




**CITY OF REDDING  
ENGINEERING AND TRAFFIC SURVEY  
OF  
LAKE BOULEVARD**


**JULY 31, 2008**

**For the determination of safe and reasonable speed zoning as required by Sections 22358 and 40802 of the California Vehicle Code (CVC), as defined by Section 627 of the CVC and in accordance with Section 2B. 13 of the California Manual on Uniform Traffic Control Devices, this Engineering and Traffic Survey (ETS) was initiated to verify or modify speed zones on Lake Boulevard.**

**Based on the results of this ETS (attached) and adoption of Ordinance Number 2465 by the City Council of the City of Redding, amending Redding Municipal Code Section 11.12.010, a speed zone on Lake Boulevard of 35 MPH from State Route 273 to Clay Street is established, and a speed zone of 40 MPH from Clay Street to St. Marks Street is established, and a speed zone of 45 MPH from St. Marks Street to the City Limits is established.**

**In accordance with Redding Municipal Code 11.08.010, appropriate signs giving notice of the above speed zoning shall be placed and the stated speed limit(s) shall be effective upon the placement of such signs.**

  
\_\_\_\_\_  
Brian Crane, P. E.  
Director of Public Works

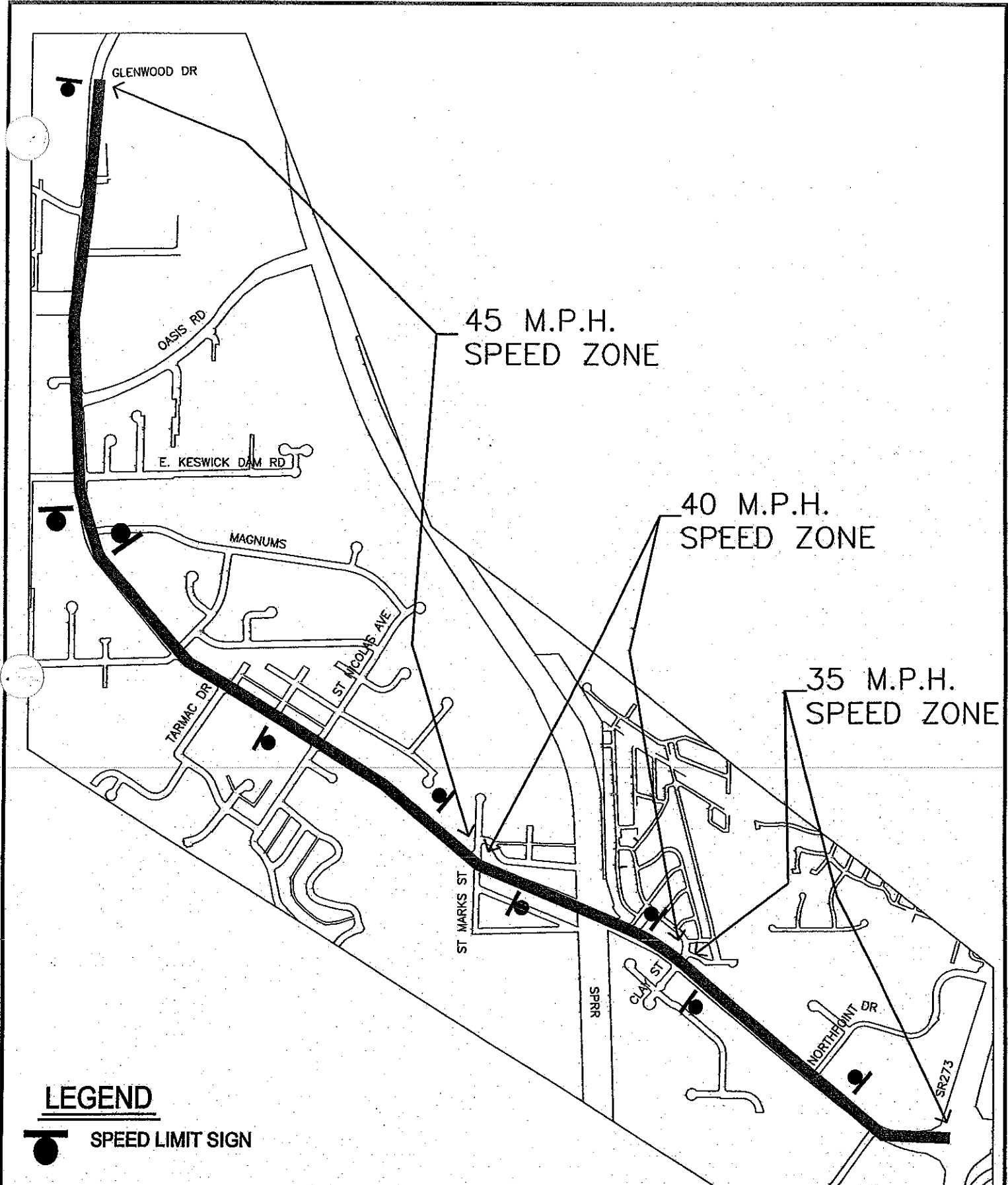
  
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PAMELA MIZE, City Clerk

**LAKE BLVD  
JULY 2008  
CONDITION SUMMARY**


FROM LOCATION TO	MARKET  CLAY	CLAY  ST MARKS	ST MARKS  OASIS	OASIS  CITY LIMITS
NO. OF LANES	4	4	4	4
WIDTH, FT. ROADWAY	64	64	64	64
