

Engineering and Traffic Survey (E&TS)

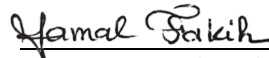
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07/19/2023
DATE

Concurred by:



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Chief (Acting)
Office of Transportation Safety

07/20/2023
DATE

I. BACKGROUND

This Engineering and Traffic Survey (E&TS) was conducted on State Route 1 (SR-1, Sepulveda Boulevard, Pacific Coast Highway, PCH), from north of Artesia Boulevard (PM 21.919) in the City of Manhattan Beach to Imperial Hwy (PM 25.921) in the City of El Segundo. The purpose of this E&TS is to update or revise the established speed limits as appropriate; the previous E&TS for the limits was conducted in August 2007.

This E&TS consists of obtaining vehicle speed samples and field survey data necessary to complete the vehicle speed survey sheets, including recommendation of appropriate speed based upon but not limited to field observations, critical speed, and accident history.

II. EXISTING CONDITIONS

A. GENERAL

SR-1 between Artesia Boulevard and Imperial Hwy is a part of major coastal artery that provided access to the major beach cities along the coast, an urban area and traverses through retail, commercial, industrial, and residential areas in the Cities of Manhattan Beach and El Segundo. Since the 2007 E&TS, there have been new housing developments and businesses along Sepulveda Boulevard.

B. TYPE OF FACILITY

Sepulveda Boulevard in the City of Manhattan Beach from Artesia Boulevard (PM 21.919) to Rosecrans Avenue (PM 23.924) is a six-lane conventional highway with raised median islands separating the northbound (NB) and southbound (SB) lanes. This segment of the highway has numerous driveways and alleys with a high number of pedestrians. There are left-turn pockets at all intersections and curb parking is allowed in some segments of Sepulveda Boulevard during non-peak hours.

Pacific Coast Highway (PCH) in the City of El Segundo from Rosecrans Avenue (PM 23.924) to Imperial Highway (PM 25.921) is eight-lane conventional highway with left-turn lanes. Raised median islands separating the NB and SB lanes. In this segment curb parking during non-peak hours is permitted on southbound from Grand Avenue to Sycamore Avenue only.

C. TRAFFIC

The highway carries a mix of residential, commuter, and through traffic. The 2020 Annual Average Daily Traffic (AADT) ranges from 41,500 to 56,000 vehicles per day.

D. EXISTING SPEED ZONES

The posted speed limits through the section are as follows:

Limits		Speed Limit	
From (Postmile)	To (Postmile)	NB MPH	SB MPH
Artesia Boulevard (PM 21.919)	Rosecrans Avenue (PM 23.924)	35	35
Rosecrans Avenue (PM 23.924)	El Segundo Boulevard (PM 24.911)	45	45
El Segundo Boulevard (PM 24.911)	Imperial Hwy (PM 25.921)	40	40

MPH – Miles Per hour

E. ACCIDENT RATES

The accident rates from the Traffic Accident Surveillance and Analysis System (TASAS) for the three-year period between, October 1, 2019, to September 30, 2022, for SR-1 within the survey limits are as follows:

Highway Segment (Postmile)		Accident Rate (Accidents/MVM)		Fatality Rate (Accidents/MVM)	
		Actual	Average	Actual	Average
Artesia Blvd (PM 21.919)	South of 22 nd Street (PM 23.331)	0.73	0.93	0.00	0.013
22 nd Street (PM 23.331)	Imperial Hwy (PM 25.921)	0.48	0.87	0.006	0.009

MVM = Million Vehicle Miles

F. ENFORCEMENT JURISDICTION

The City of Manhattan Beach Police Department and the City of El Segundo Police Department are the enforcement agencies within their respective city boundaries; these agencies use radar for speed enforcement.

G. SPEED ZONE FIELD DATA

Speed measurements were taken on February 17, February 19 and February 22, 2021. The results are shown in Attachment A.

III. COMMUNITY INVOLVEMENT

The results of this E&TS were shared with both City of Manhattan Beach and City of El Segundo for review and comment.

IV. CONCLUSIONS AND RECOMMENDATIONS

Based on field speed measurements, the 85th Percentile and 10 MPH Pace Speeds are shown in the table below:

Location of Speed Measurements	85 th Percentile Speed		10 MPH Pace Speed	
	NB	SB	NB	SB
Artesia Blvd (PM. 21.919)	37	34	28-37	26-35
Longfellow Avenue (PM 22.161)	31	39	22-31	30-39
3 rd Street (PM 22.461)	37	34	26-35	25-34
11 th Street (PM. 22.841)	41	39	32-41	30-39
Between 18 th (PM 23.191) and 22 nd Street (PM 23.3)	39	40	27-36	31-40
Rosecrans Avenue (PM 23.924)	39	38	26-35	29-38
El Segundo Boulevard (24.911)	47	42	37-46	31-40
N/O Mariposa (PM 25.441)	38	36	30-39	28-37
Imperial Highway (PM 25.921)	38	42	30-39	30-39

N/O = North of; S/O = South of

Based on the review of collision history, highway surveillance, traffic analysis, and roadway geometry, the proposed speed limits are shown in the table below:

Limits		Existing Speed Limit		Proposed Speed Limits	
From (Postmile)	To (Postmile)	NB MPH	SB MPH	NB MPH	SB MPH
Artesia Blvd (PM. 21.919)	Rosecrans Avenue (PM 23.924)	35	35	35	35
Rosecrans Avenue (PM 23.924)	El Segundo Blvd (PM 24.911)	45	45	40	40
El Segundo Blvd (PM 24.911)	Imperial Hwy (PM 25.921)	40	40	40	40

City of Manhattan Beach, Artesia Boulevard to Rosecrans Avenue (PM 21.919 to PM 23.92):

The average 85th percentile speed for this segment is 37 MPH in the NB direction and 38 MPH in the SB direction. The actual accident rate is lower than state average for similar facilities. It is recommended that the existing NB and SB speed limit of 35 MPH be retained for this segment

City of El Segundo, Rosecrans Avenue to El Segundo Boulevard (PM 23.924 to PM 24.911):

The average 85th percentile speed on this segment is 43 MPH in the NB direction and 40 MPH in SB direction. It is recommended that the existing speed of 45 MPH be reduced to 40 MPH for the NB and SB directions due to the following factors:

- The 85th percentile average speed is 43 MPH in the NB direction and 40 MPH in SB direction.
- There are horizontal curves along the roadway that may pose visibility issue at higher speed.
- There are driveways with restricted visibility.
- Railroad in the area may increase potentials for traffic conflicts.

City of El Segundo, El Segundo Boulevard to Imperial Hwy (PM 24.911 to PM 25.921):

The average 85th percentile speed on this segment is 41 MPH in the NB direction and 40 MPH in the SB direction. It is recommended that the existing NB and SB speed limit of 40 MPH be retained for this segment

V. ATTACHMENTS

- A. Vehicle Speed Survey Sheets
- B. Speed Zone Survey Layout Sheets

VEHICLE SPEED SURVEY SHEETS

SPEED ZONE SURVEY LAYOUT SHEETS

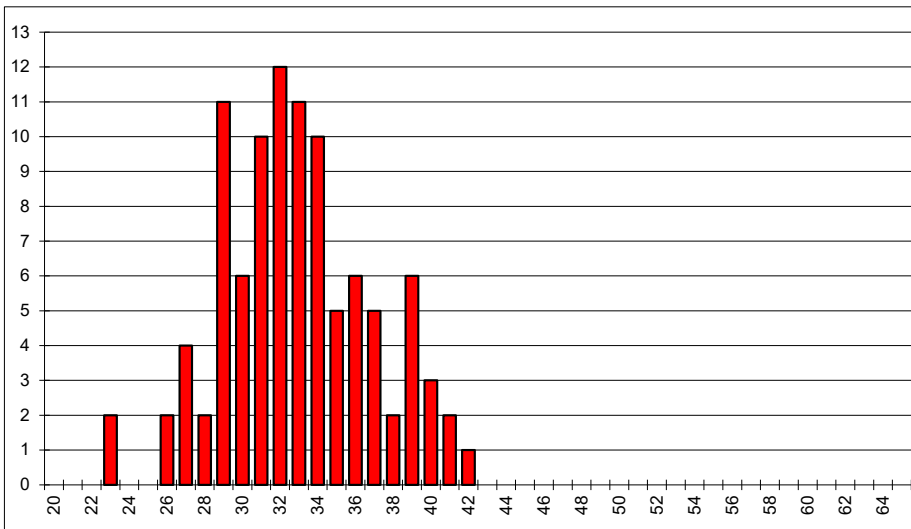
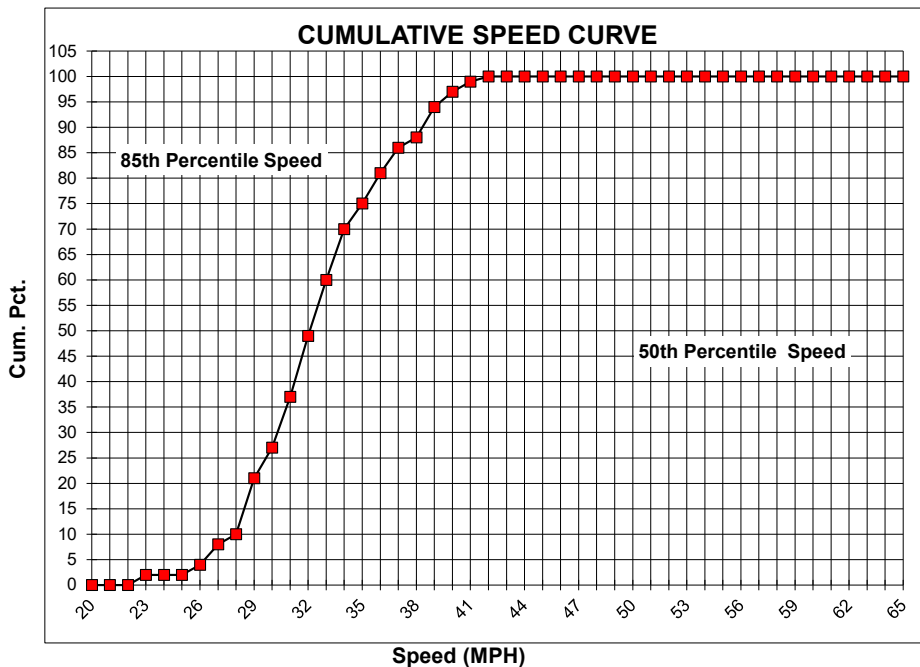
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 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **NB PCH at Artesia Blvd**
 P.M.: **21.919**
 DIRECTION(S): **NB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **11:35 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	33.0
85th Percentile Speed	37.0
Number of Vehicles Observed	100
Average Speed	33
Range of Speeds	23 to 42

10 MPH Pace Speed	28	to	37
Percent in Pace Speed	78		
Percent over Pace Speed	14		
Percent under Pace Speed	8		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	0	0	0
23	2	2	2
24	0	0	2
25	0	0	2
26	2	2	4
27	4	4	8
28	2	2	10
29	11	11	21
30	6	6	27
31	10	10	37
32	12	12	49
33	11	11	60
34	10	10	70
35	5	5	75
36	6	6	81
37	5	5	86
38	2	2	88
39	6	6	94
40	3	3	97
41	2	2	99
42	1	1	100
43	0	0	100
44	0	0	100
45	0	0	100
46	0	0	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
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60	0	0	100
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65	0	0	100



