



CLIFF ROAD STUDY
DAKOTA COUNTY - EAGAN

WELCOME TO **THE CLIFF ROAD STUDY**
OPEN HOUSE!
Please Sign In





Welcome!

OPEN HOUSE - JANUARY 17, 2019

32

CLIFF ROAD STUDY

DAKOTA COUNTY - EAGAN

Introduction

Dakota County, in cooperation with the City of Eagan, is working to complete a corridor study of Cliff Road (County Road 32) from Lexington Avenue to Trunk Highway 3 in Eagan.

The corridor study will include review of current and future traffic operations, potential for any future roadway and/or intersection improvements, trail locations along the corridor, pedestrian crossings, and the location for a grade separated crossing of Cliff Road for the Mendota Lebanon Hills Greenway.

Fall/Winter 2018/19

Investigate

- Data collection
- Identify issues
- Explore vision

Winter/Spring 2019

Develop Alternatives

- Explore opportunities
- Develop and evaluate solutions

Summer/Fall 2019

Recommendation

- Identify recommended alternative

>>> Opportunities for public input throughout project process >>>

OPEN HOUSE 1

Goals, Issues, Opportunities

OPEN HOUSE 2

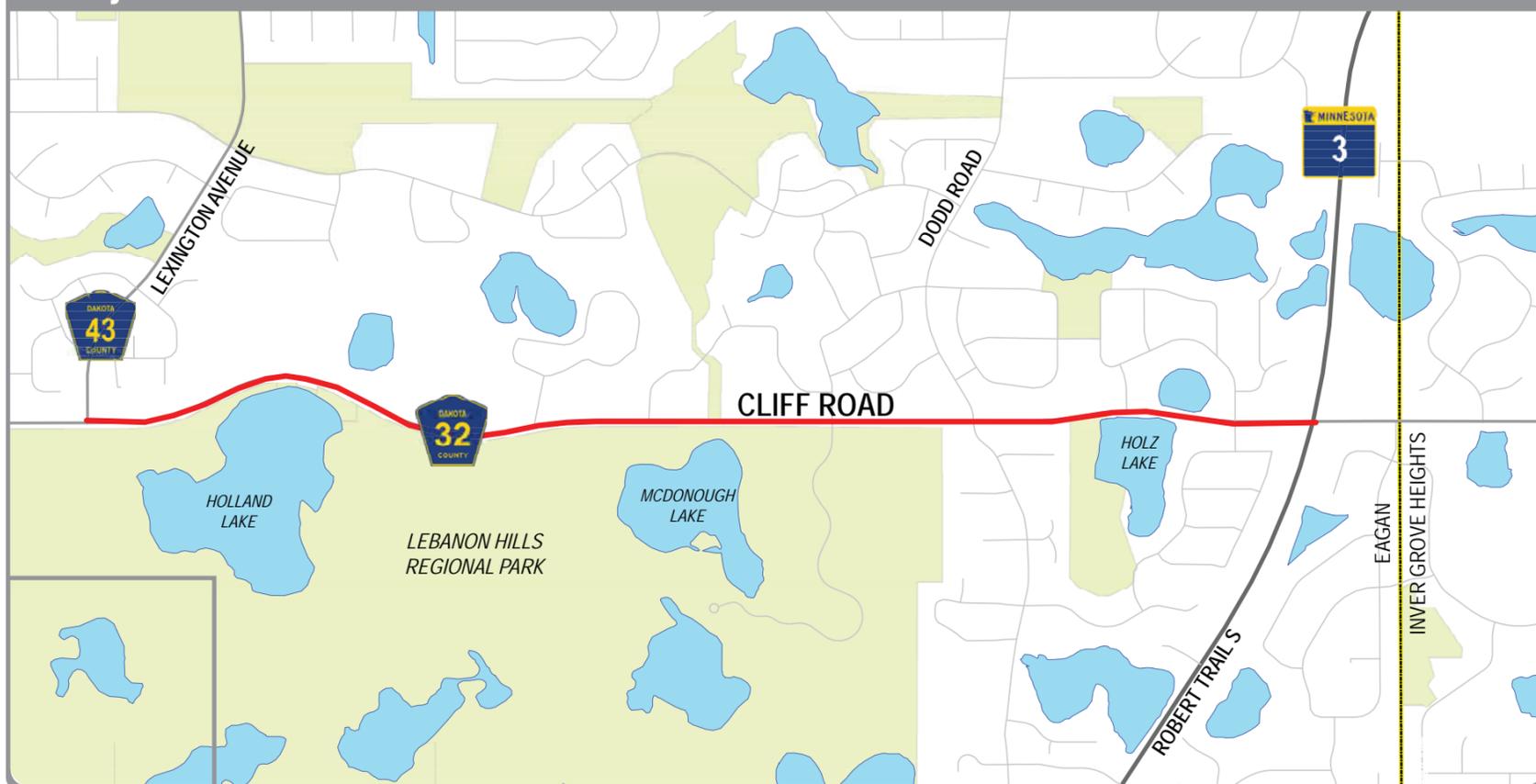
Potential Project Alternatives

OPEN HOUSE 3

Preferred Project Alternatives

A fourth Open House may be scheduled later in the project if deemed necessary by the Project Management Team (PMT).

Study Area



Study Purpose & Goals

Purpose

Through this study, improvements will be identified that align with the City and County Comprehensive Plans and ensure safe and efficient travel for pedestrians, bicyclists, and the 7,800 to 9,500 motorists traveling the corridor daily. Proposed improvements will address current and forecasted issues, strengthen corridor opportunities, and respect the corridor context including: the greater roadway network; multi-modal transportation needs; surrounding land uses; and surrounding environmental assets.

Goals

- Safely accommodate all users along the corridor
- Provide a comprehensive network for multimodal transportation that is compatible with local and regional needs
- Provide efficient and reliable vehicle mobility for the corridor
- Provide infrastructure improvements compatible with the natural and human environment
- Develop a financially responsible infrastructure implementation plan

Sign up for study updates!



Project Contacts

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Share your Input Online!



What do you see as the issues and opportunities along Cliff Road? How do you use the corridor?

In order to understand the issues we are trying to solve through this study, we need to hear from you - let us know what you think by visiting the project website and sharing your input today!

Follow Study Progress!



