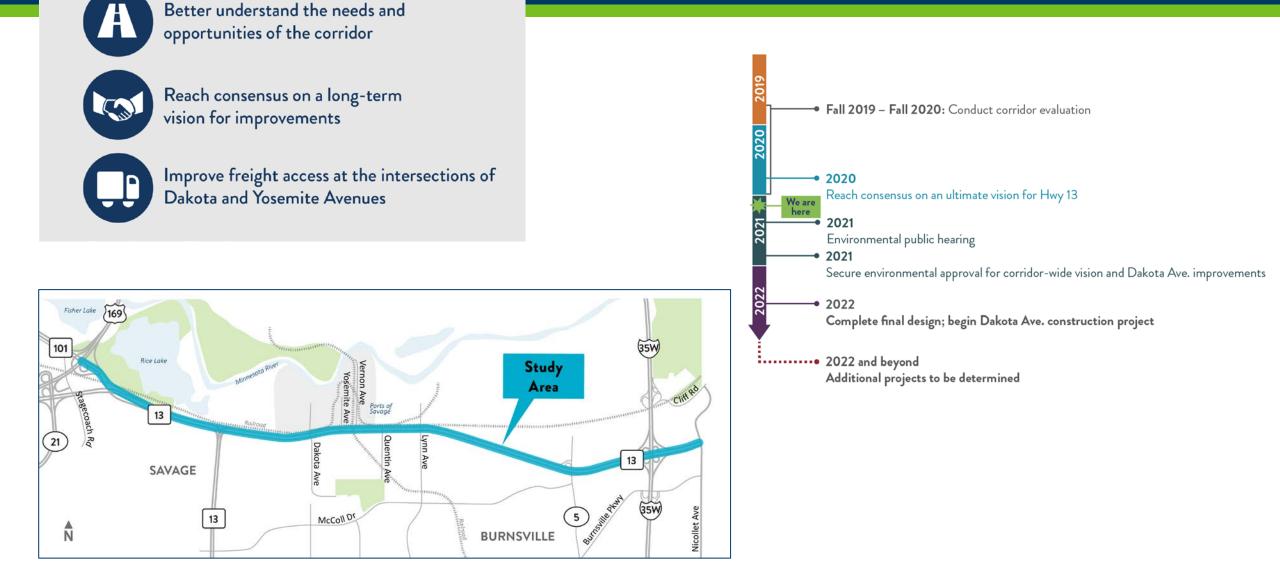


Highway 13: Savage to Burnsville Update

April 8, 2021

Project Goals

Project overview



Corridor needs



Hwy 13 exceeds its traffic capacity resulting in congestion and delays



Several intersections along Hwy 13 have higher than average vehicle crashes



Hwy 13 is not efficient or safe for trucks



Pedestrians and bicycles cannot move freely and safely in the corridor





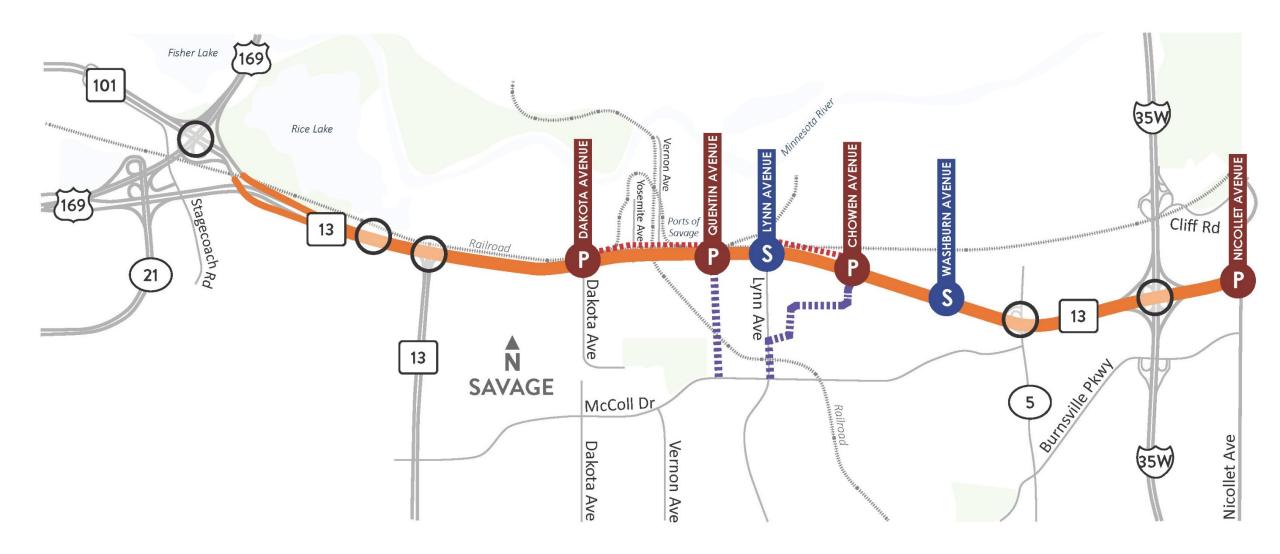


TH 13 Corridor Vision

- Defines:
 - Access: primary or secondary
 - Intersections: at-grade, grade-separated, hybrid
