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DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION
OFFICE OF TRANSPORTATION LABORATORY

CALIFORNIA, VEHICLE NOISE EMISSIION LEVELS (FINAL REPORT)

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16. ABSTRACT

The California Department of Transportation (Caltrans) is required by standards to predict noise levels for proposed federal aid highway projects. For these predictions Caltrans uses national vehicle noise reference emission levels, which are based *on* 1975 data collected in North Carolina, Florida, Washington, and Colorado. In 1982, Caltrans initiated a study in response to the need for California data. This report presents criteria, methods and analyses used to develop California vehicle noise emission levels for level roads and heavy truck emission levels on grades.

More than 3000 noise and environmental measurements were made at sixteen level road sites in California. Included were automobiles and medium and heavy trucks traveling at constant speeds between 25 and 65 mph. Microphones were located at distances of 25, 50 and 100 feet, and at heights of 5 and 10 feet. Nearly 1800 measurements were made of heavy truck noise at constant up hill speeds from 10 to 65 mph at six road sites ranging in grade from +3% to +7%.

Analyses of data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels. In contrast, medium and heavy trucks noise is 0.5 to 3 dBA lower than the national levels. The study also indicated that the three vehicle groups adequately represented the California vehicle population and geographical differences may be ignored. Effects of opposite winds of less than 12 mph, and terrain cover introduced errors of *no* more than 1 dBA at the 50-foot reference distance. For +3% to +7% grade, heavy truck noise showed no grade dependency. Speed dependency was best expressed as a second order polynomial.

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CONVERSION FACTORS

English to Metric System (SI) of Measurement

Quality	English unit	Multiply by	To get metric equivalent
Length	inches (in)or(")	25.40 .02540	millimetres (mm) metres (m)
	feet (ft)or(')	.3048	metres (m)
	miles (mi)	1.609	kilometres (km)
Area	square inches (in^2) square feet (ft^2) acres	6.432×10^{-4} .09290 .4047	square metres (m^2) square metres (m^2) hectares (ha)
Volume	gallons (gal) cubic feet (ft^3) cubic years (yd^3)	3.785 .02832 .7646	litre (1) cubic metres (m^3) cubic metres (m^3)
Volume/Time (Flow)	cubfc feet per second (ft^3/s	28.317	litres per second 1/s)
	gallons per minute (gal/min)	.06309	litres per second (1/s)
Mass	pounds (lb)	.4536	kilograns (kg)
Velocity	miles per hour (mph) feet per second (fps)	.4470 .3048	metres per second (m/s) metres per second (m/s)
Acceleration	feet per second squared (ft/s^2)	.3048	metres per second squared (m/s^2)
	acceleration due to force of gravity (G) (ft/s^2)	9.807	metres per second squared (m/s^2)
Density	(lb/ft^3)	16.02	kilograms per cubic metre (kg/m^3)
Force	pounds (lbs) (1000 lbs) kips	4.448 4448	newtons (N) newtons (N)
Thermal Energy	British termal unit (BTU)	1055	joules (J)
Mechanical Energy	foot-pounds (ft-lb) foot-kips (ft-k)	1.356 1356	joules (J) joules (J)
Bending Moment or Torque	inch-pounds (in-lbs) foot-pounds (ft-lbs)	.1130 1.356	newton-metres (Nm) newton-metres (Nm)
Pressure	pounds per square inch (psi)	15895	pascals (Pa)
	pounds per square foot (psf)	47.88	pascals (Pa)
Stress Intensity	kips per square inch square root inch ($ksi\sqrt{in}$)	1.0988	mega pascals$\sqrt{metre}$ ($MPa\sqrt{m}$)
	pounds per square inch square root inch ($psi\sqrt{in}$)	1.0988	kilo pascals$\sqrt{metre}$ ($KPa\sqrt{m}$)
Plane Angle	degrees (°)	0.0175	radians (rad)
Temperature	degrees fahrenheit (F)	$\frac{+F - 32}{1.8} = +C$	degrees celsius (°C)

