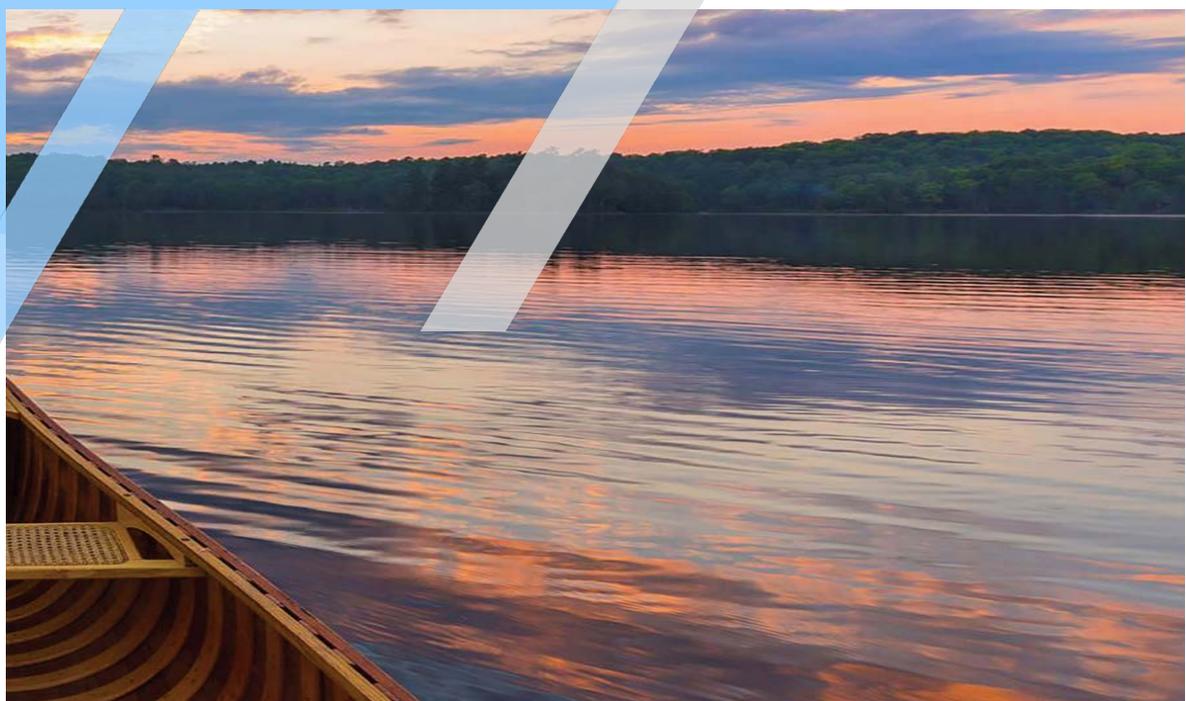


Headwaters Regional Development Commission

Corridor I-197 Analysis Report



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Report Scope

Executive Summary

The Minnesota Department of Transportation (MnDOT) is planning improvements to the Highway 197 corridor (Paul Bunyan Drive) within the city of Bemidji, from Bemidji Avenue to Gillett Drive. Figure 1 shows an aerial view of the proposed project area. The project could be developed to improve traffic safety, upgrade aging infrastructure, and provide safe access for all users including motorists, pedestrians, bicyclists, and transit riders. There are many safety problems throughout this segment of Highway 197, making it a critical crash location. From 2011-2015, 180 crashes happened between the intersection with Gillett Drive and the intersection with Bemidji Avenue. This report helps to uncover the challenges along the corridor by analyzing interview responses from businesses along the highway and identifying trends. Interview results and trends were organized by business sector.



Figure 1: Aerial view of the identified project area, I-197 corridor, from Gillett Dr. NW (left) to Bemidji Ave. (right).

