



STAFF REPORT

SAUSALITO CITY COUNCIL

AGENDA TITLE:

Consideration of Speed Limit Changes for Radar Speed Enforcement

RECOMMENDED MOTION:

Adopt Resolution Approving Speed Limit Changes along portions of Bridgeway and Caledonia.

SUMMARY

To allow radar enforcement of speeds, the California Vehicle Code requires that an Engineering and Traffic Survey be performed. This assures that the speeds on the roads consider driver behavior. The courts require that the Engineering and Traffic Surveys be updated every 5 years.

The last certified Engineering and Traffic Surveys were prepared in 2004. The City recently hired the consultant Multitrans to perform an update of the Sausalito's Engineering and Traffic Surveys. Based on field radar measurements, 6 segments of Bridgeway and two segments of Caledonia must be changed to allow radar enforcement.

Street	From	To	Direction	Existing	Proposed
Bridgeway	Gate 5	Gate 6	Northbound	30	35
Bridgeway	Coloma	Gate 5	Northbound	30	35
Bridgeway	Harbor	Coloma	Northbound	30	35
Bridgeway	Napa	Spring	Northbound	30	35
Bridgeway	Harbor	Nevada	Southbound	35	30
Bridgeway	Nevada	Spring	Southbound	35	30
Caledonia	Johnson	Napa	Northbound	25	20
Caledonia	Napa	Johnson	Southbound	25	20

Section 15.04.060 of the Municipal Code authorizes the City Council to set speed limits on the basis of an Engineering and Traffic Survey. Staff recommends the Council adopt a resolution approving speed limit changes of the above streets.

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BACKGROUND

The City performs radar speed enforcement on several streets. To allow radar enforcement of speeds, the California Vehicle Code requires that an Engineering and Traffic Survey be performed. This assures that the speeds on the roads consider driver behavior. The courts require that the Engineering and Traffic Surveys be updated every 5 years.

The last certified Engineering and Traffic Surveys were prepared in 2004. The City recently hired the consultant Multitrans to perform an update of the Sausalito's Engineering and Traffic Surveys. Based on field radar measurements, 6 segments of Bridgeway and two segments of Caledonia must be changed to allow radar enforcement. The survey found that driver behavior did not change along 24 segments and those speed limits can remain as previously approved. The segment recommended for change and the segment that can remain the same are attached to this report.

Speed limits are based upon measurement of 100 vehicles traveling along the road in "free flow" conditions. The objective of measurements at these times is that drivers will self determine reasonable speeds along a road based upon roadway, vehicle and visual conditions around the road. Speed limits are generally set at the speed that is nearest 5 mile per hour increment of the 85th percentile of the range of speeds measured. Other factors can weigh into the actual speed set. The length of the road, speed limits in the segments before and after, the roadway conditions.

Based on the measurements made 6 segments of Bridgeway and 2 segments of Caledonia are recommended for revision as follows:

Street	From	To	Direction	Existing	Proposed
Bridgeway	Gate 5	Gate 6	Northbound	30	35
Bridgeway	Coloma	Gate 5	Northbound	30	35
Bridgeway	Harbor	Coloma	Northbound	30	35
Bridgeway	Napa	Spring	Northbound	30	35
Bridgeway	Harbor	Nevada	Southbound	35	30
Bridgeway	Nevada	Spring	Southbound	35	30
Caledonia	Johnson	Napa	Northbound	25	20
Caledonia	Napa	Johnson	Southbound	25	20

The changes will allow a uniform speed limit along Bridgeway from Napa to the City Limit in both the Northbound and Southbound directions. 35 miles per hour in the Northbound direction 30 miles per hour in the southbound direction. Staff believes directional speed difference is the result of fewer conflicts for drivers traveling in the northbound direction than in the southbound direction. There are fewer curb edge changes, there are also fewer widening and narrowing areas. Currently the speed varies between 30 and 35 in both directions. Staff believes the roadway segments

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should not be varied in half mile segments. It creates confusion and misunderstanding for drivers. Drivers depend on reasonable and uniform regulation for safe motor vehicle operation and adopting the recommended changes will help create reasonable and uniform rules. The changes along Caledonia will decrease the speed from 25 to 20 miles per hour.

If the Council chooses not to approve the changes, speeds will have to be enforced by non-radar methods such as vehicle pacing or timed speed zones. These methods are less effective than radar.

FISCAL IMPACT

Speed enforcement is done to preserve order in the community, not directly to provide revenue to the City. Nonetheless, speed limit enforcement provides some revenue to the City. The City Budget does not explicitly identify revenue from speeding citations. There are two possible revenue categories where fines are aggregated, Intergovernmental transfers and Municipal Code fines. Speeding citations are a small component of one of these two categories which together represent 3.2% of the City revenue. Failure to adopt the speed limits is expected to result in reduced revenue to the General Fund. The reduction is not expected have a significant impact to the City Budget.

STAFF RECOMMENDATIONS

Adopt the attached resolution approving the speed limit changes along portions of Bridgeway and Caledonia.

ATTACHMENTS:

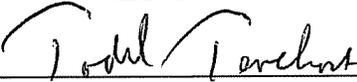
Resolution of the City Council of the City of Sausalito Approving Speed Limit Changes along Portions of Bridgeway and Caledonia on the Basis of an Engineering and Traffic Survey Completed in April 2009

Table 2 – Speed Limit Changes from 2004

Table 3 – No Change in Speed Limits from 2004

Full Report

PREPARED BY:



Todd Teachout
City Engineer

REVIEWED BY (Department Head):



Jonathon Goldman
Director of Public Works

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Reviewed BY:

Mary A. Wagner
Mary Wagner
City Attorney

SUBMITTED BY:

Adam W. Politzer
Adam W. Politzer
City Manager

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RESOLUTION _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAUSALITO APPROVING SPEED LIMIT CHANGES ALONG PORTIONS OF BRIDGEWAY AND CALEDONIA ON THE BASIS OF AN ENGINEERING AND TRAFFIC SURVEY COMPLETED IN APRIL OF 2009

WHEREAS, the California Vehicle Code allows a City to modify the speed limits on public streets from the Prima Facie limits to other limits determined from an Engineering and Traffic Survey, and

WHEREAS, Section 15.04.060 of the Sausalito Municipal Code authorizes the City Council to determine and declare as appropriate, reasonable and safe speed limit upon consideration of the results of an Engineering and Traffic Survey, and

WHEREAS, Courts require that Engineering and Traffic Surveys be performed every five years to enable speed enforcement by radar speed measurement; and

WHEREAS, an Engineering a Traffic Survey was performed in April of 2009, and

WHEREAS, six segments of Bridgeway and two segments of Caledonia were determined to require speed limit changes as follow:

Street	From	To	Direction	Existing	Proposed
Bridgeway	Gate 5	Gate 6	Northbound	30	35
Bridgeway	Coloma	Gate 5	Northbound	30	35
Bridgeway	Harbor	Coloma	Northbound	30	35
Bridgeway	Napa	Spring	Northbound	30	35
Bridgeway	Harbor	Nevada	Southbound	35	30
Bridgeway	Nevada	Spring	Southbound	35	30
Caledonia	Johnson	Napa	Northbound	25	20
Caledonia	Napa	Johnson	Southbound	25	20

and

Whereas the full details of these determinations are documented in the report entitled "City of Sausalito Engineering and Traffic Survey, April of 2009" prepared by Multitrans and on file in the Offices of the Director of Public Works and City Engineer.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Sausalito:

1. Determine and declare that the said speed limit changes are appropriate, reasonable and safe speed limits.
2. Authorize the City Engineer to certify the "City of Sausalito Engineering and Traffic Survey, April of 2009"
3. Authorizes the Director of Public Works to change speed limit signs to conform with the above table.

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AYES: Councilmembers:
NOES: Councilmembers:
ABSTAIN: Councilmembers:

Mayor, City of Sausalito

ATTEST:

City Clerk

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**TABLE 3
CITY OF SAUSALITO
CITYWIDE TRAFFIC SPEED SURVEY - CHANGES FROM 2004 SURVEY
OBSERVED SPEEDS 2009**

Segment #	Direction	Street	From	To	SPEEDS 2004					OBSERVED SPEEDS 2009				
					Existing 2004	85 th 2004	50 th	85 th	Ave.	Max.	Pace	%Pace	Existing	Proposed
1	N/B	Bridgeway	Gate 5 Rd	Gate 6 Rd	30	33	31	35	31.3	40	27-36	87	30	35
2	N/B	Bridgeway	Coloma	Gate 5 Rd	30	34	31	36	31.7	42	27-36	81	30	35
3	N/B	Bridgeway	Harbor	Coloma	30	33	32	35	31.0	44	26-35	82	30	35
6	N/B	Bridgeway	Napa	Spring	30	34	31	35	30.6	40	27-36	80	30	35
13	S/B	Bridgeway	Harbor	Nevada	35	39	28	32	28.4	46	22-31	85	35	30
14	S/B	Bridgeway	Nevada	Spring	35	39	28	31	28.1	38	23-32	91	35	30
20	N/B	Caledonia	Johnson	Napa	25	23	20	22	19.2	26	15-24	90	25	20
21	S/B	Caledonia	Napa	Johnson	25	23	19	22	19	31	15-24	84	25	20

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**TABLE 2
CITY OF SAUSALITO
CITYWIDE TRAFFIC SPEED SURVEY – NO CHANGE FROM 2004 SURVEY
SPEEDS 2004 OBSERVED SPEEDS 2009**

Segment #	Direction	Street	From	To	SPEEDS 2004				OBSERVED SPEEDS 2009					
					Existing 2004	85 th 2004	50 th	85 th	Ave.	Max.	Pace	%Pace	Existing	Proposed
4	N/B	Bridgeway	Nevada	Harbor	35	38	30	35	30.5	44	27-36	80	35	35
5	N/B	Bridgeway	Spring	Nevada	35	39	33	36	33.3	40	30-39	97	35	35
7	N/B	Bridgeway	Turney	Napa	25	29	23	27	23.3	33	18-27	84	25	25
8	N/B	Bridgeway	Johnson	Turney	25	29	23	27	23.3	31	18-27	79.6	25	25
9	N/B	Bridgeway	Bay	Johnson	25	29	23	27	23.1	31	18-27	85	25	25
10	N/B	Bridgeway	Richardson	Bay	25	29	22	26	22.9	32	19-28	94	25	25
11	S/B	Bridgeway	Gate 6	Coloma	30	33	29	32	27.9	37	23-32	81	30	30
12	S/B	Bridgeway	Coloma	Harbor	30	34	29	32	28.4	40	23-32	89	30	30
15	S/B	Bridgeway	Spring	Napa	30	34	28	31	27.8	37	24-33	86	30	30
16	S/B	Bridgeway	Napa	Turney	25	29	23	26	23.3	32	18-27	89	25	25
17	S/B	Bridgeway	Turney	Johnson	25	28	22	26	21.8	28	17-26	90	25	25
18	S/B	Bridgeway	Johnson	Bay	25	29	23	26	23.1	33	19-28	93	25	25
19	S/B	Bridgeway	Bay	Richardson	25	28	23	26	23.0	29	19-28	94	25	25
22	S/B	Second St	Richardson	South	25	29	27	29	25.4	37	21-30	75.8	25	25
23	N/B	Second St	South	Richardson	25	29	22	27	22.3	33	16-25	75	25	25
24	E/B	South St.	Alexander	Second	25	29	25	29	25.1	37	19-28	75	25	25
25	W/B	South St.	Second	Alexander	25	29	26	29	25.2	34	20-29	84	25	25
26	N/B	Alexander	Fort Baker	Edwards	35	36	31	35	31.2	42	26-35	80	35	35
27	N/B	Gate 5 Rd	Harbor	Coloma	25	25	22	27	22.7	33	19-28	82	25	25
28	S/B	Gate 5 Rd	Coloma	Harbor	25	26	22	26	22.5	33	17-26	84.9	25	25
29	E/B	Harbor Av	Bridgeway	Gate 5 Rd	25	21	18	21	18.5	25	14-23	92	25	25
30	W/B	Harbor Av	Gate 5 Rd	Bridgeway	25	21	19	22	19	27	13-22	88	25	25
31	E/B	Nevada St	Buchanan	Bridgeway	25	32	24	29	24.4	33	19-28	76	25	25
32	W/B	Nevada St	Bridgeway	Buchanan	25	30	25	27	24.8	35	19-28	92	25	25

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ENGINEERING AND TRAFFIC SURVEY

FINAL REPORT

CITY OF SAUSALITO

MAY 2009

MULTITRANS

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ENGINEERING AND TRAFFIC SURVEY

CITY OF SAUSALITO

MAY 2009

MULTITRANS
Transportation Consultants, Inc.
2410 Camino Ramon, Suite 166
San Ramon, California 94583
925-355-7300 Phone
925-355-7303 Fax
May 2009

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MULTITRANS

Transportation Consultants, Inc.

May 11, 2009

Mr. Todd Teachout P.E.
City Engineer
City of Sausalito
420 Litho Street
Sausalito, California 94965

Subject: Letter of Certification for Citywide Engineering and Traffic Survey

Dear Mr. Teachout:

This is to certify that MULTITRANS conducted a citywide traffic speed limit study for the City of Sausalito, under the direction of Mr. Todd Teachout P.E., City Engineer. The study included an Engineering and Traffic Survey, as well as preparation of a report dated May 11, 2009. The report summarized the results of the citywide Engineering and Traffic Survey, and traffic speed limit study that were undertaken by MULTITRANS for the City of Sausalito.

The speed survey consisted of collection of traffic speed data at various locations throughout the City of Sausalito to conduct and complete an Engineering and Traffic Survey in accordance with the State of California Vehicle Code and Section 8-03 of the Caltrans Traffic Manual, to allow legal use of radar or other electronic devices for speed enforcement. If you have any questions please do not hesitate to call.

I declare under the penalty of perjury that the forgoing is true.

Sincerely,

MULTITRANS
Transportation Consultants, Inc.



David H. Yazhari, FITE
Principal

INTRODUCTION

Background

This report summarizes the results of a Traffic Speed Limit Surveys and Analysis conducted by MULTITRANS Transportation Consultants, Inc. for the City of Sausalito during the months of March and May of 2009. The purpose of the traffic surveys is to determine if the existing speed limits recommended five years ago (2004) are still appropriate for enforcement purposes. California Vehicle Code (CVC) section 40802b requires that Engineering and Traffic Surveys for speed limits must be conducted once every five years by governing municipalities.

In determining the speed limit, which is most appropriate to facilitate the orderly movement of traffic, and is reasonable and safe, important factors are prevailing speeds and existing roadway conditions.

Speed limits should be established preferably at or near the 85th percentile speed, which is defined as that speed at or below which 85 percent of traffic is moving. The 85th percentile is often referred to as critical speed. Pace speed is defined as the 10-mile increment of speed containing the largest number of vehicles. Speed limits below 85th percentile do not ordinarily facilitate the orderly movement of traffic and require constant enforcement to maintain compliance. Speed limits established on the basis of 85th percentile conform to the consensus of those who drive highways as to what speed is reasonable and prudent, and are not dependent on the judgment of one or a few individuals.

The basis speed law states that no person shall drive at a speed greater than is reasonable or prudent. The majority of drivers comply with this law. Speed limits set at or slightly below the 85th percentile speed provide law enforcement officers with a means of controlling drivers who will not conform to what the majority considers reasonable and prudent. Speed limits set substantially below the 85th percentile speed generally results in increase in accident rates. However, when roadside development results in traffic conflicts and unusual conditions, which are not readily apparent to drivers as indicated in the collision records, speed limits somewhat below the 85th percentile may be justified.

Survey Methodology and Procedures

Traffic speed surveys were conducted during the March of 2009, on days with fair weather, dry pavement, and clear visibility. The Department of Transportation's Traffic Manual recommends traffic speed surveys to be taken during the off-peak periods, so that traffic congestions and backups that impede traffic flow could be avoided. Therefore, the surveys were taken on weekdays during the off-peak hours.

Speed surveys were conducted at 32 locations throughout the City with certified calibrated radar guns. A minimum of 100 observations were made in both directions. At

City of Sausalito 2009 Engineering and Traffic Survey

the end of the speed survey, results were compiled to determine average speeds, 85th percentile speeds, and pace speed for each surveyed locations. Subsequently, current speed limits, area land use, and roadway design characteristics were reviewed and evaluated before recommended speed limits were made.

Survey Results and Recommendations

Table 1 shows survey results, which includes the Year 2004 85th percentile speeds, and recommended speed limits. The recommended speed limits are set primarily based at or slightly below (within five miles) the 85th percentile speed, unless there is strong evidence of unusual roadway conditions that would justify further reduction in speed.

These Engineering and Traffic Surveys will serve as justifications for the posted speed limits for five years as defined in the CVC. The City may consider conducting additional surveys as development activities occur that may change the land use character, roadway design characteristics, and traffic patterns at some of these survey locations.

**TABLE 1
CITY OF SAUSALITO
CITYWIDE TRAFFIC SPEED SURVEY**

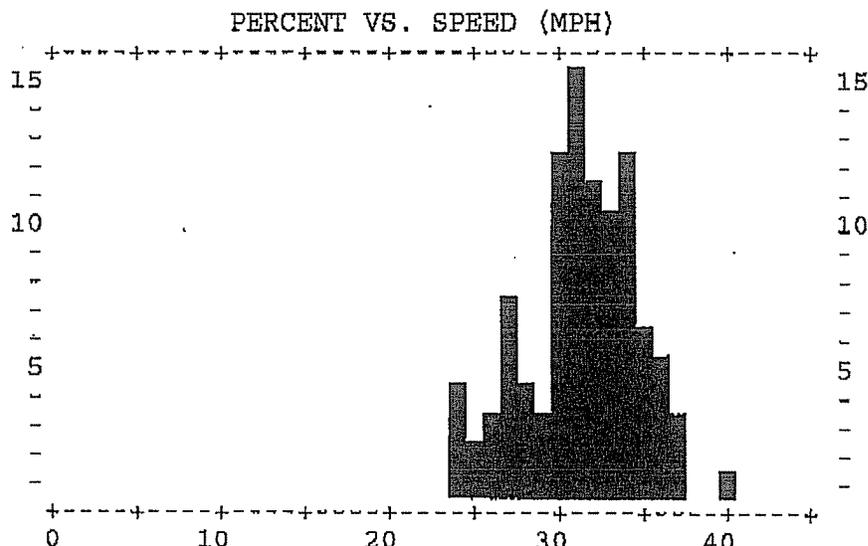
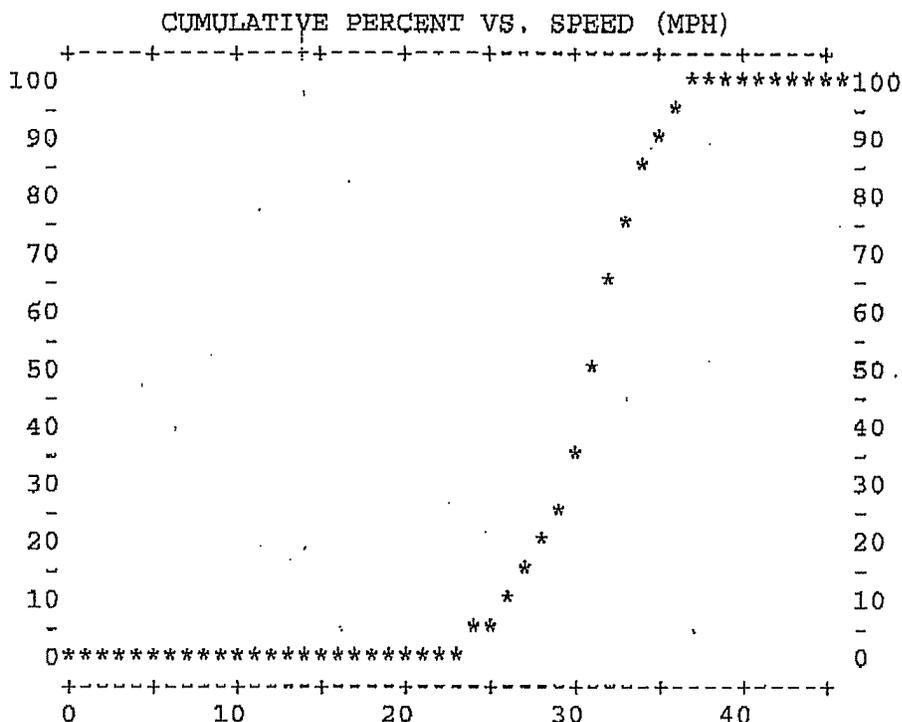
Segment #	Direction	Street	From	To	OBSERVED SPEEDS 2004					OBSERVED SPEEDS 2009				
					Existing 2004	85 th 2004	50 th	85 th	Ave.	Max.	Pace	%Pace	Existing	Proposed
1	N/B	Bridgeway	Gate 5 Rd	Gate 6 Rd	30	33	31	35	31.3	40	27-36	87	30	35
2	N/B	Bridgeway	Coloma	Gate 5 Rd	30	34	31	36	31.7	42	27-36	81	30	35
3	N/B	Bridgeway	Harbor	Coloma	30	33	32	35	31.0	44	26-35	82	30	35
4	N/B	Bridgeway	Nevada	Harbor	35	38	30	35	30.5	44	27-36	80	35	35
5	N/B	Bridgeway	Spring	Nevada	35	39	33	36	33.3	40	30-39	97	35	35
6	N/B	Bridgeway	Napa	Spring	20	34	31	35	30.6	40	27-36	80	30	35
7	N/B	Bridgeway	Turney	Napa	25	29	23	27	23.3	33	18-27	84	25	25
8	N/B	Bridgeway	Johnson	Turney	25	29	23	27	23.3	31	18-27	79.6	25	25
9	N/B	Bridgeway	Bay	Johnson	25	29	23	27	23.1	31	18-27	85	25	25
10	N/B	Bridgeway	Richardson	Bay	25	29	22	26	22.9	32	19-28	94	25	25
11	S/B	Bridgeway	Gate 6	Coloma	30	33	29	32	27.9	37	23-32	81	30	30
12	S/B	Bridgeway	Coloma	Harbor	30	34	29	32	28.4	40	23-32	89	30	30
13	S/B	Bridgeway	Harbor	Nevada	35	39	28	32	28.4	46	22-31	85	35	30
14	S/B	Bridgeway	Nevada	Spring	30	39	28	31	28.1	38	23-32	91	35	30
15	S/B	Bridgeway	Spring	Napa	30	34	28	31	27.8	37	24-33	86	30	30
16	S/B	Bridgeway	Napa	Turney	25	29	23	26	23.3	32	18-27	89	25	25
17	S/B	Bridgeway	Turney	Johnson	25	28	22	26	21.8	28	17-26	90	25	25
18	S/B	Bridgeway	Johnson	Bay	25	29	23	26	23.1	33	19-28	93	25	25
19	S/B	Bridgeway	Bay	Richardson	25	28	23	26	23.0	29	19-28	94	25	25
20	N/B	Caledonia	Johnson	Napa	25	23	20	22	19.2	26	15-24	90	25	20
21	S/B	Caledonia	Napa	Johnson	25	23	19	22	19	31	15-24	84	25	20
22	S/B	Second St	Richardson	South	25	29	27	29	25.4	37	21-30	75.8	25	25
23	N/B	Second St	South	Richardson	25	29	22	27	22.3	33	16-25	75	25	25
24	E/B	South St.	Alexander	Second	25	29	25	29	25.1	37	19-28	75	25	25
25	W/B	South St.	Second	Alexander	25	29	26	29	25.2	34	20-29	84	25	25
26	N/B	Alexander	Fort Baker	Edwards	35	36	31	35	31.2	42	26-35	80	35	35
27	N/B	Gate 5 Rd	Harbor	Coloma	25	25	22	27	22.7	33	19-28	82	25	25
28	S/B	Gate 5 Rd	Coloma	Harbor	25	26	22	26	22.5	33	17-26	84.9	25	25
29	E/B	Harbor Av	Bridgeway	Gate 5 Rd	25	21	18	21	18.5	25	14-23	92	25	25
30	W/B	Harbor Av	Gate 5 Rd	Bridgeway	25	21	19	22	19	27	13-22	88	25	25
31	E/B	Nevada St	Buchanan	Bridgeway	25	32	24	29	24.4	33	19-28	76	25	25
32	W/B	Nevada St	Bridgeway	Buchanan	25	30	25	27	24.8	35	19-28	92	25	25

MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: GATE 5 & GATE 6

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT..... 9:00
 POSTED SPEED LIMIT.30 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....31
 85TH PERCENTILE SPEED.....35
 10-MPH PACE SPEED.....27 through 36
 PERCENT IN PACE SPEED..... 87.0
 PERCENT OVER PACE SPEED..... 4.0
 PERCENT UNDER PACE SPEED..... 9.0
 RANGE OF SPEEDS.....24 to 40
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....31.3

MPH	NO.	PCT.	CUM. PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	0	0.0	0.0
22	0	0.0	0.0
23	0	0.0	0.0
24	4	4.0	4.0
25	2	2.0	6.0
26	3	3.0	9.0
27	7	7.0	16.0
28	4	4.0	20.0
29	3	3.0	23.0
30	12	12.0	35.0
31	17	17.0	52.0
32	11	11.0	63.0
33	10	10.0	73.0
34	12	12.0	85.0
35	6	6.0	91.0
36	5	5.0	96.0
37	3	3.0	99.0
38	0	0.0	99.0
39	0	0.0	99.0
40	1	1.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100



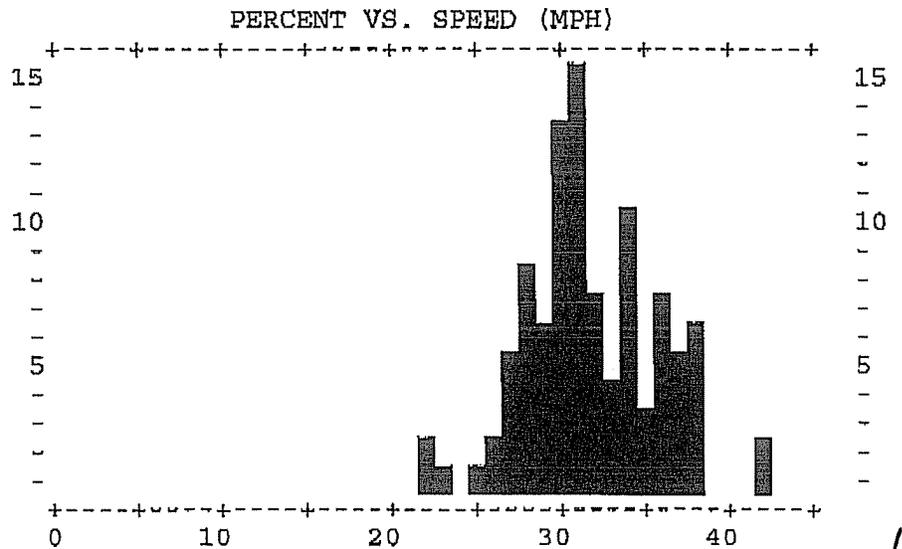
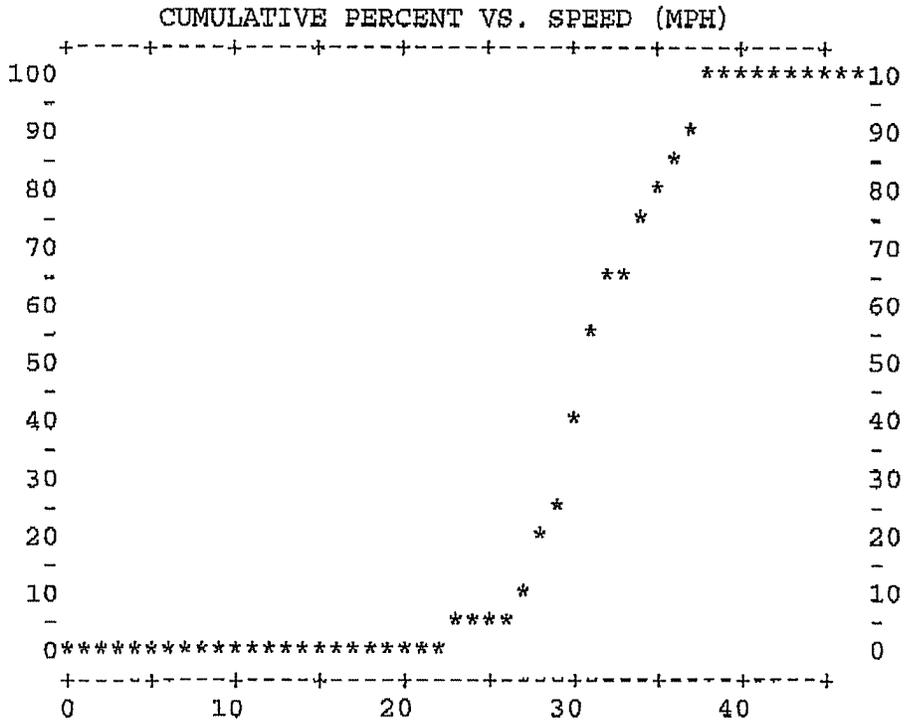
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MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: COLOMA & GATE 5

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/25/2009
 BEGINNING AT..... 9:45
 POSTED SPEED LIMIT.30 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....31
 85TH PERCENTILE SPEED.....36
 10-MPH PACE SPEED.....27 through 36
 PERCENT IN PACE SPEED..... 81.0
 PERCENT OVER PACE SPEED..... 13.0
 PERCENT UNDER PACE SPEED..... 6.0
 RANGE OF SPEEDS.....22 to 42
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....31.7

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	0	0.0	0.0
22	2	2.0	2.0
23	1	1.0	3.0
24	0	0.0	3.0
25	1	1.0	4.0
26	2	2.0	6.0
27	5	5.0	11.0
28	8	8.0	19.0
29	6	6.0	25.0
30	13	13.0	38.0
31	18	18.0	56.0
32	7	7.0	63.0
33	4	4.0	67.0
34	10	10.0	77.0
35	3	3.0	80.0
36	7	7.0	87.0
37	5	5.0	92.0
38	6	6.0	98.0
39	0	0.0	98.0
40	0	0.0	98.0
41	0	0.0	98.0
42	2	2.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100



4B7
16

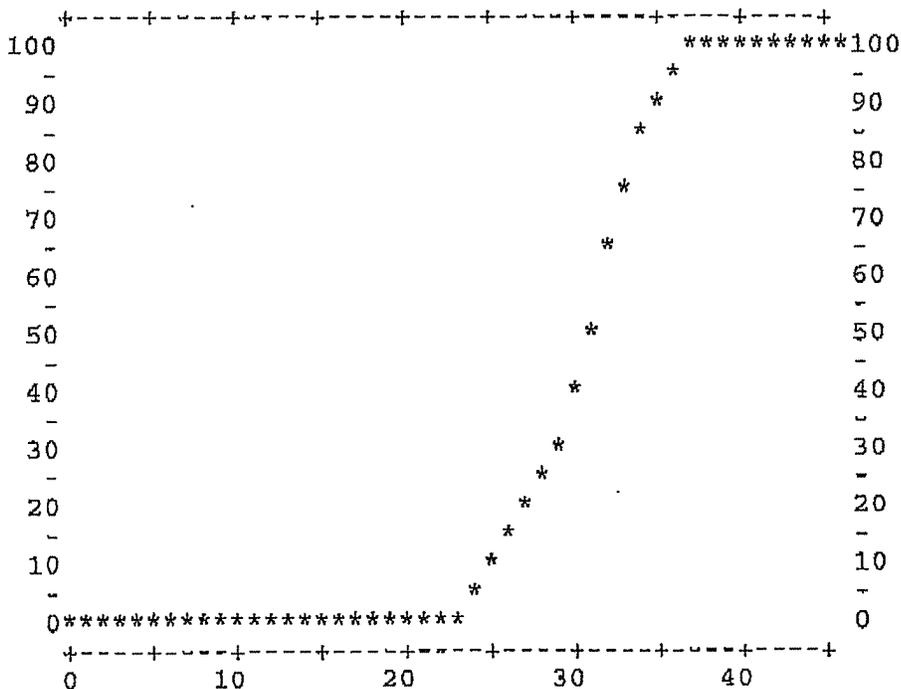
MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: HARBOR & COLOMA

DIRECTION(S).....NB
DATA COLLECTED ON.. 3/24/2009
BEGINNING AT.....11:06
POSTED SPEED LIMIT.30 MPH
REPORT DATE..... 4/ 5/2009

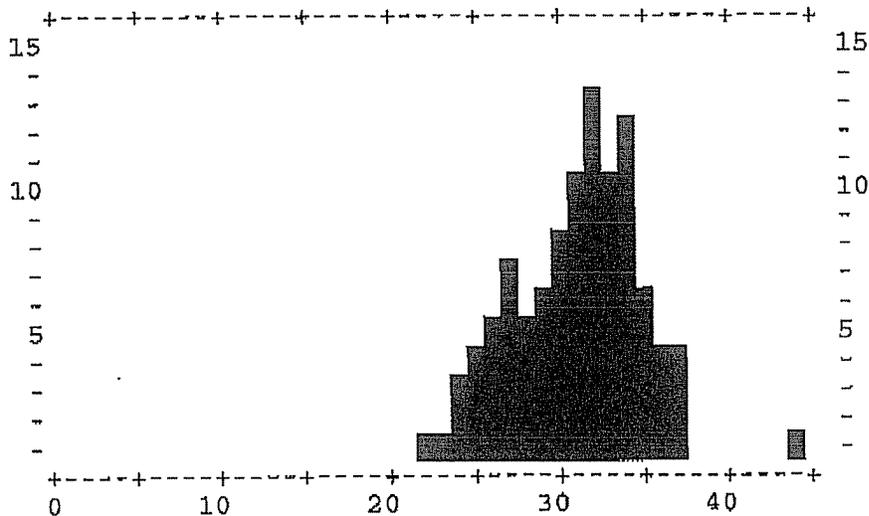
50TH PERCENTILE SPEED.....32
85TH PERCENTILE SPEED.....35
10-MPH PACE SPEED.....26 through 35
PERCENT IN PACE SPEED..... 82.0
PERCENT OVER PACE SPEED..... 9.0
PERCENT UNDER PACE SPEED..... 9.0
RANGE OF SPEEDS.....22 to 44
SPEEDS OBSERVED.....100
AVERAGE SPEED.....31.0

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	0	0.0	0.0
22	1	1.0	1.0
23	1	1.0	2.0
24	3	3.0	5.0
25	4	4.0	9.0
26	5	5.0	14.0
27	7	7.0	21.0
28	5	5.0	26.0
29	6	6.0	32.0
30	8	8.0	40.0
31	10	10.0	50.0
32	13	13.0	63.0
33	10	10.0	73.0
34	12	12.0	85.0
35	6	6.0	91.0
36	4	4.0	95.0
37	4	4.0	99.0
38	0	0.0	99.0
39	0	0.0	99.0
40	0	0.0	99.0
41	0	0.0	99.0
42	0	0.0	99.0
43	0	0.0	99.0
44	1	1.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



437
17

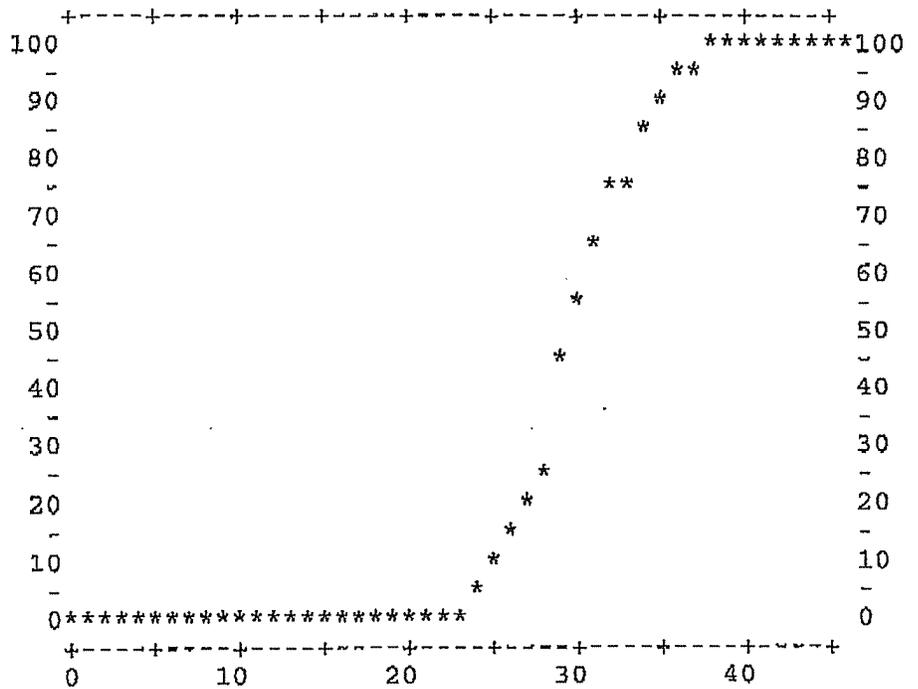
MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: NEVADA & HARBOR

DIRECTION(S).....NB
DATA COLLECTED ON.. 3/25/2009
BEGINNING AT.....10:30
POSTED SPEED LIMIT.35 MPH
REPORT DATE..... 3/31/2009

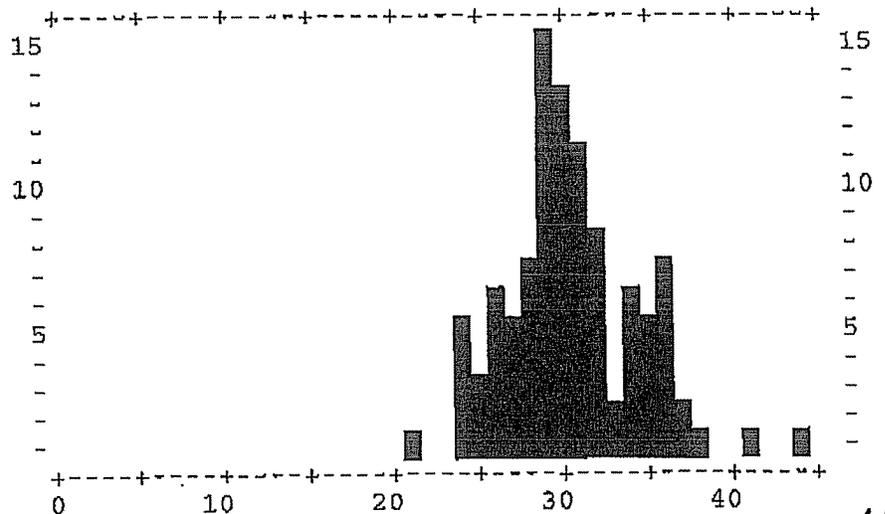
50TH PERCENTILE SPEED.....30
85TH PERCENTILE SPEED.....35
10-MPH PACE SPEED.....27 through 36
PERCENT IN PACE SPEED..... 80.0
PERCENT OVER PACE SPEED..... 5.0
PERCENT UNDER PACE SPEED..... 15.0
RANGE OF SPEEDS.....21 to 44
SPEEDS OBSERVED.....100
AVERAGE SPEED.....30.5

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	1	1.0	1.0
22	0	0.0	1.0
23	0	0.0	1.0
24	5	5.0	6.0
25	3	3.0	9.0
26	6	6.0	15.0
27	5	5.0	20.0
28	7	7.0	27.0
29	16	16.0	43.0
30	13	13.0	56.0
31	11	11.0	67.0
32	8	8.0	75.0
33	2	2.0	77.0
34	6	6.0	83.0
35	5	5.0	88.0
36	7	7.0	95.0
37	2	2.0	97.0
38	1	1.0	98.0
39	0	0.0	98.0
40	0	0.0	98.0
41	1	1.0	99.0
42	0	0.0	99.0
43	0	0.0	99.0
44	1	1.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



487
18

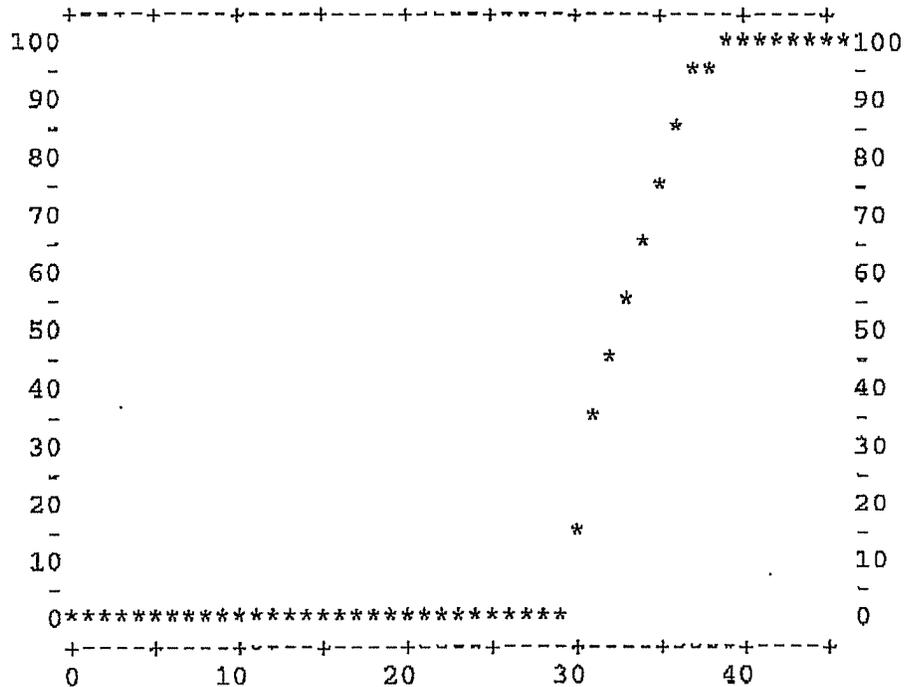
MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: SPRING & NEVADA

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT..... 2:30
 POSTED SPEED LIMIT.35 MPH
 REPORT DATE..... 3/31/2009

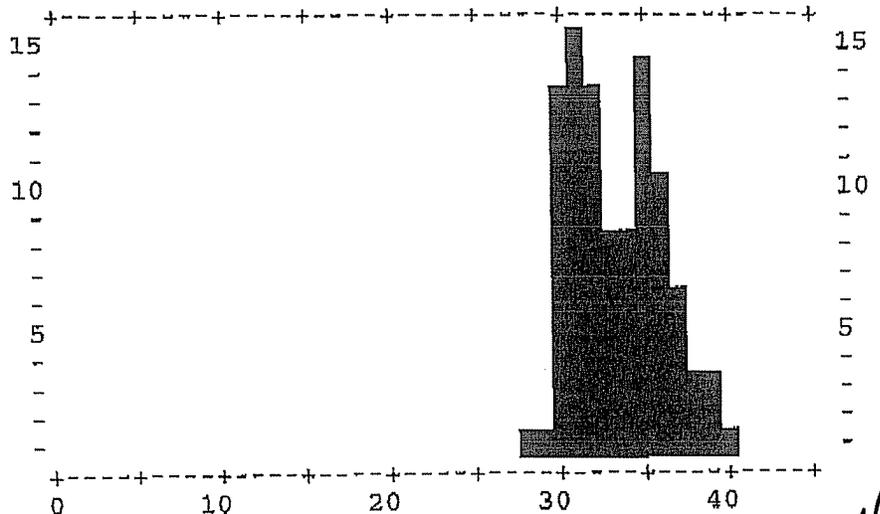
50TH PERCENTILE SPEED.....33
 85TH PERCENTILE SPEED.....36
 10-MPH PACE SPEED.....30 through 39
 PERCENT IN PACE SPEED..... 97.0
 PERCENT OVER PACE SPEED..... 1.0
 PERCENT UNDER PACE SPEED..... 2.0
 RANGE OF SPEEDS.....28 to 40
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....33.3