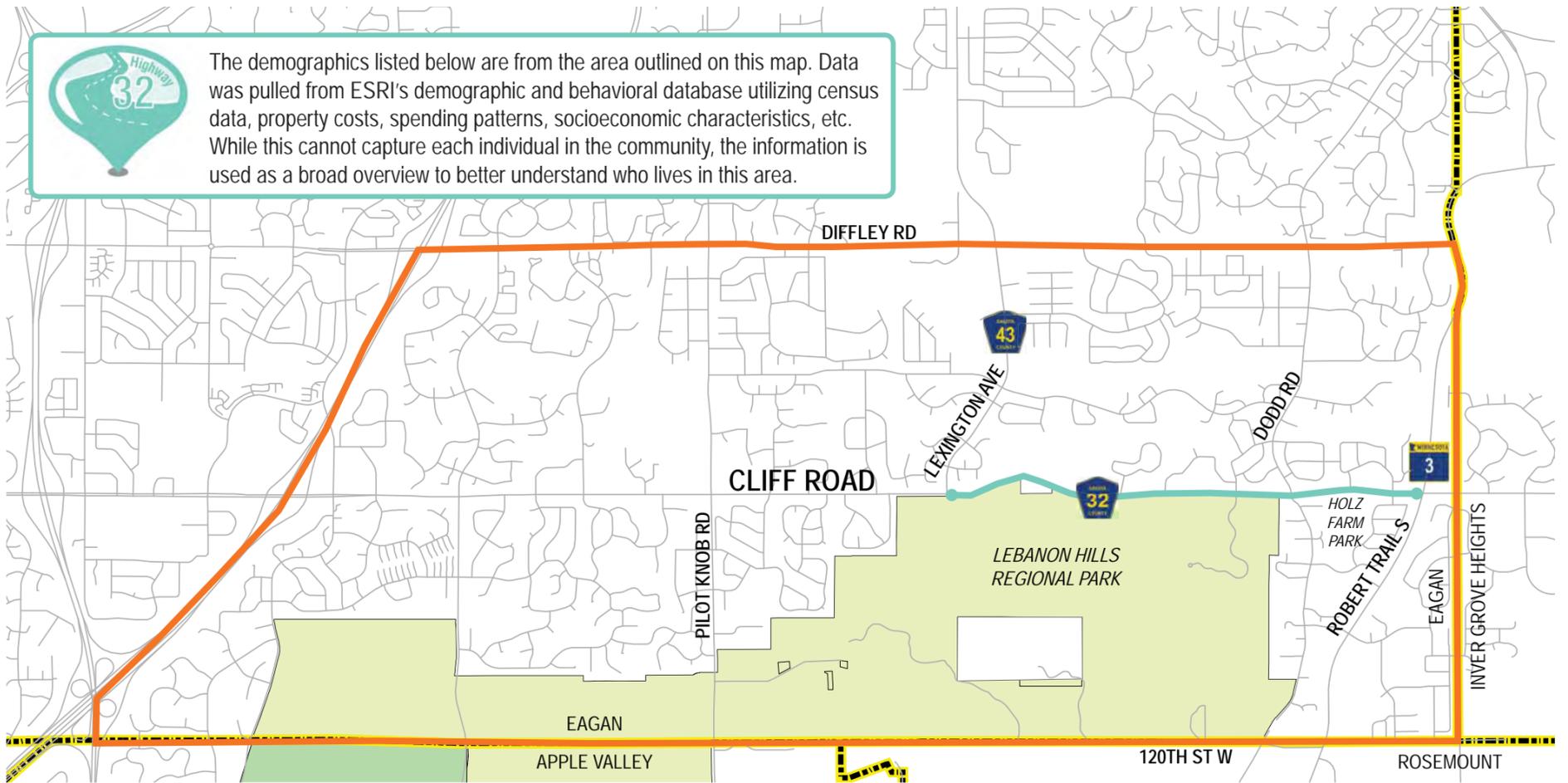
Visit the project website by searching "Cliff Road Study" on Dakota County's website (www.dakotacounty.us) or use the following link:

<https://www.co.dakota.mn.us/Transportation/TransportationStudies/Current/Pages/cliff-road-corridor.aspx>

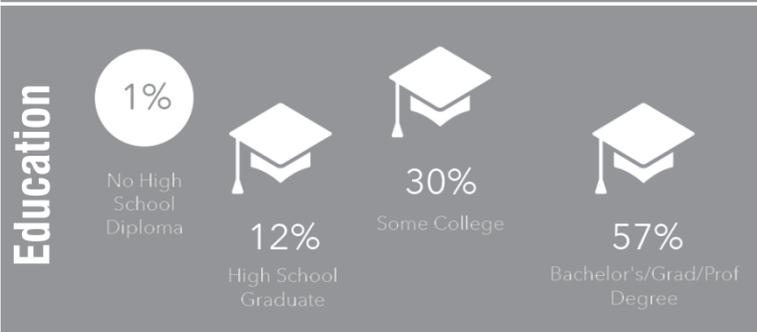
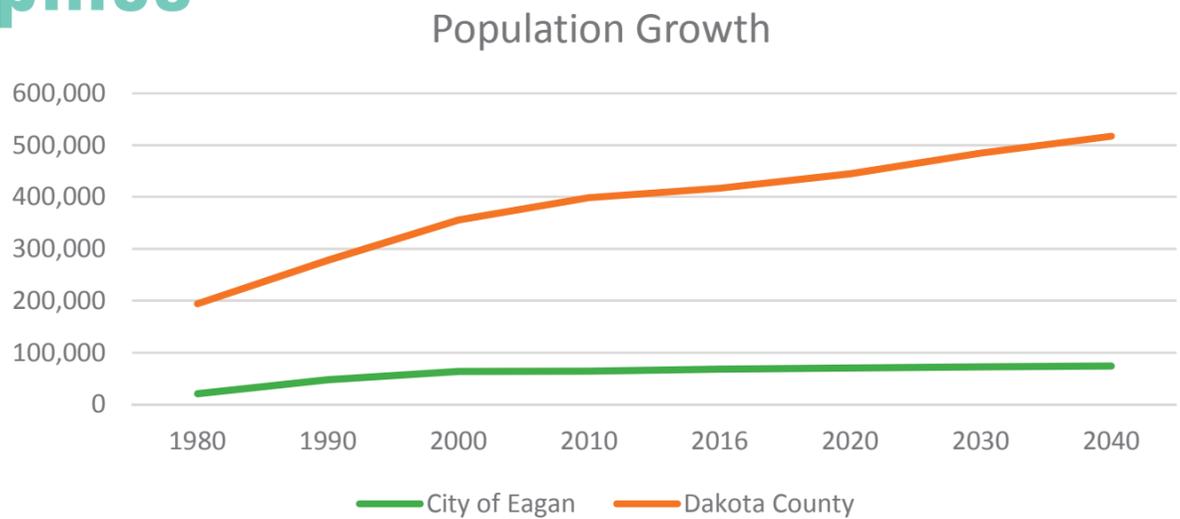
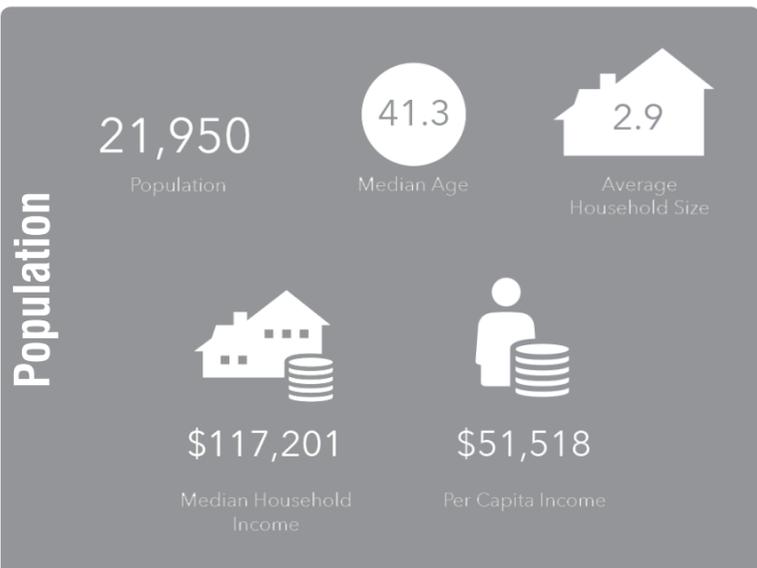
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The demographics listed below are from the area outlined on this map. Data was pulled from ESRI's demographic and behavioral database utilizing census data, property costs, spending patterns, socioeconomic characteristics, etc. While this cannot capture each individual in the community, the information is used as a broad overview to better understand who lives in this area.