VEHICLE SPEED SURVEY SHEET

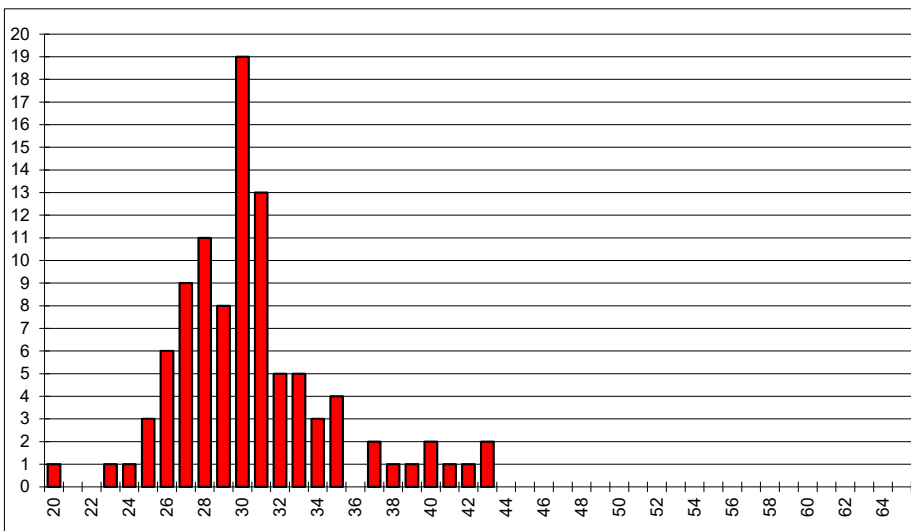
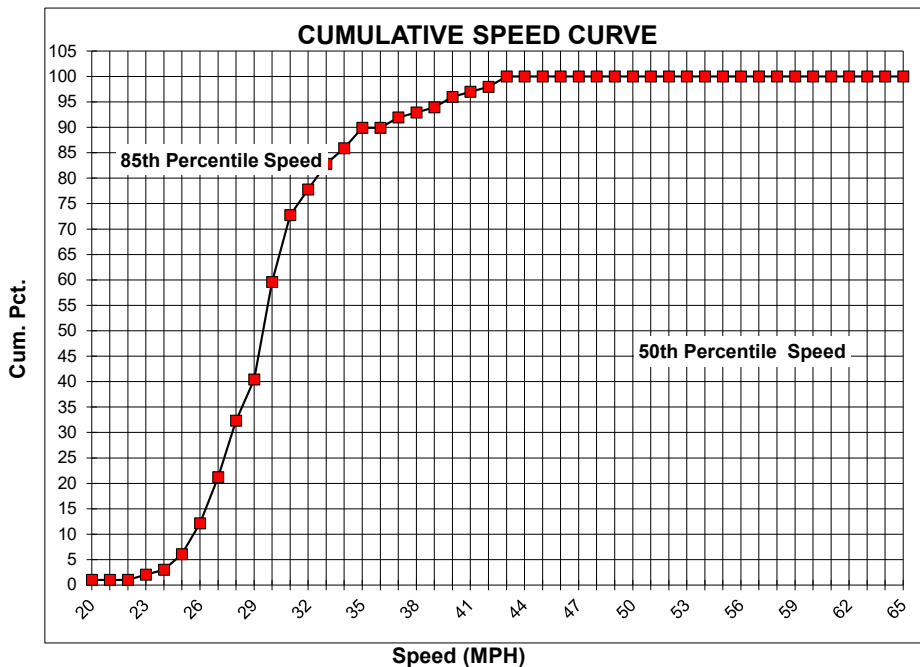
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LOCATION: **NB PCH at Artesia Blvd**
 P.M.: **21.919**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **11:41 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	30.0
85th Percentile Speed	34.0
Number of Vehicles Observed	99
Average Speed	31
Range of Speeds	20 to 43

10 MPH Pace Speed	26	to	35
Percent in Pace Speed	84		
Percent over Pace Speed	10		
Percent under Pace Speed	6		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	1	1	1
21	0	0	1
22	0	0	1
23	1	1	2
24	1	1	3
25	3	3	6
26	6	6	12
27	9	9	21
28	11	11	32
29	8	8	40
30	19	19	60
31	13	13	73
32	5	5	78
33	5	5	83
34	3	3	86
35	4	4	90
36	0	0	90
37	2	2	92
38	1	1	93
39	1	1	94
40	2	2	96
41	1	1	97
42	1	1	98
43	2	2	100
44	0	0	100
45	0	0	100
46	0	0	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
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65	0	0	100



VEHICLE SPEED SURVEY SHEET

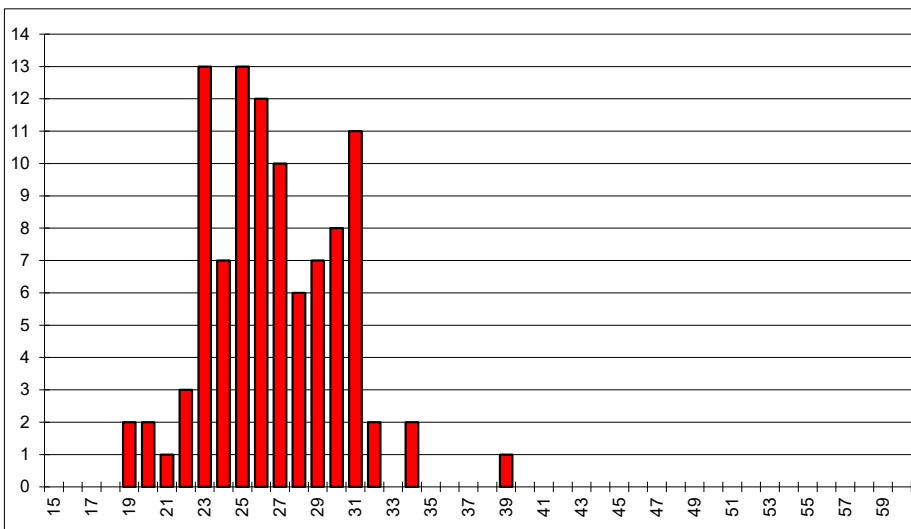
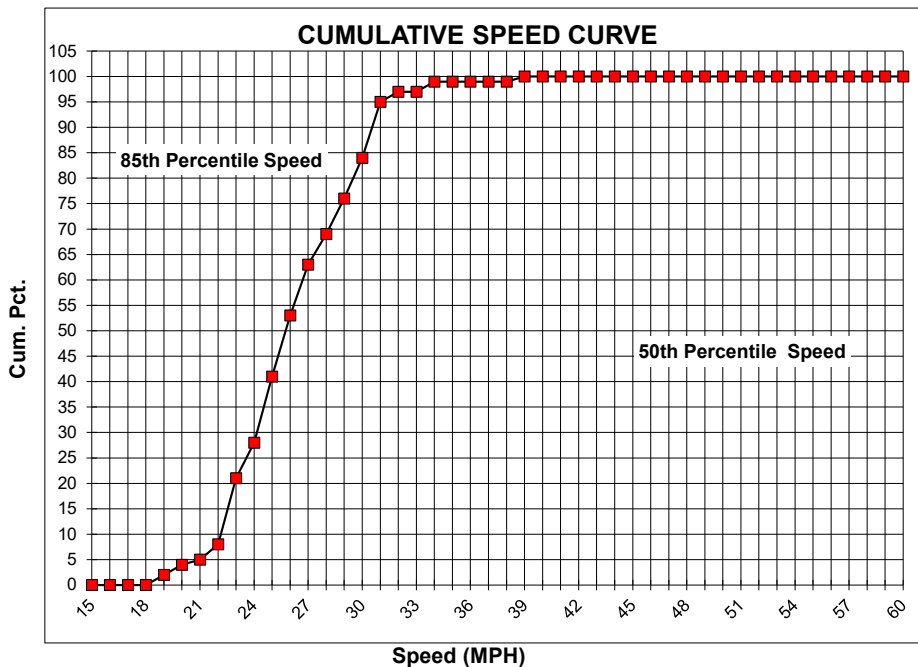
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LOCATION: **NB PCH at Longfellow Ave.**
 P.M.: **22.161**
 DIRECTION(S): **NB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **10:15 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	26.0
85th Percentile Speed	31.0
Number of Vehicles Observed	100
Average Speed	27
Range of Speeds	19 to 39

10 MPH Pace Speed	22 to 31
Percent in Pace Speed	90
Percent over Pace Speed	5
Percent under Pace Speed	5

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	2	2	2
20	2	2	4
21	1	1	5
22	3	3	8
23	13	13	21
24	7	7	28
25	13	13	41
26	12	12	53
27	10	10	63
28	6	6	69
29	7	7	76
30	8	8	84
31	11	11	95
32	2	2	97
33	0	0	97
34	2	2	99
35	0	0	99
36	0	0	99
37	0	0	99
38	0	0	99
39	1	1	100
40	0	0	100
41	0	0	100
42	0	0	100
43	0	0	100
44	0	0	100
45	0	0	100
46	0	0	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
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52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
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59	0	0	100
60	0	0	100



VEHICLE SPEED SURVEY SHEET

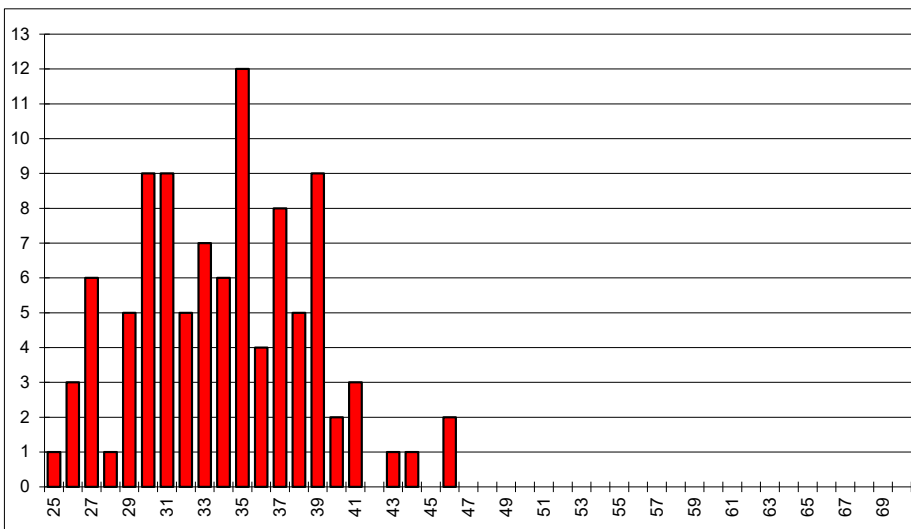
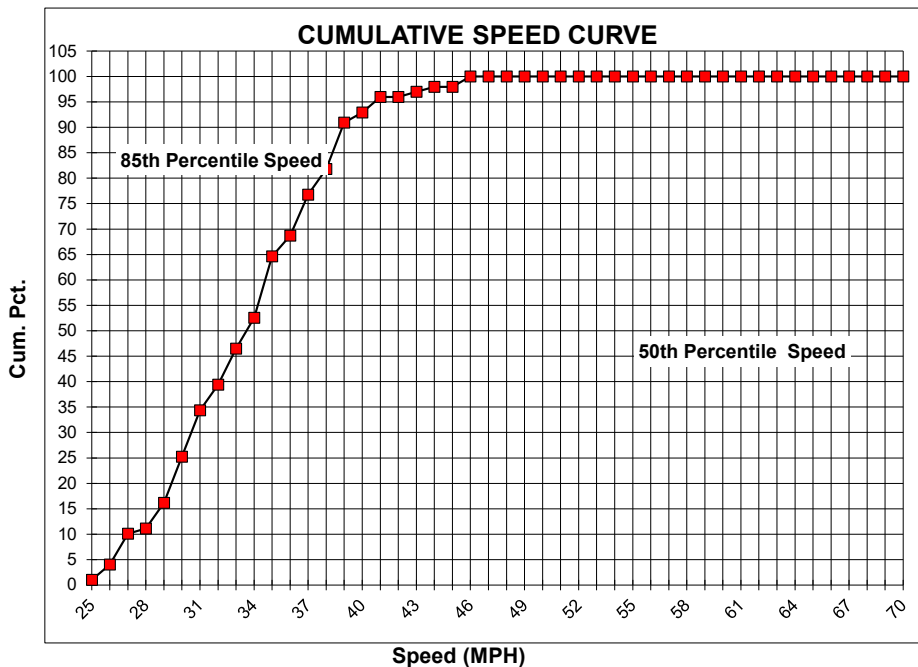
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 CALTRANS DISTRICT 7
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LOCATION: **NB PCH at Longfellow Ave.**
 P.M.: **22.161**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **10:03 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	34.0
85th Percentile Speed	39.0
Number of Vehicles Observed	99
Average Speed	34
Range of Speeds	25 to 46