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	0	0.0
16	0	0.0
17	0	0.0
18	0	0.0
19	0	0.0
20	0	0.0
21	0	0.0
22	0	0.0
23	0	0.0
24	0	0.0
25	0	0.0
26	0	0.0
27	0	0.0
28	1	1.0
29	1	2.0
30	13	15.0
31	19	34.0
32	13	47.0
33	8	55.0
34	8	63.0
35	14	77.0
36	10	87.0
37	6	93.0
38	3	96.0
39	3	99.0
40	1	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
>46	0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



487
19

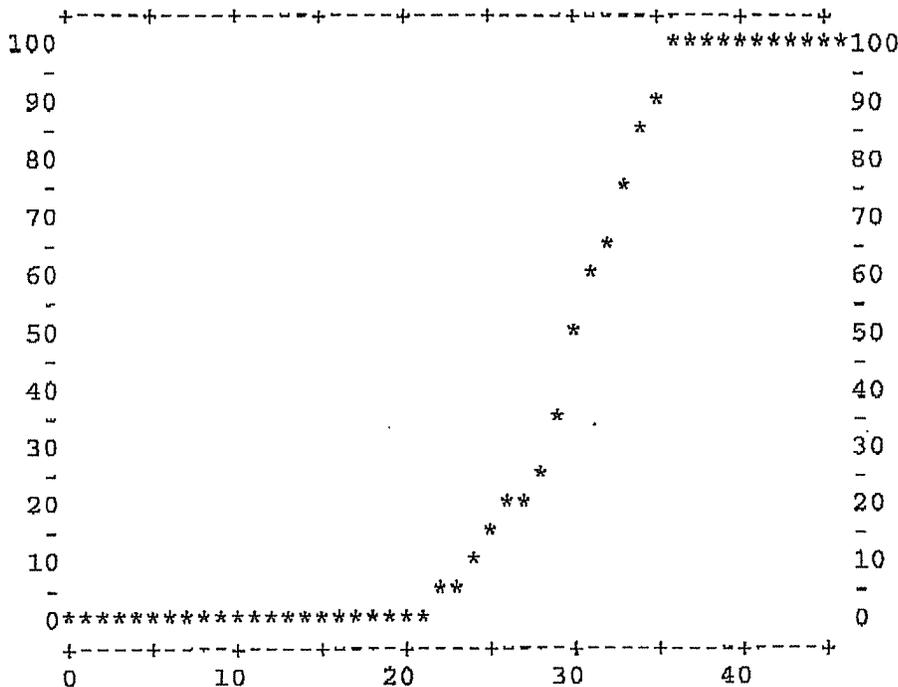
MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: NAPA & SPRING

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/25/2009
 BEGINNING AT..... 1:10
 POSTED SPEED LIMIT.30 MPH
 REPORT DATE..... 4/ 5/2009

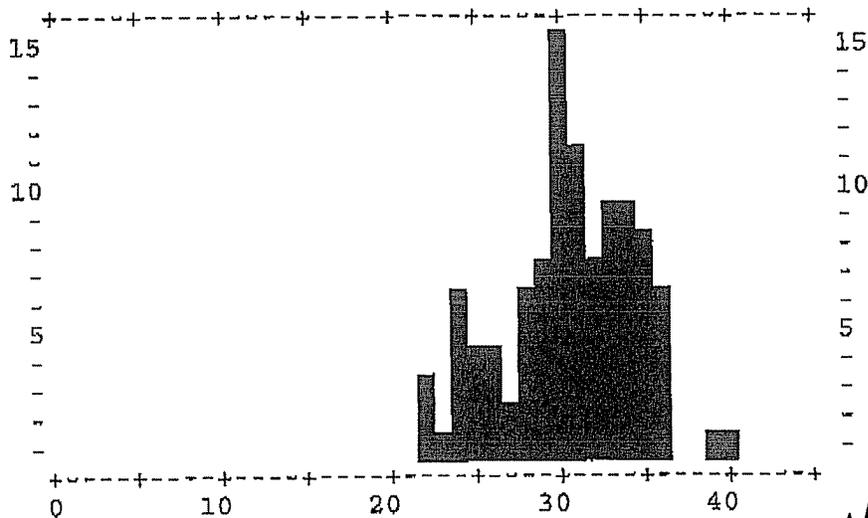
50TH PERCENTILE SPEED.....31
 85TH PERCENTILE SPEED.....35
 10-MPH PACE SPEED.....27 through 36
 PERCENT IN PACE SPEED..... 80.0
 PERCENT OVER PACE SPEED..... 2.0
 PERCENT UNDER PACE SPEED..... 18.0
 RANGE OF SPEEDS.....22 to 40
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....30.6

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	0	0.0	0.0
22	3	3.0	3.0
23	1	1.0	4.0
24	6	6.0	10.0
25	4	4.0	14.0
26	4	4.0	18.0
27	2	2.0	20.0
28	6	6.0	26.0
29	7	7.0	33.0
30	15	15.0	48.0
31	11	11.0	59.0
32	7	7.0	66.0
33	9	9.0	75.0
34	9	9.0	84.0
35	8	8.0	92.0
36	6	6.0	98.0
37	0	0.0	98.0
38	0	0.0	98.0
39	1	1.0	99.0
40	1	1.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



4B7
20

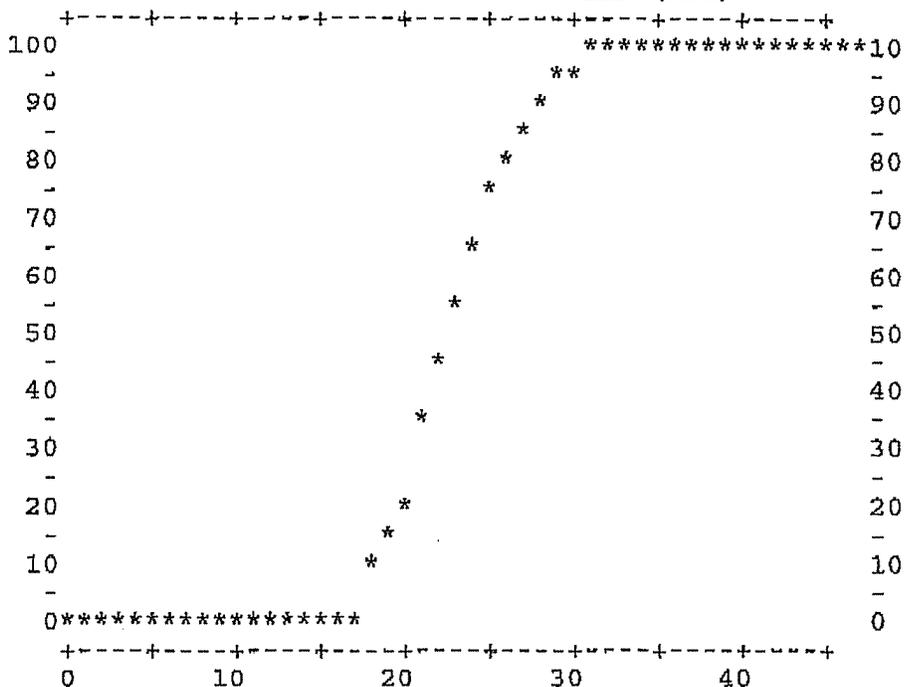
MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: TURNEY & NAPA

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT.....11:40
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

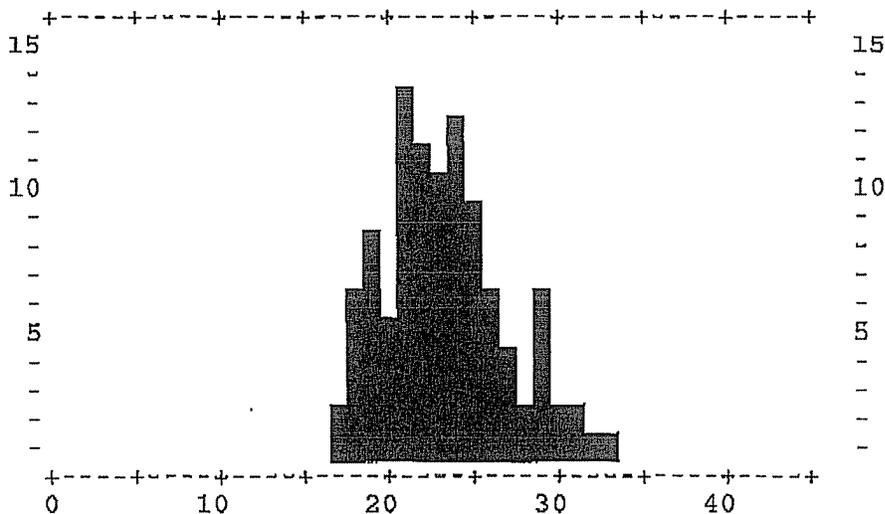
50TH PERCENTILE SPEED.....23
 85TH PERCENTILE SPEED.....27
 10-MPH PACE SPEED.....18 through 27
 PERCENT IN PACE SPEED..... 84.0
 PERCENT OVER PACE SPEED..... 14.0
 PERCENT UNDER PACE SPEED..... 2.0
 RANGE OF SPEEDS.....17 to 33
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....23.3

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	2	2.0	2.0
18	6	6.0	8.0
19	8	8.0	16.0
20	5	5.0	21.0
21	13	13.0	34.0
22	11	11.0	45.0
23	10	10.0	55.0
24	12	12.0	67.0
25	9	9.0	76.0
26	6	6.0	82.0
27	4	4.0	86.0
28	2	2.0	88.0
29	6	6.0	94.0
30	2	2.0	96.0
31	2	2.0	98.0
32	1	1.0	99.0
33	1	1.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



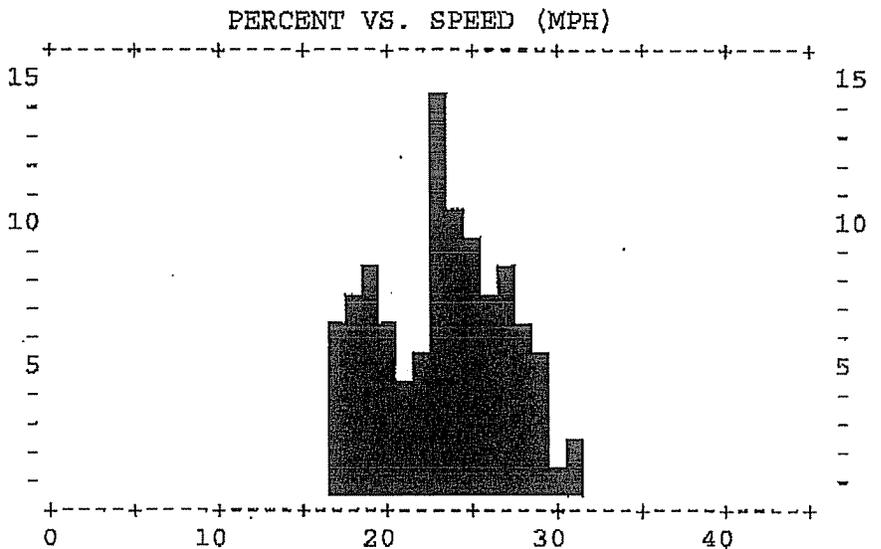
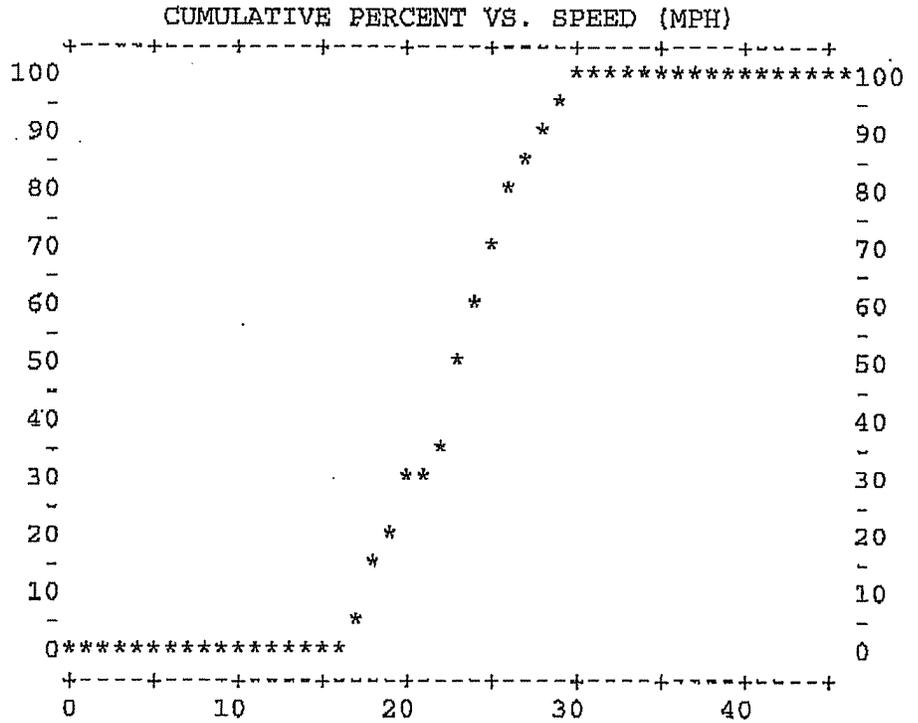
487
21

MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: JOHNSON & TURNEY

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/26/2009
 BEGINNING AT..... 2:45
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....23
 85TH PERCENTILE SPEED.....27
 10-MPH PACE SPEED.....18 through 27
 PERCENT IN PACE SPEED..... 79.6
 PERCENT OVER PACE SPEED..... 14.3
 PERCENT UNDER PACE SPEED..... 6.1
 RANGE OF SPEEDS.....17 to 31
 SPEEDS OBSERVED.....98
 AVERAGE SPEED.....23.3

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	6	6.1	6.1
18	7	7.1	13.3
19	8	8.2	21.4
20	6	6.1	27.6
21	4	4.1	31.6
22	5	5.1	36.7
23	14	14.3	51.0
24	10	10.2	61.2
25	9	9.2	70.4
26	7	7.1	77.6
27	8	8.2	85.7
28	6	6.1	91.8
29	5	5.1	96.9
30	1	1.0	98.0
31	2	2.0	100
32	0	0.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100



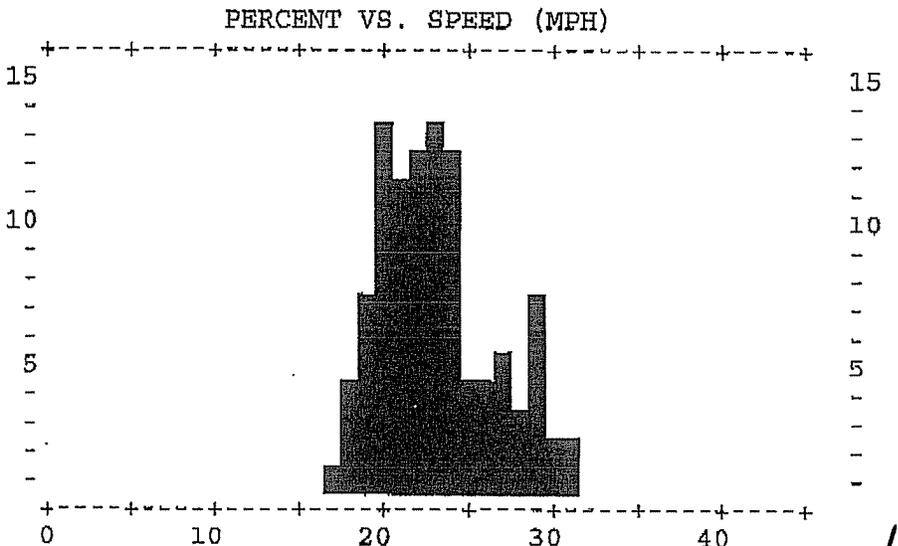
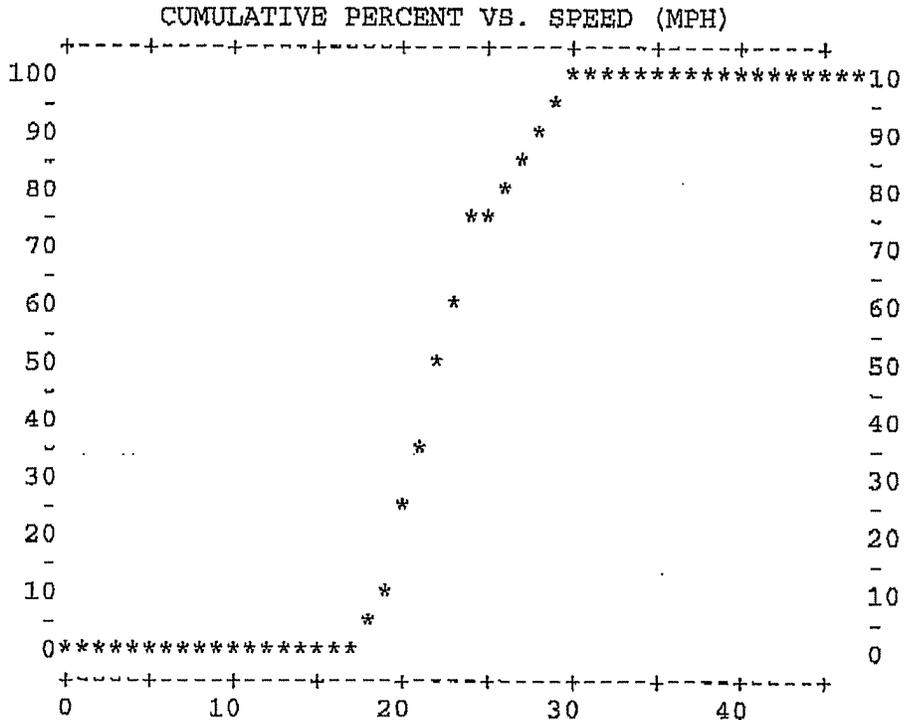
487
22

MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: BAY & JOHNSON

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT..... 1:00
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....23
 85TH PERCENTILE SPEED.....27
 10-MPH PACE SPEED.....18 through 27
 PERCENT IN PACE SPEED..... 85.0
 PERCENT OVER PACE SPEED..... 14.0
 PERCENT UNDER PACE SPEED..... 1.0
 RANGE OF SPEEDS.....17 to 31
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....23.1

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	1	1.0	1.0
18	4	4.0	5.0
19	7	7.0	12.0
20	13	13.0	25.0
21	11	11.0	36.0
22	12	12.0	48.0
23	13	13.0	61.0
24	12	12.0	73.0
25	4	4.0	77.0
26	4	4.0	81.0
27	5	5.0	86.0
28	3	3.0	89.0
29	7	7.0	96.0
30	2	2.0	98.0
31	2	2.0	100
32	0	0.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100



4B7
23

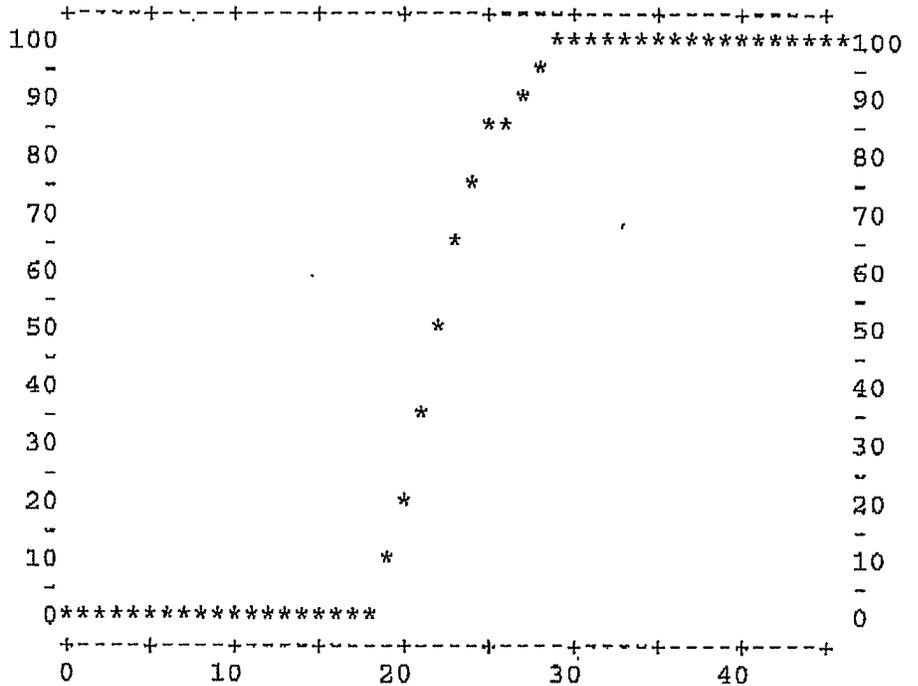
MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: RICHARDSON & BAY

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT..... 1:45
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