Study Area Demographics



Who Lives Here?

These statistics have been gathered from ESRI's Tapestry Segmentation demographic and behavioral database



TAPESTRY SEGMENTATION
esri.com/tapestry

Pursue sports and exercise

Most own 3 or more vehicles; Long work commutes are norm

Well-educated

Well-organized and routine-driven

Most households married couples with children or empty nesters

Tech savvy

Goal-oriented & strive for lifelong earning and learning

CLIFF ROAD STUDY



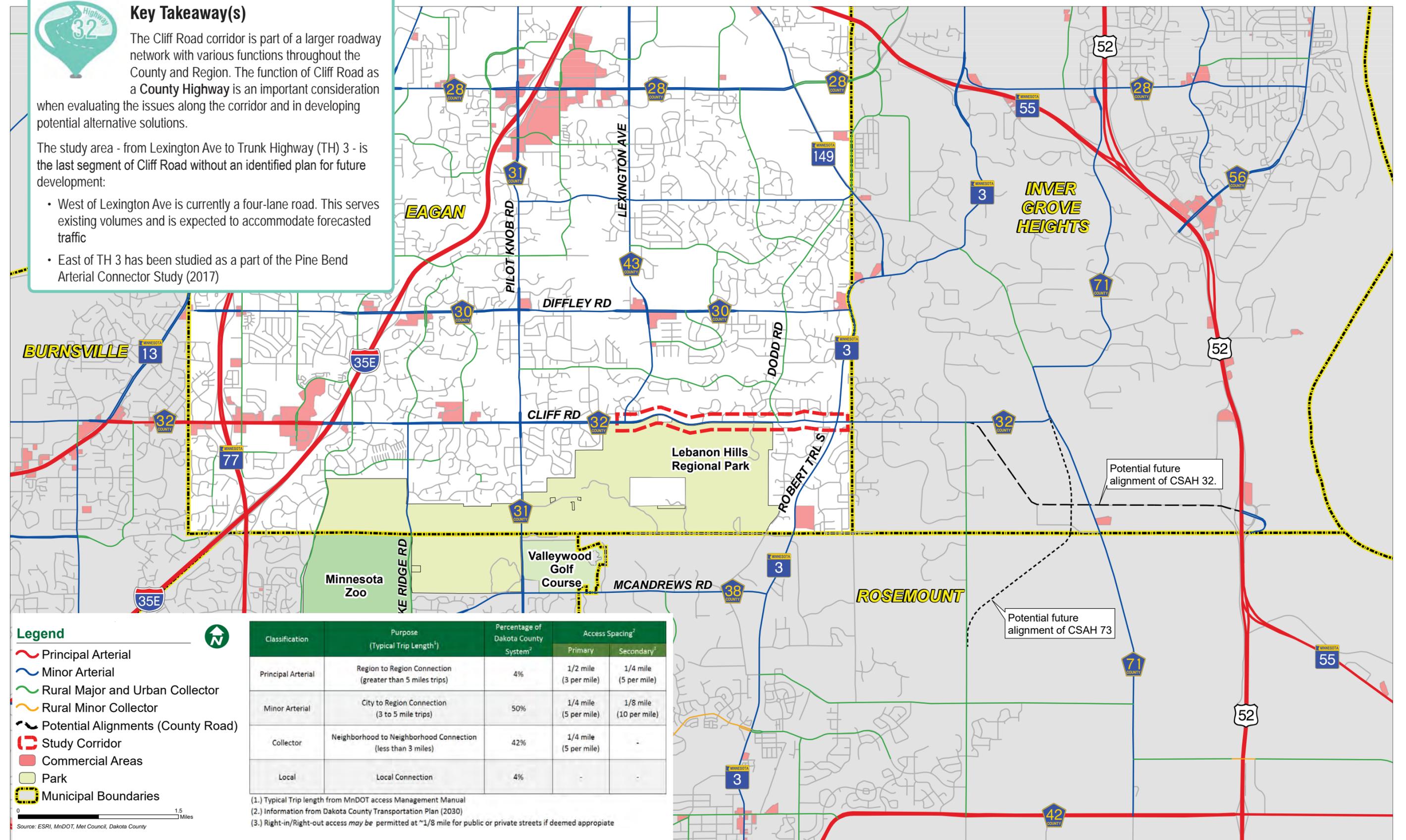
Key Takeaway(s)

The Cliff Road corridor is part of a larger roadway network with various functions throughout the County and Region. The function of Cliff Road as a **County Highway** is an important consideration

when evaluating the issues along the corridor and in developing potential alternative solutions.

