

# **US 18/151 (Verona Road)**

**Supplemental Draft Environmental Impact  
Statement (SDEIS)**

**Madison Committee**

**Briefing**

**October 21, 2010**



## Three ways to comment on the SDEIS

### Publicly

At the two hearings on October 13, spoken comments were provided in the public setting, transcribed by a court reporter.

### Privately

At the two hearings on October 13, spoken comments were provided in private, transcribed by a court reporter.

### Written or Typed

Comments could be provided at the hearing and any other time between September 3 and December 17, 2010. Comments to be mailed to WisDOT SW Region, Madison Office, or e-mailed to the WisDOT project manager.





# Project purpose

## Why is WisDOT improving Verona Road and the interchange?

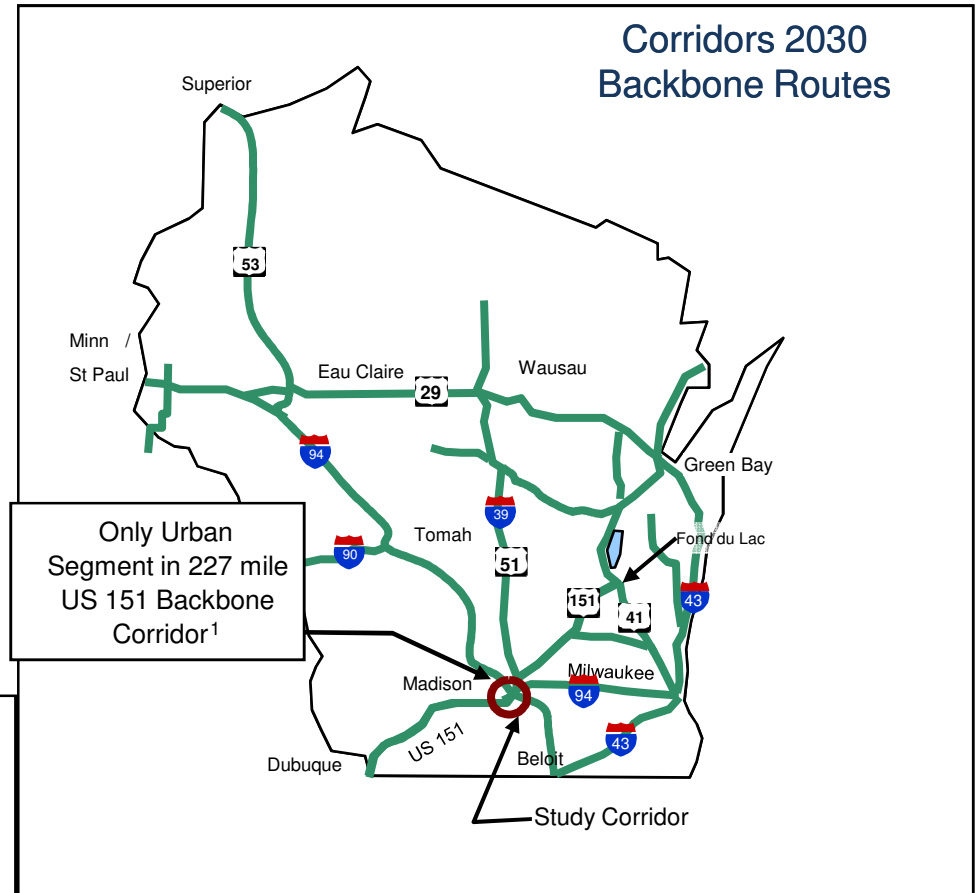
- Traffic congestion has grown to unacceptable levels for all users. Safety and mobility continue to decrease while delay, air pollution, and traffic cutting through neighborhoods all increase.
- Crash rates are above state averages, leading to injury, property damage, and adding to traffic delays.
- Surrounding pedestrian and bicycle accommodations are substandard and contribute to neighborhood isolation.



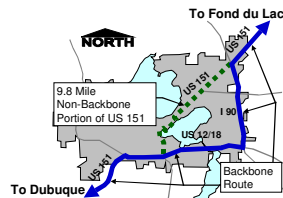
# US 151's role in the state's transportation system

US 151 has been designated a higher state priority Backbone Route in the connections 2030 State Highway Plan. Backbone Routes are the state's most important highways and have a higher state priority. They make up only 3 percent of Wisconsin's roadways, yet carry 34 percent of all auto travel and 57 percent of all truck travel. As a Backbone Route, US 151 is an important regional corridor and connects major metropolitan areas within Wisconsin to the nation.

Currently this section of US 151 is the only urban section with signals in the entire 170 mile US 151 Backbone Route from Fond du Lac to Dubuque.

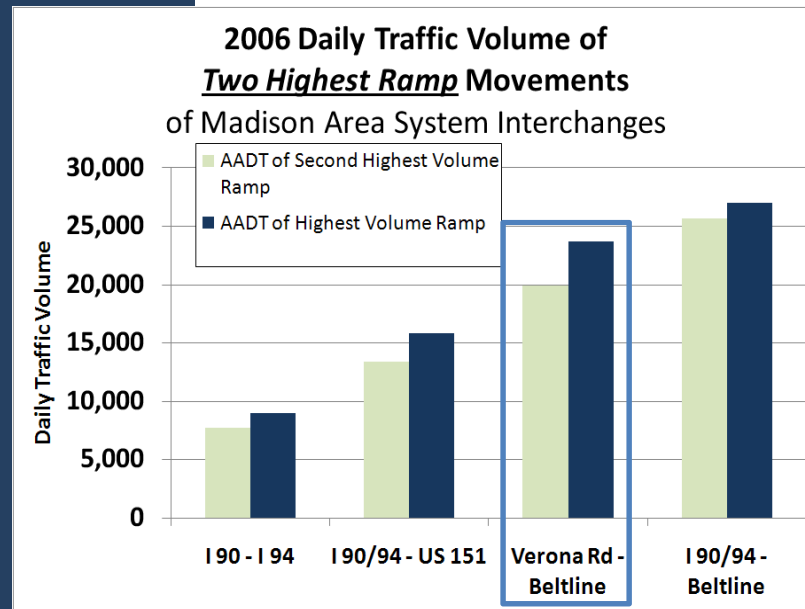


[1] The US 151 backbone route does not follow US 151 through downtown Madison. Instead, the US 151 backbone route bypasses downtown Madison on Interstate 90/94 and US 12 (the Beltline) between the 90/94-151/East Washington Avenue and Verona Road interchanges.





# Traffic congestion



- The number of vehicles that want to use the Verona Road interchange is comparable to the highest interchanges in the Madison Area – even the interstate interchanges.
- The existing interchange was not designed to handle these volumes.



# Traffic congestion

Substantial traffic backups and delay on the Beltline and Verona Road occur daily.



Drivers avoid excessive congestion by driving through nearby neighborhoods instead.

Level of Service (LOS) is a measure used by traffic engineers to determine the amount of congestion on streets. It ranges from LOS A (no congestion) to LOS F (very congested). The table below explains the average motorist delay associated with each LOS.

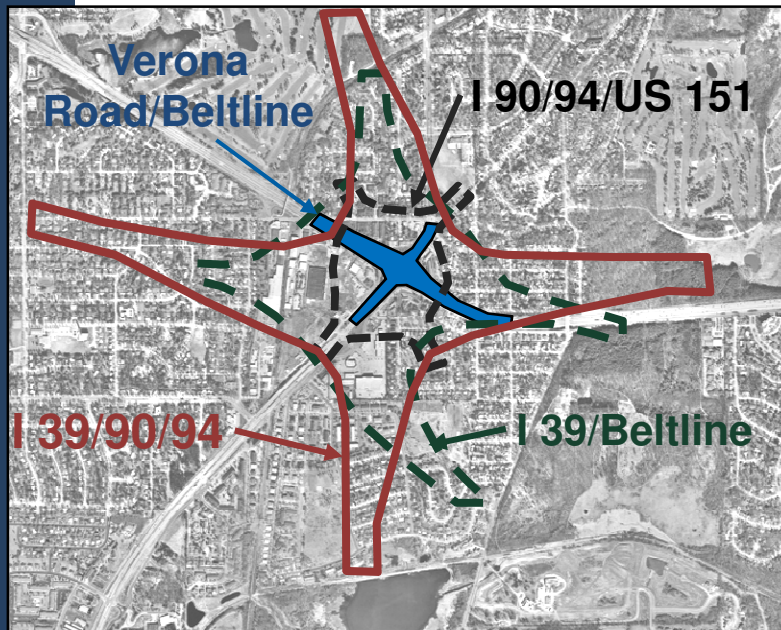
Level of Service	Average Seconds of Delay
A	<10 seconds
B	10-20 seconds
C	21-35 seconds
D	36-55 seconds
E	56-80 seconds
F	>80 seconds

Target LOS →

Seconds are the average time a motorist has to wait. The average delay on Verona Road is currently 3 times longer than it should be.



# Right of way footprints of major Madison- area interchanges



**I 39/90/94 Interchange**

- Compared to other area interchanges with high volumes, the footprint of the Verona Road interchange is very small. Improvements would increase the r/w needed, but would still occupy a relatively much smaller space.





# Safety

**Madison Beltline Safety and Operations Study**  
Beltline Crash Rates Compared with State Average for Freeways 2000-2004

### 2005 to 2009 Data

- The Beltline Section Verona Road to Seminole Highway has:
- Total crash rate that is 2.5 to 3.3 times the state average (depending on direction).
  - Injury crash rate of 2.3 to 4.1 times the state average (depending on direction).



Crash Rates – Year 2002	
Light Green Line	Greater than 30% below the State average
Medium Green Line	0% - 30% below State average
Yellow Line	0% - 30% above State average
Orange Line	30% - 60% above State average
Red Line	Greater than 60% above State average