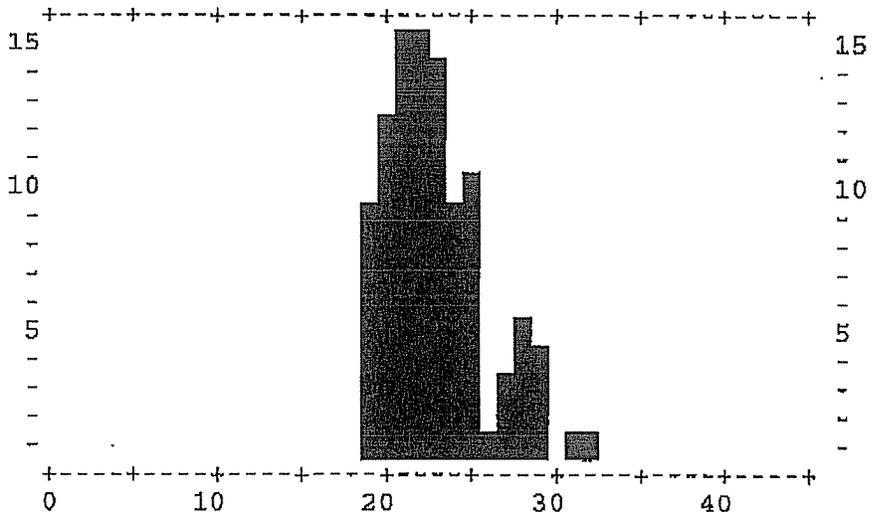
50TH PERCENTILE SPEED.....22
 85TH PERCENTILE SPEED.....26
 10-MPH PACE SPEED.....19 through 28
 PERCENT IN PACE SPEED..... 94.0
 PERCENT OVER PACE SPEED..... 6.0
 PERCENT UNDER PACE SPEED..... 0.0
 RANGE OF SPEEDS.....19 to 32
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....22.9

MPH	NO.	PCT.	CUM
====	====	====	====
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	9	9.0	9.0
20	12	12.0	21.0
21	15	15.0	36.0
22	16	16.0	52.0
23	14	14.0	66.0
24	9	9.0	75.0
25	10	10.0	85.0
26	1	1.0	86.0
27	3	3.0	89.0
28	5	5.0	94.0
29	4	4.0	98.0
30	0	0.0	98.0
31	1	1.0	99.0
32	1	1.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



487
24

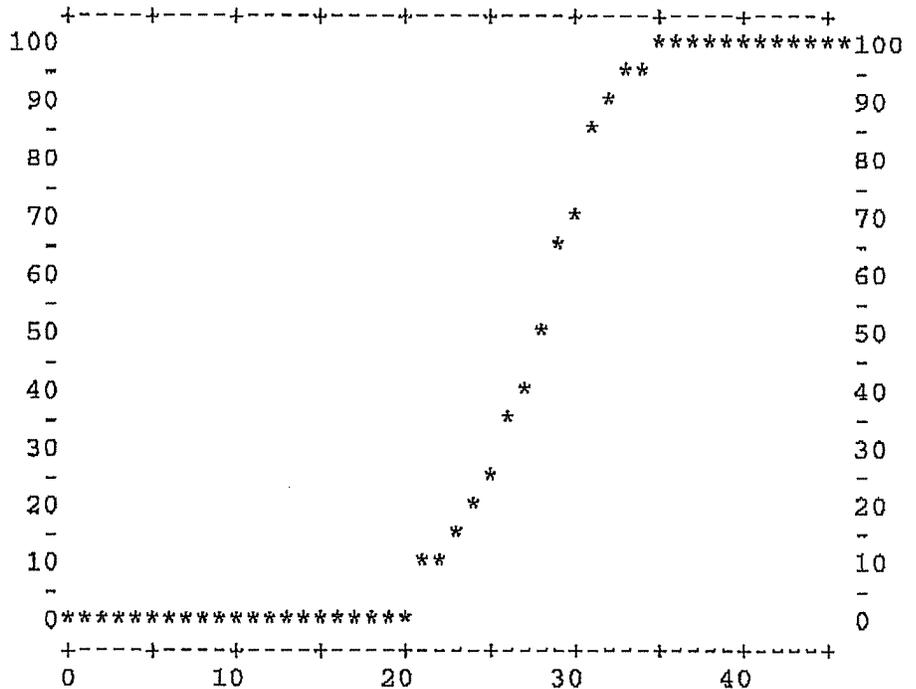
MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: GATE 6 & COLOMA

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/25/2009
 BEGINNING AT.....11:00
 POSTED SPEED LIMIT.30 MPH
 REPORT DATE..... 3/31/2009

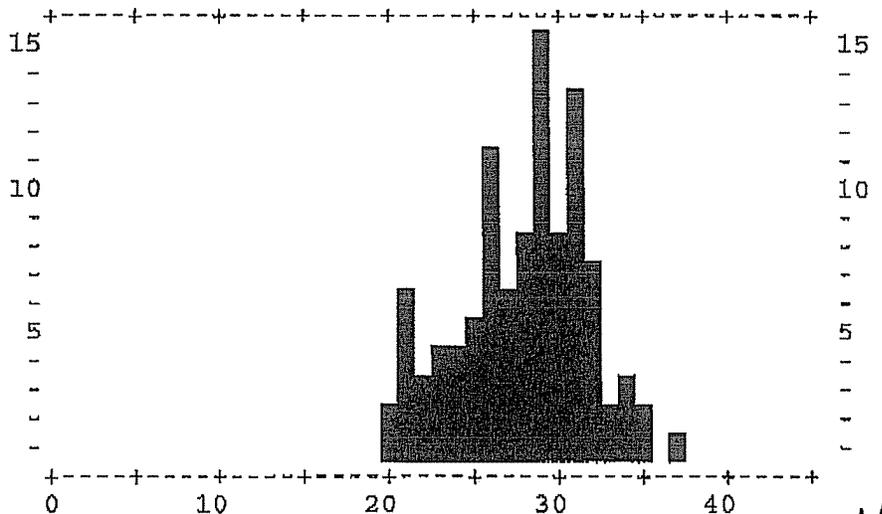
50TH PERCENTILE SPEED.....29
 85TH PERCENTILE SPEED.....32
 10-MPH PACE SPEED.....23 through 32
 PERCENT IN PACE SPEED..... 81.0
 PERCENT OVER PACE SPEED..... 8.0
 PERCENT UNDER PACE SPEED..... 11.0
 RANGE OF SPEEDS.....20 to 37
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....27.9

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	2	2.0	2.0
21	6	6.0	8.0
22	3	3.0	11.0
23	4	4.0	15.0
24	4	4.0	19.0
25	5	5.0	24.0
26	11	11.0	35.0
27	6	6.0	41.0
28	8	8.0	49.0
29	15	15.0	64.0
30	8	8.0	72.0
31	13	13.0	85.0
32	7	7.0	92.0
33	2	2.0	94.0
34	3	3.0	97.0
35	2	2.0	99.0
36	0	0.0	99.0
37	1	1.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



4B7
25

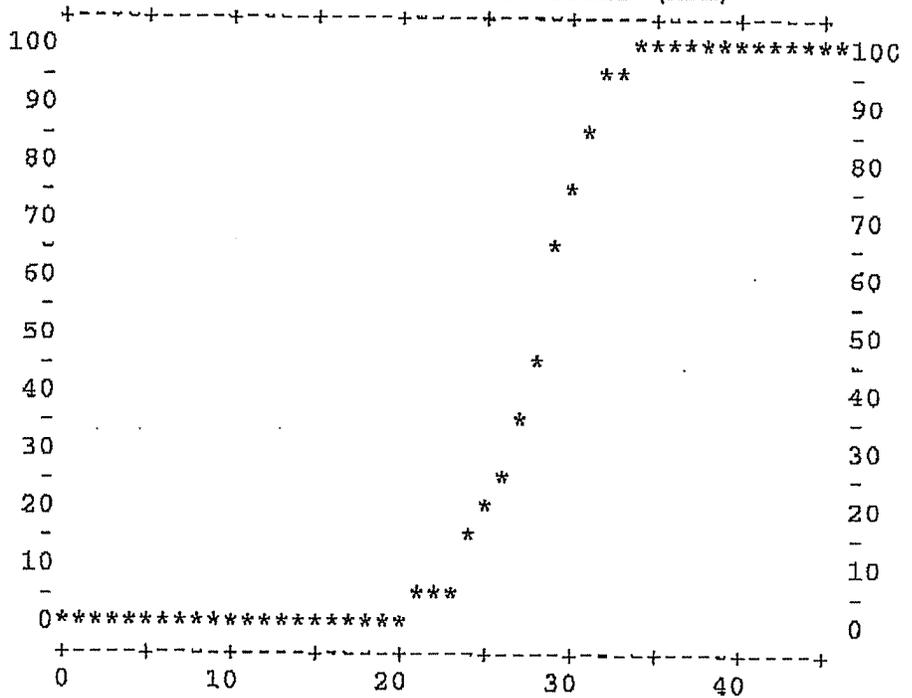
MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: COLOMA & HARBOR

DIRECTION(S).....SE
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT.....11:06
 POSTED SPEED LIMIT.30 MPH
 REPORT DATE..... 4/ 7/2009

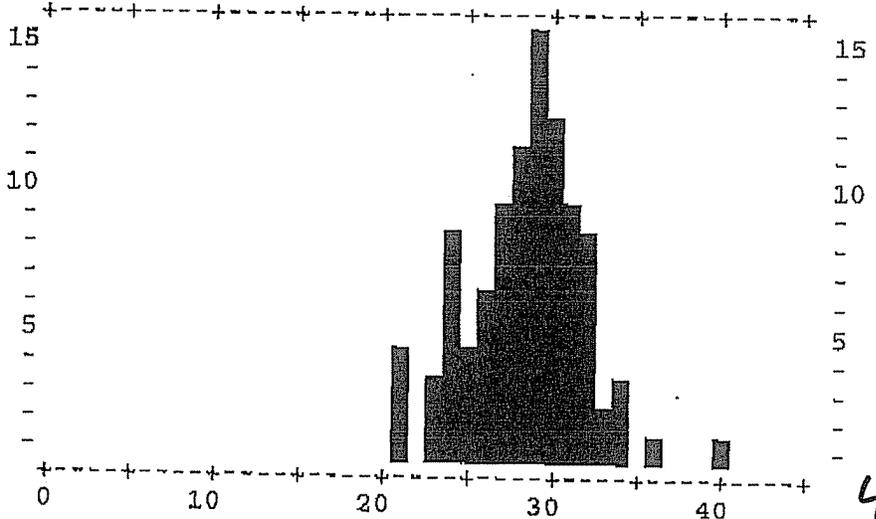
50TH PERCENTILE SPEED.....29
 85TH PERCENTILE SPEED.....32
 10-MPH PACE SPEED.....23 through 32
 PERCENT IN PACE SPEED..... 89.0
 PERCENT OVER PACE SPEED..... 7.0
 PERCENT UNDER PACE SPEED..... 4.0
 RANGE OF SPEEDS.....21 to 40
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....28.4

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	0	0.0
16	0	0.0
17	0	0.0
18	0	0.0
19	0	0.0
20	0	0.0
21	4	4.0
22	0	4.0
23	3	7.0
24	8	15.0
25	4	19.0
26	6	25.0
27	9	34.0
28	11	45.0
29	19	64.0
30	12	76.0
31	9	85.0
32	8	93.0
33	2	95.0
34	3	98.0
35	0	98.0
36	1	99.0
37	0	99.0
38	0	99.0
39	0	99.0
40	1	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
>46	0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



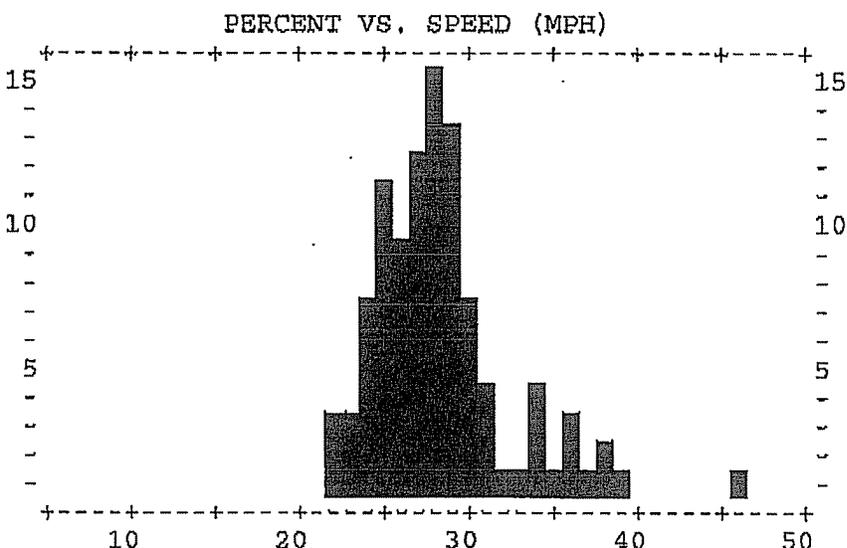
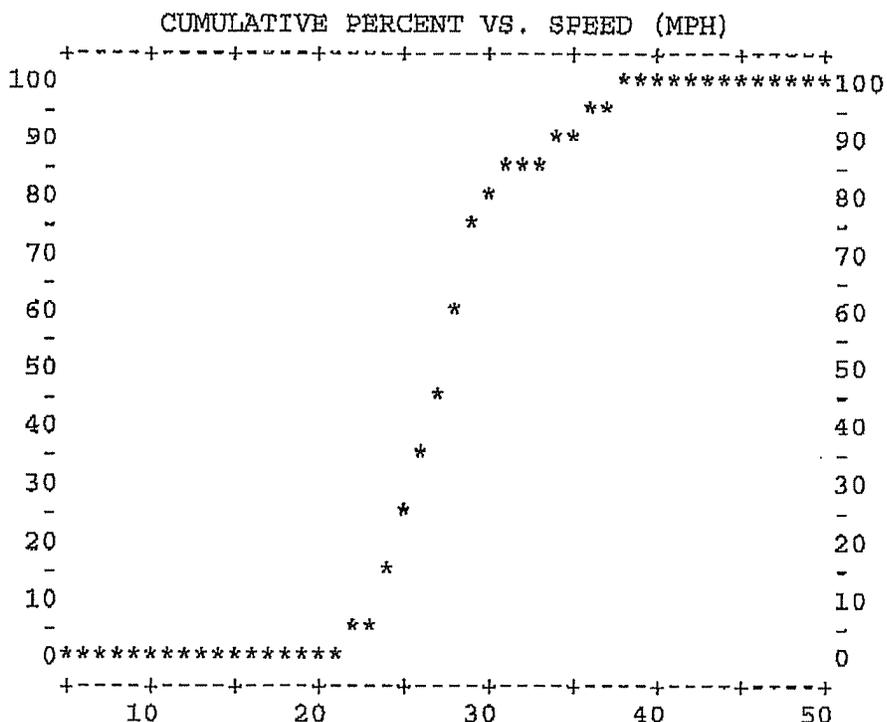
487
26

MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: HARBOR & NEVADA

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/25/2009
 BEGINNING AT.....10:30
 POSTED SPEED LIMIT.35 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....28
 85TH PERCENTILE SPEED.....32
 10-MPH PACE SPEED.....22 through 31
 PERCENT IN PACE SPEED..... 85.0
 PERCENT OVER PACE SPEED..... 15.0
 PERCENT UNDER PACE SPEED..... 0.0
 RANGE OF SPEEDS.....22 to 46
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....28.4

MPH	NO.	PCT.	CUM PCT.
<5	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	0	0.0	0.0
22	3	3.0	3.0
23	3	3.0	6.0
24	7	7.0	13.0
25	11	11.0	24.0
26	9	9.0	33.0
27	12	12.0	45.0
28	16	16.0	61.0
29	13	13.0	74.0
30	7	7.0	81.0
31	4	4.0	85.0
32	1	1.0	86.0
33	1	1.0	87.0
34	4	4.0	91.0
35	1	1.0	92.0
36	3	3.0	95.0
37	1	1.0	96.0
38	2	2.0	98.0
39	1	1.0	99.0
40	0	0.0	99.0
41	0	0.0	99.0
42	0	0.0	99.0
43	0	0.0	99.0
44	0	0.0	99.0
45	0	0.0	99.0
46	1	1.0	100
47	0	0.0	100
48	0	0.0	100
49	0	0.0	100
50	0	0.0	100
>50	0	0.0	100.



487
27

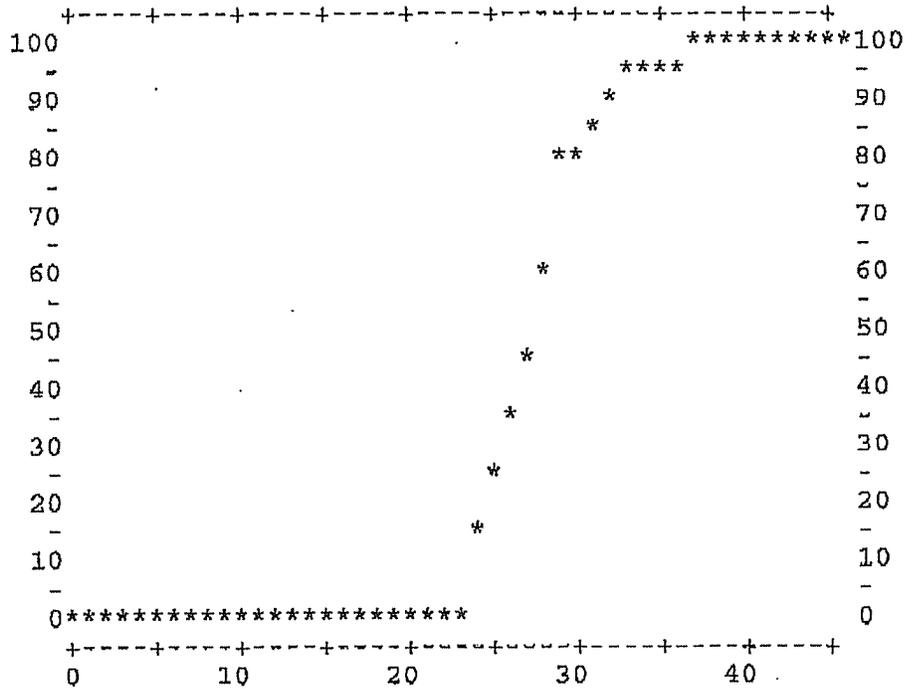
MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: NEVADA & SPRING

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT..... 2:30
 POSTED SPEED LIMIT.35 MPH
 REPORT DATE..... 4/ 5/2009

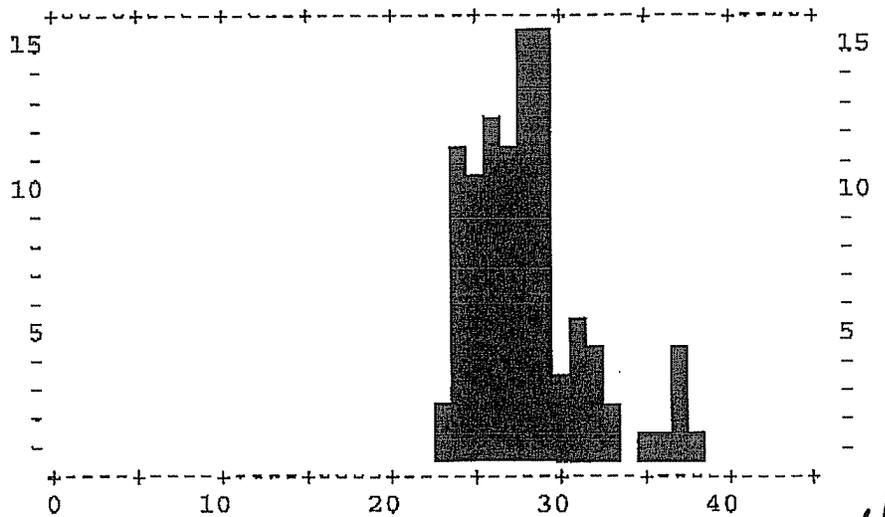
50TH PERCENTILE SPEED.....28
 85TH PERCENTILE SPEED.....31
 10-MPH PACE SPEED.....23 through 32
 PERCENT IN PACE SPEED..... 91.0
 PERCENT OVER PACE SPEED..... 9.0
 PERCENT UNDER PACE SPEED..... 0.0
 RANGE OF SPEEDS.....23 to 38
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....28.1

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	0	0.0	0.0
22	0	0.0	0.0
23	2	2.0	2.0
24	11	11.0	13.0
25	10	10.0	23.0
26	12	12.0	35.0
27	11	11.0	46.0
28	16	16.0	62.0
29	17	17.0	79.0
30	3	3.0	82.0
31	5	5.0	87.0
32	4	4.0	91.0
33	2	2.0	93.0
34	0	0.0	93.0
35	1	1.0	94.0
36	1	1.0	95.0
37	4	4.0	99.0
38	1	1.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



437
28

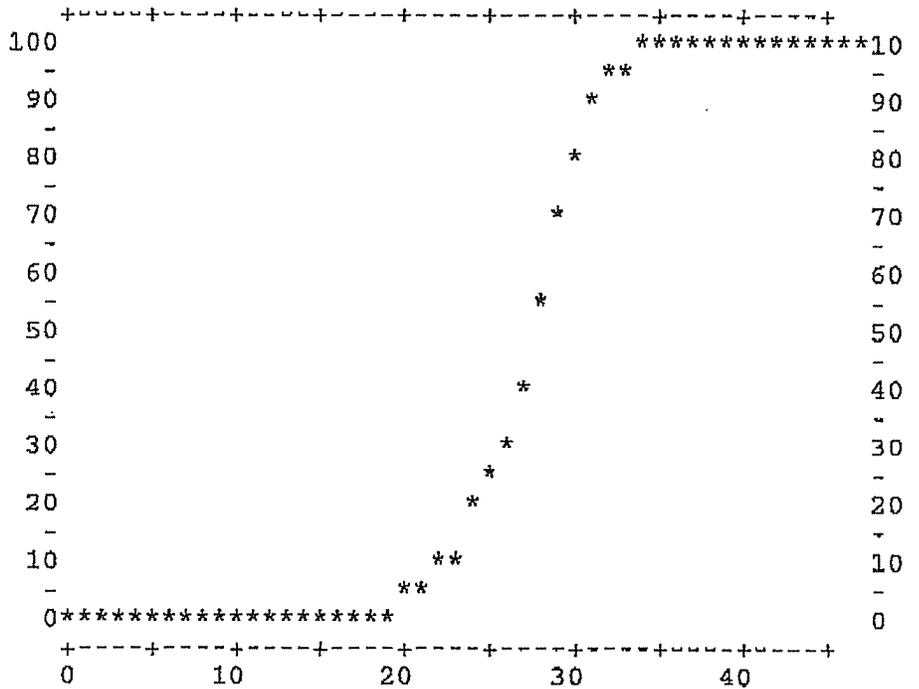
MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: SPRING & NAPA

