

# AGENDA

## Meeting of the San Marcos Traffic Commission

**Meeting Date:** March 05, 2025 | **Meeting Time:** 6:00 PM

**Location:** City Council Chambers, 1 Civic Center Drive, San Marcos CA 92069

**Americans with Disabilities Act:** If you need special assistance to participate in this meeting, please contact the City Clerk at (760) 744-1050, ext. 3145. Notification 48 hours in advance will enable the City to make reasonable arrangements to ensure accessibility to this meeting. Assisted listening devices are available for the hearing impaired. Please see the City Clerk if you wish to use this device.

**Public Comment:** Please complete a "Request to Speak" form located at the entrance of the Council Chambers in order to address the Traffic Commission on an agenda item. Comments are limited to three minutes, unless you have registered your organization with the City Clerk. If you wish to speak on an item not on the agenda, you may do so under "Oral Communications." Please complete a "Request to Speak" form as noted above and indicate which item number you wish to address.

**Agendas:** Agenda packets are available for public inspection 72 hours prior to scheduled meetings at the Information Desk counter located on the first floor of City Hall, 1 Civic Center Drive, San Marcos, during normal business hours or online at [www.san-marcos.net](http://www.san-marcos.net).

Agenda-related writings or documents provided to a majority of the Commission after distribution of the agenda packet will be available for public inspection at the time of distribution at the Information Desk counter located on the first floor of City Hall, 1 Civic Center Drive, San Marcos, CA, during normal business hours.

### **1. CALL TO ORDER - 6:00 P.M.**

### **2. PLEDGE OF ALLEGIANCE**

### **3. ROLL CALL**

Anyone wishing to speak to the Commission on any item must first complete a Request to Speak form and turn it in to the secretary.

### **4. SEATING OF NEW COMMISSIONERS**

### **5. SELECTION OF NEW CHAIRPERSON AND VICE CHAIRPERSON**

### **6. ORAL COMMUNICATIONS**

Persons wishing to speak on a matter not on the agenda may be heard at this time; however, no action will be taken until placed on a future agenda.

### **7. APPROVAL OF MINUTES**

November 06, 2024



**City of San Marcos**  
1 Civic Center Drive  
San Marcos, CA 92069

## **8. OLD BUSINESS**

- a. Rancho Dorado Community – NTMP Tier 2 Evaluation

## **9. NEW BUSINESS**

- a. Questhaven Road & San Elijo Road No Right Turn on Red

## **10. REPORTS AND INFORMATION ITEMS**

- a. Work Order Updates
- b. San Diego County Sheriff's Department Traffic Collision Summary and Accident Investigation Log
- c. Traffic Commission Commentary
- d. Staff Commentary

## **ADJOURNMENT**

### **AFFIDAVIT OF POSTING**

STATE OF CALIFORNIA )  
COUNTY OF SAN DIEGO ) ss.  
CITY OF SAN MARCOS )

I, Gina Jackson, Secretary, San Marcos Traffic Commission, hereby certify that I caused the posting on February 27, 2025 of this agenda in the glass display case at the north entrance of City Hall.

DATED: February 27, 2025

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Gina Jackson,  
Traffic Commission Secretary



# MINUTES

## Regular Meeting of the Traffic Commission

**WEDNESDAY, NOVEMBER 06, 2024**

City Council Chambers  
1 Civic Center Drive, San Marcos, CA 92069

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### **1. CALL TO ORDER**

At 6:00 p.m. Traffic Commission Chair Neill Kovrig called the meeting to order.

### **2. PLEDGE OF ALLEGIANCE**

Commissioner Clark led the Pledge of Allegiance.

