## STATE OF NEW HAMPSHIRE

- INTER-DEPARTMENT COMMUNICATION -

**DATE:** February 17, 2010

FROM:

Robert E. Bollinger, P.E., PTOE

Traffic Operations Engineer

AT (OFFICE)

Bureau of Traffic

Department of Transportation

**SUBJECT:** 

TO:

Traffic Impact Studies –

Trip Generation Thresholds

Caleb B. Dobbins, P.E.

State Maintenance Engineer

## **MEMORANDUM**

In the processing and issuance of driveway permits and other decisions regarding access control on the state highways, the Department may require a traffic impact study for the permit review process.

Guidelines published by the Institute of Transportation Engineers suggest that a site generating 100 or more (total of entering and exiting) peak hour vehicle-trips on the adjacent street can change the level-of-service, appreciably increase the volume-to-capacity ratio of intersection approaches, or warrant the need for auxiliary lanes, and would, therefore, warrant the need for a traffic impact study. It should be noted, however, that a suggested threshold of 100 or more peak hour vehicle-trips does not in any way preclude the Department from requiring traffic studies for projects that generate fewer vehicle-trips, should it be deemed necessary.

Aside from major traffic generators (big box retail, supermarkets, schools, etc.), where the need for a traffic impact study is more readily apparent, the following land uses and associated independent variables can generally be expected to generate 100 or more vehicle-trips during at least one peak hour period (weekday morning, weekday evening, or Saturday midday):

- 100 single-family (detached) homes
- 150 apartment units
- 185 condominium units
- 50 ksf office building
- 30 ksf medical/dental office building
- Any modern convenience-store/gas-pump combination (typically over 1.5 ksf with at least 4 vehicle fueling positions; may also have fast-food and a car wash components)
- 10-12 ksf pharmacy (with or without drive-through)
- 4.0 ksf drive-in bank
- 9.0 ksf high-turnover sit-down restaurant
- 1.5 ksf convenience store
- 2.0 ksf fast-food restaurant, with drivethrough, including all predominantly coffee/doughnut type facilities

Please note that this list is not all inclusive, and if there is any proposed land use not included herein, the Bureau of Traffic can provide guidance as to whether or not the suggested trip threshold is met.

Should you require any additional information or clarification on any of this matter, please contact me directly.

Cc: District Engineers

W. Lambert, Bureau of Traffic

- T. Reynolds, Bureau of Traffic
- S. Sharma, Bureau of Traffic
- J. Mathews, Bureau of Traffic
- C. Green, Bureau of Highway Design
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