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TABLE OF CONTENTS

CHAPTER		Page
I.	INTRODUCTION	I-1
	'Background	I-1
	'Objectives	I-4
	°Work Plan	I-5
II.	CONCLUSIONS	II-1
	'California Emission Levels	II-1
	'California Heavy-Truck-On-Grade Emission Levels	II-1
	'Acoustic Source Groups	II-3
	'Hard vs. Soft Sites	II-3
	'Near and Far Field Noise Drop-Off Rates	II-3
	'Geographical Differences	II-4
	'Wind	II-4
III.	RECOMMENDATIONS	III-1
IV.	IMPLEMENTATION	1v-1
V.	BENEFITS	V-1
VI.	INSTRUMENTATION	VI-1
VII.	SITES	v11-1
	°Site Selection and General Requirements	VII-1
	'Physical Criteria	v11-2
	'Hard and Soft Site Representation	v11-3
	'Geographical Representation	v11-3
	'Site Locations and Descriptions	v11-4
VIII.	FIELD MEASUREMENTS	VIII-1
	'General Approach	VIII-1
	'Typical Instrument Setups	VIII-1
	'Event Quality and Contamination Control	VIII-5
	'Sample Size	VIII-16
	'Vehicle Types and Speed Criteria	VIII-20
	'Environmental Measurements and Criteria	VIII-25
	'Measurement Procedures	VIII-28
IX.	DATA PROCESSING OF MEASUREMENT RESULTS	IX-1
	'Input and Merging of Data	IX-1
	'Data Summaries	1x-3

TABLE OF CONTENTS (Con't.)

CHAPTER	Page
X. DATA ANALYSIS AND RESULTS	X-1
'Analyses	X-1
'Emission Levels By Vehicle Type - Level Roads	X-2
'Hard vs Soft Sites	X-19
'Geographical Differences in Vehicle Populations	X-27
'Wind Analyses	X-29
'Emission Levels for Heavy Trucks on Uphill Grades	X-35
XI. CALIFORNIA VEHICLE NOISE REFERENCE ENERGY MEAN EMISSION LEVELS	XI-1
'Level Roads	x1-1
°Grades	x1-3
REFERENCES	R-1
APPENDIX A - SITE DETAILS	A
APPENDIX B - SAFETY	B
APPENDIX C - DATA SUMMARIES	C
APPENDIX D - RESULTS OF ANALYSES	3

LIST OF FIGURES

Figure		Page
VI-1	Instrumentation Setup	vi-3
VII-1	Locations of Noise Measurement Sites	vii-6
VIII-1	Typical Setup. Five Microphones	VIII-2
VIII-2	Typical Site Layout and Microphone Locations	VIII-4
VIII-3	Vehicle Noise Level as a Function of Vehicle Positions	VIII-7
VIII-4	Relative Noise Levels vs Vehicle Position (D_0=50 fegt)	VIII-7
VIII-5	Minimum Separation Between Two Vehicles. Equal Noise Sources (D_0=50 feet)	VIII-8
VIII-6	Minimum Separation Between Two Vehicles. Unequal Noise Sources (D_0=50 feet)	VIII-8
VIII-7	Valid Peak and Event Quality Criteria	VIII-13
VIII-8	National Reference Energy Mean Emission Levels as a Function of Speed	VIII-17
VIII-9	Wind Direction Orientation	VIII-27
VIII-10	Example of Vehicle Observation Sheet	VIII-30
VIII-11	Backside of Vehicle Observation Sheet	VIII-31
VIII-12	Example of Graphic Level Recorder Trace	VIII-32
VI 11-13	Example of Datalogger Printout	VIII-32
VI 11-14	Noise Measurement and Environmental Data Sheet Example	VIII-33
VI 11-15	Site Data Sheet	VIII-34
IX-1	Data Summary Sheet (Example)	1x-4
X-1 Through X-8	California Vehicle Noise Emissions. L_{OE} vs. Speed	X-4 through X8 and X-12 through X-14

LIST OF FIGURES (cont.)

