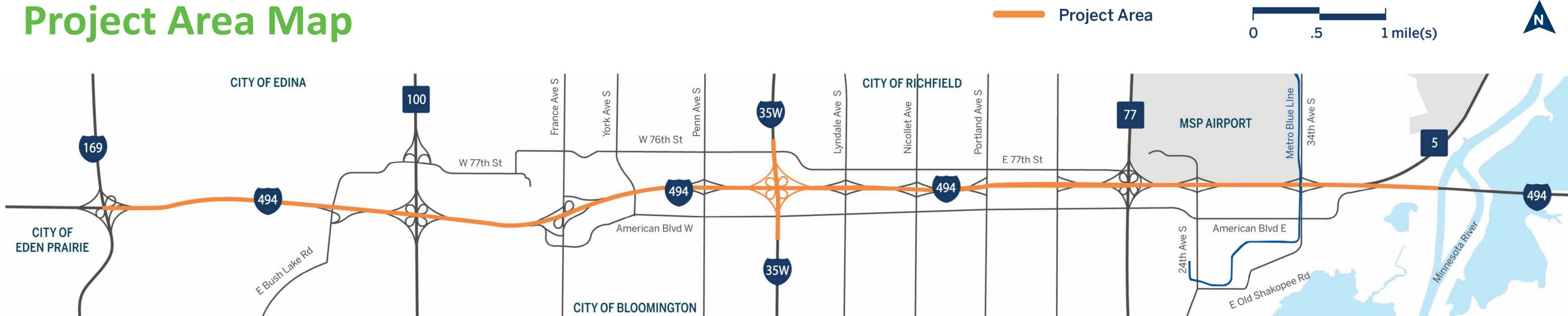


I-494: AIRPORT TO HWY 169

Project Area Map



Why Are We Studying The Project Area?

To develop a vision for long-term improvements that will increase the freeway's capacity and better serve the growing multimodal needs of the community.

How Can I Stay Involved?

- Connect with MnDOT staff
- Keep up to date on the project website and sign up for email updates

Who Are The Project Partners?

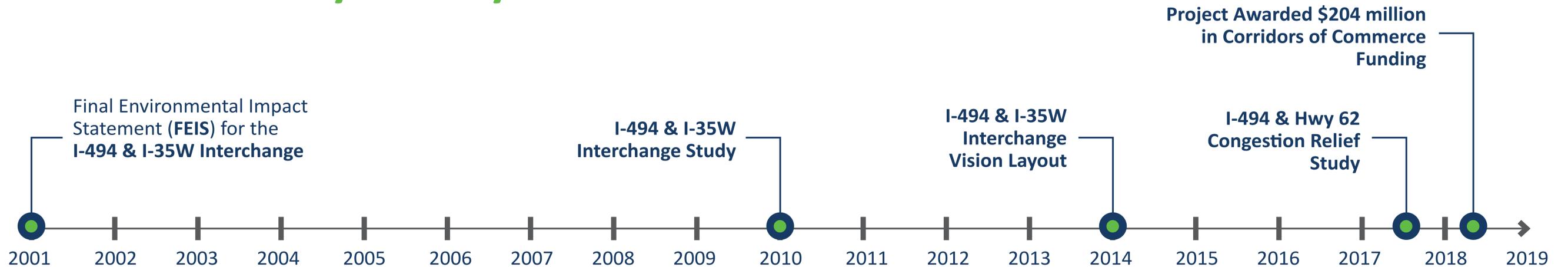
- Minnesota Department of Transportation
- Federal Highway Administration (FHWA)
- City of Bloomington
- City of Richfield
- City of Eden Prairie
- City of Edina
- Hennepin County
- Metro Transit
- MVTA
- Metropolitan Airports Comm.
- I-494 Corridor Commission
- I-35W Solutions Alliance

Need More Info?

Erik Baxstrom
Strategic Engagement Coordinator
651-234-7771
erik.baxstrom@state.mn.us

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Timeline of Freeway History

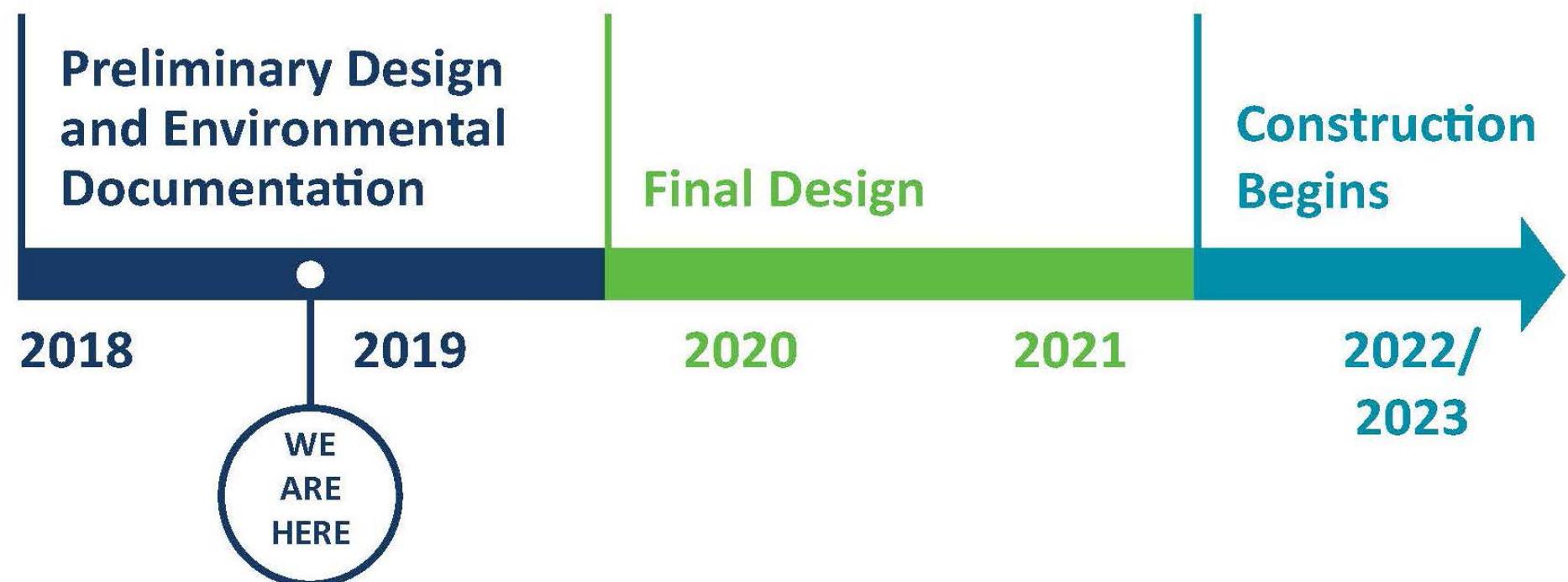


Project Schedule

The project is in the Preliminary Design and Environmental Documentation stage during which MnDOT and its partnering agencies are working with experts in the field and the public to determine a recommended design for the project. This phase consists of:

- Public Outreach and Evaluation of Alternatives: Summer 2018-Winter 2018
- Public Outreach Concept Design: Winter 2018-Summer 2019
- Environmental Review Process: Summer 2018-Fall 2019

Construction is estimated to begin in late 2022 or early 2023.



