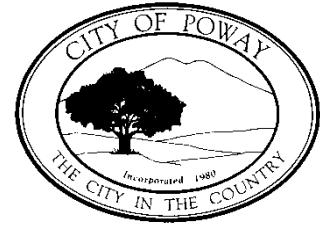


CITY OF POWAY

MEMORANDUM



TO: Traffic Safety Committee

FROM: Melody Rocco, City Engineer

DATE: October 13, 2021

SUBJECT: Titan Way Speed Limit

BACKGROUND

Titan Way is currently posted at “25 mph when Children are Present”. However, the posted speed has not been set by an Engineering and Traffic Survey (E&TS). Titan Way was not studied in the most recent 2019 E&TS adopted by the City of Poway in April 2020 because the segment is short, it is in front of Poway High School, and the pedestrian activity in the area generally resulted in lower speeds on Titan Way. During the COVID-19 Pandemic no pedestrian activity was present due to the school closure and there was a concern about higher speeds for this segment. Since then, a request has been made by the Sheriff’s Department to conduct a speed survey which would allow a speed limit to be set.

Sections 22357 and 22358 of the California Vehicle Code (CVC) give local municipalities the authority to set speed limits below the maximum speed limits set forth by State law, where such speed limits are supported by an E&TS. An approved E&TS is valid for seven years and can be extended to ten years if the roadway conditions have not changed. Section 627 of the CVC defines the survey requirements.

In order to accurately analyze traffic conditions, staff conducted a field investigation of the subject area, gathered speed and traffic data, and researched collision histories.

FINDINGS

Titan Way between Riparian Road and Espola Road is a two-lane roadway that abuts Poway High School to the north. It is listed in the General Plan Transportation Master Element as a local collector. Titan Way provides on-street parking on both sides between Riparian Road and the student parking lot, and there are sidewalks on both sides. Due to the proximity to the school, the posted speed limit on this segment of roadway is 25 mph when children are present. There are no other speed limit signs along the roadway. There is a mid-block crosswalk on Titan Way to the west of the student parking lot driveway. Yield pavement markings are provided in both directions in advance of this crosswalk.

Recent traffic collection data is shown in Attachment A. Based on these counts the Average Daily Traffic (ADT) is 2,627 vehicles.

A review of the City Crossroads and the Statewide Integrated Traffic Records System (SWITRS) accident database found a total of four accidents on this stretch of road from 2010 to 2020, see Attachment B. One accident involved an overturned vehicle. Accidents involved driving under the influence, unsafe speeding or improper turning. There were no fatalities, but one injury or complaint of pain associated with one of the accidents.

The City's current 2019 E&TS was prepared pursuant to the guidelines of the 2014 California Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD calls for speed limits to be established to the nearest 5 mph increment of the 85th percentile speed. For example, if the 85th percentile speed is 47 mph, the speed limit should be posted at 45 mph. However, if the 85th percentile speed is 48 mph, the speed limit should be posted at 50 mph.

Section 22358.5 of the CVC gives local agencies the authority to lower the speed limit an additional 5 mph beyond the adjusted 85th percentile when there are conditions that are not apparent to drivers, which manifest in higher accidents on the roadway. The following traffic and safety conditions could potentially be used as conditions that are not apparent to drivers: driveways directly abutting the roadway with frequent turns, insufficient sight distances, mid-block pedestrian and/or equestrian crossings, and pedestrians and bikers along the roadway. Roadway physical conditions, such as width, curvature, grade and surface conditions are not considered "conditions not apparent to drivers" by State law.

Recent speed survey results are shown in Attachment C. This data was collected to support the setting and supporting of a speed limit on this road. Due to the proximity to the high school, the posted speed limit on this segment of Titan Way is 25 mph when children are present. The measured 85th percentile speed was 32 mph. Based on this data, the speed limit should be rounded down to 30 mph, and using the previously described MUTCD speed reduction allowance for mid-block pedestrian crossings, could be set at 25 mph.

RECOMMENDATION

Staff recommends setting the speed limit at 25 mph on Titan Way and requests the Traffic Safety Committee support certifying a speed limit of 25 mph on Titan Way. The E&TS for this location must be adopted by a City Council ordinance.