 - Local road improvements
- Footprint is used to secure environmental clearance
- Allows for streamlined process for future projects
- Leaves flexibility for future packaging combinations of intersection types



Recommended Corridor Access Scenario



Corridor Footprint

LAYOUT LEGEND

TH 13 CORRIDOR VISION LIMITS DAKOTA IMPROVEMENT LIMITS 2022 CONSTRUCTION

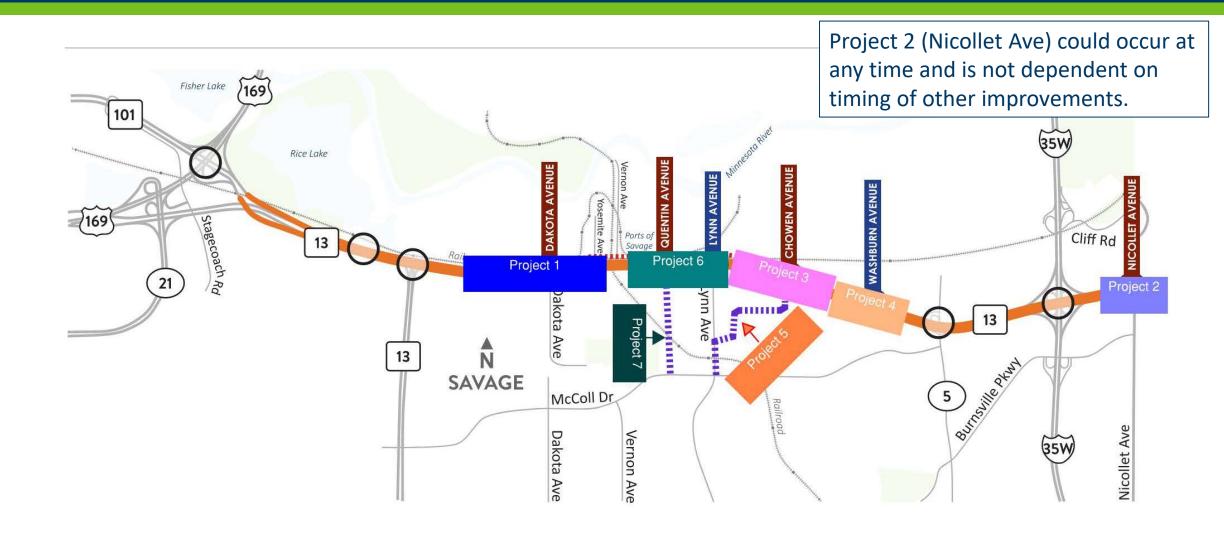
POTENTIAL FRONTAGE ROAD IMPROVEMENTS

• We chose flexibility

- Three corridor visions carried into Environmental Assessment
- Currently working on implementation plan for future projects