LENGTH, FT.	3076	2020	2200	1300
HORIZONTAL ALIGNMENT	STRAIGHT	STRAIGHT	GENTLE CURVES	STRAIGHT
VERTICAL	FLAT	DIP	FLAT	FLAT
DISTRICT	BUS / RES	BUS / RES	BUS / RES	BUS / RES
ADT	26,575	21,000	10,722	6,844
PEDESTRIANS	FEW	FEW	FEW	MANY
SIDEWALKS	100%	100%	85%	20%
BIKE LANE/ROUTE	BIKE ROUTE	BIKE ROUTE	BIKE ROUTE	BIKE ROUTE
DRIVEWAYS	NUMEROUS	FEW	FEW	SEVERAL
SPEED RELATED ACCIDENTS	10 IN 2 YRS SIGNIFICANT	NONE	4 IN 2 YRS NOT SIGNIFICANT	NONE
EXISTING SPEED ZONING	35	35	45	45
10 MPH PACE RANGE	36 - 46	38 - 48	38 - 48	38 - 48
85TH% SPEED	38	48	50	48
<b>SURVEY CONCLUSION</b>				
REASONABLE SPEED, MPH	35	*40	45	45
<b>ACTION</b>				
PUBLIC WORKS APPROVED	RMC 11.08.010	RMC 11.08.010	RMC 11.08.010	RMC 11.08.010
SPEED POSTED	35 10/18/07	35 9/12/08	45 1/21/91	45 1/21/91

**ADDITIONAL  
CONDITIONS**

\*Based on MUTCD Section 2B.13 guidance for transition speed zoning increments in urban areas and the condition of limited sight distance in this zone that is not readily apparent to drivers.



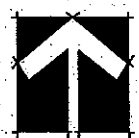
**LEGEND**

 SPEED LIMIT SIGN

CITY OF REDDING TRANSPORTATION & ENGINEERING DIVISION

JULY 2008

**LAKE BLVD SPEED ZONE**  
 SR273 TO GLENWOOD DR



LAKE BLVD N/ OASIS RD

Day: Tuesday  
 Date: 6/6/06  
 Time: 08:30 - 09:10

Observer: Lori Lackey      Calcs: Frank Hogue

Posted Speed: 45  
 Weather: Sunny & Dry

Critical Speed :		48 mph	
Average Speed :		42.0 mph	
Median Speed :		42 mph	
Standard Deviation:		5.4 mph	
Pace Range :		38 - 48 mph	
Percent in Pace :		66.0%	
Total # Vehicles :		100	

