



# ALDOT's Access Management Manual

54<sup>th</sup> Transportation Conference

February 23rd, 2011

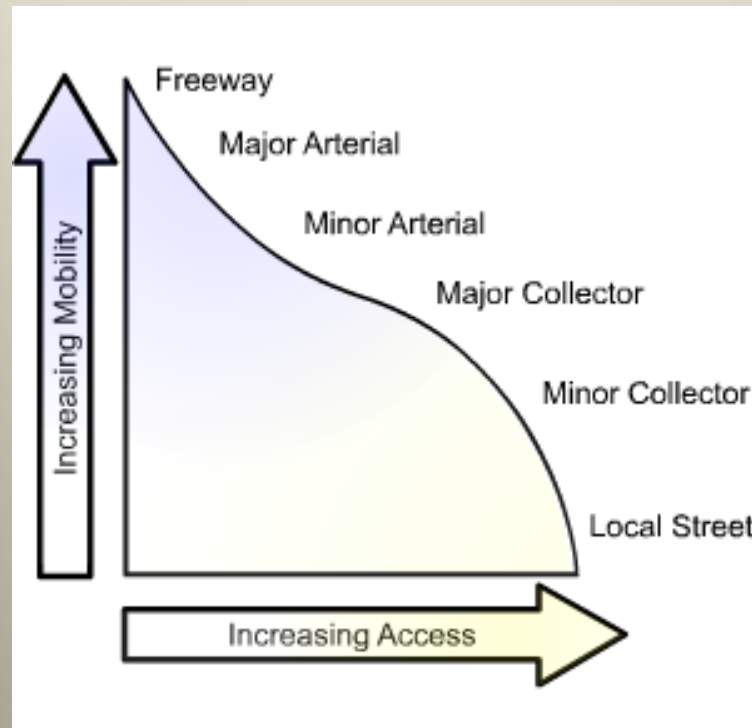
Presented by

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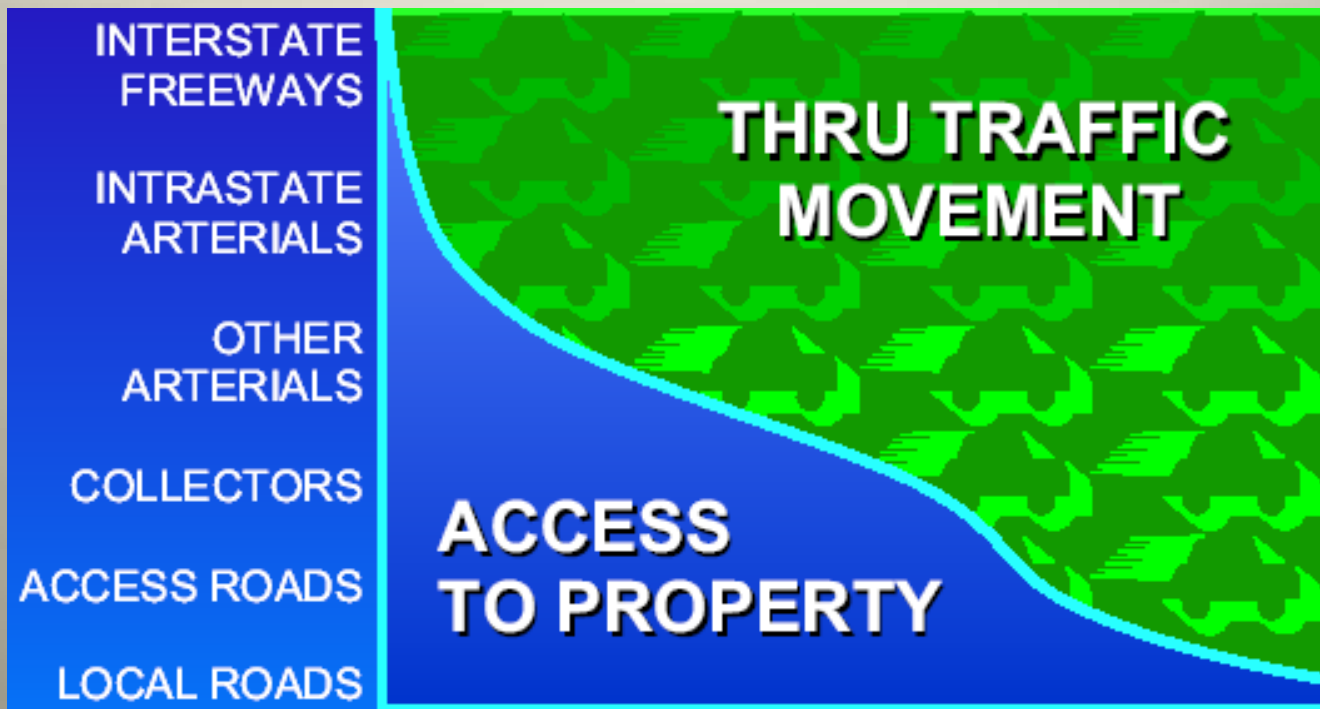
