Legislation

- Passed in the 2009 Session, N.C. General Assembly

- House Bill 182, adds G.S. 136-102.8

- Sponsors: Rep. Marilyn Avila (Wake)
  Rep. Nelson Dollar (Wake)

- Allows “the placement of traffic tables or traffic calming devices on those portions of State roads within a residential subdivision”
Requirements

- NCDOT to establish policies and guidelines
- Traffic engineering study approved by NCDOT
- Established HOA or Contractual Agreement between property owners outlining responsibility for devices
- Devices paid for and maintained by property owners
- Verification of support by at least 70% of property owners
- Property owners to post performance bond with NCDOT covering cost of maintenance or removal of the devices for a period of 3 years from the date of installation
Guidelines

Eligible Roadways

- Secondary roads whose primary purpose is to provide access to residents
- Typically fully contained within one or more subdivisions
- Other roads subject to individual review by appropriate NCDOT management
Eligible Traffic Calming Devices

- NCDOT to maintain a list of approved general and proprietary devices (currently a work in progress)
- All traffic control devices shall meet the requirements of the MUTCD and shall be used for the intended purpose
- Unwarranted all-way stops are not to be used as a traffic calming technique
- Consideration for accommodation of road maintenance activities, drainage, roadway geometry, emergency and public service vehicles
Traffic Study Requirements

- Complete description of study area
- Applicable maps and photos
- List of property owners
- Thorough description of problem that neighborhood wishes to address
- Sufficient field data to indicate magnitude of problem
  Ex. Speed study for speeding complaints
  Sight distance evaluation
  Traffic and/or pedestrian volumes
Traffic Study Requirements con’t

- Detailed description and plan of proposed installations and locations including proposed signs, markings, etc...

- Construction and maintenance cost analysis

- NCDOT may require the study to be completed by a qualified licensed professional traffic engineer dependent on the nature and complexity of the particular problem
Submit written request to NCDOT District Engineer

Hire consultant to complete and submit traffic study and project plans

Identify all member property owners and submit written verification that at least 70% support installation

Contact local fire, EMS, law enforcement, and school system and provide written verification no objections or concerns
HOA/Neighborhood Responsibility con’t

- Hire contractor to install devices per approved plans
- Post performance and indemnity bond as required
- Provide NCDOT with a maintenance plan and up to date HOA/neighborhood contact information
- Perform all routine and emergency maintenance on the devices (failure to maintain devices can result in removal)
NCDOT Responsibility

- Review neighborhood request to determine eligibility
- Determine required scope and detail of traffic study
- Review and approve submitted study, plans, and maintenance schedule
- Issue right of way encroachment agreement and enforce agreement stipulations
- Maintain list of approved devices
Opportunities and Concerns

- Coordination with NCDOT “Complete Streets” guidelines
- Implementation of measures during the subdivision planning, design and construction phases
- Currently restricted to residential subdivision streets
  Possible future consideration for other facility types?
- Guidelines are still not completely fleshed out
- Private property owners not trained or experienced in engineering, construction, and maintenance
- Success is dependent on neighborhood’s finances, consensus, and commitment
Case Study Turkey Farm Road

- Located in Orange County, ADT of 4100, with a 35 mph posted speed
- Stoneridge/Sedgefield Subdivision north of Chapel Hill
- Built to NCDOT standards late 1970’s
- Approximately 178 homes; Current price range $300,000-$1.1 million
- Majority of homes located on the east side of Turkey Farm Road but club house and pool are located on the west side of Turkey Farm Road
- Pedestrians cross Turkey Farm Road at Forest Ridge Drive to access the club house
- Hill to the south impedes intersection sight distance and speeds exceed the posted speed limit resulting in perceived unsafe conditions to pedestrians
- Neighborhood requested installation of traffic calming measures and relocation of a marked crosswalk to improve pedestrian safety
Driver view looking northbound
Driver view northbound at crest of hill
Results of NCDOT Speed Study

- Conducted 1 and 3 months after installation
- 85\textsuperscript{th} percentile speed was reduced from 42 mph to 27 mph
- No reported crash history since installation
- Neighborhood feedback has shown they were pleased with the process, pleased with the results, and so far has not expressed any concern over maintenance responsibility
Questions or Comments?