



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION ENGINEERING / PLANNING

225 E Robinson Street, Suite 450, Orlando, FL 32801 P 407.540.0555 F 407.540.0550

MEMORANDUM

Date: August 26, 2016

Project #:
19323.03

To: Francis Franco

From: William Oliver, Jennifer Musselman

Project: Lake-Sumter MPO Traffic Management System

Subject: Review of Lake Commerce Center Traffic Impact Study

At the request of Lake-Sumter MPO, Kittelson & Associates, Inc. (KAI) has reviewed the July 2016 Tier III traffic study for the Lake Commerce Center. The 110,000 square feet of building area is expected to generate 161 PM Peak hour trips with site access on SR 25 / US 27. The following comments / questions have arisen from this review.

- The professional Engineering Certification is not signed / dated
- The introduction should state that this is a Tier III traffic study.
- Please define the future year of analysis and the PM Peak period that was used in the report narrative.
- The LOS thresholds listed in table 2 do not match the TMS segment report for
 - Blackstill Lake Road
 - CR 455 – Ridgewood Ave to CR 50
 - CR 455 – CR 50 SR 50
 - CR 561 – Turnpike Rd to US 27
 - S Grand Hwy – SR 50 to Hooks St

The LOS capacities shown are actually lower than those in the TMS report for all but the CR 561 segment which is reported as higher. The discrepancy persists through the concluding analysis in Table 10. It does not appear that any new deficiencies would arise from correcting this.

- CR 561, 8th St to CR 561A, Scrub Jay Lane, and Sullivan Road are not represented in the TMS segment report. Please cite the source for the LOS and reserve capacity used. The LOS capacity shown for Scrub Jay Lane is significantly less than the stated LOS capacity would indicate.
- Please include the method/source for calculating both internal capture and pass-by ratios. If the trip generation equation was used, then internal capture would already be considered in the estimation of gross external peak hour trips. The Lake County Transportation Impact Fee uses a pass-by capture rate of only 8 percent. Why is a larger value used here?
- Peak hour factor was not applied to turning movements for intersection analysis.

- LOS analysis was not provided for the site access intersection.
- As shown in Figure 4, the reserve capacity for US 27 was not included in the analysis for the site access intersection.
- What is the access class for US 27, and is a median opening acceptable at the proposed location? As a part of the site access analysis, please address that the facility to be developed will likely be in operation for 50+ years, and the access provisions should address that likelihood by considering higher US 27 traffic volumes.
- The site access volumes in Figure 4 and the warrant analysis for driveway access lanes make use of the net external peak hour volumes; however, these analyses should make use of gross external peak hour volumes without consideration of pass-by capture. Further, the consideration of the need for, and design of, driveway lanes should be made on the basis of a.m. peak hour volumes, as it is during the a.m. that inbound trips are highest. In the driveway turn lane analysis, with the potential for connection of the internal driveway to residential streets to the west of the site, additional neighborhood traffic should be considered.
- Provide a defense of the proposed site design. Why does the site design propose a significant right-of way connecting at the southwest corner of the site? Who will construct the “missing roadway link” at the southwest corner? Is it advisable to connect this industrial site to a residential area? In the converse, is it intended for the site to provide a more direct connection for the adjacent residential area to US 27?

The Lake-Sumter MPO reviews traffic studies for the City of Minneola and reports the findings of the review and if appropriate, makes recommendations related to the traffic study. Approval of the traffic study and the overall project is the sole responsibility of the City.