U.S. Department of Transportation
Federal Highway Administration

Credit: Minnesota Department of Transportation.

I-35W North Corridor MnPASS Project

Minnesota Department of Transportation

Anoka and Ramsey Counties, Minnesota

Development of one new MnPASS Express (HOT) lane in each direction along existing interstate.

NOTABLE PRACTICES

☑ System-Level Planning Studies

- Planning studies provided a vision for the evaluation and implementation of projects along the corridor

☑ Environmental Analysis

- Alternatives explored included general purpose lanes, localized improvements, high-occupancy vehicle (HOV) lane, and MnPASS lane alternative

☑ Environmental Justice

- Level of service improvement and shorter travel times in the general purpose lanes compared to the No Build alternative
- Analyzed traffic diversion impacts

☑ Meaningful Public Involvement

- Hosted community socials at apartment complexes and manufactured home parks

INTRO & BACKGROUND

The I-35W North Corridor is a major freeway that connects the growing north suburban area of the Twin Cities to downtown Minneapolis and greater Minnesota. The construction limits of the I-35W North Corridor Preliminary Design Project extend from south of the County Road (CR) C interchange to north of the Sunset Avenue (CR 53) overpass. The project area is in Anoka and Ramsey Counties, and the I-35W corridor passes through eight developed and developing communities, including: Roseville, New Brighton, Arden Hills, Mounds View, Shoreview, Lexington, Blaine, and Lino Lakes. The Minnesota Department of Transportation (MnDOT) identified several factors justifying the need for the project, including pavement conditions, mobility, travel time reliability, and transit and carpool advantages.

Regarding mobility and reliability, traffic congestion exists on several segments along I-35W. MnDOT expects this congestion to increase, both in location and duration, as additional growth and development occurs in communities throughout the project corridor. An increase in congestion reduces mobility for all users along the I-35W corridor. Additionally, as traffic congestion increases, travel times and the variability in travel times on I-35W are also likely to increase.

I-35W is a significant multimodal corridor. Three express bus routes currently operate on I-35W between the northern suburbs and downtown Minneapolis/University of Minnesota. Nearly 90 express buses travel the I-35W corridor daily during peak periods. There are five park and ride lots in the project area, the largest being the 95th Avenue Park and Ride in Blaine, which has nearly 1,500 parking spaces. MnDOT has designated bus-only shoulders on northbound I-35W between CR C and 95th Avenue, and on southbound I-35W between County-State-Aid-Highway (CSAH) 23 and 8th Street, north of the Mississippi River and downtown Minneapolis.

Within the project corridor, there are operational challenges associated with the existing advantages provided to transit (i.e., bus-only

shoulders). With increasing congestion and slower travel speeds, MnDOT anticipates increased transit travel times in the future. The only time-saving advantage provided to encourage carpooling are ramp meter bypass lanes at Lexington Avenue and 95th Avenue.

Figure 1. I-35W North Corridor Project Area. Credit: Minnesota Department of Transportation.

SYSTEM-LEVEL PLANNING STUDIES

MnDOT has documented mobility and congestion problems on the I-35W project corridor in previous studies, beginning with the *Interstate 35 Corridor Management Plan* (CMP), completed in 2005. In addition to identifying future capacity issues from increased traffic congestion, the CMP noted that the number of additional lanes and transit service needed to achieve performance goals exceeded the levels identified in the Metropolitan Council's *Transportation Policy Plan*.

MnDOT conducted two phases of MnPASS system studies to identify candidate corridors for managed lanes projects. MnPASS system studies (1) identified the corridors that have the greatest potential to benefit from MnPASS lanes and (2) informed the MnPASS system vision and corridor investment prioritization for the metropolitan planning organization (MPO) and MnDOT long range plans. The Phase 1 study identified the I-35W corridor as one where MnPASS lanes would be most effective, and the Phase 2 study noted that the I-35W corridor had strong benefits related to transit service and downtown connectivity. The Phase 2 study also noted engineering risks and the considerable expense to build in this corridor.

Additionally, MnDOT and the Metropolitan Council completed the *Metropolitan Highway System Improvement Study* (MHSIS) in parallel with the Phase 2 MnPASS study. The purpose of the MHSIS was to develop a future transportation investment strategy that optimized investments made in the Twin Cities region by using multimodal-oriented managed lanes and comprehensive system management strategies. The MHSIS noted that I-35W north is one of the strongest transit corridors for the managed lane system and urged special consideration of the corridor's ability to serve regional and inter-regional trips based on close connections to I-394 and I-35W to the south. The presence of bus-only shoulder operations also makes the I-35W corridor to the north favorable for expansion of a managed lane facility.

MnDOT used these system studies to identify and prioritize MnPASS projects within the transportation network. When MnDOT identifies preservation (e.g., pavement resurfacing) or other construction work in these corridors, they consider the feasibility of adding MnPASS lanes to leverage their limited funding for mobility projects.

