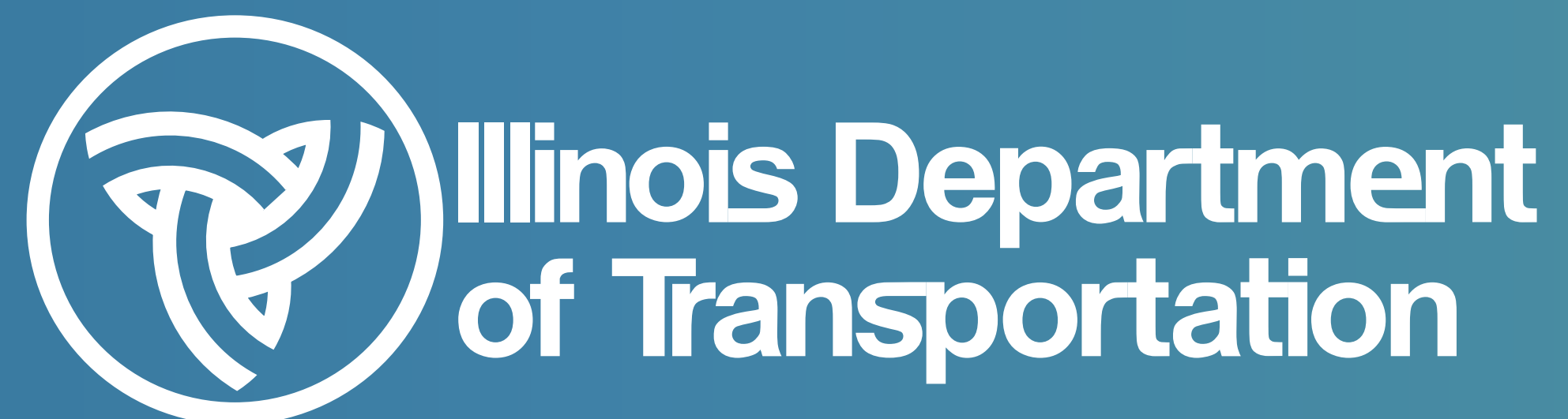


WELCOME

US 20 at Shales Parkway Phase I Engineering Study



Purpose and Need

- The purpose of the US 20 at Shales Parkway project is to improve safety, increase mobility and improve multimodal connections along the US 20 corridor.
- The US 20 at Shales Parkway signalized intersection has been identified as Safety Tier Critical, the highest tier, by IDOT's Division of Transportation Safety. The existing design and configuration of the intersection no longer accommodates travel demands. The need for the US 20 and Shales Parkway intersection is supported by high crash rates and severity of the crashes.
- Improvements are needed to:
 - Reduce potential for severe and fatal crashes on US 20
 - Improve operational efficiency and reliability at US 20 and Shales Parkway
 - Accommodate multimodal connections in the study area
 - Support goals of the City of Elgin's Comprehensive Plan

Public Involvement Summary



Virtual Public Outreach Event

- Held September 10 – October 20, 2021
- Provided an overview of the study process, schedule and anticipated public involvement activities
- Presented existing conditions
- Obtained public input on the transportation issues and needs within the study area

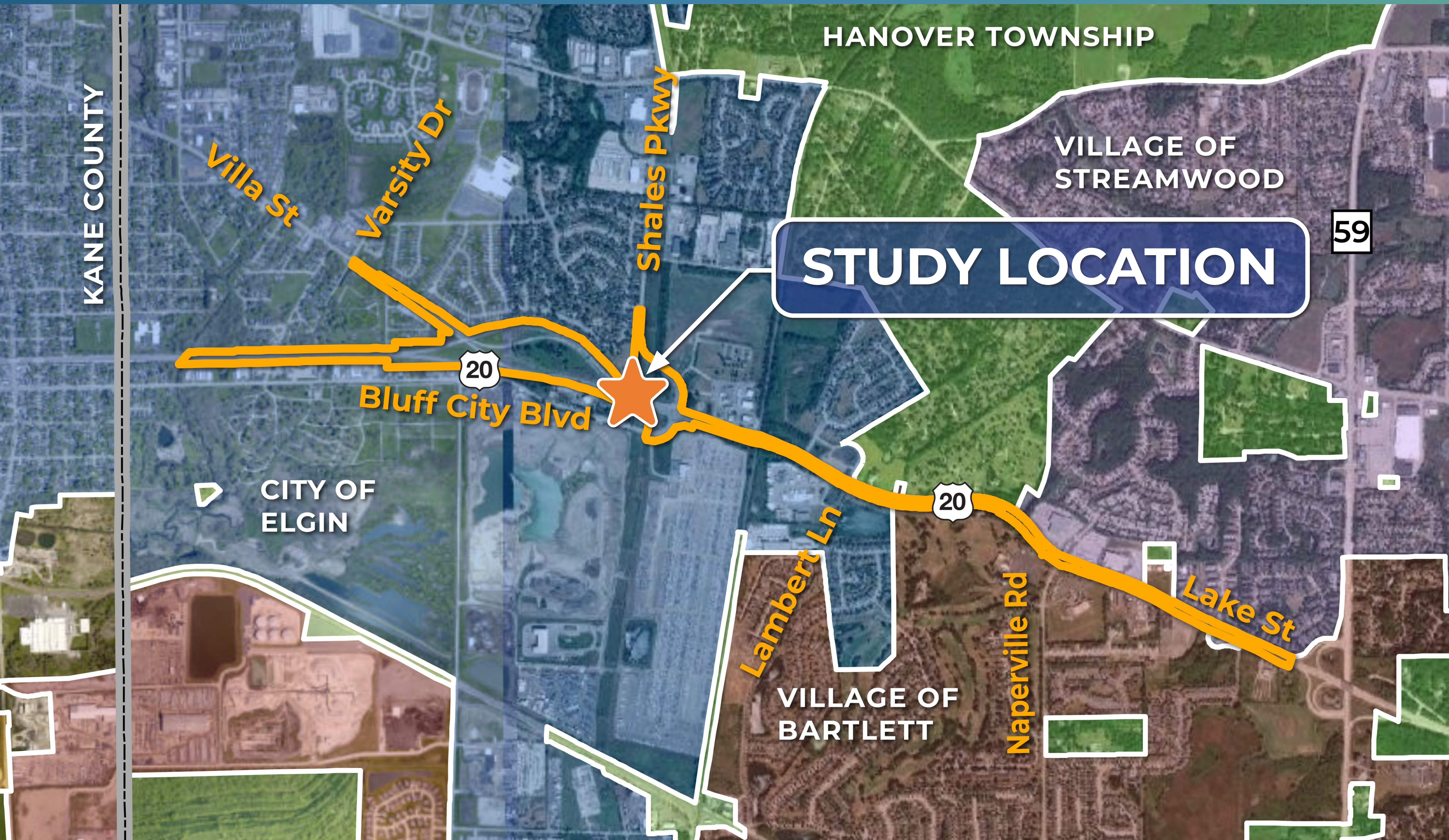
Public Information Meeting #2

- November 16, 2022
- Provided information regarding the study's process and schedule, as well as draft interchange alternatives
- Obtained public input on draft interchange alternatives and proposed changes to US 20 from Lambert Lane to IL 59

