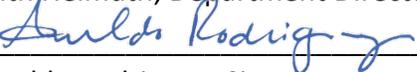


REPORT TO CITY COUNCIL

Approved by:



Keith Helmuth, Department Director



Arnaldo Rodriguez, City Manager

Council Meeting of: March 15, 2023

Agenda Number: C-1

SUBJECT:

Updating Prima Facie Speed Limits on Designated City Streets in Compliance with Vehicle Code Regarding Speed Surveys on City Streets

RECOMMENDATION:

Conduct public hearing, waive full reading, and introduce Ordinance Amending Section 3-5.08 of Chapter 5 of Title 3 of the Madera Municipal Code (MMC) to Update Prima Facie Speed Limits on City Streets

SUMMARY:

The California Vehicle Code (CVC) sets speed laws and prima facie speed limits for highways and local roads. In order to vary speed limits from those established by the CVC, a local agency must conduct an Engineering and Traffic Survey (E&TS). The CVC states that an E&TS must justify a speed limit for a particular roadway segment; otherwise, the subject segment is considered a "speed trap". The evidence of a speeding violation based on a "speed trap" is inadmissible in court. The City last conducted an E&TS in 2011 and extended the E&TS for two years in 2016 for the segments addressed by this report. The City Engineer has undertaken a new E&TS to justify speed limits on designated streets. The proposed speed limits and those that will remain unchanged are listed in the ordinance. To be enforced, the E&TS must be filed with the local Court, and new speed limit signs must be posted as necessary.

According to the Manual on Uniform Traffic Control Devices (MUTCD) (TOPD 09-04), the speed limit shall be established at the nearest 5 mph increment of the 85th percentile speed. However, the speed limit may be reduced by a 5-mph increment from the 85th percentile speed if an engineering study indicates the need for a reduction in speed is necessary to match existing conditions with the traffic safety needs of the community. If the 5-mph reduction is applied, the E&TS shall document in writing the conditions and justification for the reduced speed limit and be approved by a registered Civil or Traffic Engineer. In cases where the nearest increment would

require rounding up, MUTCD allows the speed limit to be rounded down to the nearest 5 mph increment if no further reduction is used.

BACKGROUND:

Engineering Department staff conducted six speed surveys on:

- Tozer Street from Avenue 15 to A Street
- Granada Drive from Howard Road to Industrial Avenue
- Storey Road from Yosemite Avenue to City limits
- Sunset Avenue from 4th Street to Granada Drive
- Falcon Drive from Yeager Drive to Aviation Drive; and
- Aviation Drive from Condor Drive to Falcon Drive

Four surveys were performed due to expiring speed limits and the addition of two segments due to private development in the area.

The speed survey was conducted by reading the speed directly from a radar speed meter. One hundred automobiles were considered taking 50 from each direction.

The survey representative used an unmarked car and selected a straight section of the road with no traffic signal, sign, or intersection with major cross streets. It was taken during weekday off-peak hours, in good weather, and with no unusual conditions prevailing.

DISCUSSION:

The speed limit must be set at the nearest five mph increment of the 85th percentile speed. However, other factors such as median and modal speed, 50%, 15% percentile, 10 mph pace, and accident history within each street segment that are speed-related should also be considered.

In addition to the availability of the above statistical data, a significant aspect of speed limit recommendations is based on a field review. Its importance is that existing conditions may warrant a lower speed than indicated by the application of survey data.

The engineering traffic survey must justify the posted speed to use radar for enforcement. Below are the results for the streets surveyed, followed by an explanation. The table reflects the new speeds for six streets which will be amended in the proposed ordinance. All other speed limits in the current ordinance will remain the same.

Table 1: Summary of Engineering and Traffic Survey

Item No. ¹	Location	Current Speed	2021-22 E&TS 85 th Percentile Speeds	Nearest 5 MPH (adjusted speed) ²	Date Valid until	Length of Segment in Miles
23	Granada Dr (Howard Rd to Industrial Ave)	40	45	45(40)	2/8/30	0.5
44	Storey Rd (Yosemite Ave to City Limits)	45	49	45 ³	2/8/30	0.5
46	Sunset Ave (4 th St to Granada Dr)	35	40	40(35)	2/9/30	1.4
48	Tozer Street (Avenue 15 to A Street)	45	47	45 (35)	6/3/29	0.75
56	Falcon Dr (Yeager to Aviation Dr)	N/A	43	45(35)	7/5/29	0.35
57	Aviation Dr (Condor to Falcon Dr)	N/A	46	45(35)	7/5/29	0.5

1. Matches Item No. of table in Section 3-5.08 of Chapter 5 of Title 3 of the Madera Municipal Code
2. Initial value is the nearest rounded speed from the 85th percentile speed. Second value in parenthesis is recommended adjusted speed in compliance with CVC sections 627 and 22358.5 and MUTCD Section 2B.13.
3. Rounded down when 85th percentile speed would require rounding up per MUTCD Section 2B.13 Paragraph 12a Option 2 and in compliance with CVC sections 627 and 22358.5

Justifications:

The following section provides conditions and justification for reducing speed limits as required by MUTCD.