Survey and Data Tables

Survey

MnDOT and the Headwaters Regional Development Commission conducted interviews with businesses, with questions pertaining to business plans that would affect the corridor, daily operations such as foot traffic, number of trucks arriving/departing at facility, importance of transit, and any transportation barriers. Additionally, the survey asked clients what they liked about Paul Bunyan Drive (Highway 197) and what changes they would like to see along the corridor. Figures 2, 3, and 4 depict the results of the survey by using a multilevel analysis.

Data Tables

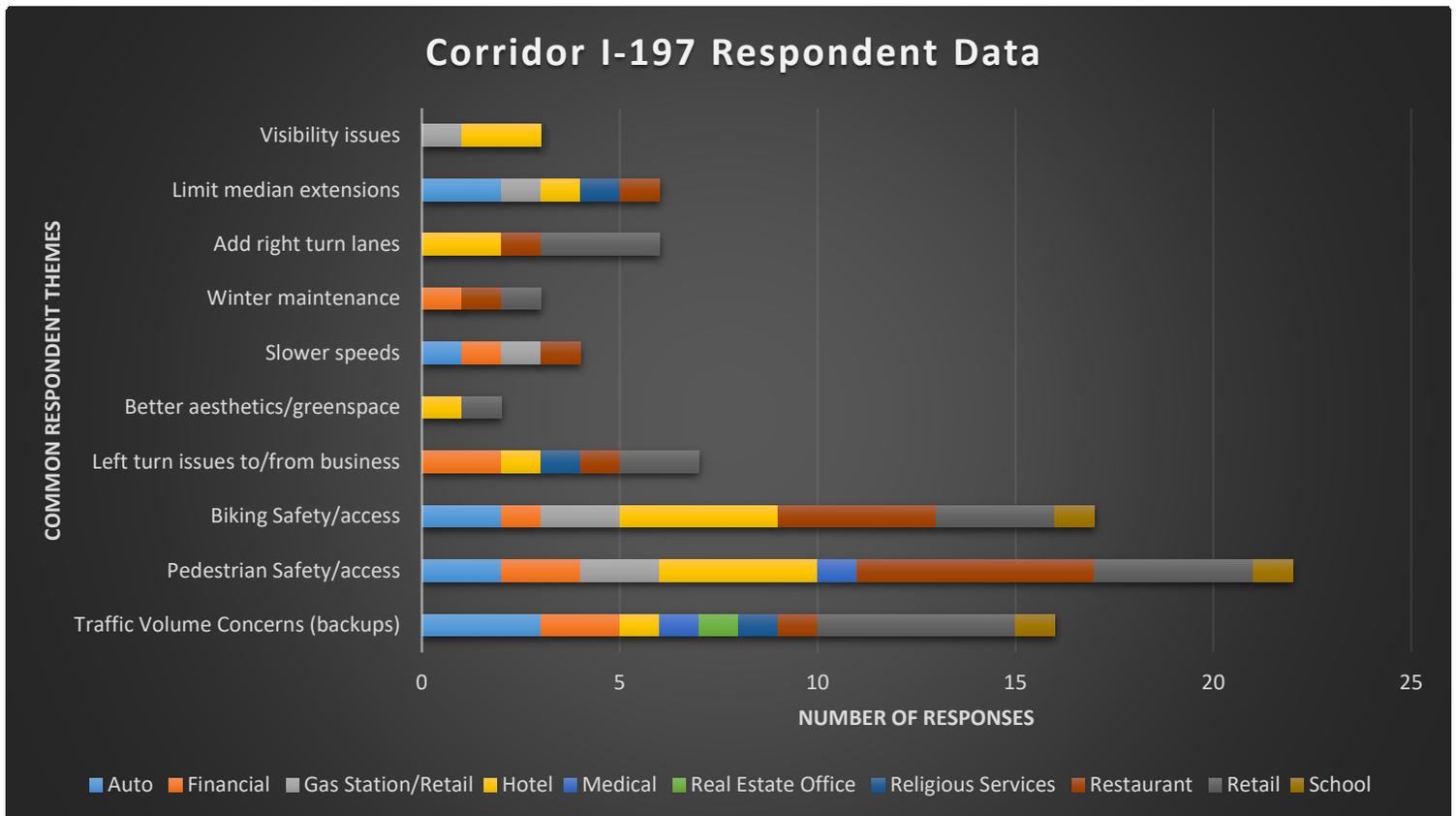


Figure 2: Top themes identified through business interviews with respondents along the I-197 corridor. Business sectors are organized by color and total responses are labeled accordingly.

