LAUREL ST NEIGHBORHOOD TRAFFIC CALMING STUDY

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TOWN OF SOUTH WINDSOR TRAFFIC CALMING POLICY

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Introduction and Objective of the Traffic Calming Policy

The Neighborhood Traffic Calming Policy is an effort to provide a systematic approach to respond to concerns raised by residents regarding traffic speeds, volumes, and road safety within neighborhoods. The document contained herein provides an overview of the process the Town would follow to evaluate a road or road network relative to the concerns raised. The Local Road Safety Committee (defined below) is the lead group of Town staff overseeing the coordination of responding to concerns by residents. One of the possible solutions to address concern regarding traffic speed, volumes, and road safety is to implement some form of “Traffic calming”.

The Federal Highway Administration (FHWA) and the Institute of Traffic Engineers (ITE) have defined "Traffic Calming “as:

“The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.”
TRAFFIC CALMING POLICY - PROCESS

- Resident Request for Service
- Site Review
- Increased Enforcement / Education
- Neighborhood Petition – Study Request Form
- Study Initiation
- Public Outreach
- Funding Request / Approval
- Final Plan Development
- Implementation / Construction
- Evaluation
TRAFFIC CALMING POLICY

- A traffic study, if undertaken, by or approved by the town must meet 3 of the 5 criteria below:
  - The 85th Percentile Speed is at least 6 miles per hour greater than the posted speed limit for the street(s).
  - One or more crashes in a 12 month period or there is evidence of accident history that suggests there may be room for safety improvement measures being evaluate.
  - Truck volume exceeding 1 percent of the total traffic volume, where the truck traffic is not related to construction activity within the neighborhood.
  - More than 50% of the traffic on the street in any hour of the day is cut-through (non-neighborhood) Traffic.
  - The street must have a minimum volume of 800 vehicles per day with a peak hour volume of 100 or more vehicles.
LAUREL STREET NEIGHBORHOOD
DATA COLLECTION

- Traffic data collected October 1 – 3
- Intersection Turning Movement Counts (4)
  - AM/ PM Peak Hours (7-9 AM & 4-6 PM)
- 24 Hour Automatic Traffic Recorder Counts (9)
  - Directional Traffic Volume
  - Travel Speeds
- Site visit to review study area roadways
RESULTS

- Kelly Road – Collector
- Woodland Drive – Neighborhood Collector
- Oak Street – Neighborhood Collector
- Laurel Street, Birch Road, Brian Road & Willow Street – Residential Streets
• Morning and Afternoon Peak Hour Data
• AM (PM) Counts
• Confirm that Kelly Road acts as a collector
• Neighborhood streets carry significantly less volume
• Woodland Drive and Oak Street serve as neighborhood collectors
• **85th Percentile Speed (Operating Speed)**
  - Indicates the speed that 85% of the vehicles are travelling at or below
  - Traffic Engineers use this speed as indication of where drivers are comfortable driving

• **Posted Speed Limits**
  - Kelly Road – 30 MPH
  - All Other Study Area Roads – 25 MPH
TRAVEL SPEEDS

• Laurel Street: 38 mph in both directions, 13 mph higher than the posted speed limit of 25 mph

• Oak Street: 29 mph northbound and 33 mph southbound, 4 to 8 mph higher than the posted speed limit of 25 mph

• Woodland Drive: 34 mph eastbound and 38 mph westbound, 9 to 13 mph higher than the posted speed limit of 25 mph

• Kelly Road (west of Laurel Street): 41 mph eastbound and 39 mph westbound, 9 to 11 mph higher than the posted speed limit of 30 mph

• Kelly Road (east of Laurel Street): 34 mph in both directions, 4 mph higher the posted speed limit of 30 mph

• Willow Street: 33 mph northbound and 34 mph southbound, 8 to 9 mph higher than the posted speed limit of 25 mph
TRAFFIC CALMING POLICY CRITERIA

• The 85th percentile speed is at least 6 mph greater than the posted speed limit for the street(s)

• One or more crashes in a 12-month period or there is evidence of collision history that suggests there may be room for safety improvement measures being evaluated

• Truck volume exceeding 1% of the total traffic volume, where the truck traffic is not related to construction activity within the neighborhood

• More than 50% of the traffic on the street in any hour of the day is cut-through (non-neighborhood) traffic

• The street must have a minimum volume of 800 vehicles per day with a peak hour volume of 100 or more vehicles
<table>
<thead>
<tr>
<th>Roadway</th>
<th>Functional Classification</th>
<th>Speed Limit (mph)</th>
<th>85th Percentile Speeds (mph)</th>
<th>Roadway Width (ft)</th>
<th>Curbing</th>
<th>Pavement Striping</th>
<th>12-Month Collision History (# Crashes)</th>
<th>Morning Peak Hour</th>
<th>Afternoon Peak Hour</th>
<th>AM Peak Hour Volume (# Veh)</th>
<th>PM Peak Hour Volume (# Veh)</th>
<th>Average Daily Traffic (Vpd)</th>
<th>Truck Volume (%)</th>
<th>Cut-Through Traffic (%)</th>
<th>Criteria Met?</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>
RESULTS AND FINDINGS

• Laurel Street: 2 out of 5 criteria met (traffic calming not warranted)
• Oak Street: 2 out of 5 criteria met (traffic calming not warranted)
• Woodland Drive* (west of Laurel Street): 3 out of 5 criteria met (traffic calming may be warranted)
• Woodland Drive (east of Laurel Street): 2 out of 5 criteria met (traffic calming not warranted)
• Birch Road: 1 out of 5 criteria met (traffic calming not warranted)
• Brian Road: 1 out of 5 criteria met (traffic calming not warranted)
• Willow Street: 1 out of 5 criteria met (traffic calming not warranted)
• * Traffic data collected to the west of Highland Road prior to connecting with the neighborhood to the north of the study area.
IMPLEMENTATION OPPORTUNITIES

• Based on the traffic data and analyses the warrants are insufficient

• Opportunities to implement low cost measures that do not involve physical alterations may be considered to encourage speed reduction

• Speed enforcement by SWPD

• Lane Striping
  – Double Yellow Centerline
  – White Edge Line
  – 10’ Travel Lanes

• Additional Speed Limit Signage
TRAFFIC CALMING MEASURES NOT RECOMMENDED

• Physical modifications to the roadways were reviewed by not recommended based on warrants
  - Horizontal
  - Vertical
  - Diversionary

• Traffic circles
• Realigned intersections
• Roundabouts
• Curb extensions/narrowing of road
• Medians
• Chicanes
• Raised crosswalks
• Raised intersections
• Speed humps
• Speed tables
• Textured pavement
• Diagonal diverters
• Street closures