



LAKE MARY CITY COMMISSION

**Lake Mary City Hall
100 N. Country Club Road**

WORK SESSION

THURSDAY, SEPTEMBER 17, 2015 5:30 PM

1. Items for Consideration

A. Downtown Traffic Study

2. THE ORDER OF ITEMS ON THIS AGENDA IS SUBJECT TO CHANGE

Per the direction of the City Commission on December 7, 1989, this meeting will not extend beyond 11:00 P. M. unless there is unanimous consent of the Commission to extend the meeting.

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT THE CITY ADA COORDINATOR AT LEAST 48 HOURS IN ADVANCE OF THE MEETING AT (407) 585-1424.

If a person decides to appeal any decision made by this Commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Per State Statute 286.0105.

NOTE: If the Commission is holding a meeting/work session prior to the regular meeting, they will adjourn immediately following the meeting/work session to have dinner in the Conference Room. The regular meeting will begin at 7:00 P. M. or as soon thereafter as possible.



MEMORANDUM

DATE: September 17, 2015
TO: Mayor and City Commission
FROM: John Omana, Community Development Director
VIA: Jackie Sova, City Manager
SUBJECT: Downtown Traffic Study

BACKGROUND: Kittelson & Associates has completed the Downtown Traffic Study for the City of Lake Mary. As you may recall, the study was to look at traffic operations and traffic circulation for the City's Downtown area under existing conditions; 5 year time frame; and 10 year time frame. In addition, geometric conditions; spot intersection improvements and potential traffic calming measures were to be looked at within the aforementioned timeframes.

Staff has attached for your review the "Executive Summary" from the 51 page Study and voluminous Traffic Volume Data Appendix to provide you with a snapshot of the consultant's findings. Staff and the consultant will be available at the Workshop for any questions you may have regarding this item.

RECOMMENDATION: Staff requests input and direction from the City Commission on the findings presented.

ATTACHMENTS:

- Kittelson Executive Summary

EXECUTIVE SUMMARY

The City of Lake Mary requested Kittelson & Associates, Inc. (KAI) to conduct a traffic operations and traffic circulation study for the City's downtown planning area. The study considers the existing traffic conditions and five-year and ten-year future projections under the City's expected growth in downtown development. KAI also evaluated several potential traffic calming measures identified by the City along the study area's west side. KAI identified the following findings and recommendations:

Findings

EXISTING CONDITIONS

Land Use

- Downtown Lake Mary is currently characterized by a mix of retail, office, and government uses. Surrounding downtown are primarily single-family residential neighborhoods with a few multi-family residential developments.

Traffic Operations

- The morning drop-off at Lake Mary Elementary School coincides with the AM peak hour, causing increased delay at the Lake Mary Boulevard and 4th Street intersection
- The intersection of Lake Mary Boulevard and Country Club Road operates at Level of Service (LOS) E during the AM peak hour and LOS D during the PM peak hour. The southbound queue, observed in the field, consistently blocked the southbound right-turn lane and at one point extended past the Country Club Road and Wilbur Avenue intersection in the PM peak hour.
- The intersection of Country Club Road and Wilbur Avenue currently operates at LOS F during the AM and PM peak hours.
- The intersection of Country Club Road and Crystal Lake Avenue currently operates at LOS D during the AM peak hour and LOS E during the PM peak hour. The southbound queue observed from Lake Mary Boulevard may cause minor street delays beyond what is reported by HCS 2010.
- The intersection sight distance is limited on the eastbound approach of the Old Lake Mary Avenue and Wilbur Avenue intersection. Drivers were observed entering the intersection area in order to see if there was an approaching vehicle.

Residential Cut-Through Traffic

- More than half of the neighborhood traffic west of downtown Lake Mary is estimated to be cut-through traffic.
- The posted speeds on the residential streets west of the downtown area range from 15 to 25 mph.
 - The average speeds are all less than 25 mph and are generally within the posted speed.
 - The 85th percentile speeds are all less than 30 mph, but exceed the posted speeds on six of the eight segments.
 - In two cases (Lake Mary Avenue and Seminole Avenue), the 85th percentile speeds exceeds the posted speeds by more than 5 mph.

FUTURE CONDITIONS

Land Use

- Development in the downtown area is expected to increase by 400 dwelling units and 217,000 square feet of commercial in the next ten years. The development is estimated to generate 169 new trips during the AM peak hour and 463 new trips during the PM peak hour.

Traffic Operations

- The Lake Mary Boulevard and Country Club Road intersection is expected to operate at LOS F within five years. Spot intersection improvements will enable the intersection to operate at LOS D or better through the ten-year development plan.
- The Country Club Road and Wilbur Avenue intersection will continue to operate at LOS F with volumes exceeding capacity as an unsignalized intersection. If the intersection is signalized, LOS is expected to improve to LOS B.

Residential Cut-Through Traffic

- The conversion of segments of 4th Street and 5th Street to northbound one-way streets will eliminate traffic cutting through Lake Mary Avenue and Wilbur Avenue from Country Club Road toward the south/west. However, a percentage of existing cut-through traffic will likely redistribute to Crystal Lake Avenue, Lakeview Avenue, and Lake Mary Boulevard.
- The one-way street conversion will not impact vehicles cutting-through in the north/east direction, the dominant PM peak hour cut-through trend.

- The intersections identified by the City for potential conversion to all-way stop control are not expected to meet the Manual on Uniform Traffic Control Devices (MUTCD) minimum volume thresholds.

Recommendations

TRAFFIC OPERATIONS

- The following spot intersection improvements are expected to improve intersection operations in the downtown area:
 - Lake Mary Boulevard & 4th Street
 - Consider converting the eastbound and westbound left turn phasing from protected-only to protected-permitted.
 - Consider changing the northbound/southbound to split phasing in the AM peak hour when traffic in and out of Lake Mary Elementary School traffic is active.
 - Lake Mary Boulevard & Country Club Road
 - Add an eastbound left-turn lane, northbound left-turn lane, southbound through-lane, and westbound right-turn lane.
 - Country Club Road & Crystal Lake Avenue
 - Add a westbound right-turn lane.
 - Country Club Road & Wilbur Avenue
 - Install traffic signal control.

RESIDENTIAL CUT-THROUGH TRAFFIC

- Consider implementation of the street closures proposed by City staff at the following locations:
 - Where Lake Mary Avenue meets 4th Street
 - Where Wilbur Avenue meets 5th Street
- Install guide signs to redirect cut-through traffic to Lake Mary Boulevard via Palmetto Street.
- Consider opportunities to apply the kit-of-parts approach provided by the project team to further calm traffic speeds and discourage cut-through traffic in the residential areas.