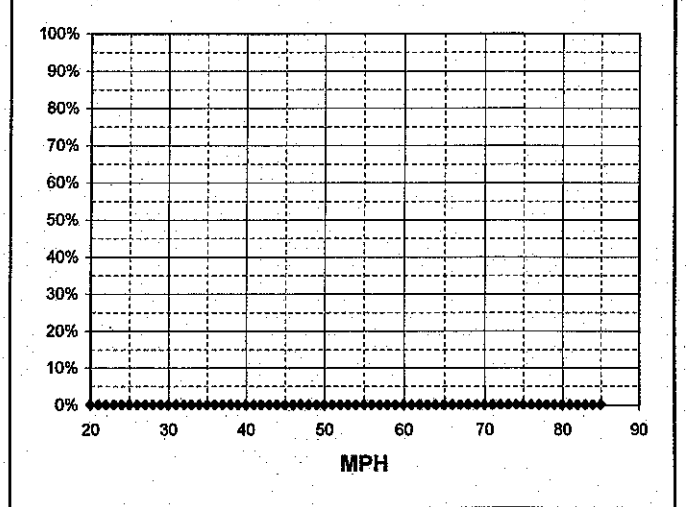
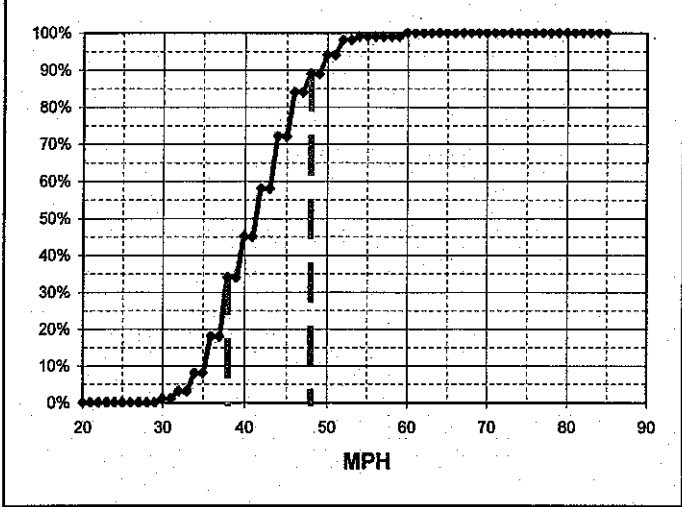
  

MPH	# of Veh.	Both Directions	%
85			100.0%
84			100.0%
83			100.0%
82			100.0%
81			100.0%
80			100.0%
79			100.0%
78			100.0%
77			100.0%
76			100.0%
75			100.0%
74			100.0%
73			100.0%
72			100.0%
71			100.0%
70			100.0%
69			100.0%
68			100.0%
67			100.0%
66			100.0%
65			100.0%
64			100.0%
63			100.0%
62			100.0%
61			100.0%
60	1	◆	100.0%
59			99.0%
58			99.0%
57			99.0%
56			99.0%
55			99.0%
54	1	◆	99.0%
53	4	◆◆◆◆	98.0%
52	4	◆◆◆◆	98.0%
51			94.0%
50	5	◆◆◆◆◆	94.0%
49			89.0%
48	3	◆◆◆	89.0%
47	12	◆◆◆◆◆◆◆◆◆◆	84.0%
46			84.0%
45			72.0%
44	14	◆◆◆◆◆◆◆◆◆◆◆◆	72.0%
43			58.0%
42	13	◆◆◆◆◆◆◆◆◆◆◆	58.0%
41			45.0%
40	11	◆◆◆◆◆◆◆◆◆◆	45.0%
39			34.0%
38	16	◆◆◆◆◆◆◆◆◆◆◆◆◆◆	34.0%
37			18.0%
36	10	◆◆◆◆◆◆◆◆◆◆	18.0%
35			8.0%
34	5	◆◆◆◆◆	8.0%
33			3.0%
32	2	◆◆	3.0%
31			1.0%
30	1	◆	1.0%
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%

