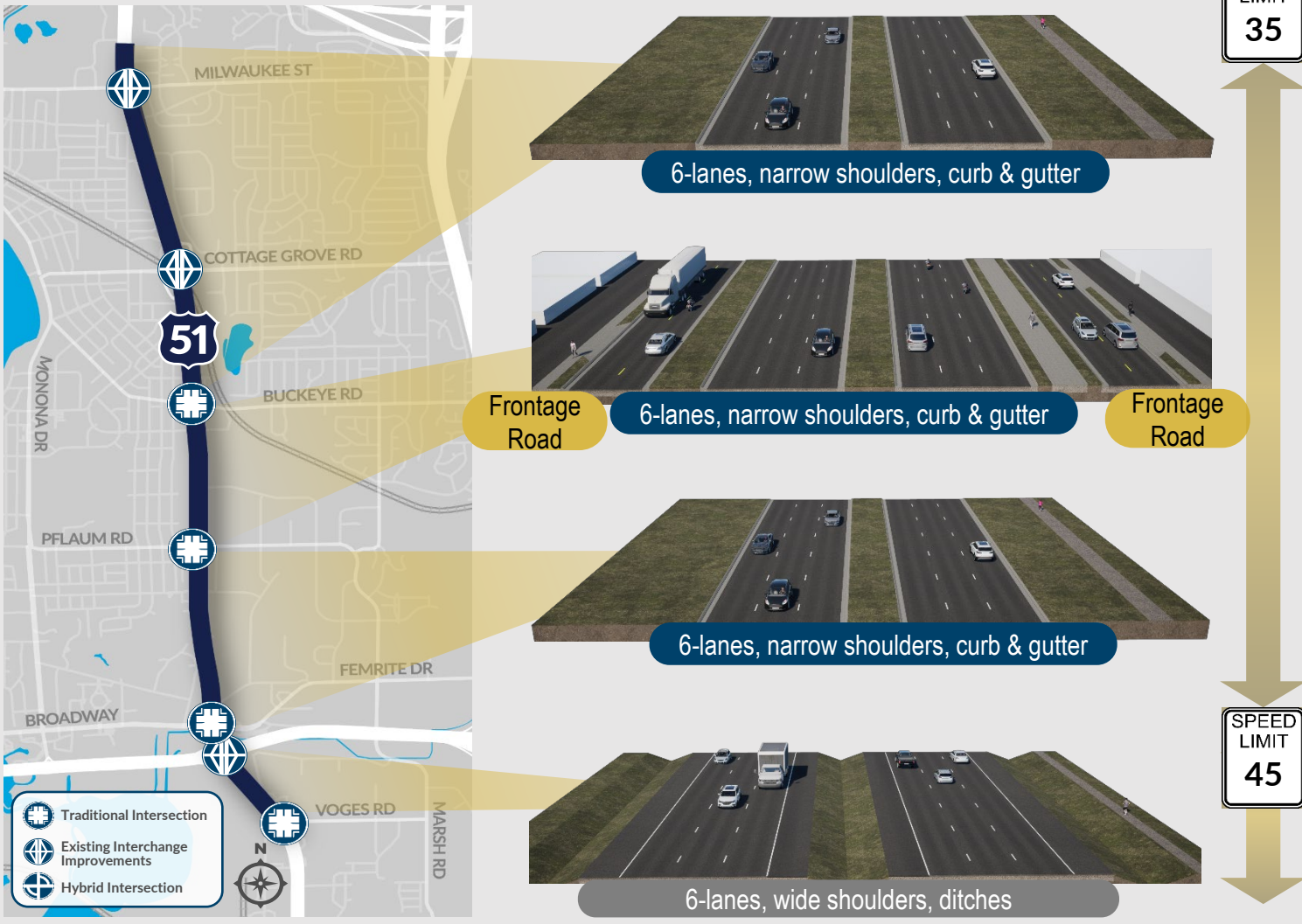


Conceptual Alt 1: 45 mph



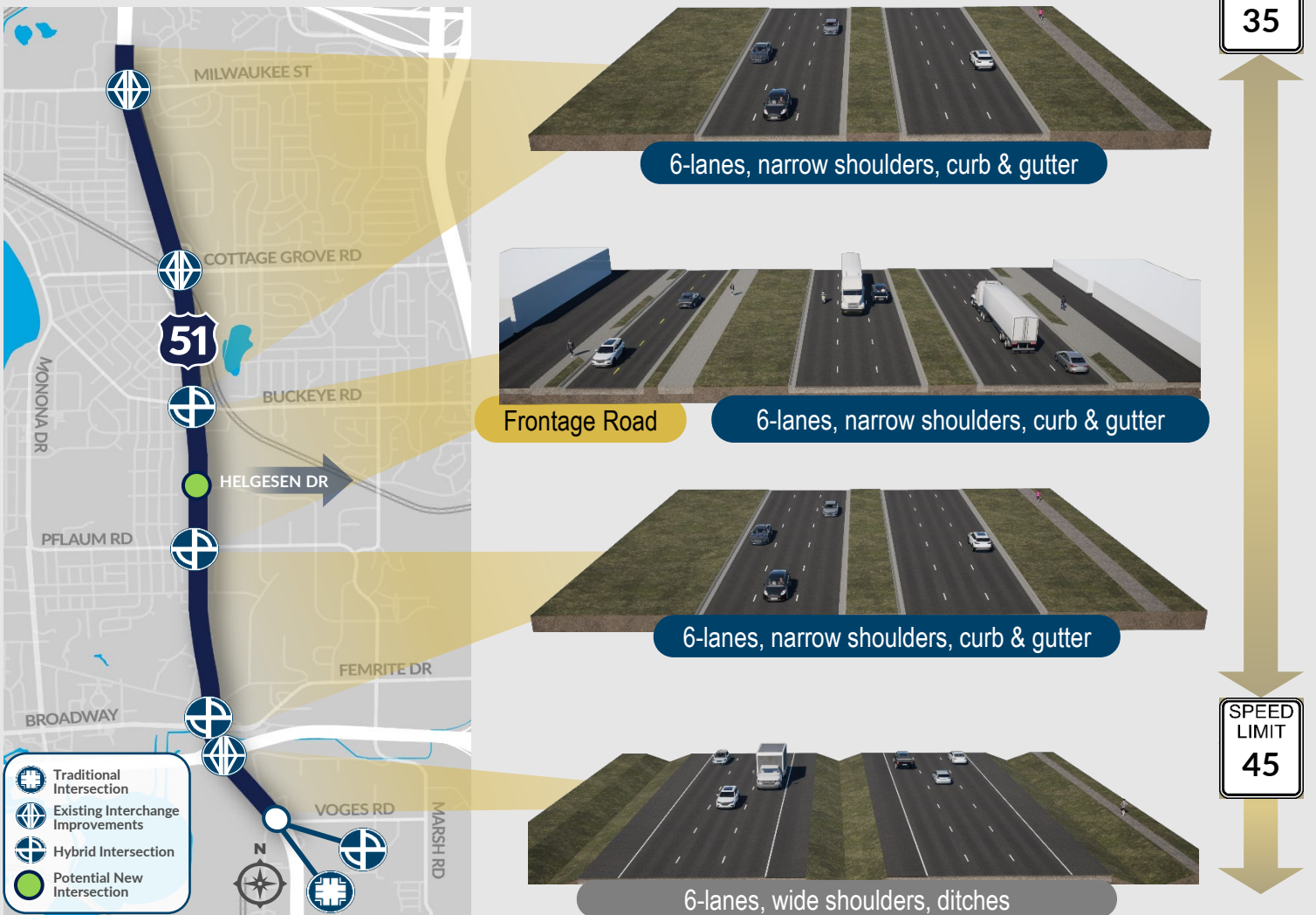
- What we like
 - Fastest north-south travel
 - Compatible with traditional or hybrid intersections
- Limitations
 - Barriers to east-west crossing
 - Higher speed could increase crash severity
 - No new connectivity options

