

ORANGE COUNTY TRAFFIC COMMITTEE

COMMITTEE REPORT OF: October 21, 2010

ITEM D

SUPERVISORIAL DISTRICT: 3

SUBJECT: Traffic Study

LOCATION: Modjeska Canyon Road/ Modjeska Grade Road; Modjeska;
T.B. 832 D6, E7, F7, G7, H7/ 862 E1, F2

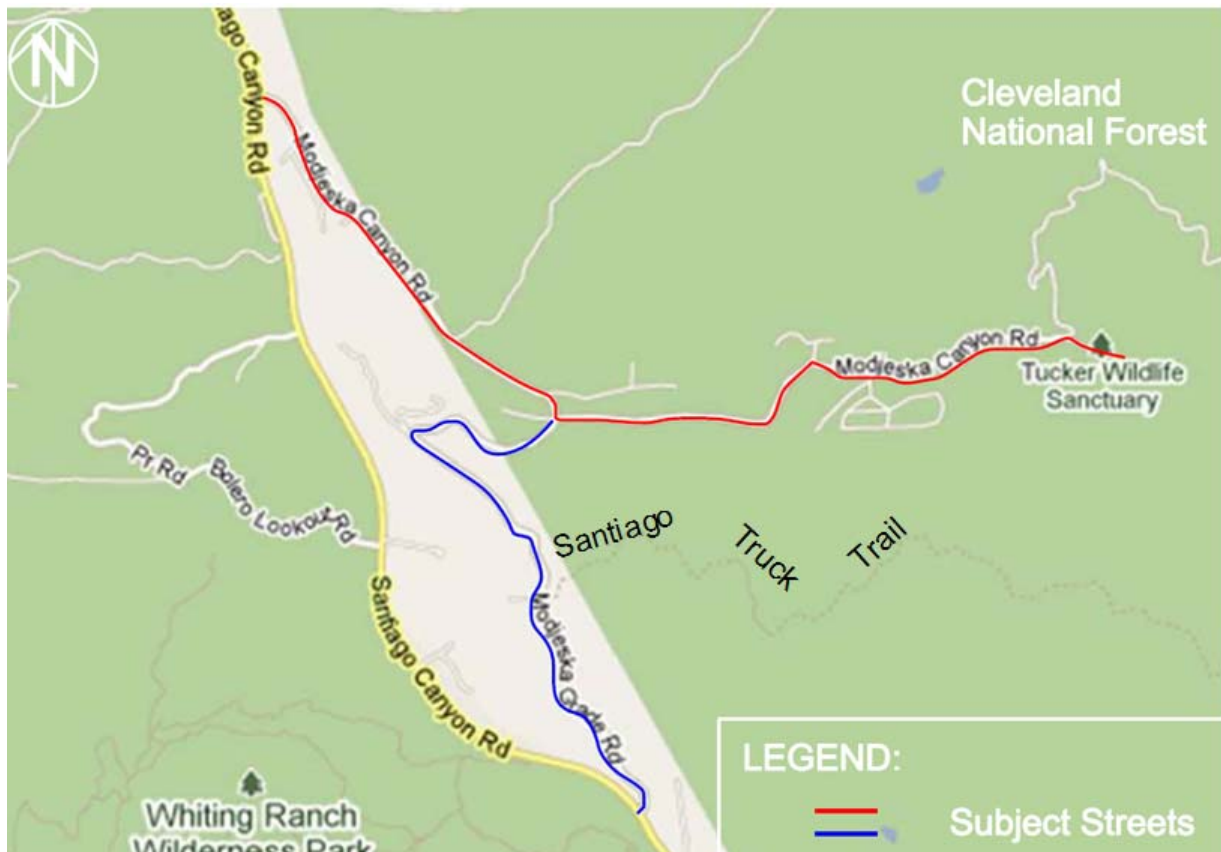
INITIATED BY: Inter-Canyon League

INVESTIGATOR: Deepthi Arabolu

REQUEST: Examine current traffic and parking conditions

DATA:

LOCATION MAP



EXISTING CONDITIONS

Modjeska Canyon Road is a scenic, two lane rural local roadway within the County's unincorporated canyons area. It is a curvilinear road that winds through the Modjeska Canyons. Modjeska Canyon Road is a narrow roadway with dirt shoulders, providing access to residential driveways, the Cleveland National Forest and the Tucker Wildlife Sanctuary. Modjeska Canyon Road varies in width from 30' to less than 10' at certain locations. The roadway intersects Santiago Canyon Road on its westerly end and dead ends at its easterly end. There is an existing vacant, graded staging area owned by the County's OC Parks Department on the south east corner of the intersection of Modjeska Canyon Road at Santiago Canyon Road.