Community Advisory Group (CAG)

- Meeting #1: December 8, 2021
- Meeting #2: June 29, 2022
- Meeting #3: April 25, 2023
- Group of volunteer community stakeholders that shares issues and concerns
- Obtained feedback on existing study area conditions and draft interchange alternatives

Location Map

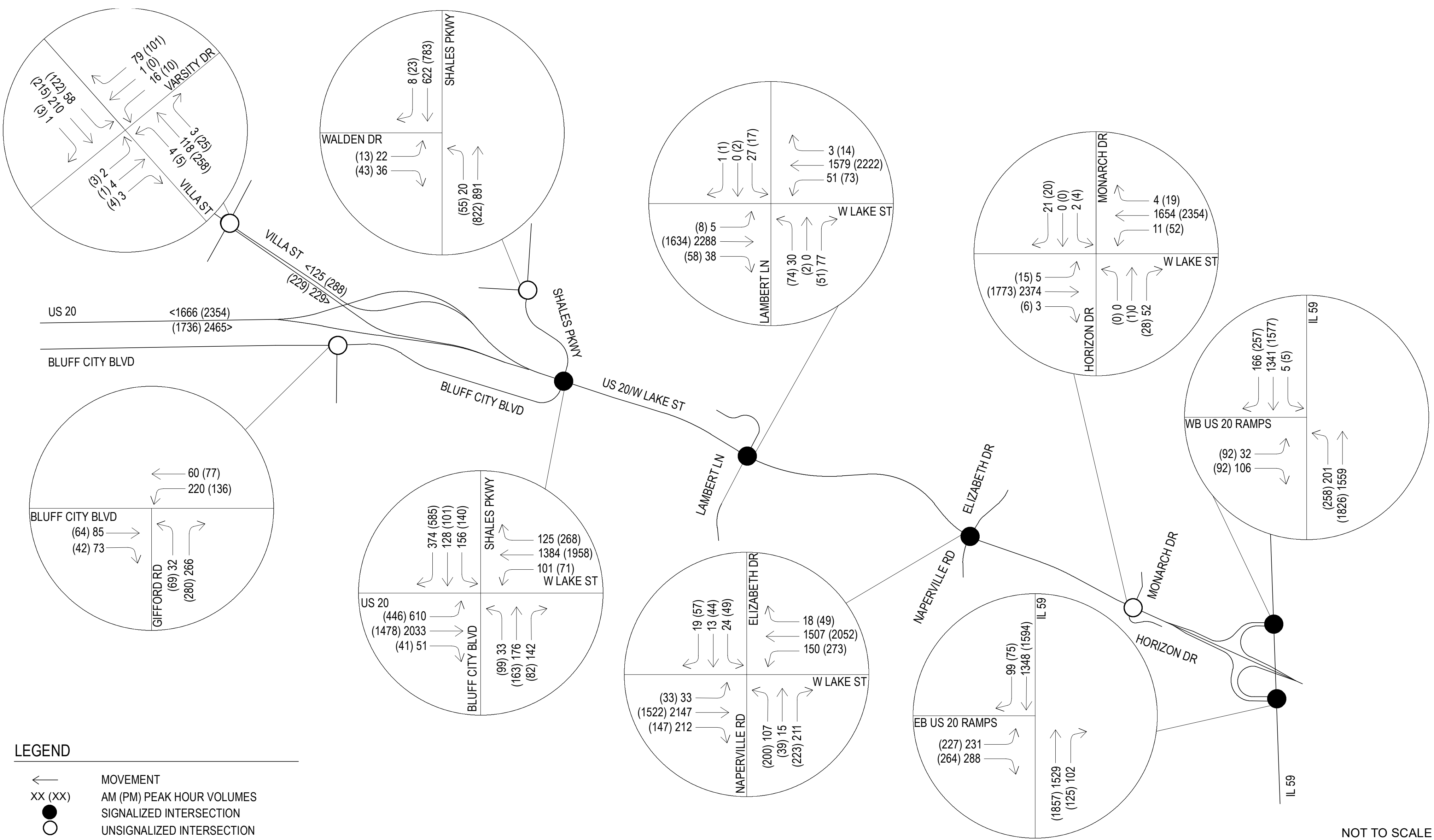


Environmental Study

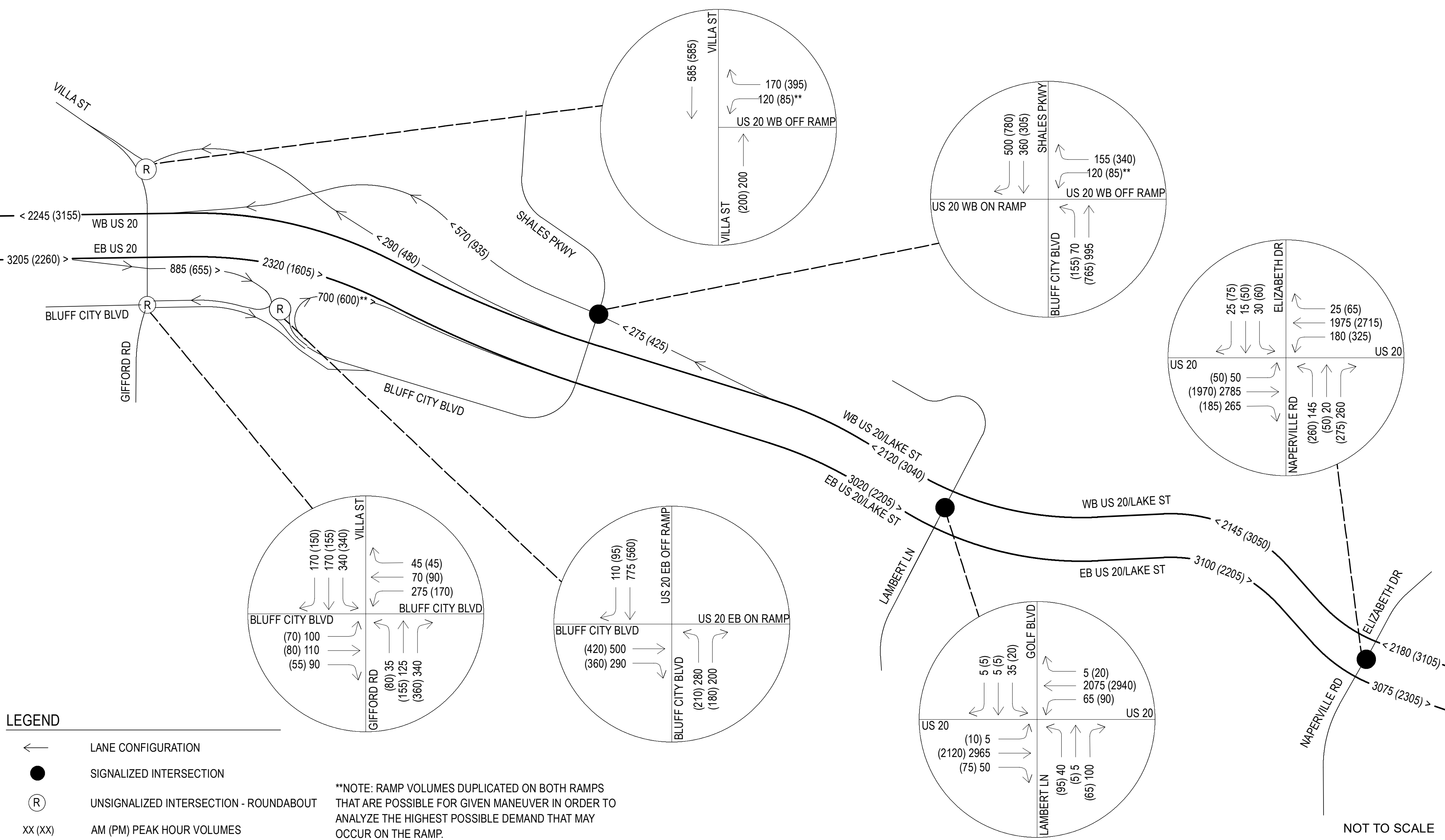
The National Environmental Policy Act (NEPA) of 1969 is a federal law that outlines policies to protect the environment. NEPA requires that federally funded projects seek to avoid, minimize and mitigate impacts to the natural and built environment. Some