10 MPH Pace Speed	30	to	39
Percent in Pace Speed	75		
Percent over Pace Speed	9		
Percent under Pace Speed	16		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
25	1	1	1
26	3	3	4
27	6	6	10
28	1	1	11
29	5	5	16
30	9	9	25
31	9	9	34
32	5	5	39
33	7	7	46
34	6	6	53
35	12	12	65
36	4	4	69
37	8	8	77
38	5	5	82
39	9	9	91
40	2	2	93
41	3	3	96
42	0	0	96
43	1	1	97
44	1	1	98
45	0	0	98
46	2	2	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
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66	0	0	100
67	0	0	100
68	0	0	100
69	0	0	100
70	0	0	100



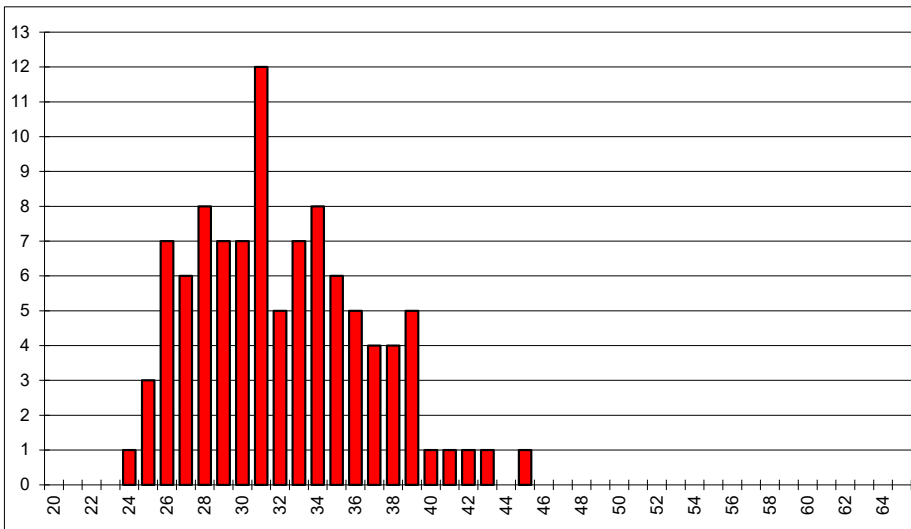
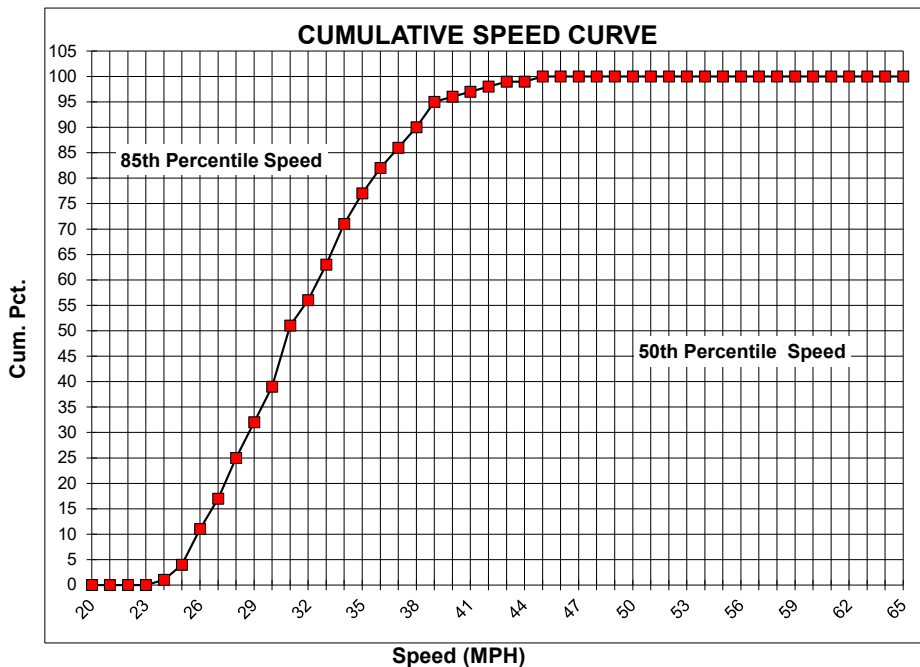
VEHICLE SPEED SURVEY SHEET

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LOCATION: **NB PCH at 3rd St.**
 P.M.: **22.461**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **10:20 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	31.0	10 MPH Pace Speed	26 to 35
85th Percentile Speed	37.0	Percent in Pace Speed	73
Number of Vehicles Observed	100	Percent over Pace Speed	23
Average Speed	32	Percent under Pace Speed	4
Range of Speeds	24 to 45		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	1	1	1
25	3	3	4
26	7	7	11
27	6	6	17
28	8	8	25
29	7	7	32
30	7	7	39
31	12	12	51
32	5	5	56
33	7	7	63
34	8	8	71
35	6	6	77
36	5	5	82
37	4	4	86
38	4	4	90
39	5	5	95
40	1	1	96
41	1	1	97
42	1	1	98
43	1	1	99
44	0	0	99
45	1	1	100
46	0	0	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100



VEHICLE SPEED SURVEY SHEET

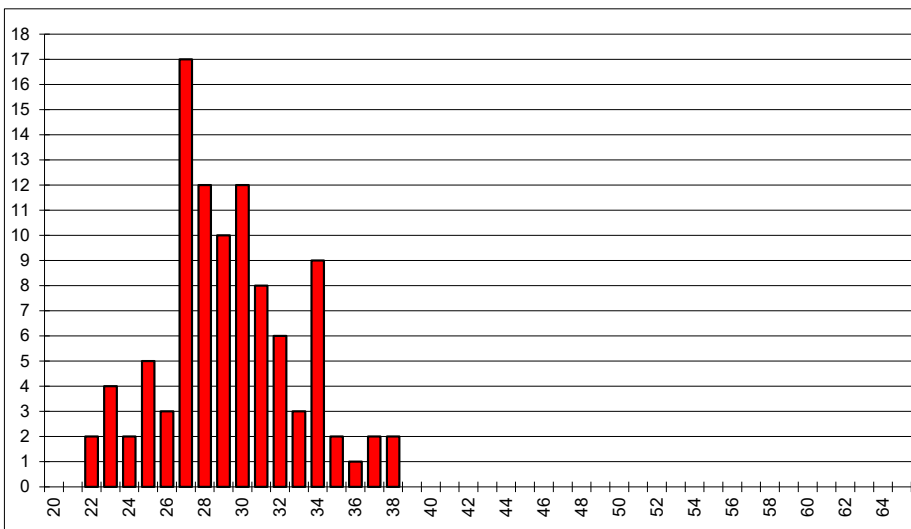
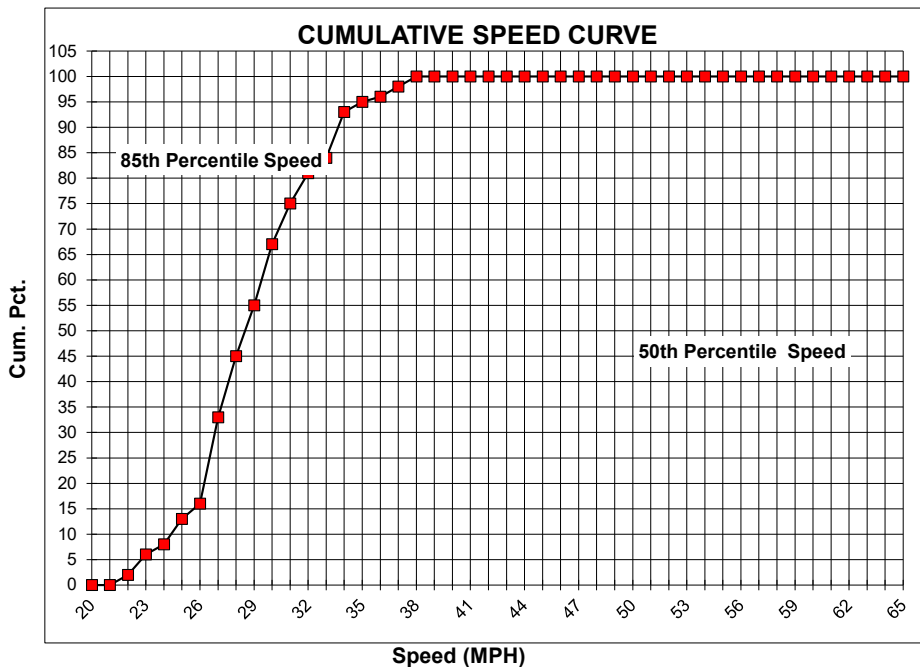
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 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **NB PCH at 3rd St.**
 P.M.: **22.461**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **10:45 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	29.0
85th Percentile Speed	34.0
Number of Vehicles Observed	100
Average Speed	29
Range of Speeds	22 to 38

10 MPH Pace Speed	25	to	34
Percent in Pace Speed	85		
Percent over Pace Speed	7		
Percent under Pace Speed	8		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	2	2	2
23	4	4	6
24	2	2	8
25	5	5	13
26	3	3	16
27	17	17	33
28	12	12	45
29	10	10	55
30	12	12	67
31	8	8	75
32	6	6	81
33	3	3	84
34	9	9	93
35	2	2	95
36	1	1	96
37	2	2	98
38	2	2	100
39	0	0	100
40	0	0	100
41	0	0	100
42	0	0	100
43	0	0	100
44	0	0	100
45	0	0	100
46	0	0	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
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57	0	0	100
58	0	0	100
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64	0	0	100
65	0	0	100



