

I-35 Burnsville to Lakeville Corridor Study Update

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I35W Solutions Alliance 6/8/2023

- I-35 Burnsville to Lakeville Corridor Study update
 - Overview
 - Purpose and need
 - Public engagement
 - Corridor concepts
 - Next steps
- Other South Area projects

Overview



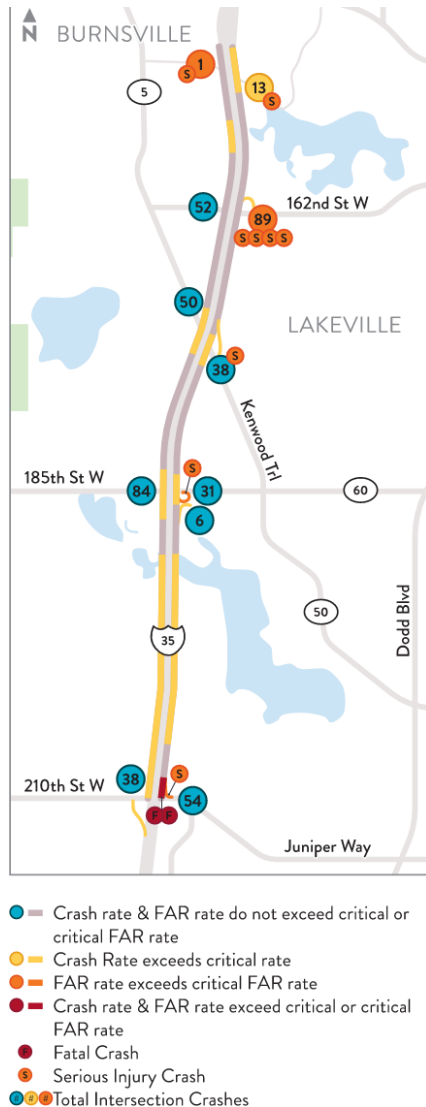
- Study objectives: understand the various corridor needs, potential future improvements to address those needs, and potential implementation timelines. Inform County led interchange reconstruction at Co. Rd. 50 and MnDOT led pavement project along I-35 planned in 2029
- Location: I35 from Co. Rd. 70 (210th St W) to the I35W/I35E split in the Cities of Lakeville and Burnsville, Dakota County
- Study Scope:
 - Public engagement
 - Existing conditions evaluation
 - Forecasting
 - Simulation modeling
 - Development and analysis of corridor concepts
- Traffic impacts: Future construction impacts TBD
- mndot.gov/metro/projects/i35burnsville-lakeville/

Purpose and Need

Overview of Purpose and Need

- **Primary needs** are the transportation problems which led to the initiation of the project
 - Vehicle safety
 - Vehicle mobility
- **Secondary needs** are other transportation problems or opportunities for improvements within the area that may be addressed concurrently
 - Bridge condition
 - Pavement condition
- **Additional considerations** are desirable elements or effects that are not central to the purpose and need, but are important factors influencing project decisions
 - Multimodal access (walkability/bikeability, and transit service)
 - Not precluding Co. Rd. 5/50 interchange improvements

Primary Need: Vehicle Safety



- Multiple segments have **crash rates above critical**
- Two segments have **fatal and serious A (FAR) rates above critical**
- Some ramps have rates above critical, but likely are not related to I-35
- I-35E southbound on-ramp crash rates during PM peak not above critical, but has high level of crashes likely caused by congestion on I-35

Primary Needs: Vehicle Mobility

- Northbound congestion during AM, southbound congestion during PM
- Based on origin-destination data, ClearGuide, RTMC, basic lane capacity analysis, and Level of Service (LOS)
 - Some segments are LOS F & E under existing conditions
 - Congestion expected to become worse in future (2026 No Build & 2046 No Build)

2046 No Build Operational Issues

Time	Location	Direction	LOS
AM	Co. Rd. 70 WB Entrance to Co. Rd. 60 Exit	Northbound	D
	Co. Rd. 60 WB Exit to Co. Rd. 50 Exit	Northbound	F
	Co. Rd. 50 Exit to Co. Rd. 50 Entrance	Northbound	D
	Co. Rd. 50 Entrance to Bus Only P&R Exit	Northbound	E
	Bus Only P&R Exit to Bus Only P&R Entrance	Northbound	D
	Co. Rd. 46 Entrance to I-35E/I-35W Split	Northbound	D
PM	I-35E/I-35W Split to Co. Rd. 46 Exit	Southbound	F
	Co. Rd. 46 Exit to Co. Rd. 46 Entrance	Southbound	E
	Co. Rd. 46 Entrance to Co. Rd. 60 Exit	Southbound	F

Secondary Needs

- Pavement condition

- Current Pavement Quality Index (PQI) ratings range from “Good” to “Very Good” – but once deterioration happens it can worsen very rapidly
- Pavement project planned for 2029 (from Co. Rd. 70 to I-35E/I-35W split)

Segment	Direction	Verbal Rating (Ride Quality/ Surface Rating)
I-35E/I-35W Split to Co. Rd. 5/50	SB	Very Good/ Very Good
Co. Rd. 5/50 to Co. Rd. 70	SB	Good/ Very Good
Co. Rd. 70 to I- 35E/I-35W Split	NB	Good/ Very Good

