



Legislation Details (With Text)

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Title: Approve a Recommendation to Establish a 25 MPH Speed Limit for the Atwater Subdivision

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Attachments: 1. Draft Ordinance, 2. Atwater Speed Limit Analysis, 3. Atwater North Map, 4. Atwater South Map

Date	Ver.	Action By	Action	Result
10/1/2020	1	Transportation Advisory Board	approved	Pass

TRANSPORTATION ADVISORY BOARD AGENDA ITEM

ACTION REQUESTED:

Approve a Recommendation to Establish a 25 MPH Speed Limit for the Atwater Subdivision

DEPARTMENT: Transportation, Engineering and Development

SUBMITTED BY: Michael Prousa, TED Project Manager

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.

DISCUSSION:

The Transportation, Engineering and Development Business Group (TED) investigated the need for neighborhood speed limits for Atwater. Staff has received several recent requests for speed limit signage in the Atwater subdivision.

The study 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 85th percentile speed (the speed at which 85 percent of the vehicles are driving at or below) and other adjustment factors for potential conflicts that includes the number of driveways, pedestrians, crashes, and on-street parking to determine the recommended posted speed limit.

Traffic data was collected at 3 different representative locations across the Atwater subdivision. Maps of the proposed streets and their locations are attached. The 3 studies were done on Alderleaf Lane,

Balsam Cove Road, and Country Club Boulevard from July 8 - July 15, 2020.

The 85th percentile speed and the upper 10 mph pace for Alderleaf Lane was 33.5 mph and 30 mph. The prevailing speed is the average of the 85th percentile and the upper 10 mph pace, which equates to 31.75 mph. The 85th percentile speed and the upper 10 mph pace for Balsam Cove Road was 33.5 mph and 30.5 mph. The prevailing speed was 32 mph. The 85th percentile speed and the upper 10 mph pace for Country Club Boulevard 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. Those factors/conflicts include the presence and/or number of driveways, pedestrians, crashes, and parking. The following are the allowable conflict reductions.

1. 10% for driveways - Alderleaf Lane has a total of 61 driveway and street intersection conflicts per mile. Balsam Cove Road has a total of 113 driveway and street intersection conflicts per mile. Country Club Boulevard has a total of 83 driveway and street intersection conflicts per mile.
2. 0% for pedestrian - All three locations have separated sidewalks. All three locations are also not on the school walk route.
3. 0% for crashes - The crash rate, 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 - Alderleaf Lane and Balsam Cove Road both have sufficient width for on-street parking. Country Club Boulevard does not have sufficient width for on-street parking.

Taking all 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. These traffic studies are proposed as the basis for establishing a uniform speed limit within the neighborhood.

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	Bayou Path Court	Coastal Sage Avenue to Terminus
6	Bayou Path Drive	Coastal Sage Avenue to Alderleaf Lane
7	Capeside Drive	Balsam Cove Road to Basin Trail Lane
8	Coastal Sage Avenue	Fairway Drive to bayou Path Drive
9	Coastal Sage Court	Bayou Path Drive to Terminus
10	Country Club Boulevard	Fairway Drive to Basin Trial Lane
11	Leyland Drive	Balsam Cove Road to Silverleaf Street
12	Silver Loch Road	Basin Trail Lane (west) to basin Trail Lane (east)
13	Silverleaf Court	Leyland Drive to Terminus
14	Silverleaf Street	Balsam Cove Road to Leyland Dirve
15	Tail Leaf Court	Country Club Boulevard to Terminus