The study area - from Lexington Ave to Trunk Highway (TH) 3 - is the last segment of Cliff Road without an identified plan for future development:

- West of Lexington Ave is currently a four-lane road. This serves existing volumes and is expected to accommodate forecasted traffic
- East of TH 3 has been studied as a part of the Pine Bend Arterial Connector Study (2017)



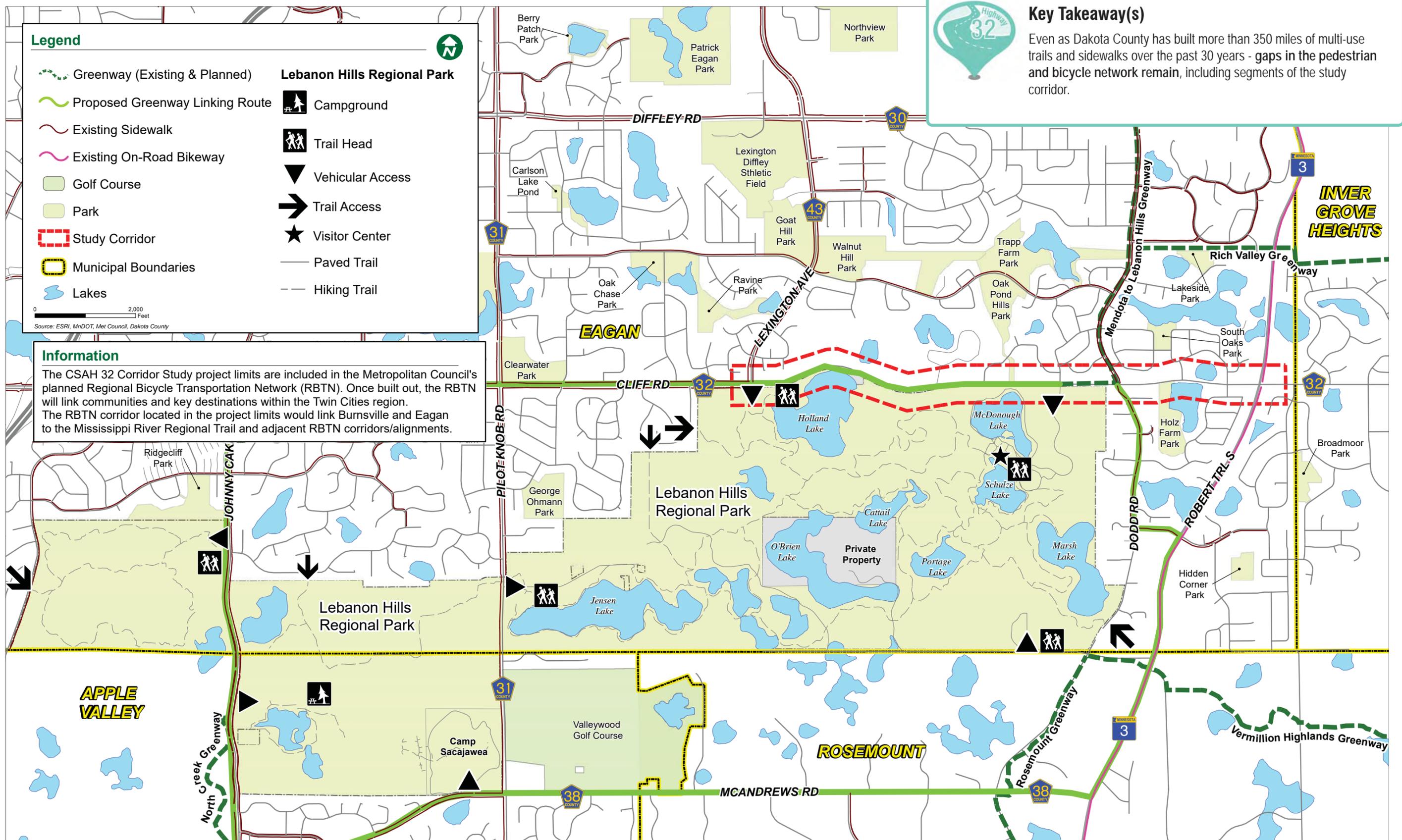
Legend

- Principal Arterial
- Minor Arterial
- Rural Major and Urban Collector
- Rural Minor Collector
- Potential Alignments (County Road)
- Study Corridor
- Commercial Areas
- Park
- Municipal Boundaries

Classification	Purpose (Typical Trip Length ¹)	Percentage of Dakota County System ²	Access Spacing ²	
			Primary	Secondary ³
Principal Arterial	Region to Region Connection (greater than 5 miles trips)	4%	1/2 mile (3 per mile)	1/4 mile (5 per mile)
Minor Arterial	City to Region Connection (3 to 5 mile trips)	50%	1/4 mile (5 per mile)	1/8 mile (10 per mile)
Collector	Neighborhood to Neighborhood Connection (less than 3 miles)	42%	1/4 mile (5 per mile)	-
Local	Local Connection	4%	-	-

(1.) Typical Trip length from MnDOT access Management Manual
 (2.) Information from Dakota County Transportation Plan (2030)
 (3.) Right-in/Right-out access may be permitted at ~1/8 mile for public or private streets if deemed appropriate

CLIFF ROAD STUDY



Legend

- Greenway (Existing & Planned)
- Proposed Greenway Linking Route
- Existing Sidewalk
- Existing On-Road Bikeway
- Golf Course
- Park
- Study Corridor
- Municipal Boundaries
- Lakes

Lebanon Hills Regional Park

- Campground
- Trail Head
- Vehicular Access
- Trail Access
- Visitor Center
- Paved Trail
- Hiking Trail

Scale: 0 to 2,000 Feet
Source: ESRI, MnDOT, Met Council, Dakota County

Key Takeaway(s)

Even as Dakota County has built more than 350 miles of multi-use trails and sidewalks over the past 30 years - gaps in the pedestrian and bicycle network remain, including segments of the study corridor.