Conceptual Alt 2: Expanded Intersections



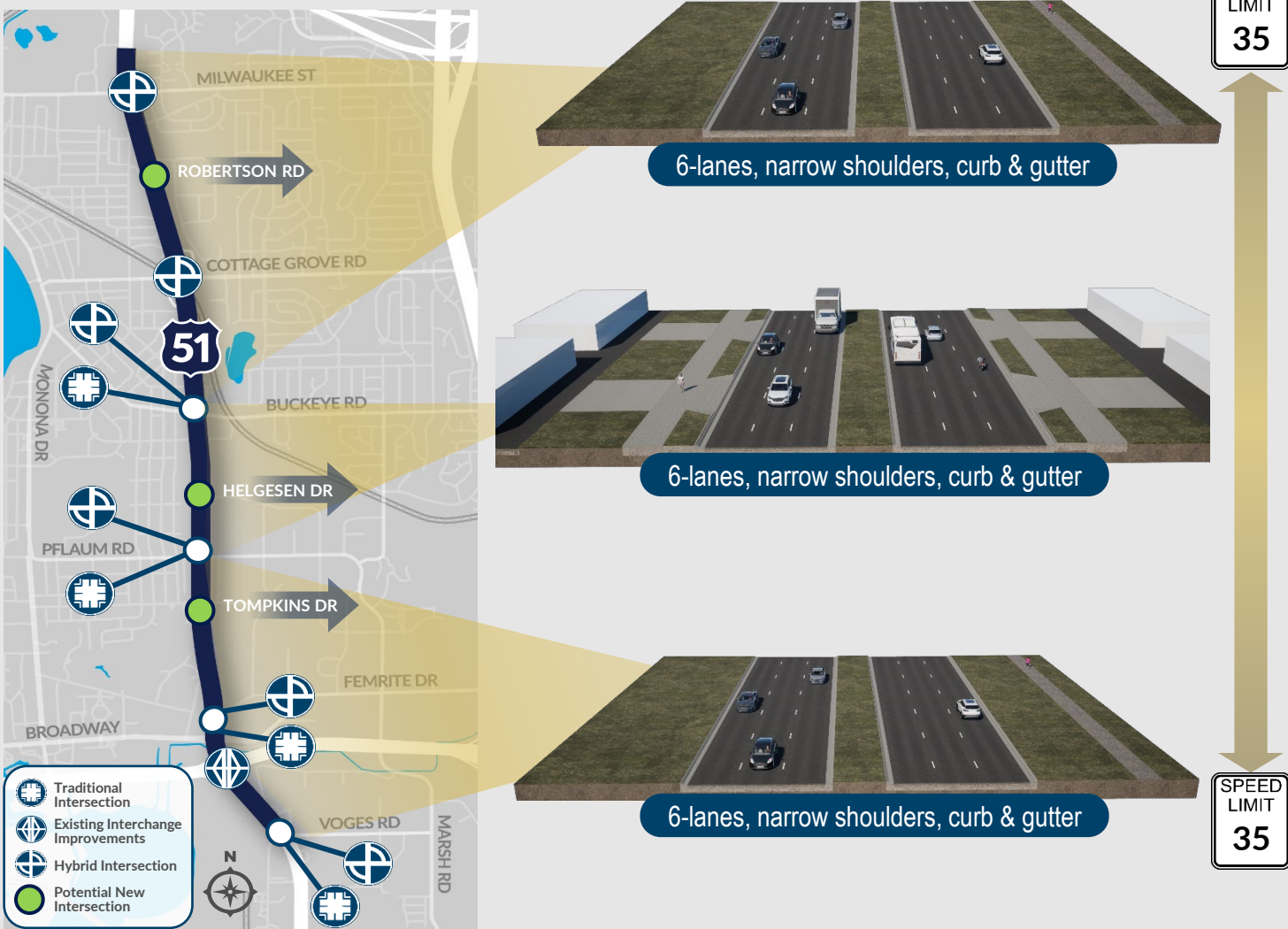
- What we like
 - Lower crash severity
 - Familiar intersection types
- Limitations
 - Large intersections
 - Frontage road intersection challenges
 - No new connectivity options