### **3. ROLL CALL**

PRESENT:	COMMISSIONERS:	SCHELLENGER, CLARK, ERICKSON, KOVRIG, HILMES, CARROLL, HOAGLIN
ABSENT:	COMMISSIONERS:	NONE

Also present:

Edd Alberto, City Traffic Engineer, City of San Marcos  
Damian Schoenecke, Associate Engineer – Traffic, City of San Marcos  
Stephanie Kellar, Deputy City Engineer, City of San Marcos  
Gina Jackson, Senior Office Specialist, City of San Marcos  
Sgt. Charles Morreale, Traffic Sheriff, County of San Diego

### **4. ORAL AND WRITTEN COMMUNICATIONS:**

**Warren Witt, resident of San Marcos** – Concerns with the No Turn on Red sign that was put up on Questhaven Road and San Elijo Road. Concerns that study used incorrect information.

**Mary Lamdeck, resident of San Marcos** – Expressed concerns about traffic safety around San Marcos High School, asking if the City can investigate providing safety measures for students crossing the streets to get to the high school.

**Commissioner Responses:** A Sheriff investigation is currently happening regarding the traffic safety concerns and upon completion of the investigation, decisions will be made on what can be done. Staff was also asked to follow-up with an additional study regarding the No Turn on Red sign, and place on a future agenda.

## **5. APPROVAL OF MINUTES**

## Approval of Minutes, August 07, 2024

COMMISSIONER HILMES MAKES A MOTION TO ACCEPT THE MINUTES AS RECORDED; SECONDED BY COMMISSIONER HOAGLIN. MOTION CARRIED BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS: SCHELLENGER, CLARK, ERICKSON, KOVRIG, HILMES, CARROLL,  
HOAGLIN  
NOES: COMMISSIONERS: NONE  
ABSENT: COMMISSIONERS: NONE  
ABSTAIN: COMMISSIONERS: NONE

## **6. OLD BUSINESS**

None

## 7. NEW BUSINESS

a. Rancho Dorado Neighborhood Traffic Management Program Report

Damian Schoenecke, Associate Engineer gave the staff presentation.

## PUBLIC COMMENT

**Nikki Jacobs, resident of San Marcos** – Supports the striping to help reduce the speeding in the neighborhood. Expressed concerns that there is still speeding and asked if Tier 3 can be implemented for the street that qualifies for this measure.

**Matt Reaber, resident of San Marcos** – Expressed that due to understaffing of the Sheriff's office, there is not enough law enforcement presence in the area to reduce the speeding. Requested historical data of speed studies for the community, would like speed bumps installed. Does not support the center line striping of the streets.

**Brad Yano, resident of San Marcos** – Does not support the center line striping of the streets. Requested speed bumps to be installed.

**PUBLIC COMMENT CLOSED**

**COMMISSIONER DISCUSSION INCLUDED:** Any research with incremental change from partial striping to full striping to reduce speeding; speed humps from previous discussions; move forward with Tier 3 on Island Drive; other Tier 2 options available; frequently of enforcement.

**STAFF RESPONSE:** There is no study that discusses the visual striping at an intersection versus a corridor, however, with centerline striping only at the intersection, drivers lose the visual narrowing through the corridor. There are no visual characteristics of a residential neighborhood on Island Drive with the wider streets that would suppress vehicle speeds when going down the corridor.

The NTMP was put together after the pilot program on Fulton Road. We are trying to determine what tier the speed humps will fall under. Speed humps cannot be installed on certain grades of streets that are over 7 and 8 percent. You also need to stay away 200 feet from intersections and 200 feet from the crest of the hill.

Staff can research if there are additional Tier 2 options appropriate for the area.

**TRAFFIC SHERIFF RESPONSE:** Speeding issues are looked into; however, enforcement does get redirected to higher priority areas.

**ACTION:**

COMMISSIONER HOAGLIN MAKES A MOTION TO APPROVE STAFF TO LOOK FOR OTHER TIER 2 OPTIONS FOR WHITE SANDS DRIVE, COAST AVENUE, AND ROCKY POINT WAY, AND APPROVE STAFF TO MOVE FORWARD WITH EVALUATING TIER 3 MEASURE FOR ISLAND DRIVE; SECONDED BY COMMISSIONER SCHELLENGER. MOTION CARRIED BY THE FOLLOWING VOTE:

AYES:	COMMISSIONERS: SCHELLENGER, CLARK, ERICKSON, KOVRIG, HILMES, CARROLL, HOAGLIN
NOES:	COMMISSIONERS: NONE
ABSENT:	COMMISSIONERS: NONE
ABSTAIN:	COMMISSIONERS: NONE

**8. REPORTS AND INFORMATION ITEMS**

**a. Work Order Updates**

Staff received four Tier 1 applications: (1) Richland Rd – Staff will deploy speed radar trailers; (2) Viewpoint Drive – The 85<sup>th</sup> percentile speed is within acceptable values and no measures are recommended at this time; (3) San Marcos Manor – The 85<sup>th</sup> percentile speed for all road speeds are within acceptable values and no measures are recommended at this time; (4) Camino Magnifico – Staff recommends installation of an additional speed limit sign.

**b. San Diego County Sheriff's Dept. Traffic Collision Summary and Accident Investigation Log:**

DUI/Alcohol Arrests:	Aug (17)	Sep (15)	Oct (16)	YTD (158)
DUI Accidents:	Aug (8)	Sep (8)	Oct (5)	YTD (71)
Fatal Collisions:	Aug (0)	Sep (1)	Oct (1)	YTD (6)

Injury Collisions:	Aug (18)	Sep (29)	Oct (20)	YTD (194)
Non-Injury Collisions:	Aug (30)	Sep (33)	Oct (34)	YTD (290)
Pedestrian Collisions:	Aug (0)	Sep (2)	Oct (2)	YTD (17)
Pedestrian Fatalities:	Aug (0)	Sep (1)	Oct (1)	YTD (4)
Bicyclist Collisions:	Aug (5)	Sep (9)	Oct (7)	YTD (40)
Bicyclist Fatalities:	Aug (0)	Sep (0)	Oct (0)	YTD (0)
Motorcycle Collisions:	Aug (1)	Sep (1)	Oct (2)	YTD (17)
Motorcycle Fatalities:	Aug (0)	Sep (0)	Oct (0)	YTD (0)
Motorcycle Injuries	Aug (0)	Sep (1)	Oct (2)	YTD (15)
NTA Citations/Hazardous:	Aug (204)	Sep (120)	Oct (183)	YTD (1494)
NTA Citations/Non-Hazardous	Aug (40)	Sep (40)	Oct (65)	YTD (631)

- c. **Traffic Commission Commentary:** Morning commutes in Woodland Parkway area, the traffic signals seem off and requested staff to look at the queueing. Chair Kovrig reapplied to continue with Traffic Commission. Thanked staff for all the work they do to make San Marcos roads safe for pedestrians, bicyclists, and motorists. Thanked staff for the widening the bicycle lanes on Twin Oaks.
- d. **Staff Commentary:** Staff does not have any additional comments.

### **ADJOURNMENT**

Chairman Kovrig adjourned the meeting at 6:53 p.m.

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NEILL KOVRIG, CHAIRMAN  
CITY OF SAN MARCOS TRAFFIC COMMISSION

**ATTEST:**

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GINA JACKSON, SENIOR OFFICE SPECIALIST  
CITY OF SAN MARCOS TRAFFIC COMMISSION

DRAFT

# AGENDA REPORT

## Meeting of the San Marcos Traffic Commission

**MEETING DATE:** March 5, 2025  
**AGENDA ITEM NO:** 8A  
**SUBMITTED BY:** Damian Schoenecke, EIT – Associate Engineer  
**REVIEWED BY:** Edd Alberto – City Traffic Engineer  
**APPROVED BY:** Stephanie Kellar – Deputy City Engineer  
**SUBJECT:** Rancho Dorado Community – NTMP Tier 2 Evaluation

### **BACKGROUND:**

The Rancho Dorado Neighborhood is a residential community of 276 homes located at the western edge of the city, with its main entrance at White Sands Drive along San Marcos Boulevard. The neighborhood also has a second entrance at Rancho Santa Fe Road via Island Drive. The neighborhood is primarily characterized by single family homes. The community has significant topography and thus varying roadway grades and geometry. At the center of the community is Simmons Family Park, a public park, which is accessible via Rocky Point Way and through a network of trails in the community.

