

Draft Purpose and Need Summary

Rethinking I-94 Phase 2

Report Version 10

Minnesota Department of Transportation (MnDOT)

Metro District

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Introduction – Purpose and Need Overview

The purpose and need statement explains why an agency, the Minnesota Department of Transportation (MnDOT) in this case, is undertaking a project or a program of projects and what its objectives are. The “need” identifies **transportation** problems or deficiencies. The “purpose” is a broad statement of the intended transportation results and other related objectives to be achieved by a proposed transportation improvement. The purpose and need statement provides the basis for developing evaluation criteria, identifying a range of alternatives, and selecting the preferred alternative. It limits the range of alternatives which may be considered reasonable, prudent, and practicable, to comply with state and federal environmental process requirements.¹ Alternatives that do not meet the project purpose and need should not be further studied, as they are not considered viable. Additionally, assuming all other concerns are equal, if one alternative meets the project purpose and need better than another, then that alternative may be identified as the preferred alternative.

Rethinking I-94 is a carefully planned, multi-phase process. MnDOT completed Phase 1 and is currently in Phase 2 of the project schedule. Phase 1, the initial Community Engagement phase, lasted from 2016 – 2018. It included gathering feedback from corridor adjacent communities about I-94 – its condition, their usage, and community needs - and research into the cultural, historic and stakeholder makeup of the corridor to build a foundation of understanding for future planning and project work. Phase 2, the Environmental Process, focuses on receiving input from government agencies and the public on the drafted purpose and need document, as well as finalizing the scoping and Tier 1 Environmental Impact Statement documents.

Some projects (including Rethinking I-94 Phase 2) also identify goals beyond solving the identified transportation problems. While these goals are contained in a separate document and not a part of the purpose and need statement, they are also factors in developing and screening alternatives.²

This summary of the Purpose and Need statement provides the key takeaways of the transportation problems on Interstate 94 (I-94) in the cities of Minneapolis and Saint Paul that will lead to the development of a program of projects (the “need” for the program) and why those needs should be addressed (the “purpose”). Full details and findings can be found in the Purpose and Need statement.

¹ FHWA, ‘NEPA Implementation - The Importance of Purpose and Need in Environmental Documents’, *FHWA Environmental Toolkit*, 1990,

https://www.environment.fhwa.dot.gov/legislation/nepa/guidance_purpose_need.aspx

² MnDOT, ‘Purpose and Need Statement’, MnDOT Transportation Project Development Process (TPDP),

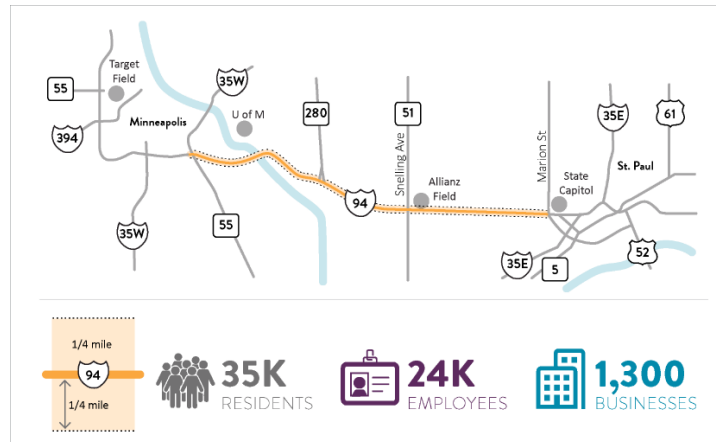
<https://www.dot.state.mn.us/project-development/index.html>

Program Area

This document uses the terms program area, program study area, or study area to refer to the portion of I-94 between I-35W/Trunk Highway (TH) 55 in Minneapolis and Marion Street in Saint Paul as well as the connecting access points to the corridor. The limits extend approximately a quarter of a mile on either side of I-94. These limits are identified in a draft logical termini memo.³ **Figure 1** shows this area. Specific analyses for some needs in this memo may extend beyond the identified limits to better understand problems on and near the corridor. The program area may be modified if technical analyses of alternatives indicate that they need to extend further, connect into downtown areas, or to establish viable alternatives.