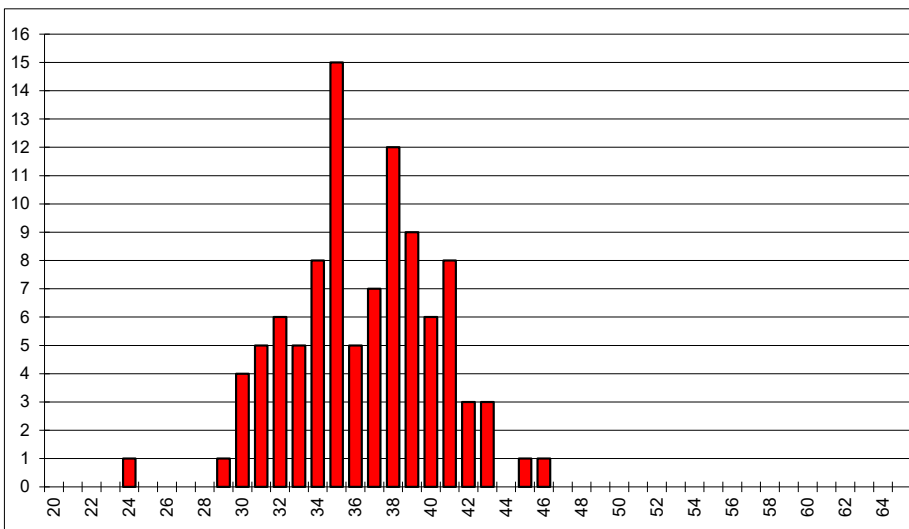
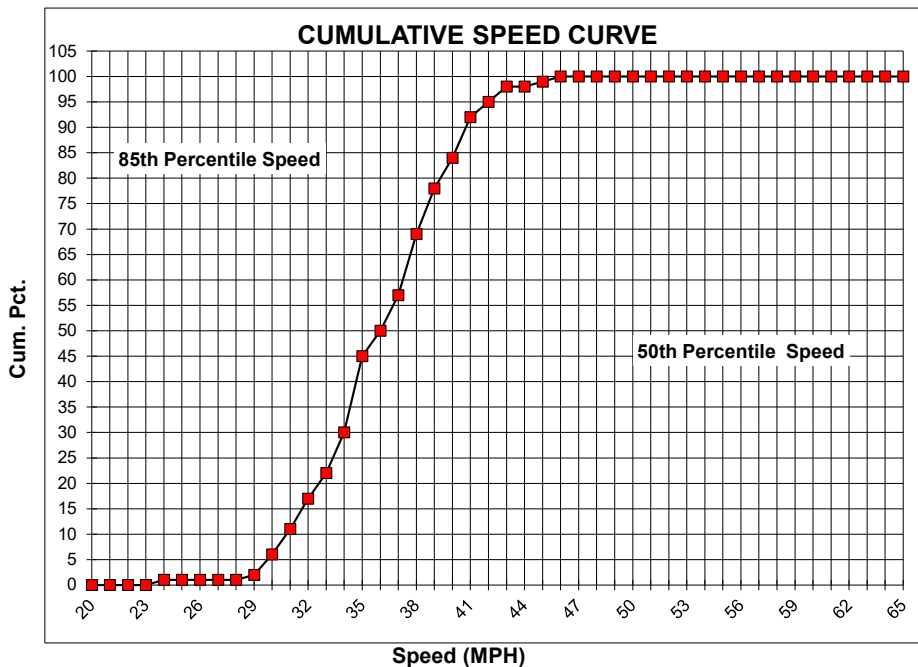
VEHICLE SPEED SURVEY SHEET

STATE OF CALIFORNIA
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 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **NB PCH at 11th St.**
 P.M.: **22.841**
 DIRECTION(S): **NB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **11:07 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	36.0	10 MPH Pace Speed	32 to 41
85th Percentile Speed	41.0	Percent in Pace Speed	81
Number of Vehicles Observed	100	Percent over Pace Speed	8
Average Speed	36	Percent under Pace Speed	11
Range of Speeds	24 to 46		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	1	1	1
25	0	0	1
26	0	0	1
27	0	0	1
28	0	0	1
29	1	1	2
30	4	4	6
31	5	5	11
32	6	6	17
33	5	5	22
34	8	8	30
35	15	15	45
36	5	5	50
37	7	7	57
38	12	12	69
39	9	9	78
40	6	6	84
41	8	8	92
42	3	3	95
43	3	3	98
44	0	0	98
45	1	1	99
46	1	1	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
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63	0	0	100
64	0	0	100
65	0	0	100



VEHICLE SPEED SURVEY SHEET

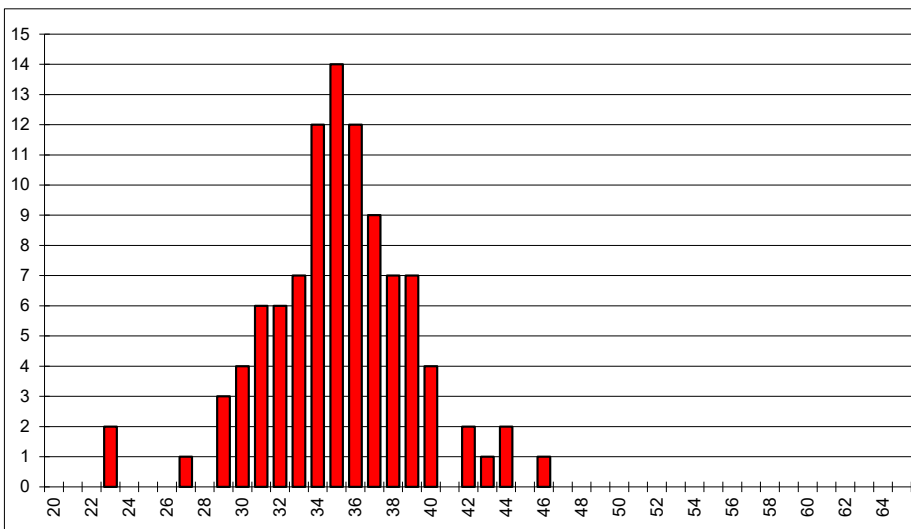
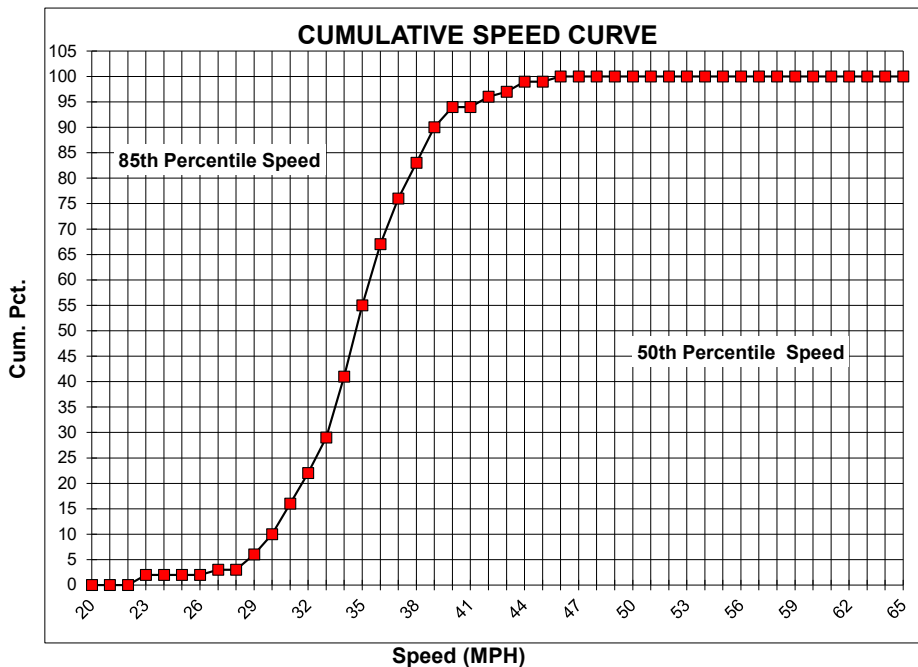
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **SB PCH at 11th St.**
 P.M.: **22.841**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/17/2021** TIME: **11:17 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	35.0
85th Percentile Speed	39.0
Number of Vehicles Observed	100
Average Speed	35
Range of Speeds	23 to 46

10 MPH Pace Speed	30	to	39
Percent in Pace Speed	84		
Percent over Pace Speed	10		
Percent under Pace Speed	6		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	0	0	0
23	2	2	2
24	0	0	2
25	0	0	2
26	0	0	2
27	1	1	3
28	0	0	3
29	3	3	6
30	4	4	10
31	6	6	16
32	6	6	22
33	7	7	29
34	12	12	41
35	14	14	55
36	12	12	67
37	9	9	76
38	7	7	83
39	7	7	90
40	4	4	94
41	0	0	94
42	2	2	96
43	1	1	97
44	2	2	99
45	0	0	99
46	1	1	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100



VEHICLE SPEED SURVEY SHEET

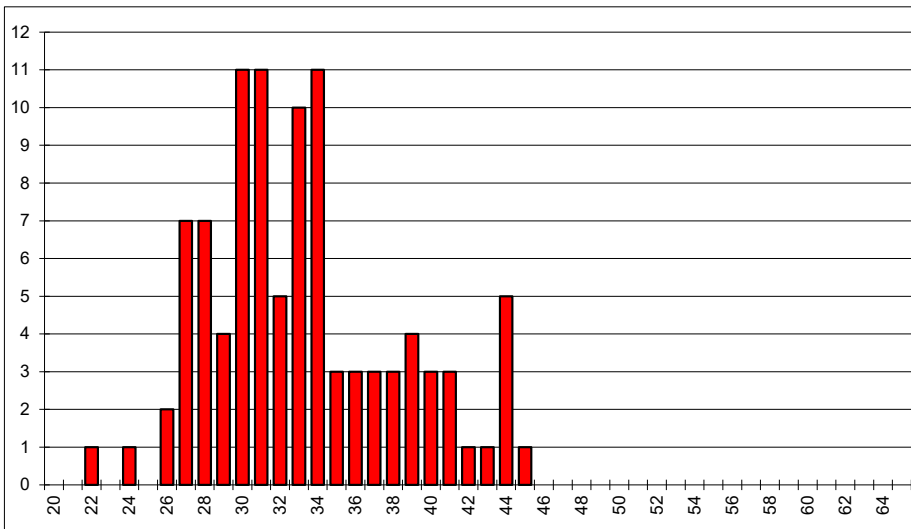
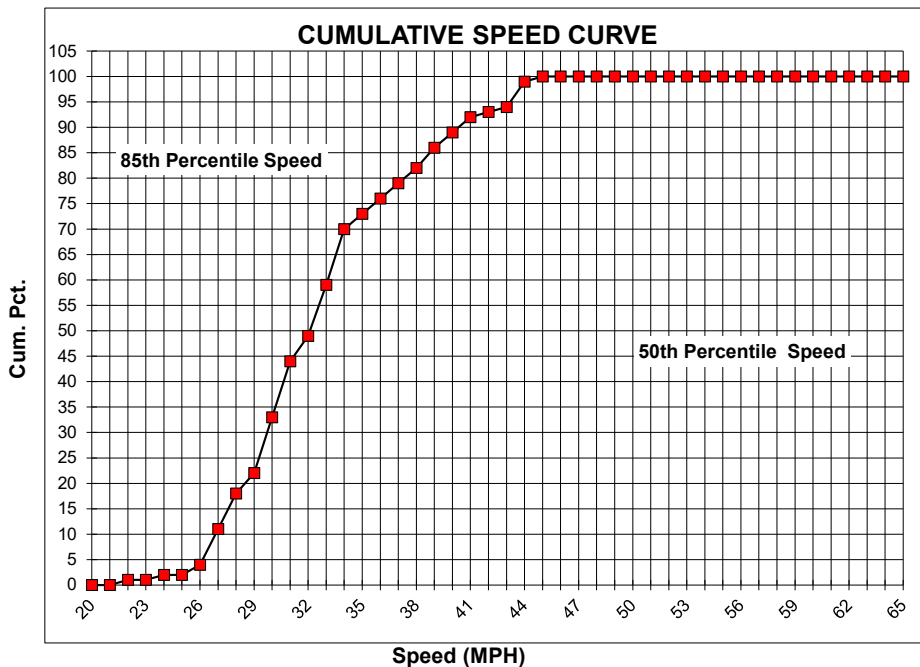
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **NB PCH between 18th and 22nd**
 P.M.: **23.231**
 DIRECTION(S): **NB** ROUTE: **1**
 DATE: **2/19/2021** TIME: **10:03 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	33.0
85th Percentile Speed	39.0
Number of Vehicles Observed	100
Average Speed	33
Range of Speeds	22 to 45