Conceptual Alt 3: Improved Frontage



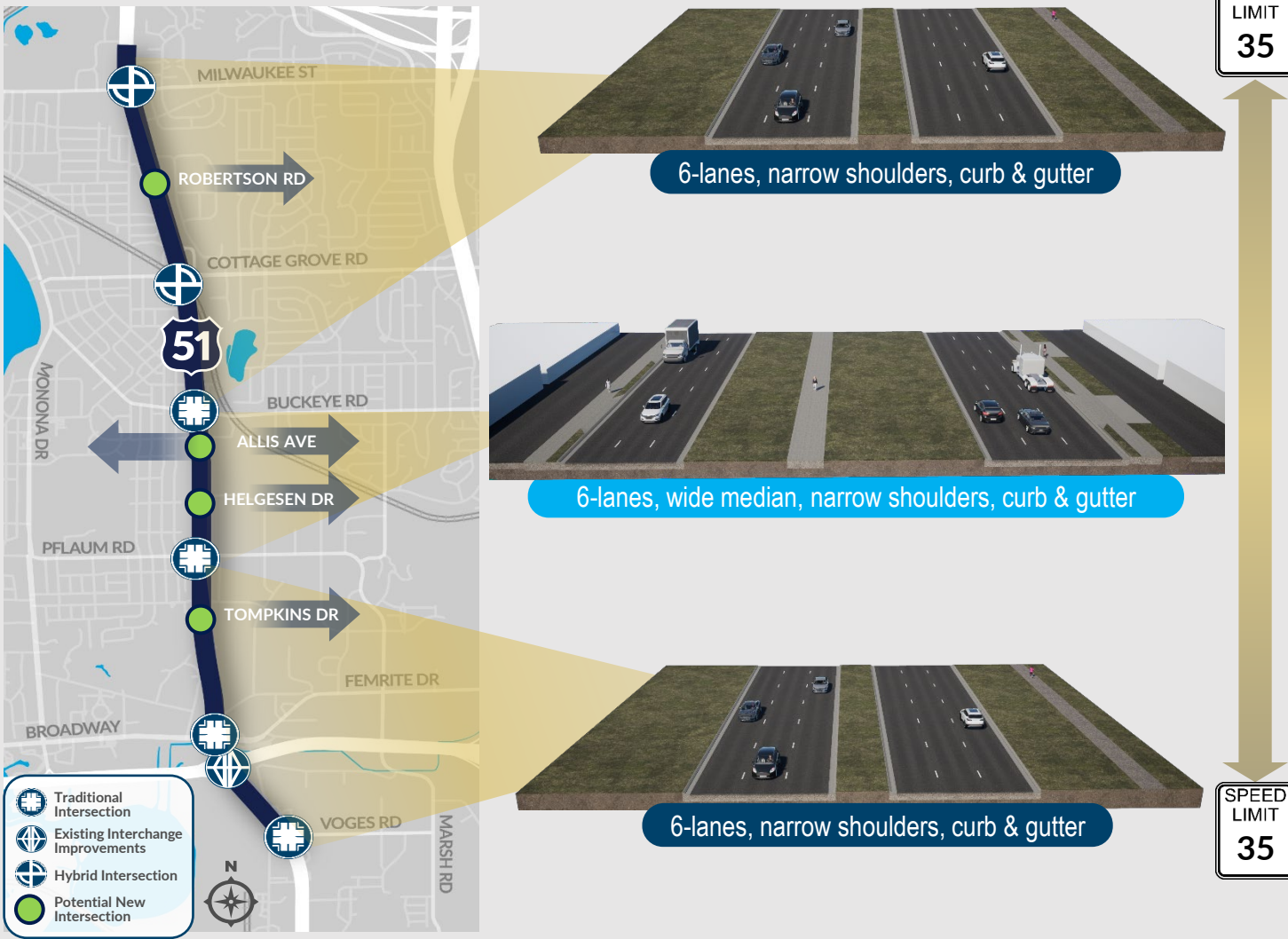
- What we like
 - Lower crash severity
 - Safety and operational advantages to hybrid intersections
- Limitations
 - Indirection for some turning traffic
 - Few new connectivity options