The proposed program area is approximately seven and a half miles long. The affected area includes several neighborhoods made up of a diverse group of residents, businesses, religious and educational institutions, and entertainment zones. According to recent socio-economic data, there are approximately 35,000 residents, 1,300 businesses, and 24,000 employees in the program area within one-quarter mile of either side of I-94. In addition, the program area was found to have average daily traffic between 114,00 and 167,000 vehicles, with heavy commercial truck ranges between 4,650 and 6,500. I-94 is also an important corridor for bus service. Pre-pandemic studies found that a total of 130 express bus trips and 38 limited-stop bus trips use I-94 on a typical weekday during the morning and afternoon peak hours.

Figure 1 - I-94 Program Area in Minneapolis and Saint Paul



Corridor History

Since its inception, the Interstate system has served as a vital link for connecting goods to markets and connecting people from our nation's cities, towns and rural communities. I-94 is the eighth longest interstate and connects Port Huron in the Great Lakes region of Michigan with Billings in the northern Great Plains region in Montana. Regionally, I-94 serves statewide traffic through the metro area to Greater Minnesota and the adjacent states of Wisconsin and North Dakota. Locally, I-94 is an integral

³ Logical termini are the rational endpoints for a transportation improvement. See Rethinking I-94 Phase 2 – *Draft Logical Termini and Independent Utility*. WSB – February, 2021

part of the freeway system in the Twin Cities. It links the state’s two largest cities and their respective downtowns along with providing access the University of Minnesota, numerous commercial enterprises, and other educational institutions.

I-94 in the Twin Cities metropolitan area was constructed in the 1960s. While the new corridor successfully connected the major cities of Minneapolis and St. Paul, like many interstate projects in urbanized areas it was constructed through impoverished neighborhoods or neighborhoods without political power. As a result, many homes and businesses were removed and neighborhoods along I-94 became disconnected.

In 2015, MnDOT’s Commissioner at the time, Charles Zelle, acknowledged that past transportation policies and practices had disrupted and dismantled neighborhoods along the corridor and that the department would do better. In 2016, MnDOT began studying I-94 under the “Rethinking I-94” process.⁴

Rethinking I-94

During Rethinking I-94 Phase 1, which focused on engaging with stakeholders along the corridor, MnDOT defined Rethinking I-94 as “a long-term effort to improve MnDOT’s engagement and relationships with communities located within the program area.”⁵ The agency gathered input from public and stakeholder groups about community needs and interests, their use of and the condition of I-94. The 2,200+ completed surveys, 250 meetings and 50 listening sessions resulted in greater opportunities for listening to a variety of perspectives, strengthened agency-to-community relationships, and a foundational understanding of the state of I-94 today.⁶ Insights from feedback and in-depth cultural and historical analyses are to be used in guiding future planning and implementation phases.

Along with its commitment to better engaging stakeholders and improving relationships with communities, MnDOT took I-94-related feedback it received from stakeholders and developed the Livability Initiative. The Livability Initiative – referred to as the Livability Framework in Phase 1 – is intended to provide communities with opportunities to identify goals associated with health and the environment, economics, sense of place, safety, connections, equity, and trust.⁷ While a majority of the goals identified are largely outside MnDOT’s jurisdiction and cannot be fully addressed through the federal environmental process, MnDOT has made a commitment to working with stakeholders, coordinating agencies and other organizations to advance objectives beyond transportation that prioritize the wellbeing of those that live, work, and recreate near the corridor. Overall, the Livability Initiative is intended to provide flexibility in addressing items that MnDOT cannot address on its own as a transportation agency or as part of the environmental process.

In Phase 2, MnDOT took on the added step of releasing draft versions of the Purpose and Need and statement of goals - along with a draft version of evaluation criteria. The purpose of doing so was to

⁴ *Rethinking I-94 – Phase 1 Report*. MnDOT – August 1, 2018.