Project Purpose and Need

What is the Purpose of the Project?

The purpose of the I-494: Airport to Highway 169 Project is to:

- Improve travel and travel time reliability across I-494
- Enhance safety and mobility for people walking, biking, driving, and using transit
- Address bridge and pavement conditions on I-494 between Highway 169 and Highway 5 near the Minneapolis-Saint Paul International Airport

Primary and Secondary Needs

In fall of 2018, MnDOT and its partners reached out to the public to find out what was most important to address when redesigning I-494 from the Airport to Highway 169.

From September 14, 2018, to October 14, 2018; nearly 4,500 individuals participated to learn about the project and share what was important to them. From this information and staff recommendations, a set of primary and secondary needs were established.

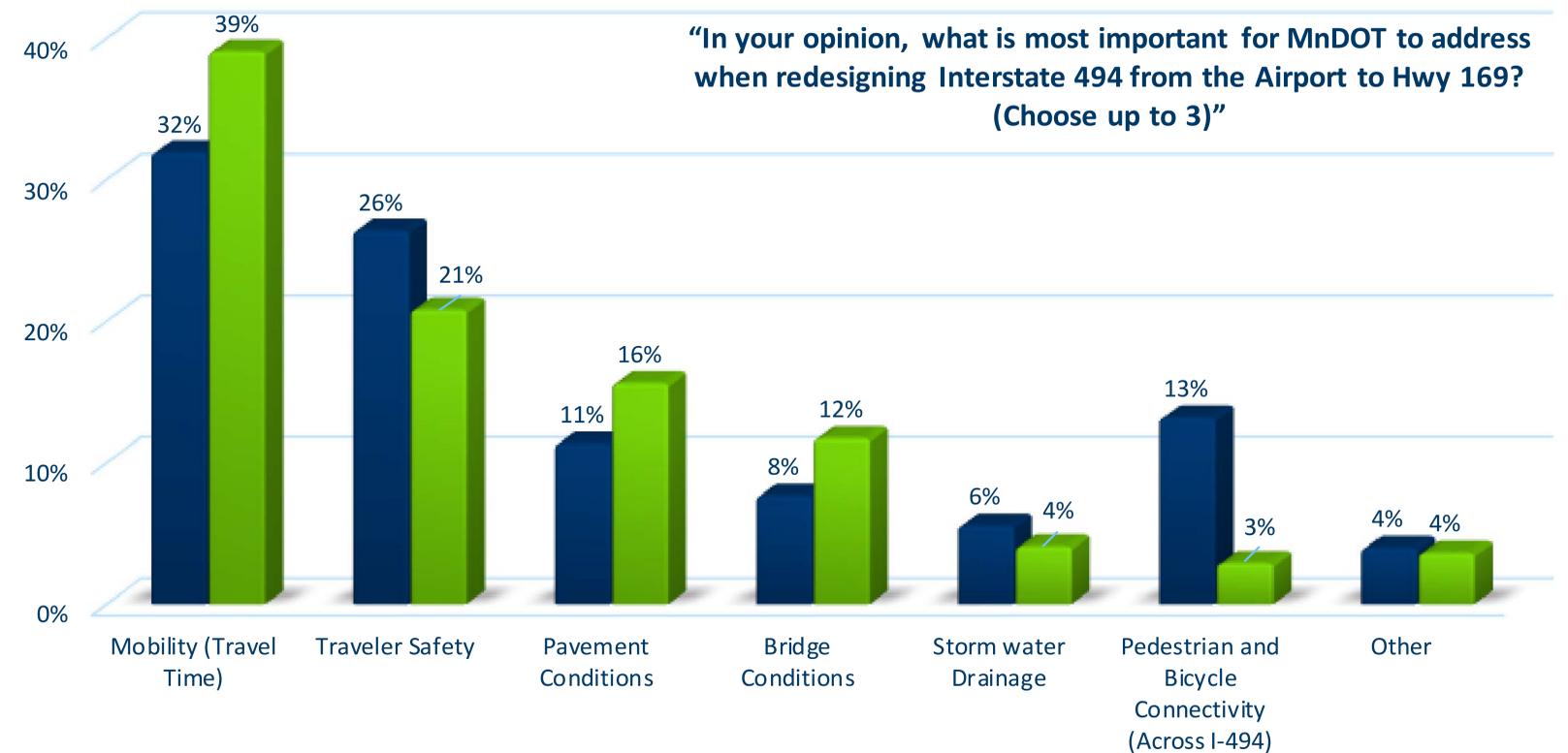
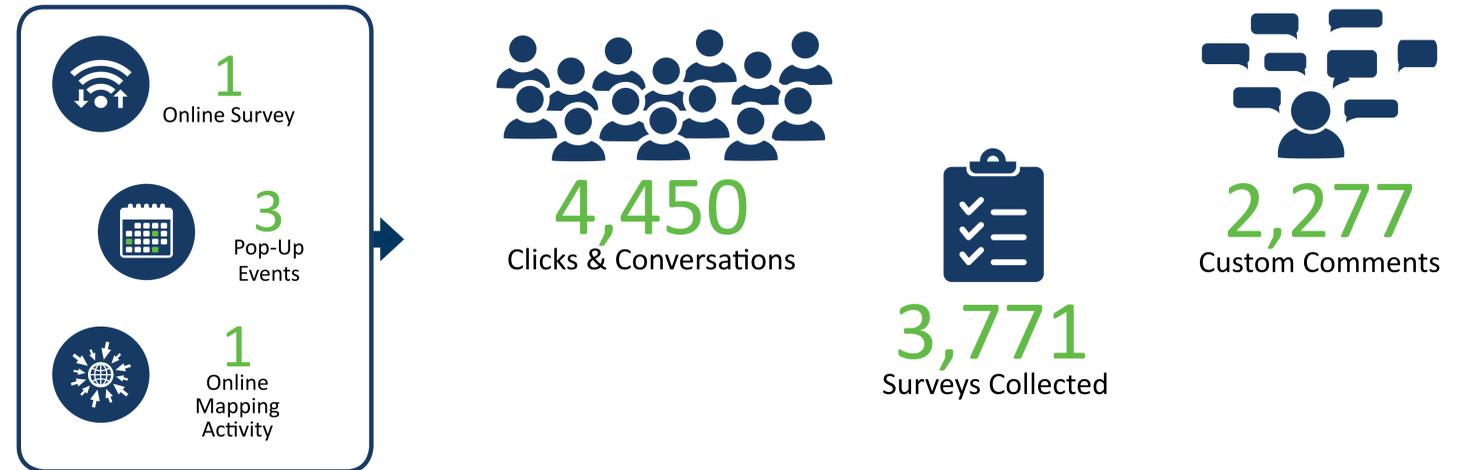
Primary Needs

- Mobility (Congestion and Travel Time Reliability)
- Traveler Safety
- Pavement Condition
- Bridge Condition

Secondary Needs

- Pedestrian and Bicycle Connectivity
- Stormwater Drainage

Fall 2018 - What We Heard!