10 MPH Pace Speed	27 to 36
Percent in Pace Speed	72
Percent over Pace Speed	24
Percent under Pace Speed	4

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	1	1	1
23	0	0	1
24	1	1	2
25	0	0	2
26	2	2	4
27	7	7	11
28	7	7	18
29	4	4	22
30	11	11	33
31	11	11	44
32	5	5	49
33	10	10	59
34	11	11	70
35	3	3	73
36	3	3	76
37	3	3	79
38	3	3	82
39	4	4	86
40	3	3	89
41	3	3	92
42	1	1	93
43	1	1	94
44	5	5	99
45	1	1	100
46	0	0	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100



VEHICLE SPEED SURVEY SHEET

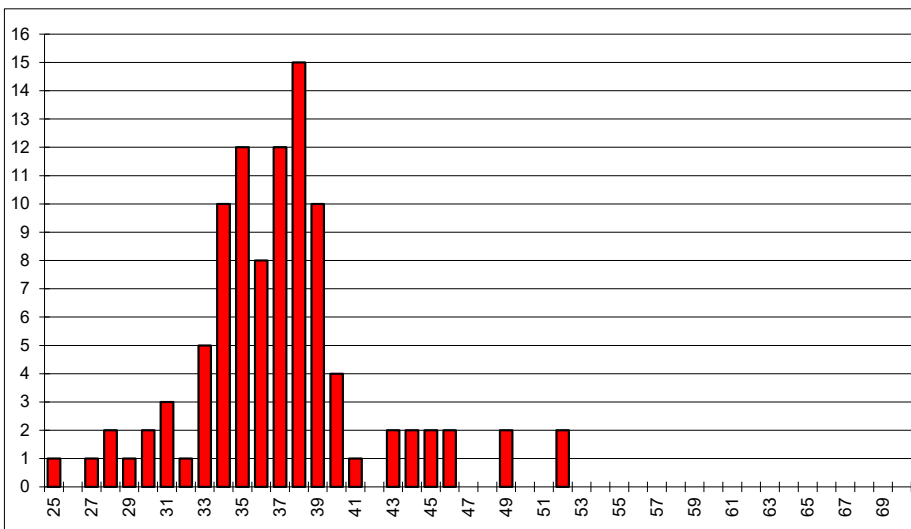
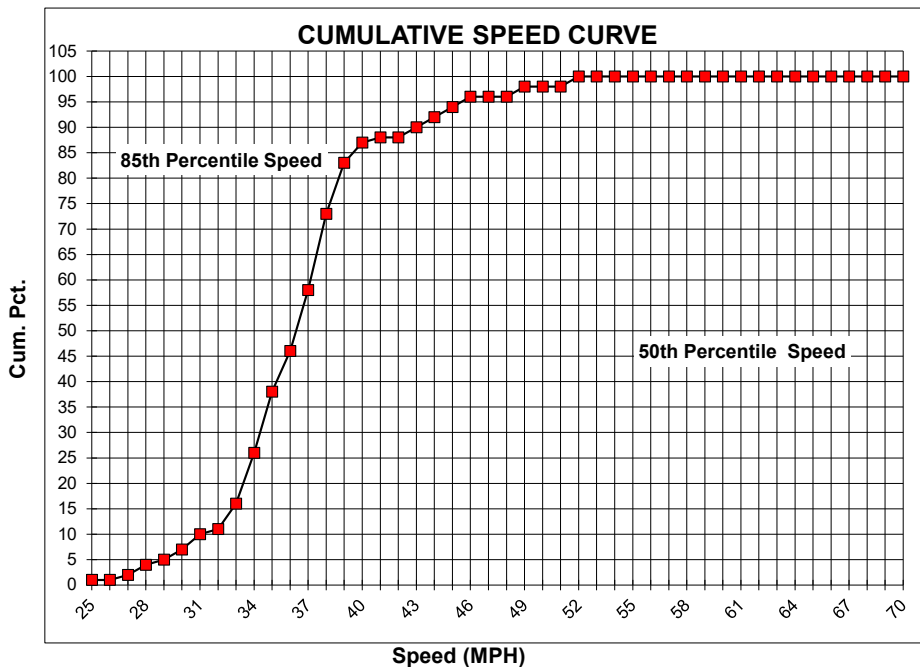
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **NB PCH between 18th and 22nd**
 P.M.: **23.231**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/19/2021** TIME: **9:50 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	37.0
85th Percentile Speed	40.0
Number of Vehicles Observed	100
Average Speed	37
Range of Speeds	25 to 52

10 MPH Pace Speed	31	to	40
Percent in Pace Speed	80		
Percent over Pace Speed	13		
Percent under Pace Speed	7		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
25	1	1	1
26	0	0	1
27	1	1	2
28	2	2	4
29	1	1	5
30	2	2	7
31	3	3	10
32	1	1	11
33	5	5	16
34	10	10	26
35	12	12	38
36	8	8	46
37	12	12	58
38	15	15	73
39	10	10	83
40	4	4	87
41	1	1	88
42	0	0	88
43	2	2	90
44	2	2	92
45	2	2	94
46	2	2	96
47	0	0	96
48	0	0	96
49	2	2	98
50	0	0	98
51	0	0	98
52	2	2	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100
66	0	0	100
67	0	0	100
68	0	0	100
69	0	0	100
70	0	0	100



VEHICLE SPEED SURVEY SHEET

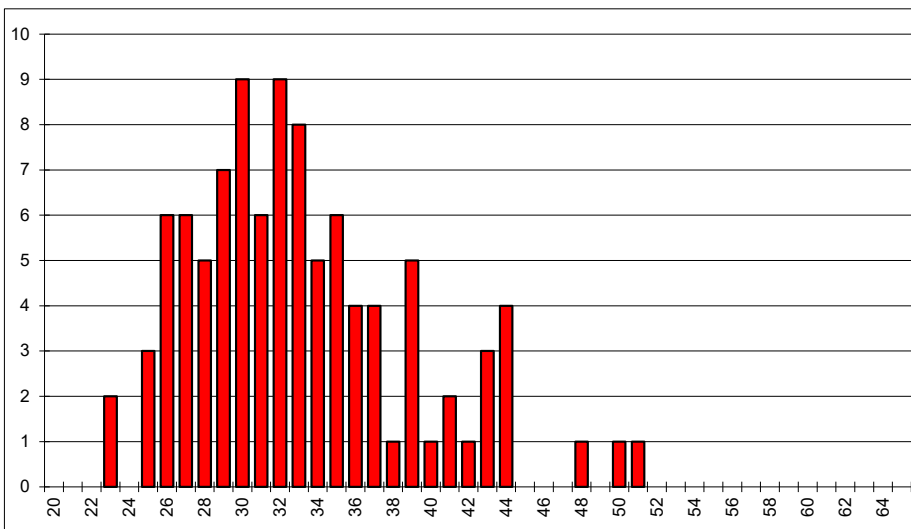
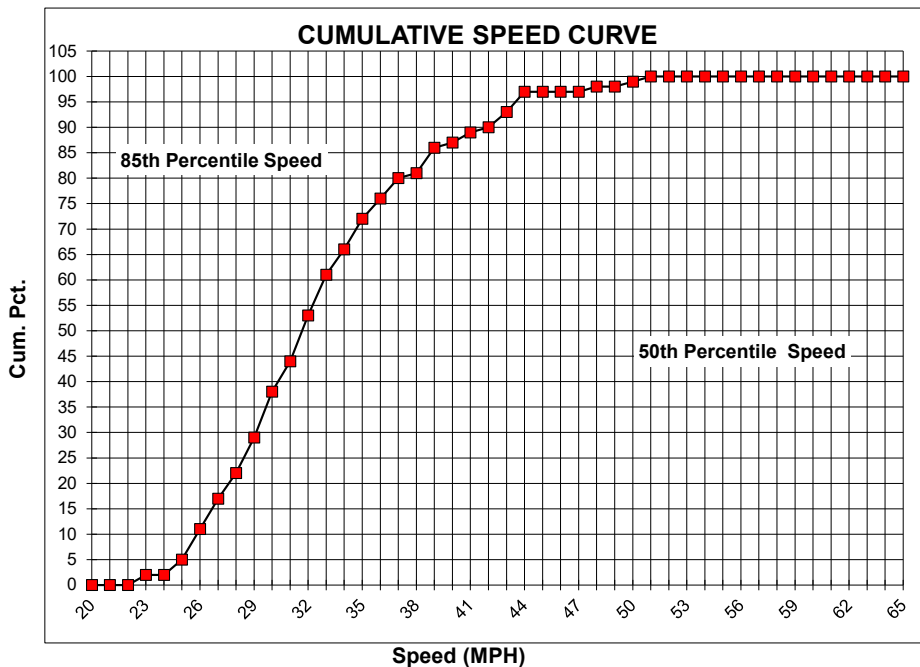
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **NB PCH south of Rosecrans**
 P.M.: **23.924**
 DIRECTION(S): **NB** ROUTE: **1**
 DATE: **2/19/2021** TIME: **10:37 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	32.0
85th Percentile Speed	39.0
Number of Vehicles Observed	100
Average Speed	33
Range of Speeds	23 to 51

10 MPH Pace Speed	26 to 35
Percent in Pace Speed	67
Percent over Pace Speed	28
Percent under Pace Speed	5

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	0	0	0
23	2	2	2
24	0	0	2
25	3	3	5
26	6	6	11
27	6	6	17
28	5	5	22
29	7	7	29
30	9	9	38
31	6	6	44
32	9	9	53
33	8	8	61
34	5	5	66
35	6	6	72
36	4	4	76
37	4	4	80
38	1	1	81
39	5	5	86
40	1	1	87
41	2	2	89
42	1	1	90
43	3	3	93
44	4	4	97
45	0	0	97
46	0	0	97
47	0	0	97
48	1	1	98
49	0	0	98
50	1	1	99
51	1	1	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100