- Bridge condition

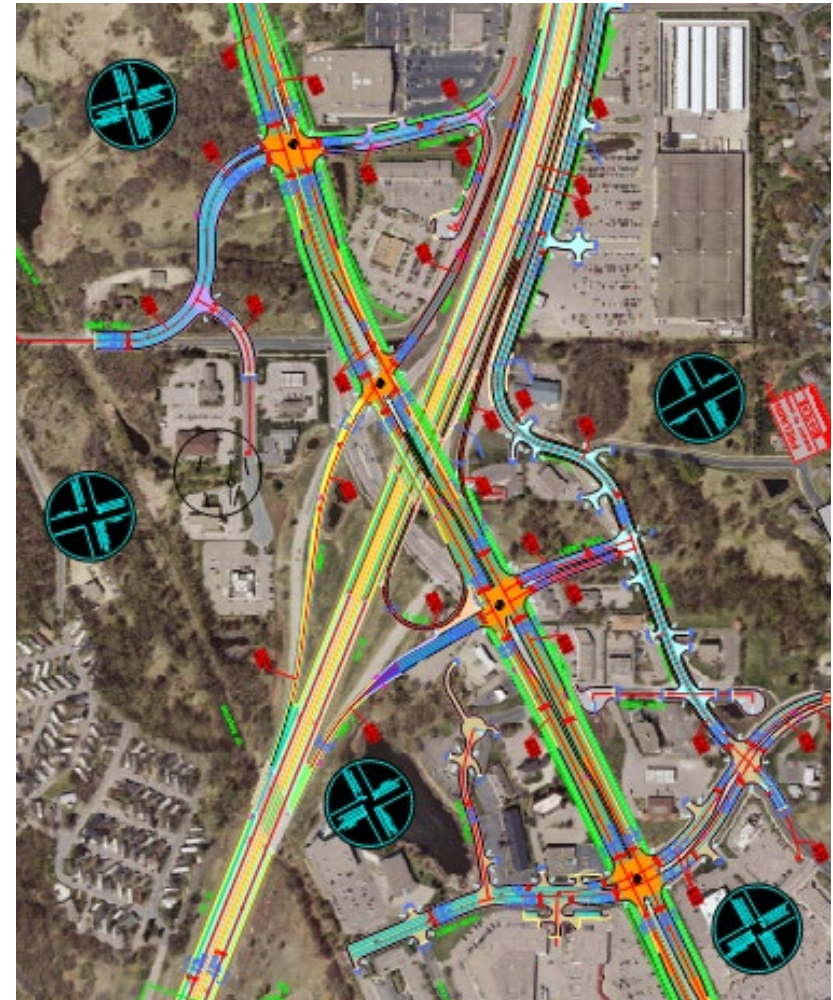
- Current National Bridge Inventory (NBI) ratings range from “Fair” to “Good”
- Anticipated work planned on 8 bridges (4 overlay, 4 replacement) 2028-2033

Additional Considerations: Multimodal Access

- Walkability/bikeability (crossing I-35)
 - As a limited access facility proposed improvements may not include ped/bike infrastructure and walkability/bikeability doesn't rise to the level of secondary need
 - Text has been included to allow for consideration as a secondary need in a future project
- Transit Service
 - Transit mobility will be accounted for with separate metrics under Vehicle Mobility
 - This item considers *access to* transit (connections or access to transit stations, for example)

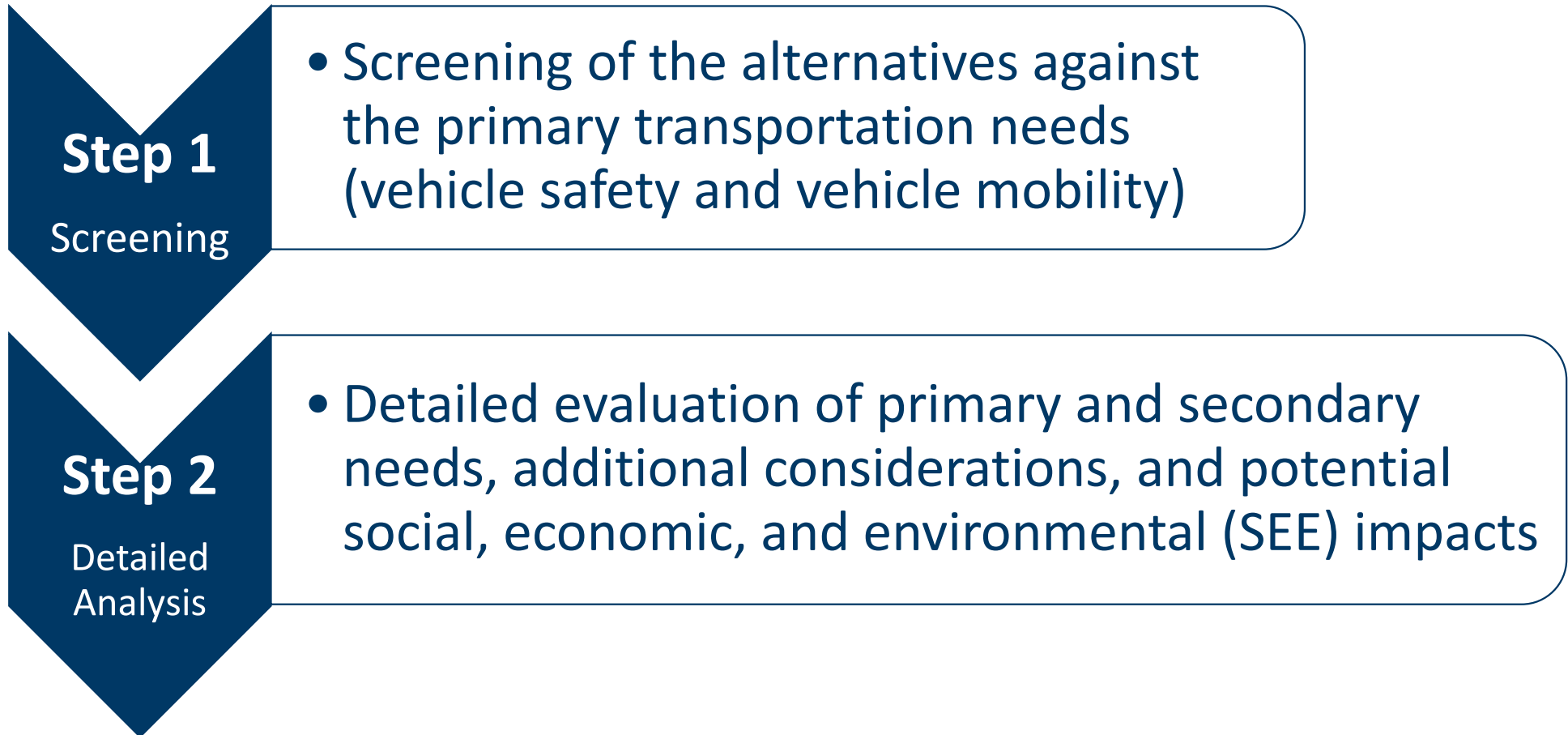
Additional Considerations: Co. Rd. 5/50

- Not precluding Co. Rd. 5/50 interchange improvements
 - Dakota County planned project
 - Construction unfunded
- Pictured at right is a draft interchange and local road improvement concept



Purpose and Need Evaluation Process

- Two-Step Process



Step 1 Evaluation Criteria

- Step 1: Screening against primary needs

Category	Evaluation Criteria	Measurement	Methodology/Tool	Rating
Primary Transportation Needs	Vehicle Safety	Crash Rate Reduction	Crash Modification Factors (CMFs)	<ul style="list-style-type: none">• Yes: reduces crashes (CMF < 1.0)• No: increases or doesn't change crashes (CMF >= 1.0)
	Vehicle Mobility	Volume-to-Capacity Ratio	Forecast Daily Volumes and Capacity	<ul style="list-style-type: none">• Yes: improves capacity at locations where No Build is at or near capacity• No: same or worse capacity at locations where No Build is at or near capacity