Modjeska Canyon Road, surrounded by mature Oak and Olive trees, is the gateway to several hiking/riding trails including the Harding Trail. Abutting land uses include private residences, a closed general store, fire station, horse stables, etc. Also located on this roadway is the century old historic former home and gardens of the late 19th century actress Helena Modjeska, also known as the Arden Helena Modjeska Historic House and Gardens fronting the roadway. The Tucker Wildlife Sanctuary is a twelve (12) acre nature preserve located on the south side of Modjeska Canyon Road near the easterly end, adjacent to the Cleveland National Forest. It is owned and operated by the California State University, Fullerton. The natural history museum, which is also a Tucker facility, is located on the north side of Modjeska Canyon Road at its easterly end. Modjeska Canyon Road, in the area of the Sanctuary, varies in width between 14' to 18' with a turnaround loop area having a triangular shaped native landscaped area at its center. Easterly from the loop is an access road which leads to a property owned by OCCR/OC Parks.

Signage and markings include double yellow centerline with raised pavement markers, curve warning signs, pavement edge delineators and guardrails at specific locations. Nine (9) local streets intersect Modjeska Canyon Road. Traffic at the intersection of Modjeska Canyon Road at Santiago Canyon Road is controlled by a stop sign on Modjeska Canyon Road. No other stop signs exist along the roadway. Modjeska Grade Road intersects Modjeska Canyon Road at a landscaped traffic circle. Modjeska Canyon Road between Santiago Canyon Road and Modjeska Grade Road does not have a speed limit posted, whereas the remaining portion of Modjeska Canyon Road is residential and is posted for a 25 mph speed limit. Advisory speed limit signs are posted at sharp curves along the roadway.

Modjeska Grade Road is classified as a rural local roadway. It has 10 foot travel lanes with variable width dirt shoulders within 50 feet of right of way. The roadway is approximately one (1) mile long extending from Modjeska Canyon Road to Santiago Canyon Road. It is a curvilinear roadway with steep grades along its entire length. Santiago Truck Trail is a dirt road that takes access to Modjeska Grade Road near its crest at the midpoint of the roadway. From Modjeska Grade Road, this trail crosses private property for access to the Cleveland National Forest. Santiago Truck Trail is very popular for mountain bikers and hikers. Signage and markings on Modjeska Grade Road include double yellow centerline stripe with raised pavement markers, curve warning signs, edge line stripe, edge line delineators and guardrails. "No Parking Any Time" and "No Stopping Any Time" signs designate parking and no parking zones on Modjeska Grade Road. There are no stop signs on this roadway except at the Santiago Canyon Road intersection. There is no speed limit posted along Modjeska Grade Road.

TRAFFIC VOLUMES – 24 HOUR ADT (MODJESKA CANYON ROAD)

(See Data Location Map for Location of Address #)

09/25/10 (Saturday)

TRAFFIC VOLUMES (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	ADT	ADT	ADT	ADT
29241	110	140	99	136
28682	359	459	398	564
28192	228	209	202	255
Average	232	269	233	318

09/26/10 (Sunday)

TRAFFIC VOLUMES (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	ADT	ADT	ADT	ADT
29241	72	114	91	125
28682	248	551	252	527
28192	113	216	151	195
Average	144	294	165	282

09/27/10 (Monday)

TRAFFIC VOLUMES (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	ADT	ADT	ADT	ADT
29241	47	94	73	91
28682	271	580	281	502
28192	117	233	179	150
Average	145	302	178	248

09/28/10 (Tuesday)

TRAFFIC VOLUMES (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	ADT	ADT	ADT	ADT
29241	61	92	60	96
28682	275	375	424	633
28192	74	185	187	187
Average	137	217	224	305

SPEED DATA – 24 HOUR (MODJESKA CANYON ROAD)

(See Data Location Map for Location of Address #)

09/25/10 (Saturday)

TRAFFIC SPEED (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	85th %	85th %	85th %	85th %
29241	20	21	20	21
28682	20	21	21	21
28192	41	39	39	37
Average	27	27	27	26

09/26/10 (Sunday)

TRAFFIC SPEED (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	85th %	85th %	85th %	85th %
29241	22	21	20	21
28682	21	22	21	21
28192	39	39	36	37
Average	27	27	26	26

09/27/10 (Monday)