Since 2013, at the approval of Traffic Commission, staff have implemented various traffic safety countermeasures such as evaluating and installing an all-way stop control at the intersection of White Sands Drive and Sea Island Place; installing “25 MPH” speed limit signs with supplemental pavement markings; and installing traffic delineators on White Sands Drive to reduce the roadway width, which were later removed by the City in response to resident complaints of the delineators’ unappealing aesthetic.

At the October 2022 Traffic Commission meeting, staff presented the existing conditions evaluation of the community’s continued concerns with speeding and cut-through traffic. Staff concluded that the perceived cut-through traffic was less than significant and did not warrant additional treatment. The data showed the 85th percentile speeds on the roadways were 1.1 mph to 12.7 mph over the speed limit. City staff recommended measures that included the installation of additional “25 MPH” speed limit signs with supplemental pavement markings, deployment of mobile speed radar trailers, and continued enforcement by the Sheriff department.

Staff also made an additional recommendation to the community to add edge and centerline striping. This additional measure was presented by staff for discussion but not recommended to Traffic Commission, as the community did not desire to have striping improvements on the neighborhood roadways.

Traffic Commission accepted staff's recommendations and directed staff to include the installation of edge striping and partial centerline striping that had been excluded from staff's formal recommendation to Traffic Commission. Traffic Commission also instructed staff to return to provide two staff updates within one year of installation. Installation of the speed limit signage and supplemental striping measures were completed on May 3, 2023.

Staff provided the first six-month update at the January 2024 Traffic Commission meeting, which concluded that 85th percentile speeds had increased slightly between January 2022 and October 2023. Staff discussed that the increased speeds were potentially due to insufficient time after striping implementation for driver behavior to adapt, with the October 2023 data set potentially being an outlier not truly representative of past conditions. Another potential cause discussed was the lack of centerline striping, which was opposed by the community from an aesthetic standpoint; lack of centerline striping may not have provided enough friction to slow vehicles.

Recommendations from staff at the January 2024 Traffic Commission meeting included additional enforcement by the Sheriff Department, deployment of mobile speed trailers, and the performance of additional speed studies. Final recommendations were to be reported to Traffic Commission one year after the installation.

During the August 2024 Traffic Commission meeting, staff provided a one-year update along with final recommendations based on data collected in March and April 2024. The findings showed mixed results from the striping changes implemented over the past year. Coast Avenue and White Sands Drive both showed the 85th percentile speed increasing from the baseline data before normalizing at 32 mph. White Sands Drive showed a reduction from the baseline speed of 35 mph, whereas Coast Avenue was higher than the baseline speed. The results showed that the 85th percentile speeds from the resulting study are consistent with the posting of a 25 mph speed limit, based on the rounding prescribed by the California Vehicle Code and California Manual on Uniform Traffic Control Devices. Rocky Point Way was not studied during this time, since the previous data collection showed the 85th percentile speed was still within 5 mph of the posted speed limit.

Final recommendations from City staff were to continue enforcement by the Sheriff Department and the occasional deployment of mobile speed radar trailers. Staff recommended that further requests

for traffic calming measures be submitted according to the Neighborhood Traffic Management Policy. Traffic Commission accepted these recommendations.

The Neighborhood Traffic Management Policy was approved by Traffic Commission August 2023, which was after the installation of initial traffic calming measures in this area. These initial measures included enforcement, signage, and striping, primarily falling within the Tier 2 category that was subsequently established by the NTMP. Residents in the Rancho Dorado Neighborhood submitted an application under the newly approved NTMP for traffic calming on September 9th, 2024. While new requests are required to enter the process as Tier 1, Rancho Dorado's application was evaluated as Tier 3 due to the previously implemented measures.