of the considerations include air quality, farmland, community impacts, wetlands, parklands, civil rights, threatened and endangered species, and cultural resources. This study is being performed in compliance with NEPA requirements.



EXISTING PEAK HOUR TRAFFIC VOLUMES



FUTURE PEAK HOUR TRAFFIC VOLUME PROJECTIONS



Crash History



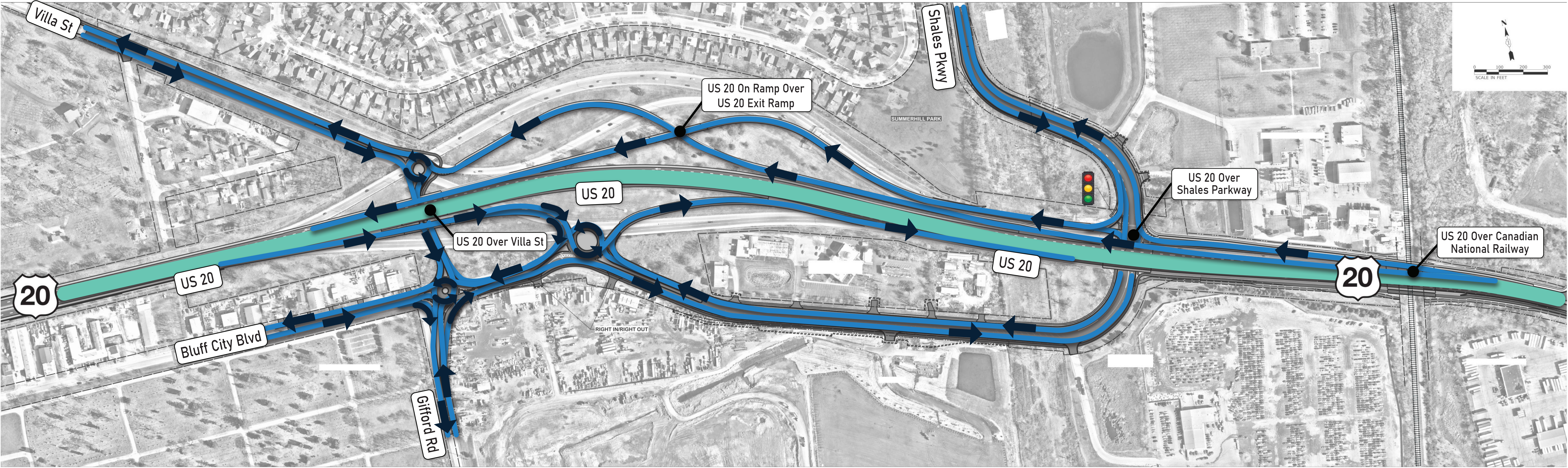
US 20 at Shales Parkway
Five-Year Vehicle Crashes (2016-2021)

CRASH TYPE	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES
Fatal	1	0.1%
Incapacitating	26	3.5%
Non-Incapacitating	94	12.7%
Reported, Not Apparent	99	13.4%
Property Damage Only	519	70.2%
Total Crashes	739	