Information

The CSAH 32 Corridor Study project limits are included in the Metropolitan Council's planned Regional Bicycle Transportation Network (RBTN). Once built out, the RBTN will link communities and key destinations within the Twin Cities region. The RBTN corridor located in the project limits would link Burnsville and Eagan to the Mississippi River Regional Trail and adjacent RBTN corridors/alignments.

INVER GROVE HEIGHTS

APPLE VALLEY

ROSEMOUNT

CLIFF ROAD STUDY



Key Takeaway(s)

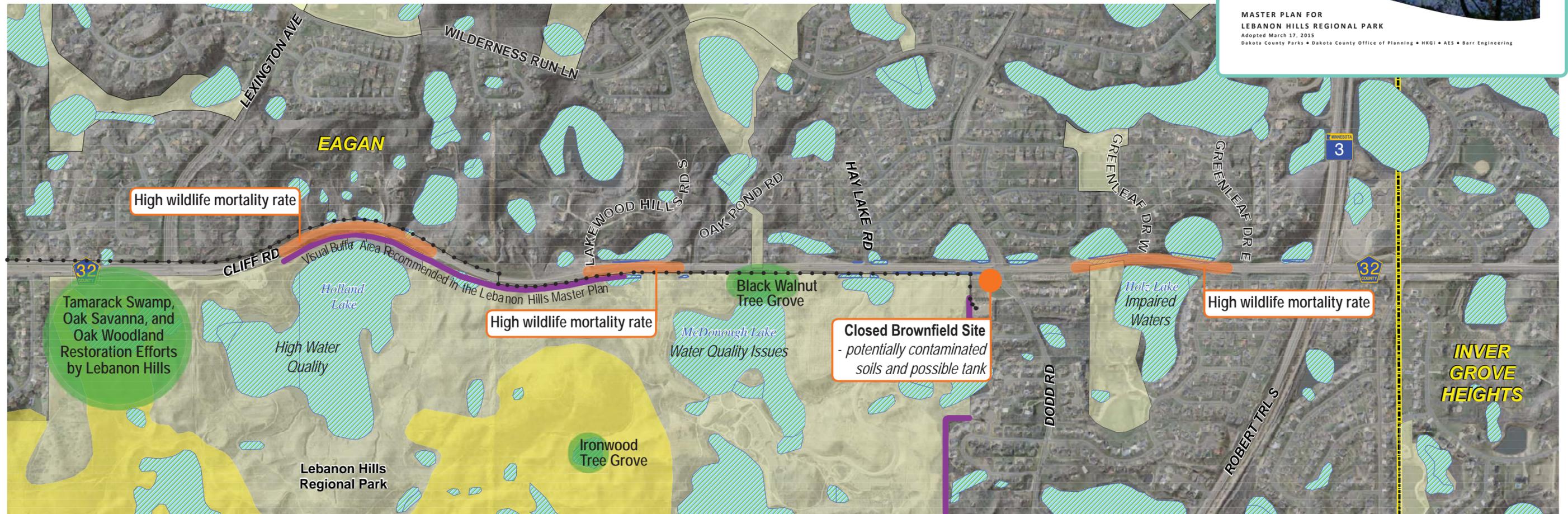
Protecting environmental and cultural resources will be important when identifying issues, constraints, and improvement opportunities along the study corridor. Environmental and cultural considerations along the corridor include:

- Adjacent wetlands
- State and County identified sites with significant ecological resources
- Native enclaves of trees
- The needs and priorities of Lebanon Hills Regional Park and Holz Farm Park
- Wildlife Mortality Rates

The *Master Plan for Lebanon Hills Regional Park* will be an important resource to the project team as the study develops and as alternative solutions are developed.



MASTER PLAN FOR
LEBANON HILLS REGIONAL PARK
 Adopted March 17, 2015
 Dakota County Parks • Dakota County Office of Planning • HGI • AES • Barr Engineering



Legend

Biodiversity Significance

Area with Moderate Significance

Moderate sites contain occurrences of rare species, moderately disturbed native plant communities, and/or landscapes that have strong potential for recovery of native plant communities.

Wetlands

Park

Municipal Boundaries

Transmission Lines

0 2,000 Feet

Source: FEMA, MndNR Public Waters Inventory (PWI), MndNR Native Plants Communities

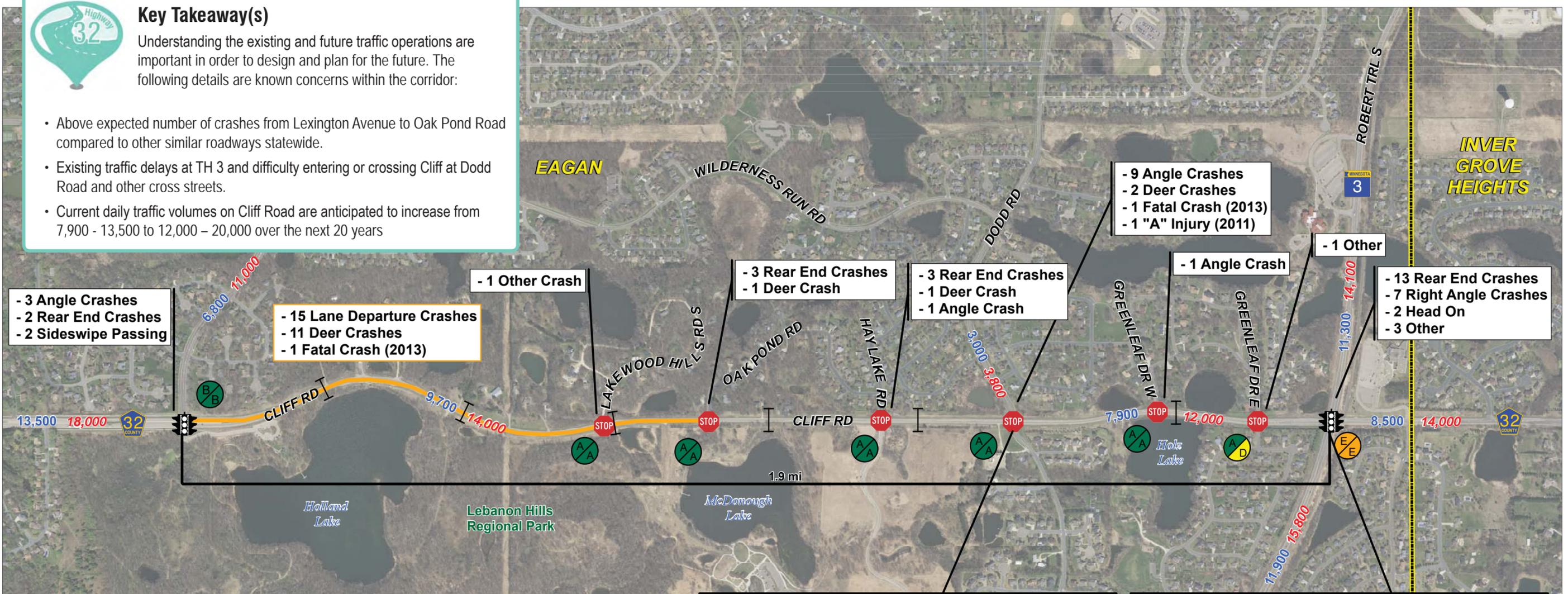
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Key Takeaway(s)