As outlined in the NTMP, to continue the Tier 3 process, the 85th percentile speed on the roadway segment(s) must be at least 35 miles per hour or special factors must be identified by the City Traffic Engineer. In addition, the study roadways are required to score over 50 points based on criteria established by the NTMP. The September/October 2024 speed studies showed that Coast Avenue, White Sands Drive, and Rocky Point Way did not meet the minimum 85th percentile speed of 35 mph and therefore did not qualify to continue the Tier 3 process. Island Drive met the minimum requirements to proceed with the Tier 3 process and is being evaluated separately.

Staff presented Tier 3 results during the November 2024 Traffic Commission and recommended moving the request for Coast Avenue, White Sands Drive, and Rocky Point Way to the community engagement step in the Tier 2 process to determine the level of support for implementing the Tier 2 measures. Staff recommended that Island Drive continue with the Tier 3 process. In addition, staff recommended continued enforcement by the Sheriff and occasional deployment of mobile speed trailers. Traffic Commission accepted the staff recommendations.

### **DISCUSSION:**

On December 4<sup>th</sup>, 2024 staff mailed notifications for a public workshop to 277 residences within the Rancho Dorado neighborhood, including one additional residence that has driveway access along Island Drive. Included in the notification was a brochure containing additional information about the NTMP.

A community meeting was held virtually at 6pm on December 18<sup>th</sup>, 2024. During this meeting the Traffic Engineering staff discussed the community's traffic concerns, reviewed the NTMP Tier 2 process, and presented the recommended Tier 2 strategy. Staff shared data collected from previous studies and presented the community with a proposal to install radar speed feedback signs on White

Sands Drive and on Coast Avenue. Rocky Point Way was excluded from further evaluation due to the recorded 85<sup>th</sup> percentile speed on that roadway being recorded as 28 mph, which is acceptable for a residential street.

Meeting participants were informed that as part of the Tier 2 process, the community must show support for the recommended strategy by returning a survey mailed to 277 residences. Each residence would have one vote that could be placed by the current resident, whether it be renter or owner.

Per the NTMP, to move a neighborhood request forward for implementation, 50% (139 surveys) of the mailed surveys must be returned. Of the 50% or more surveys that must be returned, 67% must be marked in favor of the strategy. Once the survey requirements are met, the HOA must provide a letter of support to proceed with the Tier 2 process.

Surveys were mailed on January 9<sup>th</sup>, 2025. Returned surveys required a name, address, and for their vote to be valid. Surveys could be returned by email, mail, or dropped off in person at City Hall. Staff also encouraged residents to actively participate and provided best practices for canvassing the neighborhood. Residents were given until January 31<sup>st</sup>, 2025 to return the surveys, a date which staff extended to February 7<sup>th</sup> 2025 to account for survey mailing time.

**DATA:**

30% (84 surveys) of the 277 surveys sent to residents were returned, falling short of the 50% (139 surveys) required to be returned by the NTMP. Among the returned surveys, 53% supported the installation, while 47% opposed it. Additionally, a letter of support was not received from the HOA. Table 1 provides a summary of the returned surveys by road segment.

**Table 1 – Tier 2 Community Surveys**

Street	Total Returned	Yes	No	Invalid	Total Sent	Percent Returned	Percent Yes	Percent No
Coast Ave	27	6	21	0	56	48%	22%	78%
White Sands Dr	16	11	5	0	44	36%	69%	31%
Rocky Point Way	9	8	1	0	18	50%	89%	11%
Emerald Sea Way	3	3	0	0	12	25%	100%	0%
Sea Island Pl	11	7	3	1	27	41%	64%	27%
Sun Valley Rd	5	1	4	0	29	17%	20%	80%
Crystal Cove Way	3	2	1	0	10	30%	67%	33%
Sand Dollar Way	2	1	1	0	15	13%	50%	50%
Sand Crest Way	1	1	0	0	17	6%	100%	0%
Island Dr	1	1	0	0	4	25%	100%	0%
Summit Point Way	3	1	2	0	8	38%	33%	67%
Goya Pl	1	1	0	0	11	9%	100%	0%
Island Shore Way	2	1	1	0	26	8%	50%	50%
<b>Total</b>	<b>84</b>	<b>44</b>	<b>39</b>	<b>1</b>	<b>277</b>	<b>30%</b>	<b>53%</b>	<b>47%</b>

### **CONCLUSION:**

In accordance with the NTMP guidelines, to show community support, 50% of the surveys must be returned, and those returned must show a 67% approval of the recommended strategy. In addition, an HOA letter expressing support must also be received. The Rancho Dorado application did not meet the 50% return requirement, did not meet the 67% support requirement, and did not include the HOA support letter. As such, the Tier 2 process to install radar speed feedback signs on Coast Avenue and on White Sands Drive will not move forward.