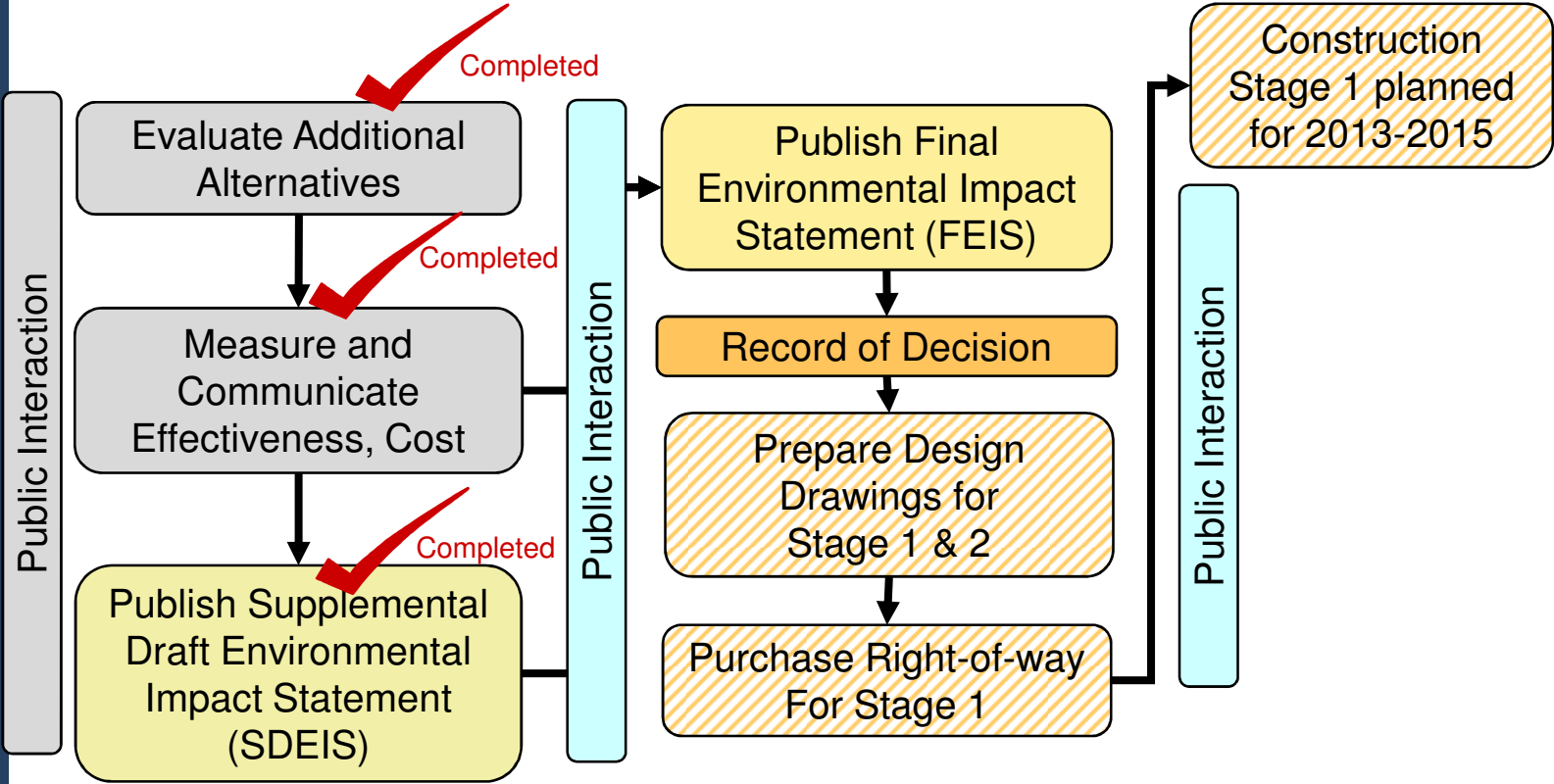


## Main concerns expressed by the public

- Noise and Air Pollution impacts
- Stormwater Impacts to Dunn's Marsh and the Arboretum
- Desire for Mass Transit Solutions
- Frontage Road impacts on residential neighborhoods
- Opposition to proposed connection from Allied Drive to Freeport Road
- Support for a new southern bypass

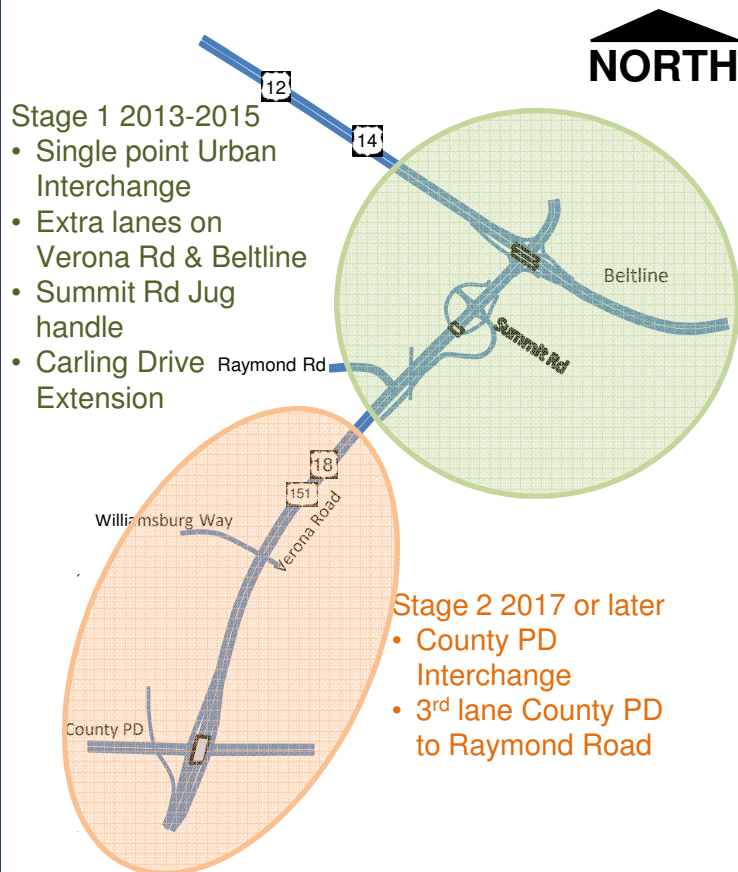


# Next steps

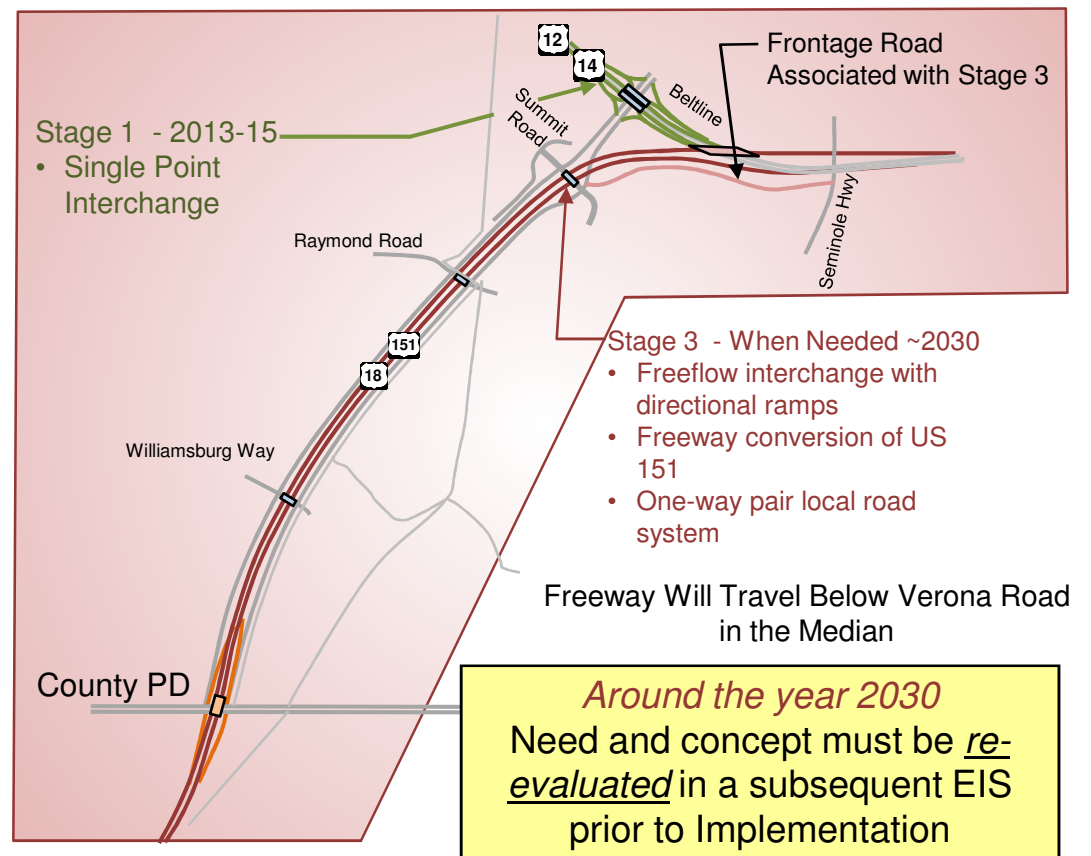


# Staged Improvements Overview

## Stage 1 and 2 Elements



## Stage 3 Elements ~2030





# STAGE 1

# STAGE 1

- Extend 6 through lanes on Beltline from Verona Road west to Whitney Way
- Rebuild Verona Rd Interchange
- Relocate Beltline Frontage Roads
- Rebuild Nakoma Road/Midvale Blvd and Summit Rd (Home Depot) Intersections
- Improve and add to Bike & Pedestrian Facilities