Critical Speed :		#DIV/0! mph	
Average Speed :		#DIV/0! mph	
Median Speed :		0 mph	
Standard Deviation:		#DIV/0! mph	
Pace Range :		#DIV/0! mph	
Percent in Pace :		#DIV/0!	
Total # Vehicles :		0	

MPH	No of Veh.		%
85			#DIV/0!
84			#DIV/0!
83			#DIV/0!
82			#DIV/0!
81			#DIV/0!
80			#DIV/0!
79			#DIV/0!
78			#DIV/0!
77			#DIV/0!
76			#DIV/0!
75			#DIV/0!
74			#DIV/0!
73			#DIV/0!
72			#DIV/0!
71			#DIV/0!
70			#DIV/0!
69			#DIV/0!
68			#DIV/0!
67			#DIV/0!
66			#DIV/0!
65			#DIV/0!
64			#DIV/0!
63			#DIV/0!
62			#DIV/0!
61			#DIV/0!
60			#DIV/0!
59			#DIV/0!
58			#DIV/0!
57			#DIV/0!
56			#DIV/0!
55			#DIV/0!
54			#DIV/0!
53			#DIV/0!
52			#DIV/0!
51			#DIV/0!
50			#DIV/0!
49			#DIV/0!
48			#DIV/0!
47			#DIV/0!
46			#DIV/0!
45			#DIV/0!
44			#DIV/0!
43			#DIV/0!
42			#DIV/0!
41			#DIV/0!
40			#DIV/0!
39			#DIV/0!
38			#DIV/0!
37			#DIV/0!
36			#DIV/0!
35			#DIV/0!
34			#DIV/0!
33			#DIV/0!
32			#DIV/0!
31			#DIV/0!
30			#DIV/0!
29			#DIV/0!
28			#DIV/0!
27			#DIV/0!
26			#DIV/0!
25			#DIV/0!
24			#DIV/0!
23			#DIV/0!
22			#DIV/0!
21			#DIV/0!
20			#DIV/0!



LAKE BLVD W/ ST. NICHOLAS WAY

Day: Tuesday  
 Date: 6/6/06  
 Time: 09:15 - 09:45

Observer: Lori Lackey Calcs: Frank Hogue

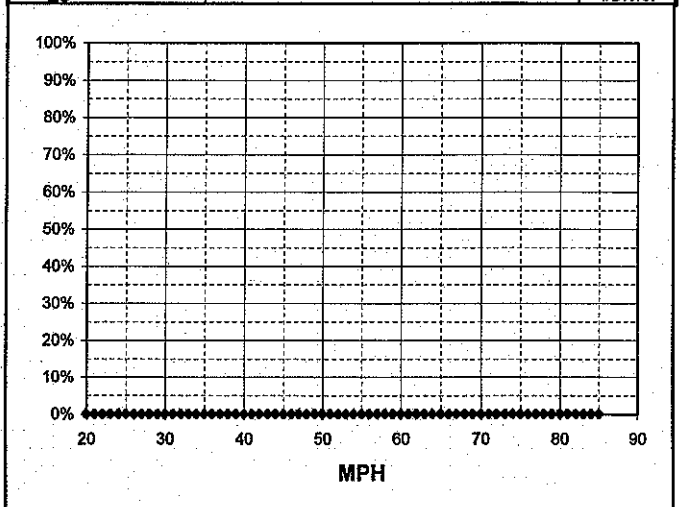
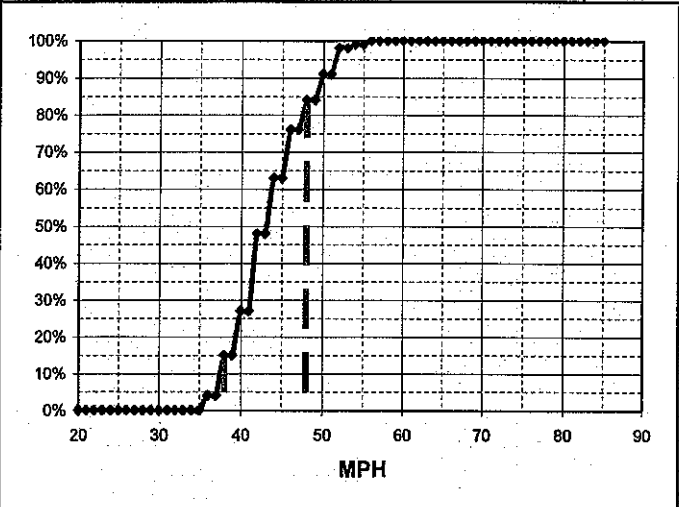
Posted Speed: 45  
 Weather: Sunny & Dry