Conceptual Alt 4: Direct Access



- What we like
 - Lower crash severity
 - Better connectivity to neighborhoods and businesses
- Limitations
 - Conflicts at new intersections and driveways

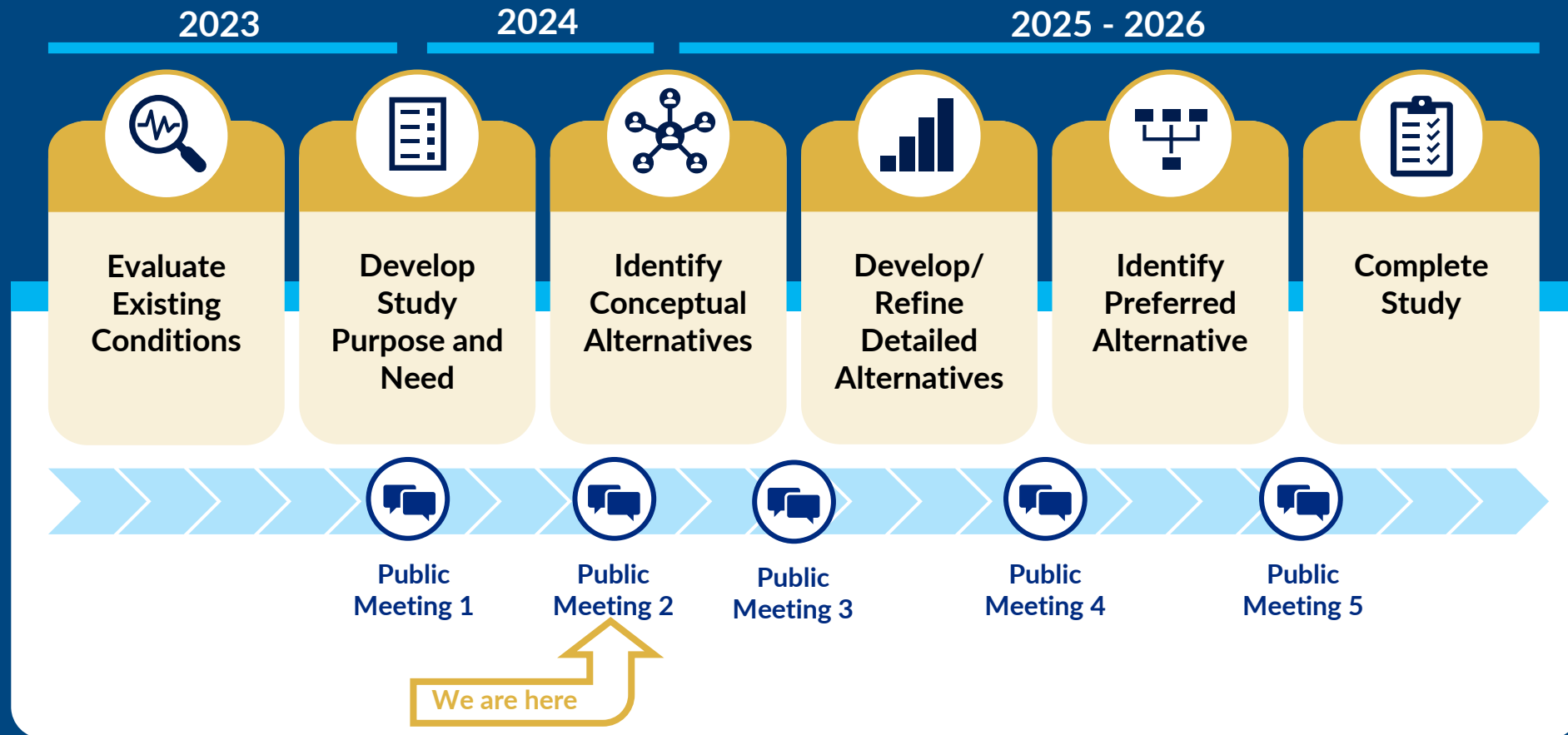
Conceptual Alt 5: Wide Boulevard



- What we like
 - Green space
 - Urban feel
 - Better connectivity to neighborhoods and businesses
- Limitations
 - Conflicts at new intersections and driveways