Figure		Paye
X-1	Compact Autos and Standard Autos	X-4
X-2	All Autos and FHWA Autos	X-5
x-3	Medium Trucks and FHWA Medium Trucks	X-6
x-4	3. 4 and 5 Axle Heavy Trucks	X-7
X-5	All Heavy Trucks and FHWA Heavy Trucks	X-8
X-6	All Autos. Speed Class Mean Data and Regression Line	X-12
x-7	iledium Trucks. Speed Class Mean Data and Reyression Line	X-13
X-8	heavy Trucks. Speed Class Mqan Data and Regression Line	X-14
X-9	Near and Far Field Drop Off Rates, Single Events. Speed Classes With Minimum Required Data Unly	X-23
X-10	Near and Far Field Drop Off Rates, Single Events. All Speea Classes Included	X-24
X-11	Speed Dependency vs Grade Dependency	X-41
x-12	Energy Mean Noise Levels at 25 Feet vs Grade By Speed Class	X-42
X-13	Sustained Crawl Speed as a F'unction of Load and Percentage of Grade	X-47
X-14	Energy Mean Noise Levels at 50 Feet vs tirade By Speed Class	X-50
x-15	Plots By Energy Means of 10 MPH Speed Classes (Leq vs Speed)	X-51
X-16	Energy Averaged 2nd Degree Polynomial Plots	X-53
X-17	$L_{\overline{OE}}$ vs Speed (Three Methods)	X-54

LIST OF FIGURES (cont.)

Fiyure		Page
X-18	Speed Distributions By Grade	X-58
X-19	Weiynted Noise Emission Levels for Observed Speed Distribtuions of Uphill Heavy Trucks	X-62
XI-1	California Vehicle Noise Emission L_{UE} vs. Speed, Autos, Medium Trucks, Heavy Trucks	X.1-2
XI-2	California Heavy Truck-on-Grade Noise Reference Eneryy Mean Emission Levels	XI-4
XI-3	Deceleration Distance as a Function of Uphill Grade for an Average Heavy Truck Slowing Down from 55 MPH to Sustained Speed	XI-6

LIST OF TABLES

Table		Page
VI-1	Instruments Used in This Study	VI-2
VII-1	Site Locations	VII-7
VIII-1	Number of Events Sampled and Minimum Required By Vehicle Group and Speed Class, Level Roads	VIII-21
VIII-2	Number of Events Sampled ana Minimum Required By Vehicle Group and Speed Class, Heavy Trucks on Grades	VIII-22
VIII-3	Vehicle Types	VIII-24
X-1	California Vehicle Noise Emission Levels. Summary of Reyression Statistics	X-11
x-2	Statistical Comparison Hard vs. Soft Sites	X-22
x-3	Statistical Cornparison of Vehicle Populations, Northern California vs. Southern California	X-28
x-4	Comparison of Wind Effects +6 to +12 mph vs. -6 to -12 mph, Soft Sites (50 Feet)	X-31
X-5	Comparison of Wind Effects +6 ti +12 mph vs. -6 to -12 mph All Sites (50 Feet)	X-33
X-6	Comparison of Wind Effects +6 to +12 mph vs. -6 to -12 mph Sites with Five Mics, (100 Feet)	X-34
x-7	Average Noise Drop-Offs on Grade Sites	X-37
X-8	Analysis of Variances, Grade Site Characteristics - All Speeds	X-39
x-9	Analysis of Variances, Grade Site Characteristics - 31-40 MPH and 41-50 MPH	X-39
x-10	Analysis of Variances, Sourqe Characteristics, Sites 20-23 and Sites 21-43, 31-40 MPH	X-43
X-11	Analysis of Variances, Sourde Characteristics, Sites 21 and 22, Sites 20 and 23, 31-40 MPH	X-44

LIST OF TABLES (cont.)