Critical Speed :	50	mph
Average Speed :	43.9	mph
Median Speed :	44	mph
Standard Deviation:	4.5	mph
Pace Range :	38 - 48	mph
Percent in Pace :	72.0%	
Total # Vehicles :	100	

Critical Speed :	#DIV/0!	mph
Average Speed :	#DIV/0!	mph
Median Speed :	0	mph
Standard Deviation:	#DIV/0!	mph
Pace Range :	#DIV/0!	mph
Percent in Pace :	#DIV/0!	
Total # Vehicles :	0	

MPH	# of Veh.	Both Directions	%
85			100.0%
84			100.0%
83			100.0%
82			100.0%
81			100.0%
80			100.0%
79			100.0%
78			100.0%
77			100.0%
76			100.0%
75			100.0%
74			100.0%
73			100.0%
72			100.0%
71			100.0%
70			100.0%
69			100.0%
68			100.0%
67			100.0%
66			100.0%
65			100.0%
64			100.0%
63			100.0%
62			100.0%
61			100.0%
60			100.0%
59			100.0%
58			100.0%
57			100.0%
56	1	◆	100.0%
55			99.0%
54	1	◆	98.0%
53			98.0%
52	7	◆◆◆◆◆◆◆	98.0%
51			91.0%
50	7	◆◆◆◆◆◆◆	81.0%
49			84.0%
48	8	◆◆◆◆◆◆◆◆	84.0%
47			76.0%
46	13	◆◆◆◆◆◆◆◆◆◆	76.0%
45			63.0%
44	15	◆◆◆◆◆◆◆◆◆◆◆◆	63.0%
43			48.0%
42	21	◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆	48.0%
41			27.0%
40	12	◆◆◆◆◆◆◆◆◆◆◆◆	27.0%
39			15.0%
38	11	◆◆◆◆◆◆◆◆◆◆◆◆	15.0%
37			4.0%
36	4	◆◆◆◆	4.0%
35			0.0%
34			0.0%
33			0.0%
32			0.0%
31			0.0%
30			0.0%
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%

MPH	No of Veh.		%
85			#DIV/0!
84			#DIV/0!
83			#DIV/0!
82			#DIV/0!
81			#DIV/0!
80			#DIV/0!
79			#DIV/0!
78			#DIV/0!
77			#DIV/0!
76			#DIV/0!
75			#DIV/0!
74			#DIV/0!
73			#DIV/0!
72			#DIV/0!
71			#DIV/0!
70			#DIV/0!
69			#DIV/0!
68			#DIV/0!
67			#DIV/0!
66			#DIV/0!
65			#DIV/0!
64			#DIV/0!
63			#DIV/0!
62			#DIV/0!
61			#DIV/0!
60			#DIV/0!
59			#DIV/0!
58			#DIV/0!
57			#DIV/0!
56			#DIV/0!
55			#DIV/0!
54			#DIV/0!
53			#DIV/0!
52			#DIV/0!
51			#DIV/0!
50			#DIV/0!
49			#DIV/0!
48			#DIV/0!
47			#DIV/0!
46			#DIV/0!
45			#DIV/0!
44			#DIV/0!
43			#DIV/0!
42			#DIV/0!
41			#DIV/0!
40			#DIV/0!
39			#DIV/0!
38			#DIV/0!
37			#DIV/0!
36			#DIV/0!
35			#DIV/0!
34			#DIV/0!
33			#DIV/0!
32			#DIV/0!
31			#DIV/0!
30			#DIV/0!
29			#DIV/0!
28			#DIV/0!
27			#DIV/0!
26			#DIV/0!
25			#DIV/0!
24			#DIV/0!
23			#DIV/0!
22			#DIV/0!
21			#DIV/0!
20			#DIV/0!



