



Final Report  
Executive Summary

Prepared by SRF Consulting Group



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# ACKNOWLEDGEMENTS

## Project Management Team (PMT)

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# EXECUTIVE SUMMARY

The City of Elk River along with its partners from MnDOT, Sherburne and Anoka Counties and the City of Ramsey completed the Highway 10 Corridor Study. The goal of the study was to develop a long-term 20+ year vision for the Highway 10 corridor and then build consensus around this vision. The long-term vision would be something that would be implemented over time as opportunities arise and funding becomes available. The goal of the long-term vision is to ensure safe and efficient operations along the Highway 10 corridor while supporting economic development within the area and region. The study included the following public engagement to facilitate the analysis process:

- Virtual open houses
- Targeted stakeholder focus group meetings
- Community surveys
- Study specific website

The study was guided by the Project Management Team (PMT), which was comprised of representatives from the City of Elk River, MnDOT District 3, and MnDOT Metro. The PMT played an integral part in the study by providing oversight and input on technical analyses, concept alternatives development and evaluation and the public engagement process. Additionally, the project included a Technical Advisory Board (TAB) that served as a sounding board and provided input and guidance at key project milestones. Members of both the PMT and TAB are identified in the Acknowledgements section of this report.

## Existing Conditions Summary

A comprehensive analysis of the conditions along the Highway 10 corridor within the study area was completed. The assessment included a review of existing planning documents, preliminary environmental review, analysis of existing and future traffic operations and safety, and review of the multimodal system. Highway 10 is an important corridor for personal and freight transportation, connecting local and regional users to greater Minnesota. After analysis of the current conditions along the roadway, the following concerns were identified:

### OPERATIONS

- All study intersections currently operate at an overall LOS C or better.
- Sides-street access to Highway 10 is challenging, with most stop-controlled approaches operating at LOS E or worse during the peak periods.
- Existing ADT volumes on Highway 10 are approaching the facility's planning-level capacity.
- There are limited or no adequate gaps for motorists to safely access Highway 10 during the peak periods.
- Vehicles were observed using the shoulders as acceleration lanes to access Highway 10.

### SAFETY

- 200 crashes have occurred within the study area during the past 5-years.
- The study corridor has crash and severity rates that are statistically significant compared to locations with similar characteristics.
- The 171st Avenue intersection has crash and severity rates that are statistically significant compared to locations with similar characteristics.



	<ul style="list-style-type: none"> <li>• The Intersections of 173rd Avenue and 165th Avenue had crash rates just under the statewide expected crash rate.</li> <li>• Majority of the crashes occurred at intersections (61 percent) and were mostly rear end and angle crash types. Majority of the rear end crashes were for westbound vehicles at the signalized intersection of 171st Avenue.</li> </ul>
ACCESS	<ul style="list-style-type: none"> <li>• Current access along Highway 10 does not meet the MnDOT guidelines for access spacing.</li> </ul>
SOCIAL, ENVIRONMENTAL, AND ECONOMIC CONTEXT	<ul style="list-style-type: none"> <li>• Most land adjacent to Highway 10 is agricultural and impacts on this land should be minimized.</li> <li>• Several water resources are in the study area. Future recommendations should minimize impacts to floodplains, wetlands, or drinking water supply management areas.</li> <li>• The roadway is close to many potentially contaminated sites and must minimize interaction with these sites.</li> <li>• The Oliver Kelley Farm, a nationally registered historic property, is located directly adjacent to the corridor.</li> </ul>

## Alternatives Considered

The alternative development process was multifaceted using a range of inputs including technical data, public comments, design parameters, and guidance from the PMT and TAB. The primary goal was to identify a unified vision for the Highway 10 corridor that can be implemented over time as opportunities arise and funding becomes available. Given the complexity and needs of the area, this vision may take 20+ years and significant fiscal investment to realize. Therefore, this study is the first step in the process and additional planning, environmental, design, and engagement efforts will be needed in the future.

The initial long-term alternatives that were considered include:

- A No Build alternative, which is also known as the do-nothing option.
- Alternative 1, which is an at-grade signalized corridor alternative that would include the addition of new traffic signals along the corridor coupled with access modifications and acceleration lanes.
- Alternative 2 represents a more innovative at-grade corridor alternative, which includes a combination of reduce conflict intersections (also known as RCIs) along with potentially more traffic signals, access modifications, and acceleration lanes.
- Alternative 3 is a grade-separated corridor alternative that provides a free flow option for Highway 10 motorists. This free flow corridor would be accomplished through a series of new interchanges, bridges, and/or on or off ramps. This alternative would also include access closures along Highway 10.

A comprehensive evaluation of each alternative was completed. Evaluation criteria was developed based on the existing conditions analysis and centered around safety, mobility and convenient access being high priorities for the corridor. Bike and pedestrian accommodations, project costs and right-of-way impacts were also used in the evaluation process. The results of the preliminary evaluation showed that alternative 3, which is the grade-separated corridor alternative, meets the majority of the evaluation criteria well, with the exception of cost. This alternative has the highest costs; however, it provides the best safety and mobility for all users.