Attachments:

- A. Traffic Volumes
- B. Crossroads/SWITRS Collision Data
- C. 2021 Titan Way Speed Survey

Prepared by NDS/ATD
 Prepared by National Data & Surveying Services

VOLUME
 Titan Way Bet. Riparian Rd & Espola Rd

Day: Thursday
 Date: 9/9/2021

City: Poway
 Project #: CA21_040156_006

DAILY TOTALS						NB	SB	EB	WB	Total
						0	0	1,590	1,037	2,627

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL				
00:00	0	0	0	0		12:00	0	0	21	0	21				
00:15	0	0	0	0		12:15	0	0	9	0	9				
00:30	0	0	1	0	1	12:30	0	0	9	0	9				
00:45	0	0	0	1	1	12:45	0	0	9	48	9	48			
01:00	0	0	0	1	1	13:00	0	0	5	0	5				
01:15	0	0	0	0		13:15	0	0	155	0	155				
01:30	0	0	0	0		13:30	0	0	9	0	9				
01:45	0	0	0	0	1	13:45	0	0	7	176	7	176			
02:00	0	0	0	0		14:00	0	0	17	0	17				
02:15	0	0	0	0		14:15	0	0	36	0	36				
02:30	0	0	0	0		14:30	0	0	200	0	200				
02:45	0	0	0	0		14:45	0	0	107	360	107	360			
03:00	0	0	0	0		15:00	0	0	46	0	46				
03:15	0	0	1	1	2	15:15	0	0	23	0	23				
03:30	0	0	0	0		15:30	0	0	31	0	31				
03:45	0	0	0	1	1	15:45	0	0	22	122	22	122			
04:00	0	0	0	0		16:00	0	0	21	0	21				
04:15	0	0	0	0		16:15	0	0	13	0	13				
04:30	0	0	0	0		16:30	0	0	34	0	34				
04:45	0	0	1	1	1	16:45	0	0	18	86	18	86			
05:00	0	0	0	0		17:00	0	0	16	0	16				
05:15	0	0	0	1	1	17:15	0	0	4	0	4				
05:30	0	0	3	1	4	17:30	0	0	7	0	7				
05:45	0	0	11	14	32	34	17:45	0	0	16	43	0	16	43	
06:00	0	0	18	45	63	18:00	0	0	8	5	13				
06:15	0	0	3	13	16	18:15	0	0	9	7	16				
06:30	0	0	9	34	43	18:30	0	0	11	6	17				
06:45	0	0	97	127	164	256	18:45	0	0	3	31	9	27	12	58
07:00	0	0	131	266	397	19:00	0	0	6	6	12				
07:15	0	0	149	197	346	19:15	0	0	3	7	10				
07:30	0	0	20	17	37	19:30	0	0	5	4	9				
07:45	0	0	8	308	13	493	19:45	0	0	1	15	2	19	3	34
08:00	0	0	11	12	23	20:00	0	0	6	17	23				
08:15	0	0	8	27	35	20:15	0	0	16	8	24				
08:30	0	0	10	45	55	20:30	0	0	3	7	10				
08:45	0	0	15	44	11	95	20:45	0	0	4	29	2	34	6	63
09:00	0	0	6	11	17	21:00	0	0	1	3	4				
09:15	0	0	5	3	8	21:15	0	0	0	3	3				
09:30	0	0	7	8	15	21:30	0	0	0	6	6				
09:45	0	0	6	24	17	39	21:45	0	0	2	3	1	13	3	16
10:00	0	0	13	12	25	22:00	0	0	0	0					
10:15	0	0	6	3	9	22:15	0	0	1	1	2				
10:30	0	0	2	3	5	22:30	0	0	1	0	1				
10:45	0	0	6	27	0	18	22:45	0	0	3	5	3	4	6	9
11:00	0	0	10	0	10	23:00	0	0	1	2	3				
11:15	0	0	24	0	24	23:15	0	0	1	0	1				
11:30	0	0	58	0	58	23:30	0	0	0	0					
11:45	0	0	31	123	0	31	123	23:45	0	0	0	2	0	2	4
TOTALS			670	938	1608	TOTALS			920	99	1019				
SPLIT %			41.7%	58.3%	61.2%	SPLIT %			90.3%	9.7%	38.8%				