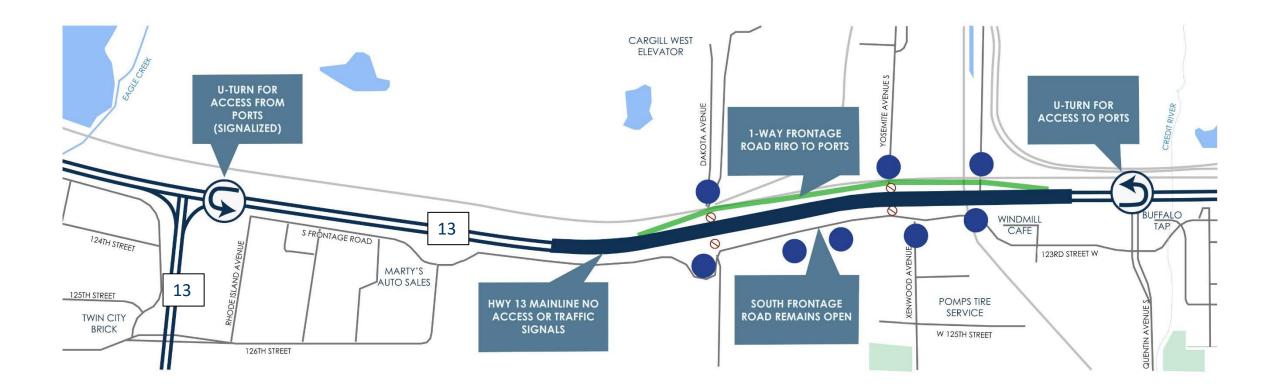
DRAFT Implementation Sequencing



First Construction Project Dakota Avenue - 2022



Hwy 13 two-Lane "pipeline"





Next Steps

• Next Steps

- Complete environmental document
- Begin Dakota Avenue construction 2022
- Public Hearings
 - Environmental Assessment (by MnDOT) Late June
 - Municipal Consent (by City) Late June
- Continue Coordination to Secure Additional Funding
 - 2022 and beyond







Minnesota Department of Transportation I-35W Spot Mobility Improvements

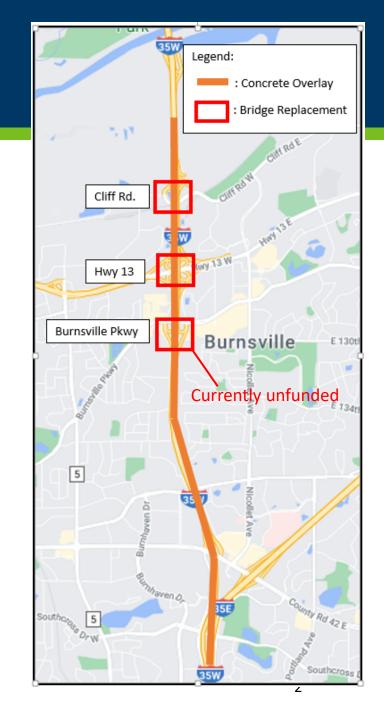
April 8, 2021



Project Work

Location: I-35W between Cliff Rd and the I-35E junction

- Concrete overlay of mainline and ramps
- ADA improvements
- Replacement of:
 - I-35W bridges over Cliff Road
 - TH 13 bridges over I-35W
 - Burnsville Parkway Bridge over I-35W (currently unfunded)



Study Process

- Problem Identification
 - Review current conditions to identify traffic and safety problems
- Solution Scoping
 - Generate solution concepts and evaluate performance
- Solution Refinement
 - Perform additional investigation of cost-effective solutions
 - Consider impacts transit, community, environmental
- Recommend beneficial solutions for inclusion in project

→Potential enhancements considered as part of MnDOT scoping



Solution Evaluation Criteria

- Annual benefits (safety + travel time)
- Project costs (to include drainage and ponding)
- Return period
- Noise walls (project triggers, development risks, and probability)
- Transit impacts
 - Considers impacts to reliability of current and future routes Considers existing and planned transit services
- MnPASS extension impacts