Comparison By Top Themes

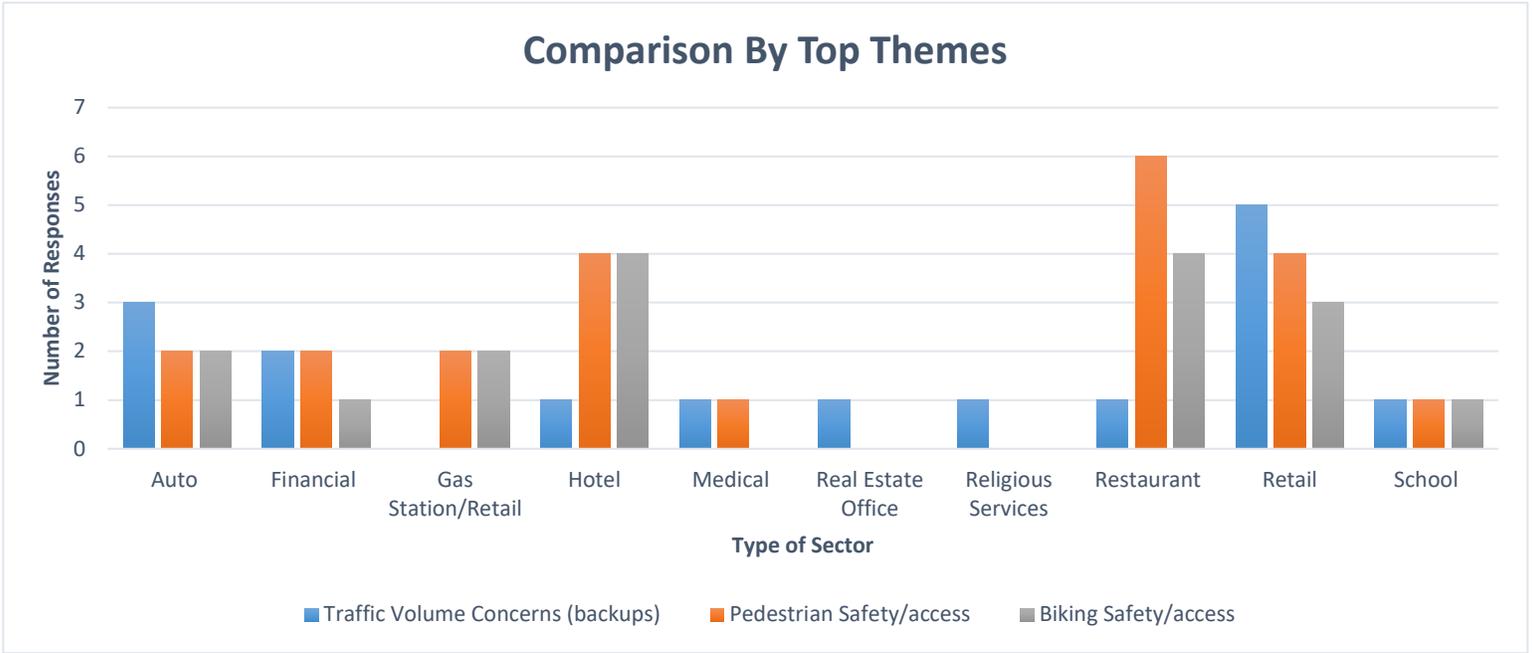


Figure 3: Top three themes identified in business interviews along I-197 corridor. Responses are organized by business sector, showing commonalities between themes.