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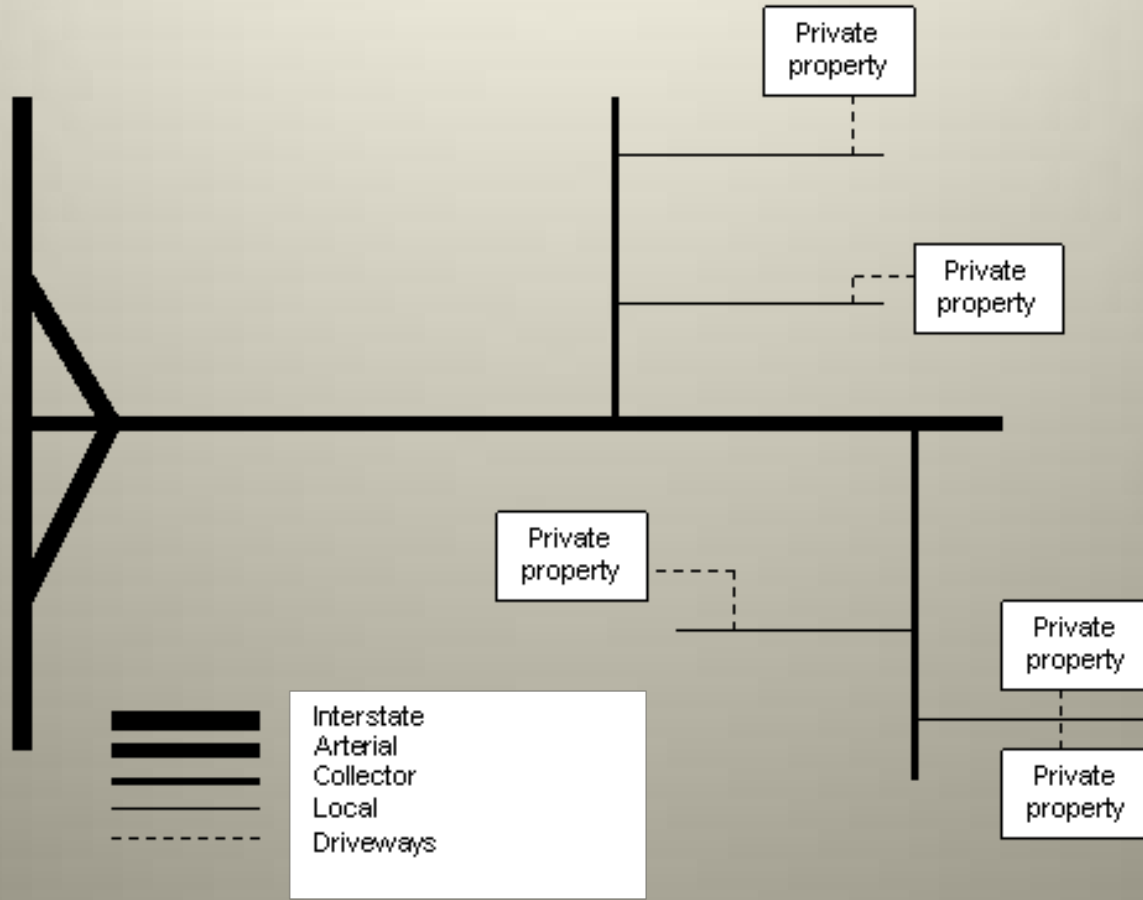
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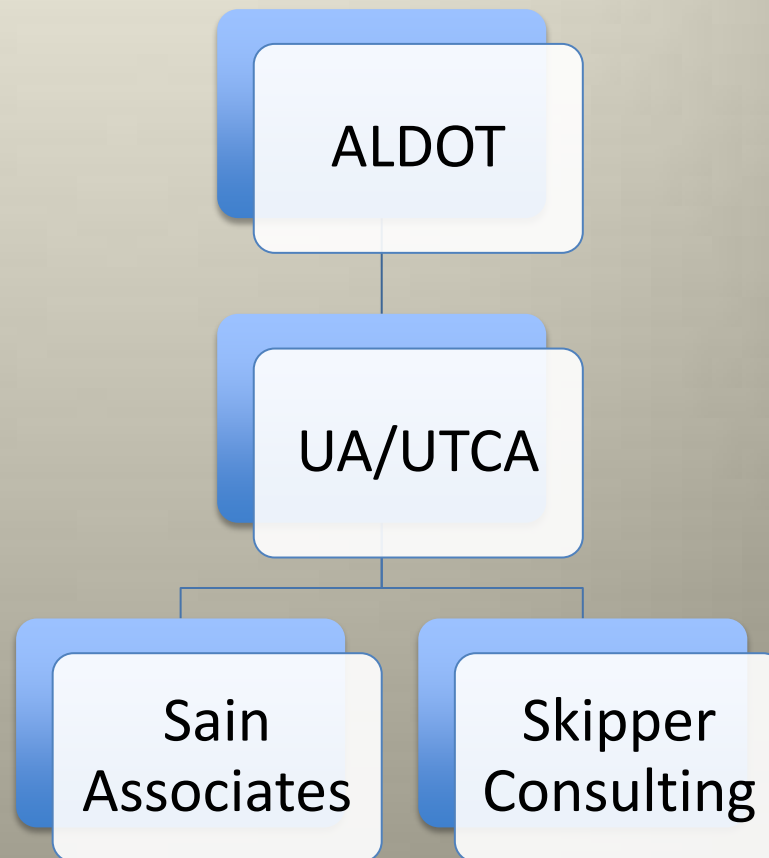