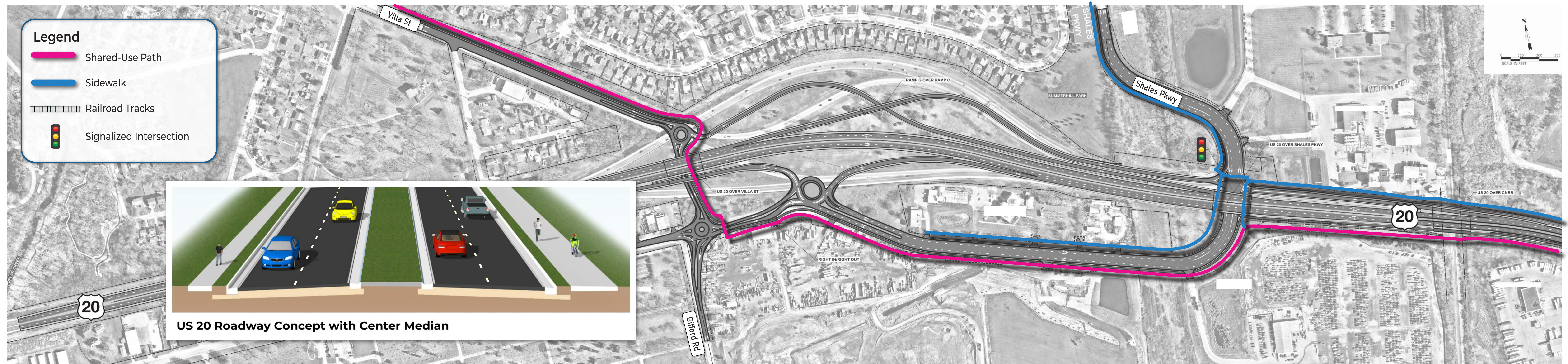
US 20 at Shales Parkway
Crashes By Type

CRASH TYPE	PERCENT OF TOTAL CRASHES
Rear End	46.5%
Sideswipe Same Direction	20.3%
Turning	15.2%
Fixed Object	8.4%
Animal	1.8%
Sideswipe Opposite Direction	1.6%
Over-Turned	1.4%
Other Object	1.1%
Head On	0.9%
Other Non-Collision	0.5%
Pedestrian / Bicyclist	0.0%