#23 Granada Drive from Howard Road to Industrial Avenue:

The speed limit was reduced by 5 mph to 40 mph as permissible by the MUTCD 2014 Revision 6 Section 2B.13 paragraph 12a and in compliance with CVC Section 627 and 22358.2. CVC Section 627 defines an E&TS that is required to consider prevailing speeds, accident records, and conditions not readily apparent to the driver and optionally consider residential density and pedestrian and bicycle safety. E&TS determined the 85th percentile speed to be 45 mph. The speed reduction was due to the following condition(s):

- The segment is in a residential area.
- Pedestrians cross Granada Drive in higher than typical numbers in this section to access the Town & Country Park

#44 Storey Road from Yosemite Avenue to City Limits:

E&TS determined the 85th percentile speed to be 49 mph. The speed limit was rounded down to 45 mph as permissible by the MUTCD Section 2B.13 Paragraph 12a Option 2 and in compliance with CVC Sections 627 and 22358.5.

#46 Sunset Avenue from 4th Street to Granada Drive:

E&TS determined the 85th percentile speed to be 40 mph. The speed limit was reduced by 5 mph to 35 mph as permissible by the MUTCD 2014 Revision 6 Section 2B.13 paragraph 12a and in compliance with CVC Section 627 and 22358.2. CVC Section 627 defines an E&TS that is required to consider prevailing speeds, accident records, and conditions not readily apparent to the driver and optionally consider residential density and pedestrian and bicycle safety. The speed reduction was due to the following condition(s):

- The segment is in a residential area.
- The segment is a major school route for two elementary schools.

#48 Tozer Street from Avenue 15 to A Street:

CVC Section 627 defines an E&TS that is required to consider prevailing speeds, accident records, and conditions not readily apparent to the driver and optionally consider residential density and pedestrian and bicycle safety. E&TS determined the 85th percentile speed to be 47 mph. The speed limit was rounded to 45 mph per CVC and reduced by 10 to 35 mph per engineering judgment. The speed reduction was due to the following condition(s):

- The edge of the traveled way is, in many places, less than 10 feet from the driveways on adjacent properties, causing low visibility for residents attempting to exit their homes.
- Ongoing residential land development in the adjacent vacant lands generates more vehicular and pedestrian traffic than in previous conditions.
- Street is a route to an elementary school and technical school.
- Half-mile street segment north of Sunrise would be classified as residential if not for the width of the roadway due to the high number of adjacent residential properties.

#56 Falcon Drive from Yeager Drive to Aviation Drive:

CVC Section 627 defines an E&TS that is required to consider prevailing speeds, accident records, and conditions not readily apparent to the driver and optionally consider residential density and pedestrian and bicycle safety. E&TS determined the 85th percentile speed to be 47 mph. The speed limit is rounded to 45 mph per CVC and reduced by 10 to 35 mph per engineering judgment. The speed reduction was due to the following condition(s):

- Segment is located in a commercial area that commonly sees high-profile trucks parallel parked, restricting driveway sight distance.
- Segment approaches a curve with a design speed of 35 mph.

#57 Aviation Drive from Condor Drive to Falcon Drive:

CVC Section 627 defines an E&TS that is required to consider prevailing speeds, accident records, and conditions not readily apparent to the driver and optionally consider residential density and pedestrian and bicycle safety. E&TS determined the 85th percentile speed to be 47 mph. The speed limit was rounded to 45 mph per CVC and reduced by 10 to 35 mph per engineering judgment. The speed reduction was due to the following condition(s):

- Segment approaches a curve with a design speed of 35 mph.
- Segment is of minimal length (1,350 feet) terminating to the west into the curve noted in the previous bullet and to the east with a curve that cannot support more than 15 mph.

FISCAL IMPACT:

The related costs are staff time and Public Works to replace speed limit signs.

ALTERNATIVES:

Failure to adopt the proposed ordinance inhibits the Police Department from issuing citations, or Council may direct staff to draft further revisions to the Speed Survey Report.

ATTACHMENTS:

1. Ordinance
2. Speed Survey Data

Attachment 1

Ordinance

ORDINANCE NO. _____

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MADERA
AMENDING SECTION 3-5.08 OF CHAPTER 5 OF TITLE III OF THE MADERA
MUNICIPAL CODE RELATING TO INCREASING STATE SPEED LIMIT IN
CERTAIN ZONES**

WHEREAS, California Vehicle Code Section 22352 establishes prima facie speed limits for streets; and

WHEREAS, California Vehicle Code Section 22357 provides that whenever a local authority determines upon the basis of an engineering and traffic survey that a speed greater than 25 miles per hour would facilitate the orderly movement of vehicular traffic and would be reasonable and safe upon any street other than a state highway otherwise subject to prima facie limit of 25 miles per hour, the local authority may by ordinance determine and declare a speed limit of 30, 35, 40, 45, 50, 55, or 60 miles per hour or a maximum speed limit of 65 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe; and

WHEREAS, according to California Vehicle Code (CVC) Section 40802, a “speed trap” is defined as a section of highway or street with a prima facie speed limit that is not justified by an engineering and traffic survey conducted within the time periods specified and the enforcement of the speed limit involves the use of radar or any other electronic device that measures the speed of moving objects; and