TRAFFIC SPEED (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	85th %	85th %	85th %	85th %
29241	21	21	20	20
28682	20	20	20	20
28192	35	36	37	37
Average	25	26	26	26

09/28/10 (Tuesday)

TRAFFIC SPEED (DIRECTIONAL)

Location	AM EB	PM EB	AM WB	PM WB
Address #	85th %	85th %	85th %	85th %
29241	21	21	20	20
28682	21	21	21	21
28192	40	36	39	38
Average	27	26	27	26

TRAFFIC VOLUMES – 24 HOUR ADT (MODJESKA GRADE ROAD)

(See Data Location Map for Location of Address #)

TRAFFIC VOLUMES(DIRECTIONAL)

Date	AM EB	PM EB	AM WB	PM WB
	ADT	ADT	ADT	ADT
09/25/10 (Saturday)	133	218	188	200
09/26/10 (Sunday)	72	201	138	182
09/27/10 (Monday)	55	257	130	203
09/28/10 (Tuesday)	63	278	170	211

Location: 28061 Modjeska Grade Road

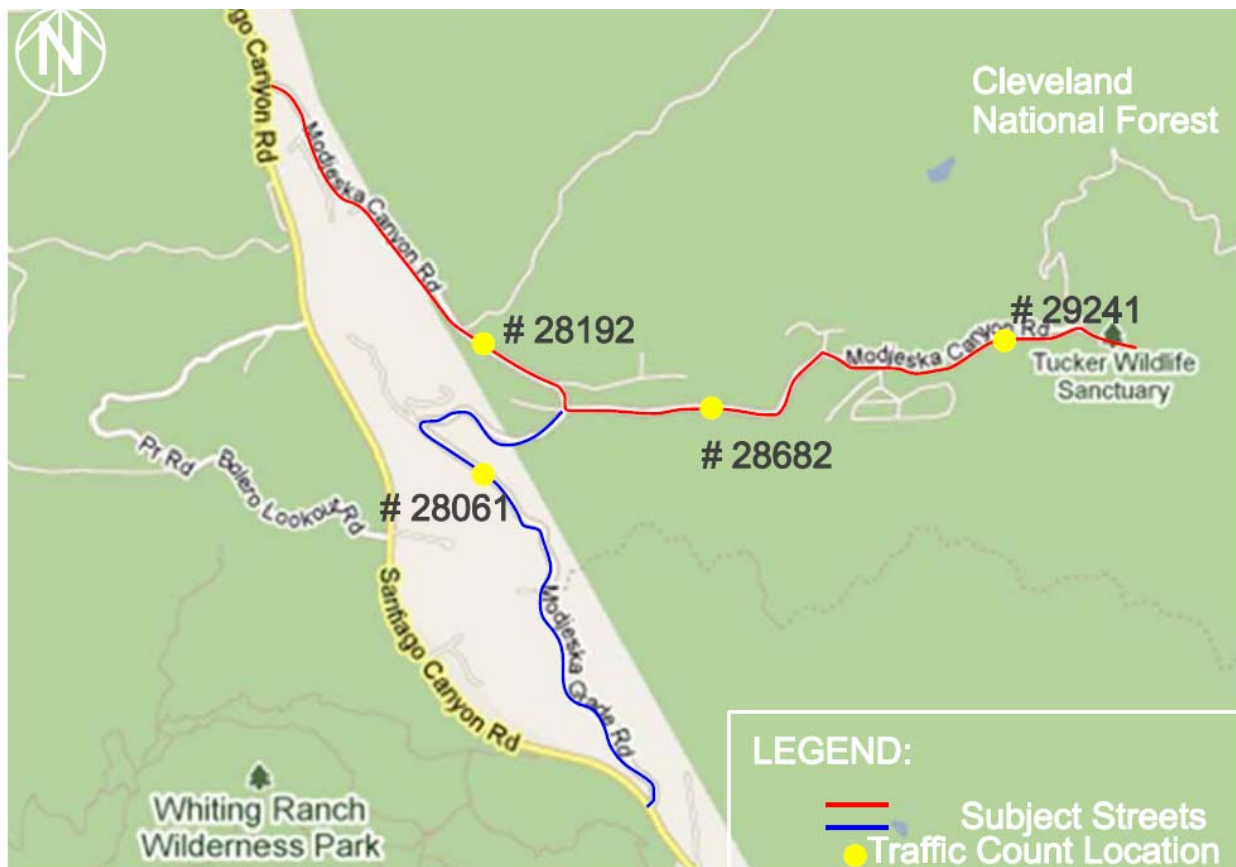
SPEED DATA – 24 HOUR (MODJESKA GRADE ROAD)