Public Engagement

Public Engagement Update

- **1,423** online survey responses
- **212** online map comments
- **252** in-person event priority votes
- **124** in-person event comments
- **46** emails received

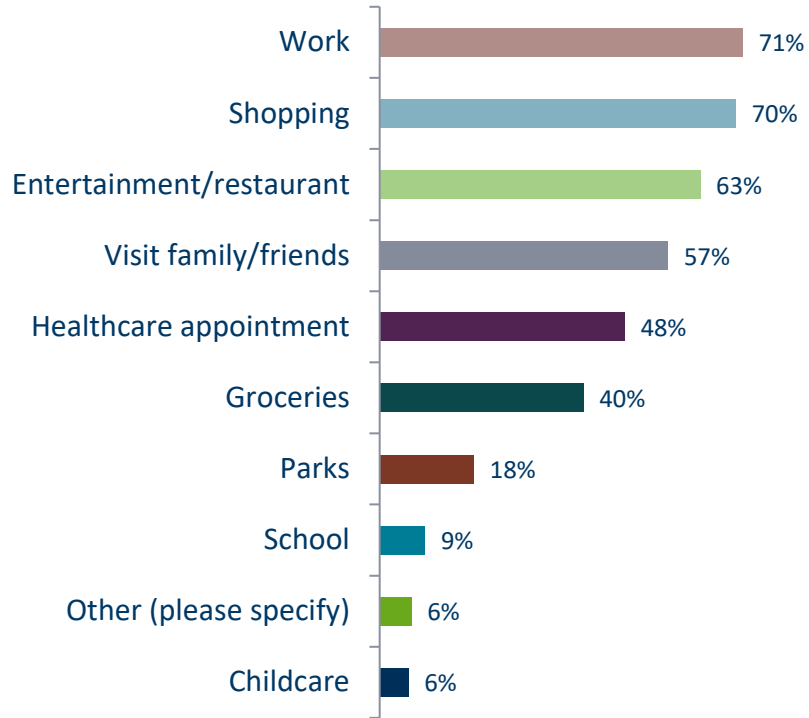
2,000+ people engaged



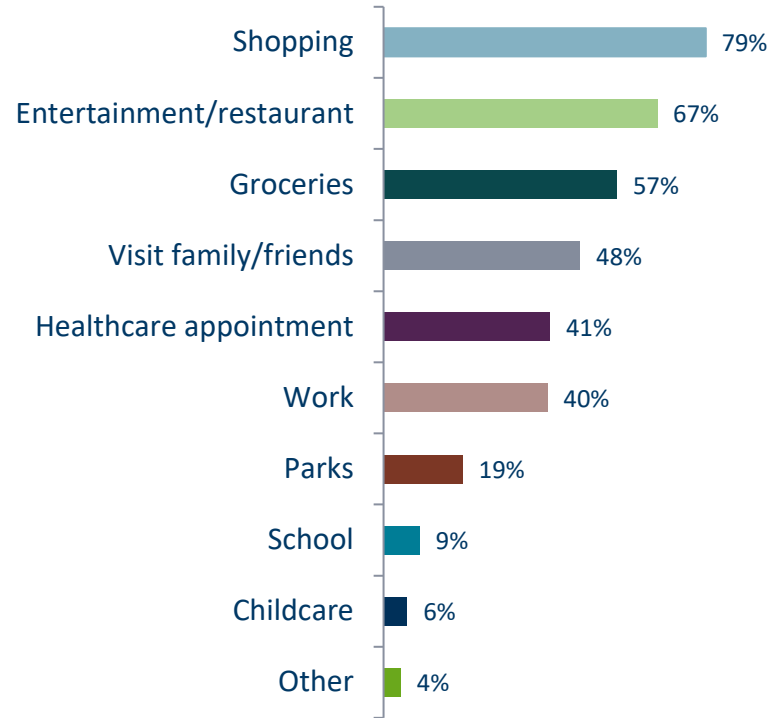
Where are you typically going?

Select all that apply.

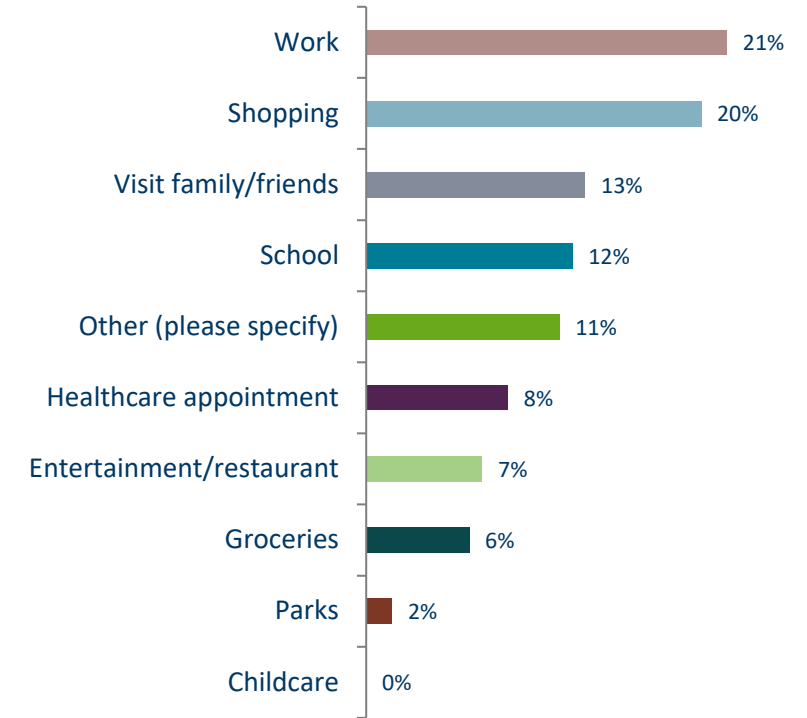
Traveling N/S
(online survey responses)



Traveling E/W
(online survey responses)