Comparison By Top Responding Sectors

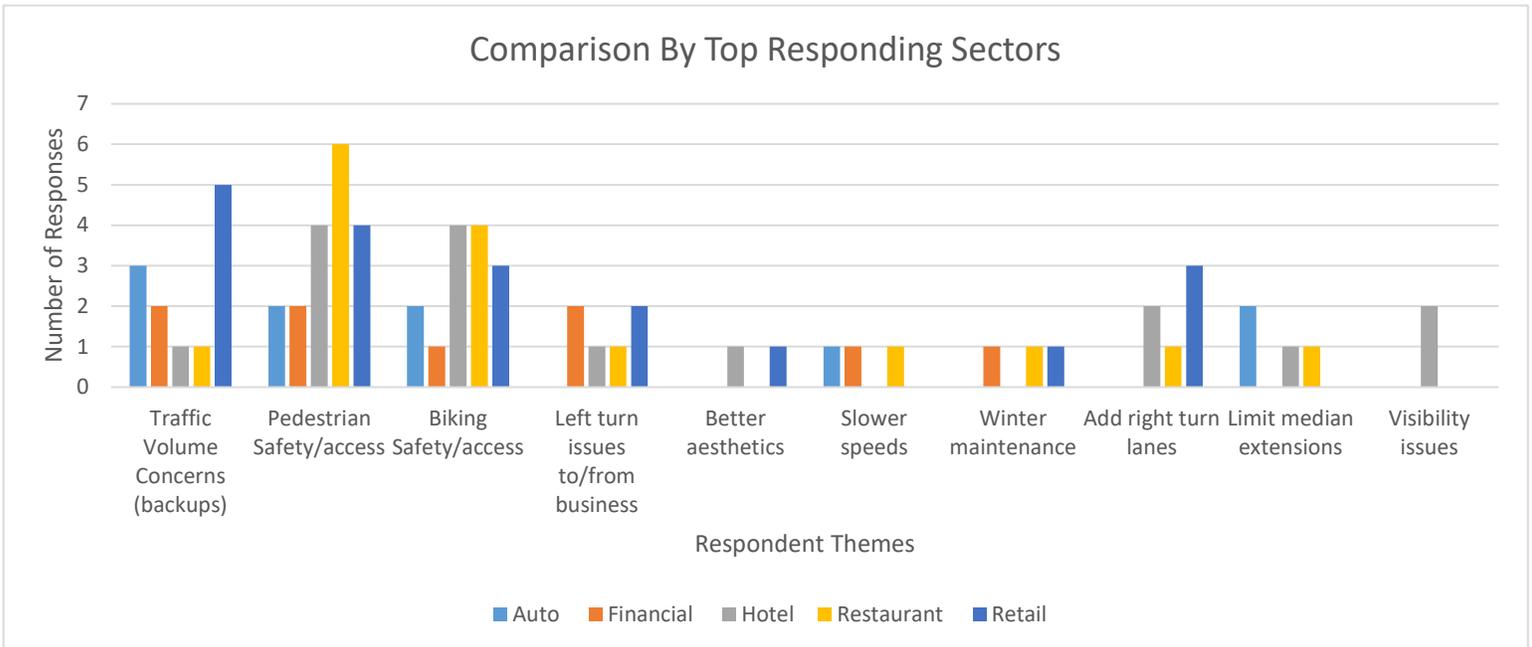


Figure 4: Top five responding business sectors along I-197 corridor and the common themes found in those responses.