### **RECOMMENDATIONS**

Staff recommend the following:

- Continued enforcement by the Sheriff Department
- Deployment of speed radar trailers

# AGENDA REPORT

## Meeting of the San Marcos Traffic Commission

**MEETING DATE:** March 5, 2025

**AGENDA ITEM NO:** 9A

**SUBMITTED BY:** Damian Schoenecke, EIT – Associate Engineer

**REVIEWED BY:** Edd Alberto –City Traffic Engineer

**APPROVED BY:** Stephanie Kellar – Deputy City Engineer

**SUBJECT:** Questhaven Road & San Elijo Road No Right Turn on Red

### **BACKGROUND:**

Questhaven Road and San Elijo Road is a signalized intersection and located approximately a quarter mile east of the San Elijo Town Center in the southern part of San Marcos. San Elijo Road is an east-west street and is classified as a four-lane arterial roadway separated by a median and features Class II bike lanes in each direction. The speed limit is 45 mph, and San Elijo Road has an average grade of 6.8% increasing from west to east. Questhaven Road is a north-south street and is classified as a two-lane collector roadway separated by a median. The speed limit is 30 mph, and Questhaven Road has an average grade of 6.6% from increasing south to north.

The northbound approach to the intersection features two left turn lanes, one through lane, and one right turn lane. The right turn bay is approximately 150 feet in length. There are marked crosswalks on all legs of the intersection for pedestrian movements.

### **DISCUSSION:**

In October 2022, staff received concerns from a resident regarding crosswalk safety at the intersection of Questhaven Road and San Elijo Road. The resident stated that while using the crosswalk on the south side of the intersection, northbound right turning vehicles would either block the crosswalk or proceed through the crosswalk on a red. To make the right turn on a red light, vehicles were encroaching into the crosswalk to achieve adequate visibility of oncoming traffic. In March 2023, staff installed two R13A (CA) No Right Turn on Red signs and supplemental R10-15 (CA) Turning Vehicles Yield to Pedestrians sign for the northbound movement on Questhaven Road.

In March 2024, staff was contacted by a resident, requesting the no right turn on red restriction to be removed. Staff evaluated the sight visibility at the intersection for vehicles stopped behind the crosswalk in accordance with the City of San Marcos Sight Visibility Guidelines. The 85<sup>th</sup> percentile speed for eastbound San Elijo Road approaching the Questhaven Road intersection is 47 mph, requiring a stopping sight distance of 430 feet; the available sight distance is 310 feet which is less than the distance required. Staff determined that the right turn restriction would remain in place. The sight distance analysis is included as Attachment A.

At the November 2024 Traffic Commission meeting, the resident raised concerns during the public comment period about the right-turn restriction. The resident claimed that the “no right on red” restriction causes excessive delays to drivers trying to make the right turn onto San Elijo Road from Questhaven Road and requested a formal review for the turn restriction to be removed. Traffic Commission directed staff to evaluate the need to restrict right turns on red.

**DATA:**

On November 19, 2024, staff installed video recording equipment at the intersection to assess whether the right-turn restriction contributed to excessive queuing. Footage was analyzed during the AM peak hour (7:00–8:00 AM) and PM peak hour (5:00–6:00 PM), with timestamps recorded each time a queue of two or more vehicles formed. The recorded data is presented in Table 1 below.