VEHICLE SPEED SURVEY SHEET

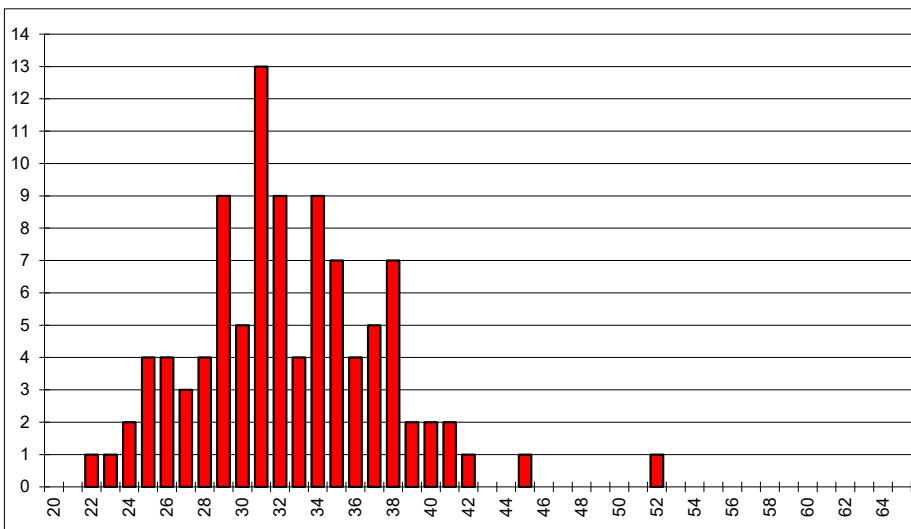
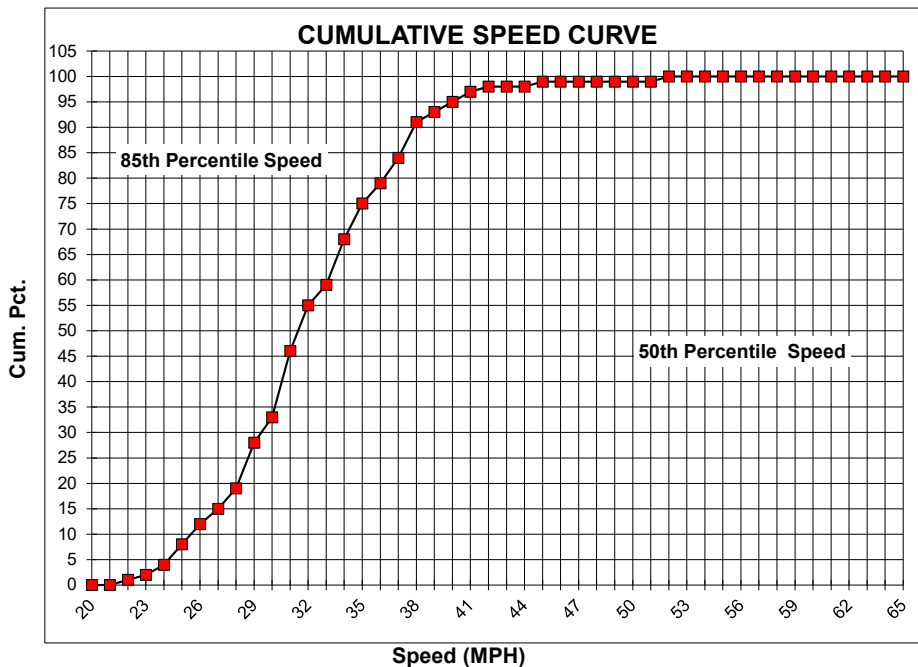
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **SB PCH south of Rosecrans**
 P.M.: **23.924**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/19/2021** TIME: **10:20 AM**
 POSTED SPEED LIMITS: **35** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	32.0
85th Percentile Speed	38.0
Number of Vehicles Observed	100
Average Speed	32
Range of Speeds	22 to 52

10 MPH Pace Speed	29 to 38
Percent in Pace Speed	72
Percent over Pace Speed	9
Percent under Pace Speed	19

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	1	1	1
23	1	1	2
24	2	2	4
25	4	4	8
26	4	4	12
27	3	3	15
28	4	4	19
29	9	9	28
30	5	5	33
31	13	13	46
32	9	9	55
33	4	4	59
34	9	9	68
35	7	7	75
36	4	4	79
37	5	5	84
38	7	7	91
39	2	2	93
40	2	2	95
41	2	2	97
42	1	1	98
43	0	0	98
44	0	0	98
45	1	1	99
46	0	0	99
47	0	0	99
48	0	0	99
49	0	0	99
50	0	0	99
51	0	0	99
52	1	1	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100



VEHICLE SPEED SURVEY SHEET

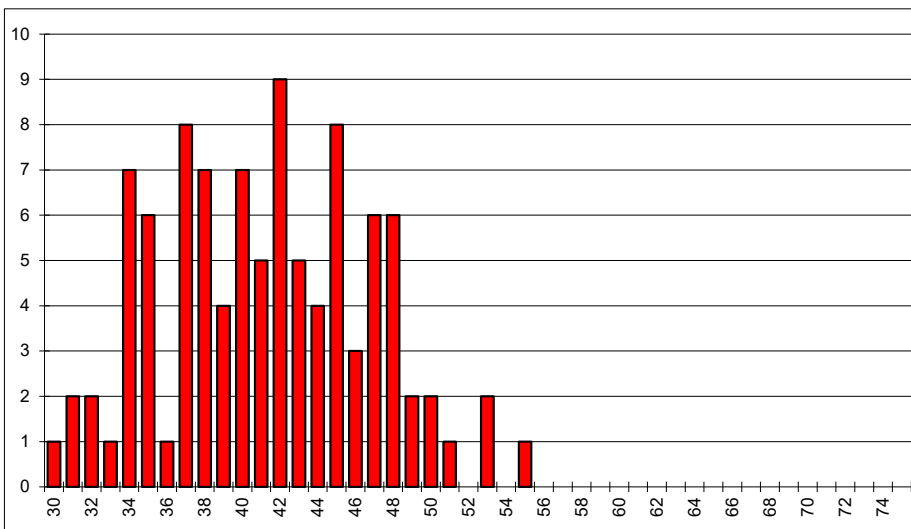
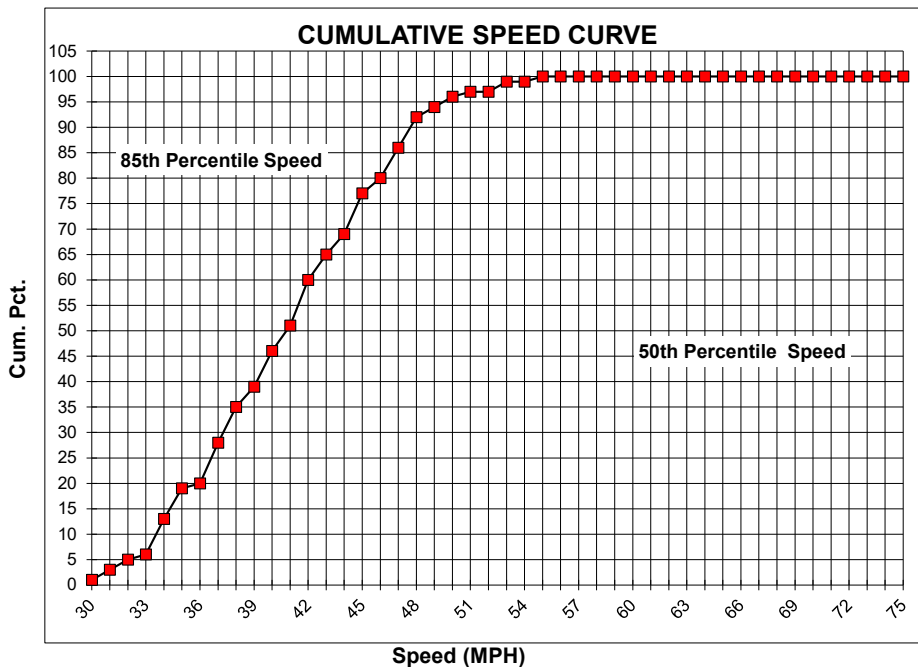
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **SB PCH south of El-Segundo**
 P.M.: **24.911**
 DIRECTION(S): **NB** ROUTE: **1**
 DATE: **2/19/2021** TIME: **11:27 AM**
 POSTED SPEED LIMITS: **45** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	41.0
85th Percentile Speed	47.0
Number of Vehicles Observed	100
Average Speed	41
Range of Speeds	30 to 55

10 MPH Pace Speed	37	to	46
Percent in Pace Speed	60		
Percent over Pace Speed	20		
Percent under Pace Speed	20		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
30	1	1	1
31	2	2	3
32	2	2	5
33	1	1	6
34	7	7	13
35	6	6	19
36	1	1	20
37	8	8	28
38	7	7	35
39	4	4	39
40	7	7	46
41	5	5	51
42	9	9	60
43	5	5	65
44	4	4	69
45	8	8	77
46	3	3	80
47	6	6	86
48	6	6	92
49	2	2	94
50	2	2	96
51	1	1	97
52	0	0	97
53	2	2	99
54	0	0	99
55	1	1	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100
66	0	0	100
67	0	0	100
68	0	0	100
69	0	0	100
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71	0	0	100
72	0	0	100
73	0	0	100
74	0	0	100
75	0	0	100