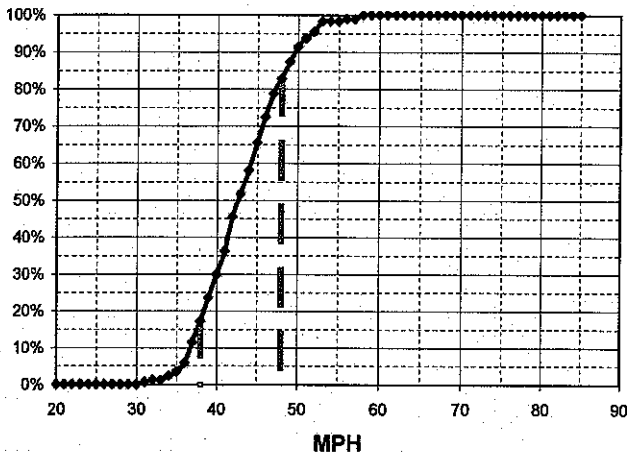
LAKE BLVD W/ CLAY ST

Observer: Frank Hogue

Calcs: Frank Hogue

Critical Speed :	49	mph
Average Speed :	43.5	mph
Median Speed :	43	mph
Standard Deviation:	5.0	mph
Pace Range :	38 - 48	mph
Percent in Pace :	67.2%	
Total # Vehicles :	174	

MPH	# of Veh.	Eastbound	%
85			100.0%
84			100.0%
83			100.0%
82			100.0%
81			100.0%
80			100.0%
79			100.0%
78			100.0%
77			100.0%
76			100.0%
75			100.0%
74			100.0%
73			100.0%
72			100.0%
71			100.0%
70			100.0%
69			100.0%
68			100.0%
67			100.0%
66			100.0%
65			100.0%
64			100.0%
63			100.0%
62			100.0%
61			100.0%
60			100.0%
59			100.0%
58	2	♦♦	100.0%
57	1	♦	98.9%
56	1	♦	98.9%
55			98.3%
54			98.3%
53	5	♦♦♦♦♦	98.3%
52	3	♦♦♦	95.4%
51	4	♦♦♦♦	93.7%
50	7	♦♦♦♦♦♦♦	91.4%
49	8	♦♦♦♦♦♦♦♦	87.8%
48	7	♦♦♦♦♦♦♦	82.8%
47	11	♦♦♦♦♦♦♦♦♦	78.7%
46	12	♦♦♦♦♦♦♦♦♦♦	72.4%
45	13	♦♦♦♦♦♦♦♦♦♦♦	65.5%
44	11	♦♦♦♦♦♦♦♦♦	58.0%
43	11	♦♦♦♦♦♦♦♦♦	51.7%
42	16	♦♦♦♦♦♦♦♦♦♦♦	45.4%
41	11	♦♦♦♦♦♦♦♦♦	36.2%
40	11	♦♦♦♦♦♦♦♦♦	29.9%
39	11	♦♦♦♦♦♦♦♦♦	23.6%
38	10	♦♦♦♦♦♦♦♦	17.2%
37	10	♦♦♦♦♦♦♦♦	11.5%
36	4	♦♦♦♦	5.7%
35	2	♦♦	3.4%
34	2	♦♦	2.3%
33			1.1%
32	1	♦	1.1%
31	1	♦	0.6%
30			0.0%
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%