Next Steps

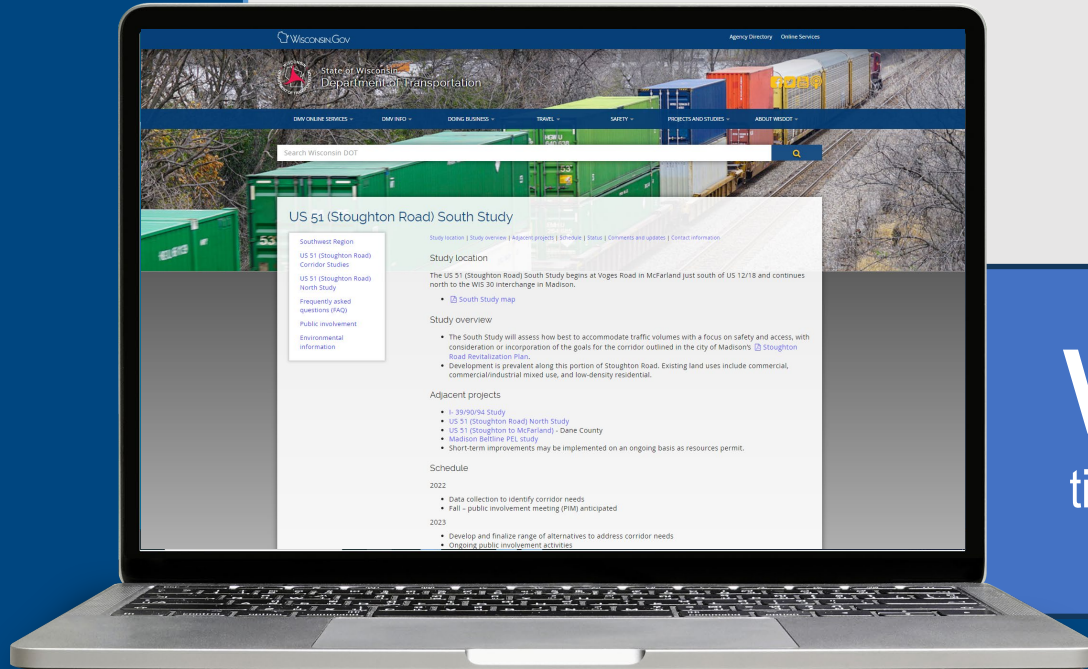
We are early in a multi-year process.
Your input will steer the remainder of the study.



Who should I contact?

Jeff Berens
Project Manager
WisDOT SW Region

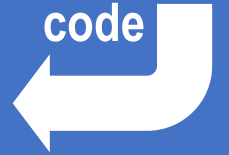
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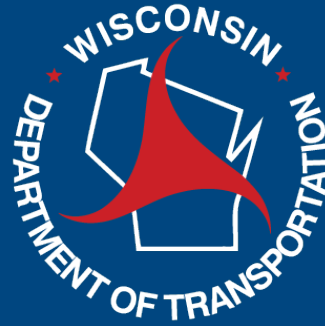


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Thank you!