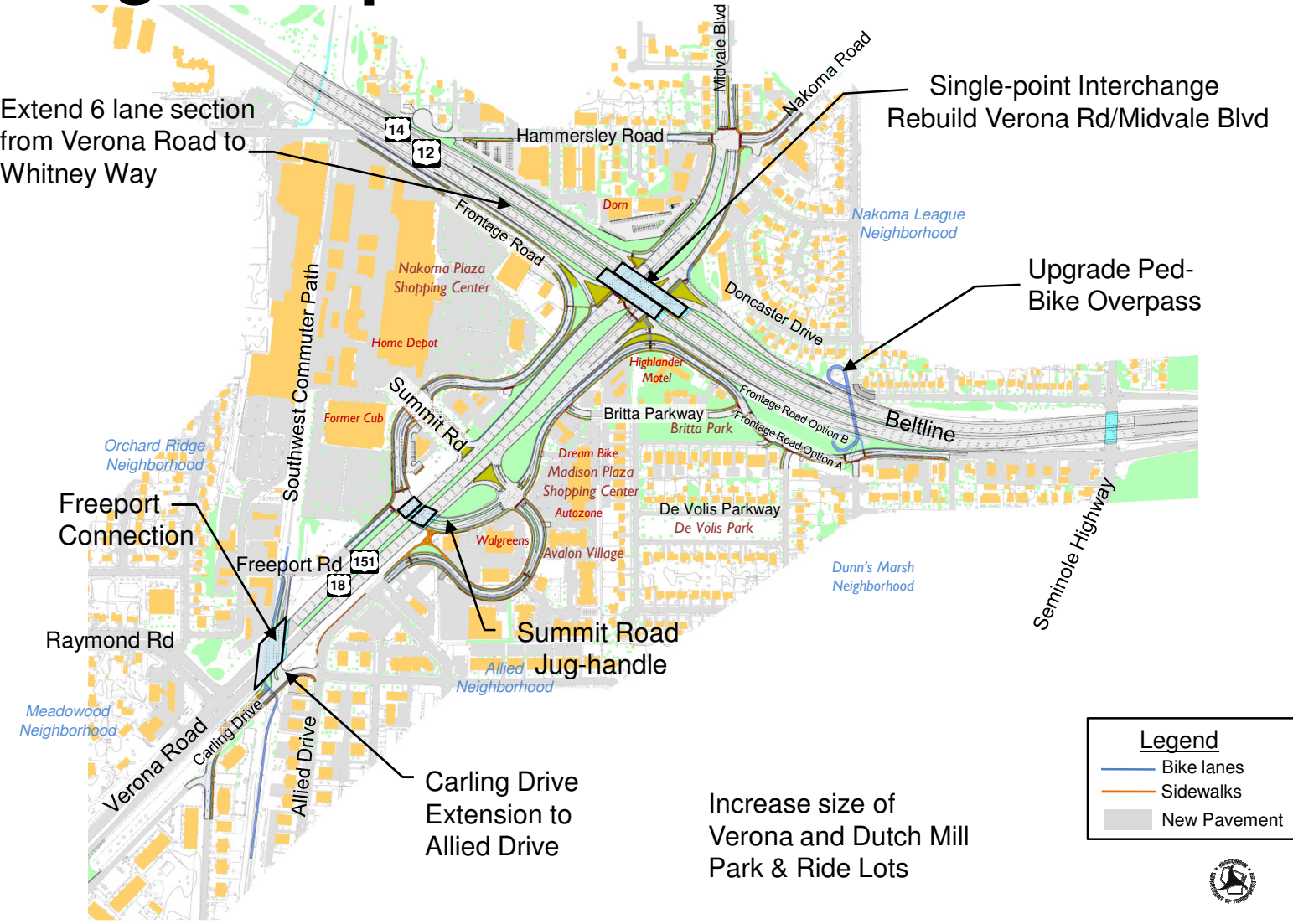




# Stage 1 improvements 2013-2015

**STAGE 1**

2013-2015



Extend 6 lane section from Verona Road to Whitney Way

Single-point Interchange Rebuild Verona Rd/Midvale Blvd

Upgrade Ped-Bike Overpass

Freeport Connection

Increase size of Verona and Dutch Mill Park & Ride Lots

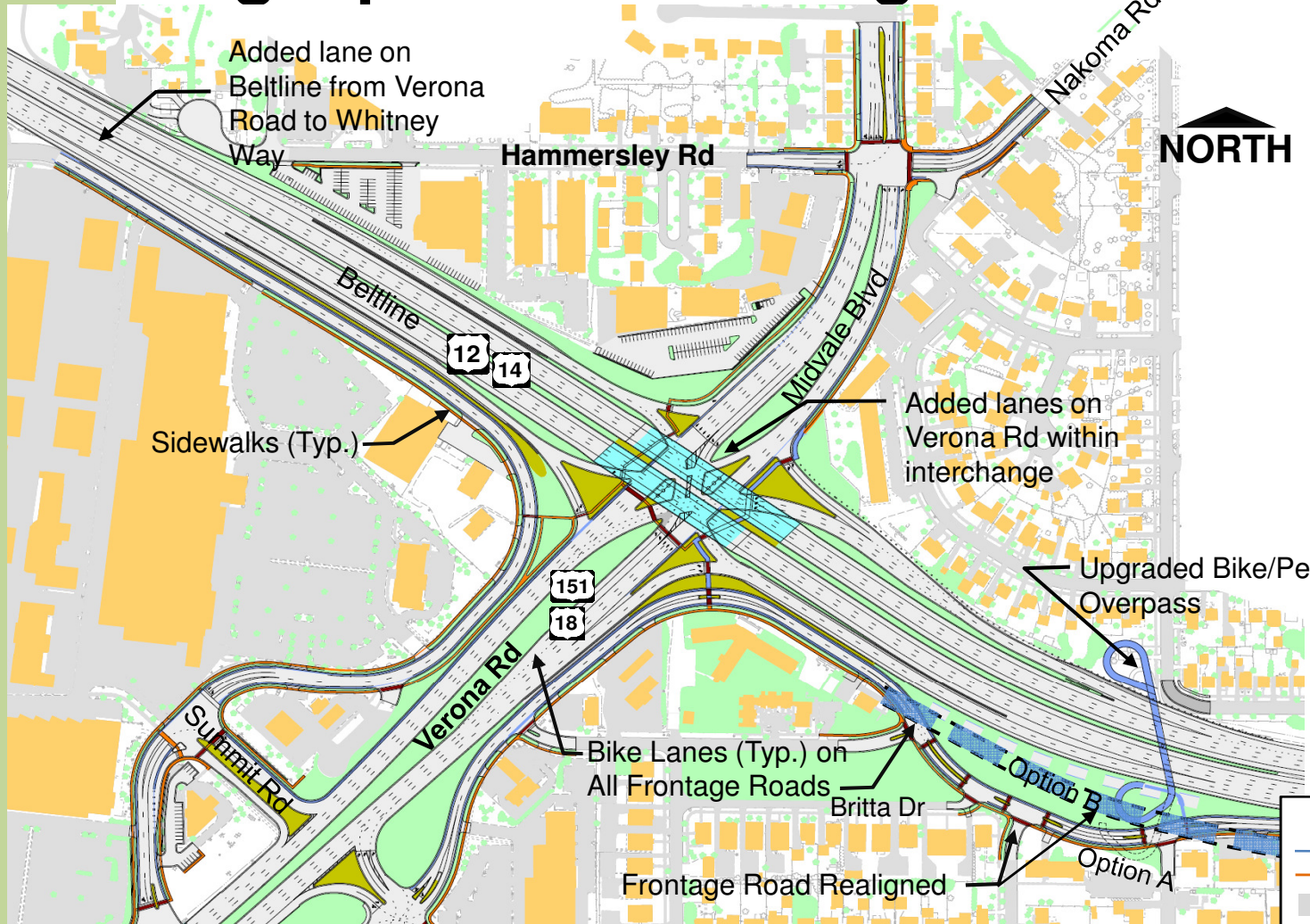
Carling Drive Extension to Allied Drive

Legend	
	Bike lanes
	Sidewalks
	New Pavement



# Single point interchange overview

STAGE 1



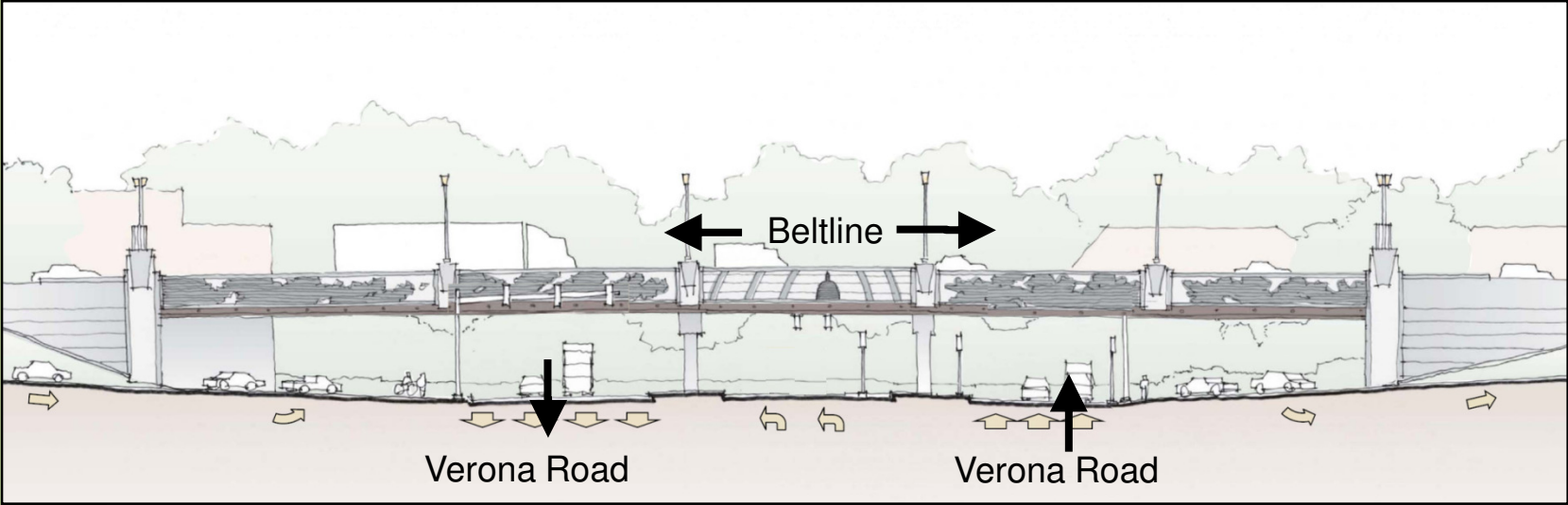
Legend	
	Bike lanes
	Sidewalks
	New Pavement





# Possible interchange bridge aesthetics

STAGE 1

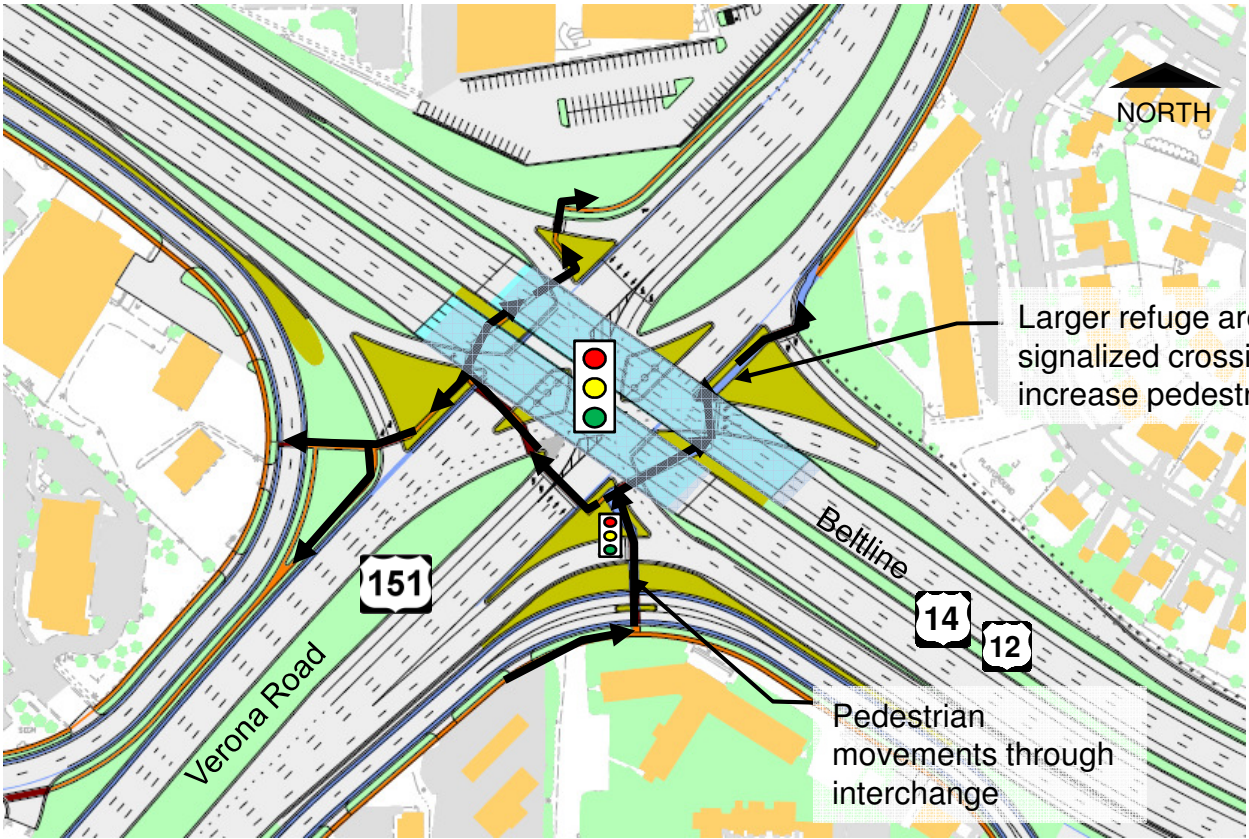


Possible Bridge Type






# Single point interchange pedestrian crossing

STAGE 1



Larger refuge area and signalized crossings increase pedestrian safety.

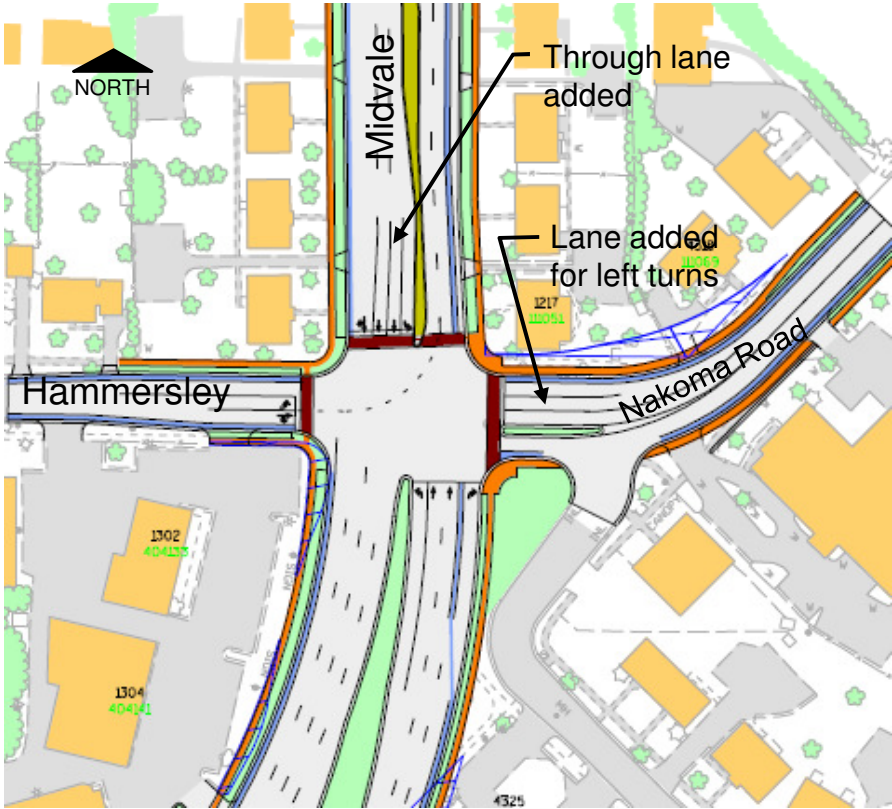
Pedestrian movements through interchange