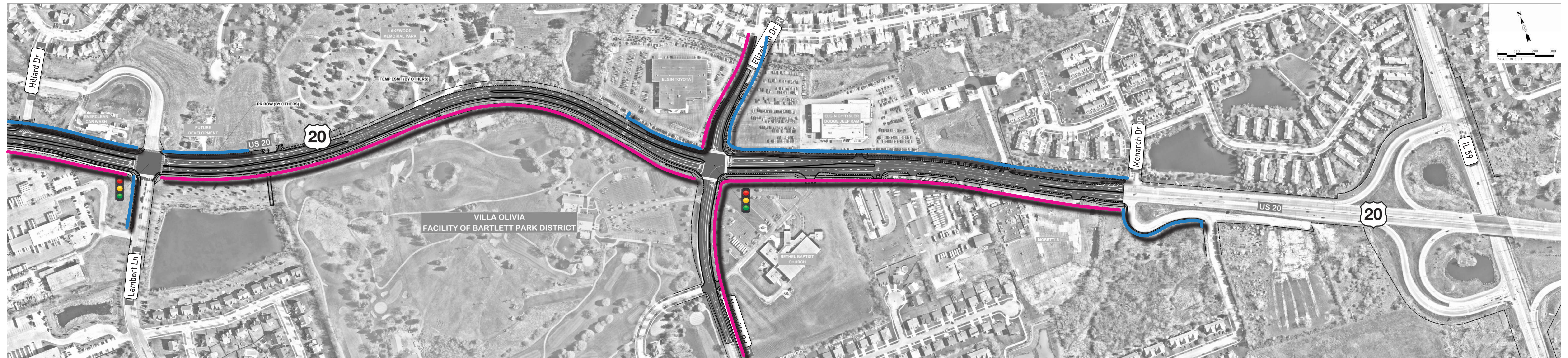
Preferred Interchange: Roundabout



Bike and Pedestrian Accommodations

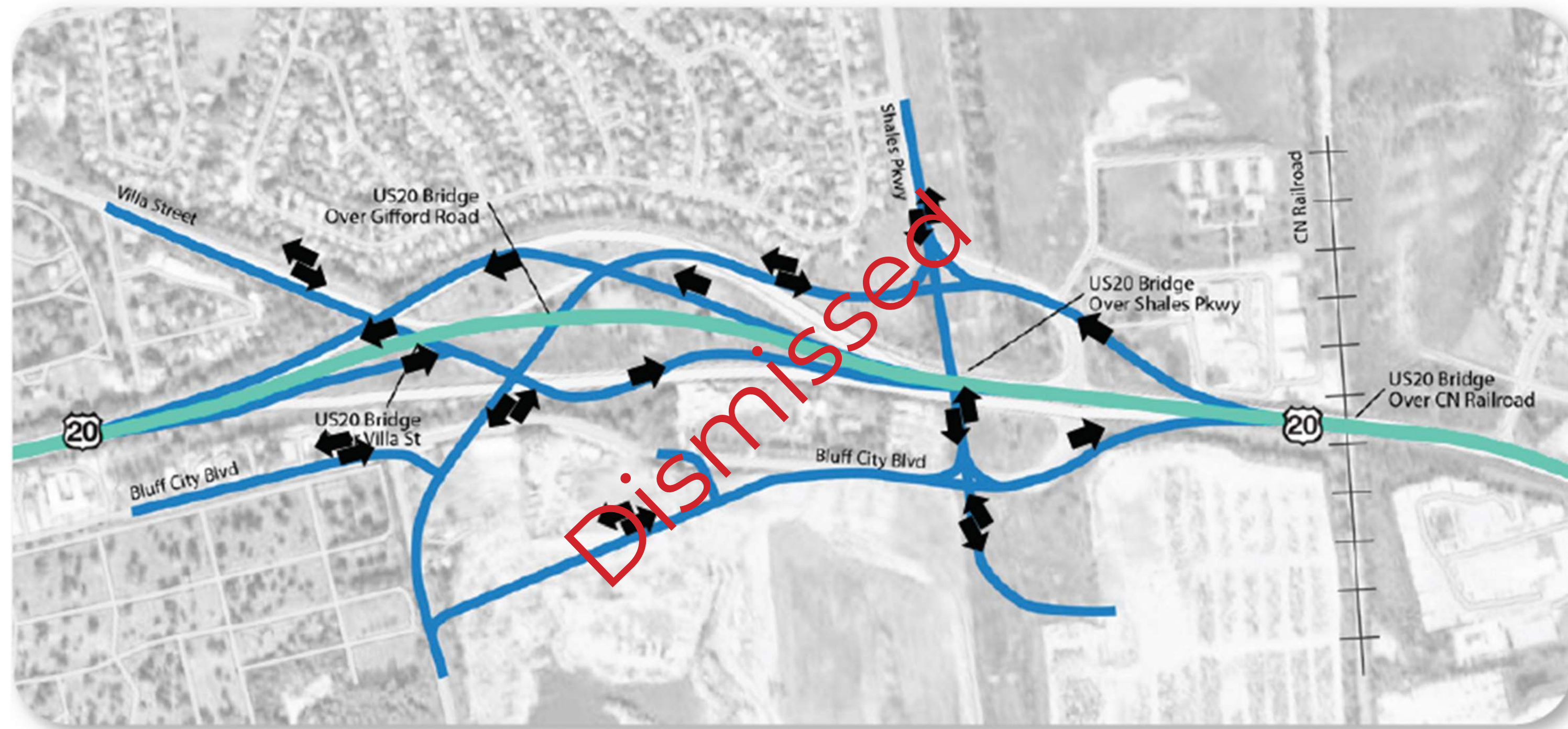


US 20 at Shales Parkway - West Side



US 20 at Shales Parkway - East Side

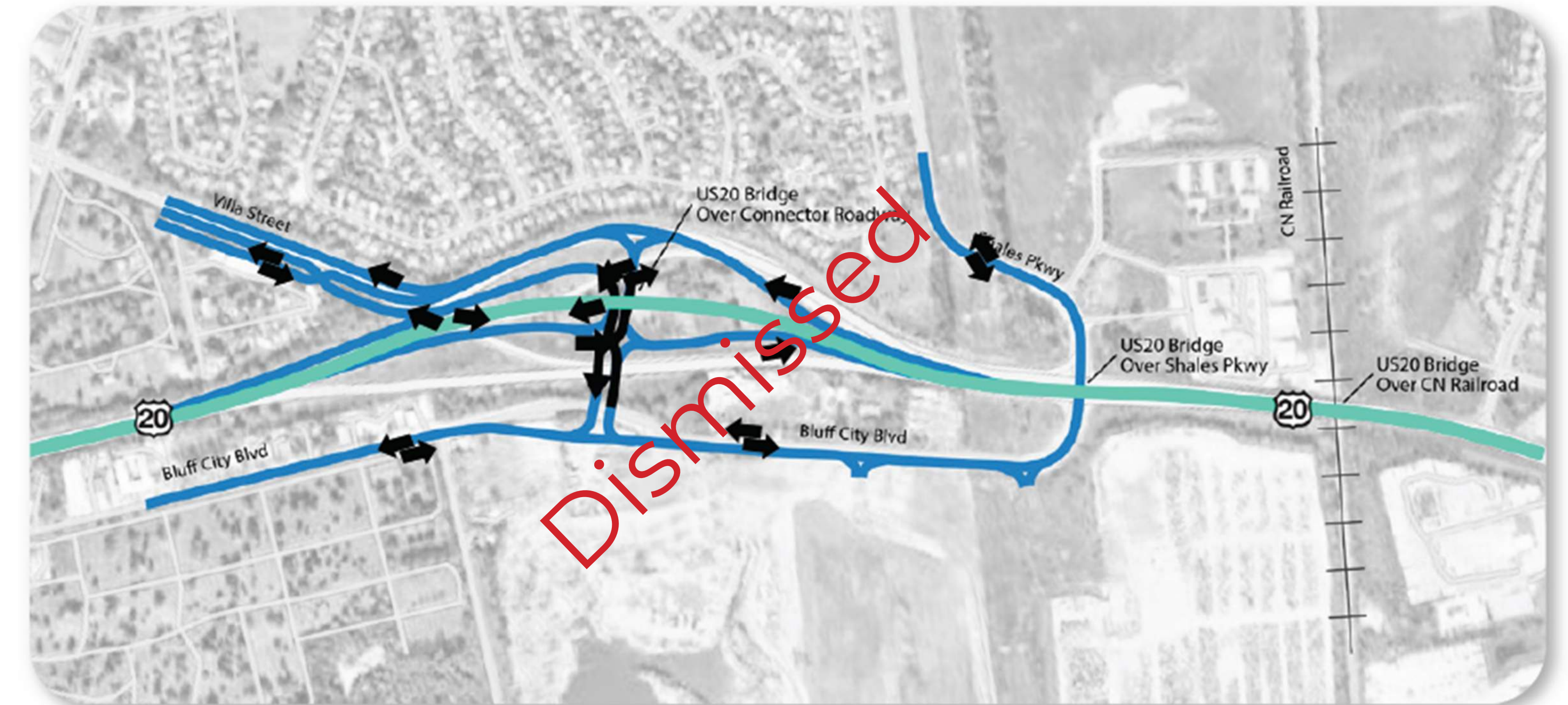
Interchange Alternatives Considered and Eliminated



Feasibility Study - US 20 w/IL 390 Extension (2017)

Public comments **did not support** this interchange alternative because of the following:

- Complexity
- Higher impacts to Summerhill Park
- Potential Cost

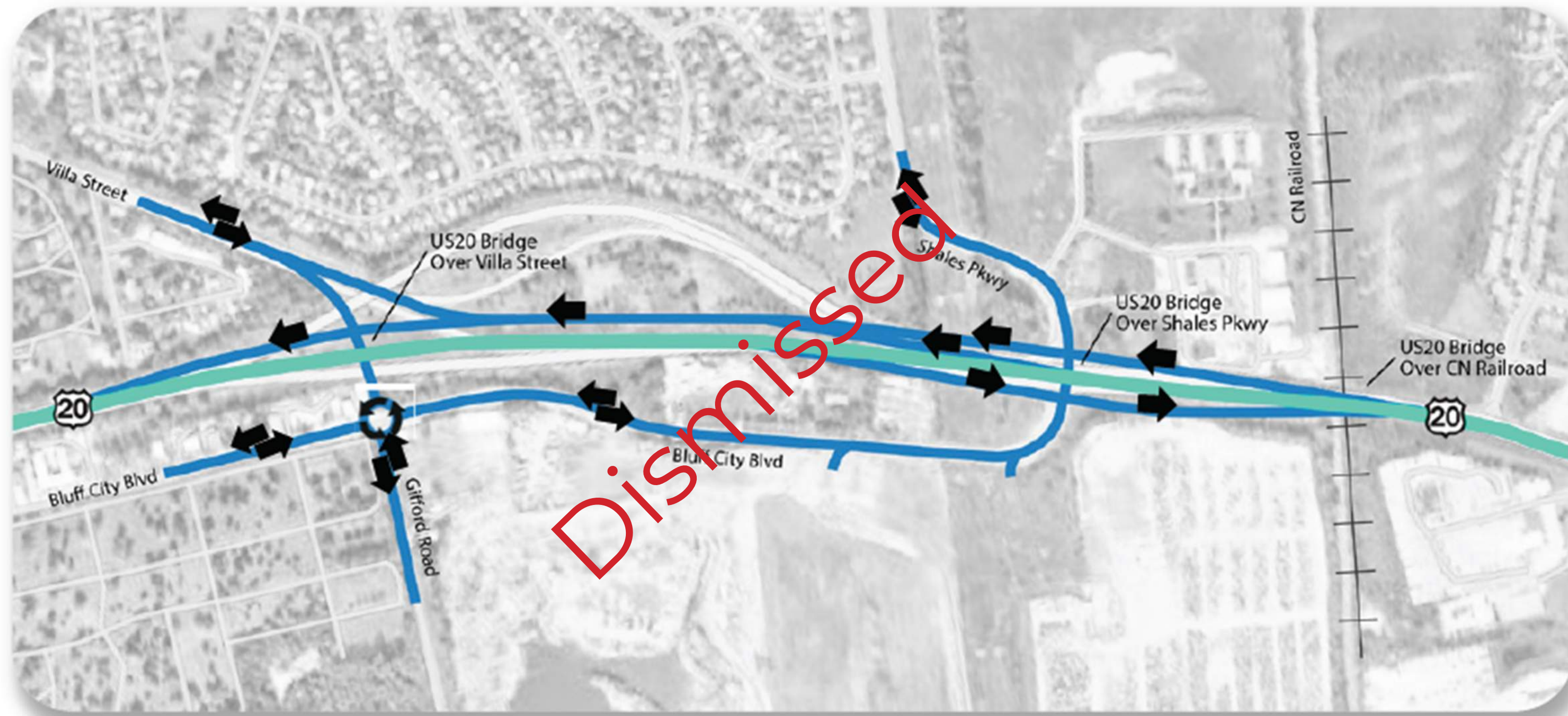


Diverging Diamond Interchange (DDI)

Public comments supported the SPUI and Roundabout options over the DDI interchange alternative because of the following:

- Complexity
- Reduced open space potential
- Increased number of potential intersections

Interchange Alternatives Studied in Detail

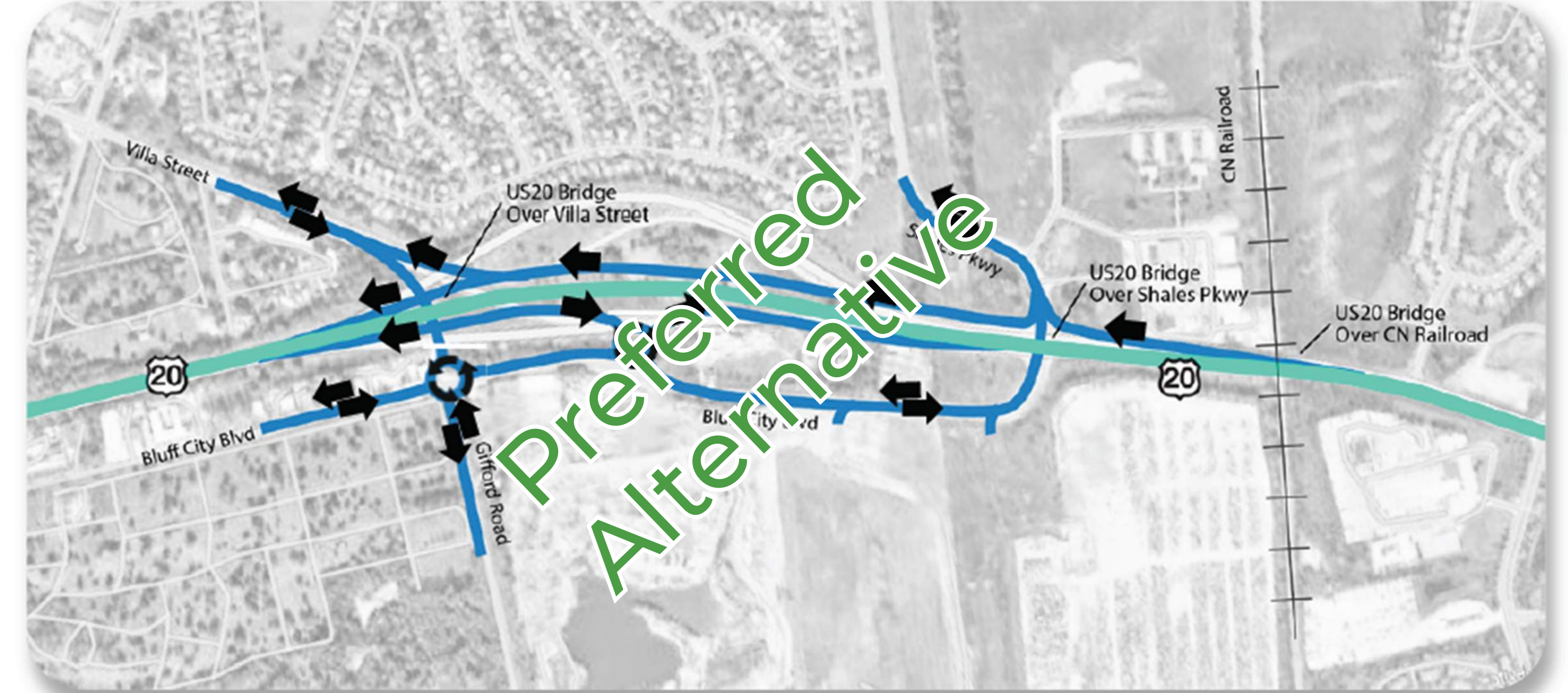


Single Point Urban Interchange (SPUI)

Public comments were **in support** of this interchange alternative because of the following:

- Limited number of intersections
- Additional roadway medians/barriers
- Minimal impact to Summerhill Park

*Dismissed due to better overall performance of the Roundabout Alternative



Roundabout West of Shales Parkway

Public comments were **in support** of this interchange alternative because of the following:

- Limited number of intersections
- Minimal impact to Summerhill Park
- Increased open space potential

Noise Study Information

Traffic Noise Study Process

IDENTIFY NOISE RECEPTORS

Exterior and Interior Noise

- IDOT and Federal Highway Administration (FHWA) stipulate that outdoor areas of frequent human use be given primary consideration.
- Interior noise for private residences is not studied; the study analysis focuses on noise levels that interfere with outdoor conversations.