Understanding the existing and future traffic operations are important in order to design and plan for the future. The following details are known concerns within the corridor:

- Above expected number of crashes from Lexington Avenue to Oak Pond Road compared to other similar roadways statewide.
- Existing traffic delays at TH 3 and difficulty entering or crossing Cliff at Dodd Road and other cross streets.
- Current daily traffic volumes on Cliff Road are anticipated to increase from 7,900 - 13,500 to 12,000 - 20,000 over the next 20 years

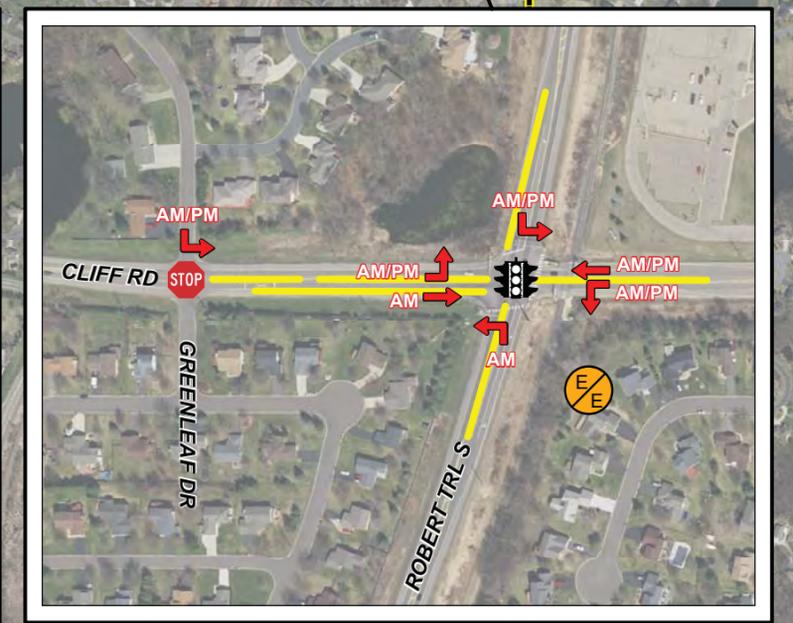


Legend

##,###	Average Annual Daily Traffic (AADT) Projected - Volumes		Maximum Queue Length
##,###	Average Annual Daily Traffic (AADT) Volumes - 2015		Segment Operating at Above Expected Range
	Problematic Left Turn Traffic Delay		1/4 mi. Markers
	Problematic Through Traffic Delay		Intersection Level of Service
	Side-Street Stop		A-C
	Traffic Signal		D
	Municipal Boundaries		E
			F

0 2,000 Feet

Source: ESRI, MnDOT, Met Council, Dakota County





Intersection traffic control

All-way stops are used for

- Moderate traffic volumes.
- Balanced traffic.
- Speed limits of 40 mph or less.

Drawbacks

- Inefficient and cause delay.
- Multiple lanes can increase crash risk.
- Increased crash risk when disregarded.
- Constant stopping/acceleration is noisy.



Traffic signals are used for

- Consistently high volume of traffic.
- Collector or arterial corridor intersections.

Drawbacks

- Introduces additional decision making.
- Increased crash risk when disregarded.
- Increased risk of fatal or serious injury crashes.
- Creates delay, particularly for higher volume movements.



Roundabouts are used for

- Moderate to high traffic volumes.
- Improving traffic flow.

Drawbacks

- May have higher construction cost and right-of-way needs.
- Potential for more property damage crashes.
- Not suitable for six-lane or principal arterial roadways.





Traffic signals

Traffic signals are effective because they

- Manage high volumes of traffic conflicts.
- Provide crossing opportunities.
- Can improve intersection efficiency.
- Can reduce right-angle crashes.



New signals are added with caution because

- Crashes often increase, especially rear-end crashes.
- Crashes at signals are typically more severe.
- They typically result in higher delays throughout the day.

