

ORANGE COUNTY TRAFFIC COMMITTEE

COMMITTEE REPORT OF: October 9, 2025 ITEM C

SUPERVISORIAL DISTRICT: 5

SUBJECT: Establish Speed Limit

LOCATION: Windmill Avenue, Ladera Ranch

INITIATED BY: Resident of Ladera Ranch

INVESTIGATOR: Anthony Vu

REQUEST: Evaluate traffic safety at Windmill Avenue in Ladera Ranch.

DATA: AimTD, SWITRS, OCPW

LOCATION MAP



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EXISTING CONDITIONS

Windmill Avenue is a 2-lane, Divided Collector Road between Sienna Parkway and Antonio Parkway in the County's unincorporated community of Ladera Ranch. The roadway is separated by a raised median and has a curb-to-curb width of 52 feet.

Windmill's primary use is to provide access to residential homes, schools such as Chaparral Elementary, Ladera Ranch Elementary, and Ladera Ranch Middle school, as well as shopping centers and arterial streets including Sienna Parkway and Antonio Parkway. Windmill features sidewalk on both sides, street lighting, and a Class III bike route. On-street parking is prohibited, and there's no direct access to residential homes.

TRAFFIC VOLUMES

Average Daily Traffic (ADT) counts collected on August 27, 2025 by AimTD.

Street Name	ADT
	2025
Windmill Avenue	5,604

SPEED ZONE FIELD DATA

Street	Posted Speed Limit (MPH)	85th % Speed (MPH)
Windmill Avenue	N/A	39

ACCIDENT DATA

Between the years of 2020 to 2025, collision data shows 4 reported collisions along Windmill Avenue between Sienna Parkway and Antonio Parkway. Accident rate is calculated to be 1.03 accidents per million vehicle miles (acc/mvm).

ENFORCEMENT JURISDICTION

The California Highway Patrol (CHP) and Orange County (OC) Sheriff provide traffic enforcement within North Tustin.

ANALYSIS

In July 2025, a Ladera Ranch resident requested a crosswalk and/or traffic calming at Windmill Avenue and Main Street. In response, OC Traffic completed a field investigation and Engineering and Traffic Survey. During the field investigation, Staff noted the presence of a Class III bike route and the absence of posted speed limit signs along Windmill Avenue. Before additional traffic calming or crosswalk improvements can be considered, a prima facie speed limit must be established for Windmill Avenue in conformance to CVC 22357(a).

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A speed survey of Windmill Avenue recorded an 85th percent speed of 39 mph, which suggests a posted speed limit of 40 mph under the guidelines in the California Manual on Uniform Traffic Devices (CA MUTCD) section 2B.13

Due to the presence of a Class III bike route and Windmill's proximity to nearby schools, OC Traffic Engineering recommends setting the speed limit of Windmill Avenue to 35 mph between Sienna Parkway and Antonio Parkway by applying the 5-mph reduction permitted under California Vehicle Code (CVC) 22358.6(c) and CA MUTCD section 2B.13.

PUBLIC COMMENTS AND INPUT

No comments were received from the public regarding this item.

TRAFFIC COMMITTEE DISCUSSION

The Fifth District Representative specifically commended OC Traffic's initiative to establish the speed limit for improved traffic safety. Traffic Committee members approved the motion to establish a 35 MPH speed limit at Windmill Avenue between Sienna Parkway and Antonio Parkway.

RECOMMENDATION

Establish a 35 MPH Speed Limit on Windmill Avenue between Sienna Parkway and Antonio Parkway in Ladera Ranch.

BOARD ACTION NECESSARY TO ENACT THIS RECOMMENDATION

1. Approve this report.
2. By resolution, Establish a 35 MPH Speed Limit on Windmill Avenue between Sienna Parkway and Antonio Parkway.