Table		Paye
x-12	Analysis of Variances, Source Characteristics, Sites 20-23, and Sites 21-23, 41-50 MPH	X-45
X-13	Comparison of Distributions of <90dBA and >90dBA Data	X-56
X-14	L_{OE} Weighted By Observed Speed Distributions	X-60
X-15	Suggested Default Values for Grades Steeper Then 1%	X-62
XI- 1	COMPARISON OF CALGRAOE AND NCHRP 117	XI-5

I. INTRODUCTION

This is the final report presenting the results of the California Vehicle Noise (Calveno) Reference Energy Mean Emission Levels study for level roads and heavy trucks on yrades. An interim report by the same title and author was published in Auyust 1984(1). It covered the development of speed-dependent vehicle noise emission levels on level roads only.

This final report includes both the interim report and the additional information concerniny noise levels of heavy trucks traveliny uphill on yrades of +3% to +7%.

Background

The noise abatement procedures for Federal or Federal Hid highway projects are yoverned by the Federal Aid Hiyhway Program Manual (FHPM) 7-7-3(2). This directive requires state highway ayencies to determine and analyze expected traffic noise impacts and alternative noise abatement measures to mitigate these impacts.

As part of the traffic noise impact analysis under FHPM 7-7-3, prediction of future traffic noise is required. Any prediction method may be used to satisfy this requirement if it yenerally meets the following two conditions:

1. The method must be consistent with the FHWA Hiyhway Traffic Noise Prediction Model, Report No. FHWA RD-77-108(3).

2 The prediction method must use either the National Reference Energy Mean Emission Levels as a function of speed(2,3) or reference energy mean emission levels determined by the methodoloyy described in FHWA-LIP-45 1R(4).

Since 1978, the California Department of Transportation (Caltrans) has used the National Reference Eneryy Mean Emission Levels as a function of speed for noise predictions for Federal or Federal Aid highway projects. These noise emission levels were based on FHWA-RD-77-19(5) (autos), and FHWA-RD-78-64(6) which presented statistical analyses on truck data gathered in the 1975 Four-State Noise Inventory(7). California was not among the four states in the study. It was also reasonable to assume that vehicle noise emission levels may have changed since 1975, due to new truck noise emissions regulations and the recent popularity of compact, eneryy efficient automobiles. For these reasons, Caltrans recognized the need for a California vehicle noise emission study.

A 1981 Caltrans barrier evaluation study(8) comparing before and after barrier measured noise levels with those predicted by FHWA-RD-77-108(3) methods concluded that the latter tended to predict average values of 3 to 4 dBA higher than those measured at eleven barrier sites throuyhout California. That study recommended further investigation to examine the validity of using the national emission levels in California. The recommendation was followed up, and the results were presented in the interim report(1).

The Calveno curves have since been approved by the FHWA and and are now used in California for noise studies required by FHPM 7-7-3. These levels, however, are valid for level roadways only. They are nut suited for grades.

To compensate for this deficiency, the FHWA model allows for an uphill grade correction to be applied to heavy truck emission levels. Two methods for calculating yrade corrections were presented(3). The first, "NCHRP Report 117 Method," involves the addition of a yrade dependent, speed-

independent constant to the noise level based on total truck volume. The second, "MCHRP Report 174 Method," is a grade- and speed-dependent equation which calculates noise adjustments for grades as a function of speed, to be applied to uphill trucks only. FHWA RD-77-108(3) recommends that the corrections of NCHRP 117 be used on the uphill heavy truck noise levels only. The FHWA Level 2 Highway Traffic Noise Prediction Model, computer versions STAMINA1 and STAMINA2, as well as the Caltrans computer versions SOUNDS3and SOUND32 Essentially use this recommended procedure.

During the Calveno level road measurements, a limited amount of measurements were made on three different uphill grades. Preliminary analyses of these grade data strongly suggested that the recommended procedures for dealing with grades(3) are not correct. An extension to the research project was requested and approved, *to* measure and analyze heavy truck noise emission levels on uphill grades. This resulted in a heavy truck speed-dependent energy mean emission level curve for grades of +3% to +7%. This curve, presented in Chapter XI, should be used for uphill heavy truck traffic traveling at sustained speeds only (i.e., far enough up the grade after decelerating from 55 mph to "crawl" speed). Ideally, the curve should be integrated over typical truck speed distributions associated with each percentage increment of grade.