I-494: AIRPORT TO HWY 169

Existing Traffic Conditions

Interstate 494 from the Minneapolis-St. Paul International Airport to Highway 169 is one of the most heavily congested roads in the state. Heavy traffic has come to be expected by those who use the freeway during rush hour, also known as “peak travel time”. The I-494: Airport to Hwy 169 project is working to address these issues.

Congestion

The following images show the areas that have the heaviest traffic during peak travel times. As you can see, congestion is greatest...

in the AM from:

- Hwy 169 to France Ave - eastbound
- Hwy 77 to I-35W - westbound
- I-35W northbound, south of I-494

in the PM from:

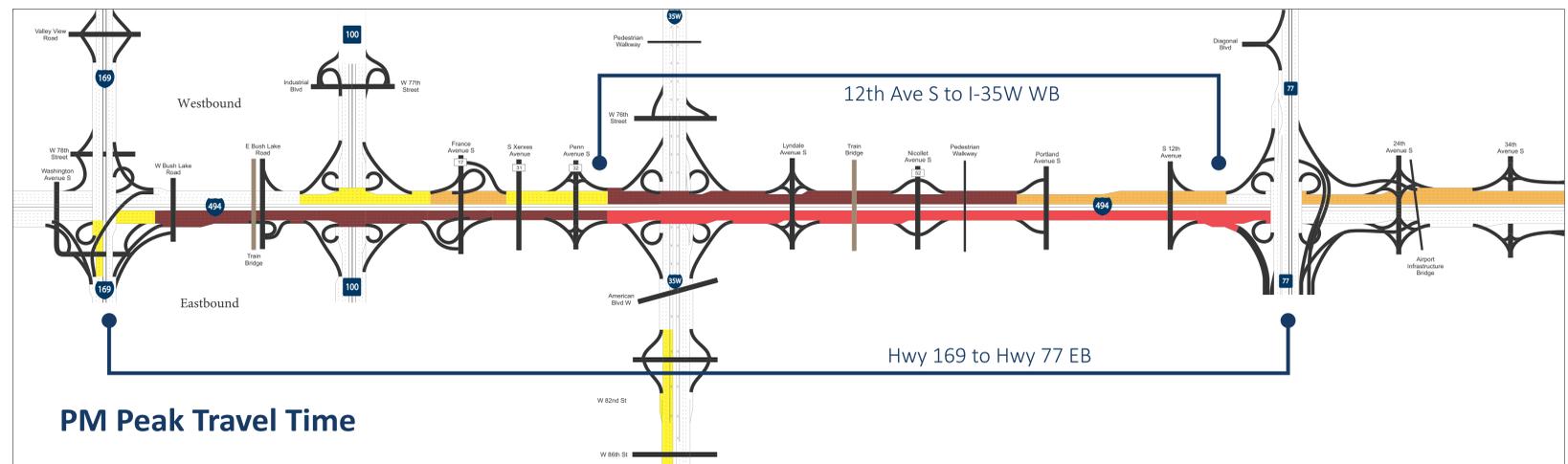
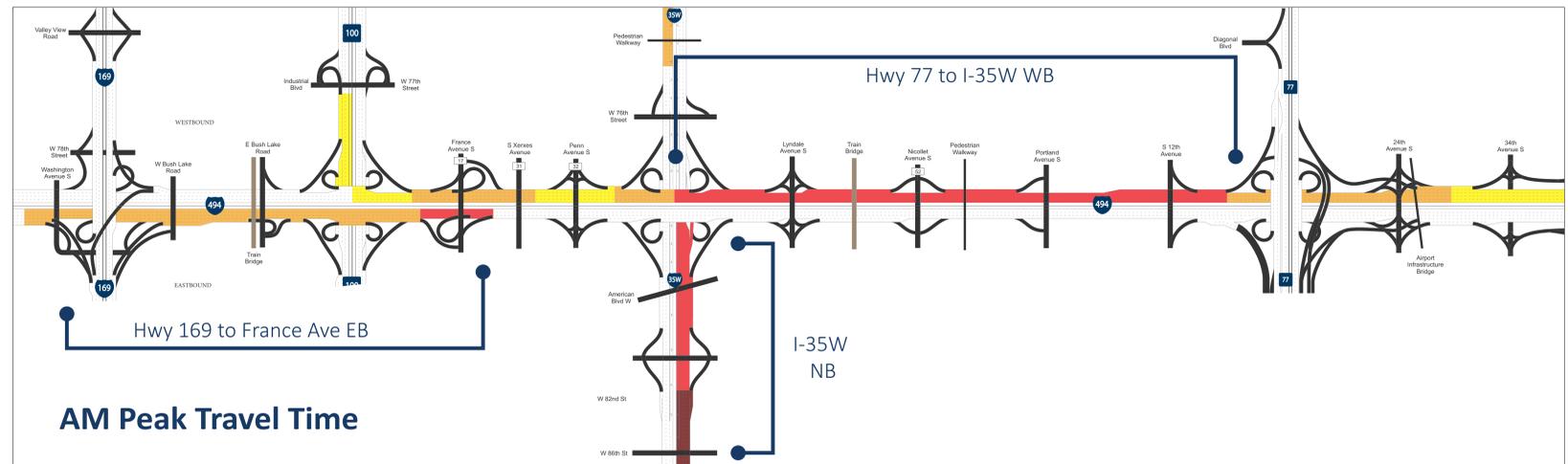
- Hwy 169 to Hwy 77- eastbound
- 12th Ave S to I-35W- westbound

Some of the factors that contribute to congestion on the freeway include entering traffic from other highways, merging between entrance and exit ramps, adding or dropping lanes which leads to additional merging, the capacity of the exit ramp, and other local factors.

Map Legend

- | | | | |
|--|--------------------------------|---|---|
|  | No Recurring Congestion |  | 2-3 Hours of Congestion |
|  | Less than 1 Hour of Congestion |  | Greater than or Equal to 3 Hour of Congestion |
|  | 1-2 Hours of Congestion | | |
- Source: MnDOT Metropolitan Freeway System 2017 Congestion Report (DRAFT)

Peak Travel Congestion on I-494 and surrounding highways



Existing Safety Conditions

In addition to congestion, safety is a major issue being addressed by the reconstruction project.