(See Data Location Map for Location of Address #)

Date	TRAFFIC SPEED (DIRECTIONAL)			
	AM EB 85th %	PM EB 85th %	AM WB 85th %	PM WB 85th %
09/25/10 (Saturday)	35	37	40	41
09/26/10 (Sunday)	34	36	40	42
09/27/10 (Monday)	35	36	42	41
09/28/10 (Tuesday)	34	36	40	41

Location: 28061 Modjeska Grade Road

DATA LOCATION MAP



ACCIDENT DATA

Traffic Engineering records show no reported accidents on Modjeska Canyon Road within the past 12 month period. The past five (5) year accident data shows five (5) reported accidents on Modjeska Canyon Road. The Primary Collision Factor (PCF) for three (3) out of these five (5) accidents is “Driving Under Influence”.

Traffic Engineering records show one (1) reported accident on Modjeska Grade Road within the past 12 month period. The reported accident occurred on the July 17, 2010 and the PCF was “Unsafe Speed”. There have been nine (9) reported accidents on Modjeska Grade Road within the past 5 year period. The PCF for the majority of these accidents was “Unsafe Speed” and “Improper Turning”.

ANALYSIS

On August 3, 2010, the Inter-Canyon League’s (ICL) Gateway Issues Committee prepared its report on traffic, bicycling and trail access concerns in the canyons. The report included several complaints related to safety and security issues voiced by the canyon residents. The majority of the complaints were issues between residents and visitors regarding conflicts with drivers and bicyclists, speeding, traffic, and parking and illegal activities. The report stated a set of tentative recommendations. The recommendations included, but not limited to, requesting County officials to review road and traffic conditions and improvements, and suggesting traffic calming measures.

As a result, Traffic Engineering staff has undertaken a traffic study of Modjeska Canyon Road and Modjeska Grade Road to review current traffic and roadway conditions, identify any existing roadway performance issues, and provide potential mitigation measures, if warranted. The traffic study included collection of traffic volumes, speeds, and accident data in addition conducting to a thorough analysis of existing roadway conditions through numerous field observations. Staff’s field observations included several visits to the Canyon during morning and afternoon hours.

All pavement markings and signs are appropriately placed and adequate for existing conditions. The narrow roadway and general lack of wide shoulders precludes the ability to park along the majority of the roadways.

On Modjeska Canyon Road there are few “No Parking” signs posted along the majority of the roadway except at the intersection of Modjeska Canyon Road at Modjeska Grade Road and in the area adjacent to the Tucker Wildlife Sanctuary. Along to the Tucker Wildlife Sanctuary property there are sixteen (16) striped parking spaces including one (1) disabled parking space within the County right of way on the south side of Modjeska Canyon Road. However, Tucker Wildlife Sanctuary was issued a temporary access to and use of selected section of 8 of these 16 parking spaces by County Property Permits on November 18, 2008. Permits records indicate that this permit has expired as of May 18, 2010. Additionally, there is a large gated parking lot belonging to Tucker approximately 250 feet easterly of the Sanctuary entrance. There are also

four (4) off road parking spaces near the Sanctuary that are not within the road right of way. Previously, there were unauthorized “No Parking Dusk to Dawn” signs posted on the fence of the Sanctuary for the sixteen (16) striped spaces. There are “2 Hour Parking for Tucker Patrons Only” and “No Overnight Parking” signs posted for the four (4) off-road parking spaces and at the Tucker’s parking lot. On the north side of the roadway, on both sides of the Harding Trail entrance, there are “No Parking Any Time” signs posted. These signs were posted by the County in the year 1977. Overall, there are parking restrictions on both sides of Modjeska Canyon Road in the vicinity of the Tucker Wildlife Sanctuary, except in the designated parking areas. Upon further research, it was confirmed that the “No Parking Dusk to Dawn” signs do not have a supporting resolution and are therefore non-enforceable signs. However, these signs were installed on a fence located on private property. Upon staff’s field visit on October 8, 2010, all the “No Parking Dusk to Dawn” signs were removed from the fence at the Tucker Wildlife Sanctuary.