# What is Access Management?



# ALDOT project

- Initiated in January 2010
- Team structure



# Objectives

Develop an Access Management Manual that will simplify the permit process while improving consistency in permit decisions at all levels of ALDOT.

- Determine State of the Practice (ALDOT & other states)
- Evaluate prior access management projects in Alabama
- Develop draft policies, procedures, examples and case studies
- Develop and deliver access management training
- Participate in outreach with ALDOT

# Deliverables

- *Alabama Access Management Manual*
- Changes to Code of Alabama
- Training program
- Outreach

# Internal Surveys

- Internal survey sent to all ALDOT Divisions
- Results:
  - Need for **consistency** in application and enforcement
  - Need for traffic impact studies
  - Training
  - Outreach
  - One response included a suggestion that simple applications be allowed to be approved at lower (i.e., district) levels

# External Surveys

- External survey sent to 8 states with varying levels of established access management policy
  - GA, FL, LA, MS, SC, TN, TX, VA
- Results:
  - Keep the policy simple
  - Cross reference manual to other standards
  - DOTs decentralized
  - Internal permit processing timelines
  - Adopt internal policies that are already working
  - **Outreach!!!!**

# Prior projects in Alabama

- SR 21 Oxford
- US 231 Wetumpka
- US 98 Mobile County
- SR 20 Decatur
- US 72 Gurley
- US 31 Calera
- Corridor X
- SR 181 Baldwin County
- SR 185 Greenville
- SR 69 Dodge City
- US 31 Spanish Fort
- US 231 Troy
- SR 59 Loxley
- SR 14 Millbrook

# Contents of Draft Manual

- Introduction
- Principles of Access Management
- Permit Procedures
- Traffic Impact Study Requirements
- Access Design Standards
- Appendices

**Address common questions...**

# Common Questions

- When to do a traffic impact study
- When are turn lanes needed
- How many access points are allowed

# Traffic Impact Studies

## General Information –

*“Traffic Impact Studies (TIS) are required by the Alabama Department of Transportation to adequately assess the impact of a proposed development on the existing and/or planned highway system.”*

## The AM Manual will address the following:

- State that the **applicant** is responsible for assessing the traffic impacts associated with a proposed development.
- State that ALDOT shall serve in a review and approval capacity for TIS submissions.
- Require the TIS must be completed, signed, and sealed by a Registered Professional Engineer in the State of Alabama.
- Define thresholds for when a TIS is required.
- Define a procedure and process for completing a TIS and its submission to ALDOT.
- Define analysis requirements & guidelines to determine TIS study area.

