



## Legislation Text

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File #: 20-1134B, Version: 1

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### **CITY COUNCIL AGENDA ITEM**

#### **ACTION REQUESTED:**

Waive the first reading and pass the ordinance to establish a 25 mph speed limit for the Atwater Subdivision (requires six positive votes)

**DEPARTMENT:** Transportation, Engineering and Development

**SUBMITTED BY:** Michael Prousa, TED Project Manager

#### **BOARD/COMMISSION REVIEW:**

On October 1, 2020 the Transportation Advisory Board (TAB) recommended approval to establish a 25 mph speed limit for the Atwater Subdivision. Approved (9-0)

#### **BACKGROUND:**

Atwater is a newer subdivision bounded by Diehl Road (north), Fairway Drive (east), North Aurora Road (south), and Shore Road (west). The streets in Atwater have been operating under the default 30 mph limit established by the Illinois Vehicle Code.

Staff from the Transportation, Engineering and Development Business Group (TED) has received several recent requests for speed limit signage in the Atwater subdivision and conducted a study to investigate the need for speed limits.

#### **DISCUSSION:**

##### *The Study*

The warrants used to establish speed limits are located in Section B of the Illinois Department of Transportation (IDOT) "Policy on Establishing and Posting Speed Limits" and the Illinois Vehicle Code. This IDOT policy uses the 85<sup>th</sup> percentile speed (the speed at which 85 percent of the vehicles are driving at or below) and other adjustment factors for potential conflicts such as the number of driveways, pedestrians, crashes, and on-street parking, to determine the recommended posted speed limit.

Traffic data was collected at three different representative locations across the Atwater subdivision: Alderleaf Lane, Balsam Cove Road, and Country Club Boulevard from July 8 - July 15, 2020. Maps are attached and findings for each street are listed below:

##### Alderleaf Lane

The 85<sup>th</sup> percentile speed, and the upper 10 mph pace, was 33.5 mph and 30 mph. The prevailing speed is the average of the 85<sup>th</sup> percentile and the upper 10 mph pace, which equates to 31.75 mph.

##### Balsam Cove Road

The 85<sup>th</sup> percentile speed, and the upper 10 mph pace, was 33.5 mph and 30.5 mph. The prevailing speed was 32 mph.

#### Country Club Boulevard

The 85<sup>th</sup> percentile speed, and the upper 10 mph pace, was 30 mph and 29.5 mph. The prevailing speed was 29.75 mph.

Section B of the IDOT manual allows for adjustments when altering a speed limit due to road factors identified above. The following are the allowable conflict reductions for each street:

1. 10% for driveways
  - a. Alderleaf Lane has a total of 61 driveway and street intersection conflicts per mile.
  - b. Balsam Cove Road has a total of 113 driveway and street intersection conflicts per mile.
  - c. Country Club Boulevard has a total of 83 driveway and street intersection conflicts per mile.
2. 0% for pedestrian
  - a. All three locations have separated sidewalks. All three locations are also not on the school walk route.
3. 0% for crashes
  - a. The crash rate is determined by comparing the amount of crashes on a given road to the citywide average per year. All three locations have a crash rate lower than 1.5 which equates to no adjustment.
4. 5% for parking
  - a. Alderleaf Lane and Balsam Cove Road both have sufficient width for on-street parking.
  - b. Country Club Boulevard does not have sufficient width for on-street parking.

Considering the allowable reductions, the adjusted prevailing speed is calculated to be 26.78 mph for Alderleaf Lane, 27.20 mph for Balsam Cove Road, and 26.78 for Country Club Boulevard. The adjusted prevailing speed is set to the nearest 5 mph increment, which establishes a speed limit of 25 mph as the lowest possible speed limit in accordance with the IDOT manual and the Illinois Vehicle Code. The speed study worksheets illustrating the allowable reductions and location maps are attached.

The characteristics of Alderleaf Lane, Balsam Cove Road, and Country Club Boulevard are representative of conditions throughout the Atwater subdivision and these traffic studies are proposed as the basis for establishing a uniform speed limit within the neighborhood.

#### *Recommendations*

The study warrants establishing a 25 mph speed limit are for the following streets:

No.	Street	Area of Restriction
1	Alderleaf Court	Country Club Boulevard to Terminus
2	Alderleaf Lane	Country Club Boulevard to Diehl Road
3	Balsam Cove Road	Shore Road to Alderleaf Lane
4	Basin Trail Court	Silver Loch Road to Terminus
5	Basin Trail Lane	Alderleaf Lane to Silver Loch Road
6	Bayou Path Court	Coastal Sage Avenue to Terminus
7	Bayou Path Drive	Coastal Sage Avenue to Alderleaf Lane
8	Capeside Drive	Balsam Cove Road to Basin Trail Lane
9	Coastal Sage Avenue	Fairway Drive to bayou Path Drive
10	Coastal Sage Court	Bayou Path Drive to Terminus
11	Country Club Boulevard	Fairway Drive to Basin Trial Lane
12	Leyland Drive	Balsam Cove Road to Silverleaf Street
13	Silver Loch Road	Basin Trail Lane (west) to basin Trail Lane (east)
14	Silverleaf Court	Leyland Drive to Terminus
15	Silverleaf Street	Balsam Cove Road to Leyland Dirve
16	Tail Leaf Court	Country Club Boulevard to Terminus

**FISCAL IMPACT:**

Speed limit signs are placed at the entrances of a subdivision. Four speed limit signs will be placed at Alderleaf Lane, Balsam Cove Road, Coastal Sage Avenue, and Country Club Boulevard. In total, the estimated fiscal impact of these signs will be \$250.00.