

Proposed Day Care Hudson, Ohio Traffic Impact Study Review #1

Dear Mr. Rapp,

At the request of the City of Hudson, GPD Group has completed a peer review of the Traffic Impact Study (TIS) for the proposed Learning Experience daycare center to be located on Terex Road, south of SR 303 (W. Streetsboro Road), prepared by TMS Engineers and submitted on January 7, 2026. Also included in our review is evaluation of the proposed site driveway as shown on conceptual plans dated February 9, 2026. We have completed a comprehensive review of the TIS and conceptual site plan and offer the following comments:

1. Section 1.1 Purpose of Report – The report indicates that the site will be served by one driveway located on the west side of Terex Road approximately 150' south of the intersection with SR 303 (W. Streetsboro Road). However, the conceptual site plan (including both the plan shown on Figure 1.2 and the more recent plans provided by the City) shows the driveway approximately 300' south of the intersection.
2. Section 1.2 Study Objectives – Reference to the *Ohio Manual of Uniform Traffic Control Devices (OMUTCD)* should be updated to reflect the *National Manual of Uniform Traffic Control Devices (MUTCD)* and the *Ohio Supplement to the MUTCD*.
3. Table 1.2 Intersection Operational Goals – The current version of the OATS manual no longer differentiates between locations within or outside of an MPO.
4. Section 1.5 References – Several of the references need to be updated (i.e. *OMUTCD*, *Trip Generation Manual*, *Traffic Engineering Manual*).
5. Section 2.1 Transportation Network Study Area, Roadway & Intersection Characteristics – Existing turn lane lengths on Figure 2.2 do not appear to match what is actually available, based on a review of Google Streetview. Additionally, there is a marked bike lane between the EB thru and right-turn lanes that should be noted. Please field verify the EB turn lane storage lengths. While the NB left-turn lane is striped at approximately 220', in reality the entire length of the two-lane NB approach is used for left-turn storage.
6. Section 2.3 Traffic – The text indicates that counts were performed on Tuesday November 20, 2025. Traffic volume sheets say Thursday. Please confirm which is correct.
7. Table 3.2 PM Peak Hour Pass By Rates – We acknowledge that this is information published by ITE, but question the validity of pass-by rates from one study performed more than 35 years ago. As there is no better resource, we approve of the pass-by rates that were used.
8. Table 3.3 Trip Generation Summary – The trip generation values are based on the fitted curve, which while often considered more accurate, also result in fewer trips for this case. The study should be updated using trip generation based on the average rates.

9. Table 3.6 PM Pass-by Trip Origins and Destinations – We disagree with most of the data in this table. Trips entering from the east should be 585, not 912. The 912 value is what exits to the west and includes traffic from the south on Terex Road and from the north on Hudson Crossing Parkway. Trips exiting to the east should be 641, not 1055, which is what enters from the west. It is our opinion that no pass-by should be included from the north. The 520 trips shown entering are what actually do pass the site but largely originate from the east and west. The total pass-by trips are overinflated because they double count turns from SR 303 onto Terex Road. These changes will affect all pass-by distribution percentages and volumes.
10. Figure 3.1 Site Generated Non-Pas-By Traffic Distribution – For primary trips the entering and exiting percentages at the driveway need to be the same. If someone is making a trip specifically to drop off their child, they will arrive and return from the same direction (e.g., NB left in followed by EB right out, SB right in followed by EB left out). Revise trip distribution accordingly.
11. Section 3.3 Future Traffic – Rounding the No-Build volumes to the nearest 10 is not required for a TIS, even by ODOT standards. In this case it results in apparently lower or equal future volumes than existing. Please remove rounding on future submittals.
12. General comment on capacity analysis – Please provide full HCS reports rather than the results summary so data inputs can be verified.
13. Note that all Build analysis results will change based on comments related to trip generation and distribution.
14. All analysis results indicate that the NB left-turn movement at SR 303 (W. Streetsboro Road) and Terex Road will queue up to or beyond the proposed driveway, even at the location further south on Terex Road. This is not mentioned and would, in fact, be a greater issue if the driveway were in fact 150' south of the intersection. Please acknowledge and address potential blocking of the driveway.
15. It appears that the QSR for the EB right-turn movement will be > 1.0 in all PM scenarios when adjusted to reflect existing condition.
16. Section 4.2 Capacity & LOS at Development Access Intersection – All analysis needs to be updated with revised volumes based on previous distribution and trip generation comments. The analysis also assumes using the existing NB left-turn lane for the intersection to access the site, which is not possible with the new driveway location and wouldn't be feasible even if the driveway were further north due to queuing from the signal. None of the TWSC analyses are realistic if traffic is queued beyond the driveway.
17. Section 4.3 Auxiliary Turning Lane Warrant Analysis at Access Intersections – All analysis is based on a 4-lane section. The proposed site drive is not located in a 4-lane section. While the NB provides two lanes, one of those is actually the left-turn lane to SR 303; SB is in the taper reduction from two lanes to one. We recommend using the 2-lane turn lane charts, which will likely warrant both left- and right-turn lanes at the site driveway.
18. Section 4.5 Improvements to Accommodate Study Area Traffic – While it is acknowledged that No-Build traffic queues beyond the marked storage for the NB left-turn lane, in reality the entire length of the two-lane approach functions as a left-turn lane and provides approximately 500' of storage. Restriping could provide most of the needed storage and would not impact operations at the church driveway.
19. Site Plan Comments - The conceptual site plan is erroneous in showing an existing median opening. The proposed driveway location will require a new median opening, which is adjacent to the beginning of the NB left-turn lane and within the SB lane reduction from two lanes to one.

This is problematic for several reasons. Developing a left-turn bay to the site adjacent to the existing left-turn lane to SR 303 will be confusing for drivers. Developing a right-turn lane just before the lane reduction should be possible but could also have safety ramifications related to improper lane changes.

The study will need updated and resubmitted addressing the comments above. A preliminary roadway improvement plan showing the proposed median opening and development of turn lanes, meeting ODOT and City design standards is needed.

GPD Group appreciates the opportunity to provide these types of traffic engineering services to the City of Hudson. Should you have any questions or comments that require additional information, please call me at (216)-927-8654 or email me at jmbennett@gpdgroup.com.

Respectfully Submitted,

GPD Group



Judith M. Bennett, PE, PTOE
Project Manager / Senior Traffic Engineer

cc: Brad Kosco, PE, PS (City of Hudson)
Kevin Westbrook, PE, PTOE (GPD Group)
File