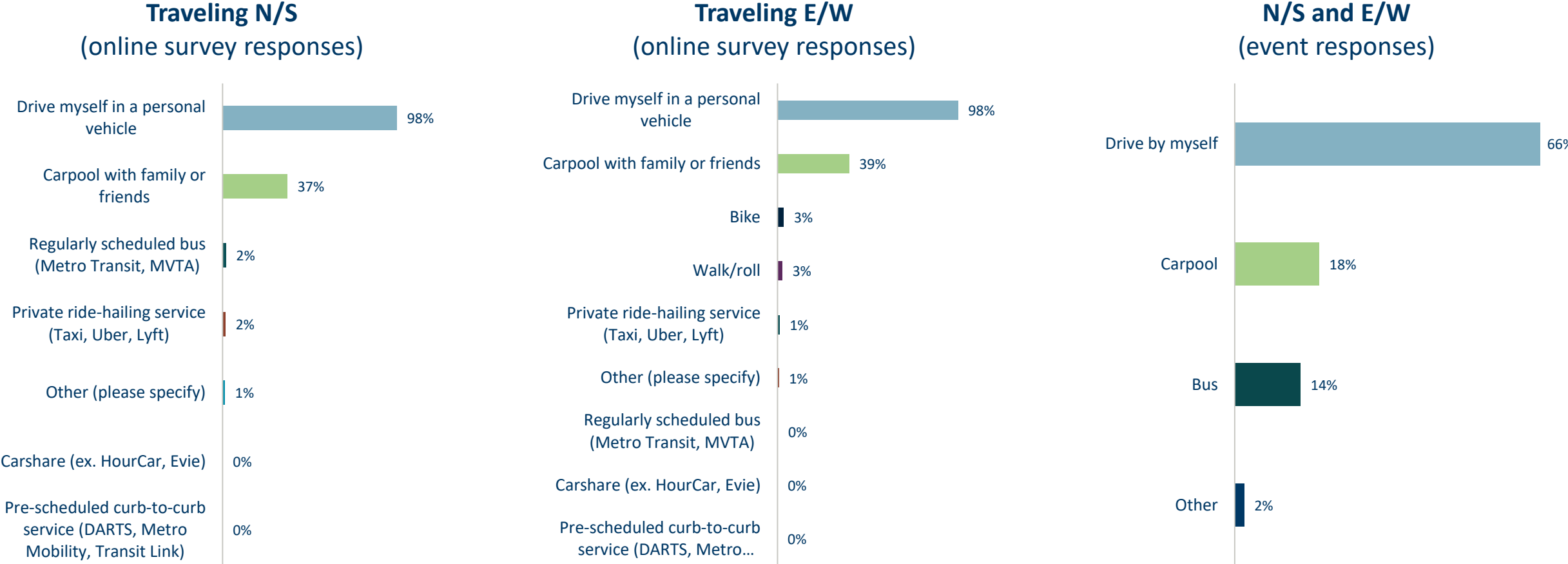


N/S and E/W
(event responses)

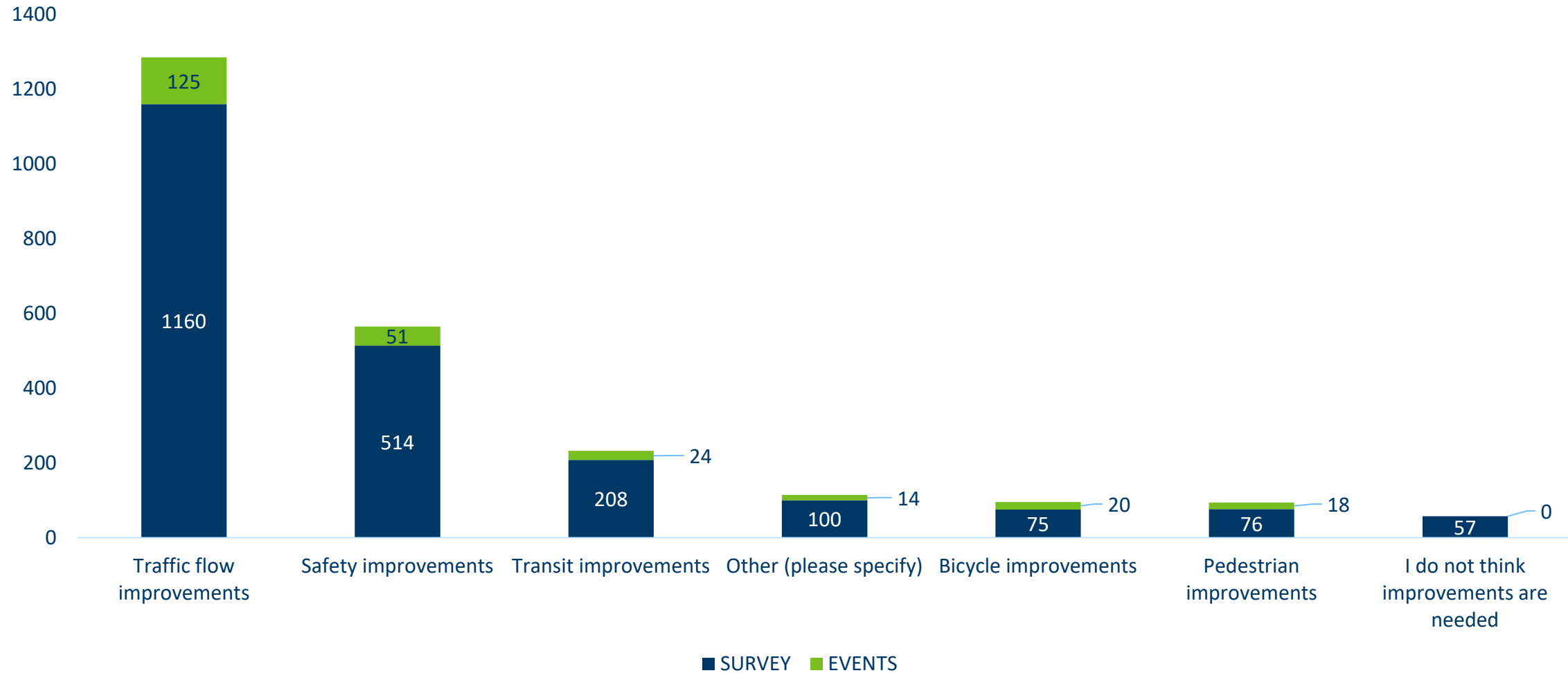


What methods of travel do you use most often?

Select all that apply.



What are the top two types of improvements you'd like to see?



Is there anything specific that you'd like to see changed or improved? Anything else you'd like to share?