⁵ *Rethinking I-94 – Phase 1 Report*. MnDOT – August 1, 2018.

⁶ *Rethinking I-94 – Phase 1 Executive Summary*. MnDOT August 8, 2018.

⁷ *Livability*, Minnesota Department of Transportation - 2022, <https://www.dot.state.mn.us/livability/background.html>

raise public and community awareness of future transportation investments and continue to proactively engage community members in conversations prior to the legally required formal public comment period. The public then provided feedback on the drafts regarding logical termini, purpose and need, statement of goals and evaluation criteria, which was used to modify the draft documents.

What follows in this document was informed by that feedback.

Responsibility to the Environment

One common theme noted in the comments received from MnDOT's early release of draft documents was that the purpose and need and statement of goals should identify environmental enhancements or improvements. Examples included reducing air and noise pollution, addressing greenhouse gas emissions, and reducing the amount and distance people drive in single occupancy vehicles. There has been a groundswell of community support for addressing greenhouse gas emissions as part of Rethinking I-94. While the extent to which MnDOT can address this issue through the environmental process is currently limited by current federal guidance and mitigation practices^{8,9}, additional methods to incorporate and utilize this information will continue to be explored as they become viable.

Purpose

Phase 1 of Rethinking I-94 included efforts by MnDOT and its partners to identify issues with the regional freeway infrastructure, support local and regional transportation networks, and explore investments that support reconnecting neighborhoods and the revitalization of communities located along the program area.¹⁰ Building on prior outreach efforts with more detailed data and additional public input, a clearer purpose emerged.

Projects within the Rethinking I-94 program will accomplish the following:

- Improve mobility for people and goods on, along, and across the corridor in a way that facilitates community connections for all modes
- Enhance safety for people and goods on, along, and across the I-94 corridor for all modes
- Address aging infrastructure condition within the I-94 corridor
- Support transportation objectives consistent with adopted state and regional (Met Council) plans

⁸ FHWA, NEPA Implementation - Technical Advisory (T 6640.8A): Guidance for Preparing and Processing Environmental and Section 4(f) Documents, *FHWA Environmental Toolkit - Legislation, Regulations, and Guidance*, 1987, https://www.environment.fhwa.dot.gov/legislation/nepa/guidance_preparing_env_documents.aspx

⁹ 23 Code of Federal Regulations (CFR), Part 771, Environmental Impact and Related Procedures. <https://ecfr.io/cgi-bin/text-idx?SID=dda0eb289fead7eb18456de4c58f1d6c&mc=true&node=pt23.1.771&rgn=div5>

¹⁰ For more information, please visit MnDOT's Rethinking I-94 Phase 1 Study webpage at: https://talk.dot.state.mn.us/rethinking-i94/news_feed/phase-1

Needs for I-94 Program of Projects

This section discusses the transportation needs in the program area.¹¹ The purpose and need statement explains why MnDOT is undertaking a transportation project/program of transportation projects and what its objectives are. The “need” identifies the transportation problems or deficiencies. The “purpose” is a broad statement of the primary intended transportation results to be achieved. The purpose and need statement also provides the basis for developing evaluation criteria (measures by which different alternatives will be evaluated), identifying a range of alternatives, and selecting the preferred alternative. It limits the range of alternatives which may be considered reasonable and prudent, consistent with environmental process requirements. Alternatives that do not meet the project purpose and need should not be further studied, as they do not achieve what needs to be done.

Project needs are transportation problems to be addressed by the program of projects that will result from the Tier 1 Environmental Impact Statement (EIS). There are four transportation needs that have been identified for the corridor. They include:

- Infrastructure condition
- Mobility for people in motorized vehicles – cars, freight, and transit
- Walkability and bikeability – experience of people walking, bicycling, and rolling
- Safety for people in motorized vehicles – cars, freight, and transit

Infrastructure Condition

There are several types of infrastructure in the I-94 corridor that are part of the roadway network. This includes the pavement, bridges, retaining walls, noise walls, and drainage elements.