WHEREAS, the evidence of a speeding violation based on the maintenance or use of a speed trap is inadmissible in court per CVC Section 40803; and

WHEREAS, in order to establish speed limits and ensure a speed trap is not created, engineering and traffic surveys must be conducted in accordance with CVC Section 627 and the California Manual on Uniform Traffic Control Devices (MUTCD); and

WHEREAS, the City prepared an engineering and traffic survey (E&TS) for designated City streets from 6/3/22 through 2/9/23 and the proposed speed limit for each street as established by the 2023 E&TS; and

WHEREAS, CVC Section 40802(c) allows for engineering and traffic surveys to be valid for a period of seven years if the conditions specified in Section 40802(c), pertaining to officer training and equipment standards, are met; and

WHEREAS, the City has reviewed CVC Section 40802(c) and determined that the Madera Police Officers using radar/lidar equipment for determination of speed have been properly trained and the radar/lidar equipment used meets the required standards and is properly maintained and calibrated.

THE CITY COUNCIL OF THE CITY OF MADERA DOES ORDAIN AS FOLLOWS:

SECTION 1. Subsection (B) of Sec. 3-5.08 of Chapter 5 of Title 3 of the Madera Municipal Code is hereby amended to read as follows:

(B) *Section 16.* It is determined upon the basis of an engineering and traffic survey that the speed permitted by state law upon the following streets is less than is necessary for the safe operation of vehicles thereon by reason of the designation and sign-posting of such streets as through highways and/or by reason of widely-spaced intersections and it is declared that the prima facie limit shall be as set forth in this section on those streets, or parts of streets, designated in this section when signs are erected giving notice thereof:

Item No.	Location	Declared Prima Facie Speed Limit (MPH)
1	Adell Street from Country Club Dr. to "D" Street	40
2	Almond Ave. from Pine Street to Granada Drive	45
3	Almond Ave. from Golden State Hwy to Madera Ave.	40
4	Almond Ave. from Madera Ave. to Stadium Road	40
5	Cleveland Ave. from Gateway Drive to Tulare St.	40
6	Cleveland Ave. from Granada Drive to Schnoor Ave.	40
7	Cleveland Ave. from Granada Dr. to W. City Limits	45
8	Cleveland Ave. from Schnoor Ave. to Freeway 99	40
9	Cleveland Ave. from Tulare Street to Tozer Road	40
10	Clinton Ave. from Lilly St. to Tozer Road	35
11	Country Club Drive from Cleveland Ave. to Clark	40
12	D Street from Central Ave. to Yosemite Ave.	35
13	D Street from Cleveland Ave. to Adell Street	40
14	D Street from Ninth Street to Olive Avenue	35
15	Ellis Street from Lake Street to Chapin Ave.	40
16	Fourth Street from I Street to Pine Street	35
17	Fourth Street from D Street to Lake Street	35
18	Gateway Drive from Cleveland Ave. to Avenue 16	50
19	Gateway Drive from Fresno River to Cleveland Ave.	40
20	Gateway Drive from Ninth Ave. to Olive Ave.	35
21	Granada Drive from Cleveland Ave. to Fresno River	45
22	Granada Drive from Howard Road to Sunset Ave.	35
23	Granada Drive from Howard Road to Industrial Ave.	40
24	Granada Drive from Industrial Ave. to South City Limits	45
25	Granada Drive from Sunset Ave. to Riverview Drive	35
26	Howard Road from Autumn Road to Pine St.	35
27	I Street from 4 th Street to Olive Ave.	35
28	I Street from 4 th Street to Central Avenue	35

29	Industrial Ave. from Granada Dr. to Schnoor Ave.	40
30	Kennedy Street from Lake Street to Tulare Ave.	35
31	Kennedy Street from Tulare Street to City Limits	40
32	Knox Street from Olive Avenue to Tozer Street	40
33	Lake Street from Cleveland Ave. to Ellis Street	40
34	Lake Street from Clinton Ave. to Sunrise Ave.	35
35	Pecan Ave. from Raymond Thomas to Golden State Blvd.	40
36	Pecan Ave. from Madera Ave. to Pine Street	45
37	Pecan Ave. from Schnoor Ave. to Pine Street	45
38	Pine Street from Howard Road to Pecan Street	45
39	Pine Street from Howard Road to Sunset Avenue	30
40	Schnoor Ave. from Dutra Way to Cleveland Ave.	35
41	Schnoor Ave. from Kennedy Street to Cleveland Ave.	40
42	Sherwood Way from Country Club Drive to Sonora Street	40
43	Sherwood Way from Sonora Street to Lake Street	35
44	Storey Road from Yosemite Ave. to City Limits	45
45	Sunrise Ave. from B Street to Lilly Street	40
46	Sunset Ave. from Fourth Street to Granada Drive	35
47	Sunset Ave. from Granada Drive to City Limits	45
48	Tozer Street from Avenue 15 to A Street	35
49	Tozer Street from Yosemite Ave. to Avenue 15	40
50	Tozer Street from Olive Ave. to Knox Street	45
51	Vineyard Ave. from Clinton Ave. to Yosemite Ave.	30
52	Westberry Blvd from Howard Road to Sunset Avenue	45
53	Westberry Blvd from Sunset Avenue to Riverview Drive	40
54	Yosemite Ave. from Gateway Drive to Olive Ave.	35
55	Pecan Avenue from Road 28 to Road 29	45
56	Falcon Drive from Yeager Drive to Aviation Drive	35
57	Aviation Drive from Condor Drive to Falcon Drive	35

SECTION 2. If any section, subsection, clause or phase of this Ordinance is for any reason held to be unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and any section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsection, sentence, clause or phrase be declared unconstitutional or otherwise invalid.