Crash Rates

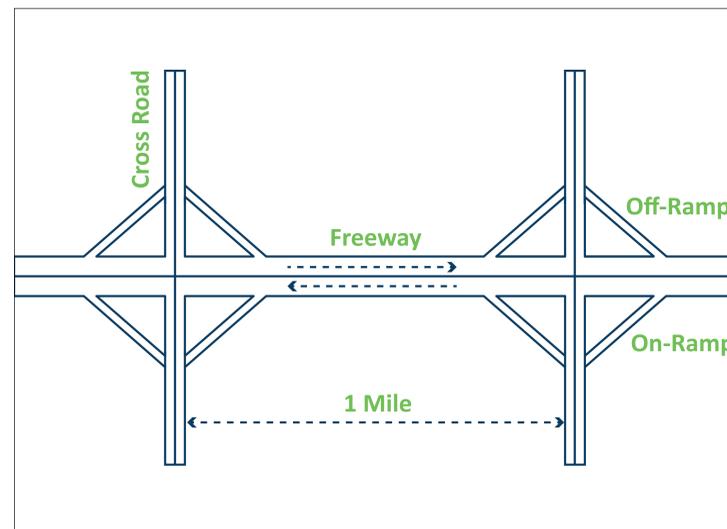
High crash rates, which often makes traveling unreliable, are seen throughout the project area. Crash rate data for the westbound segment of I-494 show that crash rates on I-494 are highest between I-35W and Highway 77, near the entrance and exit ramps of 12th, Portland, Nicollet and Lyndale.

Segment	Length (Miles)	Total Crashes	Crash Rate (per mil vehicles)
Hwy 5 to 34th	0.2	13	0.8
34th to 24th	0.3	31	1.6
Hwy 77 to 12th	0.2	42	2.3
12th to Portland	0.4	55	1.8
Portland to Nicollet	0.2	38	2.7
Nicollet to Lyndale	0.2	24	1.2
Lyndale to I-35W	0.1	35	3.0
I-35W to Penn	0.1	18	1.3
Penn to France	0.6	40	0.8
France to Hwy 100	0.6	39	0.7
Hwy 100 to E Bush Lake	0.2	6	0.4
E Bush Lake to Hwy 169	1.0	36	0.7

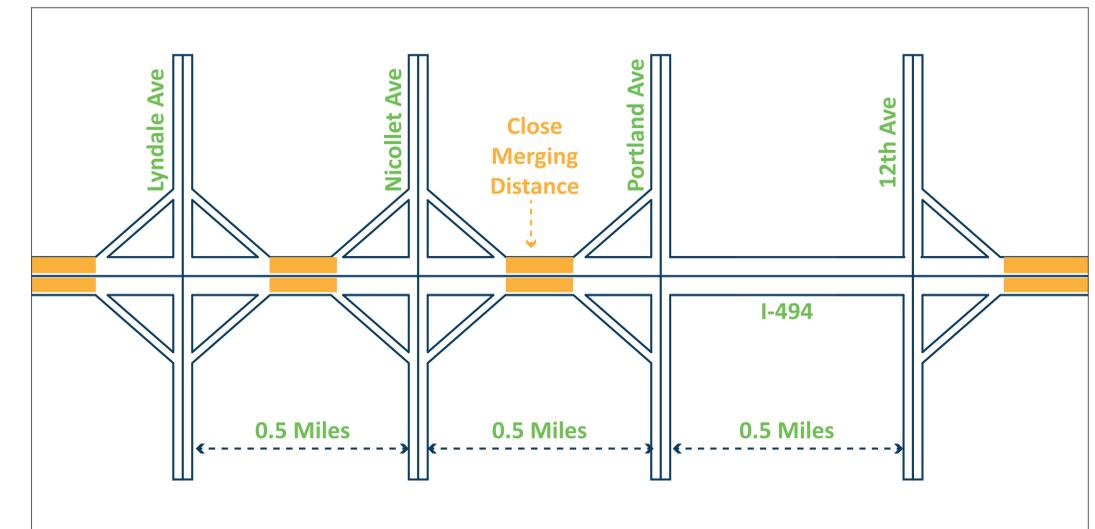
What causes safety issues?

While there are a variety of factors that impact the safety of a freeway, one important factor is the spacing between entrance and exit ramps. Ramps that are too close together cause merging conflicts when vehicles have to enter and exit the freeway in a short distance. One mile spacing is recommended by the Federal Highway Administration for safe interchange spacing in urban areas. The interchanges between I-35W and Hwy 77 are closer than recommended, at approximately one-half mile apart, leading to safety and congestion issues on the freeway.

Federal Highway Administration Recommendations for Spacing Between Interchanges in Urban Areas



Existing Interchange Spacing Between I-35W and Hwy 77 on I-494



I-494: AIRPORT TO HWY 169

Possible Ramp Closures Between I-35W and Hwy 77

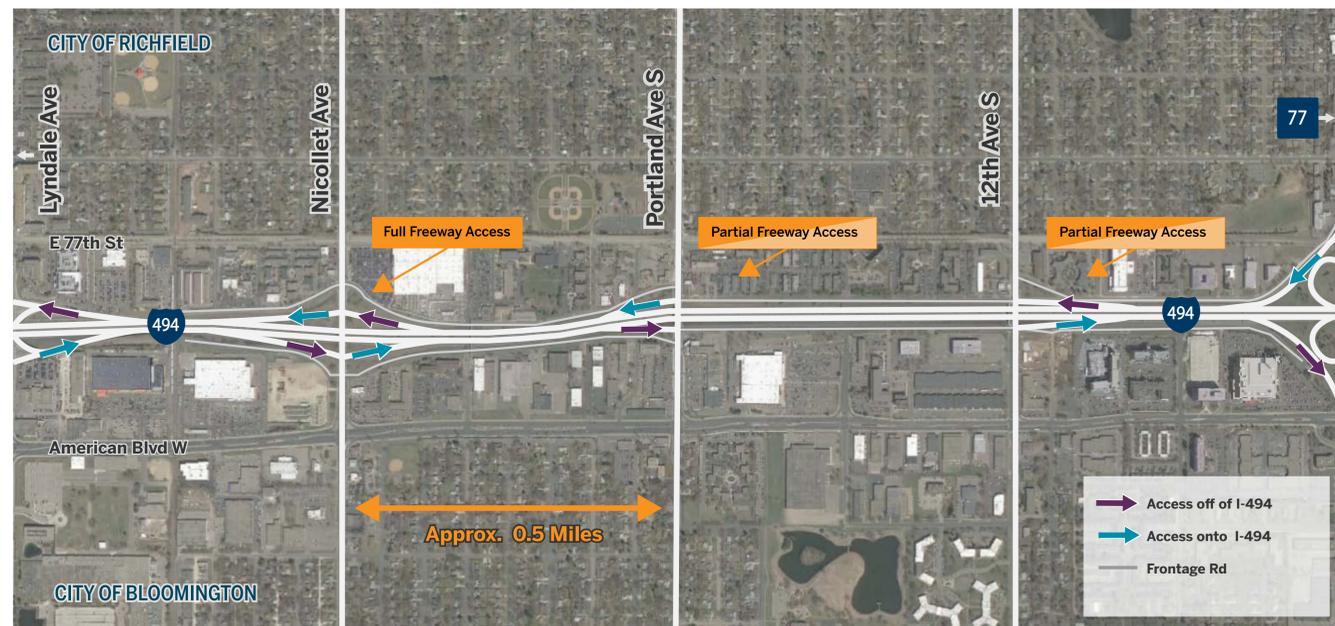
In general, we see increased crashes and slow moving traffic (congestion) when entrance and exit ramps on the freeway are spaced less than one mile apart.