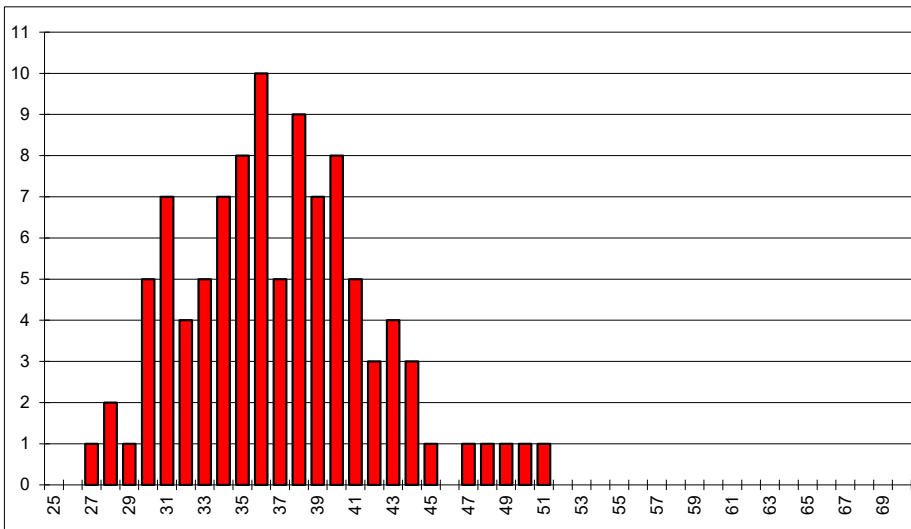
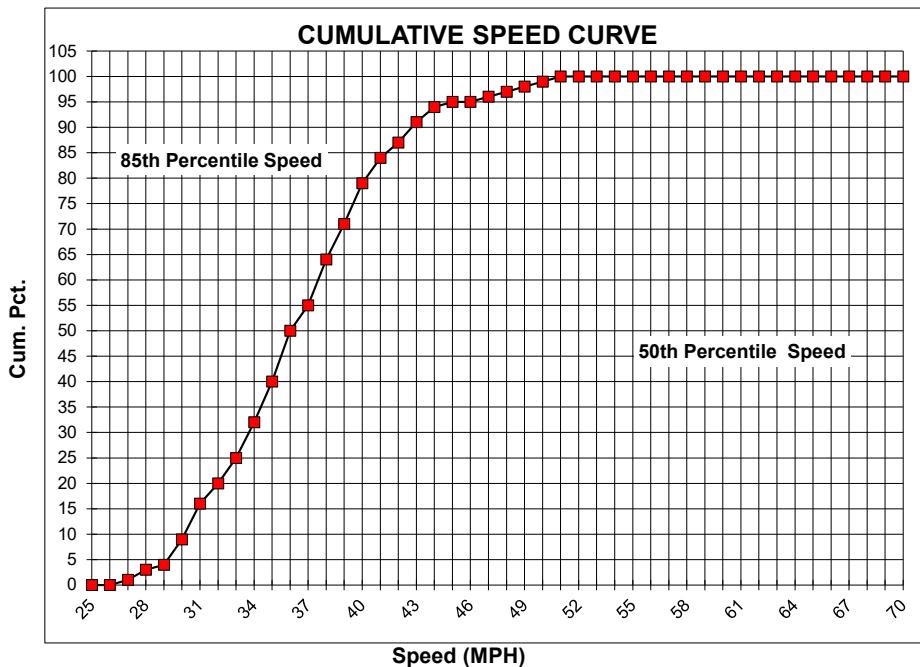
VEHICLE SPEED SURVEY SHEET

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: **SB PCH south of El-Segundo**
 P.M.: **24.911**
 DIRECTION(S): **SB** ROUTE: **1**
 DATE: **2/19/2021** TIME: **11:22 AM**
 POSTED SPEED LIMITS: **45** OBSERVER: **AM, WH**
 WEATHER: **Clear and sunny**

50th Percentile Speed	36.0	10 MPH Pace Speed	31 to 40
85th Percentile Speed	42.0	Percent in Pace Speed	70
Number of Vehicles Observed	100	Percent over Pace Speed	21
Average Speed	37	Percent under Pace Speed	9
Range of Speeds	27 to 51		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
25	0	0	0
26	0	0	0
27	1	1	1
28	2	2	3
29	1	1	4
30	5	5	9
31	7	7	16
32	4	4	20
33	5	5	25
34	7	7	32
35	8	8	40
36	10	10	50
37	5	5	55
38	9	9	64
39	7	7	71
40	8	8	79
41	5	5	84
42	3	3	87
43	4	4	91
44	3	3	94
45	1	1	95
46	0	0	95
47	1	1	96
48	1	1	97
49	1	1	98
50	1	1	99
51	1	1	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100
66	0	0	100
67	0	0	100
68	0	0	100
69	0	0	100
70	0	0	100



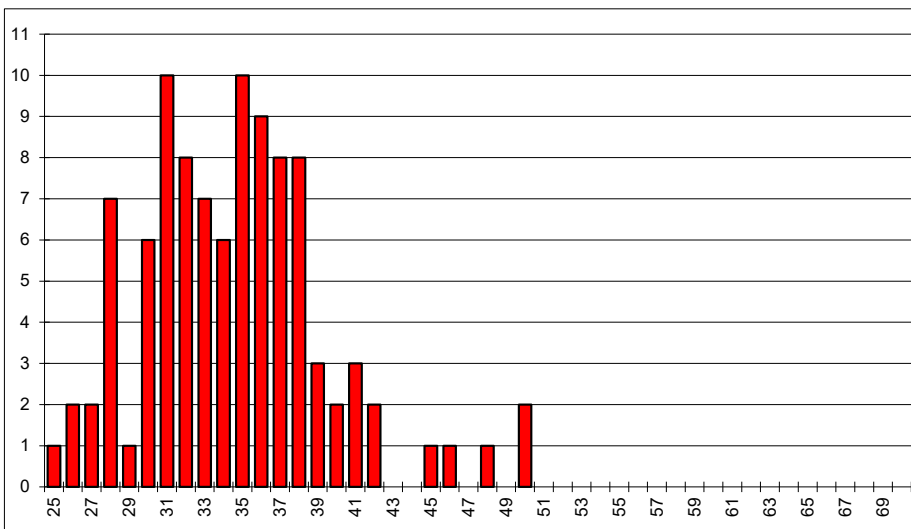
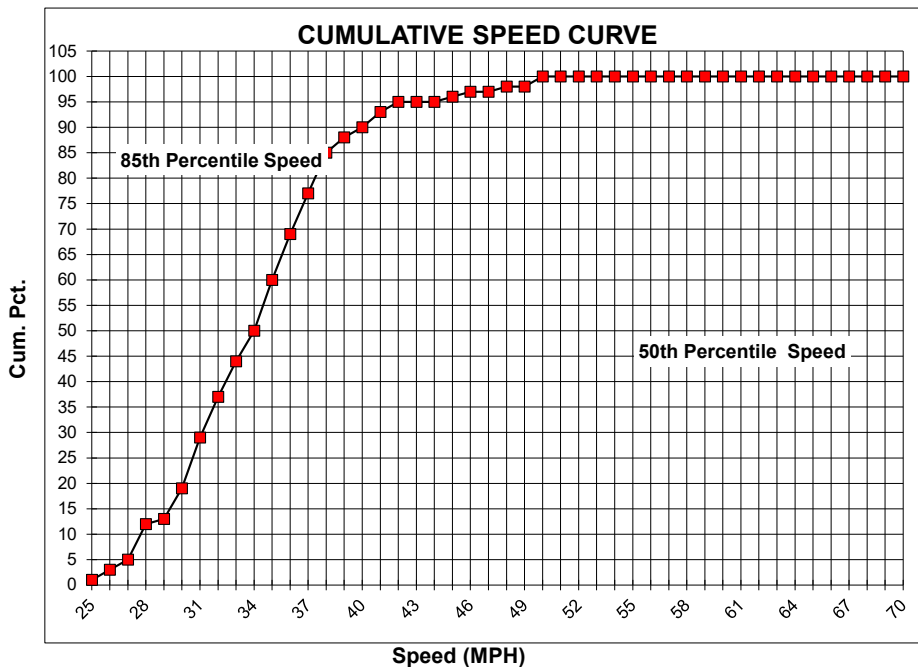
VEHICLE SPEED SURVEY SHEET

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: north of Mariposa Ave
 P.M.: 25.441
 DIRECTION(S): NB ROUTE: 1
 DATE: 2/22/2021 TIME: 10:05 AM
 POSTED SPEED LIMITS: 40 OBSERVER: AM, WH
 WEATHER: Clear and sunny

50th Percentile Speed	34.0	10 MPH Pace Speed	30 to 39
85th Percentile Speed	38.0	Percent in Pace Speed	75
Number of Vehicles Observed	100	Percent over Pace Speed	12
Average Speed	35	Percent under Pace Speed	13
Range of Speeds	25 to 50		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
25	1	1	1
26	2	2	3
27	2	2	5
28	7	7	12
29	1	1	13
30	6	6	19
31	10	10	29
32	8	8	37
33	7	7	44
34	6	6	50
35	10	10	60
36	9	9	69
37	8	8	77
38	8	8	85
39	3	3	88
40	2	2	90
41	3	3	93
42	2	2	95
43	0	0	95
44	0	0	95
45	1	1	96
46	1	1	97
47	0	0	97
48	1	1	98
49	0	0	98
50	2	2	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100
66	0	0	100
67	0	0	100
68	0	0	100
69	0	0	100
70	0	0	100



VEHICLE SPEED SURVEY SHEET

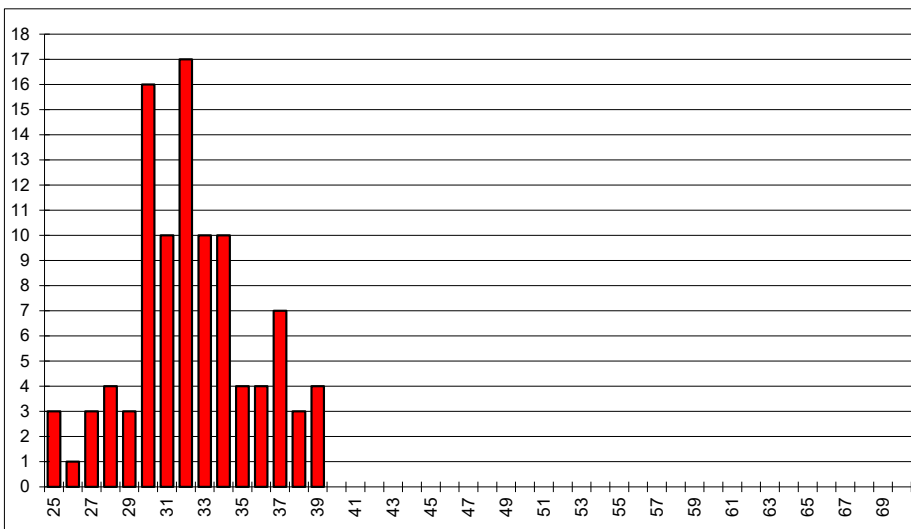
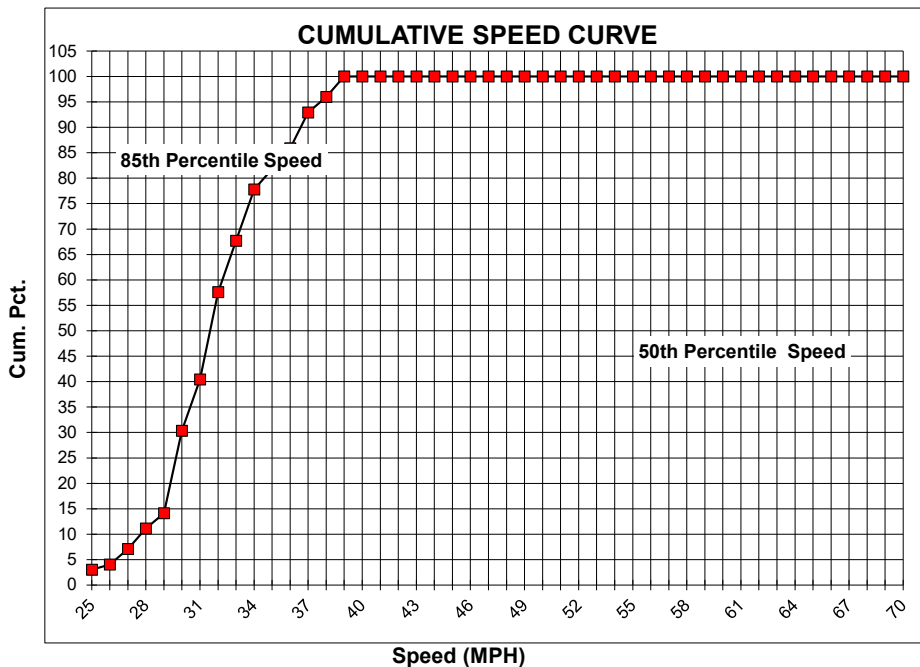
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: north of Mariposa Ave
 P.M.: 25.441
 DIRECTION(S): SB ROUTE: 1
 DATE: 2/22/2021 TIME: 10:15 AM
 POSTED SPEED LIMITS: 40 OBSERVER: AM, WH
 WEATHER: Clear and sunny