DAILY TOTALS						NB	SB	EB	WB	Total
						0	0	1,590	1,037	2,627

AM Peak Hour			06:45	06:30	06:30	PM Peak Hour			14:15	19:45	14:15
AM Pk Volume			397	661	1047	PM Pk Volume			389	34	389
PK Hr Factor			0.666	0.621	0.659	PK Hr Factor			0.486	0.500	0.486
7 - 9 Volume	0	0	352	588	940	4 - 6 Volume	0	0	129	0	129
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			16:00		16:00
7 - 9 Pk Volume	0	0	308	493	801	4 - 6 Pk Volume	0	0	86	0	86
PK Hr Factor	0.000	0.000	0.517	0.463	0.504	PK Hr Factor	0.000	0.000	0.632	0.000	0.632

**City of Poway
Engineering Services Dept - Traffic Engineering Division**

Collision Report Summary

9/23/2021

Date Range Reported: 1/1/10 - 12/31/21

Total Number of Collisions: 4

Total Number of Persons Injured: 1

Total Number of Persons Killed: 0

Report#	Collision_Date	Collision_Time	Primary_Location	Secondary_Location	Distance	Direction	Type_Collision	Involved_Witt	PCF	Injury_Degree	Injured	Killed
4680593	03/12/10	6:54:00 PM	TITAN WY	RIPARIAN RD	0	Not Stated	Rear-End	Other Motor Vehicle	A		1	0
6700363	09/05/14	4:17:00 AM	TITAN WY	ESPOLA RD	135	West	Rear-End	Other Motor Vehicle	A	Property Damage Only	0	0
7130606	10/17/15	10:55:00 PM	TITAN WY	RIPARIAN RD	58	West	Rear-End	Other Motor Vehicle	A	Property Damage Only	0	0
8199027	11/10/16	10:40:00 PM	TITAN WY	ESPOLA RD	12	East	Rear-End	Other Motor Vehicle	A	Property Damage Only	0	0

Settings

Parameter	Setting
Street Name	TITAN WY
Cross Street	ESPOLA RD
Starting Date	1/1/2010
Ending Date	12/31/2021
Distance from Intersection	>= 0' for non rear-end collisions >= 0' for rear-end collisions

Attachment B
 SWITRS Collision Data - Titan Way
 City of Poway

Case Id	Collision Year	Process Date	Jurisdiction	Collision Date	Collision Time	Officer Id	Reporting District	Day of Week	CHP Shift	Population	County City Location	Special Condition	Beat Type	CHP Beat Type	City Division LAPD	CHP Beat Class	Beat Number	Primary Rd	Secondary Rd
4680593	2010	20110223	3700	20100312	1854	SH2560		5	5	4	3780	0	0	0	0	0	406	TITAN WY	RIPARIAN RD
6700363	2014	20150527	3700	20140905	1617	SH7709		5	5	4	3780	0	0	0	0	0	406	TITAN WY	ESPOLA RD
7130606	2015	20160203	3700	20151017	2255	SH2340		6	5	4	3780	0	0	0	0	0	406	TITAN WY	RIPARIAN RD
8199027	2016	20170103	3700	20161110	2240	SH5620		4	5	4	3780	0	0	0	0	0	406	TITAN WY	ESPOLA RD

Attachment B
 SWITRS Collision Data - Titan Way
 City of Poway

Case Id	Distance	Direction	Intersection	Weather 1	Weather 2	State Highway Indicator	Caltrans County	Caltrans District	State Route	Route Suffix	Postmile Prefix	Postmile	Location Type	Ramp Intersection	Side Of Highway	Tow Away	Collision Severity	Killed victims	Injured victims	Party Count
4680593	0		Y	A	-	N										N	3	0	1	1
6700363	54 W		N	A	-	N										N	0	0	0	1
7130606	96 E		N	C	-	N										Y	0	0	0	1
8199027	206 W		N	A	-	N										N	0	0	0	2