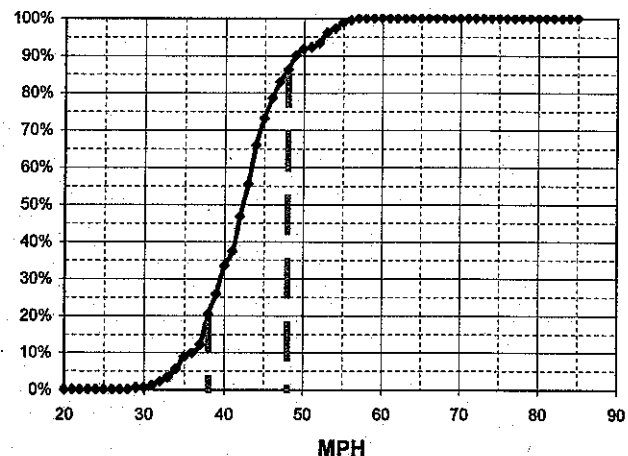
Day: Thursday

Posted Speed: 35  
Weather: Sunny & Dry

Date: 6/19/08  
Time: 10:00 - 10:50

Critical Speed :	48	mph
Average Speed :	42.9	mph
Median Speed :	43	mph
Standard Deviation:	5.3	mph
Pace Range :	38 - 48	mph
Percent in Pace :	70.9%	
Total # Vehicles :	182	

MPH	No of Veh.	Westbound	%
85			100.0%
84			100.0%
83			100.0%
82			100.0%
81			100.0%
80			100.0%
79			100.0%
78			100.0%
77			100.0%
76			100.0%
75			100.0%
74			100.0%
73			100.0%
72			100.0%
71			100.0%
70			100.0%
69			100.0%
68			100.0%
67			100.0%
66			100.0%
65			100.0%
64			100.0%
63			100.0%
62			100.0%
61			100.0%
60			100.0%
59			100.0%
58			100.0%
57	1	♦	98.9%
56	1	♦	98.9%
55	3	♦♦♦	98.3%
54	2	♦♦	97.3%
53	5	♦♦♦♦♦	96.2%
52	2	♦♦	93.4%
51	1	♦	92.3%
50	3	♦♦♦	91.8%
49	7	♦♦♦♦♦♦♦	90.1%
48	6	♦♦♦♦♦♦	86.3%
47	8	♦♦♦♦♦♦♦♦	83.0%
46	10	♦♦♦♦♦♦♦♦♦	78.6%
45	13	♦♦♦♦♦♦♦♦♦♦	73.1%
44	19	♦♦♦♦♦♦♦♦♦♦♦	65.9%
43	16	♦♦♦♦♦♦♦♦♦♦	55.5%
42	17	♦♦♦♦♦♦♦♦♦♦♦	46.7%
41	7	♦♦♦♦♦♦♦	37.4%
40	14	♦♦♦♦♦♦♦♦♦♦	33.5%
39	10	♦♦♦♦♦♦♦♦	25.8%
38	15	♦♦♦♦♦♦♦♦♦♦	20.3%
37	4	♦♦♦♦	12.1%
36	2	♦♦	9.9%
35	6	♦♦♦♦♦	8.8%
34	4	♦♦♦♦	5.5%
33	2	♦♦	3.3%
32	2	♦♦	2.2%
31	1	♦	1.1%
30			0.5%
29	1	♦	0.5%
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%



LAKE BLVD E/ NORTHPOINT DR

Day: Wednesday

Date: 6/25/08

Posted Speed: 35

Weather: Sunny & Dry

Time: 09:40 - 10:40

Observer: Frank Hogue

Calcs: Frank Hogue

Critical Speed :	<u>38</u>	<u>mph</u>
Average Speed :	<u>33.9</u>	<u>mph</u>
Median Speed :	<u>34</u>	<u>mph</u>
Standard Deviation:	<u>3.8</u>	<u>mph</u>
Pace Range :	<u>30 - 40</u>	<u>mph</u>
Percent in Pace :	<u>82.5%</u>	
Total # Vehicles :	<u>120</u>	