Legend	
	Bike lanes
	Sidewalks
	New Pavement



# Improvements to Midvale/Nakoma Road intersection

STAGE 1



**Legend**

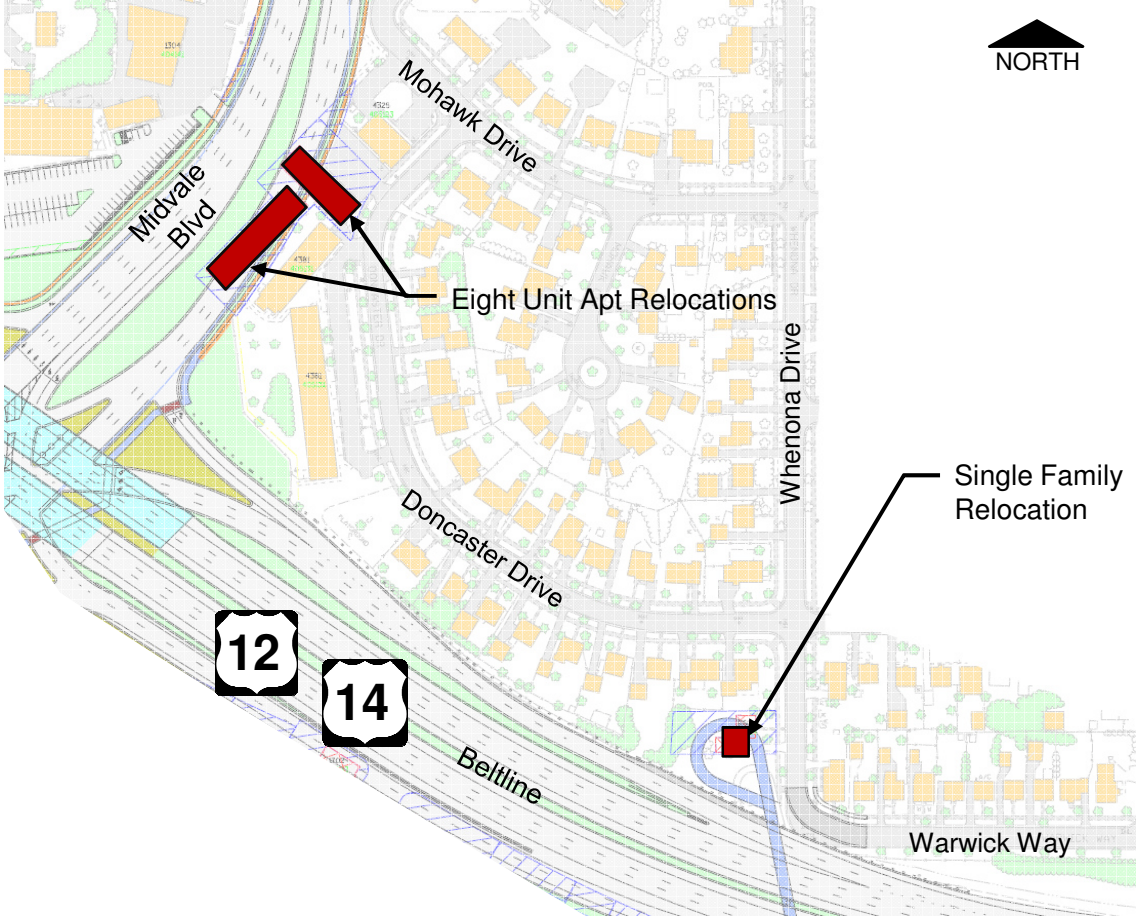
- Bike lanes
- Sidewalks
- New Pavement



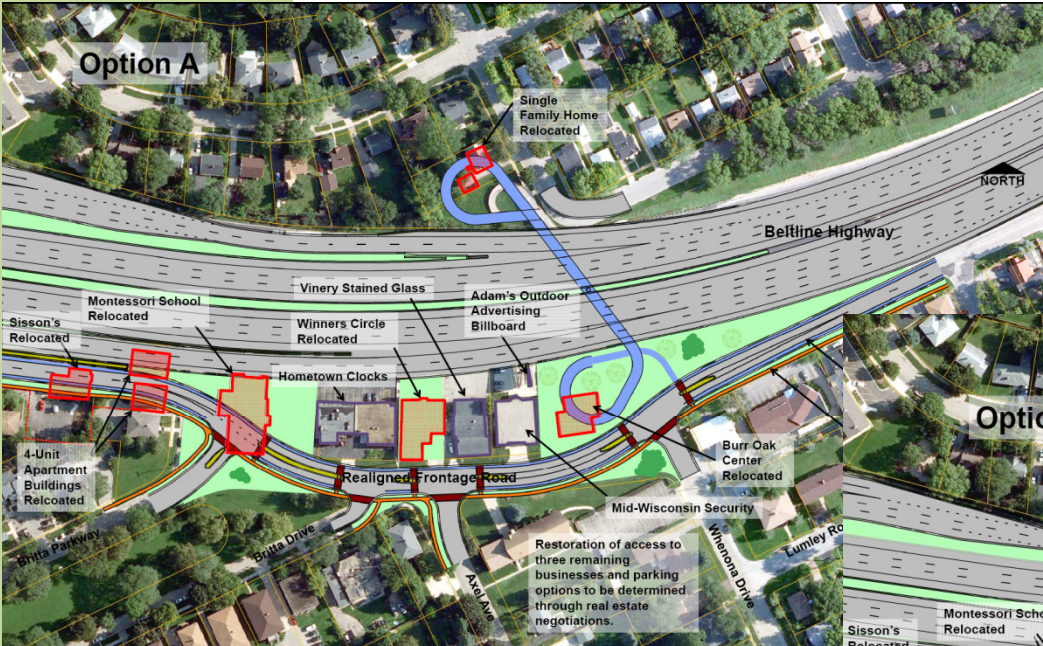


# Northeast quadrant property impacts

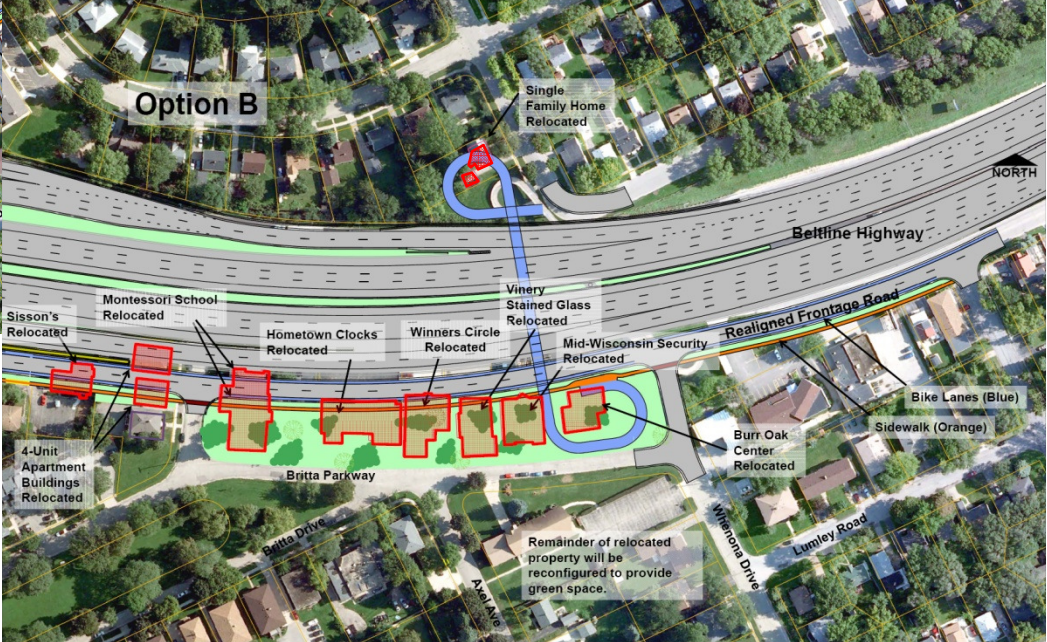
STAGE 1



# Beltline southeast frontage road options



Option A – SE Quadrant



Option B – SE Quadrant

**Legend**

- Bike lanes
- Sidewalks
- New Pavement







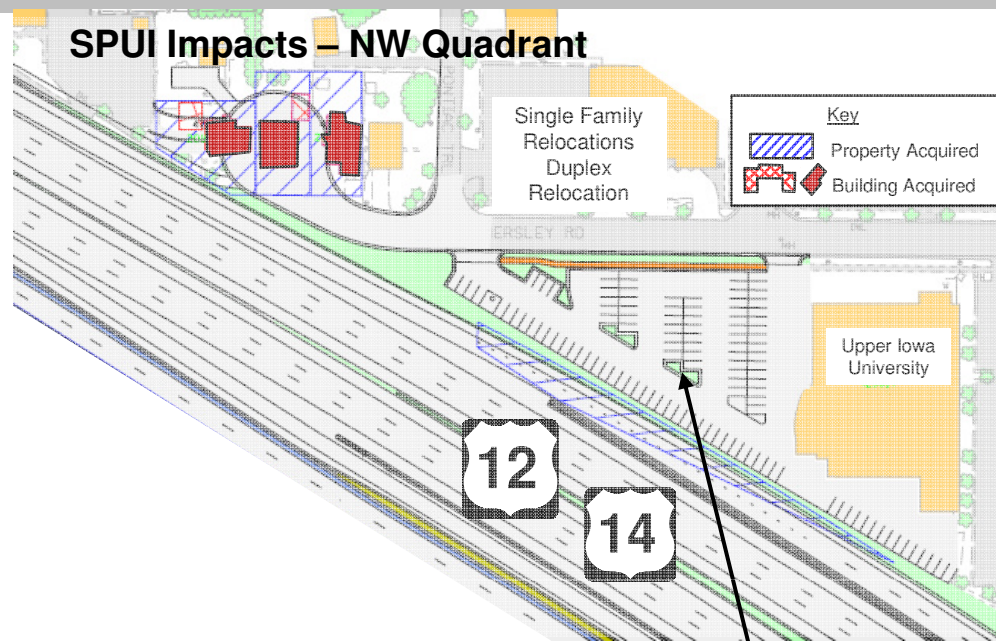
# STAGE 1

2013-2015

## Stage 1 – SW and NW Quadrant Property Impacts

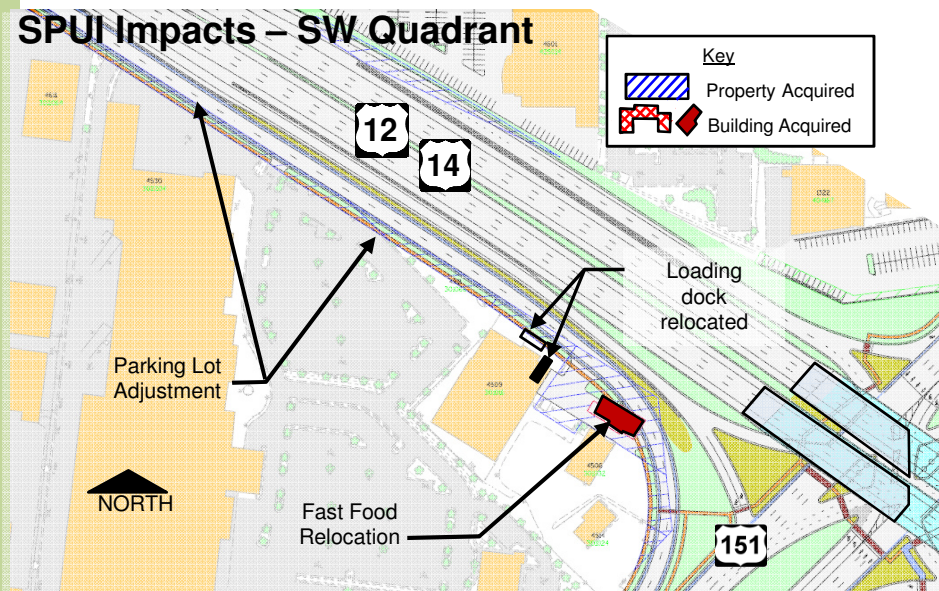
US 151/Verona Road

### SPUI Impacts – NW Quadrant



Upper Iowa, Dorn Hardware  
Parking Lot Adjustments

### SPUI Impacts – SW Quadrant





# Bike and pedestrian improvements

## STAGE 1

2013-2015



Bike lanes are added to Midvale Blvd and carried through the Single-point interchange.