Solution Concepts

<u>Northbound</u>

Location	Description
NB at TH 13	Buffer lane for loops
NB at TH 13	Extending aux lane from Burnsville Pkwy to loops
NB at TH 13	CD road
NB at TH 13	Remove NB to WB loop, tie in with NB to EB ramp and add Green T
NB at TH 13	Remove NB to WB loop, tie in with NB to EB ramp and provide flyover to WB TH 13 (merge prior to W-S loop)
NB at TH 13	Remove NB to WB loop, tie in with NB to EB ramp and provide turbine ramp to WB TH 13 (merge with S-W ramp)
NB at TH 13	Remove EB to NB loop, provide turbine ramp for E-N movement
NB at TH 13	Bridge braid N-W ramp with E-N ramp, tie in with N-E ramp
NB at TH 13	Remove NB to WB loop, merge W-N ramp to 35W earlier, combine with Green T or High T for N-W movement
NB at TH 13	Add WB TH 13 traffic to EB TH 13 loop, add lane at mainline, Green T or High T on TH 13
NB at Cliff Rd	Connect aux lane from TH 13 to Cliff Rd



Solution Concepts

<u>Southbound</u>

Location	Description
SB at Cliff Rd	Extend decel lane at Cliff Rd
SB at TH 13	CD road from Cliff exit to TH 13 WB off ramp, merges downstream of TH 13 WB exit
SB at TH 13	Buffer lane at TH 13 loops (option to extend to Burnsville Pkwy off or on ramp)
SB at TH 13	Buffer lane at TH 13 loops, extend to Burnsville Pkwy off ramp
SB at TH 13	Extend fourth lane through loops with escape lane, WB loop becomes merge (could add loop-to-loop aux lane)



Solution Concepts

<u>Southbound</u>

Location	Description
SB at CR 42	Add lane from TH 13 to CR 42 and provide escape lane with 2- lane exit
SB at CR 42	Provide separate exit to local access near CR 42
SB at CR 42	Provide separate exit to Buck Hill Rd and EB CR 42
SB at 35E	Merge 35E ramp lanes to 1 lane sooner
SB at 35E	Parallel accel for outside lane from 35E



Solution Evaluation Matrix

Location	Description	Annual Benefit (millions)	Project Cost (millions)	Return Period (years)
NB 35E	Modify split to add center lane earlier for 2-2 split	\$0.25	\$0.5	2
NB CR 42	Parallel accel	\$0.36	\$0.8	2
NB TH 13	Buffer lane for loops	\$0.33	\$1.9	6
NB TH 13	Extending aux lane from Burnsville Pkwy to loops	\$0.39	\$3.2	8
NB TH 13	Remove EB to NB loop, provide turbine ramp for E-N movement, add lane for turbine, merge Cliff Rd	\$0.65	\$8.5	13
NB TH 13	Bridge braid N-W ramp with E-N ramp, tie in with N-E ramp	\$0.35	\$8.5	24
NB Cliff	Connect aux lane from TH 13 to Cliff Rd	\$0.46	\$4.0	9
SB TH 13	Buffer lane at TH 13 loops, extend to Burnsville Pkwy off ramp	\$0.40	\$3.2	8
SB CR 42	Provide separate exit near CR 42 (dependent on local network changes)	\$0.28	\$1.5	5
SB 35E	Parallel accel for outside lane from 35E	\$0.13	\$0.5	4