SECTION 3. This Ordinance shall be effective and of full force and effect at 12:01 a.m. on the thirty-first day after its passage or when appropriate signs giving notice thereof are erected upon street and shall not thereafter be revised except upon the basis of an engineering and traffic survey, whichever occurs later.

SECTION 4. Publication. This ordinance shall be published in accordance with the provisions of Government Code Section 36933.

Attachment 2

Speed Survey Data

#23 Granada Drive from Howard Road to Industrial Avenue

CITY OF MADERA SPEED SURVEY SHEET

Jurisdiction: CITY OF MADERA Date: 2/8/2023

Location: Granada from Howard to Industrial Weather: Sunny & Dry

Recorder: Jonathan Gramajo Begin Time: 1:35 PM End Time: 2:21 PM

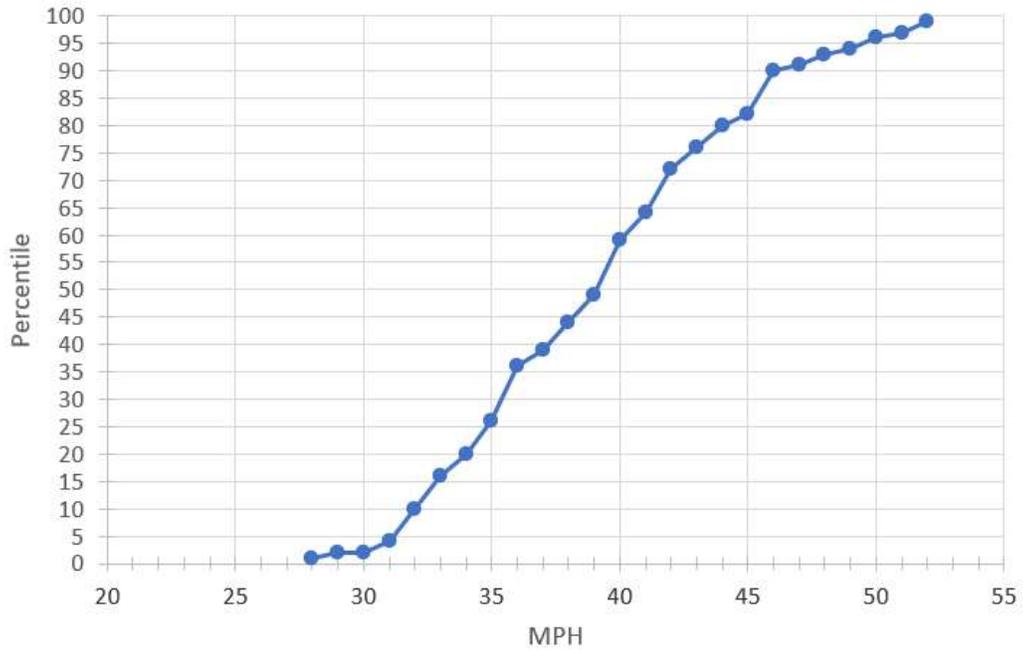
MPH	NUMBER OF VEHICLES						TOTAL	CUMULATIVE PERCENTAGE
	5	10	15	20	25	30		
65	X						1	100
64							0	99
63							0	99
62							0	99
61							0	99
60							0	99
59							0	99
58							0	99
57							0	99
56							0	99
55							0	99
54							0	99
53							0	99
52	X	X					2	99
51	X						1	97
50	X	X					2	96
49	X						1	94
48	X	X					2	93
47	X						1	91
46	X	X	X	X	X	X	8	90
45	X	X					2	82
44	X	X	X	X			4	80
43	X	X	X	X			4	78
42	X	X	X	X	X	X	8	72
41	X	X	X	X			5	64
40	X	X	X	X	X	X	10	59
39	X	X	X	X			5	49
38	X	X	X	X			5	44
37	X	X	X				3	39
36	X	X	X	X	X	X	10	36
35	X	X	X	X	X		6	28
34	X	X	X	X			4	20
33	X	X	X	X	X		6	16
32	X	X	X	X	X		6	10
31	X	X					2	4
30							0	2
29	X						1	2
28	X						1	1
27							0	0
26							0	0
25							0	0
24							0	0
23							0	0
22							0	0
21							0	0
20							0	0
19							0	0
18							0	0
17							0	0
16							0	0
TOTAL NUMBER OF VEHICLES = <u>100</u>							100%	