Replace bike/ped overpass with new one built to current ADA standards.

Extend bike lanes on all frontage roads to connect to Beltline and Verona Rd grade separated crossings.

Well lit bicycle and pedestrian crossings under Verona Road, separated from roadways.

New street connection between Nakoma Heights and Allied Drive, and Freeport Road.

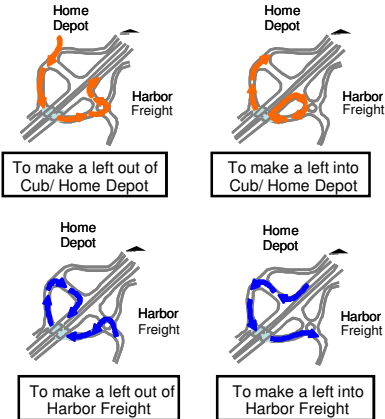
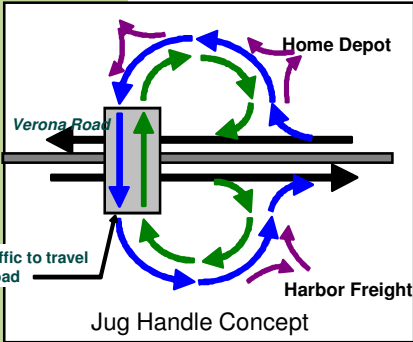
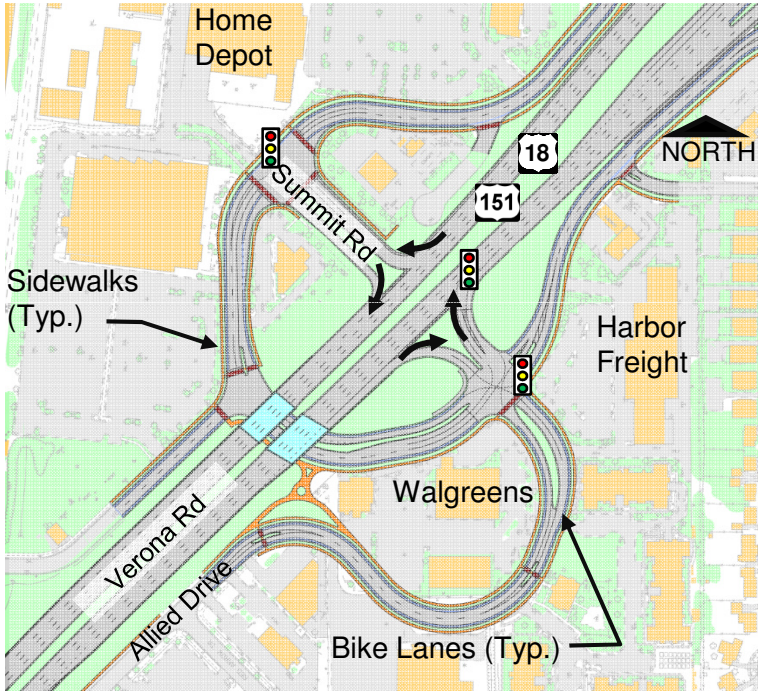
Increase the size of Verona and Dutch Mill Park and Rides



# Summit road jug handle

## Jug Handle

- Special type of intersection that reduces the number of “stops” for Verona Road traffic.
- Replaces the at-grade crossing at Summit Road with a grade separated crossing under Verona Road.
- Needed to allow single point interchange to operate properly.
- Only allows Right-In/Right-Out turns to and from Verona Road at Summit Road. To make a left turn out of Summit Road, a vehicle travels under Verona Road to the other side and then makes a right turn.
- The new bridges provide provides a safe and convenient crossing under Verona Road for local traffic, bicycles and pedestrians.

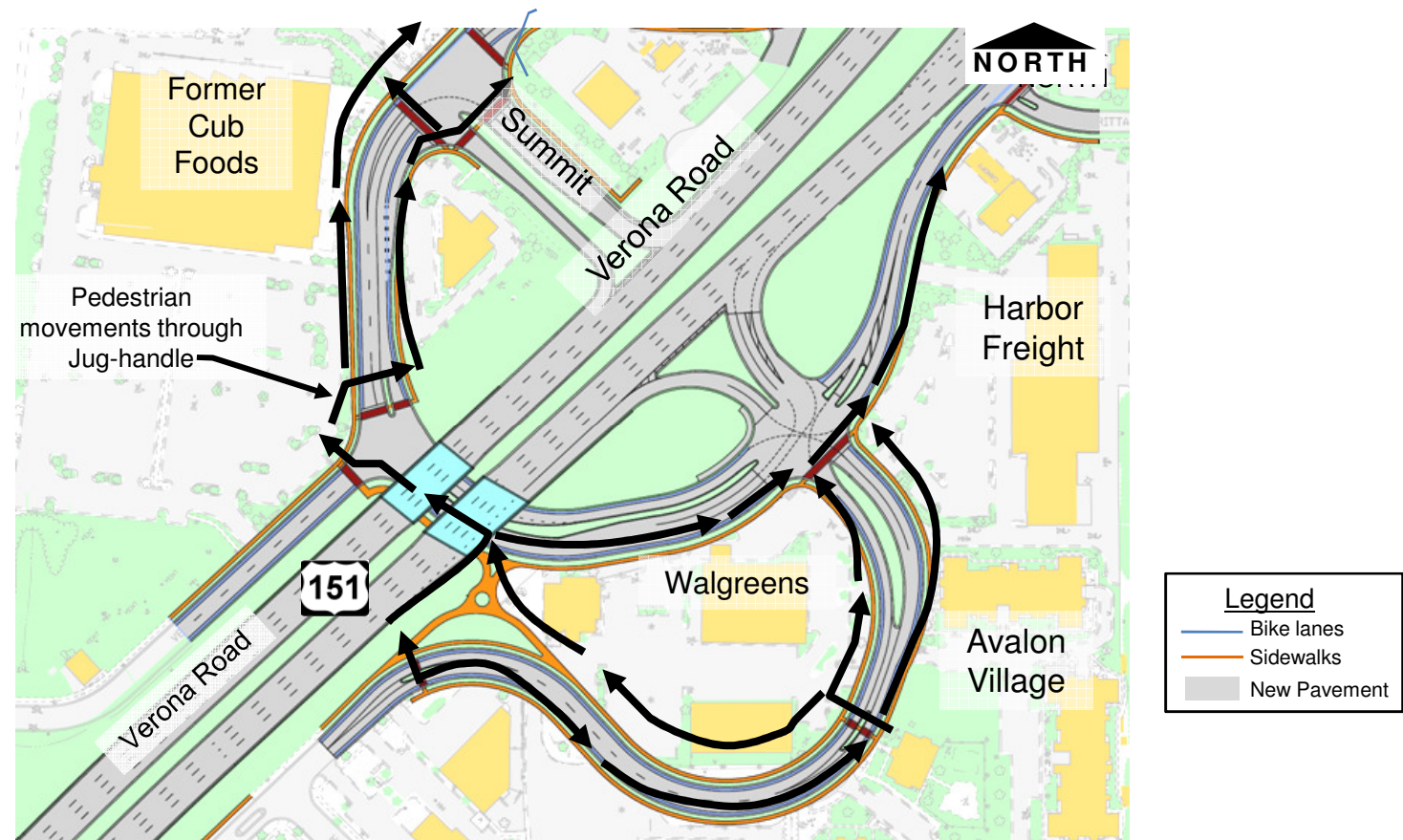


**Legend**

- Bike lanes
- Sidewalks
- New Pavement



# Bicycle & pedestrian crossing



Grade separated pedestrian underpass traveling under Verona Road.

- Alongside but separated from frontage road traffic.
- Replaces existing at-grade crossing of signalized intersection.

STAGE 1

2013-2015



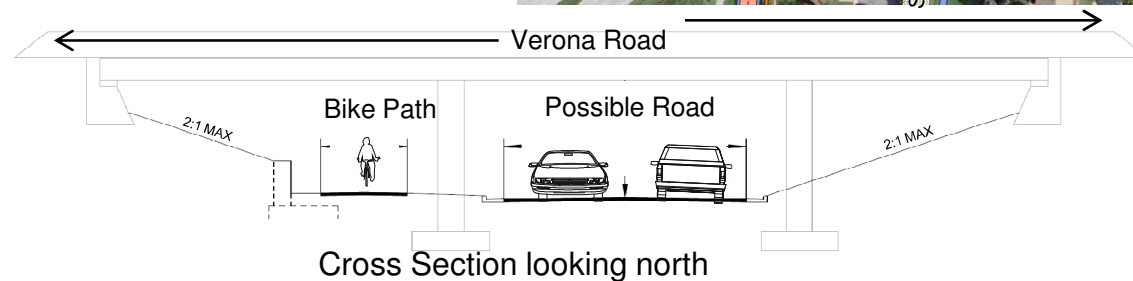
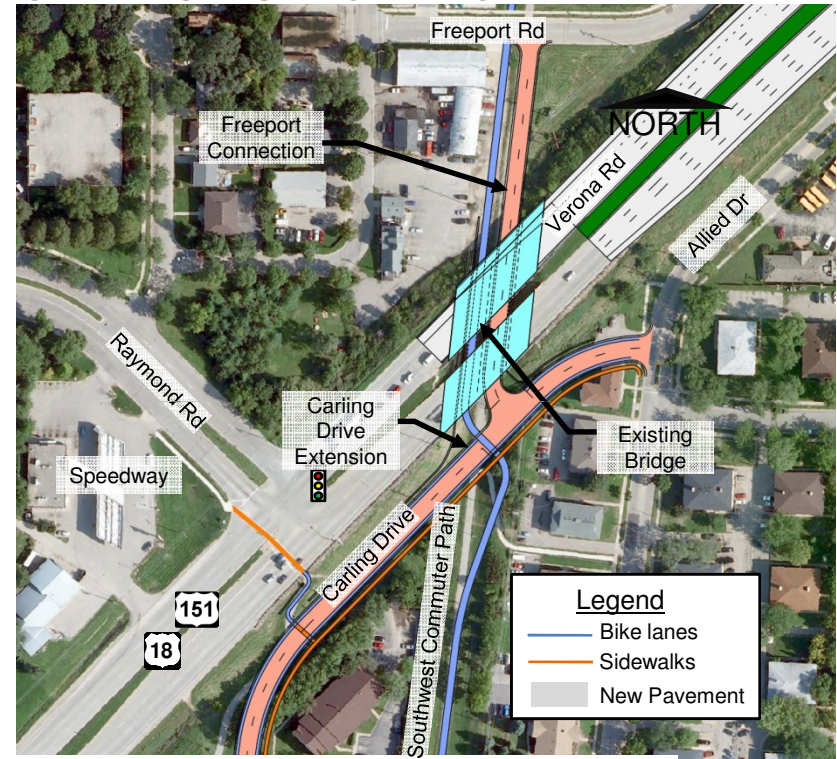


# STAGE 1

2013-2015

## Extension of Carling Drive & new street crossing under Verona Rd

- Existing railroad bridges have sufficient width underneath for a roadway connection and bike path.
- Adds street connectivity to Nakoma Heights area and Allied-Dunn's Marsh Neighborhood.
- Provides alternate route during construction.
- Some impacts:
  - 1 or 2 relocations
  - Parking impacts to apartments
  - Bike Path crossing of Carling Drive