Traffic Engineering received several written and verbal concerns about the existing parking restrictions at the Tucker Wildlife Sanctuary. Tucker staff have been working closely with the County staff to formalize the “No Parking Dusk to Dawn” signs. In a letter dated July 2, 2010 to the County, Tucker representatives stated that Tucker staff and canyon residents are subjected to issues associated with parking being allowed overnight. Tucker representatives noted in their letter that prior to installing the “No Parking Dusk to Dawn” signs, serious problems arose with people parking in front of Tucker and drinking, likely using drugs and other illegal activities. The problems significantly dropped after Tucker took the initiative of installing the “No Overnight” and “No Dusk to Dawn” signs. However, to accommodate canyon organized groups who have legitimate use of the trail in the evenings, the Tucker Wildlife Sanctuary remains open to work with canyons/trails users to provide parking within their private property (lot). A few other canyon residents and nearby neighbors to the Sanctuary have also provided written support for an overnight parking ban. Conversely, Traffic Engineering also received written and verbal requests opposing the dusk to dawn parking restrictions. The Silverado-Modjeska Recreation and Park District, Inter-Canyon League members and a few other residents opposed the dusk to dawn parking restrictions. However, as an alternative, they recommend an overnight parking ban between the hours of 10 pm to 6 am and also request the County not to impose a 2-hour limited time parking.

County also received complaints that hikers were concerned about the lack of parking spaces near the Sanctuary for those visiting the Cleveland National Forest. In response, Traffic Engineering evaluated the area to identify any potential additional parking spaces within the County right of way on Modjeska Canyon Road near Harding Trail. Staff conducted an informal tree survey in the picnic area located in the center of the roadway turn around area as a potential area for additional parking. Based on staff’s preliminary analysis, it appears feasible that up to seven (7) extra parking spaces could be added within the picnic area. However, this design, if implemented, would involve the removal of native vegetation and would likely impact the layout of the existing picnic tables in the center landscaped area.

After a detailed parking study conducted by staff involving a thorough analysis of written and oral requests from canyon residents, hikers and other public visiting the Cleveland National Forest, Traffic Engineering determined that consideration of an overnight parking ban is

appropriate. Beginning the parking ban late in the evenings would not adversely impact the recreational users. Therefore, Traffic Engineering recommends a 10:00 pm to 3:00 am parking restriction on Modjeska Canyon Road near Tucker Wildlife Sanctuary for all the sixteen (16) striped parking spaces on the south side of the roadway. The restriction on parking is consistent with the existing posted restriction on Black Star Canyon Road.

Traffic and speed volumes were collected at three (3) different locations along Modjeska Canyon Road during four (4) consecutive days of the week which included a Saturday, Sunday, Monday and Tuesday. Detailed review of speed survey data, volume data, and accident data revealed that Modjeska Canyon Road experiences low traffic volumes and is operating well with a good safety record. Speed data indicated no speeding issues on the roadway. The highest recorded 85th percentile speed over the four (4) day period was 41 mph. This speed was recorded along the un-posted portion of Modjeska Canyon Road with a de facto speed limit of 55 mph. Traffic Engineering does not recommend any new traffic controls on Modjeska Canyon Road at this time.

On Modjeska Grade Road, 24 hour traffic and speed volumes were also collected during four (4) consecutive days of the week which included a Saturday, Sunday, Monday and Tuesday. Field investigation and traffic count study on Modjeska Grade Road indicates the roadway to be a low volume, very narrow, winding mountainous road with steep embankments and limited visibility around curves. Speed data did not indicate a speeding issue on a roadway such as this, having a de facto speed limit of 55 mph. The majority of the dirt shoulders are narrow and provide few areas that are wide enough to allow vehicles to pull completely off the road and park. Parking restrictions on Modjeska Grade Road have been posted to selectively allow parking in areas deemed safe. Staff's latest field visit observed sand bags placed all along the dirt shoulders of the roadway, as an erosion control measure. During staff's field review, staff observed about four (4) to five (5) bikers sharing the roadway with motorists. Given the geometrics of the roadway, staff concludes that the roadway is operating at a good level of safety. Traffic Engineering does not recommend any additional traffic controls at this time.

RECOMMENDATION

Establish a "No Parking Any Time" zone on the south side of Modjeska Canyon Road near Tucker Wildlife Sanctuary between 10:00 pm and 3:00 am for the sixteen (16) striped parking spaces.

BOARD ACTION NECESSARY TO ENACT THIS RECOMMENDATION

1. Approve this report.
2. By resolution, establish a "No Parking Any Time" zone on the south side of Modjeska Canyon Road near Tucker Wildlife Sanctuary between 10:00 pm and 3:00 am for the sixteen (16) striped parking spaces.