DETERMINE NOISE LEVELS

Predicted Traffic Noise Using FHWA Traffic Noise Model

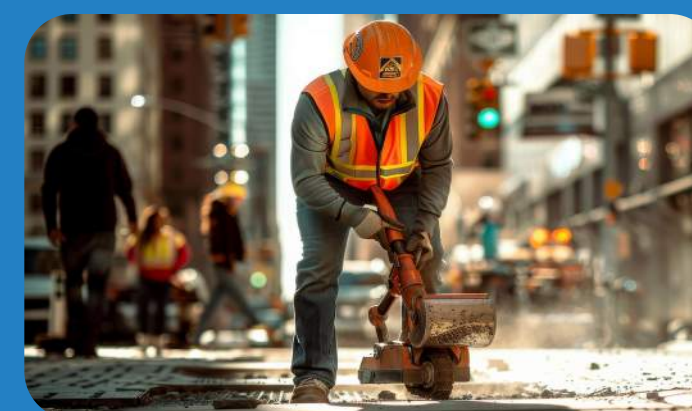
- Existing Conditions (validated by field measurements)
- Future 2050 - without Improvements (No Build)
- Future 2050 - with Improvements (Build)



RECOGNIZE NOISE IMPACTS

Impacts identified for worst-case receptors

- 1) Future noise levels approach, meet or exceed the FHWA Noise Abatement Criteria (NAC)
 - Activity Category (CAT) B/C: Residential, cemetery, library, hospital, parks, etc.
 - CAT E: Hotels, motels, office, restaurants, etc.
- 2) Substantial increases in noise compared to existing conditions (+15 decibels or greater)



TRAFFIC NOISE ABATEMENT ANALYSIS

NOISE WALLS MUST BE FEASIBLE AND REASONABLE

Feasibility

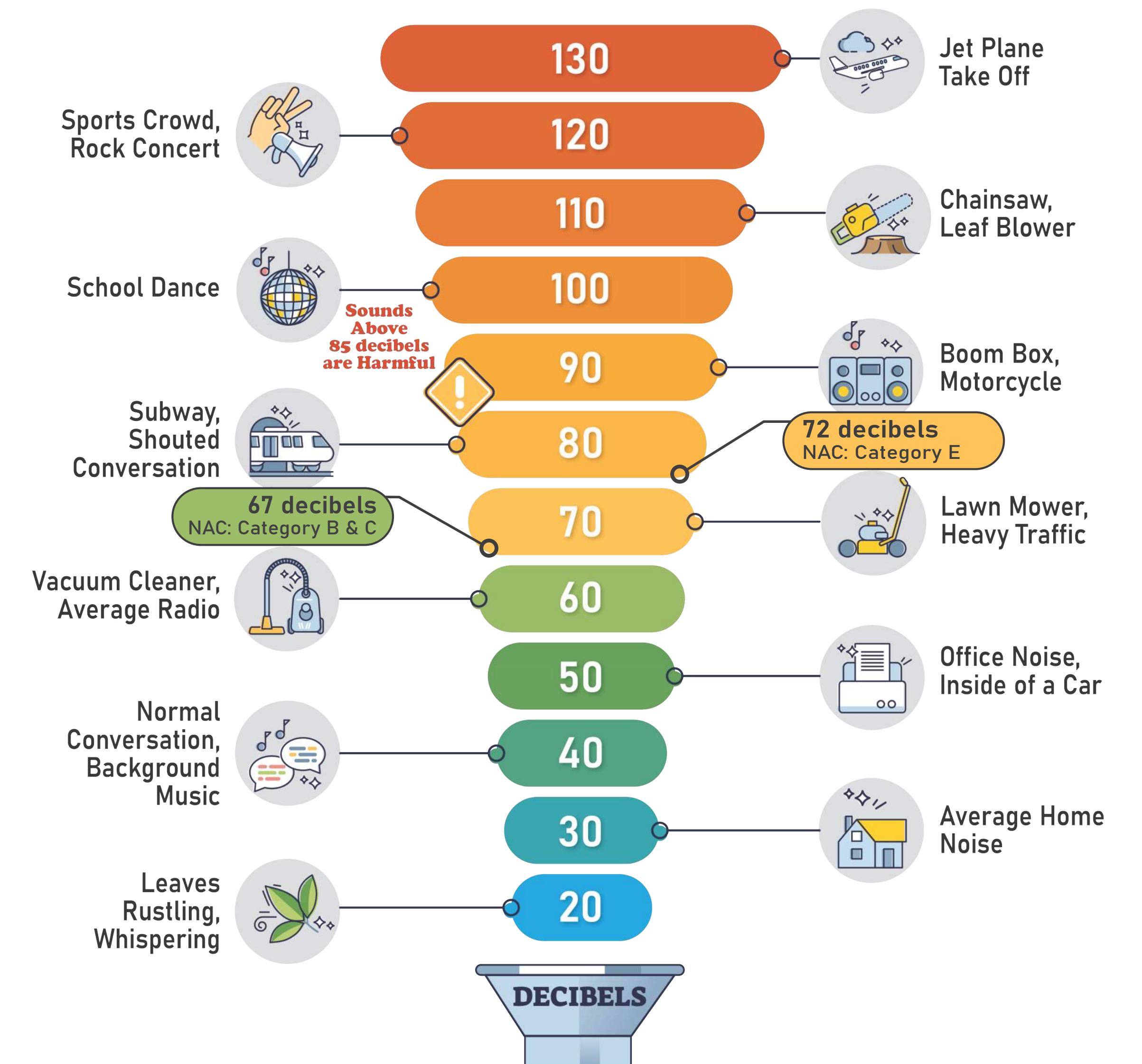
- Must achieve at least 5 decibels noise reduction for at least two impacted receptors.
- Must be feasible to construct.

Reasonableness

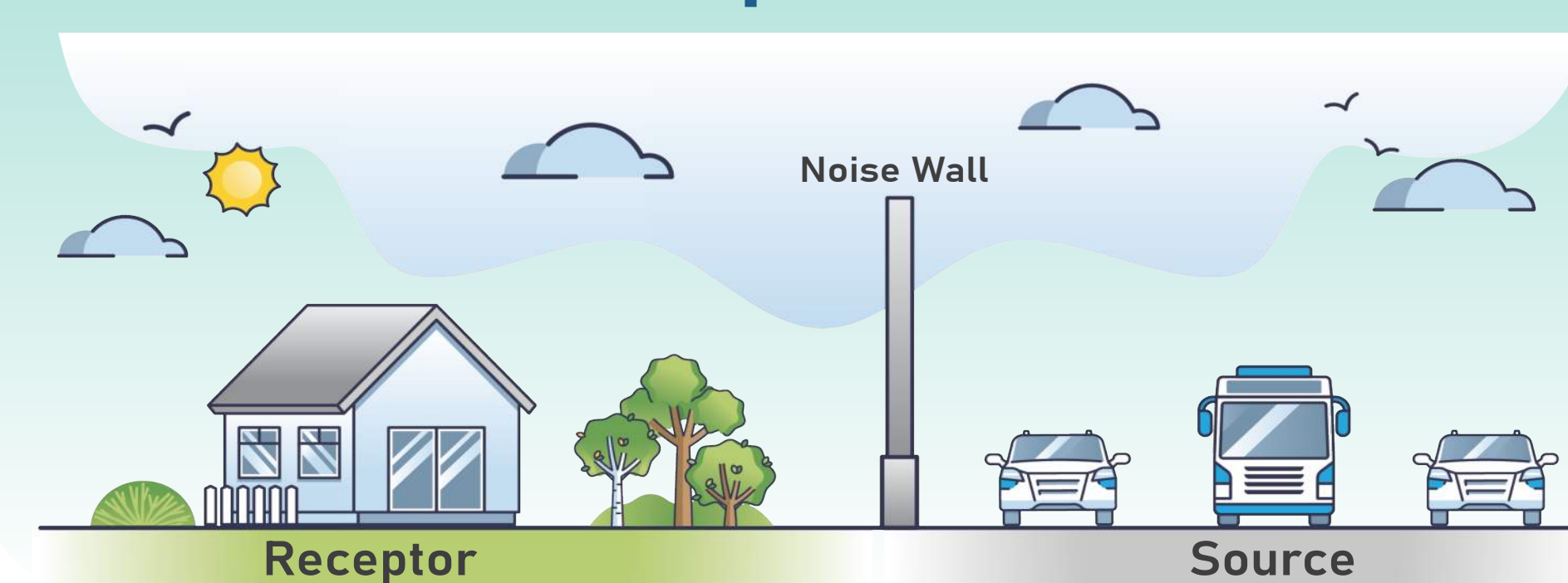
- Must achieve an 8 decibels reduction for at least one benefited receptor.
- Must be cost-effective (generally \$30,000 per benefited receptor).
- Final decision on noise wall installation is based on the viewpoints of those that will benefit from the wall.