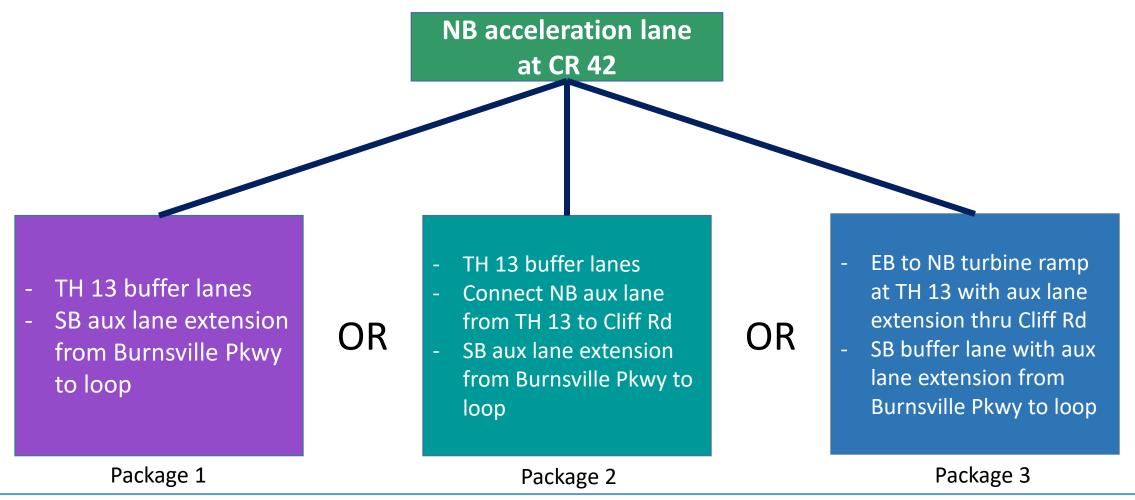


Solution Evaluation Matrix

		Noise Wall		MnPASS Extension
Location	Description	Probability	Transit Impacts	Impacts
NB 35E	Modify split to add center lane earlier for 2-2 split	Medium	None. If this improvement reduces congestion at the split, it could improve reliability for Metro Transit Route 467 service to Lakeville (if service is eventually restored).	This change adds capacity and may allow more flexibility for future MnPASS lanes. Discuss relationship between this project and MnPASS on I-35W.
NB CR 42	Parallel accel	N/A	None	None
NB TH 13	Buffer lane for loops	N/A		Requires additional bridge lengthening on TH 13 to accommodate MnPASS lane extension.
NB TH 13	Extending aux lane from Burnsville Pkwy to loops	Low		Requires additional bridge lengthening on TH 13 to accommodate MnPASS lane extension.
NB TH 13	Remove EB to NB loop, provide turbine ramp for E-N movement, add lane for turbine, merge Cliff Rd	Low	None. Existing HOV connection to NB 35W is maintained.	None.
NB TH 13	Bridge braid N-W ramp with E-N ramp, tie in with N-E ramp	Low		Requires additional bridge lengthening on TH 13 to accommodate MnPASS lane extension
NB Cliff	Connect aux lane from TH 13 to Cliff Rd	Medium	None	None
SB TH 13	Buffer lane at TH 13 loops, extend to Burnsville Pkwy off ramp	Medium		Requires additional bridge lengthening on TH 13 to accommodate MnPASS lane extension.
SB CR 42	Provide separate exit to local access near CR 42	Low	None. MVTA buses currently access Burnsville Center via local streets. Direct access from SB I-35W to Buck Hill Road/Burnsville Center may offer opportunities in the future.	Ensure that design does not preclude potential future MnPASS lanes under CR 42. If not constrained, no transit impacts.
SB 35E	Parallel accel for outside lane from 35E	N/A	None	None