3/16/2023

Location Code	Frequency	Percent
Kenwood Tr/CR 50/CR 5	285	16%
CR 70/210th/Juniper Way	160	9%
E/W split	134	7%
CR 60/185th	127	7%
Other	93	5%
SB (general)	68	4%
CR 42/Eagan Dr	63	3%
CR 46/162nd	62	3%
150th/Crystal Lake Rd	48	3%
NB (general)	45	2%
Buck Hill	35	2%
E (general)	19	1%
Buck Hill Rd	16	1%
Kenrick Ave	11	1%

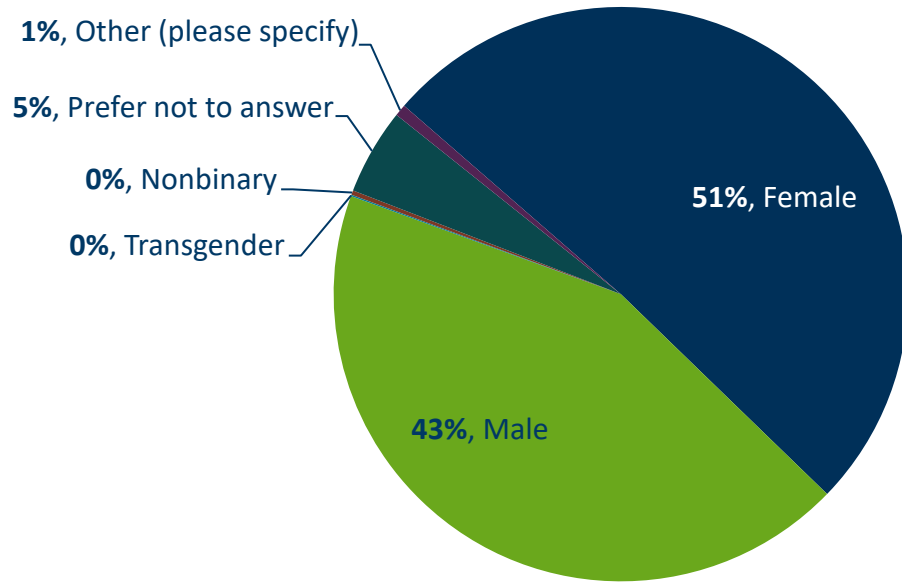
mndot.gov

Topic Code	Frequency	Percent
Add lane(s)	626	35%
Congestion	472	26%
Ramps	384	21%
Merging	285	16%
Safety	213	12%
Other	94	5%
Speed	74	4%
Interchange	60	3%
Carpool lane	60	3%
Ice/snow	59	3%
Visibility	54	3%
Freight	54	3%
Transit	53	3%
Navigation	53	3%
Pavement	51	3%
Positive	47	3%
Pedestrians	46	3%
Biking	41	2%
Driver behavior	33	2%
Signage	32	2%
Noise	18	1%
Fence/barrier	18	1%
Environment	10	1%

Demographics: Gender and Age

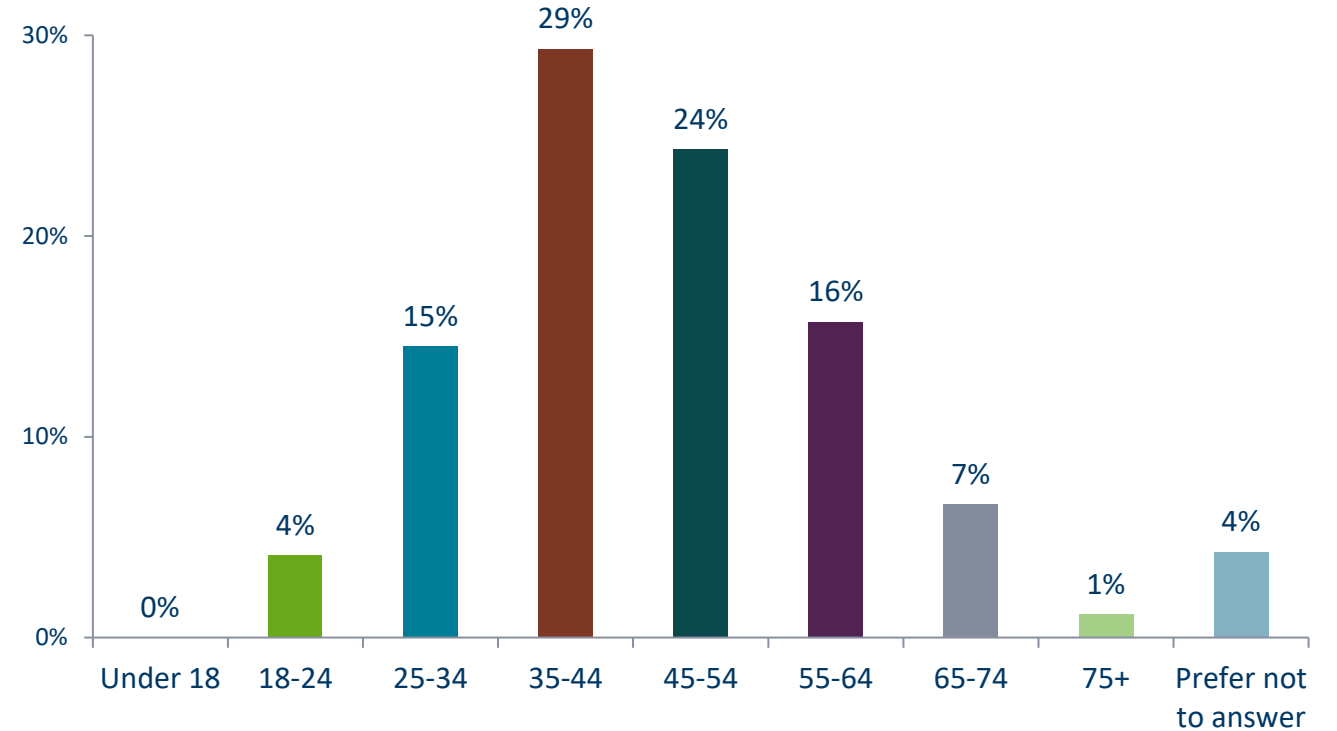
Gender

(online survey only)