# Traffic Impact Studies

- *Transportation Impact Analysis for Site Development: An ITE Recommended Practice*
  - “...it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways’ peak hour or the development’s peak hour.”



# Traffic Impact Studies

## When is a TIS Required?

- Traffic Impact Studies are encouraged for any development applying for access along any State Route in Alabama.
- Traffic Impact Studies are **required** for any development generating more than 100 vehicle trips (inbound + outbound) in any peak hour.
- Traffic Impact Studies **may not be required** for smaller developments generating less than 100 vehicle trips in any peak hour.

*“The need for a Traffic Impact Study is not totally absolved when traffic generation estimates fall below 100 total peak-hour vehicle trips. A traffic impact study may still be required at ALDOT’s discretion.”*

# Traffic Impact Studies

## TIS Requirements:

**Minor Developments (Peak Hour Trips <100 veh/hour)** - Applicant shall provide ALDOT with a trip generation letter signed by a Licensed Engineer that certifies the proposed development generates less than 100 peak hour trips (inbound+outbound).

**All Other Developments (Peak Hour Trips >100 veh/hour)** – Applicant shall provide a complete Traffic Impact Study that complies with stated TIS guidelines. The requirements for the level of analysis required in Traffic Impact Studies are stated in the manual and are grouped in three categories (small, moderate, and large developments)

\*\*TIS guidelines and requirements are only stated minimums. ALDOT reserves the right to require additional studies and/or tasks to be completed based upon the conditions with each individual development.

# Traffic Impact Studies

Common land uses and densities that generate >100 peak hour trips:

<i>Land Use</i>	<i>Size (units)</i>
Residential – Single Family	50 dwelling units
Residential – Townhomes/Condos	120 dwelling units
Residential – Apartments	100 dwelling units
Residential – Assisted Living	285 beds
Shopping Center	17,500 ft <sup>2</sup>
Fast Food Restaurant w/drive-thru	1,500 ft <sup>2</sup>
High-Turnover Sit-Down Restaurant	5,900 ft <sup>2</sup>
Quality Restaurant	8,300 ft <sup>2</sup>
Gas/Service Station w/Convenience Market & Car Wash	5 fueling positions
Bank w/drive-thru	2,200 ft <sup>2</sup>
Pharmacy w/drive-in	8,500 ft <sup>2</sup>
Hotel/Motel	95 rooms
General Office	43,000 ft <sup>2</sup>
Medical/Dental Office	21,000 ft <sup>2</sup>
General Light Industrial	102,000 ft <sup>2</sup>
Manufacturing	137,000 ft <sup>2</sup>

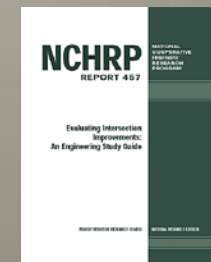
# Traffic Impact Studies

Conditions Where ALDOT personnel may require traffic impact studies regardless of development densities or Trip Generation Estimates:

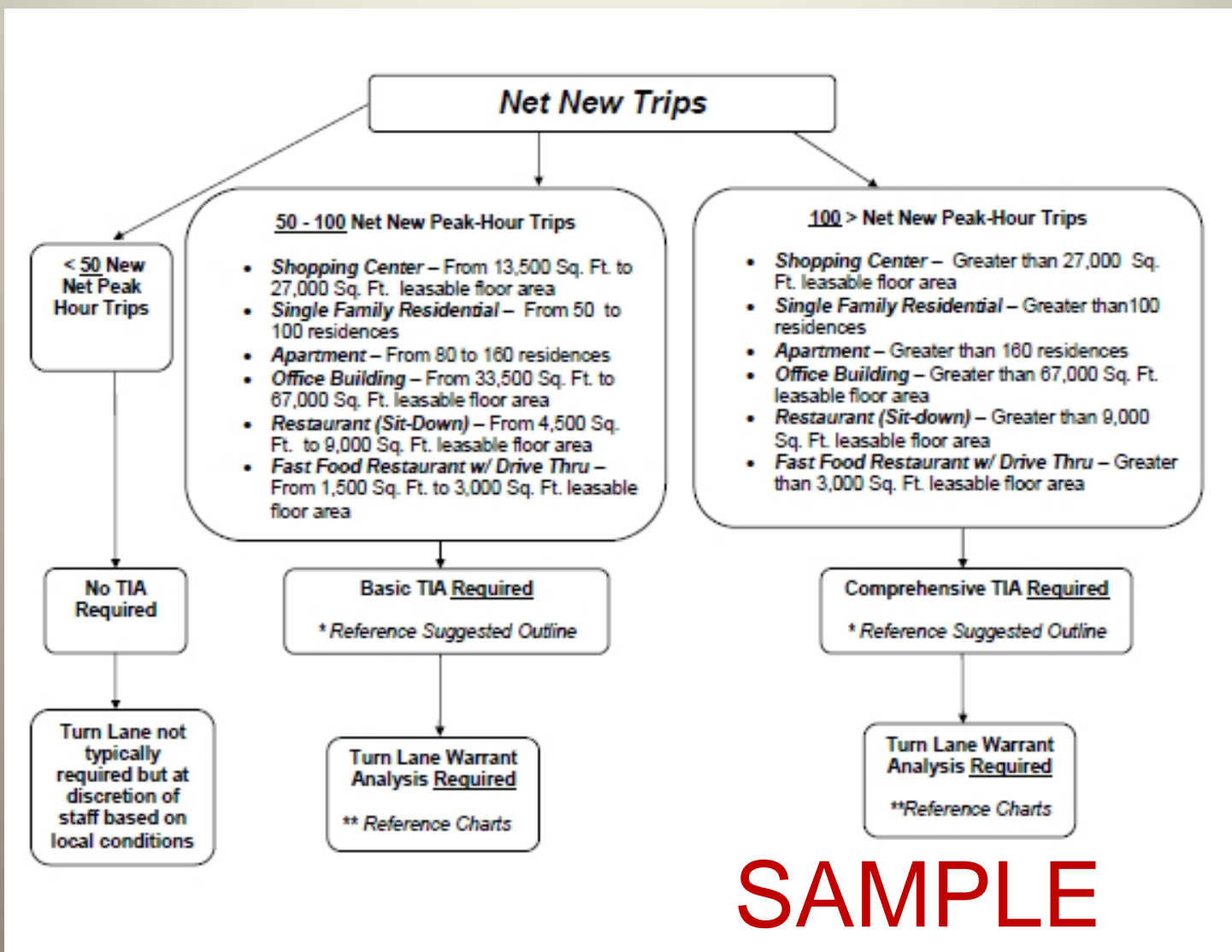
- Impact to state highway system – Developments that do not directly access the state highway system, but will impact the traffic conditions on the existing highway system.
- Change in land use and/or development density – The land use or development density of a property accessing a previously permitted connection point changes.
- Update to previous traffic impact study – Previous traffic impact study that is more than two (2) years old when construction commences on the permitted access point(s) shall be updated. ALDOT may waive this requirement if it can be demonstrated that the conclusions of the original traffic impact study are valid for current conditions.

# Turn Lanes

- NCHRP Report 457 – *Evaluating Intersection Improvements: An Engineering Study Guide*
  - Contains guidelines for determining the need for left turn bays and right turn bays
  - “Turn lane warrant” spreadsheets linked to the PDF version of the document



# “Decision Tree”



# How many connection points?

- Will be addressed in *Access Design Standards* section of manual:
  - Minimum spacing requirements based on connection type and traffic control
  - Number of allowable commercial/industrial connection points based on parcel frontage length\*

\* ALDOT has discretion to require fewer connection points

*“Access Management is not rocket science - it is a lot harder.”*

- Randy Braden



# Questions/Contact Info

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