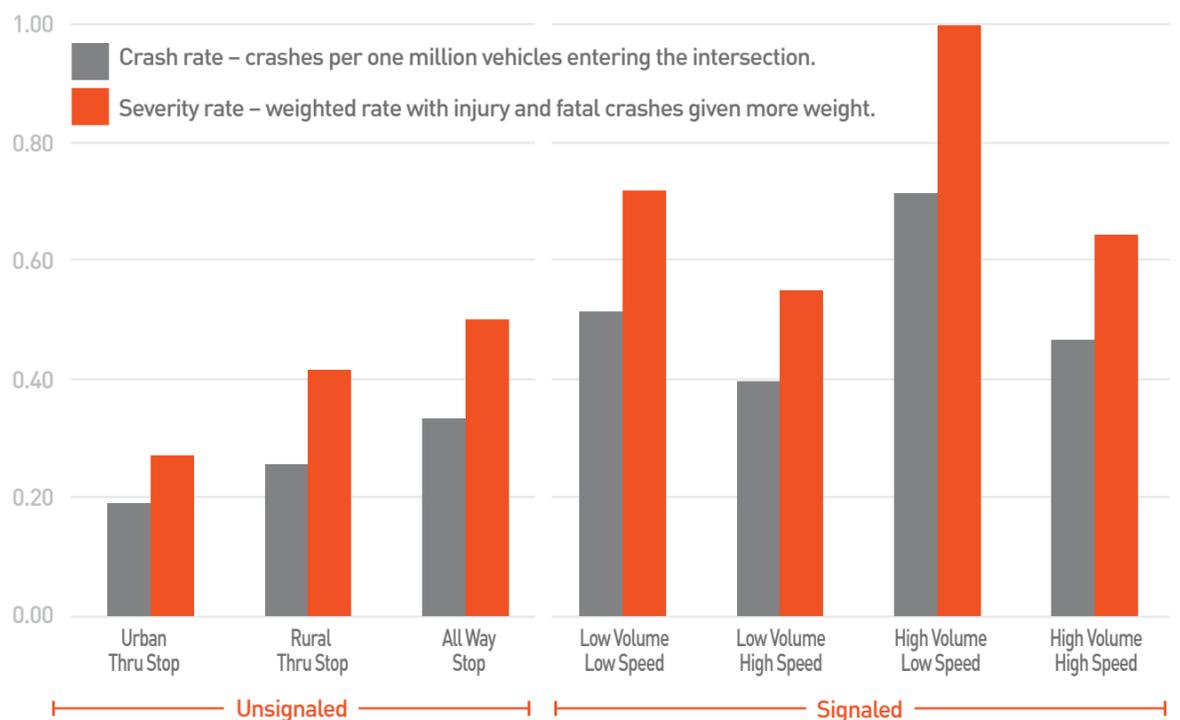


The decision to install signals is based on

- Traffic volumes.
- Vehicle delays.
- Crash history.
- Anticipated crash rate.

In Dakota County

- Approximately 10% of intersections are signalized.
- 47% of fatal and serious injury crashes occur at signalized intersections.



Speed limits

Speed limits are important because they

- Make roads safer by reducing variability in vehicle speeds.
- Help unfamiliar drivers know the appropriate speed.
- Help law enforcement curb dangerous behavior.

Speed limits are established through Minnesota Statute 169.14. The statute

- Defines speeds for certain roadway types.
- Establishes a process for the State to determine speeds.

Speed studies examine

- Actual speeds of vehicles using the roadway.
- Roadway type, condition and length.
- Location of intersections and driveways.
- Traffic volume and crash history.
- Sight distance limitations caused by curves or hills.

After a speed study is conducted, a speed limit is set by the State. Posted limits reflect speeds for ideal road and weather conditions.

Speed limit facts

- Lowering the posted speed limit will not slow traffic.
- Most people drive what is comfortable and safe to them regardless of posted speeds.
- Lowering a posted speed limit does not reduce crashes.
- Improperly set speed limits decrease safety.



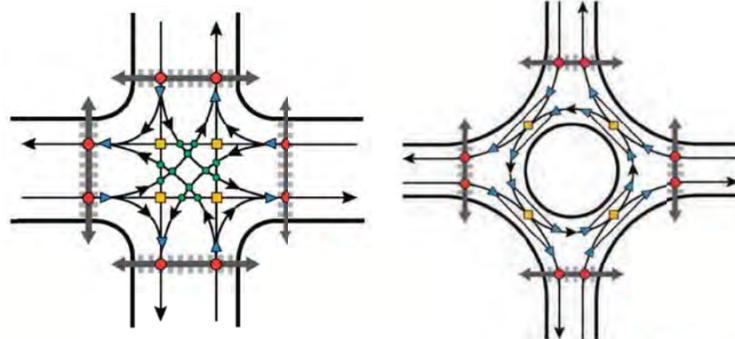
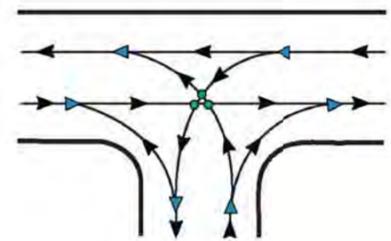
What is Access Management?

- Planning and control of the location, spacing, design, and operation of driveways, median openings, and street connections to a roadway.
- Designates where and how vehicles access and exit a roadway.
- Helps protect public investment in roadways by:
 - Preserving mobility
 - Reducing delay
 - Minimizing crashes
 - Reducing conflict points

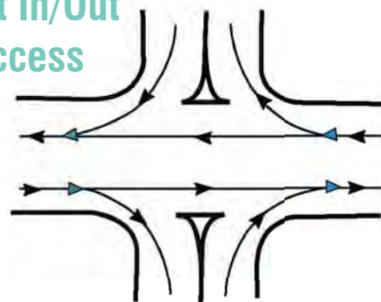
Access Conflict Points and Connection Safety



