

Solutions for Florida Schools

Tindale-Oliver & Associates, Inc., (TOA) excels in providing professional traffic engineering and transportation planning services to Florida school boards. Traffic engineering and transportation planning are TOA's specialty, and the firm has significant experience specific to school traffic operations and planning. Due to considerable experience with school projects, TOA is acutely aware of the unique traffic-related needs and issues faced by school administrators. TOA understands that the school board's principal mission is to *educate* youth, and that alleviating school-related traffic congestion is not usually at the forefront of the board's budget issues. With increasing emphasis on site design and access issues resulting from Interlocal Agreements, TOA's involvement demands effective, practical solutions. TOA is sympathetic to this premise and have identified the following means by which traffic/transportation related budget expenditure can be minimized:



ISSUE

New School Site Selection and Expert Witness: TOA knows that evaluating potential off-site traffic impacts associated with proposed school sites assists in the selection of appropriate sites and consequently reduces the likelihood of costly litigation invoked by opposing neighborhood groups.

As a part of interlocal coordination requirements of section 1013.33, Florida Statutes, school districts find they must comply with local land planning and growth management policies and regulations. These regulations require compliance with concurrency provisions, including the need to address traffic impacts. Dealing with growth management issues has been one of Tindale-Oliver's core service areas since the firm's inception in 1989, and the firm has stayed at the forefront of evolving growth management policy at the state and local levels. We have developed transportation concurrency management policies and programs for dozens of communities, participated in advisory groups to proposed legislative changes, have represented development interests in hundreds of specific land use plan amendments, rezonings, and development permitting cases, and have provided expert testimony regarding roadway operating conditions and appropriate impact mitigation procedures.

SOLUTION

Project: Elementary "X" Traffic Impact Study, Hillsborough County, Florida

TOA was contracted to undertake a traffic impact study in support of a proposed elementary school. The traffic study was prepared to evaluate the school in consideration of transportation concurrency, and to demonstrate that the selected site was appropriate for the development of an elementary school. The site selection was initially challenged by a neighborhood group and litigation ensued. The final report was entered as evidence to the court, and the engineers involved with the study were called as expert witnesses to testify on behalf of the school board.



ISSUE

School Site Development: TOA knows that the involvement of an experienced traffic engineer in the development/design of a school site is an effective way of reducing or eliminating operational problems related to traffic upon school opening. The costs associated with "retro-fit" solutions usually far outweigh the costs of implementing traffic related enhancements into an initial design.



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& Associates, Inc.

SOLUTION

Project: Newsome High School Traffic Analysis and Design, Hillsborough County, Florida

TOA was contracted to estimate traffic conditions for a proposed high school, identify potential traffic related problems, and develop solutions to resolve these problems that could be incorporated into the development of the school site. Trip generation studies were performed at other local area high schools considered similar in nature to the proposed school to identify trip generation by mode/purpose (i.e., school bus, student drivers, parent drop-off and pick-up, and faculty/staff drivers). The information obtained from these schools was used to estimate the trip generation of the proposed high school by mode, in five minute periods. A digital traffic simulation model was developed using the traffic volume estimates to evaluate on-site and off-site traffic operations and safety, including evaluating signal warrant criteria at the school's main access.

ISSUE

Low-Cost Solutions: Many existing school sites have inherent traffic operation problems, especially in consideration of the recent trend towards parental drop-off and pick-up of students, for which a given school may not have initially been designed to accommodate. TOA's experience has been that several alternatives are typically available to resolve the deficiencies of a specific site. In many cases, relatively simple (low-cost) strategies can yield significant results, such as educating parents and faculty on efficient drop-off and pick-up procedures, relocating school bus loading/unloading zones, or restricting turning movements into and out of school sites.



SOLUTION

Project: Alafia Elementary School Traffic Operations Study, Hillsborough County, Florida

TOA was contracted to provide professional traffic engineering services for Alafia Elementary School to study on-site traffic circulation, off-site queuing, and neighborhood intrusion issues. TOA collected and observed data during the morning drop-off and afternoon pick-up periods including vehicle turning movement counts by vehicle type; traffic circulation patterns by vehicle type; arrival and departure distributions by vehicle type; vehicle occupancy; vehicle queuing characteristics by type including development, duration, and discharge; and pedestrian traffic accessing the school. TOA also performed origin and destination studies and speed/volume counts in adjacent neighborhoods to assess traffic impacts imposed by the school. TOA also conducted origin and destination studies and speed/volume counts in adjacent neighborhoods to assess traffic impacts imposed by the school. Four alternatives were developed that included revisions to the school's parking lot configuration, the formation of exclusive pedestrian walkways, and the implementation of turning restrictions at site access points.



If you would like to talk with someone further regarding our school projects, please contact Mike Raysor, P.E., PTOE, at (813) 224-8862 or mraysor@tindaleoliver.com.



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