The entrances and exits at Nicollet Ave., Portland Ave. S and 12th Ave. S are spaced one-half mile apart and have significant safety and congestion issues, as shown by the high crash rates and levels of congestion. A possible solution to safety and congestion issues on I-494 would be to permanently reduce the number of ramps on and off the interstate and make improvements to the local roads and interchanges. The maps below show the existing freeway access for this area and a possible solution.

What is **partial** vs. **full** access?

Partial access provides entrances and/or exits to the freeway in some directions, while full access provides entrances and exits to every direction of the freeway.

Existing Conditions



Considerations

- Close spacing of entrances and exits is below safety standards and causes safety issues on I-494
- Close spacing of entrances and exits causes congestion on I-494 with increased merging
- Partial access at Portland Ave. S and 12th Ave. S
- Full access at Nicollet Ave. and Lyndale Ave.

Note: Pedestrian and bicycle improvements across I-494 are planned regardless of access change.

Possible Solution



Considerations

- Reduced congestion and improved safety and travel time reliability on I-494
- Full interstate access at Portland Ave. S and Lyndale Ave.
- Access removed at Nicollet Ave. and 12th Ave. S, with improved local access to Portland Ave. S entrances and exits
- Increased traffic flow on Portland Ave. S, with infrastructure improvements to support traffic increase

Possible Partial Ramp Closure at W 82nd St.

To address existing and future issues at the interchange of I-35W and I-494, MnDOT is planning a flyover ramp from northbound I-35W to westbound I-494. The change is expected to reduce slow moving traffic (congestion) and improve safety and the reliability of travel time along both I-35W and I-494, two of the most congested freeways in the state.

Given the close proximity of W 82nd St. to the I-494/I-35W interchange, the interchange at W 82nd St. may be impacted by upcoming improvements. The following map shows the existing conditions at W 82nd St.

Considerations

- Existing full freeway access at W 82nd St.
- Existing and projected future usage of the W 82nd St. interchange is low
- There are short merging distances between entrances and exits (approx. one-third mile), causing congestion and safety issues on the freeway

Changes to entrance and exit ramps at W 82nd St. could improve the function of I-35W for the region as a whole. The two options being considered for W 82nd St. are:

Option 1: A flyover ramp at I-494/I-35W with limited changes to access at W 82nd St.

Option 2: A flyover ramp at I-494/I-35W with the removal of the northbound entrance and southbound exit at W 82nd St.

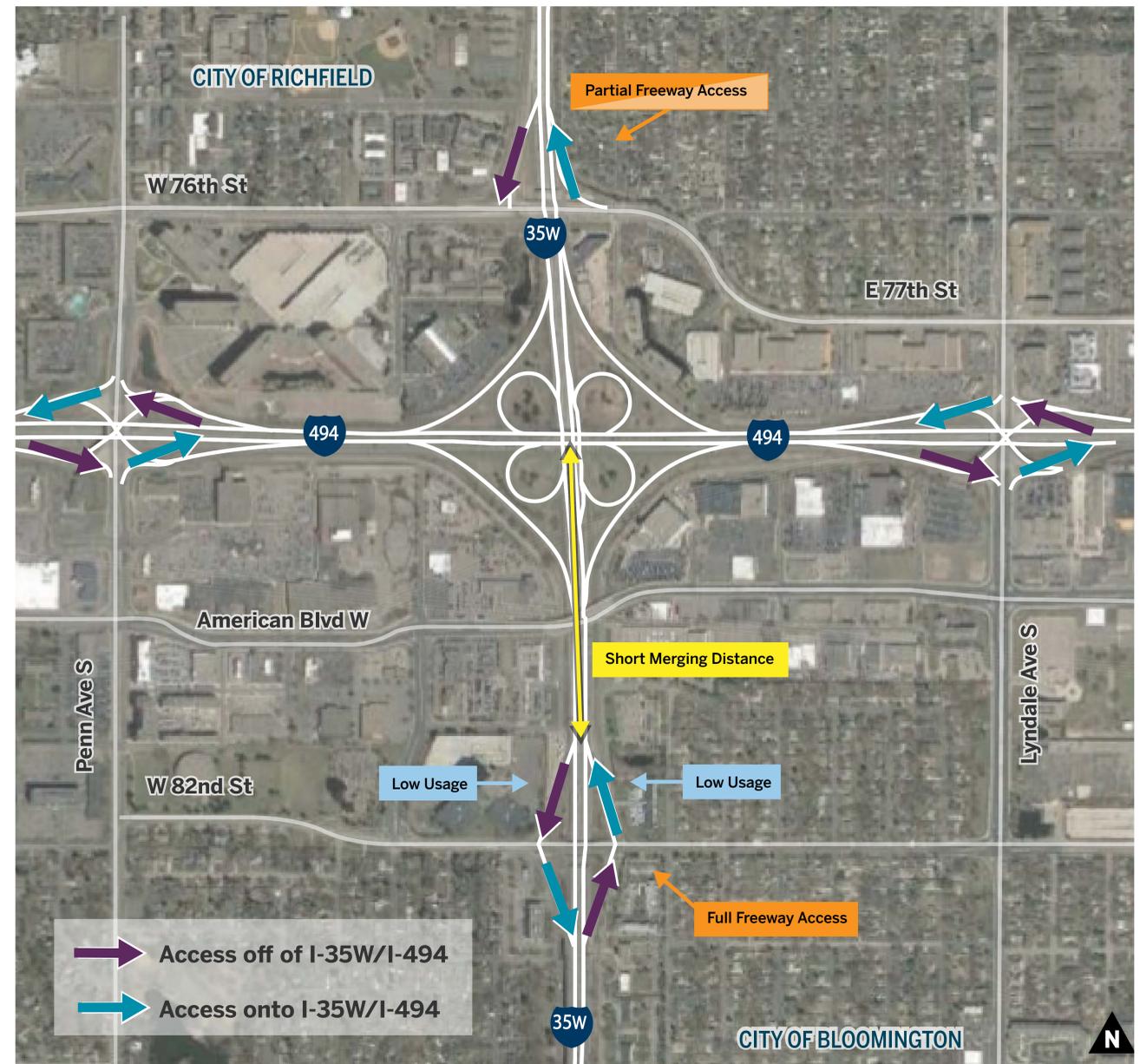
Planned Flyover Ramp



What is **partial** vs. **full** access?

Partial access provides entrances and/or exits to the freeway in some directions, while full access provides entrances and exits to every direction of the freeway.

