

MEMORANDUM

To: City of Aurora, Department of Public Works
From: Cassie Slade, PE, PTOE
Date: January 25, 2021
Project: Aurora One Traffic Impact Study
Subject: Response to Comments

Fox Tuttle Transportation Group received comments (dated 11/10/20) from the City of Aurora in reference to the 2nd submittal of the Aurora One development traffic impact study (dated September 2020). We appreciate your thorough review. The responses for the traffic related comments are listed below:

Comment 1. Non- auto trips and internal trip reduction appear to not have been taken either revise text or make it clear these have been taken.

Response: The internal capture and non-auto reductions were applied in the 4th and 5th columns, respectively, of Table 5 (Trip Generation Summary). These are “1 minus percentage” for the reduction. The equation to estimate trips is “size of land use * ITE rate * internal capture factor * non-auto factor.”

Comment 2. Review Access 5 vs figure/SYNCHRO

Response: Reviewed and did not see the discrepancy. This has become Access #4 and remains proposed as full movement.

Comment 3. 3-thru lanes does not fully remove requirement to include aux lanes per CDOT SHAC or City requirements.

Response: Acknowledged.

Comment 4. Add identified comments/text

Response: Acknowledged.

Comment 5. See comments throughout.

Response: Listed below and responded to.

Comment 6. Page 6, re: Pedestrian and Bicycle. Picadilly is designated as a Primary Bike Route with Separated Bike Lanes in NEATS (2018). Sand Creek Regional Greenway appears to be very near the study area.

Response: Text added.

Comment 7. Page 7, re: Pedestrian and Bicycle. Add here or in a separate future development area: As identified by City Traffic Engineers, pedestrian crossings at unsignalized locations shall comply with the recommendations found in the US Department of Transportation Federal Highway Administration's Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations and shall be determined at later stages with Site Plans / Preliminary Plats.

Response: Text added.

Comment 8. Page 7, re: Transit. Picadilly Road, and 6th Avenue, are both designated in NEATS (2018) as future high frequency transit routes

Response: Text added.

Comment 9. Page 14, re: Year 2040 Planned Transportation Network. plus identified aux lanes

Response: Text added.

Comment 10. Page 26, Year 2040 Background + Project Intersection Capacity Analysis; Stephen D. Hogan Parkway at Valdai Street. The City has a two viable geometric options to mitigate pedestrians and cyclists concerns at channelized right turns at signalized intersections. Include the SB right turn lane, channelization and accel lane.

Response: A southbound channelized right-turn and acceleration lane was added and analysis was shown in "with improvements" scenario.

Comment 11. Page 26, Year 2040 Background + Project Intersection Capacity Analysis; Picadilly Road at 6th Avenue. Due to the poor LOS, and proximity to signalized intersection, add that if an accident pattern develops, then this intersection will be converted to prohibit left out (3/4 movement).

Response: This note was added to the text and Figure 2.

Comment 12. Add text: For intersections not analyzed in this study, anticipated volumes are low and side street stop control shall be considered acceptable unless studied by a later Traffic Impact Study. All-way stop control shall not be used unless an All-way stop warrant has been met per MUTCD.

Response: Text added in report and on Figure 11.

Comment 13. Page 27, Year 2040 Background + Project Intersection Capacity Analysis. CDOT SHAC may be excessively conservative and thus recommendations always included the 95th percentile queue but not always need to meet the CDOT SHAC recommendation that does not take intersection operation into consideration.

Response: Understood and agree. The City standards refer to the use and compliance with CDOT standards. I appreciate you identifying which locations can have a reduced length.

Comment 14. Table 2, Stephen D. Hogan Parkway at Picadilly Road, LOS in 2040 Background + Project. What is the LOS if a right turn lane is added here?

Response: A northbound and westbound right-turn were evaluated in the new “with improvements” scenario.

Comment 15. Table 2, Stephen D. Parkway at Valdai Street. With more than 300 volumes, channelize & provide accel lane.