50th Percentile Speed	32.0
85th Percentile Speed	36.0
Number of Vehicles Observed	99
Average Speed	32
Range of Speeds	25 to 39

10 MPH Pace Speed	28 to 37
Percent in Pace Speed	86
Percent over Pace Speed	7
Percent under Pace Speed	7

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
25	3	3	3
26	1	1	4
27	3	3	7
28	4	4	11
29	3	3	14
30	16	16	30
31	10	10	40
32	17	17	58
33	10	10	68
34	10	10	78
35	4	4	82
36	4	4	86
37	7	7	93
38	3	3	96
39	4	4	100
40	0	0	100
41	0	0	100
42	0	0	100
43	0	0	100
44	0	0	100
45	0	0	100
46	0	0	100
47	0	0	100
48	0	0	100
49	0	0	100
50	0	0	100
51	0	0	100
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61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100
66	0	0	100
67	0	0	100
68	0	0	100
69	0	0	100
70	0	0	100



VEHICLE SPEED SURVEY SHEET

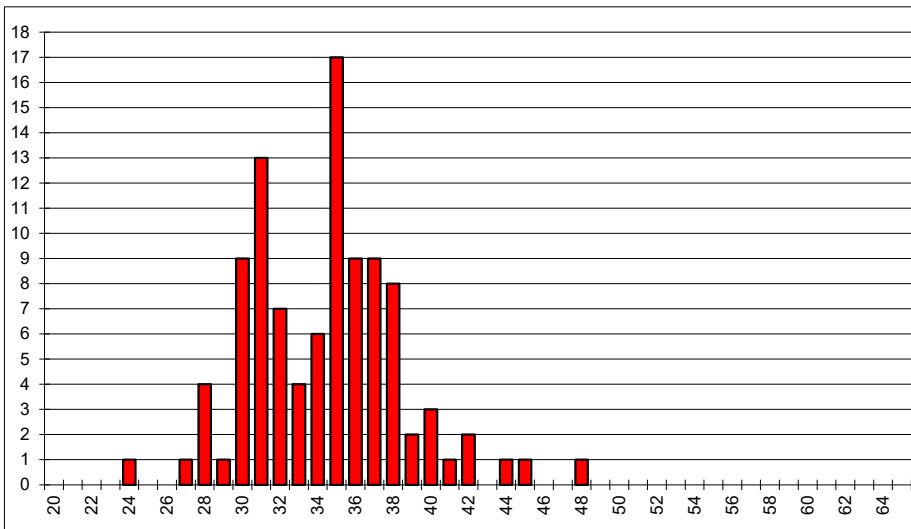
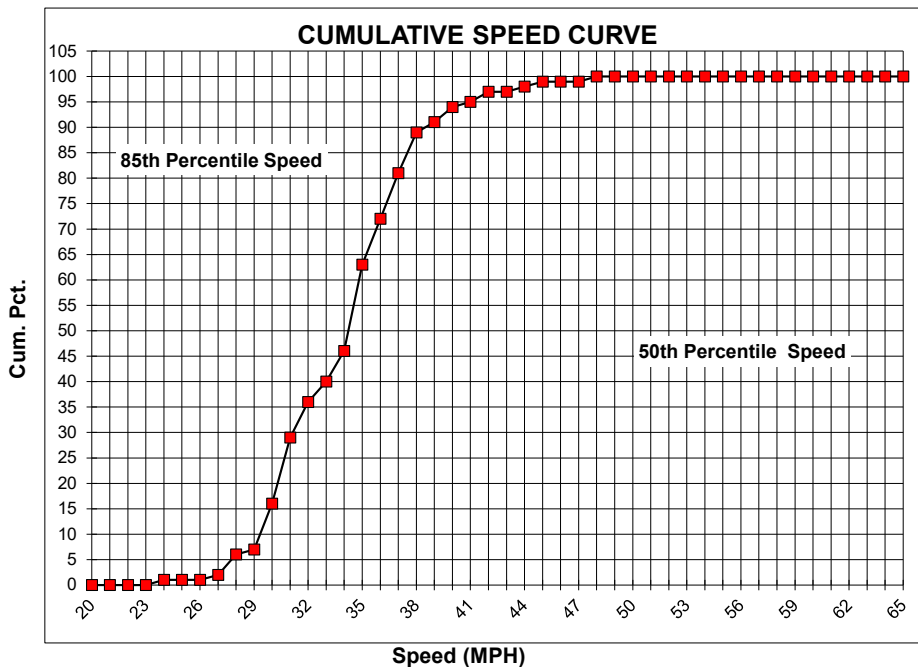
STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: South of Imperial Hwy
 P.M.: 25.921
 DIRECTION(S): NB ROUTE: 1
 DATE: 2/22/2021 TIME: 10:45 AM
 POSTED SPEED LIMITS: 40 OBSERVER: AM, WH
 WEATHER: Clear and sunny

50th Percentile Speed	35.0
85th Percentile Speed	38.0
Number of Vehicles Observed	100
Average Speed	34
Range of Speeds	24 to 48

10 MPH Pace Speed	30	to	39
Percent in Pace Speed	84		
Percent over Pace Speed	9		
Percent under Pace Speed	7		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	1	1	1
25	0	0	1
26	0	0	1
27	1	1	2
28	4	4	6
29	1	1	7
30	9	9	16
31	13	13	29
32	7	7	36
33	4	4	40
34	6	6	46
35	17	17	63
36	9	9	72
37	9	9	81
38	8	8	89
39	2	2	91
40	3	3	94
41	1	1	95
42	2	2	97
43	0	0	97
44	1	1	98
45	1	1	99
46	0	0	99
47	0	0	99
48	1	1	100
49	0	0	100
50	0	0	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100



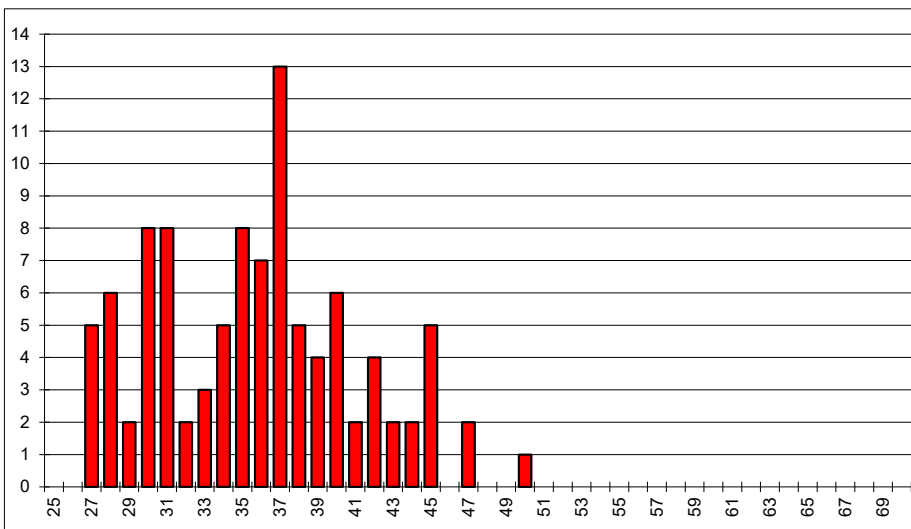
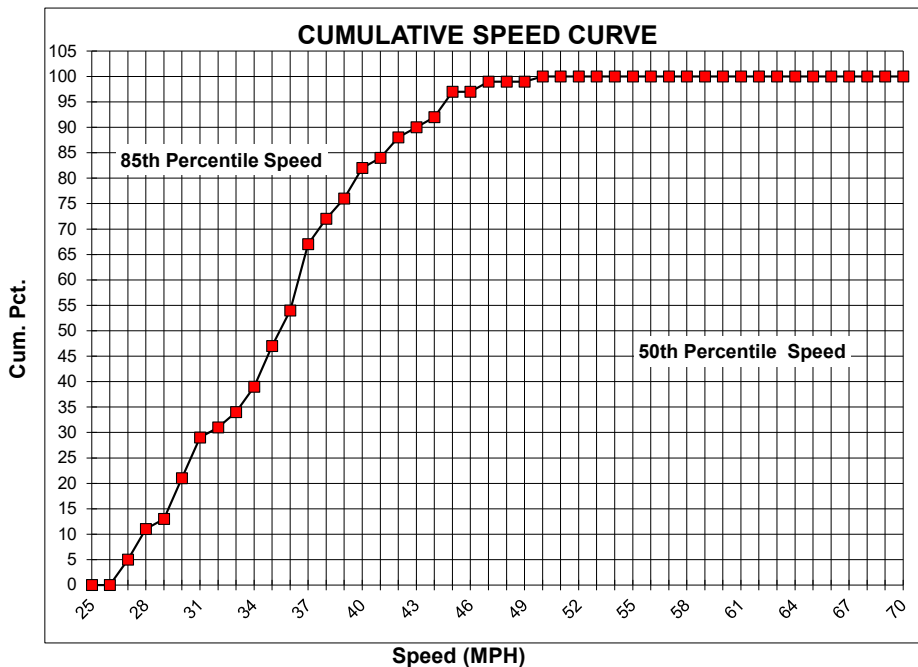
VEHICLE SPEED SURVEY SHEET

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
 CALTRANS DISTRICT 7
 OFFICE OF TRAFFIC MANAGEMENT

LOCATION: South of Imperial Hwy
 P.M.: 25.921
 DIRECTION(S): SB ROUTE: 1
 DATE: 2/22/2021 TIME: 10:34 AM
 POSTED SPEED LIMITS: 40 OBSERVER: AM, WH
 WEATHER: Clear and sunny

50th Percentile Speed	36.0	10 MPH Pace Speed	30 to 39
85th Percentile Speed	42.0	Percent in Pace Speed	63
Number of Vehicles Observed	100	Percent over Pace Speed	24
Average Speed	36	Percent under Pace Speed	13
Range of Speeds	27 to 50		

Speed (MPH)	NO. (cars)	Pct. (%)	Cum. Pct. (%)
25	0	0	0
26	0	0	0
27	5	5	5
28	6	6	11
29	2	2	13
30	8	8	21
31	8	8	29
32	2	2	31
33	3	3	34
34	5	5	39
35	8	8	47
36	7	7	54
37	13	13	67
38	5	5	72
39	4	4	76
40	6	6	82
41	2	2	84
42	4	4	88
43	2	2	90
44	2	2	92
45	5	5	97
46	0	0	97
47	2	2	99
48	0	0	99
49	0	0	99
50	1	1	100
51	0	0	100
52	0	0	100
53	0	0	100
54	0	0	100
55	0	0	100
56	0	0	100
57	0	0	100
58	0	0	100
59	0	0	100
60	0	0	100
61	0	0	100
62	0	0	100
63	0	0	100
64	0	0	100
65	0	0	100
66	0	0	100
67	0	0	100
68	0	0	100
69	0	0	100
70	0	0	100



VEHICLE SPEED SURVEY SHEET

[illegible]