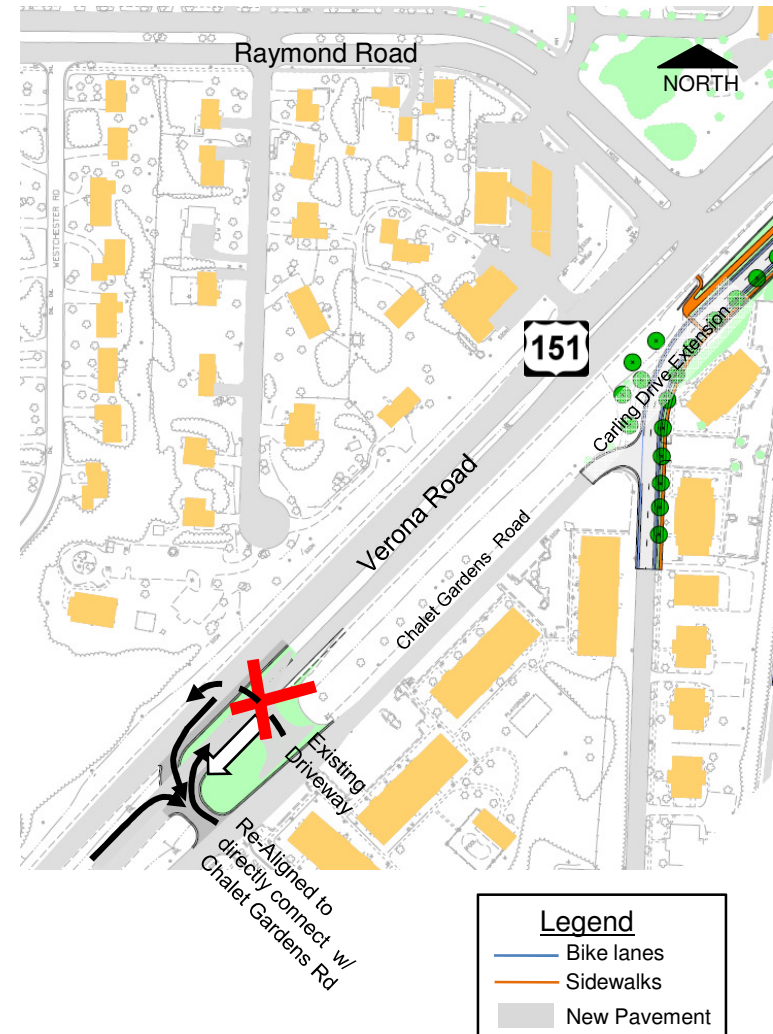


# STAGE 1

2013-2015

## Nakoma Heights relocated entrance

- Maintains access to Nakoma Heights
  - Left turn south onto Verona Rd is removed.
  - Verona Road access will be closed if crashes increase or congestion occurs.
- Easier turns for buses, other large vehicles





## STAGE 1

# Raymond Road and Williamsburg Way

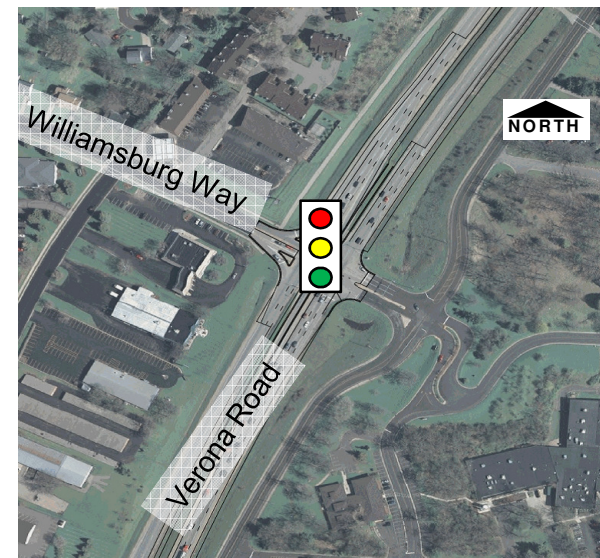


Raymond Road – maintain existing signal

- Current signal accommodates about 150% of today's traffic.

Williamsburg Way - maintain existing signal

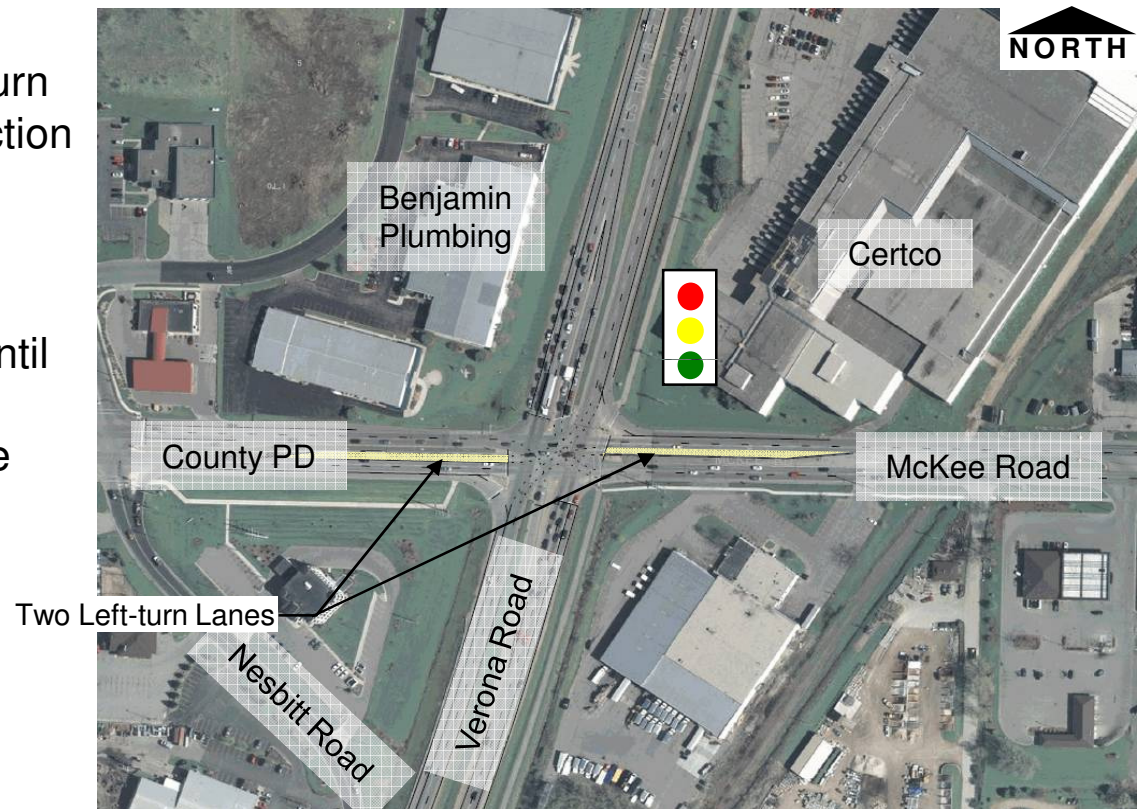
- Maintains current access.
- Capacity will be improved when Stage 2 is constructed.



# County PD/McKee Road Short-term Intersection Improvements

## STAGE 1

- Provides two-left turn lanes in each direction and right-turn lane extensions.
- Provides some congestion relief until County PD interchange can be constructed.
- Minor right-of-way impacts.



  
**STAGE 2**

## STAGE 2 and 3

- Stage 2 – County PD Interchange and extra through lane up to Raymond Road.
  - Construction 2017 or later but begin design in 2011 in case money is available sooner.
- Stage 3 – Ultimate improvements that include freeway conversion.
  - 2030 or when need is indicated by future problems.
  - Reevaluate conditions, build Stage 3 or other solution, as appropriate.

2017 or later







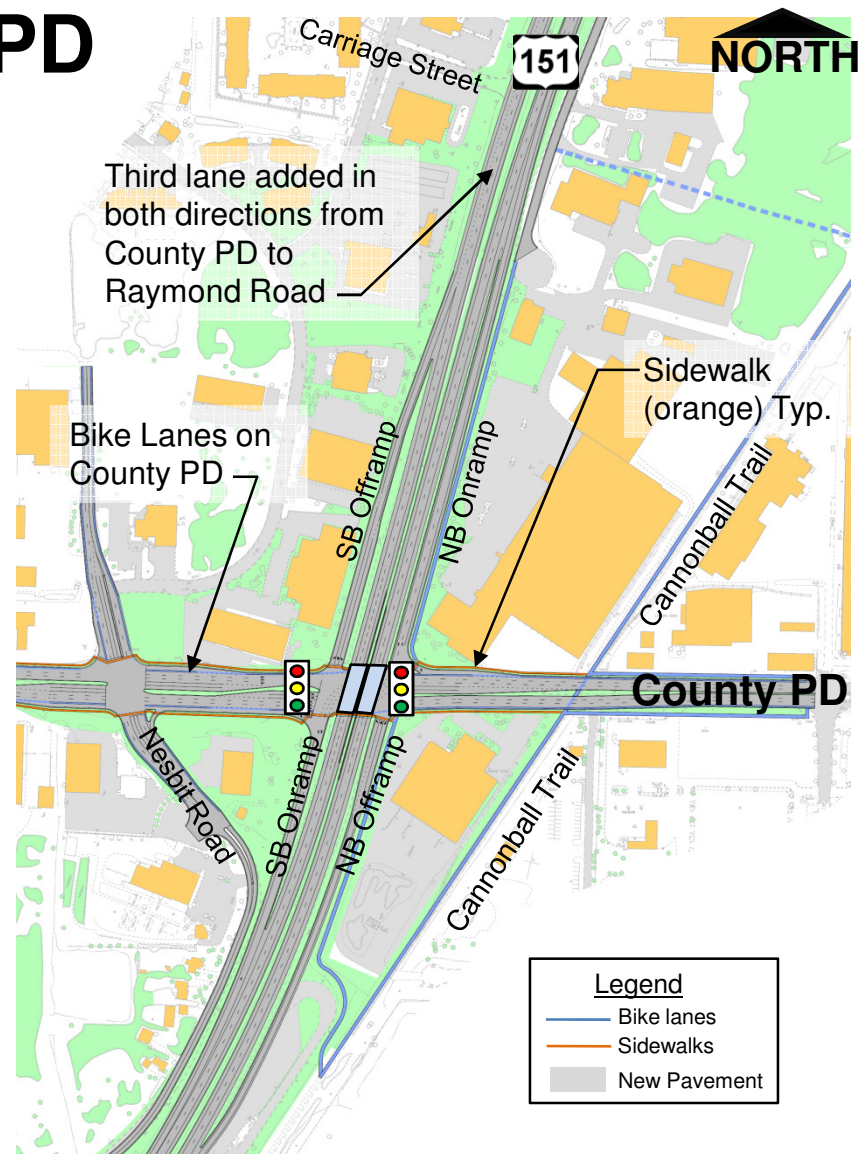
# STAGE 2

2017 or later

US 151/Verona Road

## Stage 2 – County PD interchange

- Standard On/Off Ramps
- Greatly improves capacity, eliminates conflicts with US 151 through traffic.
- Bike and pedestrian accommodations through interchange.
- Possibly one business relocation, strips of right-of-way needed from many adjacent parcels.
- Two driveways will be closed.