Chapter XI includes observed speed distributions and compares them with previously reported typical speed-distributions on grades in California. It also includes suggested heavy truck noise emission values for each percentage increment of grades from +3% to +7%. These were based on intregration over Observed truck speed distributions which proved to be fairly typical. The values may be

used as "default" values when detailed truck speed distributions are not readily available.

Objectives

The original objective of this study was to develop California Vehicle Noise Reference Energy Mean Emission Levels for use in California highway noise studies complying with the FHPM 7-7-3 requirements. The methods and criteria used to accomplish the primary objective are consistent with FHWA-DP-451R(4) and FHWA-OEP/HEV-78-1(9). The orignal objective was later expanded to include uphill heavy truck noise emission levels on grades up ,to +7%.

There were some secondary objectives in this study:

'Verification of the inference from the four-state study that vehicles in California can be categorized in three acoustic source groups to represent the State's entire vehicle population without inti-oducing significant errors in noise predictions.

'Examining the effects of hard and soft site characteristics (as defined by FHWA RD-77-108(3)) on noise emission levels measured at a 50-foot reference distance.

'Studying near and far field (defined in FHWA RD-77-108(3)) single event drop-off Gates as a function of distance and vehicle group.

'Examining geographical differences in vehicle emission levels for two regions in California, representing northern and southern California.

°Examining the effects of wind on emission level measurements.

Work Plan

A total of sixteen sites were selected for the original objective, eiyht in northern California and eight in the southern part of the state. Each vehicle yroup was about equally represented in the northern and southern portions of the state.

The number of vehicle passby events measured was 3045. Because of stringent contamination control and other rejection criteria, 2734 events were actually used to determine emission levels. Of these, 46.2% were automobiles, 11.6% medium trucks and 42.2% heavy trucks (as defined in FHWA-RD-77-108(3)). Speed-dependent reference energy mean emission levels were developed for each of the three vehicle groups for constant speeds from 25 mph to 65 mph on level roaas. These emission curves are presented in Chapter XI of this report.

Six additional sites were selected later for the grade emission levels. These sites were along grades ranging from +3% to +7%. A total of 1907 heavy truck measurements were made of which 1770 were acceptable. These were used to determine the grade emission levels at sustained speeds of 10 mph to 64 mph. The grade emission levels are also presented in Chapter XI.

The secondary objectives were attained by measurements using up to 5 microphones a4 distances ranging from 25 to 100 feet from the centerline of vehicle travel and at heights of 5 feet and 10 feet.

All noise measurements were made on the A-weighted scale. No frequency spectra were measured, nor was any attempt made to verify vehicle noise centroid heights as reported in FHWA-RD-77-108(3). No measurements were made on the downhill side of the roadway. This was not included in the objectives.

11. CONCLUSIONS

California Emission Levels - Level Roads (Calveno

Automobiles. The California reference energy mean emission levels are from 0.8 dBA at 31 mph to 1.0 dBA at 60 mph higher than the national reference mean energy emission levels.

Medium Trucks. The California levels are from 0.5 dBA at 31 mph to 2.9 dBA at 60 mph lower than FHWA (national) levels.

Heavy Trucks. The California levels are from 0.2 dBA higher at 31 mph to 2.8 dBA lower at 60 mph than FHWA levels.

Because of the importance of heavy truck volumes in noise predictions, the net effect of the above three findings is a lower predicted noise level of about 2 dBA for average traffic mixes.

California Heavy-Truck-On-Grade Emission Levels (Calgrade)

Grade Dependency. For a given speed or speed class, no direct grade dependency could be detected in the measured noise levels for the range of grades studied (+3% to +7%). This paradox can probably best be explained by the following. Sustained uphill truck speed is governed by both grade and load. Trucks traveling at the same maximum sustained speed must carry lighter loads on steeper grades and heavier loads on lesser grades. For a particular speed, the probable increase in noise level due to a steeper grade will be offset by the lighter loads prevalent at that speed. The degree to which load and speed offset each other could not be determined experimentally because the truck weights were not known.