San Elijo Road & Questhaven Road Northbound Right Turn Queue			
AM Peak		PM Peak	
Timestamp	Total Queue	Timestamp	Total Queue
7:04 AM	4	5:00 PM	4
7:08 AM	2	5:03 PM	2
7:13 AM	6	5:07 PM	3
7:18 AM	2	5:10 PM	6
7:29 AM	2	5:12 PM	2
7:31 AM	5	5:17 PM	3
7:34 AM	7	5:18 PM	2
7:39 AM	3	5:29 PM	2
7:43 AM	2	5:30 AM	3
7:45 AM	5	5:33 PM	3
7:46 AM	5	5:36 PM	3
7:48 AM	7	5:40 PM	5
7:49 AM	3	5:42 PM	2
7:53 AM	4	5:44 PM	2
7:55 AM	5	5:51 PM	6

7:57 AM	3	5:54 PM	4
7:58 AM	4	5:55 PM	4

**Table 1 – San Elijo Road & Questhaven Road Northbound Right Turn Queue**

To determine delay, staff utilized the Traffic Management Center to download signal timings from the intersection controller. Signal timings for each movement are shown below in Table 2.

Phase	1	2	3	4	5	6	7	8
Description	WB Left	EB	NB Left	SB	EB Left	WB	SB Left	NB
Enabled	✓	✓	✓	✓	✓	✓	✓	✓
Walk	0	5	0	5	0	5	0	5
Ped Clear	0	22	0	26	0	18	0	27
Min Green	6	15	7	7	6	15	7	7
Passage	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Max 1	30	40	30	30	30	40	30	30
Yellow Change	4.5	4.5	3.5	3.5	4.5	4.5	3.5	3.5
Red Clear	2.0	2.0	3.0	3.0	2.0	1.5	3.0	3.0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum Initial	0	20	0	20	0	20	0	20

**Table 2 – San Elijo Road & Questhaven Road Signal Timings**

Accident history between 1/1/2020 and 2/1/2025 showed 6 collisions in the vicinity.

- 9/27/2020 – Head-On
- 2/17/2021 – Head-On
- 4/7/2022 – Broadside (Bicycle)
- 11/29/2022 – Hit Object
- 10/6/2023 – Rear End
- 1/8/2024 – Rear End

#### **ANALYSIS:**

Data collected on November 19<sup>th</sup>, 2024 shows that the maximum number of vehicles that were queued to make a right turn from Questhaven Rd to San Elijo Rd in the AM peak hour was 7, while the maximum number of vehicles queued in the PM peak hour was 6. The right turn lane is approximately 150 feet in length and can accommodate a maximum queue of 7 vehicles.

The intersection signal timing operates in “FREE” mode, meaning it responds to vehicle movements based on real-time demand. Unlike “coordinated” mode, which prioritizes main street traffic, FREE mode allows each movement to be served individually. If the intersection reaches the maximum green time for each phase, a right-turning vehicle could wait a maximum of 100 seconds before getting a green indication. During periods of low demand with no opposing southbound traffic, the average wait time for a right turn reduces to 22 seconds.

The right turn movement from Questhaven Rd is currently operating at a level of service D with a delay of 47.8 seconds in the peak hour. Level of Service D is an acceptable level of service in accordance with the City of San Marcos General Plan.

The controller is currently programmed to serve northbound and southbound left turns as leading phases. This means that the left turns are green before the through movements get a green light. However, staff determined that changing the traffic signal sequence by programming the southbound left turn to lagging operation would improve the northbound right turn to LOS C with a delay of 33.7 seconds.

### **CONCLUSION:**

A queue analysis determined that the available storage length of 150 feet can accommodate the maximum number of vehicles observed during the AM and PM peak hours. Traffic signal timing data shows that the maximum amount of delay for right turning vehicles to be 100 seconds under heavy demand and 22 seconds during low demand. The Highway Capacity Manual relates this delay to a level of service (LOS) D. A change in the sequence could improve northbound right turn operations by reducing delay and improving to LOS C. Staff will make the appropriate changes to the traffic signal sequence.

### **RECOMMENDATIONS**

Staff recommends the following –

- The current no right turn on red restriction for the northbound right turn movement to remain in place.