Existing Conditions



I-494: AIRPORT TO HWY 169

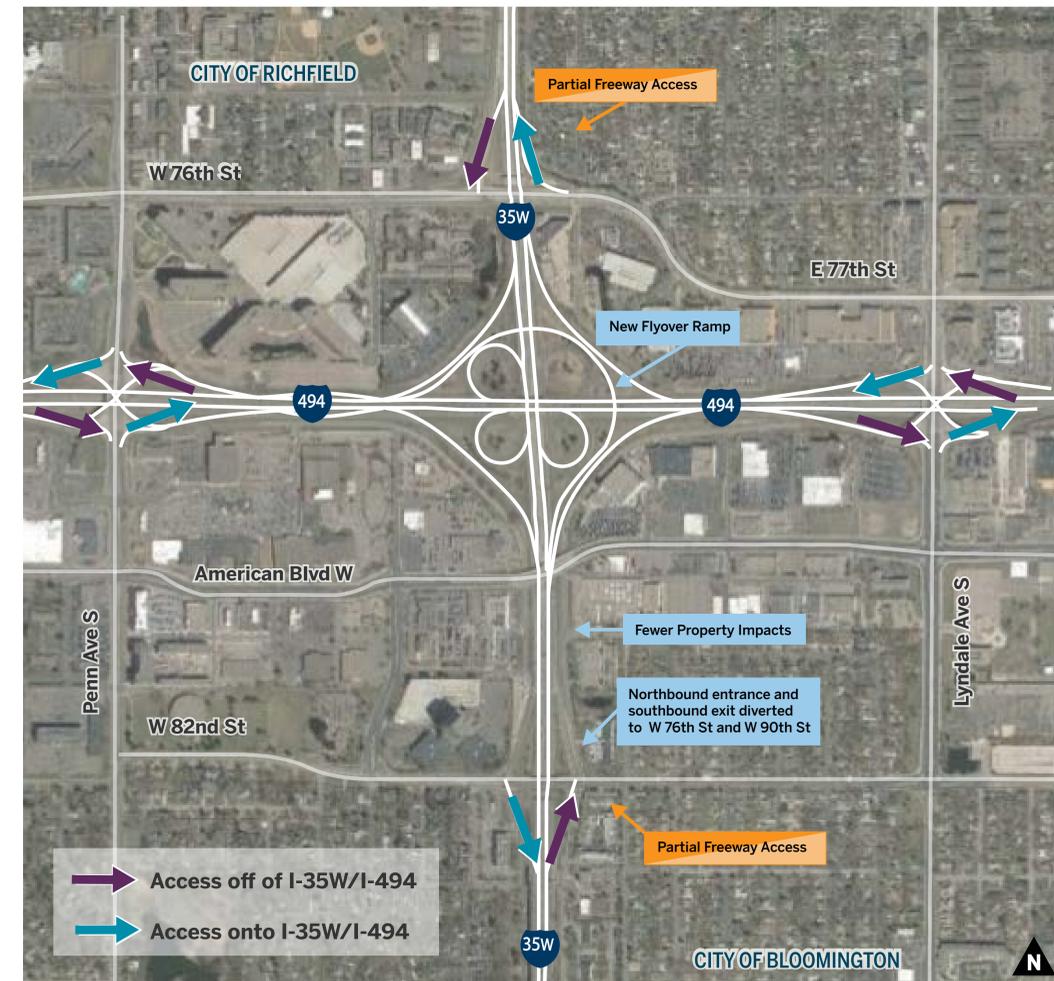
Option 1 - Limited change to access at W 82nd St.



Considerations

- Preserves the majority of freeway access at W 82nd St. (Movement from eastbound I-494 to W 82nd St. and from W 82nd St. to eastbound I-494 will be removed)
- Projected future usage of the W 82nd St. interchange is low
- There are still short merging distances between entrances and exits (approx. one-third mile), causing congestion and safety issues on the freeway
- Greater property impacts on the surrounding neighborhood

Option 2 - Removal of northbound entrance and southbound exit at W 82nd St.



Considerations

- The northbound entrance to I-35W and southbound exit from I-35W will be diverted to W 76th St. in the north and W 90th St., which is one mile to the south
- Resolves merging conflicts, improving safety and congestion on I-35W
- Fewer property impacts on the surrounding neighborhood

HIGHWAY TRAFFIC NOISE

AND NOISE BARRIERS



When does MnDOT conduct noise studies?

Two programs activate a noise analysis:

The first is for a major reconstruction project in which the road would be expanded with additional lanes for more than a mile or would significantly change the alignment of the road. This type of project usually requires an in-depth environmental review process in which many issues are looked at one of which is noise and noise barriers.

The other program is commonly referred to as a retro-fit project. It is for stand-alone noise walls where major reconstruction is not planned in the near future. As part of this program, areas are ranked by existing noise levels, length of barrier, and number of homes.

How does MnDOT determine whether a noise barrier can be constructed?

A noise barrier must be both feasible and reasonable if it is to be constructed with a highway project. The reasonability of a noisewall is determined by factors such as cost, amount of reduction in noise, safety, and site features. Decisions on noise mitigation locations are determined on a case-by-case bases.

How do noise barriers work?

Noise barriers block the direct path of sound waves from the highway to homes and businesses along the highway. They do not eliminate noise, they only reduce the noise. To be considered effective, a noise barrier must reduce noise impact to receptors by at least 5 decibels.

Can noise increase as it passes over the barrier?

No. Noise does not increase as it passes over the barrier. The further noise travels, the greater the reduction in noise.

Could trees be planted to block traffic noise?

There isn't enough space to plant the amount of and size of trees needed to reduce traffic noise. To effectively reduce traffic noise there needs to be room for at least 100 feet of dense evergreen trees that are 15 feet tall or more. Additionally, if trees are used to reduce traffic noise, they need to be maintained. MnDOT lacks the necessary resources to maintain trees or other vegetation.

Do noise barriers affect property values?

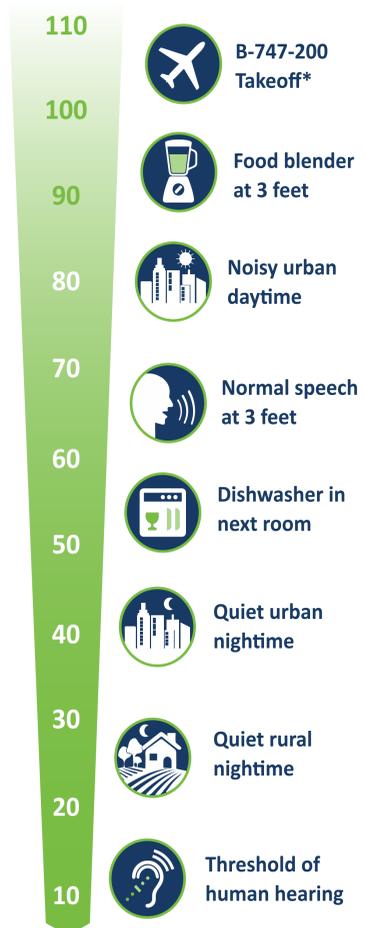
There haven't been any studies that link property values to noise barriers. Future buyers may either appreciate the noise reduction the barrier provides, or they may have aesthetic concerns about its presence.