Other Considerations: 85th Percentile at: 85 85th Percentile: 45

Accident History: _____

Unusal History: _____

Signed: Jonathan Gramajo Date: 2/8/2023 Title: Assistant Engineer



#44 Storey Road from Yosemite Avenue to City Limits

CITY OF MADERA SPEED SURVEY SHEET

Jurisdiction: CITY OF MADERA Date: 2/8/2023

Location: Storey from Yosemite to City Limits Weather: Sunny & Dry

Recorder: Jonathan Gramajo Begin Time: 2:30 PM End Time: 3:35 PM

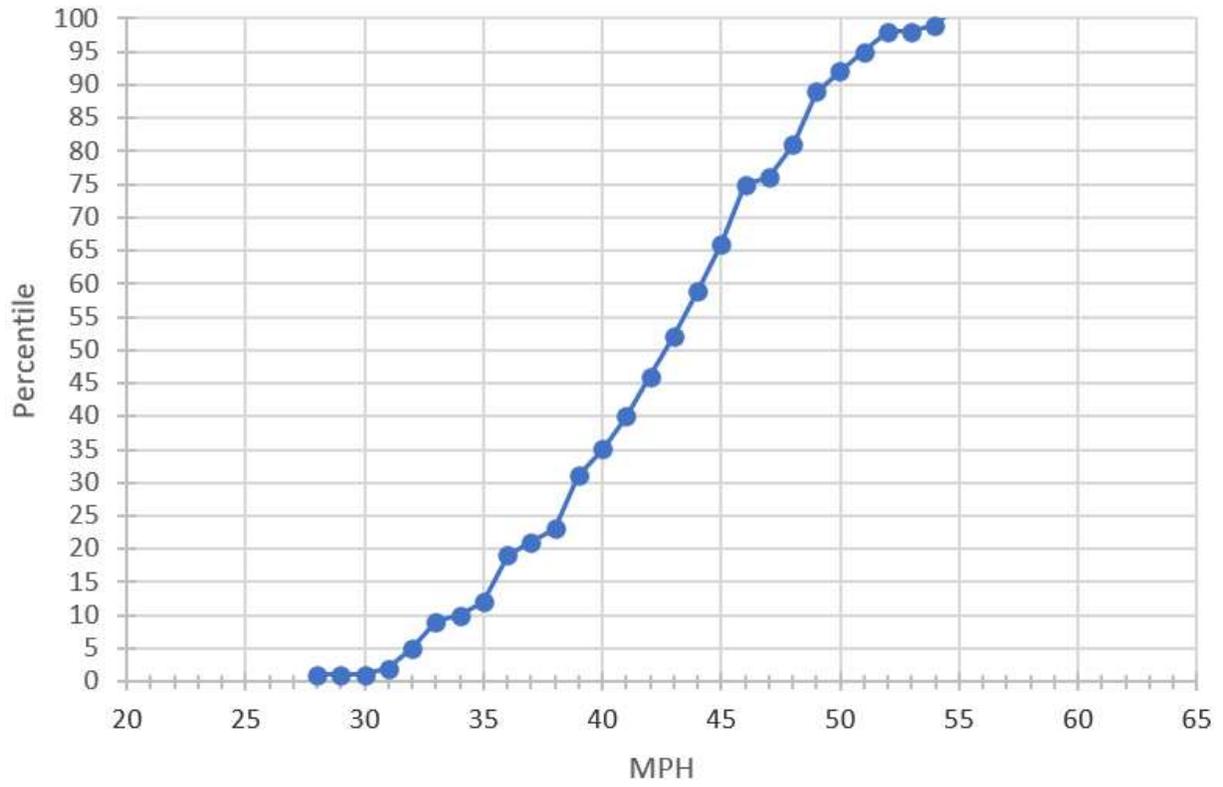
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64							0	105
63							0	105
62							0	105
61	X						1	105
60	X						1	104
59							0	103
58							0	103
57							0	103
56	X						1	103
55	X	X	X				3	102
54	X						1	99
53							0	98
52	X	X	X				3	98
51	X	X	X				3	95
50	X	X	X				3	92
49	X	X	X	X	X	X	8	89
48	X	X	X	X			5	81
47	X						1	76
46	X	X	X	X	X	X	9	75
45	X	X	X	X	X		7	66
44	X	X	X	X	X		7	59
43	X	X	X	X			6	52
42	X	X	X	X	X		6	46
41	X	X	X	X			5	40
40	X	X	X	X			4	35
39	X	X	X	X	X	X	8	31
38	X	X					2	23
37	X	X					2	21
36	X	X	X	X	X	X	7	19
35	X	X					2	12
34	X						1	10
33	X	X	X				4	9
32	X	X	X				3	5
31	X						1	2
30							0	1
29							0	1
28	X						1	1
27							0	0
26							0	0
25							0	0
24							0	0
23							0	0
22							0	0
21							0	0
20							0	0
19							0	0
18							0	0
17							0	0
16							0	0
TOTAL NUMBER OF VEHICLES = <u>105</u>							105%	

