

March 20, 2013

Mr. Paul Kaspar, P.E.
City of Bryan
PO Box 1000
Bryan, Texas 77805

Re: Edgewater Subdivision Signal Warrant Analysis

Dear Mr. Kaspar:

Alliance Transportation Group, Inc. respectfully submits the following responses to the review comments generated by the draft Traffic Signal Warrant Analysis submitted related to the proposed Edgewater Subdivision in Bryan, Texas. The review comments are repeated along with our responses.

- Pages 5 and 7-Alliance states that Warrants 1 and 2 are applicable at both study intersections, but we think they should clarify this statement. Studying these warrants are "applicable", but neither warrant is satisfied at either intersection with existing and build-out conditions.

Response: The intent of the warrant report is to first summarize all warrants for signalization and identify those which apply to the proposed intersection location(s). Then, for the applicable warrants, further discussion is provided related to the traffic data collected for the study.

- Page 21-Good assumptions in Table 4 based on current conditions. However, west side growth along the SH 47 corridor could easily increase the westbound Villa Maria distribution numbers.

Response: The TIA prepared for the Walmart store under construction at the former Texas Hall of Fame location was provided as reference. Distribution from the Walmart TIA was used for guidance. We do concur that additional development west of SH 47 could impact the distribution, but the expectation is that this development would be completed before significant development occurs west of SH 47.

- Page 23, 2nd and 3rd paragraphs Text refers to "Table 1..." but this should say "Table 5..."

Response: This has been updated



- Page 26, 2nd and 3rd paragraphs Text refers to "Table 1..." but this should say "Table 6..."

Response: This has been updated

- Page 29-31 Table 7 and Table 8 and its implications for left-turn lanes look appropriate. In this case (for both intersections), safety will be the overriding factor in the installation of left-turn lanes, not operational improvements. We will likely have to consider these as a future public improvement for 80% build-out and would be necessary if one or both locations ever needed traffic signals.

Response: Comment noted. The engineer's position is that if a traffic signal were to be installed, then it would be highly recommended that turn lanes be constructed.

- Page 31 Nothing specific here, just a general comment, where an intersection only satisfies Warrant 3 (Peak Hour Volume) and no other warrants, this is generally considered in the traffic engineering field as a "weak" case for a traffic signal. In other words, if other nonsignalized intersections meet Warrants 1 (eight hour volume) and/or 2 (four hour volume), these intersections should be a higher priority for funding for signals. Furthermore, Autumn Lake Drive meets Warrant 3 (peak hour volume) in the 80% build-out, but the study assumes that the southbound right-turn volumes are included in the analysis. A proper geometric design prior to signalization should include a southbound right-turn lane, especially considering the west side growth along SH 47, in The Traditions area, in the BioCorridor area, and in the Health Science Center area. If a right-turn lane existed on Autumn Lake Drive, would Warrant 3 be satisfied in 80% or 100% build-out? Also, there is enough pavement width on Autumn Lake Drive right now (about 56 feet) to add a southbound right-turn lane, but would

require the median and monument sign to be removed or reduced in size.

Response: Comment noted. The peak hour warrant was evaluated as trip generation estimates for developments do not provide an hourly distribution of entering and exiting traffic. In general terms, however, if the location does not satisfy the peak hour condition, it is fairly likely that it would not satisfy the four hour or eight hour conditions either. While we agree that a right turn lane would be appropriate, the projected volume of left-turns would be sufficient to satisfy the peak hour volume condition.

If you have questions or need additional information, please let us know.

Sincerely,
Alliance Transportation Group, Inc.

A handwritten signature in black ink, appearing to read "Scott A. Feldman".

Scott A. Feldman, P.E, P.T.O.E.
Senior Transportation Engineer