For the I-35W North Corridor project, MnDOT used the vision from the planning study to determine the scope of the environmental review. The system study identified four phases for the implementation of MnPASS lanes. MnDOT used the breakdown of phases from the

system study to support the logical termini for the National Environmental Policy Act (NEPA) review.

ENVIRONMENTAL ANALYSIS

The environmental review process included an Environmental Assessment (EA) under NEPA. The Federal Highway Administration (FHWA) issued a Finding of No Significant Impact (FONSI) in January 2018.

The three Build alternatives evaluated in the EA include: general purpose lanes, high-occupancy vehicle (HOV) lanes, and MnPASS lanes. MnDOT would restrict the HOV lanes to carpools, transit vehicles, and motorcycles during morning and afternoon peak periods. During off-peak periods, the HOV lanes would have no restrictions on use. The MnPASS lanes would operate like existing MnPASS lanes in the Twin Cities; they would be dynamically priced lanes during peak hours but would have no restrictions during off-peak hours.

Ultimately, the MnPASS lanes alternative was identified as the recommended alternative because it (1) best addressed the purpose and need for the project, (2) is the most cost-effective investment among the three Build Alternatives, and (3) is consistent with State and regional transportation plan policies and objectives. MnDOT did not identify substantive differences in potential human or environmental impacts among the Build Alternatives.

ENVIRONMENTAL JUSTICE

Regarding consideration of tolling and traffic impacts, the environmental justice analyses focused on level of service (LOS) in the general purpose lanes under the Build and No Build alternatives. MnDOT does not expect the MnPASS lanes to worsen conditions for drivers using the general purpose lanes, and the toll for the MnPASS lane is only associated with one travel lane on an existing multi-lane freeway. The proposed project will provide the same or better LOS and improvements in travel times in the general purpose lanes compared to the No Build Alternative.

Additionally, the EA included an income equity analysis to determine whether adding MnPASS lanes would place an unequal burden on lower income travelers. The EA concluded that the burden was not disproportionately high or adverse because:

- The MnPASS lane will operate as a general purpose lane during off-peak periods.
- Drivers may use the general purpose lanes to travel the route without having to pay a toll, ride transit, or share a ride.
- Based on travel demand forecasts, MnDOT does not expect the volume of traffic on adjacent roadways to increase as a result of traffic diversion to avoid tolls.

Construction began in March 2019, and lanes opened to traffic in August 2021.

MEANINGFUL PUBLIC INVOLVEMENT

During the environmental analysis process, MnDOT hosted 10 public engagement activities at various apartment complexes and manufactured home parks throughout the project corridor to make it easier to reach new participants. The formats for the events were primarily community socials but also included public information meetings and door-to-door activities at the requests of the property managers.

MnDOT noted that the department has placed more emphasis on public engagement and looked to identify innovative ways to engage the public and specifically target underrepresented communities. Because public meetings in the early evening overlap with meals or other family activities, MnDOT provided food and space for kids to improve the opportunities for public engagement.

The outcome of these public involvement events not only resulted in improved engagement, they also served as venues to provide project-related information (e.g., purpose and need, MnPASS lane system, schedule) and to obtain input from corridor users about current travel patterns and choices.

MnDOT provided surveys at these events to obtain information on demographics, typical travel modes, peak period use, travel times, and

willingness to pay for reliability. Although not statistically significant, the surveys indicated some willingness to pay tolls for reliability, but that willingness decreased as tolls increased. In addition to the survey results, MnDOT noted that this type of outreach was so effective to engage the public that they have implemented community socials for future projects.

COMMUNITY BENEFITS

The primary community benefit of the project is a provision for long-term, sustainable travel options for motorists and transit. In MnDOT's current system, they do not implement MnPASS lanes as stand-alone projects. MnDOT seeks to maximize use of public funds and minimize disruption to the traveling public by implementing planned and prioritized managed lanes projects in conjunction with other construction projects, such as pavement rehabilitation.

FOR MORE INFORMATION, CONTACT

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RESOURCES

MnPASS System Study Phase I
https://www.camsys.com/sites/default/files/publications/mnpass_system_finalreport.pdf

MnPASS System Study Phase II
http://www.dot.state.mn.us/rtmc/pdf/mnpass9-24.pdf

Metropolitan Highway System Investment Study
https://metrocouncil.org/Transportation/Planning/Transportation-Resources/Metropolitan-Highway-System-Investment-Study-(MHSI.aspx

I-35W North Managed Lanes Corridor Study
http://www.dot.state.mn.us/metro/projects/35wnorthmnpass/pdf/I35W-final-report-SRF-2013.pdf
EA, FONSI
http://www.dot.state.mn.us/metro/projects/35wnorthmnpass/documents.html

PHOTO CREDITS

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