Other Considerations: 85th Percentile at: 89.3 85th Percentile: 49

Accident History: _____

Unusal History: _____

Signed: Jonathan Gramajo Date: 2/8/2023 Title: Assistant Engineer



#46 Sunset Avenue from 4th Street to Granada Drive

CITY OF MADERA SPEED SURVEY SHEET

Jurisdiction: CITY OF MADERA Date: 2/9/2023
 Location: Sunset from Fouth to Granada Weather: Sunny & Dry
 Recorder: Jonathan Gramajo Begin Time: 2:22 PM End Time: 3:10 PM

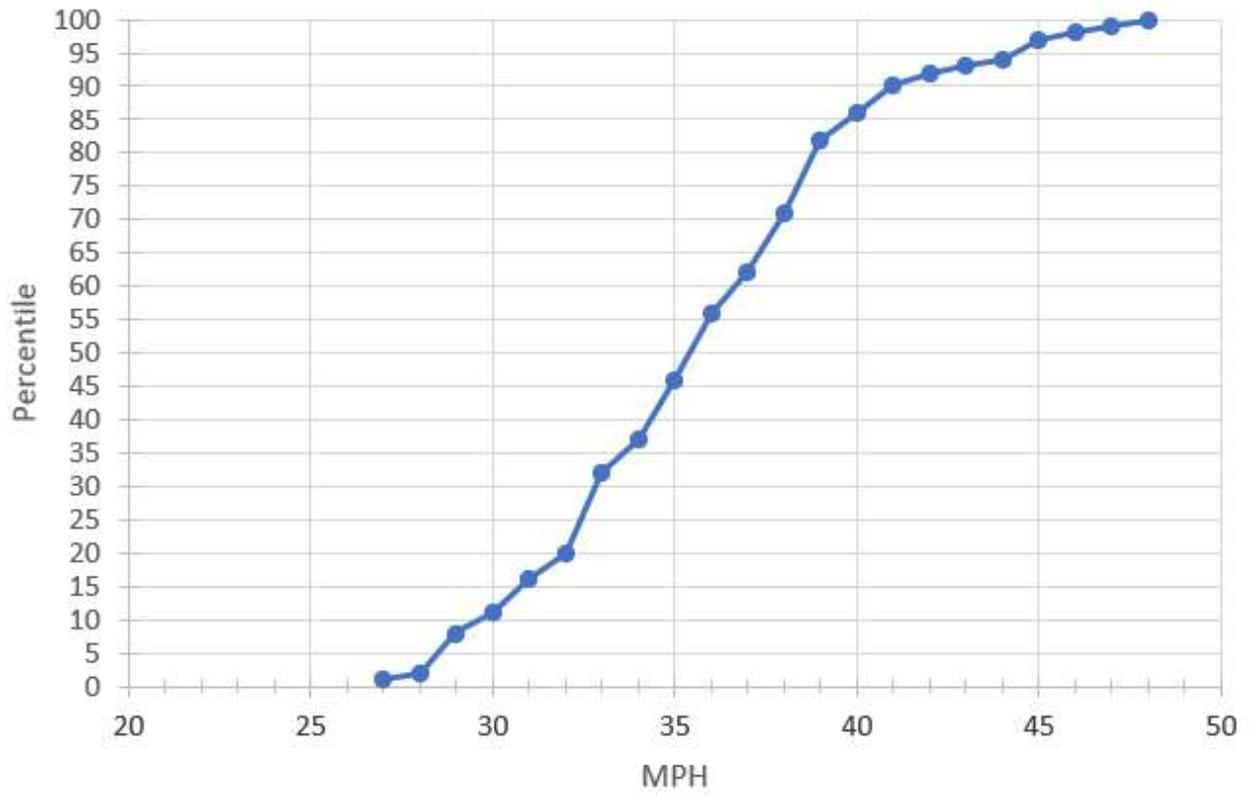
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64							0	100
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62							0	100
61							0	100
60							0	100
59							0	100
58							0	100
57							0	100
56							0	100
55							0	100
54							0	100
53							0	100
52							0	100
51							0	100
50							0	100
49							0	100
48	X						1	100
47	X						1	99
46	X						1	98
45	X	X					3	97
44	X						1	94
43	X						1	93
42	X	X					2	92
41	X	X	X				4	90
40	X	X	X	X			4	86
39	X	X	X	X	X		11	82
38	X	X	X	X	X		9	71
37	X	X	X	X	X		6	62
36	X	X	X	X	X		10	56
35	X	X	X	X	X		9	46
34	X	X	X	X	X		5	37
33	X	X	X	X	X	X	12	32
32	X	X	X	X			4	20
31	X	X	X	X			5	16
30	X	X	X				3	11
29	X	X	X	X	X		6	8
28	X						1	2
27	X						1	1
26							0	0
25							0	0
24							0	0
23							0	0
22							0	0
21							0	0
20							0	0
19							0	0
18							0	0
17							0	0
16							0	0
TOTAL NUMBER OF VEHICLES =							100	100%

Other Considerations: 85th Percentile at: 85 85th Percentile: 40

Accident History: _____

Unusal History: _____

Signed: Jonathan Gramajo Date: 2/9/2023 Title: Assistant Engineer



#48 Tozer Street from Avenue 15 to A Street

CITY OF MADERA SPEED SURVEY SHEET

Jurisdiction: CITY OF MADERA Date: 6/3/2022
 Location: Tozer from Ave 15 to Sunrise Weather: Sunny & Dry
 Recorder: Jonathan Gramajo Begin Time: 9:55 AM End Time: 10:27 AM

