



MEMORANDUM

TO: Elizabeth Nijkamp, Engineer Review Manager, El Paso County

FROM: Paul Brown, FHU

DATE: November 15, 2022

SUBJECT: **On-Call Contract #17-067H-1; PO # 8115428**
Traffic Impact Study Reviews
Task Order #6: Lorson Ranch Commercial TIS – Second Review (P2211)

This memorandum provides a list of comments on the October 2022 Lorson Ranch Commercial Traffic Impact Study (TIS) prepared by Matrix Design Group for The Landhuis Company. Our comments are based on requirements provided in the County’s Engineering Criteria Manual (ECM), Appendix B.

Comments

Comments on the TIA are divided into general requirements to conform to ECM TIA report requirements and technical and report specific comments that request further clarification or missing information.

General Comments

The following are general requirements that need to be met in the Lorson Ranch Commercial TIS to meet ECM requirements:

- I. The intersection analyses continue to have several key shortcomings.
 - a. The peak hour factors shown in the intersection analysis printouts (various appendixes) do not meet the requirements of ECM Section B.3.1.B.
 - b. Existing signal timings were not obtained and applied at the Marksheffel Road / Fontaine Boulevard intersection under existing conditions.
 - c. Section B2.4.B of the ECM requires an evaluation of traffic signal progression. Bandwidth targets are provided in ECM Section B.4.1.B. The TIS disregards signal progression, and states that signal operations have been evaluated “independently of any coordination between signals” (page 25). The signalized analyses need to be updated to reflect progression in accordance with the ECM requirements. Signal cycle lengths should be constrained accordingly. We acknowledge that Marksheffel Road is being transitioned to the City of Colorado Springs. A progression analysis along Marksheffel Road is still required to evaluate operations along County roadway approaches to Marksheffel Road and generally along Fontaine Boulevard.
 - d. Traffic signal warrants were evaluated using “... AM and PM peak hour volumes to project 4-hour and 8-hour volumes ...” (TIS page 25). Given that project-specific daily traffic distributions are presented in Appendix A of the TIS, these analyses should be updated.
 - e. Throughout the report, yellow + all-red times appear to use the software defaults. Given the 45mph speed limit along Fontaine Boulevard and the 55mph speed limit along Marksheffel Road, these default values are not appropriate. Please update accordingly.

2. We recommend disapproval of the deviation request for a new access along Fontaine Boulevard from a traffic perspective.
 - a. The access serves less than 160 vehicle trips (combined entering and exiting) based on Figure 11 and Figure 12 in the TIS.
 - b. Based on the 2040 Total Traffic levels of service shown in Table 10 and Table 11, the Fontaine Boulevard / Carriage Meadows Drive intersection (#3) and the Access 2 / Carriage Meadows Drive intersection (#20) should be able to accommodate these trips.
 - c. Fontaine Boulevard is forecasted to operate over its theoretical capacity adjacent to the new access per the text on page 38 of the TIS.

Technical Report Comments

Comments on the technical report can be found in the Lorson Ranch Commercial PDF and the Lorson Ranch Commercial Deviation Request PDF documents in Bluebeam.

Conclusions

Based on the comments above, we feel that the subject TIA should be updated and resubmitted. The revised study should update the operational analyses and either remove the Fontaine Boulevard site access or provide additional justification for retaining it.