Maintaining infrastructure in a state of good repair extends the life of the highway system and increases the overall resilience of the transportation system. Resilience or resiliency is the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.¹² Climate change and extreme weather events present significant and growing risks to the safety, reliability, effectiveness, and sustainability of the Nation’s transportation infrastructure and operations.

The impacts of a changing climate (such as higher temperatures, sea-level rise, and changes in seasonal precipitation and the intensity of rain events) and extreme weather events are affecting the lifecycle of transportation systems and are expected to intensify. While transportation infrastructure is designed to handle a broad range of impacts based on historic climate, preparing for climate change and extreme weather events is critical to protecting the integrity of the transportation system.

Our key findings in analyzing the roadway subsurface along I-94 in the program area is that it’s beyond its useful life and many of the bridges located on or over I-94 in the program area have

¹¹ This section provides a summary of the Draft Purpose and Need in Conjunction with the Statement of Goals Technical Report (Purpose and Need Report). The Purpose and Need Report documents the facts and data supporting each problem or unsatisfactory condition identified for the I-94 program area.

¹² FHWA Order 5520: *Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*. FHWA – December 15, 2014. <https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm>

problems and will need work within the next 20 years. Some elements of the supporting roadway infrastructure, including retaining walls, noise walls, and drainage structures, are also in poor condition and could lead to future travel disruptions and impacts to adjacent properties.

Mobility for People in Motorized Vehicles – Cars, Freight, and Transit¹³

Mobility, the ability of a person or people to travel from one place to another, on I-94 within the program area is considered deficient due to congestion problems during the morning and afternoon travel times. The problems include items listed below, which are detailed in the Purpose and Need statement.

- Poor level of service (all vehicles)
- Multiple hours of congestion (all vehicles)
- Reduction to vehicle speed (cars & freight; transit)
- Increases in vehicle delay (cars & freight; transit)
- Poor travel time reliability (all vehicles)

Mobility issues are expected to get worse in the future as the region continues to grow and demand on I-94 increases. Mobility problems impact all modes that use I-94: cars, freight and transit (mobility for nonmotorized users who travel along and across I-94 is discussed in Walkability and Bikeability – Experience of People Walking, Bicycling, and Rolling).

MnDOT's summary as it relates to the state of mobility for people in motorized vehicles along I-94 in the program area has a demonstrated mobility problem based on poor levels of service, multiple hours of congestion, reduced vehicle speeds, increases in vehicle- and person-delay, and poor travel time reliability.

Walkability and Bikeability - Experience of People Walking, Bicycling, and Rolling¹⁴

Walkability is the ability to reach destinations safely and comfortably on foot or using a mobility device. Bikeability is the ability to reach destinations safely and comfortably by bike. Mobility and safety for these roadway users are a priority for MnDOT.

People walking and biking currently cross I-94 using a mix of dedicated pedestrian bridges and bridges or underpasses shared with other modes of transportation. Some of these facilities are less comfortable for users because they have higher traffic volumes and/or intersect with freeway entrance and exit ramps where traffic may be traveling at higher rates of speed.

Existing walking and biking facilities are not consistently designed and are considered substandard throughout much of the corridor. The importance of properly designed infrastructure for pedestrians and bicyclists was a common theme identified by residents during the Rethinking I-94 engagement process. This has also been identified as an issue by the cities of Minneapolis and Saint Paul, as well as Hennepin and Ramsey Counties.

¹³ Several documents have been prepared that discuss mobility items on I-94. References will be provided by subsection as to the appropriate reference document and year of data.

¹⁴ Additional detail regarding pedestrian and bicycle conditions can be found in Rethinking I-94 Phase 2 – *Bicycle and Pedestrian Existing Conditions and Network Connectivity*. WSB – July 31, 2019 (Updated May 28, 2021).

There is demand for walking and biking on both sides of I-94 in the program area, but roadways crossing or next to I-94 are poorly equipped to serve multimodal trips. This is demonstrated by a high rate of bicycle and pedestrian crashes on some roadways.