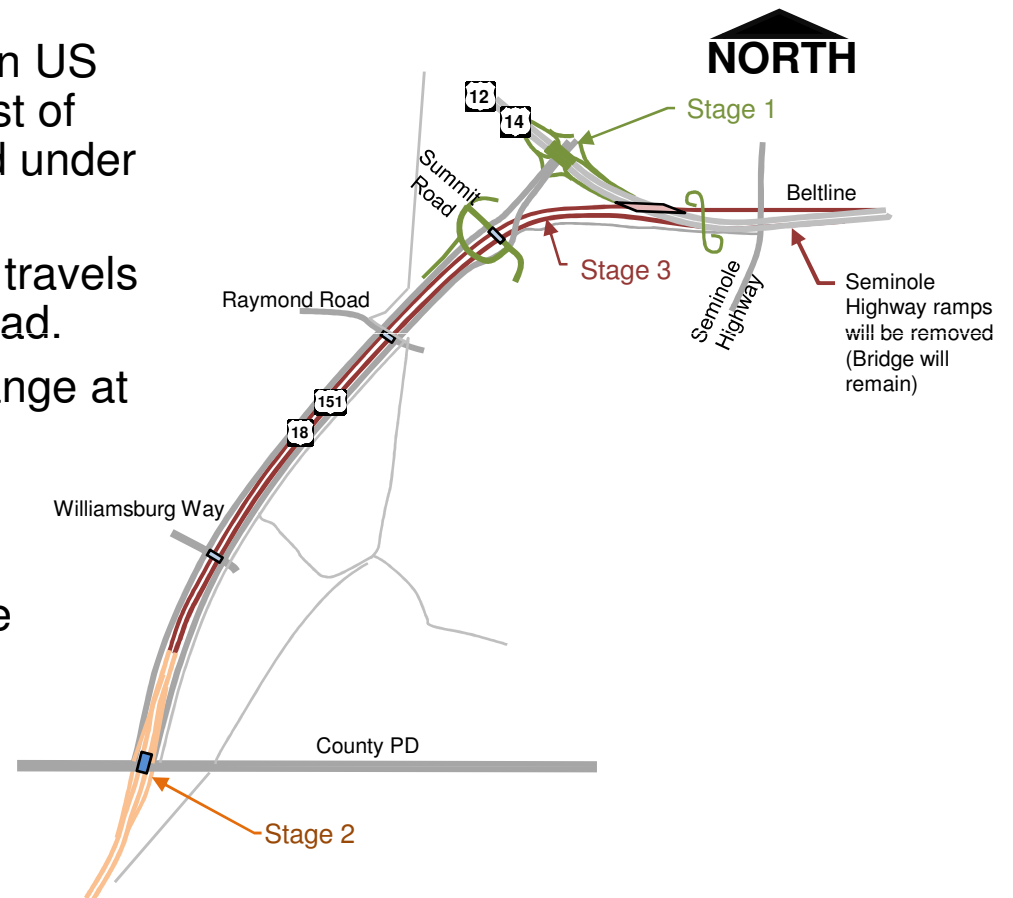


# STAGE 3

## Stage 3 – Ultimate freeway conversion

Incorporates

- Freeflow ramps between US 151 and the Beltline east of Verona Road are added under or over the Beltline.
- A US 151 Freeway that travels in median of Verona Road.
- A half-diamond interchange at Raymond Road.
- A grade separation at Williamsburg Way.
- Single point interchange remains.
- County PD interchange remains.



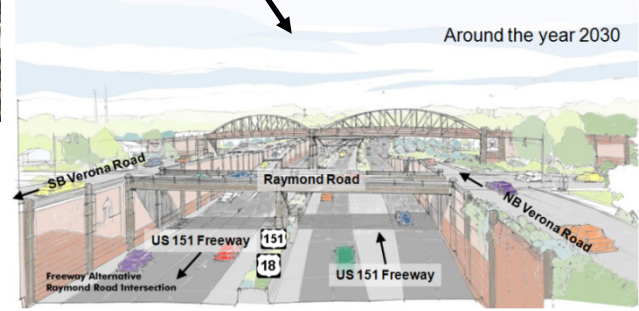
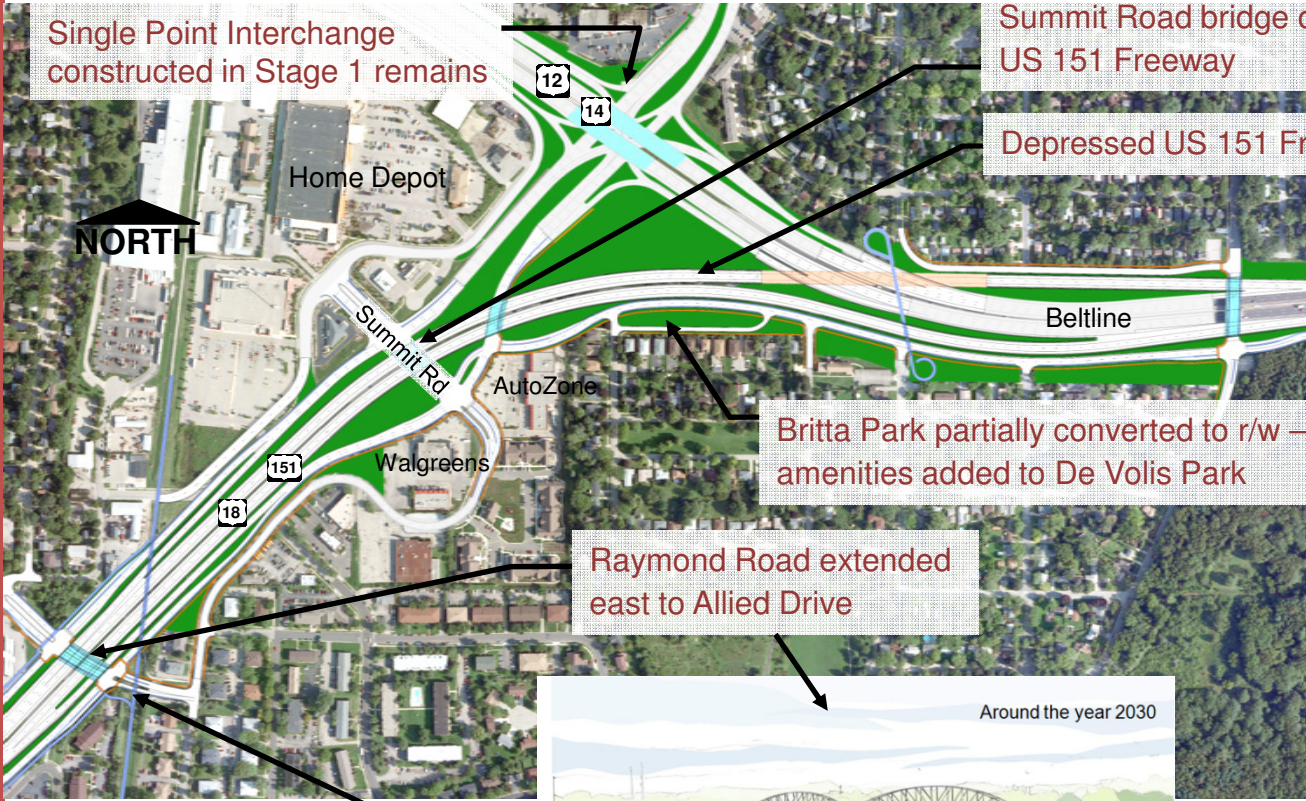
2030 or later



STAGE 3

# Stage 3 affects to Britta Park

When future operational and safety needs warrant ~ 2030



2030 or later





STAGE 3

# Stage 3 affects to Britta Park

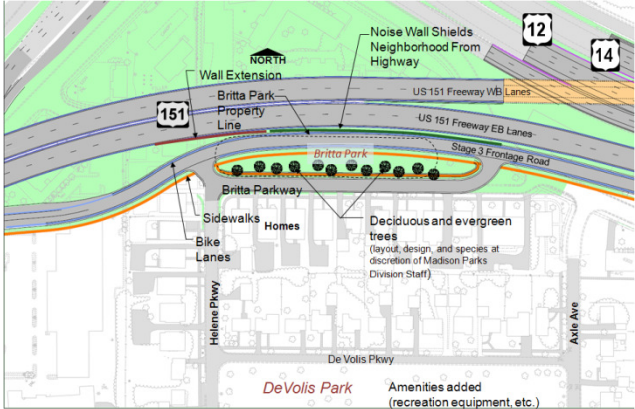
## When future operational and safety needs warrant ~ 2030



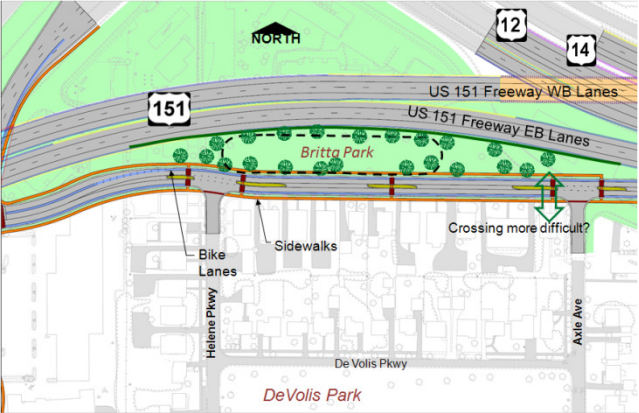
**Legend**

- Bike lanes
- Sidewalks
- New Pavement

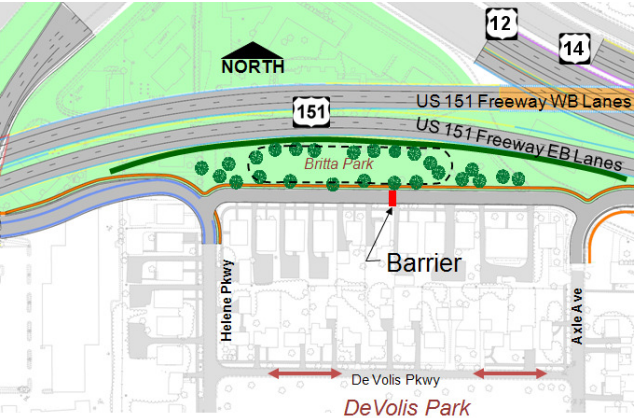
**Option 1 (Recommended)** affects Britta Park, keeps Frontage Road and adds amenities to DeVolis Park, possible visual mitigation in Stage 1.