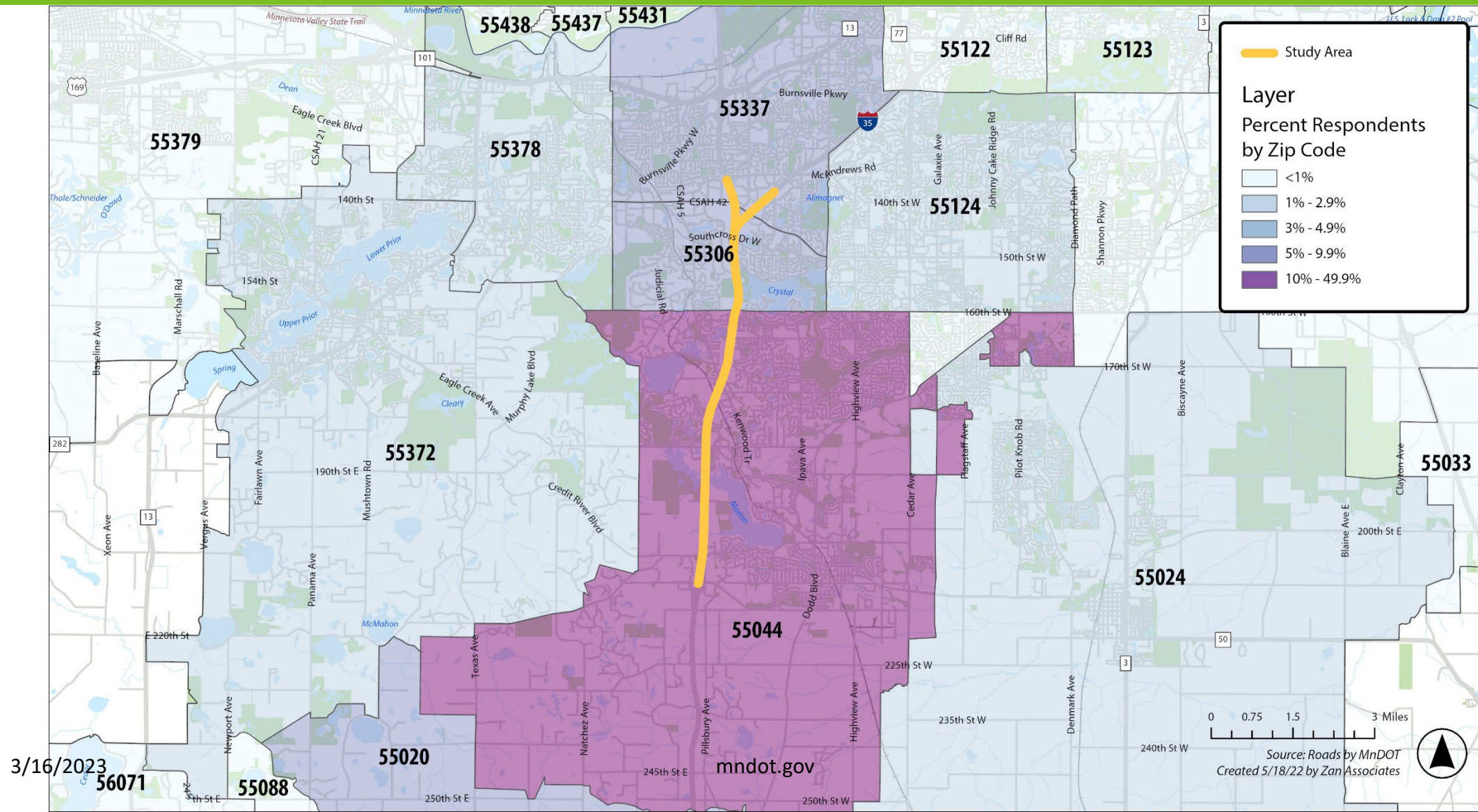


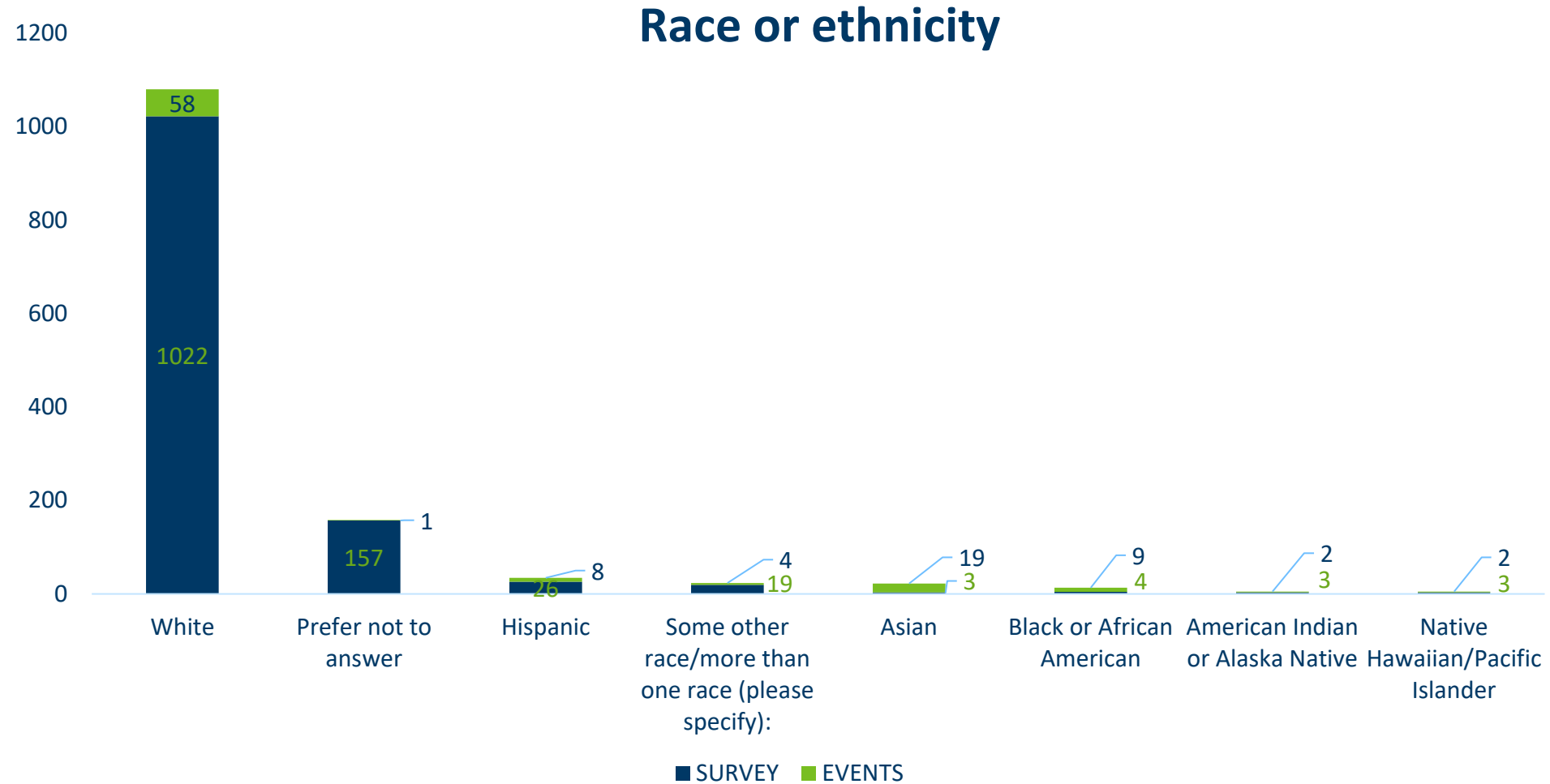
Age

(online survey only)