Critical Speed :	<u>37</u>	<u>mph</u>
Average Speed :	<u>33.3</u>	<u>mph</u>
Median Speed :	<u>33</u>	<u>mph</u>
Standard Deviation:	<u>3.9</u>	<u>mph</u>
Pace Range :	<u>30 - 40</u>	<u>mph</u>
Percent in Pace :	<u>78.4%</u>	
Total # Vehicles :	<u>102</u>	

MPH	# of Veh.	Eastbound	%
85			100.0%
84			100.0%
83			100.0%
82			100.0%
81			100.0%
80			100.0%
79			100.0%
78			100.0%
77			100.0%
76			100.0%
75			100.0%
74			100.0%
73			100.0%
72			100.0%
71			100.0%
70			100.0%
69			100.0%
68			100.0%
67			100.0%
66			100.0%
65			100.0%
64			100.0%
63			100.0%
62			100.0%
61			100.0%
60			100.0%
59			100.0%
58			100.0%
57			100.0%
56			100.0%
55			100.0%
54			100.0%
53			100.0%
52			100.0%
51			100.0%
50			100.0%
49			100.0%
48			100.0%
47			100.0%
46			100.0%
45			100.0%
44	1	♦	100.0%
43			99.2%
42	2	♦♦	99.2%
41	3	♦♦♦	97.5%
40			95.0%
39	7	♦♦♦♦♦♦♦	95.0%
38	7	♦♦♦♦♦♦♦	89.2%
37	14	♦♦♦♦♦♦♦♦♦♦	83.3%
36	10	♦♦♦♦♦♦♦♦	71.7%
35	13	♦♦♦♦♦♦♦♦♦	63.3%
34	9	♦♦♦♦♦♦♦	52.5%
33	10	♦♦♦♦♦♦♦♦	45.0%
32	8	♦♦♦♦♦♦♦	36.7%
31	11	♦♦♦♦♦♦♦♦	30.0%
30	10	♦♦♦♦♦♦♦♦	20.8%
29	7	♦♦♦♦♦♦♦	12.5%
28	2	♦♦	6.7%
27	3	♦♦♦	5.0%
26	2	♦♦	2.5%
25		♦	0.8%
24	1	♦	0.0%
23			0.0%
22			0.0%
21			0.0%
20			0.0%

MPH	No of Veh.	Westbound	%
85			100.0%
84			100.0%
83			100.0%
82			100.0%
81			100.0%
80			100.0%
79			100.0%
78			100.0%
77			100.0%
76			100.0%
75			100.0%
74			100.0%
73			100.0%
72			100.0%
71			100.0%
70			100.0%
69			100.0%
68			100.0%
67			100.0%
66			100.0%
65			100.0%
64			100.0%
63			100.0%
62			100.0%
61			100.0%
60			100.0%
59			100.0%
58			100.0%
57			100.0%
56			100.0%
55			100.0%
54			100.0%
53			100.0%
52			100.0%
51			100.0%
50			100.0%
49			100.0%
48			100.0%
47			100.0%
46			100.0%
45			100.0%
44			100.0%
43	1	♦	100.0%
42	1	♦	99.0%
41	1	♦	98.0%
40	3	♦♦♦	97.1%
39	5	♦♦♦♦♦	94.1%
38	4	♦♦♦♦	89.2%
37	3	♦♦♦	85.3%
36	5	♦♦♦♦♦	77.5%
35	9	♦♦♦♦♦♦♦	72.5%
34	6	♦♦♦♦♦	63.7%
33	16	♦♦♦♦♦♦♦♦♦♦	57.8%
32	13	♦♦♦♦♦♦♦♦	42.2%
31	10	♦♦♦♦♦♦♦	29.4%
30	4	♦♦♦♦	19.6%
29	2	♦♦	15.7%
28	7	♦♦♦♦♦♦♦	13.7%
27	4	♦♦♦♦	6.9%
26	2	♦♦	2.9%
25		♦	1.0%
24			1.0%
23			1.0%
22	1	♦	1.0%
21			0.0%
20			0.0%