**Option 2** Avoids Britta Park



**Option 3** Avoids Britta Park but discontinues Frontage Road

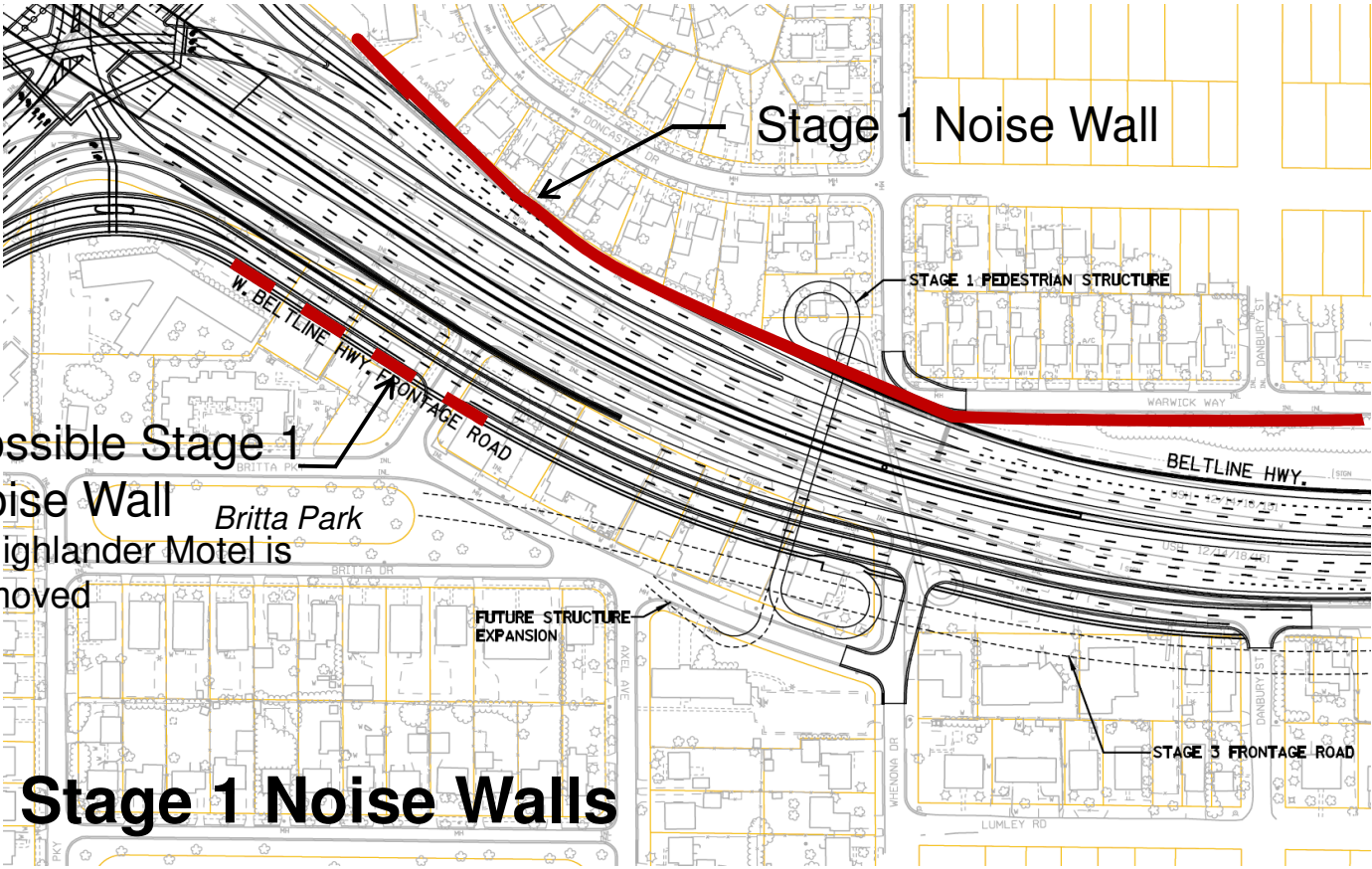


2030 or later



# Noise walls – Stage 1

STAGE 1



Possible Stage 1 Noise Wall if Highlander Motel is removed

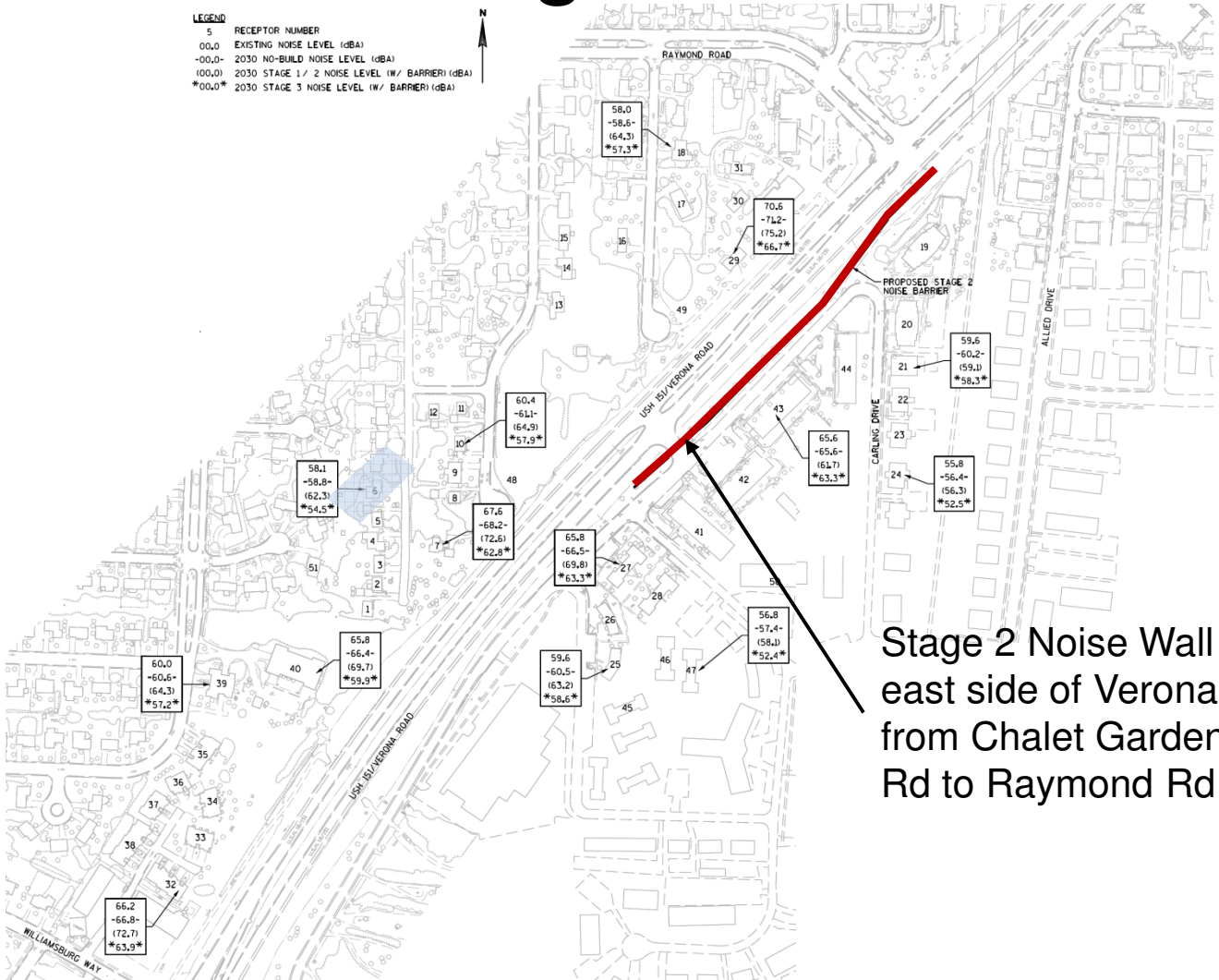
## Stage 1 Noise Walls



# Noise walls – Stage 2

**LEGEND**

- 5 RECEPTOR NUMBER
- 00,0 EXISTING NOISE LEVEL (dBA)
- 00,0 2030 NO-BUILD NOISE LEVEL (dBA)
- (00,0) 2030 STAGE 1 / 2 NOISE LEVEL (W/ BARRIER) (dBA)
- \*00,0\* 2030 STAGE 3 NOISE LEVEL (W/ BARRIER) (dBA)



Stage 2 Noise Wall – east side of Verona Rd from Chalet Gardens Rd to Raymond Rd

STAGE 2

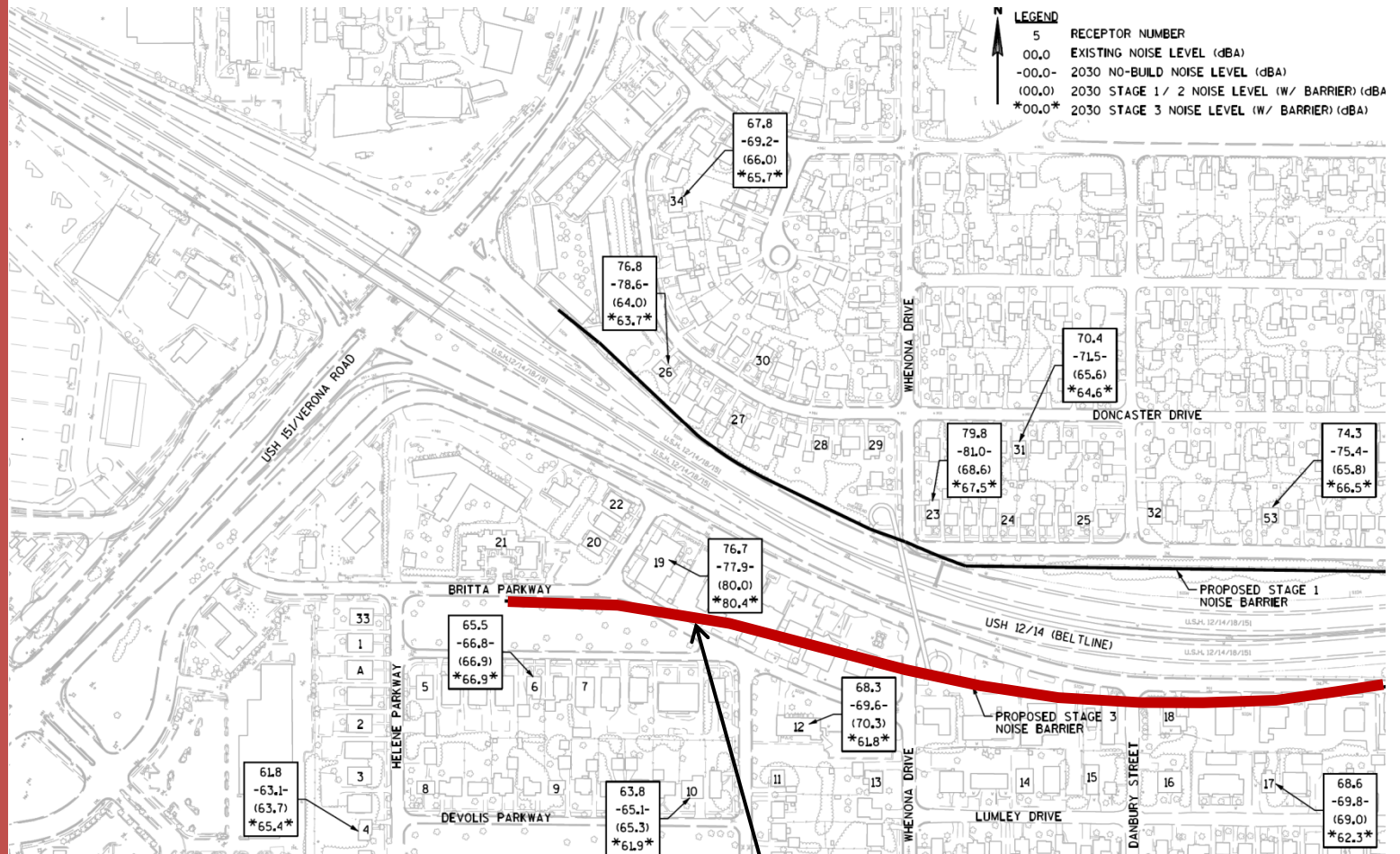
2017 or later





# Noise walls – Stage 3

# STAGE 3



Stage 3 Noise Wall south side of Beltline from Helene Pkwy to Seminole Hwy



2030 or later

# Project purpose and need

The purpose of this WisDOT project is to:

- Enhance the mobility of motorized travel in the US 151 backbone corridor to operation levels that are consistent with a Corridors 2020 Backbone Route.
- Preserve the mobility of motorized travel in the US 12/14 corridor to levels that are consistent with a Corridors 2020 Connector Route.
- Enhance nonmotorized travel accommodations and connectivity in both the US 151 and the US 12/14 corridors.

Primary components of the Purpose and Need for the US 151 corridor include:

A. US 151 System Continuity and Consistency with the Corridors 2020 State Highway Plan

US 151 is classified as a Backbone Route in the Corridors 2020 State Highway Plan. This is the same classification as the Interstate Highways. Currently the US 151 Backbone Route is a four-lane expressway/freeway facility from Fond du Lac to Dubuque, except for the two-mile section that is a focus of this study. Increasing traffic volumes and associated congestion are compromising the mobility of the corridor.

B. Safety

As traffic volumes on the US 151/Verona Road corridor grow, congestion-related crashes are increasing.

C. Neighborhood Connectivity – Transit/Nonmotorized Travel

US 151 and the US 151 interchange separates the Allied-Dunn's Marsh neighborhood from other Madison neighborhoods north and west. The corridor and its heavy traffic volumes contribute to the physical isolation of the neighborhood. Verona Road has poor pedestrian access across the roadway and limited pedestrian/bike facilities parallel and adjacent to the roadway.

D. Metropolitan Traffic Movements and Local Access

US 151 regularly experiences congestion during the evening rush hour. This congestion affects not only regional traffic, but also metropolitan traffic that originates and ends within the Madison metro area. Because of this congestion, many metropolitan trips are being diverted to local and neighborhood streets. Area residents regularly express concerns over nonlocal traffic cutting through neighborhoods to avoid the Beltline and Verona Road.

