



RESEARCH PROJECT CAPSULE [10-4SS]

June 2011

TECHNOLOGY TRANSFER PROGRAM

Truck Facility Access Design Guidelines Statewide

JUST THE FACTS:

Start Date:
April 25, 2011

Duration:
24 months

End Date:
April 24, 2013

Funding:
State

Principal Investigator:
Thomas R. Swanson, P.E., PTOE
G.E.C., Inc.
225-612-4266

Co-principal Investigator:
Robert E. Boagni, P.E.
Transportation Director

Administrative Contact:
Mark Morvant, P.E.
Associate Director, Research
225-767-9124

Technical Contact:
Ravindra Gudishala
Research Associate
225-205-6456

Louisiana Transportation
Research Center
4101 Gourrier Ave
Baton Rouge, LA 70808

Sponsored jointly by the Louisiana
Department of Transportation and
Development and Louisiana State
University

POINTS OF INTEREST:

*Problem Addressed / Objective of
Research / Methodology Used
Implementation Potential*

WWW.LTRC.LSU.EDU

PROBLEM

Truck stops provide temporary rest locations for commercial drivers, and many serve as long-term parking locations for long-haul truck drivers. The motor carrier industry has expanded rapidly resulting in an increased demand for truck parking at truck stops, and this trend is expected to continue in the foreseeable future.

Truck stops are often located adjacent to interstate highways, and access interstate highways through interchanges. Since the volume of traffic accessing these truck stops through interchanges has increased and is expected to keep rising, it is necessary that these truck stop access points be properly designed to ensure a safe and efficient operation of traffic in the interchange area. Poorly designed access to a truck stop can result in congestion and unsafe vehicular operation in the area.

OBJECTIVE

The overall purpose of this project is to develop design guidelines for truck access to truck stop facilities adjoining interstate highways and accessed by interchanges in Louisiana. The specific objectives of the research are to:

1. Identify existing access design standards/guidelines in other states.
2. Inventory truck stops adjoining interstates in Louisiana, and record current access design and truck stop layouts.
3. Record good and bad practice in truck stop facility access design.
4. Evaluate current practice and recommend preferred guidelines.
5. Document recommended guidelines.

METHODOLOGY

The following tasks will be pursued to achieve the desired objectives:

1. Conduct a survey among state DOTs to identify existing access design standards by collecting information such as name, location, crash history, layout design, access design, states' requirements for allowing truck stop access near interchanges, traffic volumes, and accident maintenance records for the past 3 years.

2. Search the Internet for all existing truck stops adjoining interstate highways in Louisiana and then contact LADOTD Headquarters and district offices by phone/e-mail to verify the existence of identified truck stops and request all information on file related to the truck stops.
3. From the collected existing design standards/guidelines, identify existing truck stop facility design standards/guidelines, and conduct an analysis to document good and bad practice in truck facility access design.
4. Evaluate the current existing design standards in Louisiana and verify for compliance with established good access design standards in task 3 and compile recommended guidelines for truck facility access design in Louisiana.
5. Submit a final report outlining the developed guidelines.

IMPLEMENTATION POTENTIAL

Currently, there are no established access design standards/guidelines for truck facilities accessing interstate highways through interchanges in Louisiana. Establishing access design/guidelines for these facilities would ensure future facilities or modification to existing facilities are designed using best practice and guidelines, operate efficiently and safely, and the impact of the truck stop on interchange operation is minimal. The guidelines could be adopted by LADOTD for statewide application.