Noise

Comparison of Noise Levels

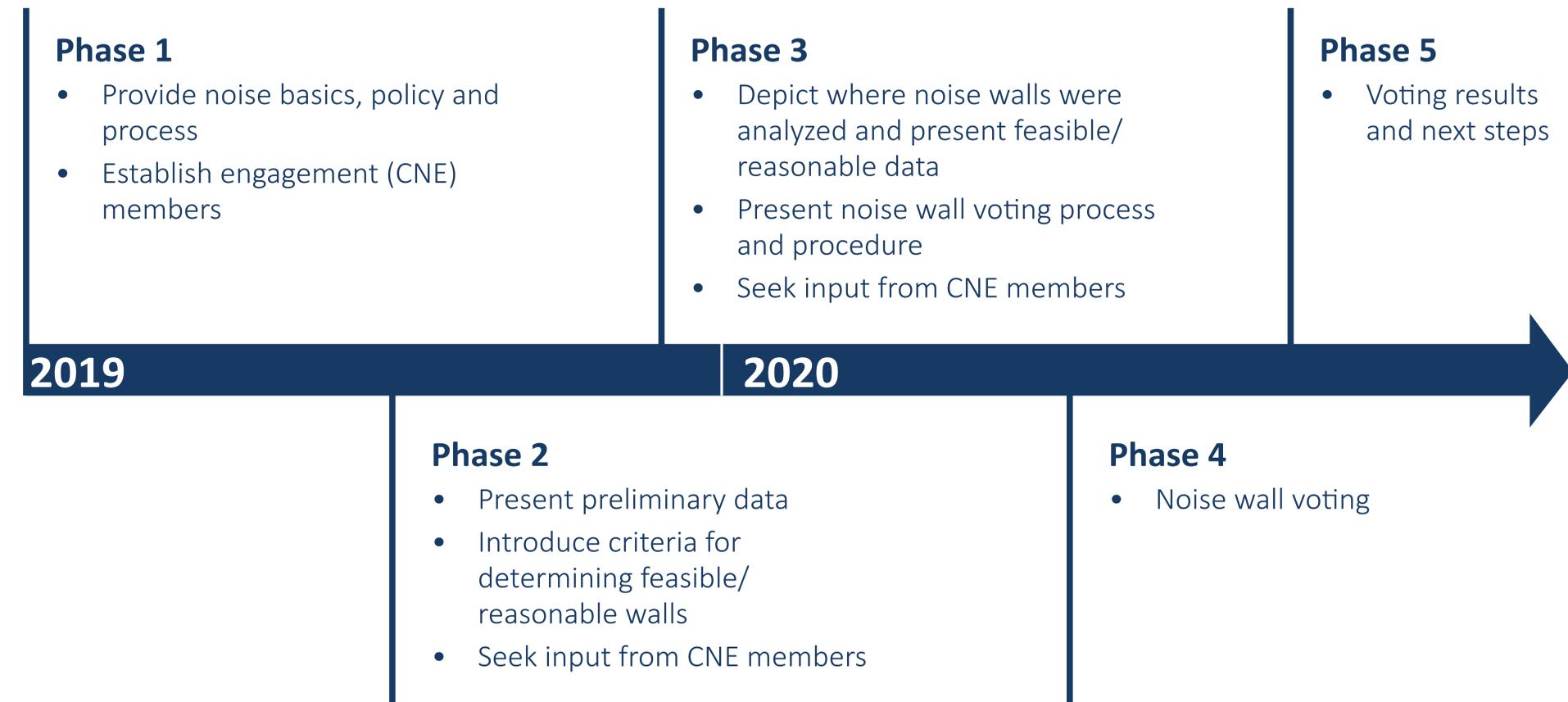
Increase or decrease in noise level:

- <3 dBA- not perceptible
- 3 dBA- barely perceptible
- 5 dBA- easily perceptible
- 10 dBA- perceived as twice as loud



* As measured along the takeoff path
2 miles from the overflight end of the runway

Noise Outreach Process

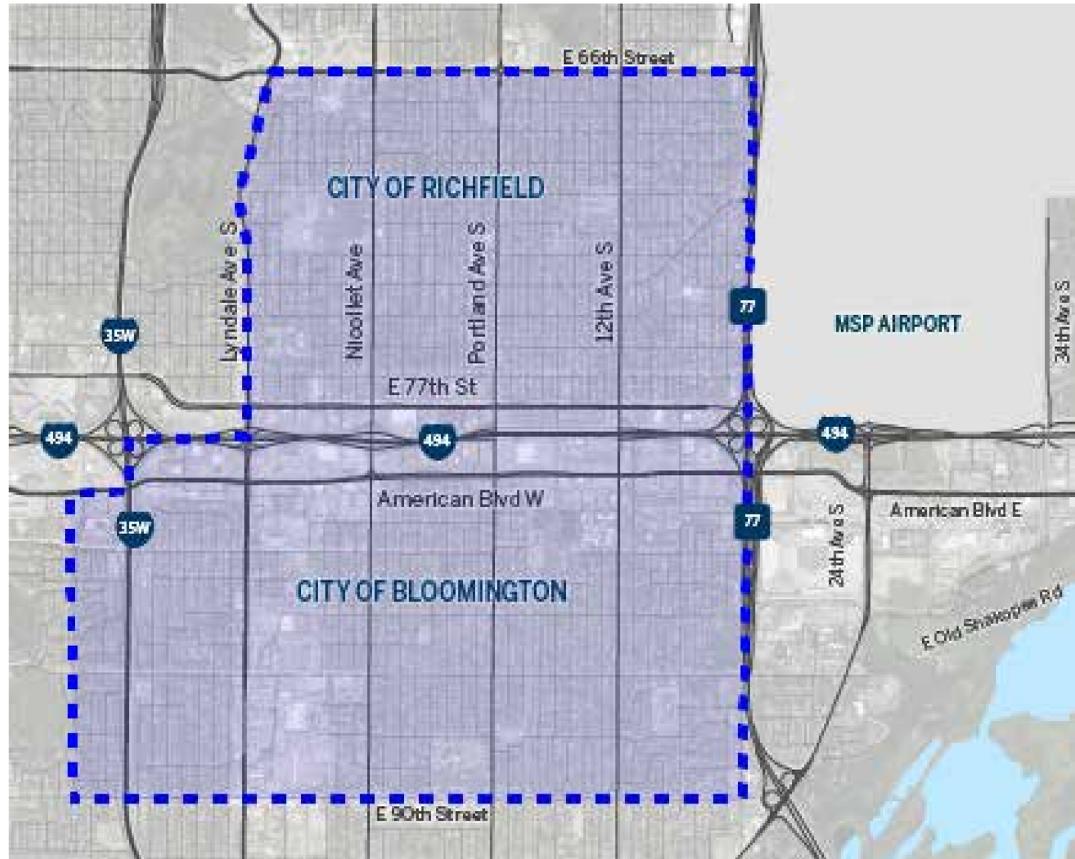


CNE: Community Noise Engagement

I-494: AIRPORT TO HWY 169

We Want To Hear From You!