Americans with Disabilities Act (ADA) Compliance

ADA standards are in place to ensure safety and accessibility for all users. A review of existing pedestrian facilities along and crossing the I-94 corridor based on Public Right of Way Accessibility Guidelines (PROWAG) indicate that a large percent of pedestrian facilities do not meet ADA design standards. For facilities within MnDOT's property, only 36 percent of curb ramps and 50 percent of sidewalks meet ADA standards. Most other agencies do not have readily available data on ADA consistency. An inventory was not completed because it is believed that most resources within the program area would not meet ADA standards.

Safety

Safety is a priority for all transportation agencies. I-94 has historically had a high rate of crashes, with a number being severe. Crashes on the highway or at interchanges can indicate design conditions that create problems or reflect poor traffic conditions (congestion). Crash information for the period January 1, 2016, through December 31, 2020, was used to conduct a safety analysis of the program area. The report details that the entirety of the program area has crash rates above the critical rate, a measure used to indicate whether a particular area segment has a safety problem.

Mainline and interchange safety concerns affect all modes that use I-94, including cars, freight, and transit vehicles. On the intersecting streets, crashes include motor vehicles, pedestrians, bicyclists, and other modes such as motorized scooters.

Pedestrian and bicycle facilities across the I-94 ramp intersections present safety issues and result in a lack of comfort for users. Automobiles exiting I-94 are traveling at high speeds and are transitioning from a pedestrian-free environment to one where there is a high probability of encountering a pedestrian or bicyclist. Drivers of vehicles at on-ramps are accelerating and focused on getting onto the freeway. Frontage roads along I-94 are tied into many interchange ramp locations and/or immediately adjacent to those areas and have inconsistent bicycle and pedestrian crossing infrastructure, further increasing conflict points between motorized vehicles and non-motorized users.

For each of the intersecting streets, the crash rates and critical crash rates were calculated for the segments that extended out up to 1,000 feet in each direction from the interchange ramp terminals.¹⁵ Eighteen of the segments on intersecting streets had crash rates higher than the critical crash rates. Recognizing that non-motorized users (pedestrians, bicyclists, etc.) are present on intersecting roadways, the segments with crash rates above the critical rates were further reviewed to understand if the crashes included non-motorized users. Cross streets that have segments with crash rates that are higher than the critical crash rates and have pedestrian and/or bicycle crashes account for over 10 percent of the crashes include Cedar Avenue, Riverside Avenue, Snelling Avenue, Hamline Avenue, and

¹⁵ See the "Safety for People in Motorized Vehicles" section for more information on the crash analysis methodology.

Dale Street. The highest number of non-motorized crashes occurred near the Hamline Avenue interchange (11), with eight pedestrian and one bicyclist crashes occurring on the north segment and three pedestrian and one bicyclist crashes occurring on the south segment.

The report concludes that the full length of I-94 within the program area, one interchange, and eighteen intersecting street segments have a demonstrated crash problem. The prevalence of a crash rate exceeding the critical rate along the entirety of the program is a key safety concern identified in the report.

Additional Considerations

There are four additional considerations that influence the program development process and alternatives evaluation.

- **Consistency with Adopted State and Regional Plans:** This includes the MnDOT 20-Year State Highway Investment Plan, MnDOT Metro District Bicycle Plan, MnDOT Statewide Pedestrian System Plan, and Metropolitan Council 2040 Transportation Policy Plan.
- **Geometric Deficiencies:**
 - **Vertical Clearance Consistency:** This refers to the inconsistent height underneath bridges and its effect on the movement of freight through the corridor.
 - **Additional MnDOT Design Parameters:** This refers to areas with deficient decision sight distance and gap acceptance length (geometric criteria for freeway design).
- **Recent Projects in the Area (2015-2021):** This includes projects in and near the program area completed by MnDOT and other agencies.
- **Future Projects in the Area:** This includes projects in and near the program area with dedicated funding within the next five years.