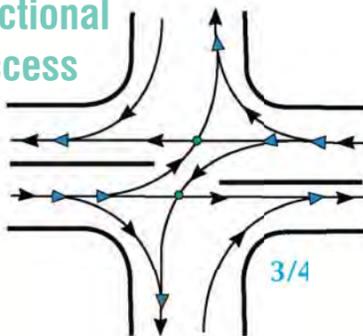
Full Access



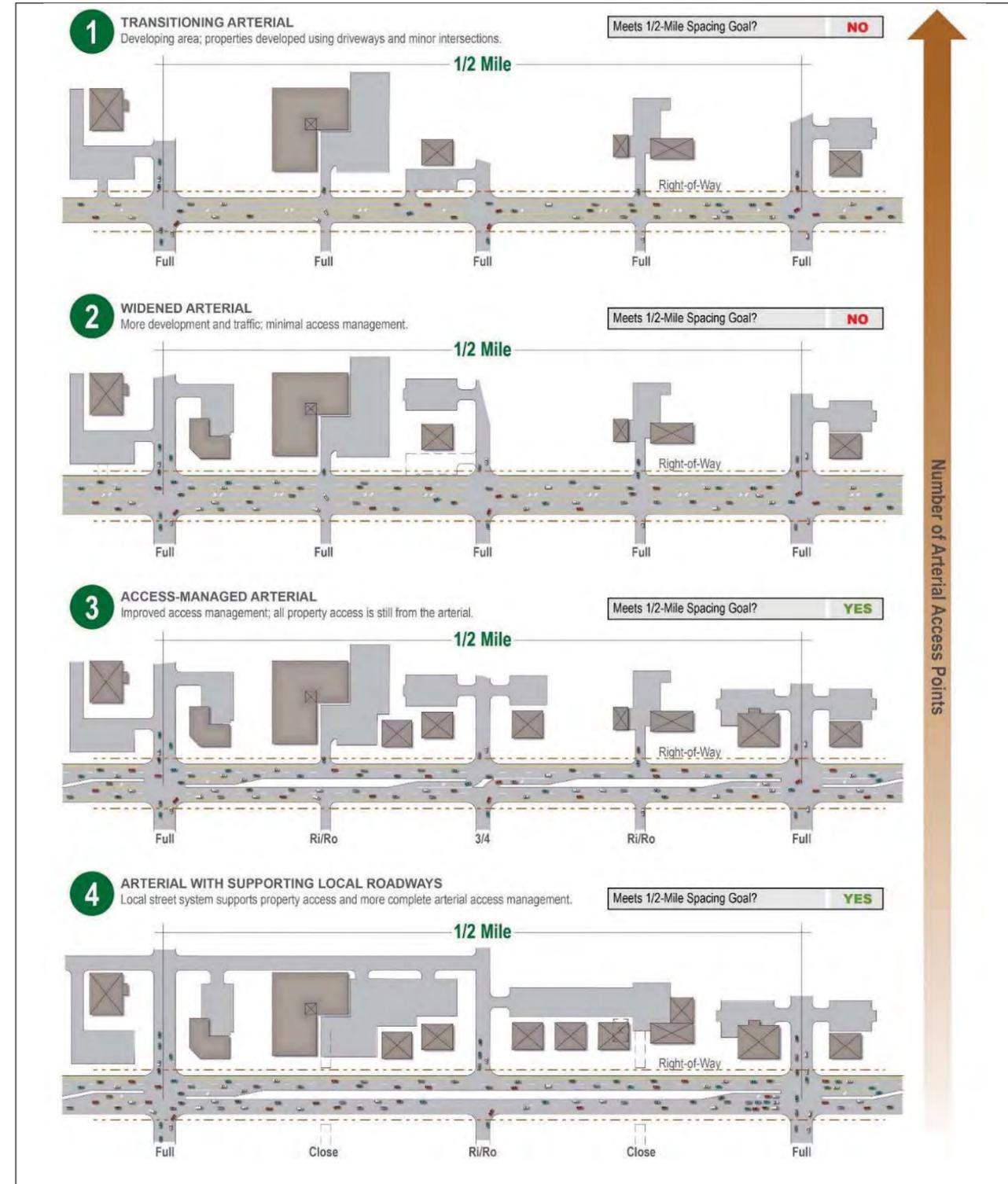
Right In/Out Access



Directional Access



- Crossing
- Turning
- ▲ Merge/Diverge
- Pedestrian



Neighborhood Meeting Comments

November 8, 2017



Missing turn lanes & illegal bypass - cars go around those trying to turn off Cliff Road



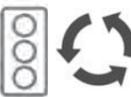
Excessive speeds



Difficult to cross Cliff Road



Additional lanes on Cliff Road will make it harder to cross



Add traffic control (roundabout or signal)



So many accidents



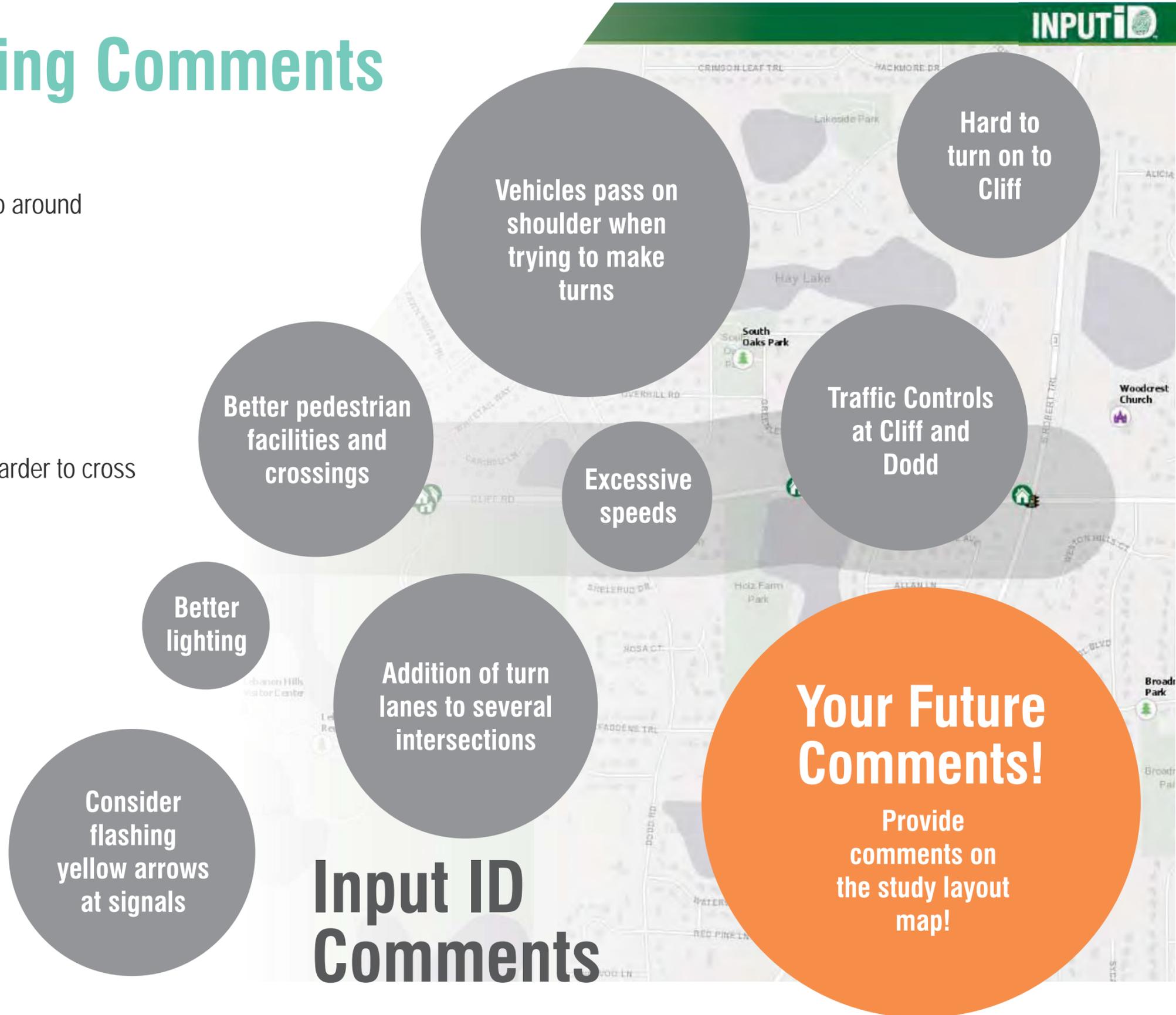
Poor lighting



Pedestrian and cyclist safety and access



Noise level



Input ID Comments