Speed Dependency. Although noise emission levels of heavy trucks lumbering up-grade were apparently not grade dependent, they displayed a definite speed dependency. A second order polynomial curve (noise energy vs. $\log_{10}$ speed) provided the best fit with data collected at each grade site.

Uphill Heavy Truck Speed Distributions. As was expected, a variety of truck speeds was observed at each grade site. Unlike truck speeds on level roads which were largely unaffected by loads at cruise speeds, the uphill heavy trucks were strongly affected by loading, creating wide ranges of observed truck speeds. Average speeds decreased as the percentage of grade increased. The observed speed distributions generally appeared to fit typical distributions of trucks on grades in California(10).

On-Grade Reference Energy Mean, Emission Levels. Because of the observed lack of a direct, dependency on grade, one speed dependent heavy truck noise emission curve, valid for +3% to +7% grades, was developed (see Chapter XI). The effects of grade and load are implicit in the estimated truck speed assigned by the user. Using typical average Speeds for grades of +3% to +7% in 1% increments, a comparison was made between the California Heavy-Truck-On-Grade Noise (Calgrade) Reference Energy Mean Emission Levels and the NCRHP 117 grade corrections applied to Calveno heavy truck curve. For grades of +3% to +5% Calgrade is higher by 1.6 dBA at +3% to 0.5 dBA at +5%; for grades of +6% and +7% Calgrade is lower by 0.8 dBA at +6% to 2.6 dBA at +7%. Ideally, the Calgrade curve should be integrated over an entire truck speed distribution, rather than using the average speed, since Calgrade is a second-order polynomial with a "sag" at about 25 mph and high values at 10 mph and 65 mph. Using typical speed distributions, predictions based on average speeds will generally be from 0.1 to 0.5 dBA lower than those based on

integration of the entire speed distribution. Default values including these integrations are given in Chapter XI.

Acoustic Source Groups

California vehicles can be categorized in three acoustic source groups: autos, medium trucks and heavy trucks, using the same definitions as in FHWA RD-77-108(2).

Hard vs. Soft Sites

The difference in noise levels between hard and soft site characteristics at 50 feet from the centerline of vehicle travel, averaged 2.0 dBA for autos, 1.9 dBA for medium trucks and 1.6 dBA for heavy trucks. Because of the many variations in site characteristics encountered in the sixteen measuring sites, the California emission levels provide a balance between hard and soft site noise levels at 50 feet that guarantees accuracies of well within ±1 dBA for all but the most extreme site conditions.

Near and Far Field Noise Drop-Off Rates

In both near (less than 50 feet) and far (50 feet or greater) fields, site characteristics had an effect on the single event drop-off rates.

On hard sites, the near field drop-off rates were reduced to an average of 5.2 dBA per doubling of distance (DD), probably due to point source degradation close to the vehicles.

In the far field, the average hard site single event drop-off rates were 5.9 dBA/DD for the low microphones (5-foot high) and 5.2 dBA/DD for the high microphones (10-foot high). The latter

deviation from the expected 6.0 dBA/DD point source drop-off rate was probably due to greater exposure to reflections from the roadway.

On soft sites, the near field point source degradation effects on drop-off rates was more than offset by excess ground attenuation. The drop off rates averaged 7.0 dBA/DD at a height of 5 feet.

In the far field, the average soft site drop-off rate for single events was 7.9 dBA at 5-foot heights and 6.8 dBA at 10 feet, indicating that soft site characteristics still affect noise levels at 10 feet above the ground.

Geographical Differences

There appeared to be no differences between northern and southern California for autos and medium trucks. Heavy trucks appeared to be louder in Northern California by up to 2 dBA. The California emission curve for heavy trucks, however, provides a balance guaranteeing accuracies within ±1 dBA in most locations in California.