Analysis

Under careful analysis, Figure 2 gives a snapshot of the all the sectors and themes that were a result of the interview questions. For the purpose of this report, the term “theme” refers to the concerns and barriers that respondents reported were important for corridor improvement. When reviewing all of the common themes among business sectors the outcome was as follows:

- **61.1% of all businesses interviewed responded that *Pedestrian Safety and Access* was a concern.**
- **47% of all businesses interviewed responded that *Biking Safety and Access* was a concern.**
- **44% of all businesses interviewed responded that *Traffic Volume and Backups* was a concern.**
- **19% of all businesses interviewed responded that *Left Turn Issues To and From the Business* was a concern.**
- **17% of all businesses interviewed responded that *Adding Right Turn Lanes* was a concern.**
- **17% of all businesses interviewed responded that *Limiting Median Extensions* was a concern.**
- **14% of all businesses interviewed responded that *Slower Speeds* was a concern.**
- **8% of all businesses interviewed responded that *Winter Maintenance* was a concern.**
- **8% of all businesses interviewed responded that *Visibility Issues* was a concern.**
- **6% of all businesses interviewed responded that *Better Aesthetics and Green Space* was a concern.**

Out of all the themes compared, biking/safety access, pedestrian safety/access, and traffic volume concerns were the leading variables. The number of responses for the leading themes exceeded 15, and were also common across the board. With that, 62 businesses were contacted and 36 were actually interviewed.

In Figure 3, the data was isolated by only looking at the top three themes across all of the sectors, which allows for a more detailed analysis. The graph eliminates the sectors that did not answer whether they thought biking/safety access, pedestrian safety/access, and traffic volume were concerns. By doing this, it can be deduced which themes have common interests within sectors.

Figure 4, similar to Figure 3, also shows isolated data by grouping together the top responding sectors across all themes. With this data, only those businesses that had a high amount of responses (over 10) are reported in the graph. Subsequently, because these sectors have multiple concerns, it is important to see where commonalities lie between like sectors, as opposed to just comparing popular themes.

Outliers and Further Thoughts

Most businesses that were interviewed gave similar concerns, resulting in the above identified common themes. However, it is essential to recognize outlying responses to give a complete picture. Two businesses voiced that better aesthetics and more greenspace were important improvements to be considered. These two businesses came from the retail and restaurant areas, showing that improved greenspace and aesthetic value are important to different sectors. These responses should be considered in the I-197 project, not only because they offer varied perspectives across business sectors, but also because increased greenspace and aesthetics could serve other purposes as well. Enhanced pedestrian and bicycling options can include aesthetic updates in addition to improving safety. Furthermore, it is important to note that 19% of businesses interviewed stated that there was nothing they would change about the I-197 corridor at this time. Two companies indicated concerns that changes to the corridor would negatively impact access to their businesses, and in turn reduce customers or sales. This shows that all responses and business concerns, not just common themes, should be considered when addressing the project along the I-197 corridor. Lastly, in Figure 5, located in Appendix D, the map shows all the businesses interviewed along the corridor.

Appendix A

Highway I97 Interview Questions

- 1) Tell us a little bit about your business or organization:
 - a. Do you have plans to make significant investments in your business that would change how you use Paul Bunyan Drive?

- 2) Tell us about your day to day operations:
 - a. Do you have a large volume of traffic concentrated at the same time of day?
 - b. Approximately how many trucks arrive and depart your facility daily?
 - c. How important is walking, biking or transit to your business/organization?
 - d. Are you aware of any transportation issues with accessing your business/organization?

- 3) What do you like about Paul Bunyan Drive?

- 4) What would you like to change about Paul Bunyan Drive?

Appendix C Table of Businesses Interviewed

Business Name	Business Name
1. American	2. Applebees
3. Autozone	4. Bank Forward
5. Bemidji Chrysler Center	6. Best Western
7. Big Apple Bagels	8. Builders First Source
9. Carquest	10. Century 21
11. Chester Berg Toyota	12. Country Kitchen
13. Culvers	14. Destination Sporting Goods
15. Dicks Northside	16. Dominos
17. First Baptist Church	18. First National Bank
19. Holiday Inn Express	20. Ideal Pawn
21. Ken K Thompson	22. Marketplace Foods
23. McDonalds	24. Med-Express Urgent Care
25. Menards	26. Netzer's Floral
27. Simonson Market	28. Stamart
29. Stittsworth Meats	30. Super 8 Motel
31. Taco Johns	32. UPS Store
33. Trek North High School	34. TruStar Federal
35. Valvoline	36. Wal-Mart