DIRECTION(S).....SB
DATA COLLECTED ON.. 3/25/2009
BEGINNING AT..... 1:35
POSTED SPEED LIMIT.30 MPH
REPORT DATE..... 3/31/2009

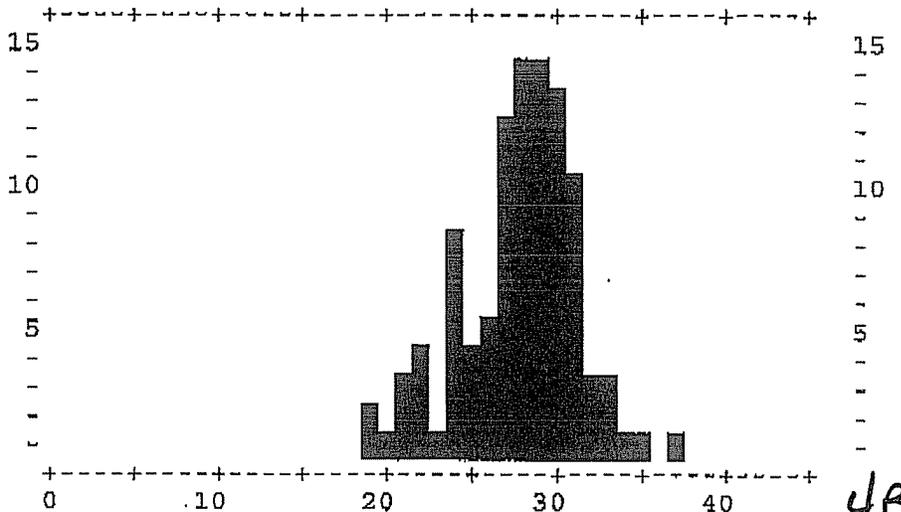
50TH PERCENTILE SPEED.....28
85TH PERCENTILE SPEED.....31
10-MPH PACE SPEED.....24 through 33
PERCENT IN PACE SPEED..... 86.0
PERCENT OVER PACE SPEED..... 3.0
PERCENT UNDER PACE SPEED..... 11.0
RANGE OF SPEEDS.....19 to 37
SPEEDS OBSERVED.....100
AVERAGE SPEED.....27.8

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	2	2.0	2.0
20	1	1.0	3.0
21	3	3.0	6.0
22	4	4.0	10.0
23	1	1.0	11.0
24	8	8.0	19.0
25	4	4.0	23.0
26	5	5.0	28.0
27	12	12.0	40.0
28	14	14.0	54.0
29	14	14.0	68.0
30	13	13.0	81.0
31	10	10.0	91.0
32	3	3.0	94.0
33	3	3.0	97.0
34	1	1.0	98.0
35	1	1.0	99.0
36	0	0.0	99.0
37	1	1.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



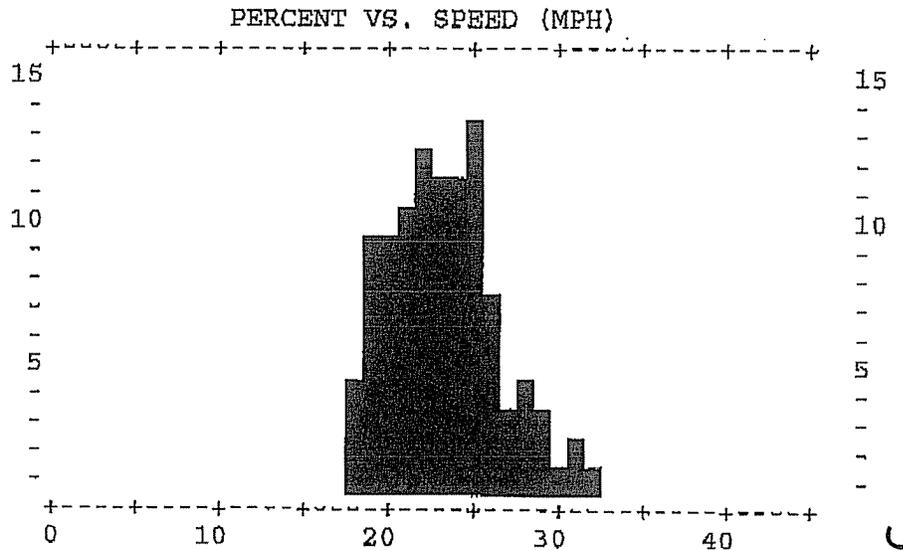
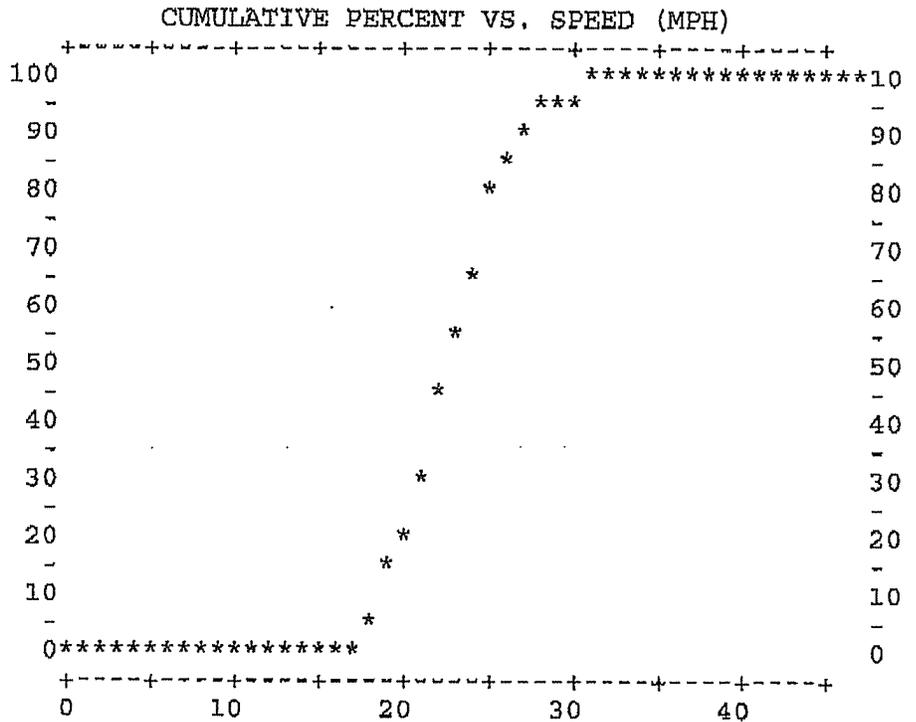
487
29

MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: NAPA & TURNEY

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT.....11:40
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....23
 85TH PERCENTILE SPEED.....26
 10-MPH PACE SPEED.....18 through 27
 PERCENT IN PACE SPEED..... 89.0
 PERCENT OVER PACE SPEED..... 11.0
 PERCENT UNDER PACE SPEED..... 0.0
 RANGE OF SPEEDS.....18 to 32
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....23.3

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	4	4.0	4.0
19	9	9.0	13.0
20	9	9.0	22.0
21	10	10.0	32.0
22	12	12.0	44.0
23	11	11.0	55.0
24	11	11.0	66.0
25	13	13.0	79.0
26	7	7.0	86.0
27	3	3.0	89.0
28	4	4.0	93.0
29	3	3.0	96.0
30	1	1.0	97.0
31	2	2.0	99.0
32	1	1.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100



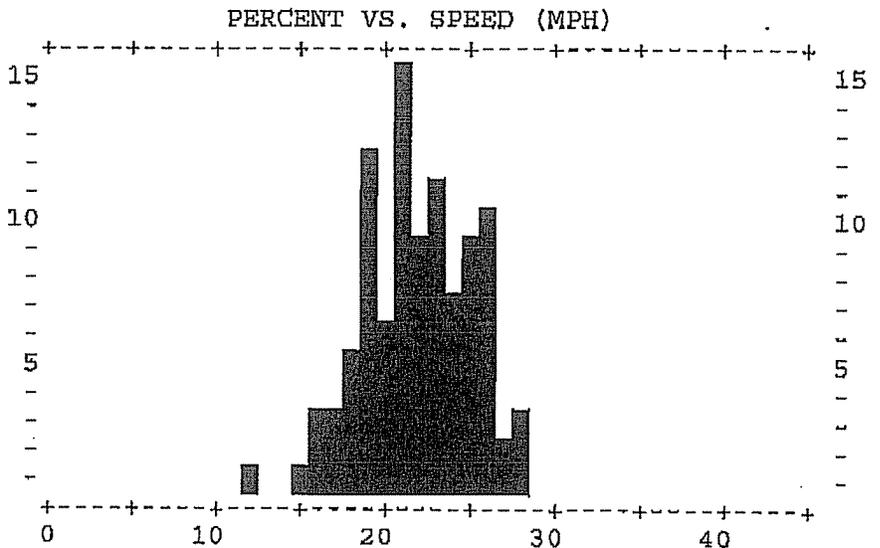
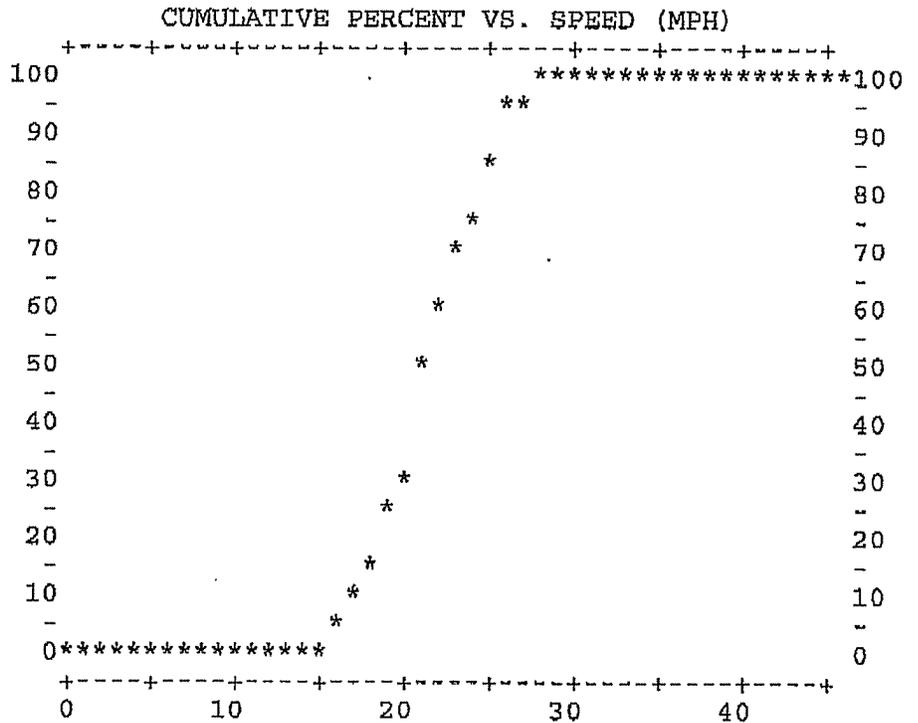
487
30

MULTITRANS SPOT SPEED STUDY
BRIDGEWAY: TURNEY & JOHNSON

DIRECTION(S).....SB
DATA COLLECTED ON.. 3/26/2009
BEGINNING AT.....10:45
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....22
85TH PERCENTILE SPEED.....26
10-MPH PACE SPEED.....17 through 26
PERCENT IN PACE SPEED..... 90.0
PERCENT OVER PACE SPEED..... 5.0
PERCENT UNDER PACE SPEED..... 5.0
RANGE OF SPEEDS.....12 to 28
SPEEDS OBSERVED.....100
AVERAGE SPEED.....21.8

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	1	1.0	1.0
13	0	0.0	1.0
14	0	0.0	1.0
15	1	1.0	2.0
16	3	3.0	5.0
17	3	3.0	8.0
18	5	5.0	13.0
19	12	12.0	25.0
20	6	6.0	31.0
21	18	18.0	49.0
22	9	9.0	58.0
23	11	11.0	69.0
24	7	7.0	76.0
25	9	9.0	85.0
26	10	10.0	95.0
27	2	2.0	97.0
28	3	3.0	100
29	0	0.0	100
30	0	0.0	100
31	0	0.0	100
32	0	0.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100



487
31

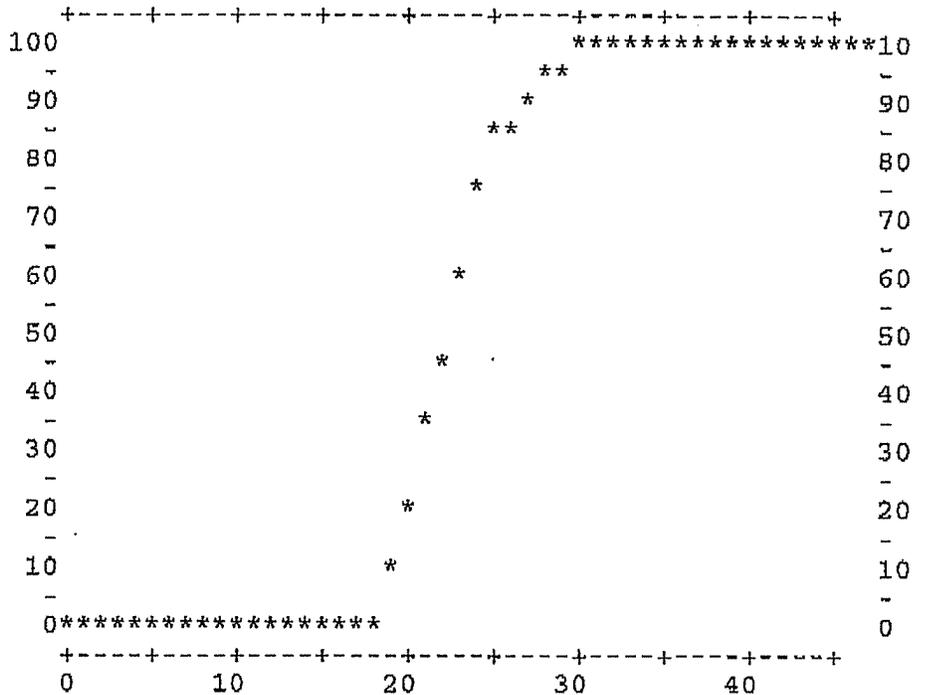
MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: JOHNSON & BAY

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT..... 1:00
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

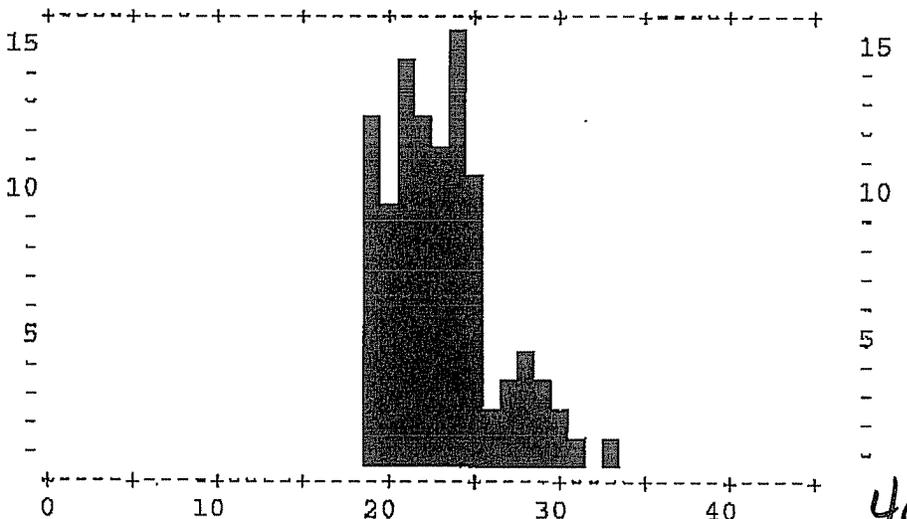
50TH PERCENTILE SPEED.....23
 85TH PERCENTILE SPEED.....26
 10-MPH PACE SPEED.....19 through 28
 PERCENT IN PACE SPEED..... 93.0
 PERCENT OVER PACE SPEED..... 7.0
 PERCENT UNDER PACE SPEED..... 0.0
 RANGE OF SPEEDS.....19 to 33
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....23.1

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	12	12.0	12.0
20	9	9.0	21.0
21	14	14.0	35.0
22	12	12.0	47.0
23	11	11.0	58.0
24	16	16.0	74.0
25	10	10.0	84.0
26	2	2.0	86.0
27	3	3.0	89.0
28	4	4.0	93.0
29	3	3.0	96.0
30	2	2.0	98.0
31	1	1.0	99.0
32	0	0.0	99.0
33	1	1.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



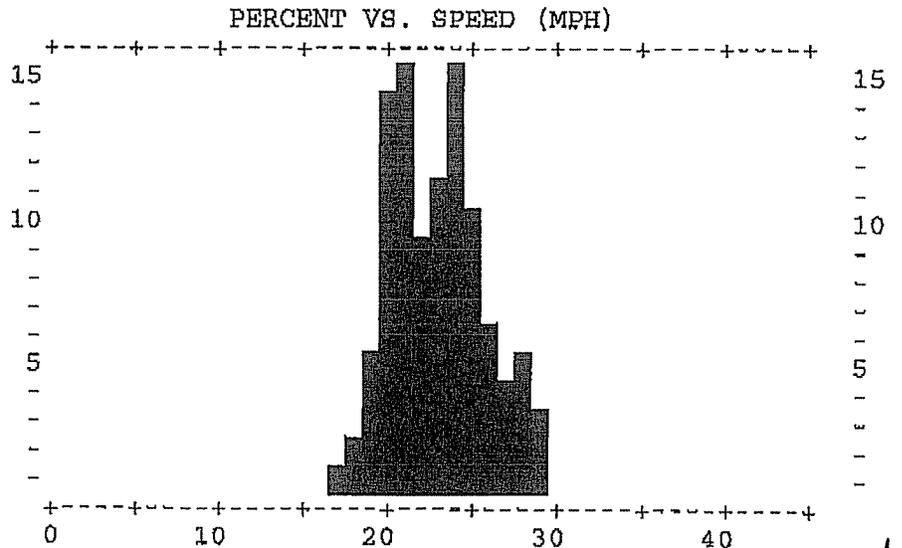
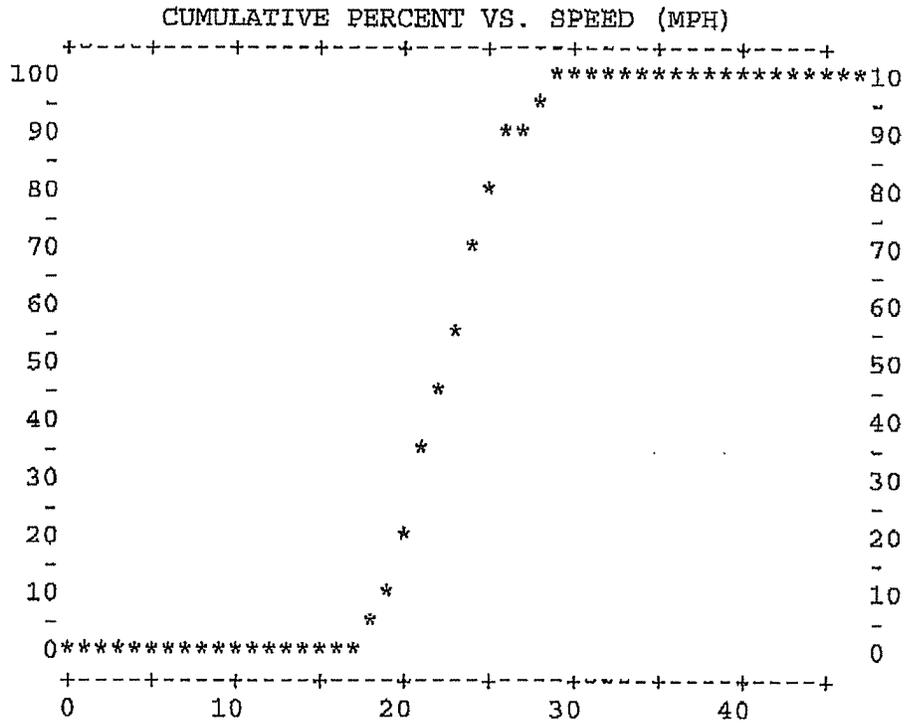
487
32

MULTITRANS SPOT SPEED STUDY
 BRIDGEWAY: BAY & RICHARDSON

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/24/2009
 BEGINNING AT..... 1:45
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....23
 85TH PERCENTILE SPEED.....26
 10-MPH PACE SPEED.....19 through 28
 PERCENT IN PACE SPEED..... 94.0
 PERCENT OVER PACE SPEED..... 3.0
 PERCENT UNDER PACE SPEED..... 3.0
 RANGE OF SPEEDS.....17 to 29
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....23.0

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	0	0.0
16	0	0.0
17	1	1.0
18	2	3.0
19	5	8.0
20	14	22.0
21	15	37.0
22	9	46.0
23	11	57.0
24	15	72.0
25	10	82.0
26	6	88.0
27	4	92.0
28	5	97.0
29	3	100
30	0	100
31	0	100
32	0	100
33	0	100
34	0	100
35	0	100
36	0	100
37	0	100
38	0	100
39	0	100
40	0	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
47	0	100