Wind

For winds of 12 mph or less, direction had no apparent effect on measurements at 50 feet. For opposite cross wind (90° to roadway) directions with speeds between 6-12 mph there appeared to be a statistically significant diffference at 100 feet of 3 dBA in noise levels generated by auto$. This difference could have been caused by wind direction, site variation, or both. It was not possible to separate individual contributions by each. No differences were detected for medium and heavy trucks at 100 feet.

III. RECOMMENDATIONS

This report makes the following recommendations:

'The California Vehicle Noise (Calveno) Reference Energy Mean Emission Levels should be used in California for highway noise predictions in new studies effective as soon as possible after FHWA approval.

'Computer programs should have an option for either National or California emission levels to allow completion of studies already in progress.

The above recommendations were implemented after FHWA approval of the interim report(1) and hake been in use since March 1985 in California.

'The California Heavy-Truck-OD-Grade Noise (Calgrade) emission levels should be implemented fop use in California as soon as possible after FHWA approval. Calgrade should be used for uphill heavy trucks, on grades ranging from +3% to +7%, at free flowing sustained speeds. For grades less then 3%, straight-line interpolation between level and 3% noise emission values is recommended.

'California vehicle noise emission levels should be updated periodically to account for changes in vehicle fleets. These update efforts do not have to be as extensive as those presented in this report.

'Further research is recommended in line source drop-off rates as a function of distance, height, terrain, wind speed and wind direction. These variables have a significant effect on noise measurements and prediction results.

IV. IMPLEMENTATION

In March 1985, following approval of the interim report(1) by tne FHWA, the California Vehicle Noise (Calveno) Reference Energy Mean Emission Levels presented in Chapter XI of this report were programmed into all Caltrans computer versions of the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The National Reference Energy Mean Emission Levels will remain available to allow completion of noise studies already in progress.

A memorandum was sent to all Caltrans districts advising concerned environmental and project development personnel of the changes.

Immediately following FHWA approval of this final report and/or the California Heavy-Truck-On-Grade Noise (Calgrade) Reference Energy Mean Emission Levels presented in Chapter XI of this report, Calgrade will be programmed into all Caltrans computer versions of the FHWA Highway Traffic Noise Preaiction Model (FHWA-RD-77-108).

A memorandum will be sent to all Caltrans districts advising concerned environmental and project development personnel of the changes.

V. BENEFITS

Calveno

At the outset of this study, benefits could not be estimated in terms of dollar savings. There were three possible outcomes for the California emission level results. First, the levels could have been the same as the national emission levels. In this case, the benefit would have bqen the reassurance that the levels used for noise predictidn and barrier design were accurate.

A second outcome could have beqn that the California emission levels were higher than the national levels. There would not have been any benefit to Caltrans or FHWA in this outcome, at least not directly translatable into dollars. Higher predicted noise levels would result in higher barriers and greater costs. Affected residents, however, would benefit from additional noise reductions.

The third outcome, lower California emission levels, would obviously translate directly into dollar savings for Caltrans and FHWA resulting from reduced mitigation measures.

The benefit common to all three outcomes is the improved accuracy of the model, thereby assuring both increased confidence in the model results, and a higher level of service to the public.

As the conclusions indicate, the third outcome - that of lower California truck emission levels than national levels - occurred.

It is, therefore, not entirely fair to credit the benefit in barrier savings to the design of this study. The benefits, however, may be viewed as incidental to the search for increased accuracy in the model.

For average traffic mixes and speeds of 55 mph predicted noise levels should be approximately 1 to 2 dBA lower using the California emission levels. To translate this into dollar savings, several items need to be considered. Firstly, retrofit barriers for existing freeways will not be affected by the lower emission levels, due to the currerht Caltrans practice of calibrating the model with existing noise measurements.

Secondly, Caltrans Noise Barrier Design Information Bulletin No. 58(11) requires a barrier line-of-sight (LOS) break between an 11.5-foot truck stack and 5-foot receiver. The actual height of the LOS break depends on the roadway-barrier-receiver geometry. For average, at-grade highway conditions, the break height lies between 8 and 10 feet.

