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**PLANNING . ENGINEERING . INFORMATION TECHNOLOGY**

REPORT OF JOE MEHRA, P.E. PTOE, Review comments of the Comprehensive Transportation Review – Wisconsin Avenue Baptist Church Sunrise Senior Living, prepared by Gorove/Slade dated October 8, 2018 (Revised).

1. The existing development is a 350 seat church and a 56-student day care center
2. The proposed program consists of a 250-seat church and an 85 unit assisted living facility.
3. The Gorove/Slade report is designed to provide the proposed development's impact on the local transportation network. Gorove/Slade cites in their report, "This report accomplishes this by identifying the potential trips generated by the proposed development, above the baseline existing condition, on all major modes of transportation." Gorove/Slade fails to accomplish this purpose as described below.
4. Gorove/Slade used the following methodology for estimating vehicle trip generation for the proposed development: They utilized the Institute of Transportation Engineers (ITE) Trip Generation Report to estimate trips for the existing church and daycare center, then applied an "employment based (trips from home to work) mode split assumption" to estimate vehicle trips to and from the church for the weekday and Sunday. In other words, their methodology assumed that the church members are going to work on Sunday rather than going to church on Sunday. The daycare vehicle trips were similarly applied an arbitrary picked mode split number to estimate vehicle trips to the church/day care. This methodology is flawed and does not meet the transportation industry standard. The industry standard for estimating vehicle trip generation for an existing development is to observe or survey the existing vehicle trip generation and not use ITE trip rates. This should be done for the existing church and the daycare center. The observed or surveyed trip rates should then be used to compute vehicle trips for the proposed development.

Ironically, Gorove/Slade collected data at two comparable Sunrise communities to estimate the vehicle trip generation for the proposed facility. Why did they not use the ITE Trip generation report to estimate trips for the proposed Sunrise development (similar to the methodology they used to estimate vehicle trips for the church and daycare center)? The ITE Report shows that the 85 units of Sunrise would generate a total of 16, 22 and 24 vehicle trips during the AM, PM and Sunday peak hours. The ITE estimated trips are as much as 50% higher than the Gorove/Slade estimates from observations at two locations.

Gorove/Slade should survey the existing church and daycare center and use the existing observed data rather than data developed assuming that the church Congregants are "driving to work on Sunday" and using the home to work mode split.

5. Gorove/Slade estimates future church traffic using ITE trip rates and applying a "work trip mode split". ~~The board of trustees of WABC have expressed their intention to continue or expand their congregational and non-religious community service activities in their joint WABC/Sunrise facility. These activities could entail several hundreds of separate visitor trips per weekday, as indicated by a filing WABC submitted to the BZA in 2008. church-related traffic would decline by one one-third (to 6 trips per weekday), in line with the smaller maximum congregation size, and that day care-related traffic would cease entirely (from 59 trips per weekday; Gorove Slade p. 19).~~ Yet the board of trustees of WABC have expressed their intention to continue or expand their congregational and non-religious community service activities in their joint WABC/Sunrise facility. These activities could entail several hundreds of separate visitor trips per weekday, as indicated by a filing WABC submitted to the BZA in 2008. The estimated additional activity varies from an estimated 522 to 788 person trips to the church daily. This activity is in addition to the regular church activity. These 522 to 788 person trips were not computed by Gorove/Slade in their future trip estimation. This additional activity could add approximately 680 to over 1,000 vehicle trips daily to and from the Church. This additional activity could add 126 vehicle trips during the AM peak hour and 87 vehicle trips during the PM peak hour on a typical weekday.
6. Section 3.2.3 of the DDOT Guidelines for Comprehensive Transportation Review (CTR) Requirements states that a CTR is expected to include further analysis of vehicle impacts if the proposed site generates 25 vehicle trips in the peak directions for either peak period, AM, PM, or weekend. As shown in 5 above, the site is projected to generate more than 25 vehicle trips during the peak hours. Therefore, the requirements of Section 3.2.3 have not been met. A

comprehensive traffic impacts should be conducted and submitted to DDOT for review.

7. In summary, Gorove/Slade has underestimated the existing trips by using wrong methodology to develop trip rates that would be used for future trip generation. Further, they did not incorporate other activities that the church is proposing to have in the future church operations.
8. Shared parking analysis – Gorove/Slade shows in Table 2 of their report that the church has a maximum demand of 23 parking spaces on Sunday. However, Gorove/Slade shows in Table 4 of their report that the church is estimated to generate 34 vehicle trips in one hour. These 34 vehicles entering the church parking lot need 34 parking spaces and not 23 (as shown in Table 2). The shared parking analysis needs to be revised to correct for this discrepancy.
9. The traffic report also does not address how some of the larger trucks would be able to turn into the facility's driveway on Alton or exit via Yuma. Alton Place, designated as a "local" street, is supposed to have 7 feet on each side for parking and 8 feet for each lane of the two-way street. This totals to the 30 feet width of the street. Yuma street is four feet wider. This raises the question of how the 28-ton and 30-foot box trucks would be able to turn onto the street. Gorove/Slade should demonstrate using AutoTurn or other methodology that the trucks can enter and exit from the loading areas.
10. In Conclusion, the trip generation is flawed using incorrect methodology, is underestimating trips due to other planned activities and has not met the requirements of Section 3.2.3 of the DDOT Guidelines for Comprehensive Transportation Review. The shared parking analysis is flawed and needs to be corrected. The traffic study should be revised and submitted to DDOT for their review and approval.