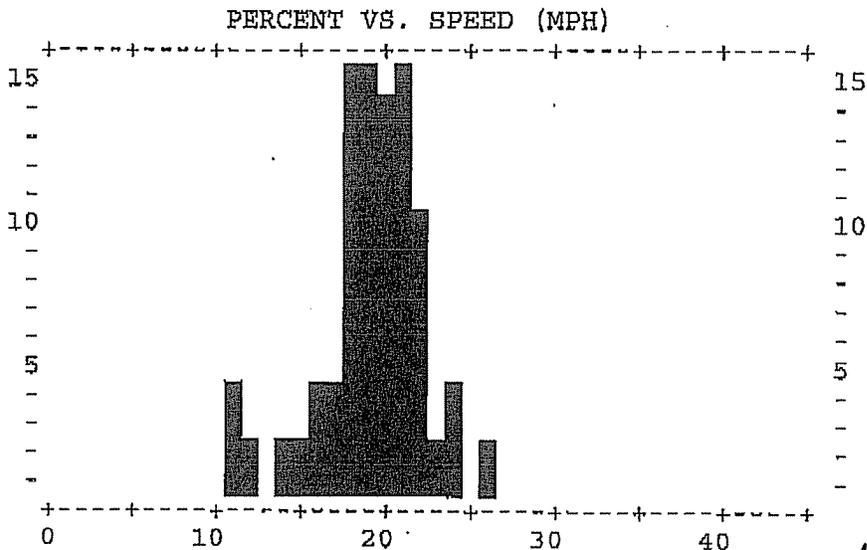
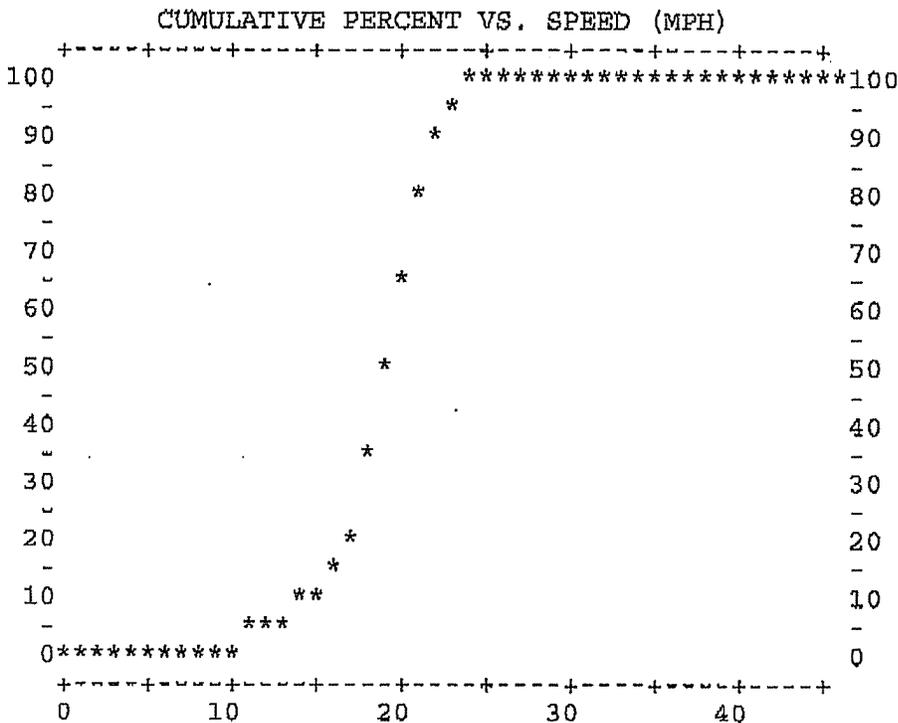
487
33

MULTITRANS SPOT SPEED STUDY
 CALEDONIA ST.: JOHNSON & NAPA

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/26/2009
 BEGINNING AT.....11:15
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....20
 85TH PERCENTILE SPEED.....22
 10-MPH PACE SPEED.....15 through 24
 PERCENT IN PACE SPEED..... 90.0
 PERCENT OVER PACE SPEED..... 2.0
 PERCENT UNDER PACE SPEED..... 8.0
 RANGE OF SPEEDS.....11 to 26
 SPEEDS OBSERVED.....,50
 AVERAGE SPEED.....19.2

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	2	4.0	4.0
12	1	2.0	6.0
13	0	0.0	6.0
14	1	2.0	8.0
15	1	2.0	10.0
16	2	4.0	14.0
17	2	4.0	18.0
18	8	16.0	34.0
19	8	16.0	50.0
20	7	14.0	64.0
21	9	18.0	82.0
22	5	10.0	92.0
23	1	2.0	94.0
24	2	4.0	98.0
25	0	0.0	98.0
26	1	2.0	100
27	0	0.0	100
28	0	0.0	100
29	0	0.0	100
30	0	0.0	100
31	0	0.0	100
32	0	0.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100



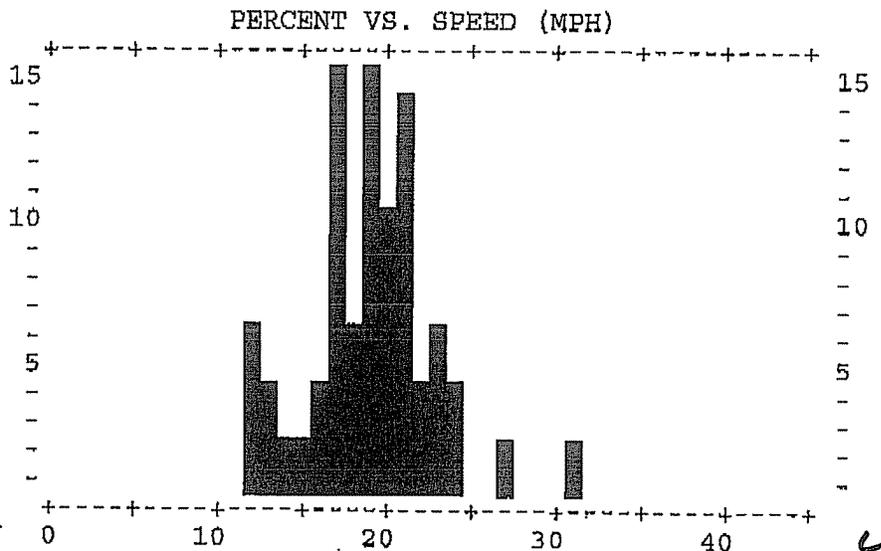
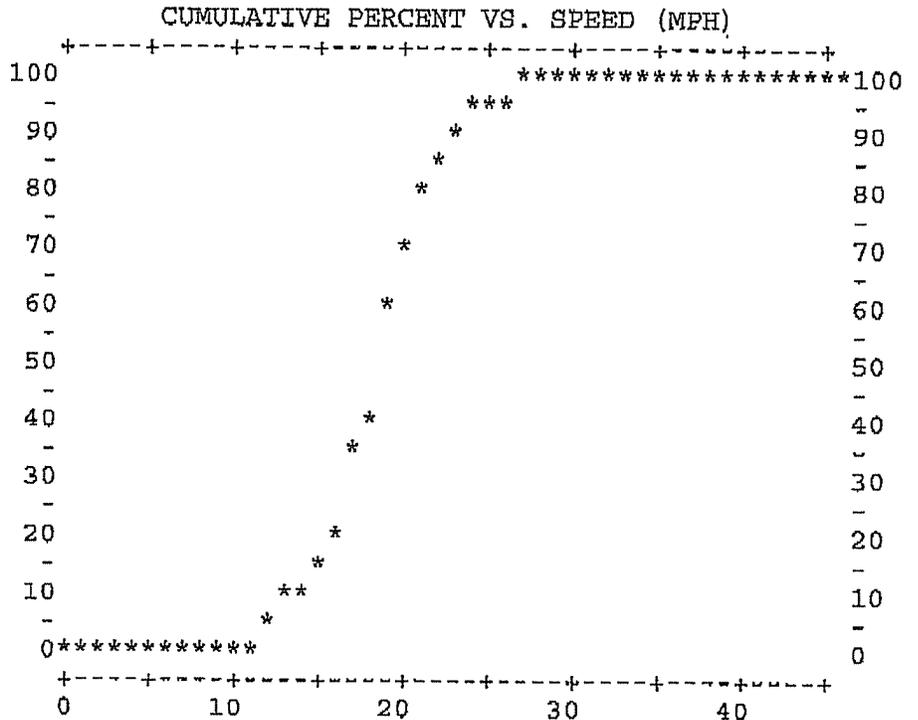
4B7
34

MULTITRANS SPOT SPEED STUDY
 CALEDONIA ST.: NAPA & JOHNSON

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/26/2009
 BEGINNING AT.....11:15
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....19
 85TH PERCENTILE SPEED.....22
 10-MPH PACE SPEED.....15 through 24
 PERCENT IN PACE SPEED..... 84.0
 PERCENT OVER PACE SPEED..... 4.0
 PERCENT UNDER PACE SPEED..... 12.0
 RANGE OF SPEEDS.....12 to 31
 SPEEDS OBSERVED.....50
 AVERAGE SPEED.....19.0

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	3	6.0	6.0
13	2	4.0	10.0
14	1	2.0	12.0
15	1	2.0	14.0
16	2	4.0	18.0
17	9	18.0	36.0
18	3	6.0	42.0
19	8	16.0	58.0
20	5	10.0	68.0
21	7	14.0	82.0
22	2	4.0	86.0
23	3	6.0	92.0
24	2	4.0	96.0
25	0	0.0	96.0
26	0	0.0	96.0
27	1	2.0	98.0
28	0	0.0	98.0
29	0	0.0	98.0
30	0	0.0	98.0
31	1	2.0	100
32	0	0.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100



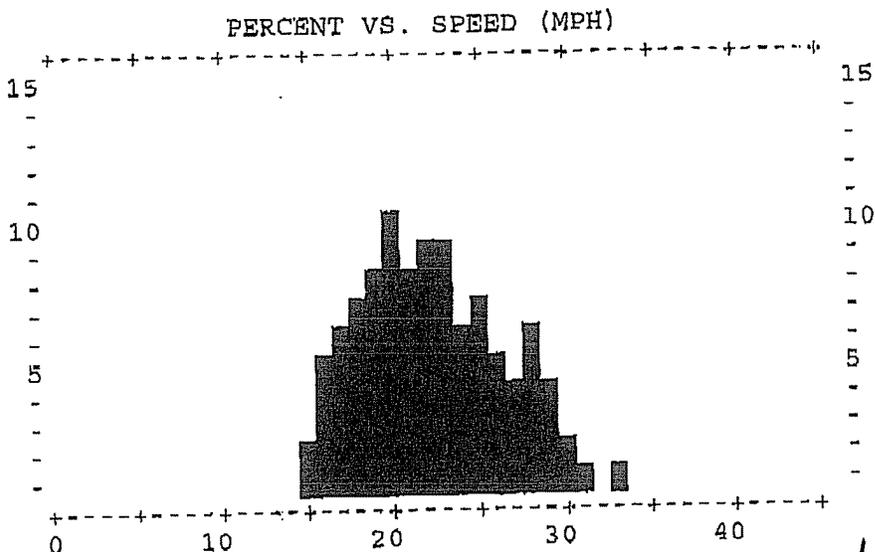
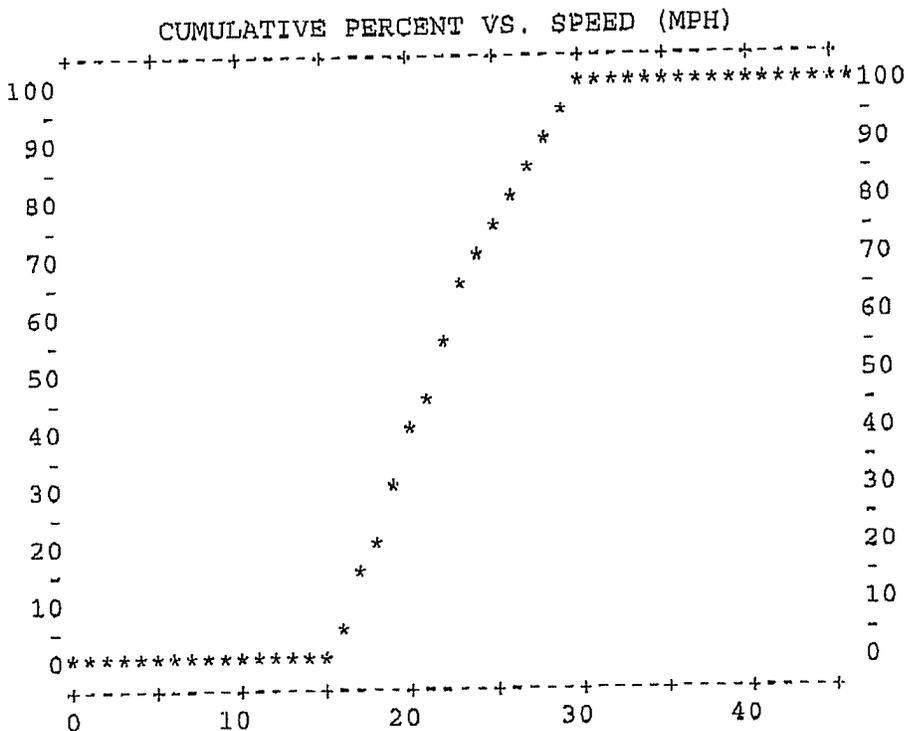
487
35

MULTITRANS SPOT SPEED STUDY
 SECOND ST.: SOUTH & RICHARDSON

DIRECTION(S).....NB
 DATA COLLECTED ON.. 3/26/2009
 BEGINNING AT..... 1:45
 POSTED SPEED LIMIT.25 MPH
 REPORT DATE..... 5/ 7/2009

50TH PERCENTILE SPEED.....22
 85TH PERCENTILE SPEED.....27
 10-MPH PACE SPEED.....16 through 25
 PERCENT IN PACE SPEED..... 75.0
 PERCENT OVER PACE SPEED..... 23.0
 PERCENT UNDER PACE SPEED..... 2.0
 RANGE OF SPEEDS.....15 to 33
 SPEEDS OBSERVED.....100
 AVERAGE SPEED.....22.3

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	2	2.0
16	5	7.0
17	6	13.0
18	7	20.0
19	8	28.0
20	10	38.0
21	8	46.0
22	9	55.0
23	9	64.0
24	6	70.0
25	7	77.0
26	5	82.0
27	4	86.0
28	6	92.0
29	4	96.0
30	2	98.0
31	1	99.0
32	0	99.0
33	1	100
34	0	100
35	0	100
36	0	100
37	0	100
38	0	100
39	0	100
40	0	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
>46	0	100



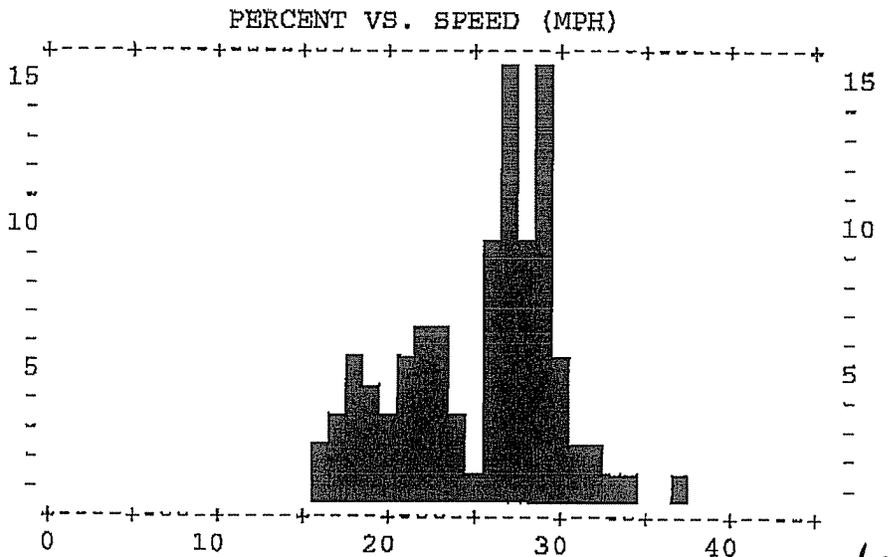
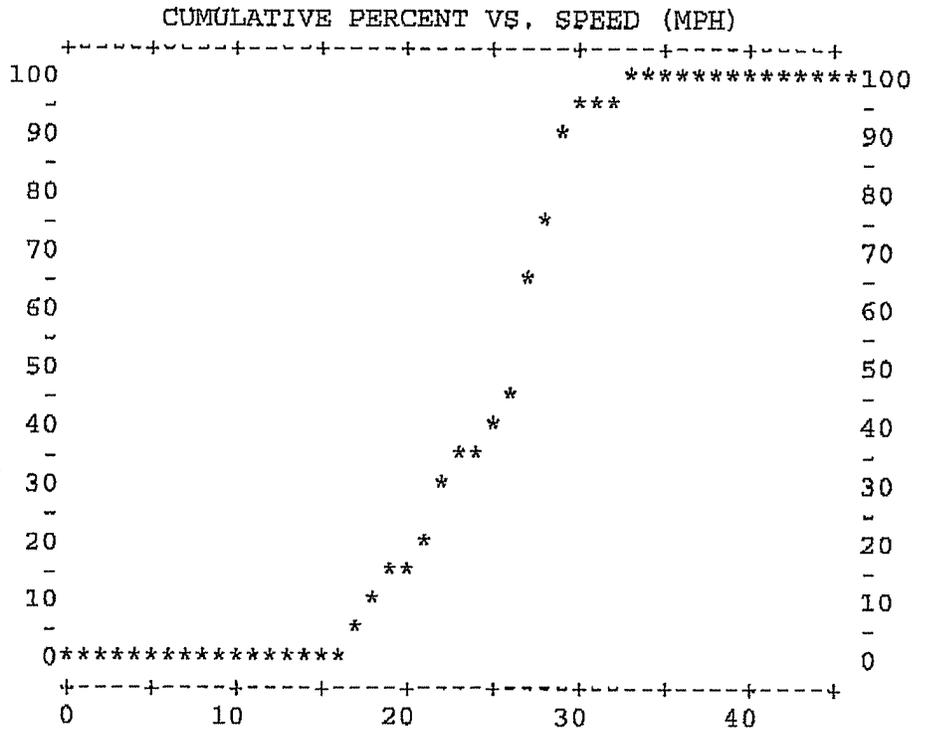
487
36

MULTITRANS SPOT SPEED STUDY
 SECOND ST.: RICHARDSON & SOUTH

DIRECTION(S).....SB
 DATA COLLECTED ON.. 3/26/2009
 BEGINNING AT..... 1:45
 POSTED SPEED LIMIT,25 MPH
 REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....27
 85TH PERCENTILE SPEED.....29
 10-MPH PACE SPEED.....21 through 30
 PERCENT IN PACE SPEED..... 75.8
 PERCENT OVER PACE SPEED..... 7.1
 PERCENT UNDER PACE SPEED..... 17.2
 RANGE OF SPEEDS.....16 to 37
 SPEEDS OBSERVED.....99
 AVERAGE SPEED.....25.4

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	2	2.0	2.0
17	3	3.0	5.1
18	5	5.1	10.1
19	4	4.0	14.1
20	3	3.0	17.2
21	5	5.1	22.2
22	6	6.1	28.3
23	6	6.1	34.3
24	3	3.0	37.4
25	1	1.0	38.4
26	9	9.1	47.5
27	16	16.2	63.6
28	9	9.1	72.7
29	15	15.2	87.9
30	5	5.1	92.9
31	2	2.0	94.9
32	2	2.0	97.0
33	1	1.0	98.0
34	1	1.0	99.0
35	0	0.0	99.0
36	0	0.0	99.0
37	1	1.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100



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37

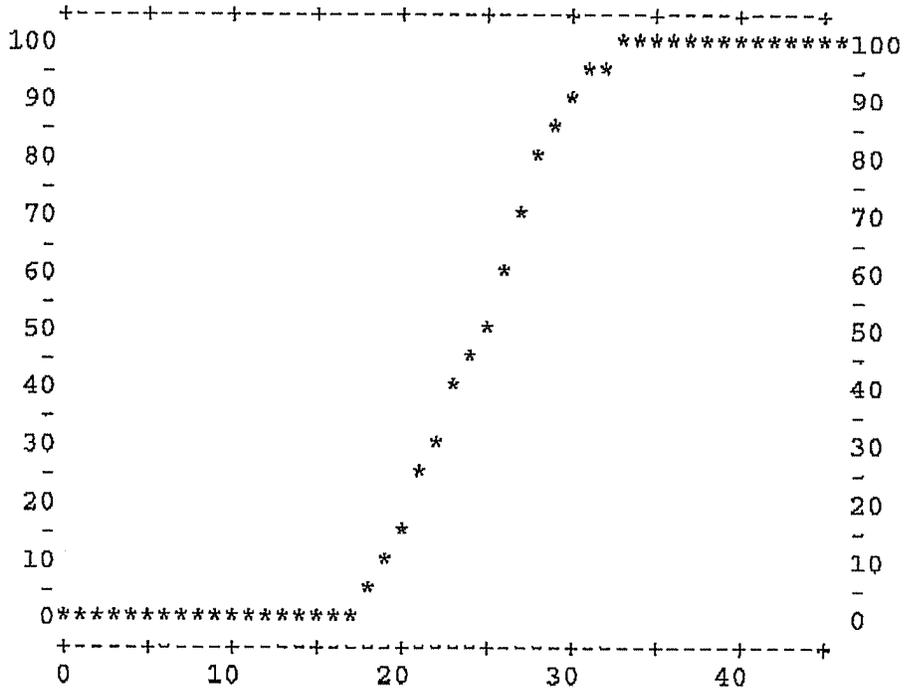
MULTITRANS SPOT SPEED STUDY
SOUTH ST.: ALEXANDER & SECOND