Attachment B
 SWITRS Collision Data - Titan Way
 City of Poway

Case Id	Primary Collision Factor	PCF Violation Code	PCF Violation Category	PCF Violation	PCF Violation Subsection	Hit And Run	Type of Collision	Motor Vehicle Involved With	Ped Action	Road Surface	Road Condition 1	Road Condition 2	Lighting	Control Device	CHP Road Type	Pedestrian Collision	Bicycle Collision	Motorcycle Collision	Truck Collision	Not Private Property
4680593	A	-	1	23152	A	N	E	I	A	A	H	-	C	A	0	0	0	0	0	Y
6700363	A	-	3	22350		N	E	I	A	A	H	-	A	D	0	0	0	0	0	Y
7130606	A	-	3	22350		N	F	I	A	B	H	-	C	A	0	0	0	0	0	Y
8199027	A	-	8	22102		N	D	C	A	A	H	-	C	A	0	0	0	0	0	Y

Attachment B
 SWITRS Collision Data - Titan Way
 City of Poway

Case Id	Alcohol Involved	Statewide Vehicle Type At Fault	CHP Vehicle Type At Fault	Severe Injury count	Other Visible Injury count	Complaint of Pain Injury count	Pedestrian Killed count	Pedestrian Injured count	Bicyclist Killed count	Bicyclist Injured count	Motorcyclist Killed count	Motorcyclist Injured count	Primary Ramp	Secondary Ramp	Latitude	Longitude
4680593	Y	A	1	0	1	0	0	0	0	0	0	0	0	-		
6700363		A	1	0	0	0	0	0	0	0	0	0	0	-		
7130606		D	22	0	0	0	0	0	0	0	0	0	0	-		
8199027		D	22	0	0	0	0	0	0	0	0	0	0	-		

SPEED

Titan Way Bet. Riparian Rd & Espola Rd

Day: Thursday
Date: 9/9/2021

City: Poway
Project #: CA21_040156_006

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	2
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	1	0	0	0	0	0	0	2
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	0	19	22	6	1	0	0	0	0	0	0	0	48
06:00	42	51	138	110	37	5	0	0	0	0	0	0	0	383
07:00	127	175	261	164	59	14	1	0	0	0	0	0	0	801
08:00	0	0	11	48	50	24	6	0	0	0	0	0	0	139
09:00	0	3	8	19	14	15	4	0	0	0	0	0	0	63
10:00	0	0	4	21	14	5	1	0	0	0	0	0	0	45
11:00	0	3	24	37	42	12	5	0	0	0	0	0	0	123
12:00 PM	1	4	8	10	22	3	0	0	0	0	0	0	0	48
13:00	0	10	50	70	36	6	4	0	0	0	0	0	0	176
14:00	58	56	109	75	48	12	2	0	0	0	0	0	0	360
15:00	0	4	33	48	29	8	0	0	0	0	0	0	0	122
16:00	0	2	22	29	25	5	3	0	0	0	0	0	0	86
17:00	0	3	6	14	18	2	0	0	0	0	0	0	0	43
18:00	0	2	12	22	21	1	0	0	0	0	0	0	0	58
19:00	0	1	6	14	8	4	1	0	0	0	0	0	0	34
20:00	0	1	14	27	17	3	1	0	0	0	0	0	0	63
21:00	0	0	3	6	5	1	1	0	0	0	0	0	0	16
22:00	0	1	3	2	2	1	0	0	0	0	0	0	0	9
23:00	0	1	0	0	3	0	0	0	0	0	0	0	0	4
Totals	229	318	731	739	457	123	30							2627
% of Totals	9%	12%	28%	28%	17%	5%	1%							100%

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes			
	Volume	%		Volume	%		Volume	%		Volume	%		
AM Volumes	170	233	422	223	77	18	0	0	0	0	0	0	1608
% AM	6%	9%	16%	8%	3%	1%							61%
AM Peak Hour	07:00	07:00	07:00	07:00	08:00	08:00							07:00
Volume	127	175	164	59	24	6							801
PM Volumes	59	85	317	234	46	12	0	0	0	0	0	0	1019
% PM	2%	3%	12%	9%	2%	0%							39%
PM Peak Hour	14:00	14:00	14:00	14:00	14:00	13:00							14:00
Volume	58	56	75	48	12	4							360

Street Name	Percentiles				
	15th	50th	Average	85th	95th
Garden Rd	18	25	25	32	36
Direction					ADT
Summary	18	25	25	32	2627