ORANGE COUNTY TRAFFIC COMMITTEE

COMMITTEE REPORT OF: September 21, 2023 ITEM A

SUPERVISORIAL DISTRICT: 3

SUBJECT: Speed Limit

LOCATION: Modjeska Grade Road

(Santiago Canyon Road to Modjeska Canyon Road)

862-E1, F1, F2; 832-E7

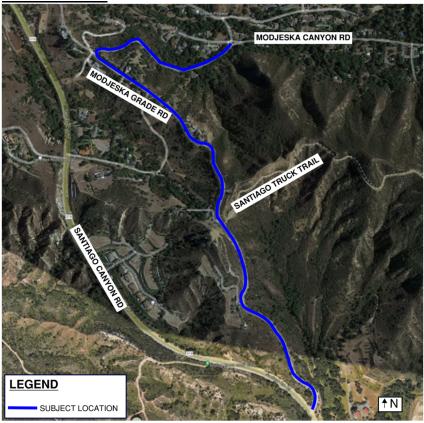
INITIATED BY: Joanne Hubble

INVESTIGATOR: Anthony Vu

REQUEST: Establish Speed Limit on Modjeska Grade Road

DATA:

LOCATION MAP



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EXISTING CONDITIONS

Modjeska Grade Road from Santiago Canyon Road to Modjeska Canyon Road is a two-lane rural collector road within Unincorporated County of Orange's canyon area. The roadway is mainly used to provide access for residents and recreationists to the Cleveland National Forest, Tucker Wildlife Sanctuary, Harding Trail, Arden Helena Modjeska House and more. Bicyclists also frequent Modjeska Grade Road for recreational purposes.

Modjeska Grade Road is approximately 1.3 miles long with travel lane widths ranging from 8 to 11 feet wide. Shoulders are typically 1 foot wide and vary up to approximately 7 feet. The roadway is winding with steep grades up to 15%. Areas adjacent to the roadway consist of vegetated and unvegetated slopes and limited residential development.

TRAFFIC VOLUMES – (BOTH DIRECTIONS)

Location, Modioska Grada Bood	Date	ADT	Peak Hour Volume	
Location: Modjeska Grade Road	Date	Volume	AM	PM
From Modjeska Canyon Rd to Santiago Truck Trail	6/29/2023	629	48	52
From Santiago Truck Trail to Santiago Canyon Rd	6/29/2023	777	78	68

SPEED ZONE FIELD DATA

Location: Modjeska Grade Road	Date	85 th Percentile (MPH)	50 th Percentile (MPH)	10 mph Pace Speed (MPH)	10 mph Pace (%)	Posted Speed Limit (MPH)
		NB/SB	NB/SB	NB/SB	NB/SB	(IVIPH)
North side shoulder, South of 28061 Modjeska Grade Road	8/3/2023	37	32	28-38	76	None

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ACCIDENT DATA

Between August 2018 and August 2023, OC Traffic Engineering's collision report show four reported accidents along this segment of Modjeska Grade Road. Three accidents, between 2020 and 2021, were due to vehicles travelling at unsafe speeds before a sharp turn. The most recent incident was a head on collision due to a vehicle taking an illegal maneuver while travelling at an unsafe speed on July 18, 2023.

ENFORCEMENT JURISDICTION

The California Highway Patrol (CHP) provides speed enforcement within the Unincorporated County area.

ANALYSIS

Currently, Modjeska Grade Road has no posted speed limit; therefore, the statutory speed limit of 55 mph applies to this roadway per the California Vehicle Code (CVC) Section 22349(b). The California Manual on Uniform Traffic Control Devices (CA MUTCD) and CVC Section 22358.6(a) allows a prima facie speed limit to be established at the nearest 5 mph increment of the 85th percentile free-flowing traffic speed based on the Engineering and Traffic Survey (E&TS). Also, CVC Section 22358.5 permits the option of further reducing the speed limit by 5 mph based on highway traffic and roadside condition not readily apparent to the driver. Posting a speed limit based on an E&TS would allow for CHP enforcement.

OC Public Works Traffic Engineering conducted an E&TS in compliance with the current CVC requirements on Modjeska Grade Road from Santiago Canyon Road to Modjeska Grade Road. The speed survey results on Modjeska Canyon Road showed a measured 85th percentile speed of 37 mph. The nearest 5 mph increment of the 85th percentile is 35 mph along the study segment of Modjeska Grade Road. However, due to the Modjeska Grade Road's existing conditions, collision history, and bicycle use, we recommend the prima facie speed limit set to be 30 mph applying the 5 mph reduction.

PUBLIC COMMENTS AND INPUT

Resident was concerned about implementing a 30 mph speed limit and the proposed Transverse Rumble Strips (TRS) along Modjeska Grade Road. He believes that 35 mph was sufficient since most of the residents travel around that speed. He also noted his concerns with installing TRS due to noise, delaying fire trucks, and affecting wildlife. He recommended an incremental change where OCPW posts speed limit with "Speed Enforced by Radar" signs before adding physical changes to the roadway.

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TRAFFIC COMMITTEE DISCUSSION

The Committee representative from the Sheriff's Department clarified to the resident that citations for speeding 15 mph above the posted speed limit have a much higher conviction rate in court; therefore, 30 mph is preferred over 35 mph.

The Committee representative from Orange County Transportation Authority (OCTA) questioned Staff if other traffic calming alternatives were considered. Staff explained Modjeska Grade Road was saturated with warning signs, and due to the existing conditions of the roadway, traffic calming options are limited. Staff also clarified that the resident is correct where Transverse Rumble Strips would cause a noticeable increase in noise along Modjeska Grade Road.

The Committee representative from Orange County Public Work's Operations and Maintenance (OCPW O&M) agreed with the resident that the change should be incremental, and that OCPW should hold off on installing Transverse Rumble Strips. The OCPW O&M representative then moved to approve the recommendation to set the speed limit to 30 mph and was seconded by the representative from OCTA. The Committee unanimously approved the motion to establish the speed limit at Modjeska Grade Road to 30 mph.

RECOMMENDATION

Establish a 30-mph speed limit on Modjeska Grade Road from Santiago Canyon Road to Modjeska Canyon Road.

BOARD ACTION NECESSARY TO ENACT THIS RECOMMENDATION

- 1. Approve this report.
- 2. By resolution, establish a 30 mph radar enforced speed limit on Modjeska Grade Road from Santiago Canyon Road to Modjeska Grade Road.