

**Town of Avon Traffic Calming Program**

**Traffic Investigation Report**

**Cobblestone Springs Subdivision**

**March 11, 2008**

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## **Traffic Investigation Report**

### **Purpose of Traffic Investigation**

A traffic investigation was performed to measure and observe motorist, bicyclist, and pedestrian activity as well as the existing roadway characteristics. The investigation is intended to focus on the problems identified by the neighborhood petition letter.

### **Problems Identified by Neighborhood**

A letter, dated March 12, 2007, was delivered to the Town of Avon requesting that a traffic investigation be conducted in their neighborhood. Twelve petition signatures were included. The letter identified several perceived problems as noted below:

- The neighborhood streets were being used by cut-through traffic trying to avoid the intersection of Dan Jones Road and US 36 (Rockville Road).
- Cut-through traffic routinely ignores posted speed limits.
- Cut-through traffic routinely violates stop signs.

The neighborhood has requested and received increased police patrols in the past. When the police patrols were active, the petitioners stated that cut-through traffic and violations of stop signs decreased only to resume after the patrols ceased. A copy of the neighborhood letter appears in the Appendix.

### **Neighborhood Roadway Characteristics**

The traffic investigation focused on the cut-through street traffic between Dan Jones Road and US 36. Three streets were examined; Cobblestone Springs Drive, Red Sunset Court, and Springwood Drive.

Cobblestone Springs Drive serves as a residential or neighborhood collector street since it collects traffic from the side streets and cul-de-sacs and provides access to secondary arterial roadways. There are two relatively straight street sections on Cobblestone Springs, and all three streets are relatively wide with provisions for on-street parking. Sidewalks are located on both sides of the three streets.



### Safety Issues

The neighborhood petition letter noted that stop sign violations frequently occur. None were noted in the field during the on-site investigation, which took place during non-peak traffic hours.

### Recorded Traffic Data

Traffic volumes and speeds were recorded on Monday, 5/1/07 through Friday, 5/4/07, at four key locations within the study area (see Traffic Data Exhibit in the Appendix). Volumes were collected for both directions of travel. Speeds were also recorded for both directions and summarized for both directions combined. Stop sign locations are also noted on the exhibit. Occasional pedestrian and bike activity was noted during the non-peak periods when the traffic investigation was conducted.

### Diagnosis of Problem Areas

By reviewing the traffic data, a cut-through traffic pattern was identified. Over the course of an average weekday, about 60% of the daily traffic was observed traveling through the neighborhood from US 30 to Dan Jones Road, with 40% of

the traffic traveling in the opposite direction on Cobblestone Springs Drive, Red Sunset Way, and Springwood Drive. The majority of the through traffic travels on Cobblestone Springs Drive, although all three roads have the capacity to convey the recorded traffic volumes.

The average speeds recorded were below the 25 mph posted speed limit. The 85<sup>th</sup> percentile speed reached 29 mph at counting station 3282, located at the mid-point of a straight section of roadway on Cobblestone Springs. Speeding does not appear to be a significant problem in the study area, although most neighborhood residents typically like to see travel speeds in the low 20's mph, if possible.

Stop sign violations are more difficult to observe and record. Without a prolonged period of observation, as experienced by the residents, it is difficult to assess if problems exist unless accidents occur. For high-volume or high-accident locations, the installation of video recording devices can help to identify problems. Since this is very expensive, it is usually used only for the most critical locations.

#### Directly Affected Area

The residents considered to be directly affected by the potential installation of traffic calming devices include all residences that must travel and use Cobblestone Springs Drive. Approximately 77 residences are located in the directly affected area. The directly affected area is shown on the Traffic Data Exhibit in the report Appendix.

#### Remediation Alternatives

The following are recommendations for consideration by the Town and the neighborhood:

1. Install a stop sign for eastbound traffic on Red Sunset Way to convert this intersection from 2-way to 3-way stop control. The 2-way stop sign arrangement that currently exists helps to facilitate cut through traffic from US 36 to Dan Jones Road.
2. Consider installing one permanent 14-foot wide parabolic speed hump and associated warning signs at the mid-point of the straight section of Cobblestone Springs Drive in the vicinity of data collection station 3282. Warning signs shall be placed for both approaches in the vicinity of the speed bump. This should help to discourage cut-through traffic and should help to reduce travel speeds on this section of roadway.

## Recommended Alternative and Estimated Cost

The cost to purchase and install one 14-foot bituminous concrete speed hump is \$3,000. The associated two warning signs and one stop sign installation will cost an additional \$1,050. The total cost to install the speed hump, warning signs, pavement markings, and one stop sign is estimated to be about \$4,050.

## Recommendation and Implementation Plan

The installation of the recommended stop sign and speed hump can be pursued this year, pending favorable approval by the residents located in the directly affected area, the Public Works Committee, and the Avon Town Council. After the speed hump has been installed for a period of at least 30 – 60 days, a follow up study should be conducted to determine how effective the devices are at reducing speeds to desirable levels.

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