Appendix D Map of Corridor with Businesses Interviewed

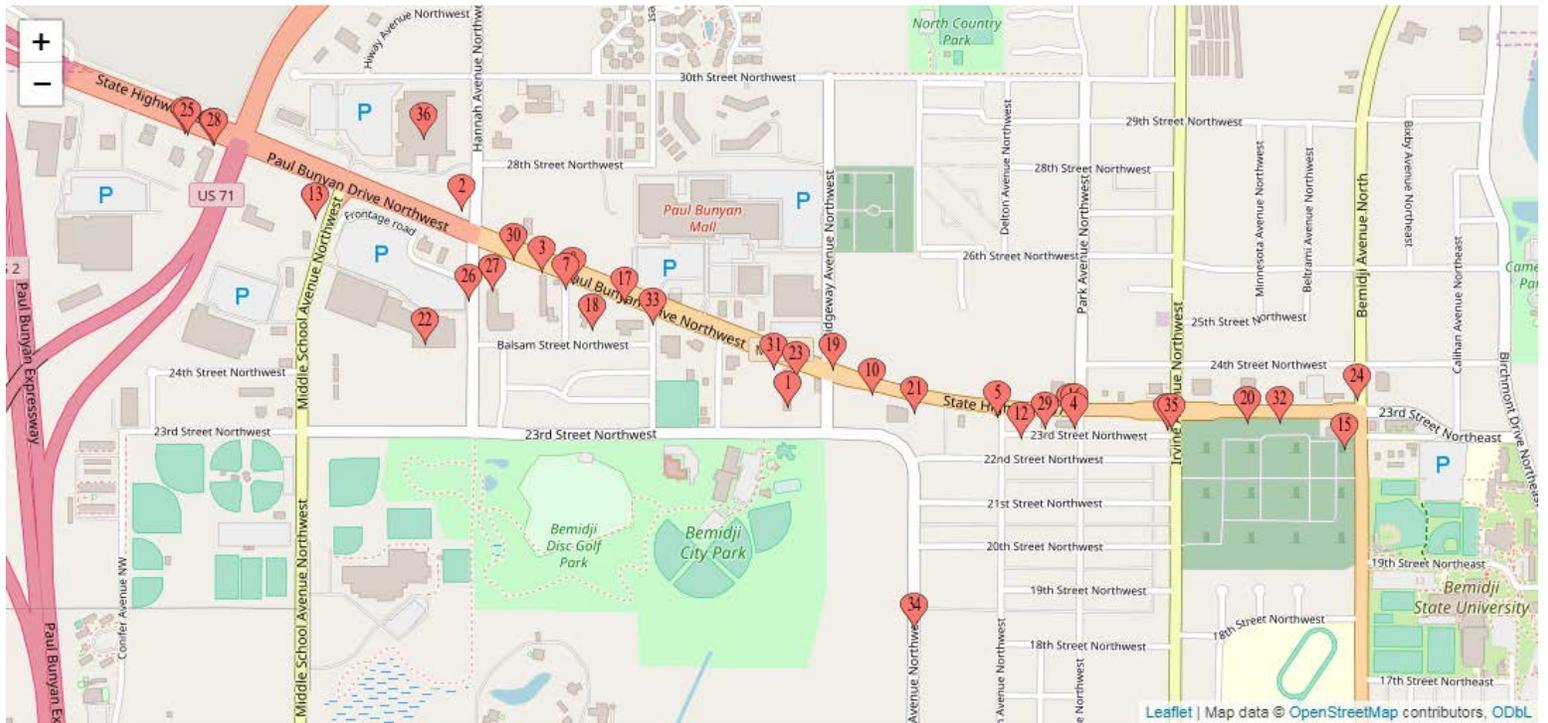


Figure 5. Map of I-197/Paul Bunyan Drive with Businesses Interviewed