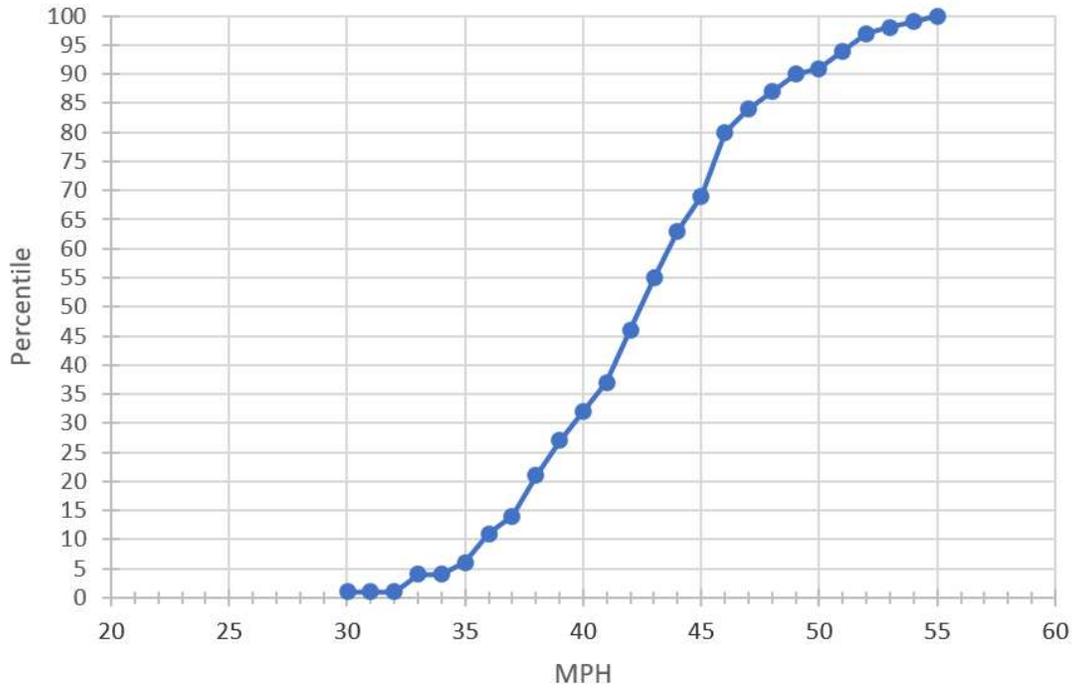
MPH	NUMBER OF VEHICLES						TOTAL	CUMULATIVE PERCENTAGE
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64							0	100
63							0	100
62							0	100
61							0	100
60							0	100
59							0	100
58							0	100
57							0	100
56							0	100
55	X						1	100
54	X						1	99
53	X						1	98
52	X	X	X				3	97
51	X	X	X				3	94
50	X						1	91
49	X	X	X				3	90
48	X	X	X				3	87
47	X	X	X	X			4	84
46	X	X	X	X	X	X	11	80
45	X	X	X	X	X		6	69
44	X	X	X	X	X	X	8	63
43	X	X	X	X	X	X	9	55
42	X	X	X	X	X	X	9	46
41	X	X	X	X			5	37
40	X	X	X	X			5	32
39	X	X	X	X			6	27
38	X	X	X	X	X		7	21
37	X	X	X				3	14
36	X	X	X	X			5	11
35	X	X					2	6
34							0	4
33	X	X	X				3	4
32							0	1
31							0	1
30	X						1	1
29							0	0
28							0	0
27							0	0
26							0	0
25							0	0
24							0	0
23							0	0
22							0	0
21							0	0
20							0	0
19							0	0
18							0	0
17							0	0
16							0	0
TOTAL NUMBER OF VEHICLES = <u>100</u>							100%	

Other Considerations: 85th Percentile at: 85 85th Percentile: 47

Accident History: _____

Unusal History: _____

Signed: Jonathan Gramajo Date: 6/3/2022 Title: Assistant Engineer



#56 Falcon Drive from Yeager Drive to Aviation Drive

CITY OF MADERA SPEED SURVEY SHEET

Jurisdiction: CITY OF MADERA Date: 7/5/2022
 Location: Falcon Dr from Yeager Dr to Aviation Dr Weather: Sunny & Dry
 Recorder: Jonathan Gramajo Begin Time: 9:17 AM End Time: 10:55 AM