## Long-Term Vision

Following the second round of stakeholder and public engagement, additional discussions with the PMT occurred to confirm the long-term vision for the Highway 10 Corridor would be a grade-separated corridor with interchanges at Highway 169 (existing), Twin Lakes Road and Adams Street (see [Figure E - 1](#)). Additionally, access closure and a robust local roadway network will be needed to support this long-term vision (see [Figure E - 2](#)). MnDOT and the City will need to have additional coordination to determine the final access configuration for 173rd Avenue and 171st Avenue. At the conclusion of this study consensus was not reached. The configuration shown in [Figure E - 2](#) is the City's preferred Highway Local Roadway Network. MnDOT's preference would be to have full access closures at 173rd Avenue and 171st Avenue (see [Figure E - 3](#)).

Figure E - 1. Highway 10 Long-Term Vision

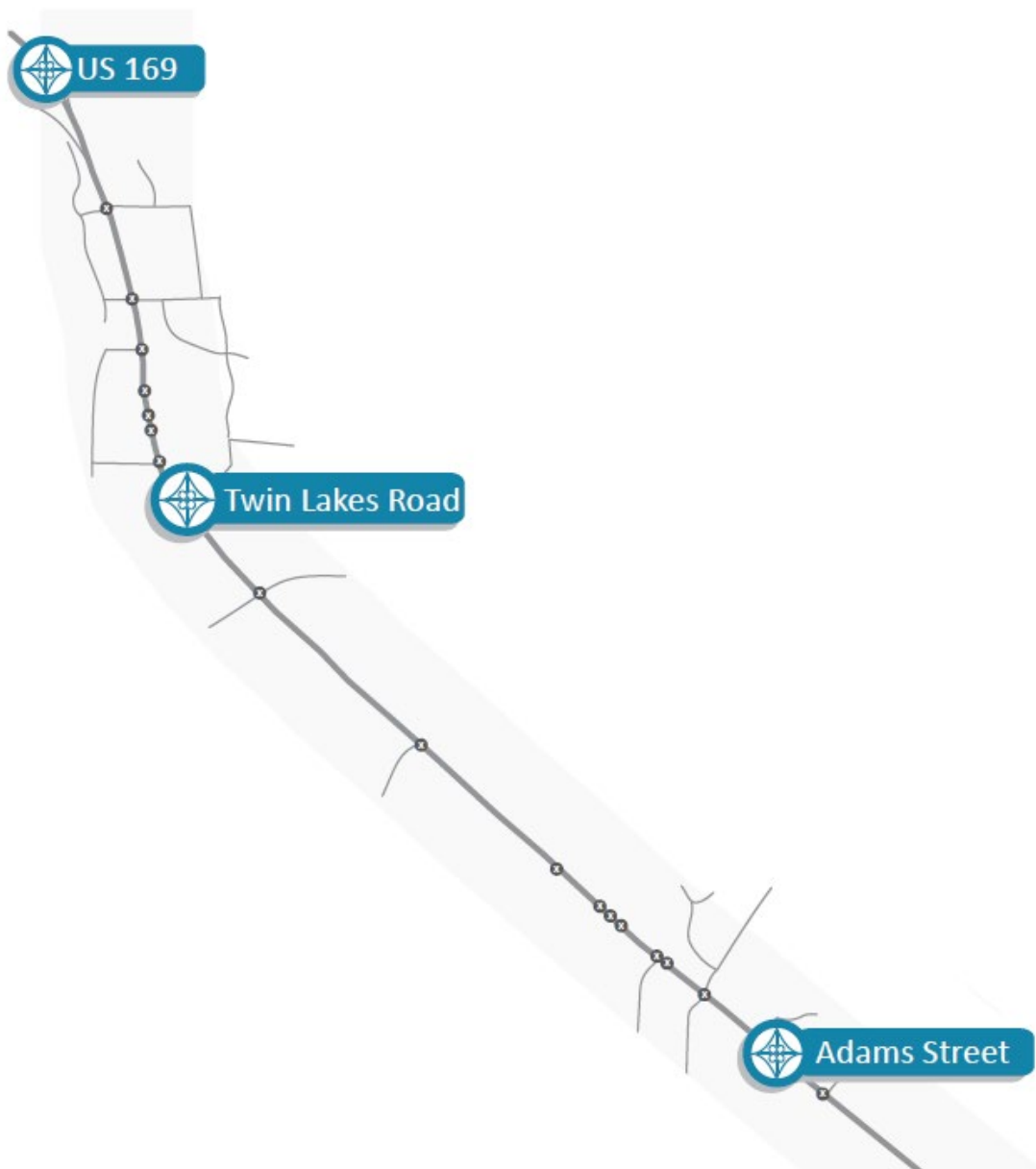


Figure E - 2. Highway Local Roadway Network – Community Supported



Figure E - 3. Highway Local Roadway Network – MnDOT Supported



## Next Steps

The critical next step for this study is to complete significant environmental review, as required by the National Environmental Policy Act (NEPA), to fully analyze these conceptual alternatives and implementation strategies. Through this environmental process, interchange design and implementation will be determined. The environmental review process also includes additional opportunities for public input. Following the environmental review, the project would move into preliminary and final design.

The goal of the study was to identify a long-term 20+ year vision for the Highway 10 corridor ensures safe and efficient operations along the Highway 10 corridor while supporting economic development within the area and region. Implementation of the long-term vision will take commitment and collaboration from all study partners. The cities, counties, and MnDOT will need to continue to collaborate to determine next steps such as environmental review, preliminary and final design, and agency cost sharing and coordination.