1. Do you live, work or own property in this area?

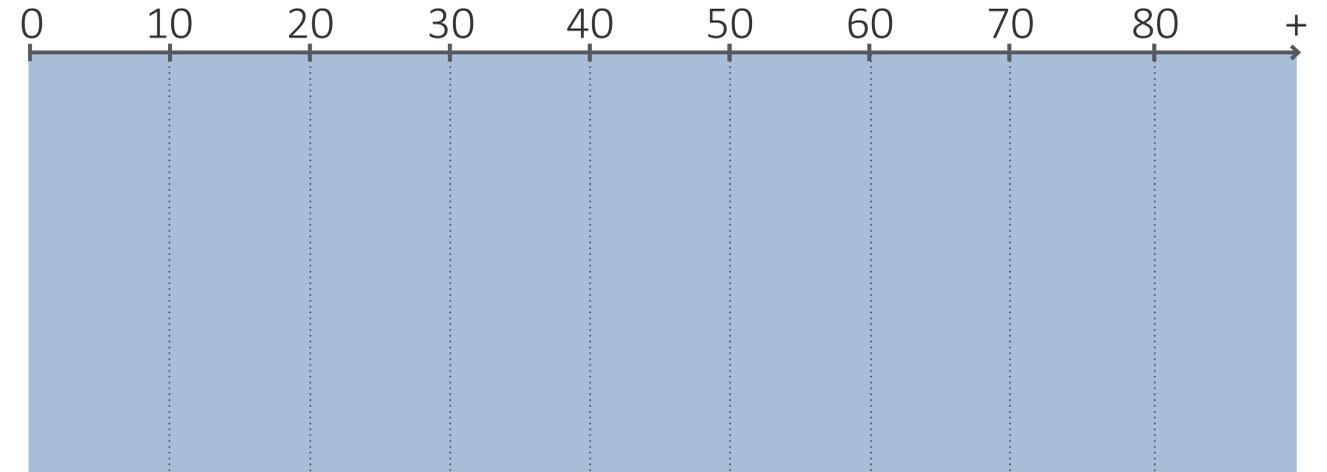


I live or work in this area

I own/manage a property or business in this area

I live/work/own property outside of this area

1. What is your age?



3. Which bridges and/or entrance and exit ramps do you use on a regular basis?

Nicollet Ave @ I-494

12th Ave S @ I-494

Portland Ave @ I-494

W 82nd St @ I-35W

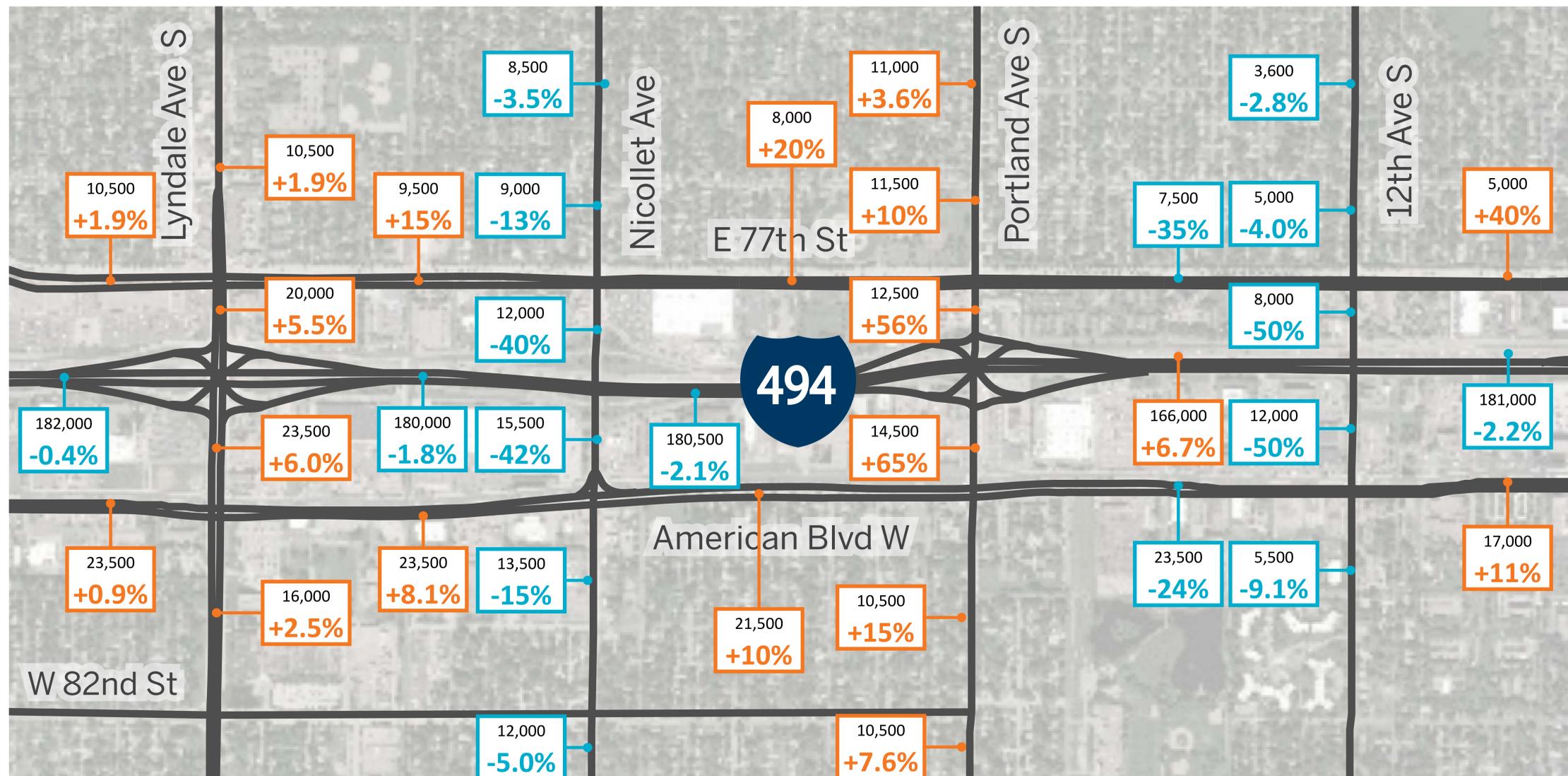
I don't use any of these bridges and/or entrance and exit ramps on a regular basis

I-494: AIRPORT TO HWY 169

How Could Ramp Closures Impact Surrounding Roads?

Permanent ramp closures may impact the surrounding roads by increasing or decreasing the amount of traffic on a particular section of road. The following maps show the estimated changes in the amount of traffic flow in the year 2040 under two possible scenarios.

Traffic Diversions Under Portland Ave Consolidation Scenario



Map Legend



This scenario includes removing entrance and exit ramps at Nicollet Ave. and 12th Ave. S and consolidating freeway access at Portland Ave S.

How Could Ramp Closures Impact Surrounding Roads?

Permanent ramp closures may impact the surrounding roads by increasing or decreasing the amount of traffic on a particular section of road. The following maps show the estimated changes in the amount of traffic flow in the year 2040 under two possible scenarios.

Map Legend

- Increase in expected 2040 traffic volumes
- Decrease in expected 2040 traffic volume
- xx,xxx Year 2040 Daily Traffic Volumes
- +XX% Change in Traffic Volume (%)
- XX%

This scenario includes the removal of the northbound entrance and southbound exit at W 82nd St.

Traffic Diversions Under W 82nd St Partial Ramp Closure Scenario