DIRECTION(S).....EB
DATA COLLECTED ON.. 3/26/2009
BEGINNING AT..... 1:00
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 4/ 5/2009

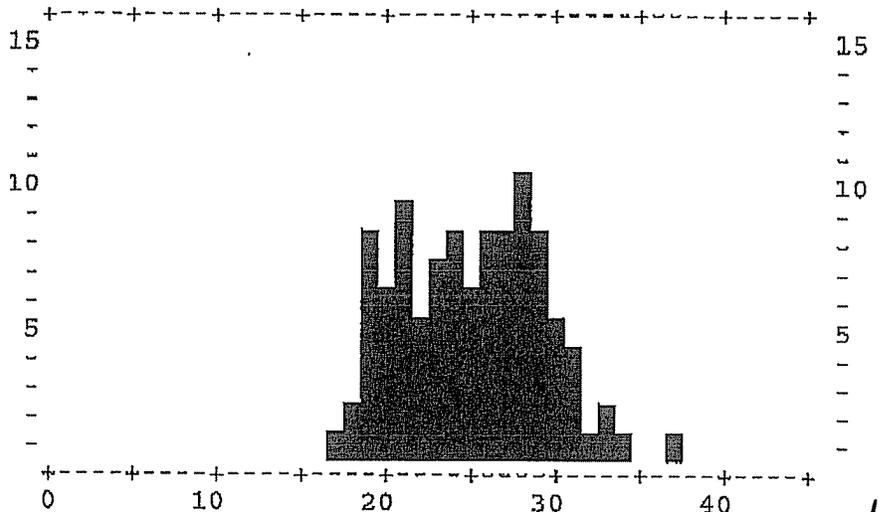
50TH PERCENTILE SPEED.....25
85TH PERCENTILE SPEED.....29
10-MPH PACE SPEED.....19 through 28
PERCENT IN PACE SPEED..... 75.0
PERCENT OVER PACE SPEED..... 22.0
PERCENT UNDER PACE SPEED..... 3.0
RANGE OF SPEEDS.....17 to 37
SPEEDS OBSERVED.....100
AVERAGE SPEED.....25.1

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	0	0.0
16	0	0.0
17	1	1.0
18	2	2.0
19	8	8.0
20	6	6.0
21	9	9.0
22	5	5.0
23	7	7.0
24	8	8.0
25	6	6.0
26	8	8.0
27	8	8.0
28	10	10.0
29	8	8.0
30	5	5.0
31	4	4.0
32	1	1.0
33	2	2.0
34	1	1.0
35	0	0.0
36	0	0.0
37	1	1.0
38	0	0.0
39	0	0.0
40	0	0.0
41	0	0.0
42	0	0.0
43	0	0.0
44	0	0.0
45	0	0.0
46	0	0.0
>46	0	0.0

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



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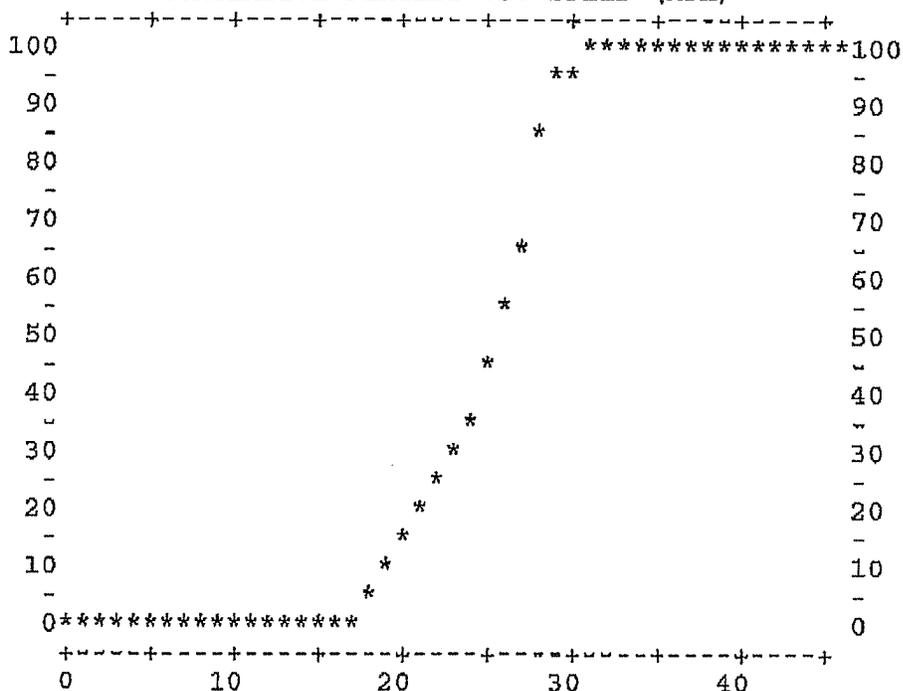
MULTITRANS SPOT SPEED STUDY
SOUTH ST.: SECOND & ALEXANDER

DIRECTION(S).....WB
DATA COLLECTED ON.. 3/26/2006
BEGINNING AT..... 1:00
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 4/ 5/2009

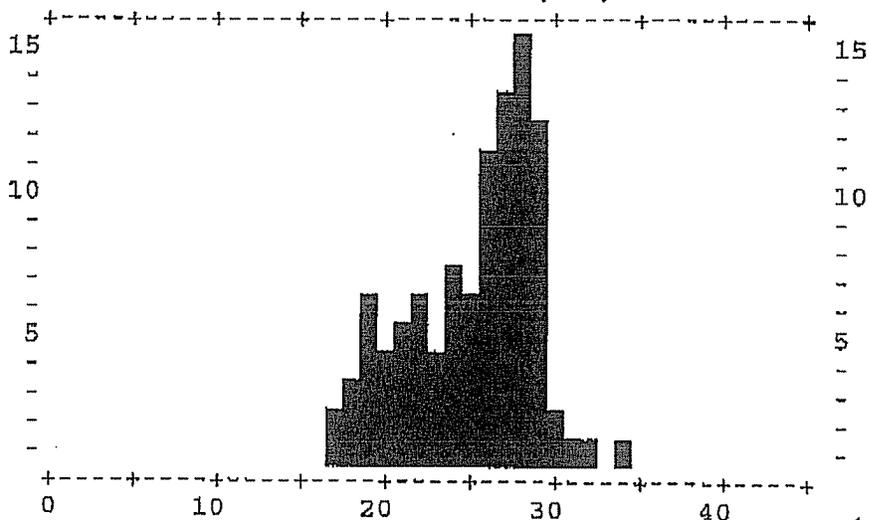
50TH PERCENTILE SPEED.....26
85TH PERCENTILE SPEED.....29
10-MPH PACE SPEED.....20 through 29
PERCENT IN PACE SPEED..... 84.0
PERCENT OVER PACE SPEED..... 5.0
PERCENT UNDER PACE SPEED..... 11.0
RANGE OF SPEEDS.....17 to 34
SPEEDS OBSERVED.....100
AVERAGE SPEED.....25.2

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	0	0.0
16	0	0.0
17	2	2.0
18	3	5.0
19	6	11.0
20	4	15.0
21	5	20.0
22	6	26.0
23	4	30.0
24	7	37.0
25	6	43.0
26	11	54.0
27	13	67.0
28	16	83.0
29	12	95.0
30	2	97.0
31	1	98.0
32	1	99.0
33	0	99.0
34	1	100
35	0	100
36	0	100
37	0	100
38	0	100
39	0	100
40	0	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
>46	0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



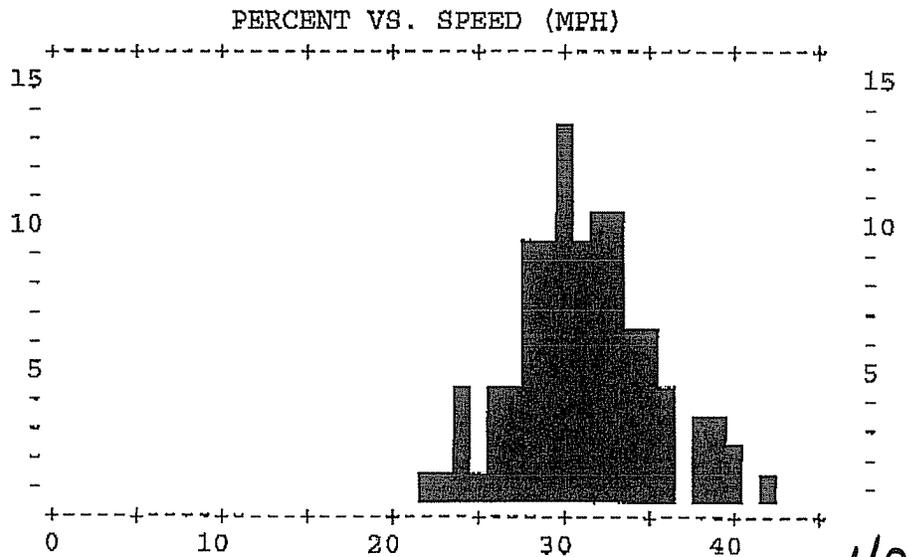
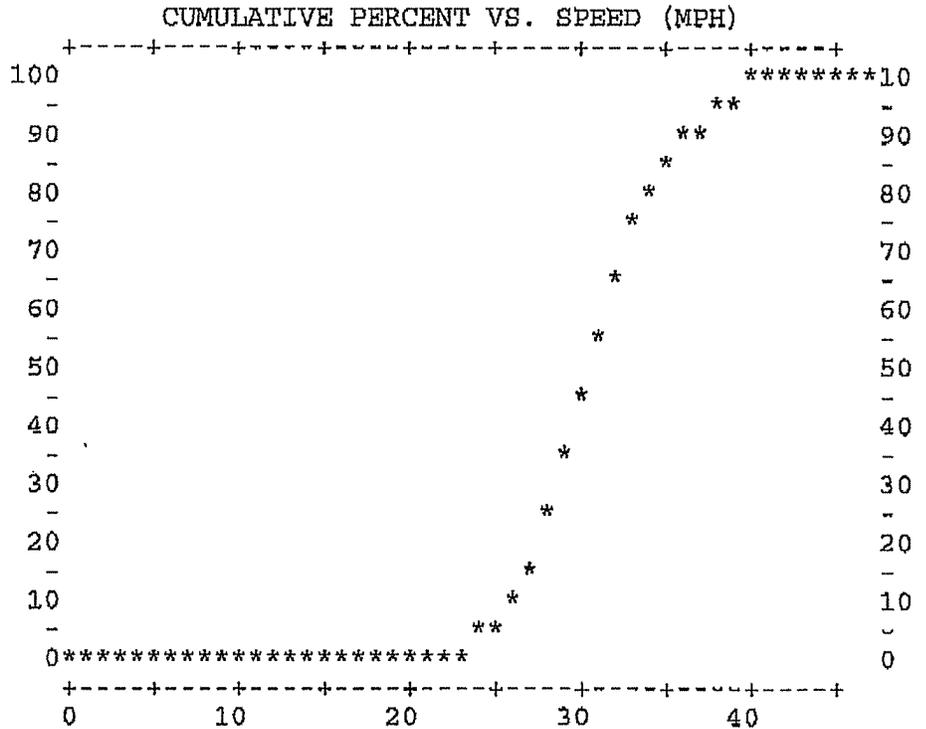
487
39

MULTITRANS SPOT SPEED STUDY
ALEXANDER AVE.: E. FORT BAKER & EDWARDS

DIRECTION(S).....NB
DATA COLLECTED ON.. 3/25/2009
BEGINNING AT..... 2:40
POSTED SPEED LIMIT.35 MPH
REPORT DATE..... 3/31/2009

50TH PERCENTILE SPEED.....31
85TH PERCENTILE SPEED.....35
10-MPH PACE SPEED.....26 through 35
PERCENT IN PACE SPEED..... 80.0
PERCENT OVER PACE SPEED..... 13.0
PERCENT UNDER PACE SPEED..... 7.0
RANGE OF SPEEDS.....22 to 42
SPEEDS OBSERVED.....100
AVERAGE SPEED.....31.2

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	0	0.0	0.0
17	0	0.0	0.0
18	0	0.0	0.0
19	0	0.0	0.0
20	0	0.0	0.0
21	0	0.0	0.0
22	1	1.0	1.0
23	1	1.0	2.0
24	4	4.0	6.0
25	1	1.0	7.0
26	4	4.0	11.0
27	4	4.0	15.0
28	9	9.0	24.0
29	9	9.0	33.0
30	13	13.0	46.0
31	9	9.0	55.0
32	10	10.0	65.0
33	10	10.0	75.0
34	6	6.0	81.0
35	6	6.0	87.0
36	4	4.0	91.0
37	0	0.0	91.0
38	3	3.0	94.0
39	3	3.0	97.0
40	2	2.0	99.0
41	0	0.0	99.0
42	1	1.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100



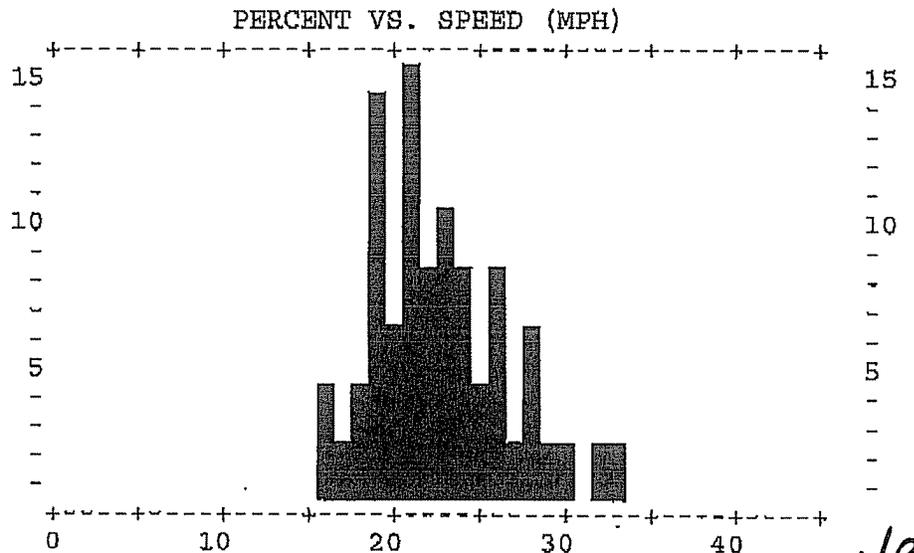
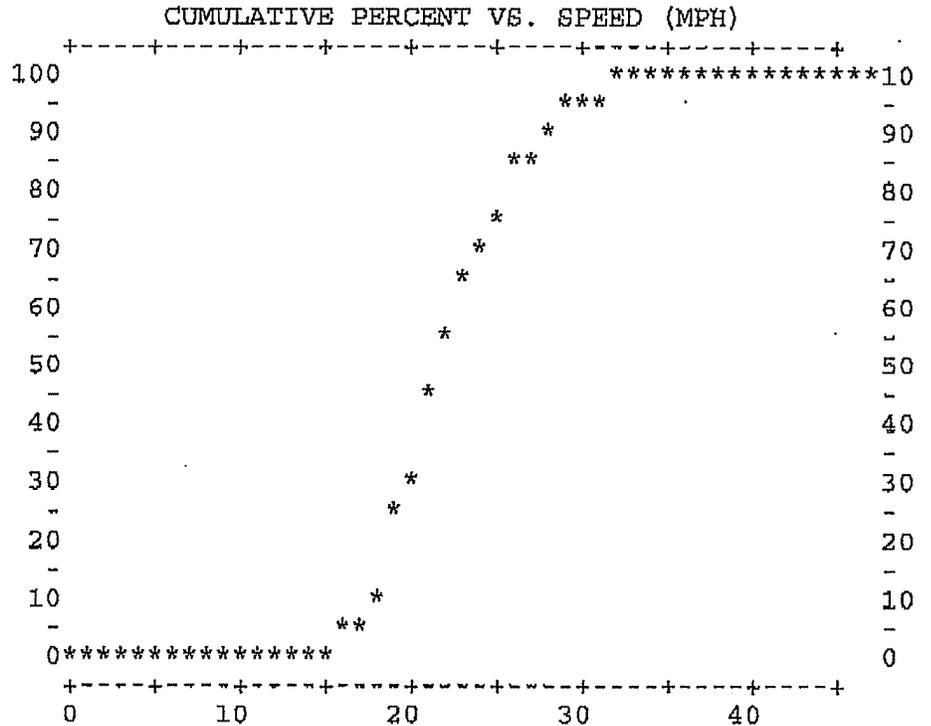
4B7
40

MULTITRANS SPOT SPEED STUDY
GATE 5 RD.: HARBOR & COLOMA

DIRECTION(S).....NB
DATA COLLECTED ON.. 3/24/2009
BEGINNING AT..... 9:00
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....22
85TH PERCENTILE SPEED.....27
10-MPH PACE SPEED.....19 through 28
PERCENT IN PACE SPEED..... 82.0
PERCENT OVER PACE SPEED..... 8.0
PERCENT UNDER PACE SPEED..... 10.0
RANGE OF SPEEDS.....16 to 33
SPEEDS OBSERVED.....50
AVERAGE SPEED.....22.7

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	0	0.0	0.0
14	0	0.0	0.0
15	0	0.0	0.0
16	2	4.0	4.0
17	1	2.0	6.0
18	2	4.0	10.0
19	7	14.0	24.0
20	3	6.0	30.0
21	8	16.0	46.0
22	4	8.0	54.0
23	5	10.0	64.0
24	4	8.0	72.0
25	2	4.0	76.0
26	4	8.0	84.0
27	1	2.0	86.0
28	3	6.0	92.0
29	1	2.0	94.0
30	1	2.0	96.0
31	0	0.0	96.0
32	1	2.0	98.0
33	1	2.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
47	0	0.0	100



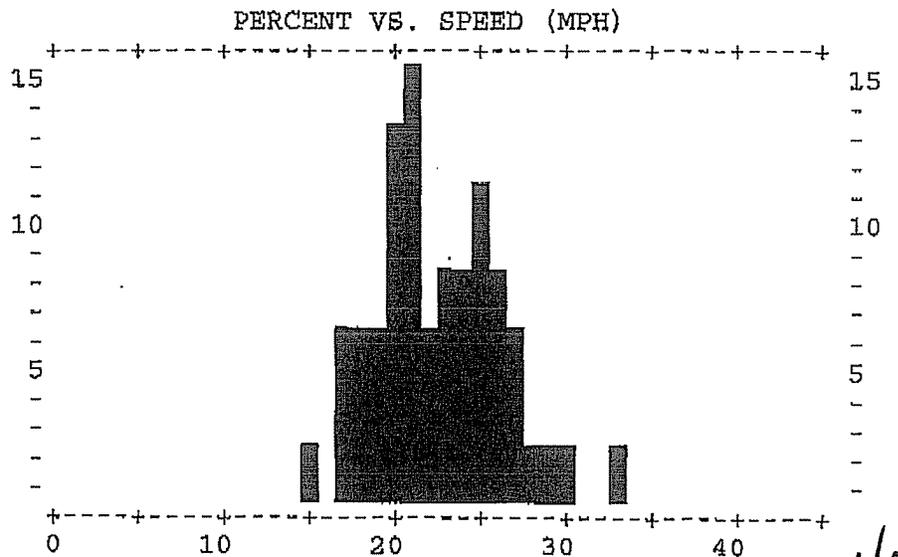
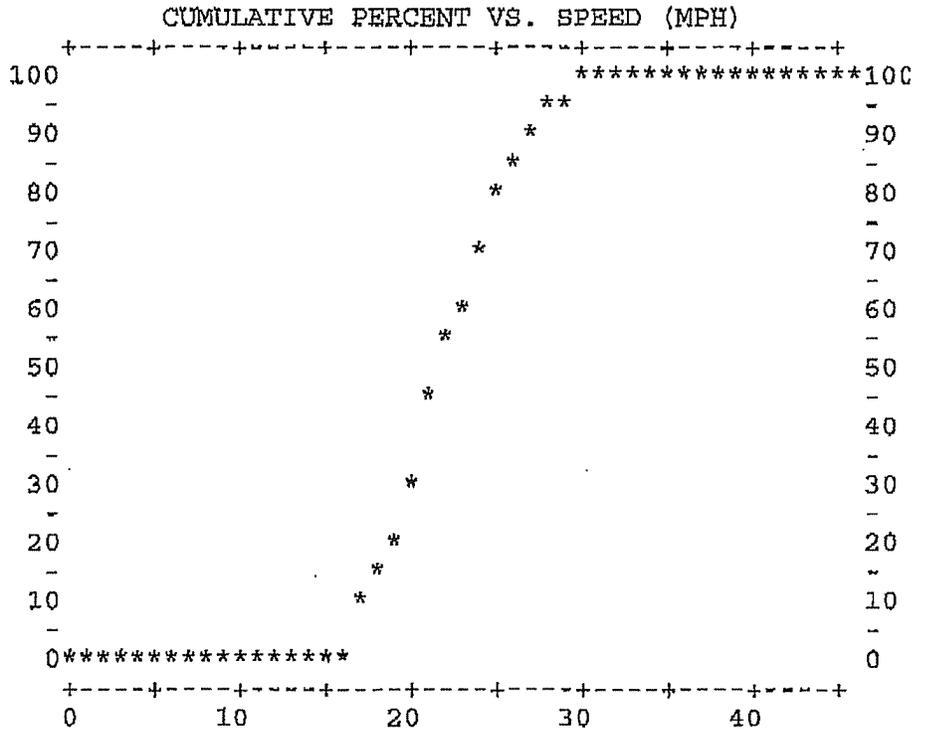
487
41

