



MEMORANDUM

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

FROM: Paul Brown, FHU

DATE: June 15, 2022

SUBJECT: **On-Call Contract #17-067H-1; PO # 8115428**
Traffic Impact Study Reviews
Task Order #2: Crossroads North TIA Review (SP207)

This memorandum provides a list of comments on the January 2022 Crossroads North Traffic Impact Study (TIS) 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.

As background, FHU reviewed the October 2020 Crossroads-Meadowbrook TIS that reflected the site being evaluated in the current Crossroads North TIS. References to FHU's comments on the previous TIS are included here where appropriate.

General Comments

The following are general requirements that need to be met in the Crossroads North TIS to meet ECM requirements:

1. The current TIS utilizes year 2020 counts presented in the Crossroads-Meadowbrook TIS. These counts no longer meet the 1-year requirement in ECM Section B.3.1. Further, some of the development described in the previous TIS has been completed, indicating the volumes along Newt Drive / Meadowbrook Parkway may have changed significantly since the 2020 counts were collected. More recent counts would also allow for updates to the pandemic adjustment made in the previous TIS. New count data should be provided, and related analyses should be updated.
2. The growth rates described in the current TIS are the same as those used in the previous TIS and are based solely on OTIS data for SH 94. At a minimum, CDOT data from US 24 should also be considered. FHU commented on the previous TIS that these rates should be compared with PPACOG growth in this area. The applicant has supplied PPACOG data in Appendix B but did not evaluate those data with respect to this project. The project's growth rate should be revisited, and future year analyses should be updated if necessary.
3. ECM Section B.2.4.B requires a progression analysis for a full TIS. A progression analysis was conducted and documented for Marksheffel Road, but not for SH 94 or US 24. Since access permits may be required (per TIS Section 5.6) and both US 24 and SH 94 are recommended to be widened, progression analyses should be provided for all three study corridors. Progression analyses are also a state highway access code requirement along state highways.
4. ECM Section B.3.3.A requires the use of the 'latest data' contained in the ITE Trip Generation Manual. The 11th Edition of the Manual was released in 2021, but the 10th Edition of the Manual was used in the TIS. Since the development being studied has been changed, we do not believe

that consistency with the previous TIS is necessary and that the trip generation in the current TIS should be updated.

5. ECM Section B.5.4 requires that mitigation measures be physically feasible. The TIS relies on 6-lane cross-sections for US 24 and Marksheffel Road but does not indicate if the applicant is dedicating sufficient ROW for these cross-sections. The TIS should outline these commitments if needed.
6. ECM Section B.4.1.C requires adequate bicycle and pedestrian amenities. The TIS does not identify pedestrian amenities along the Marksheffel Road (arterial) site frontage. We acknowledge that project-specific amenities would not be reasonable along CDOT category EX facilities. The TIS should document proposed pedestrian amenities (if any) along the arterial.
7. ECM Section B.4.1.C also requires links to attractions within ¼ mile of the project. The TIS does not identify connections to the secondary regional trail along SH 94 shown in the MCTP. The TIS should document a proposed connection (if any) to this regional trail.
8. Section 5.8 of the TIS evaluated two options for the north site access along Marksheffel Road. As part of this effort, ECM Section B.2.4.B requires a safety evaluation. Although a safety evaluation heading is shown in Section 5.8, the related text appears to be a conclusion for the overall section, and no safety review is included. The applicant should provide this safety review.

Technical Report Comments

Comments on the technical report can be found in the Crossroads North TIS PDF document in Bluebeam.

Conclusions

Based on the comments above, we feel that the subject TIA should be updated and resubmitted. The revised study should refine the baseline traffic volumes, clarify future projections, and provide missing analyses.