Common Noise Levels



Noise Wall Example

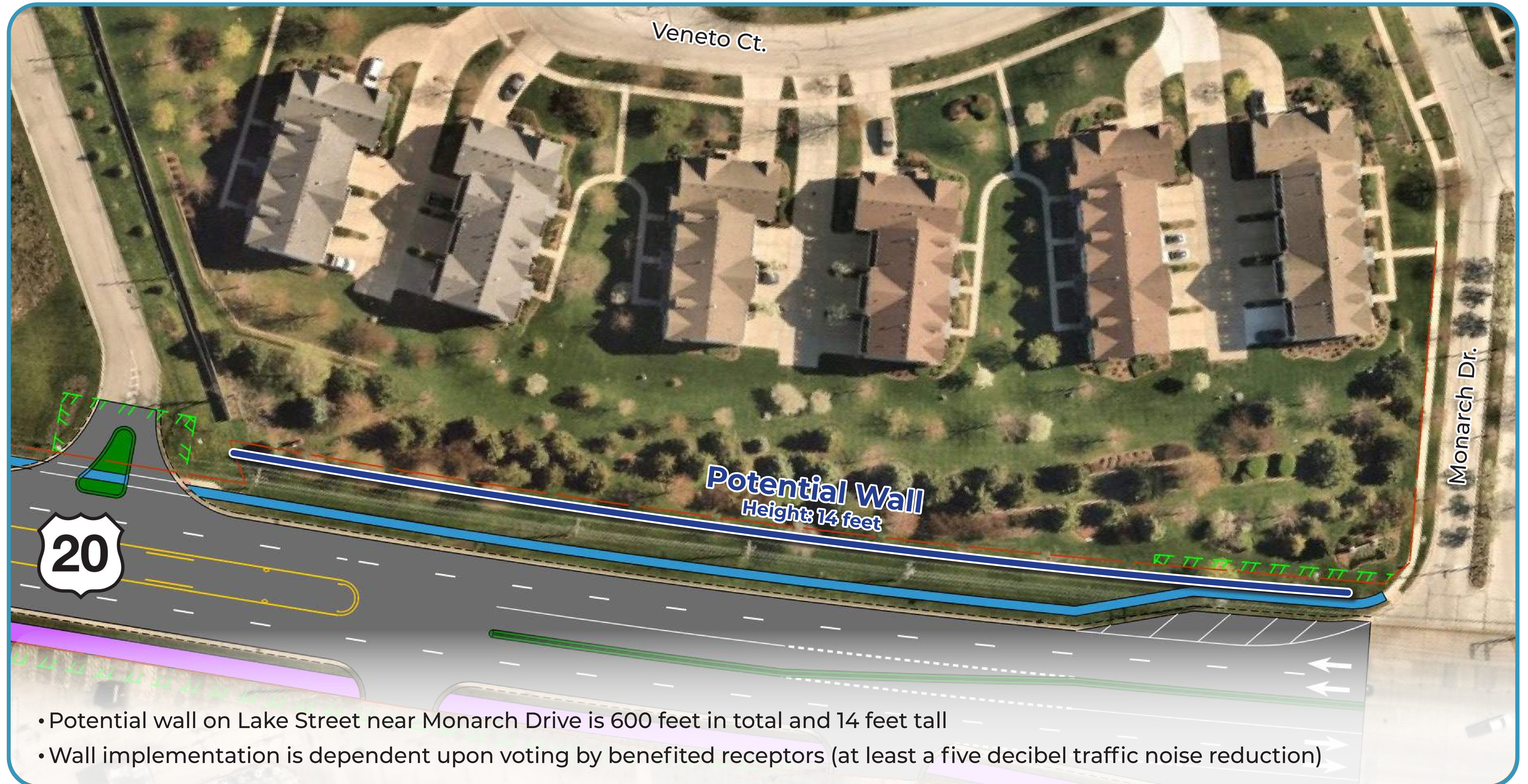


Response goal of **33%** of benefited receptors per proposed barrier



If response goal is not met a second mailing will be sent to maximize response rate for voting

Potential Noise Abatement Wall: Lake Street



Land Acquisition Types

FEE SIMPLE:

44 Parcels, 6.95 acres

- Acquisition of all rights and interest

PERMANENT EASEMENT:

1 Parcel, .08 Acres

- Ownership retained by the property owner
- Agency is allowed permanent use of the property for construction and future maintenance

TEMPORARY EASEMENT:

27 Parcels, 1.66 Acres

- Ownership retained by the property owner
- Agency is allowed temporary use of the property to construct the project

Land Acquisition Process

OWNERSHIP DETERMINATION

APPRAISAL

NEGOTIATION (Court Proceedings if Necessary)

PROPERTY ACQUISITION

Submit Public Comment



**PROVIDE
COMMENT
ON AVAILABLE FORM**



**VISIT THE PROJECT
WEBSITE**
Scan the QR code or visit:
us20atshalesstudy.org



EMAIL US
info@US20atShalesStudy.org



SEND US MAIL
Illinois Department of
Transportation
**Bureau of
Programming, Attn.
Lori Brown**
201 West Center Court
Schaumburg, IL 60196-
1096