Demographics: Location

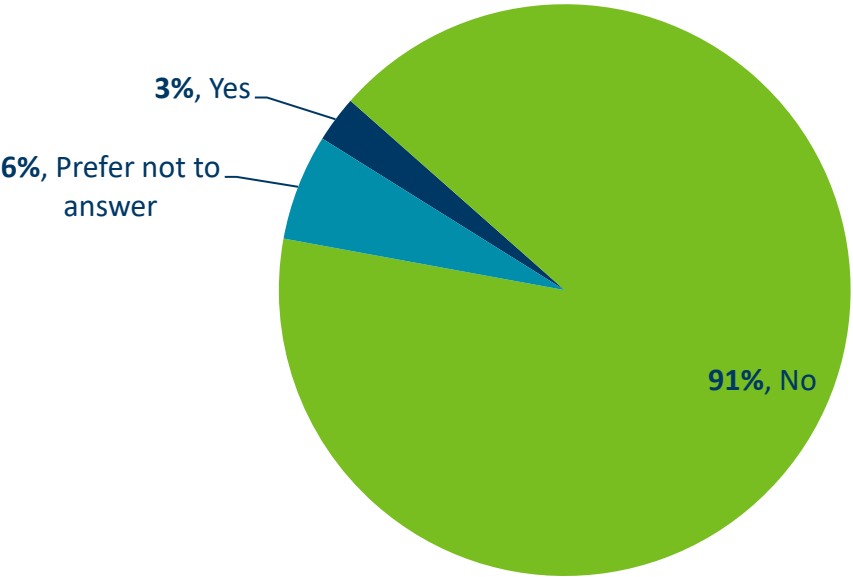




Demographics: Disability Status and Education Level

Disability Status

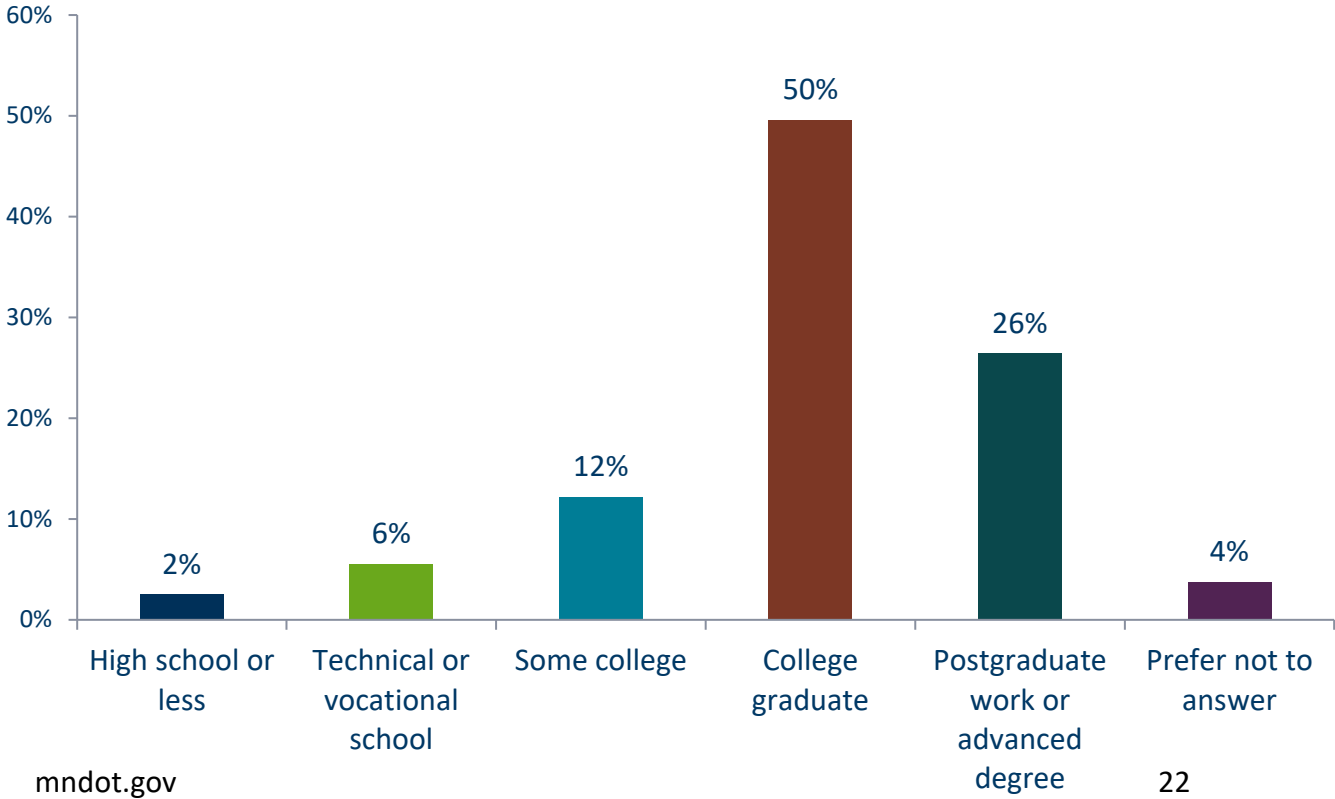
(online survey only)



3/16/2023

Education level

(online survey only)