Response: The southbound right-turn was evaluated with channelization and acceleration lane and results are shown in new “with improvements” scenario.

Comment 16. Table 5, Trip generation. Previous comment not incorporated: Add line items for the identified internal trip reduction and mode shift reduction as identified on pdf pg 23. Add line item below Total Pass-by Trips for both the 10% and 5% reduction or change text on pg 23.

Response: Row added for sum of internal capture and non-auto reductions.

Comment 17. Table 11, SH 30 at Picadilly Road, Southbound right-turn length. Why not 275' or 300'?

Response: Reduced to 275 feet.

Comment 18. Table 11, Stephen D. Hogan Parkway at Picadilly Road Westbound Right. Add CDOT SHAC analysis.

Response: Added.

Comment 19. Table 11, Stephen D. Hogan Parkway at Picadilly Road. Add WB right turn in 2040, addition of lane does not negate the need of this aux lane.

Response: Added to the analysis and shown in the new “with improvements” scenario.

Comment 20. Table 11, Queue Lengths. Can support a reduction of this to 50' based on queuing & future 3-thru lane configuration.

Response: Updated majority of auxiliary lane lengths. Held a couple as shown previously based on volume and through lane queue length to ensure turning vehicles are able to get into the turn lane prior to the intersection.

Comment 21. Table 11, Stephen D. Hogan Parkway at Valdai Street, Southbound Right. Can support 275'.

Response: Reduced to 275 feet.

Comment 22. Table 11, Queue Length. Minimum aux lane length is typically 50'. Some highlighted lengths may be lowered. (recommended not require, shall meet 95th percentile)

Response: Updated majority of auxiliary lane lengths. Held a couple as shown previously based on volume and through lane queue length to ensure turning vehicles are able to get into the turn lane prior to the intersection.

Comment 23. Table 11, Stephen D. Hogan Parkway at Rome Street, Westbound Right-Turn. Add to 2040, see previous comments on 3-lane still requiring aux. Support 50'.

Response: Added a westbound right-turn lane.

Comment 24. Table 11, Stephen D. Hogan at Access 7 (updated to 8). No EB or WB right turn lanes needed for Access 7.

Response: Agree. Right-turns were not proposed.

Comment 25. Table 11, 6th Avenue at Rome Street, Northbound Left. Check - mislabeled?

Response: Good catch. Updated typo.

Comment 26. Figure 2, Picadilly Road at 6th Avenue. May be limited if an accident pattern occurs (to 3/4).

Response: Note added.

Comment 27. Figure 2, Stephen D. Hogan at Access 5. Per later figures 3/4 movement.

Response: This intersection is full movement throughout report and analysis. The discrepancy was not found. Note this is now Access #4.

Comment 28. Figure 2. Add the Traffic Signal icon to the Key.

Response: Added.

Comment 29. Figure 7C. Connectivity is required to meet Roadway network requirements.

Response: Connectivity shown.

Comment 30. Add requested note for non-identified intersection control.

Response: Note added for internal intersections.

Comment 31. Figure 9A, Stephen D. Hogan Parkway at Picadilly Road. WB right turn volume warrants a right turn in 2040.

Response: A westbound right-turn was added and results are shown in new “with improvements” scenario.

Comment 32. Figure 9B, Stephen D. Hogan Parkway at Access 5. Circled.

Response: This intersection is full movement throughout report and analysis. The discrepancy was not found. Note this is now Access #4.

Comment 33. Figure 10B, Include this figure with 2040 final am(pm) LOS

Response: Peak hour LOS was added to Figures 10A and 10B.

Comment 34. Figure 11. Based on network connectivity this is anticipated to be collector (see roadway manual).

Response: Updated to collector.

Comment 35. Figure 11, southwest area. This access needs to connect with at least 1 drive that connects to Hogan.

Response: Potential connectivity shown.

Comment 36. Figure 11. Local roadways or private drives (change label)

Response: Label updated.

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