Feasible Solution Options



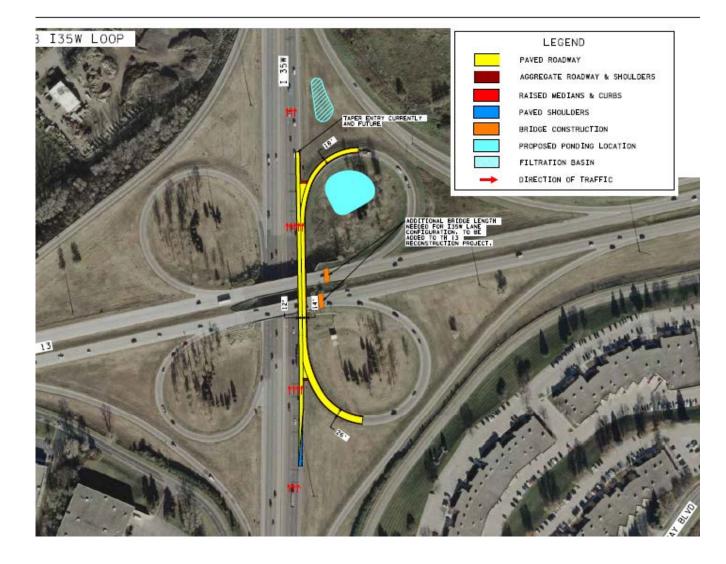


NB Acceleration Lane North of CR 42





Northbound Buffer Lane at Hwy 13

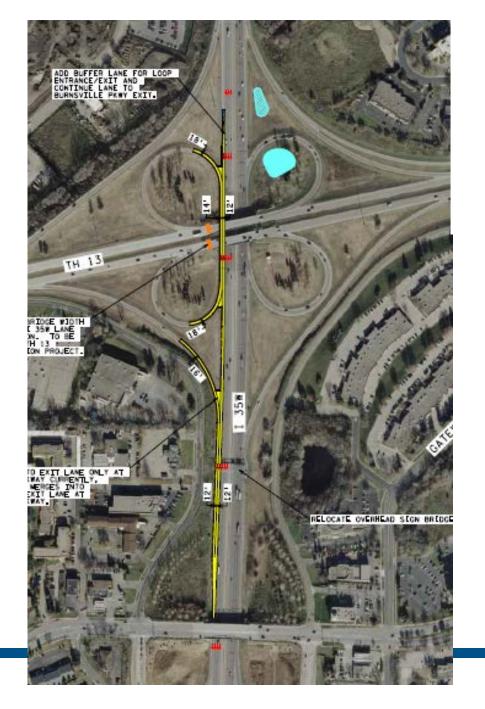




Southbound

Buffer Lane at Hwy 13

SB aux lane extension from Hwy 13 loop to Burnsville Pkwy





Extend Northbound Aux Lane from Hwy 13 through Cliff Road





Solution Package Overview

Package 1

- Cost: \$6-9M ? Draft
- Annual benefit: \$1.1M

Package 2

<u>Package 3</u>

- Cost: \$10-12M ? Draft Cost: \$15-18M ? Draft
- Annual benefit: \$1.5M
- Annual benefit: \$1.9M

All solutions

- Medium noise wall risk for SB lane from TH 13 loops to Burnsville Pkwy
- No notable impacts to existing or planned transit services
- TH 13 buffer lanes require lengthening of TH 13 bridges (MnPASS extension would require additional lengthening)



Questions / Discussion





Highway 77 Congestion Mitigation

Molly Kline, MnDOT South Area Engineer 04/08/2021



mndot.gov

Study Overview

Why this study?

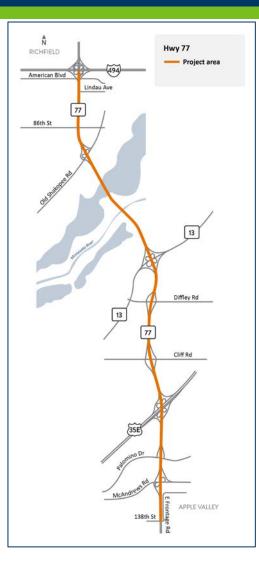
- Recurring congestion, elevated crash history, and reliability issues
- Continued stakeholder interest
- Continued interest as potential MnPASS corridor

Why now?

- MnDOT upcoming pavement projects
- Better traffic data available
- Local agency partnership, transit planning

What is included?

- Large scale improvements
- Small scale improvements



Public and Agency Involvement

Public Outreach

- Public Open Houses
 - 1st Jan. 15-Feb. 14th
 - 2 additional rounds of Open Houses planned through 2021
- Listening Sessions
- Email Updates
- Project Website



Project-related Committee and Group

- Technical Advisory Committee consists of city, county and federal/state agency staff that meet regularly to review technical information.
- Focus Groups Consist of emergency services, chamber commerce, and representatives of businesses along the corridor.

Project Website

For more information and to get involved: mndot.gov/metro/projects/hwy77applevalleyrichfield/index.html



Thank you again!

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4/7/2021

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