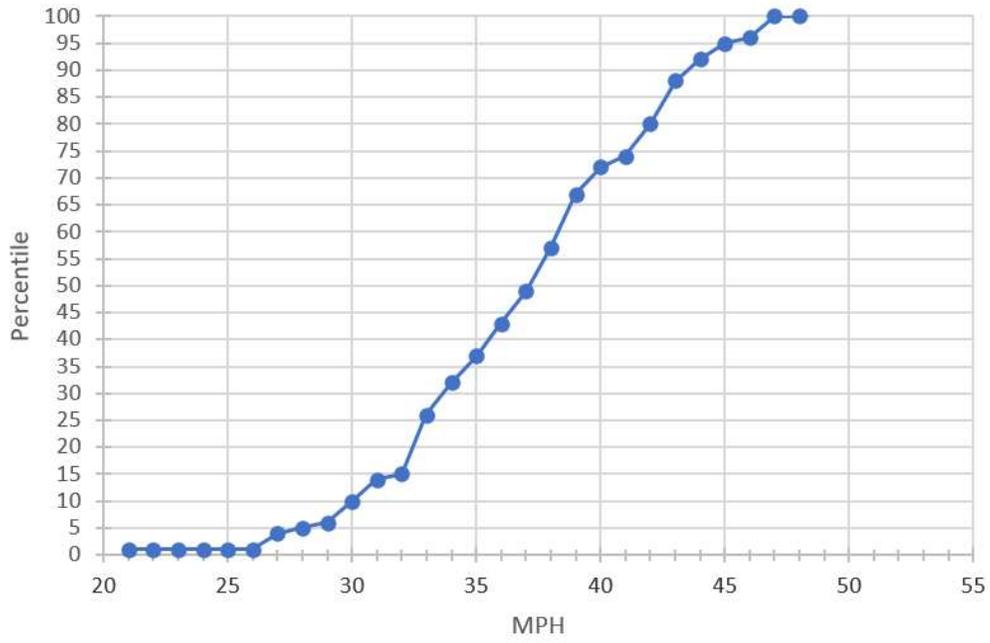
MPH	NUMBER OF VEHICLES						TOTAL	CUMULATIVE PERCENTAGE
	5	10	15	20	25	30		
65							0	101
64							0	101
63							0	101
62							0	101
61							0	101
60							0	101
59							0	101
58							0	101
57							0	101
56							0	101
55							0	101
54							0	101
53							0	101
52							0	101
51							0	101
50							0	101
49	x						1	101
48							0	100
47	x	x	x	x			4	100
46	x						1	96
45	x	x	x				3	95
44	x	x	x	x			4	92
43	x	x	x	x	x	x	8	88
42	x	x	x	x	x		6	80
41	x	x					2	74
40	x	x	x	x	x		5	72
39	x	x	x	x	x	x	10	67
38	x	x	x	x	x	x	8	57
37	x	x	x	x	x		6	49
36	x	x	x	x	x		6	43
35	x	x	x	x	x		5	37
34	x	x	x	x	x		6	32
33	x	x	x	x	x	x	11	26
32	x						1	15
31	x	x	x				4	14
30	x	x	x	x			4	10
29	x						1	6
28	x						1	5
27	x	x	x				3	4
26							0	1
25							0	1
24							0	1
23							0	1
22							0	1
21	x						1	1
20							0	0
19							0	0
18							0	0
17							0	0
16							0	0
TOTAL NUMBER OF VEHICLES = <u>101</u>							101%	

Other Considerations: 85th Percentile at: 85.9 85th Percentile: 43

Accident History: _____

Unusal History: _____

Signed: Jonathan Gramajo Date: 7/5/2022 Title: Assistant Engineer



#57 Aviation Drive from Condor Drive to Falcon Drive

CITY OF MADERA SPEED SURVEY SHEET

Jurisdiction: CITY OF MADERA Date: 7/1/2022
 Location: Aviation Dr from Condor Dr to Falcon Dr Weather: Sunny & Dry
 Recorder: Jonathan Gramajo Begin Time: 3:01 PM End Time: 4:04 PM

MPH	NUMBER OF VEHICLES						TOTAL	CUMULATIVE PERCENTAGE
	5	10	15	20	25	30		
65							0	100
64							0	100
63							0	100
62							0	100
61							0	100
60							0	100
59							0	100
58							0	100
57							0	100
56	X	X					2	100
55							0	98
54							0	98
53							0	98
52	X						1	98
51							0	97
50	X	X	X	X			4	97
49	X	X					2	93
48	X	X					2	91
47	X						1	89
46	X	X	X	X	X	X	7	88
45	X	X	X	X	X	X	8	81
44	X	X	X				3	73
43	X	X	X	X	X		6	70
42	X	X	X	X	X	X	10	64
41	X	X	X				4	54
40	X	X	X	X	X	X	12	50
39	X	X	X				4	38
38	X	X	X	X			5	34
37	X	X	X				3	29
36	X	X	X	X	X	X	8	25
35	X	X	X	X	X	X	8	18
34	X	X					2	10
33	X	X	X				3	8
32	X	X	X				3	5
31	X						1	2
30	X						1	1
29							0	0
28							0	0
27							0	0
26							0	0
25							0	0
24							0	0
23							0	0
22							0	0
21							0	0
20							0	0
19							0	0
18							0	0
17							0	0
16							0	0
TOTAL NUMBER OF VEHICLES =							100	100%

Other Considerations: 85th Percentile at: 85 85th Percentile: 46

Accident History: _____

Unusal History: _____

Signed: Jonathan Gramajo Date: 7/1/2022 Title: Assistant Engineer