MULTITRANS SPOT SPEED STUDY
GATE 5 RD.: COLOMA & HARBOR

DIRECTION(S).....SB
DATA COLLECTED ON.. 3/24/2009
BEGINNING AT..... 9:00
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 3/31/2009

50TH PERCENTILE SPEED.....22
85TH PERCENTILE SPEED.....26
10-MPH PACE SPEED.....17 through 26
PERCENT IN PACE SPEED..... 84.9
PERCENT OVER PACE SPEED..... 13.2
PERCENT UNDER PACE SPEED..... 1.9
RANGE OF SPEEDS.....15 to 33
SPEEDS OBSERVED.....53
AVERAGE SPEED.....22.5

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	1	1.9
16	0	1.9
17	3	5.7
18	3	13.2
19	3	18.9
20	7	32.1
21	8	47.2
22	3	52.8
23	4	60.4
24	4	67.9
25	6	79.2
26	4	86.8
27	3	92.5
28	1	94.3
29	1	96.2
30	1	98.1
31	0	98.1
32	0	98.1
33	1	100
34	0	100
35	0	100
36	0	100
37	0	100
38	0	100
39	0	100
40	0	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
>46	0	100



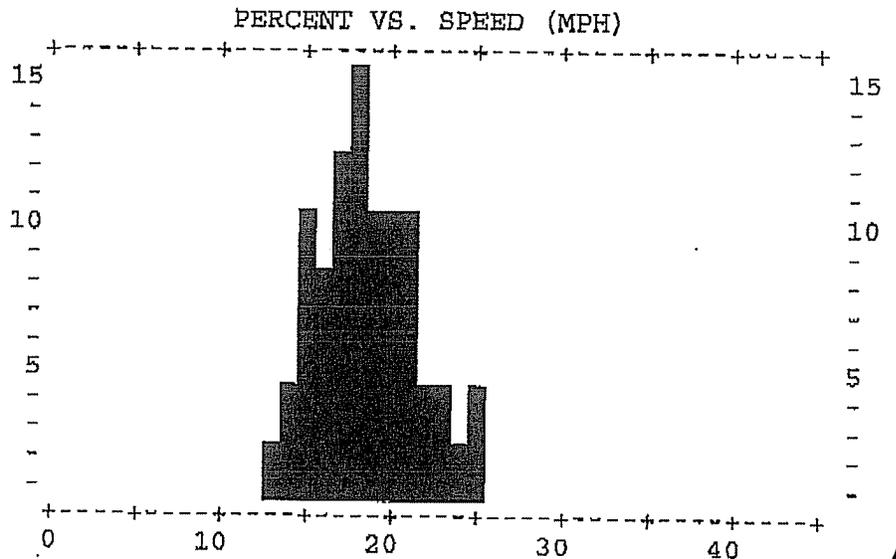
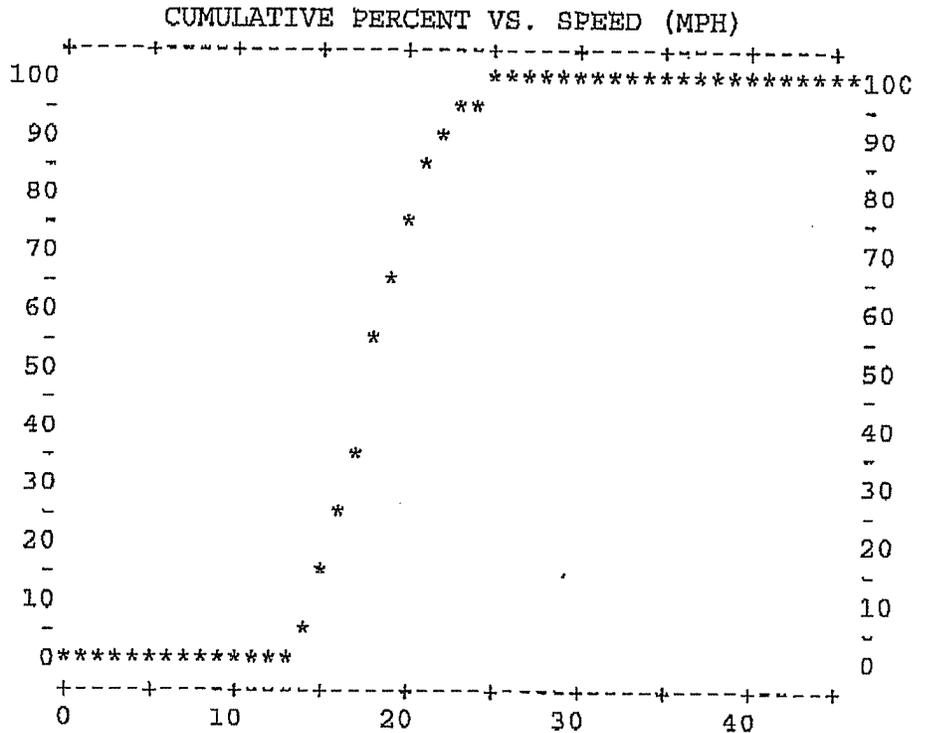
4B7
42

MULTITRANS SPOT SPEED STUDY
HARBOR AVE.; BRIDGEWAY & GATE 5

DIRECTION(S).....EB
DATA COLLECTED ON.. 3/24/2009
BEGINNING AT.....10:10
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 3/31/2009

50TH PERCENTILE SPEED.....18
85TH PERCENTILE SPEED.....21
10-MPH PACE SPEED.....14 through 23
PERCENT IN PACE SPEED..... 92.0
PERCENT OVER PACE SPEED..... 6.0
PERCENT UNDER PACE SPEED..... 2.0
RANGE OF SPEEDS.....13 to 25
SPEEDS OBSERVED.....50
AVERAGE SPEED.....18.5

MPH	NO.	PCT.	CUM PCT.
0	0	0.0	0.0
1	0	0.0	0.0
2	0	0.0	0.0
3	0	0.0	0.0
4	0	0.0	0.0
5	0	0.0	0.0
6	0	0.0	0.0
7	0	0.0	0.0
8	0	0.0	0.0
9	0	0.0	0.0
10	0	0.0	0.0
11	0	0.0	0.0
12	0	0.0	0.0
13	1	2.0	2.0
14	2	4.0	6.0
15	5	10.0	16.0
16	4	8.0	24.0
17	6	12.0	36.0
18	10	20.0	56.0
19	5	10.0	66.0
20	5	10.0	76.0
21	5	10.0	86.0
22	2	4.0	90.0
23	2	4.0	94.0
24	1	2.0	96.0
25	2	4.0	100
26	0	0.0	100
27	0	0.0	100
28	0	0.0	100
29	0	0.0	100
30	0	0.0	100
31	0	0.0	100
32	0	0.0	100
33	0	0.0	100
34	0	0.0	100
35	0	0.0	100
36	0	0.0	100
37	0	0.0	100
38	0	0.0	100
39	0	0.0	100
40	0	0.0	100
41	0	0.0	100
42	0	0.0	100
43	0	0.0	100
44	0	0.0	100
45	0	0.0	100
46	0	0.0	100
>46	0	0.0	100



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43

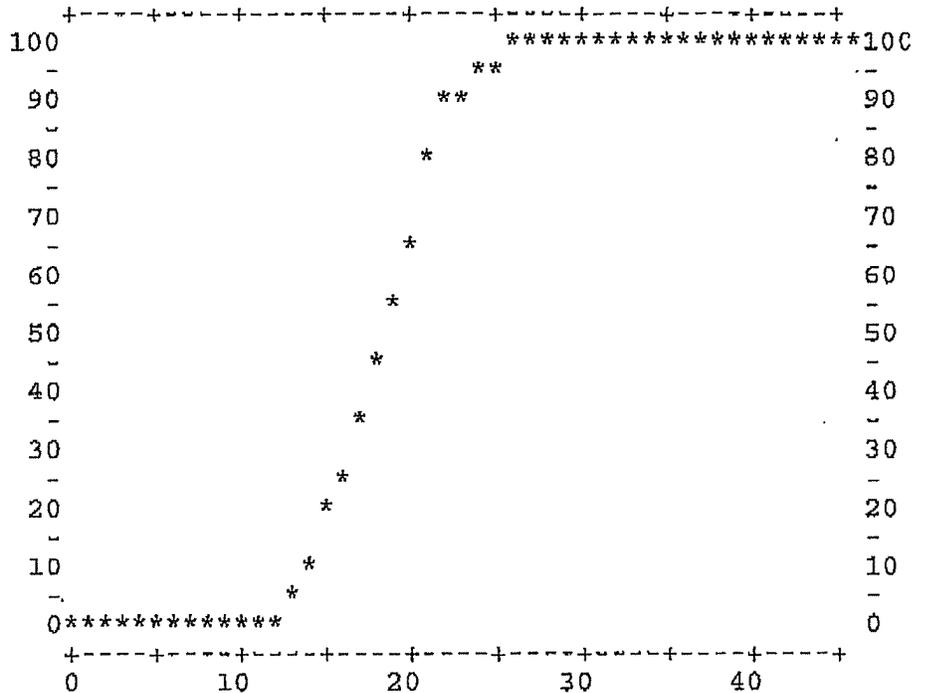
MULTITRANS SPOT SPEED STUDY
HARBOR AVE.; GATE 5 & BRIDGEWAY

DIRECTION(S).....WB
DATA COLLECTED ON.. 3/24/2009
BEGINNING AT.....10:10
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 3/31/2009

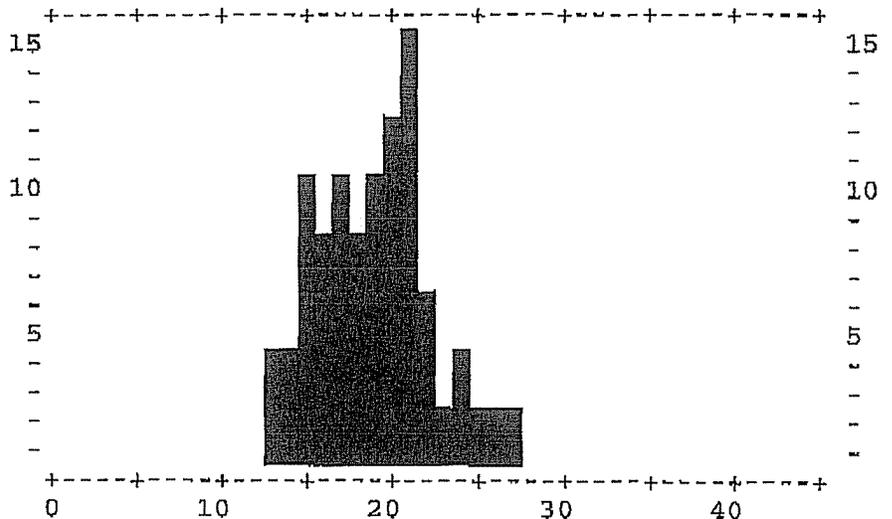
50TH PERCENTILE SPEED.....19
85TH PERCENTILE SPEED.....22
10-MPH PACE SPEED.....13 through 22
PERCENT IN PACE SPEED..... 88.0
PERCENT OVER PACE SPEED..... 12.0
PERCENT UNDER PACE SPEED..... 0.0
RANGE OF SPEEDS.....13 to 27
SPEEDS OBSERVED.....50
AVERAGE SPEED.....19.0

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	2	4.0
14	2	8.0
15	5	18.0
16	4	26.0
17	5	36.0
18	4	44.0
19	5	54.0
20	6	66.0
21	8	82.0
22	3	88.0
23	1	90.0
24	2	94.0
25	1	96.0
26	1	98.0
27	1	100
28	0	100
29	0	100
30	0	100
31	0	100
32	0	100
33	0	100
34	0	100
35	0	100
36	0	100
37	0	100
38	0	100
39	0	100
40	0	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
>46	0	100

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



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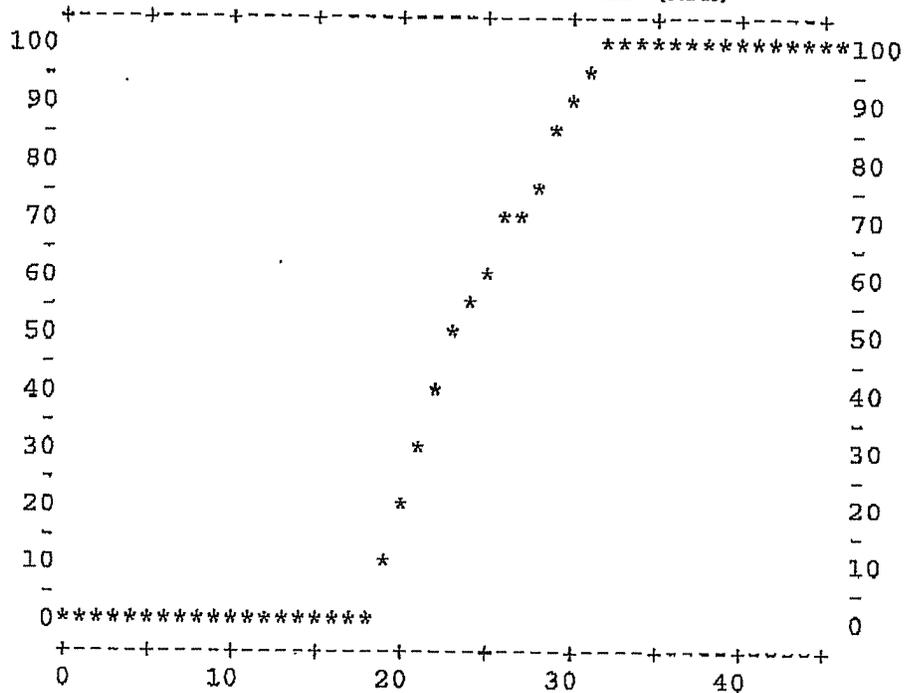
MULTITRANS SPOT SPEED STUDY
NEVADA ST.: BUCHANAN & BRIDGEWAY

DIRECTION(S).....EB
DATA COLLECTED ON.. 3/26/2009
BEGINNING AT..... 2:45
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 4/ 5/2009

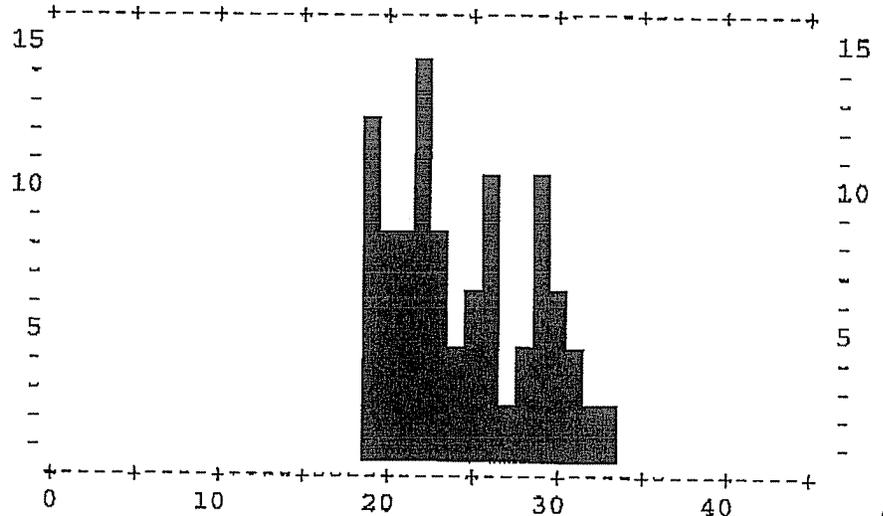
50TH PERCENTILE SPEED.....24
85TH PERCENTILE SPEED.....29
10-MPH PACE SPEED.....19 through 28
PERCENT IN PACE SPEED..... 76.0
PERCENT OVER PACE SPEED..... 24.0
PERCENT UNDER PACE SPEED..... 0.0
RANGE OF SPEEDS.....19 to 33
SPEEDS OBSERVED.....50
AVERAGE SPEED.....24.4

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	0	0.0
16	0	0.0
17	0	0.0
18	0	0.0
19	6	12.0
20	4	8.0
21	4	8.0
22	7	14.0
23	4	8.0
24	2	4.0
25	3	6.0
26	5	10.0
27	1	2.0
28	2	4.0
29	5	10.0
30	3	6.0
31	2	4.0
32	1	2.0
33	1	2.0
34	0	0.0
35	0	0.0
36	0	0.0
37	0	0.0
38	0	0.0
39	0	0.0
40	0	0.0
41	0	0.0
42	0	0.0
43	0	0.0
44	0	0.0
45	0	0.0
46	0	0.0
>46	0	0.0

CUMULATIVE PERCENT VS. SPEED (MPH)



PERCENT VS. SPEED (MPH)



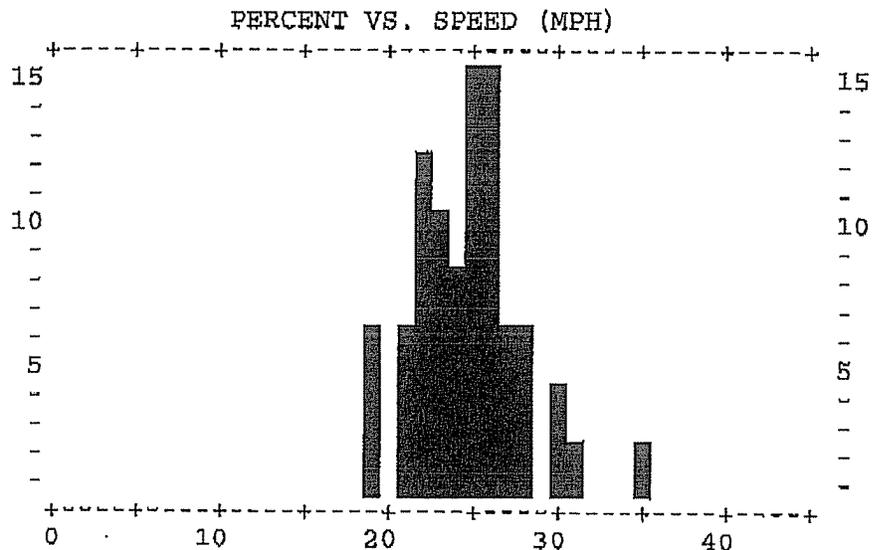
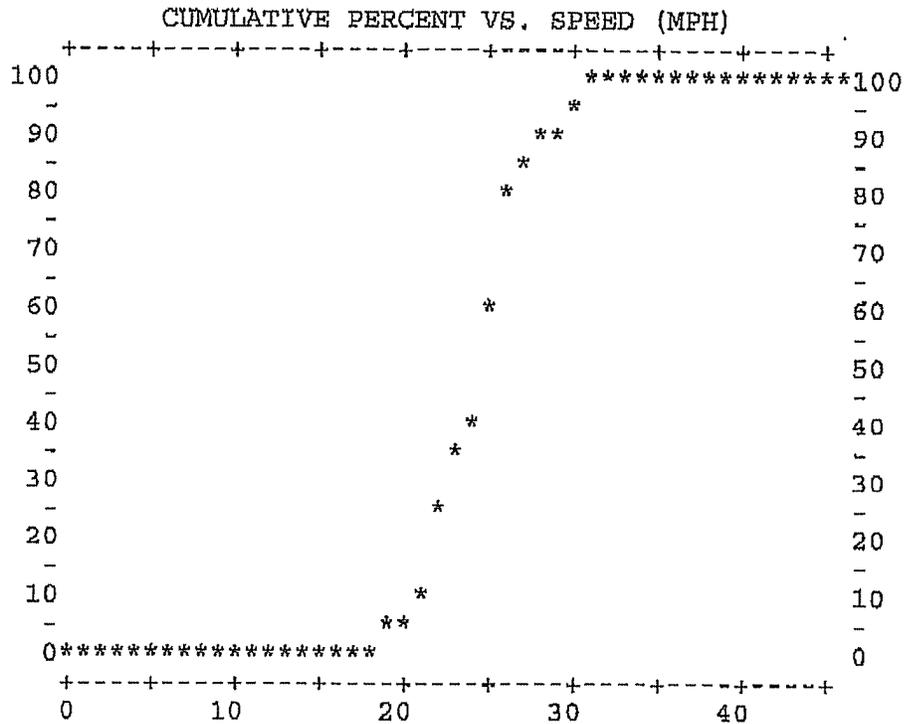
487
45

MULTITRANS SPOT SPEED STUDY
NEVADA ST.: BRIDGEWAY & BUCHANAN

DIRECTION(S)WB
DATA COLLECTED ON.. 3/26/2009
BEGINNING AT..... 2:45
POSTED SPEED LIMIT.25 MPH
REPORT DATE..... 4/ 5/2009

50TH PERCENTILE SPEED.....25
85TH PERCENTILE SPEED.....27
10-MPH PACE SPEED.....19 through 28
PERCENT IN PACE SPEED..... 92.0
PERCENT OVER PACE SPEED..... 8.0
PERCENT UNDER PACE SPEED..... 0.0
RANGE OF SPEEDS.....19 to 35
SPEEDS OBSERVED.....50
AVERAGE SPEED.....24.8

MPH NO.	PCT.	CUM PCT.
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	0	0.0
6	0	0.0
7	0	0.0
8	0	0.0
9	0	0.0
10	0	0.0
11	0	0.0
12	0	0.0
13	0	0.0
14	0	0.0
15	0	0.0
16	0	0.0
17	0	0.0
18	0	0.0
19	3	6.0
20	0	6.0
21	3	12.0
22	6	24.0
23	5	34.0
24	4	42.0
25	8	58.0
26	11	80.0
27	3	86.0
28	3	92.0
29	0	92.0
30	2	96.0
31	1	98.0
32	0	98.0
33	0	98.0
34	0	98.0
35	1	100
36	0	100
37	0	100
38	0	100
39	0	100
40	0	100
41	0	100
42	0	100
43	0	100
44	0	100
45	0	100
46	0	100
>46	0	100



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