Corridor Concepts

Concept Development

CONCEPT 1

E-ZPass Lane

Add E-ZPass from Cliff Road to or through CSAH 5/50

CONCEPT 2

General Purpose Lane

Add a general purpose lane to or through CSAH 5/50

CONCEPT 3

Auxiliary Lanes

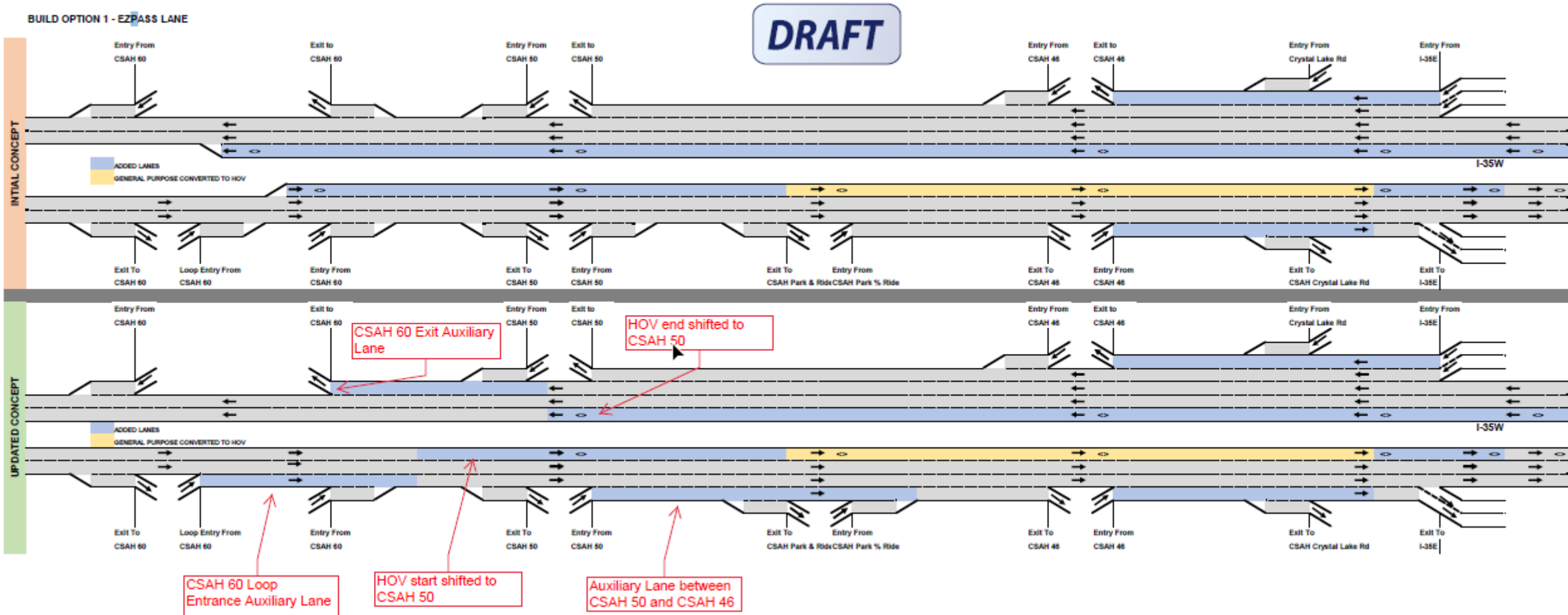
Add auxiliary lanes between CSAH 5/50 & CSAH 60, and southbound between CSAH 60 and CSAH 70

CONCEPT 4

TBD

Potential combination of previous concepts

Concept Development: E-Zpass Example



Next Steps

Remaining Tasks

- Next steps
 - Finalize Purpose and Need memo
 - Complete Phase 2 evaluation
 - Summarize results
 - Share results

Other South Area Projects

I-35W Pavement and Bridge Preservation



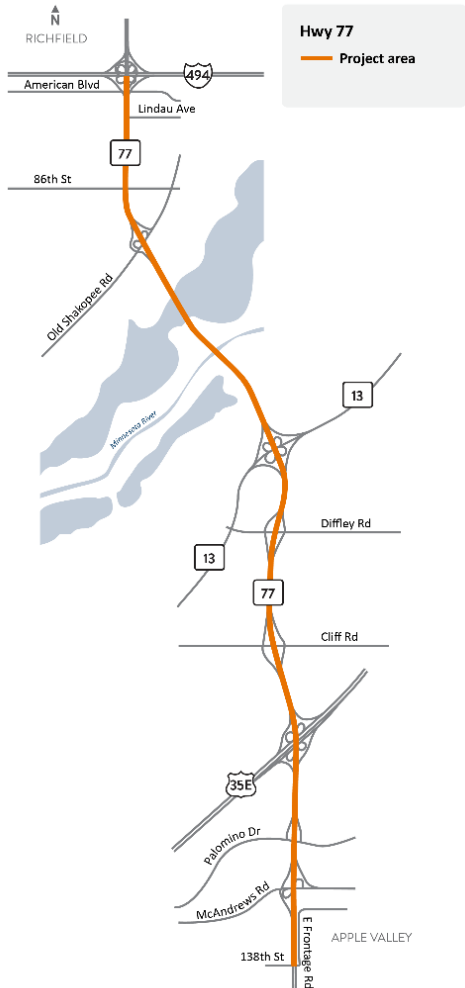
- Purpose: provide safe and smooth pavement for a projected 30-year duration with functioning drainage and safe bridges
- Location: I-35W from the I-35W/I-35E junction north to Cliff Road in the City of Burnsville, Dakota County and on TH 13 at I-35W
- Project Scope:
 - Rehabilitate pavement and drainage
 - Replace bridges: I-35W over Cliff, Hwy 13 over I-35W, Burnsville Pkwy over I-35W
 - Install roadway lighting
 - Improve bicycle and pedestrian infrastructure
 - Construct spot mobility improvements
- Traffic Impacts: construction in 2025 and 2026
- mndot.gov/metro/projects/i35wburnsville/

Southbound I-35W exit ramp to County Road 42



- Purpose: address safety, mobility, and access via altered I35W exit ramp
- Location: southbound I-35W at County Road 42
- Project Scope:
 - Construct new southbound exit ramp
 - Construct roundabout at Buck Hill Road
 - Improvements at County Road 42 intersection
 - Connection into Burnsville center Village redevelopment and ring road
- Traffic Impacts: construction in 2025 and 2026 as part of unbonded concrete overlay and bridge replacement project

Hwy 77 Pavement Preservation



- Purpose: provide safe and smooth pavement for a projected 30-year duration with functioning drainage and safe bridges
- Location: Hwy 77 from 138th St through to the river bridge in the Cities of Apple Valley and Eagan, Dakota County
- Project Scope:
 - Rehabilitate pavement and drainage
 - Improve bicycle and pedestrian infrastructure
- Traffic Impacts: construction 2026 to 2028
- mndot.gov/metro/projects/hwy77applevalley-richfield/

Hwy 13 Corridor

RECOMMENDED ACCESS SCENARIO

P AT DAKOTA, QUENTIN, CHOWEN, & NICOLLET

P PRIMARY INTERSECTION

S SECONDARY INTERSECTION

O INTERSECTION REMAINS THE SAME

----- PROPOSED LOCAL CONNECTION

----- FRONTAGE ROAD



- Vision: 2021 Environmental Assessment outlined long-term vision for improvements to address congestion, pedestrian/bicycle activity, and freight
- Location: Highway 13 from Nicollet Ave to Highway 169 in the Cities of Burnsville and Savage, Dakota County and Scott County
- Current Work: Highway 13 between Highway 101 interchange and Quentin Ave in Savage
 - mndot.gov/metro/projects/hwy13savageburnsville/index.html



Remaining Hwy 13 Vision

- Current Work: Local submission for Corridors of Commerce, announcement in June 2023
- Pictured and left and bottom are vision concepts for the remaining corridor



Thank You!

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