Finally, the acoustical barrier design also depends on traffic mix and geometry.

For future barriers along proposed new highway alignments where model calibration is not possible, barrier cost savings using California emission levels could result in savings of 8200,000 per mile for at-grade sections. The estimate is based on typical traffic mixes at 55 mph, at-grade section, barrier to equivalent noise source distance of 50 feet and barrier to receiver distance of 50 feet. A noise wall designed to be 13 feet high with national emission levels could be reduced to approximately 10 feet using California emission levels to achieve the same predicted noise level behind the barrier. In some marginal cases it is possible that a barrier might be entirely eliminated.

Higher predictions of 1 to 2 dBA with national emission levels are consistent with average overpredictions of 3 to 4 dBA reported in a previous Caltrans study(8).

Calarade

For speed distributions associated with 6% to 7% grade, noise predictions using Calgrade will generally be up to 2.6 dBA lower than those based on Calveno with NCHRP 117 grade corrections. Noise barrier designs based on the Calgrade predictions would be about 1 foot lower if the barrier were located on the uphill-bound side of +6% to+7% grades resulting in a saving of approximately $50,000/mile. On the other hand, Calgra'de would result in an increase of approximately the same amount for +3% to +5% grades. It may, therefore, be concluded that no significant cost savings or increases will be realized from implementing the Calgrade curve.

The true benefit in this case is the increased accuracy and greater confidence in predictions, resulting in more reliable noise barrier design procedures.

VI. INSTRUMENTATION

All sound level meters (SLM) used in this study met the requirements of Type I Precision SLM per ANSI S1.4, 1983 (12). The SLM were connected to a datalogyer specifically designed for the California Transportation Laboratory,

The datalogger has sixteen ahannels which may be selectively activated to receive up to sixteen DC output signals from SLM. The signals are then converted by the datalogger's microprocessor into continuous, time-varying noise signals which are digitally displayed and updated at short time intervals depending on the "slow" or "fast" response settinys. The datalogger has two mode settings: "standby" and "sampling". In the "sampling" mode the dataloyyer stores one sample per activated channel per second in the microprocessor. The stored values are used at the end of each sampling period to derive noise descriptors and statistical values. During sampliny, an "omit sample" button may be depressed to exclude any noise contamination such as barking dogs, sirens or aircraft noise,

At the end of each noise megsurement period, the dataloyyer prints out the channel number, date, site number, time sampling started, time sampling ended, number of samples lost (due to "editing" during measurement), L_{eq}, L_{10}, L_{50}, a histogram of noise levels vs percent frequency, stanaard deviations, skewness, and kurtosis for each channel.

The dataloyyer also has the capability to measure maximum noise levels in either standby or sampliny mode while a "peak" button is pressed. Upon release of the button, the maximum noise level received by each channel while the peak

button was depressed, is printed with the date, site number, time, and elapsed time of the single event. The dataloyyer was used in this mode during this study.

A 50-foot reference microphone (mic 2) and SLM were also connected to a graphic level recorder (GLK). The GLR was used as a "valid peak" evaluation tool as will be discussed in the Field Measurements chapter.

Table VI-1 lists the instruments used in this study. Figure VI-1 shows the instrument setup.

Table VI-1

INSTRUMENTS USED IN THIS STUDY

Sound Level Meters

5 Bruel & Kjaer Type 2218 Precision SLM

Microphones

5 Bruel & Kjaer Type 4165 1/2" Microphones

Graphic Level Recorders

1 Bruel & Kjaer Type 2306 Portable GLR

Calibrators

1 Bruel & Kjaer Type 4230 1000 Hz, 94 dB Calibrator

Noise Data Acquisition System

1 ea. Dataloyyer Microcomputer made to specifications prepared by the Transportation Laboratory; the unit was manufactured by James Cox & Sons, Inc., Colfax, California, and Walt Winter of Engineering Logic, Sacramento, California.

Miscellaneous

1 ea. Range Master 715 (radar gun); Decatur Electronics, Inc. Wind Measuring Instrument; Belfort Instument Company

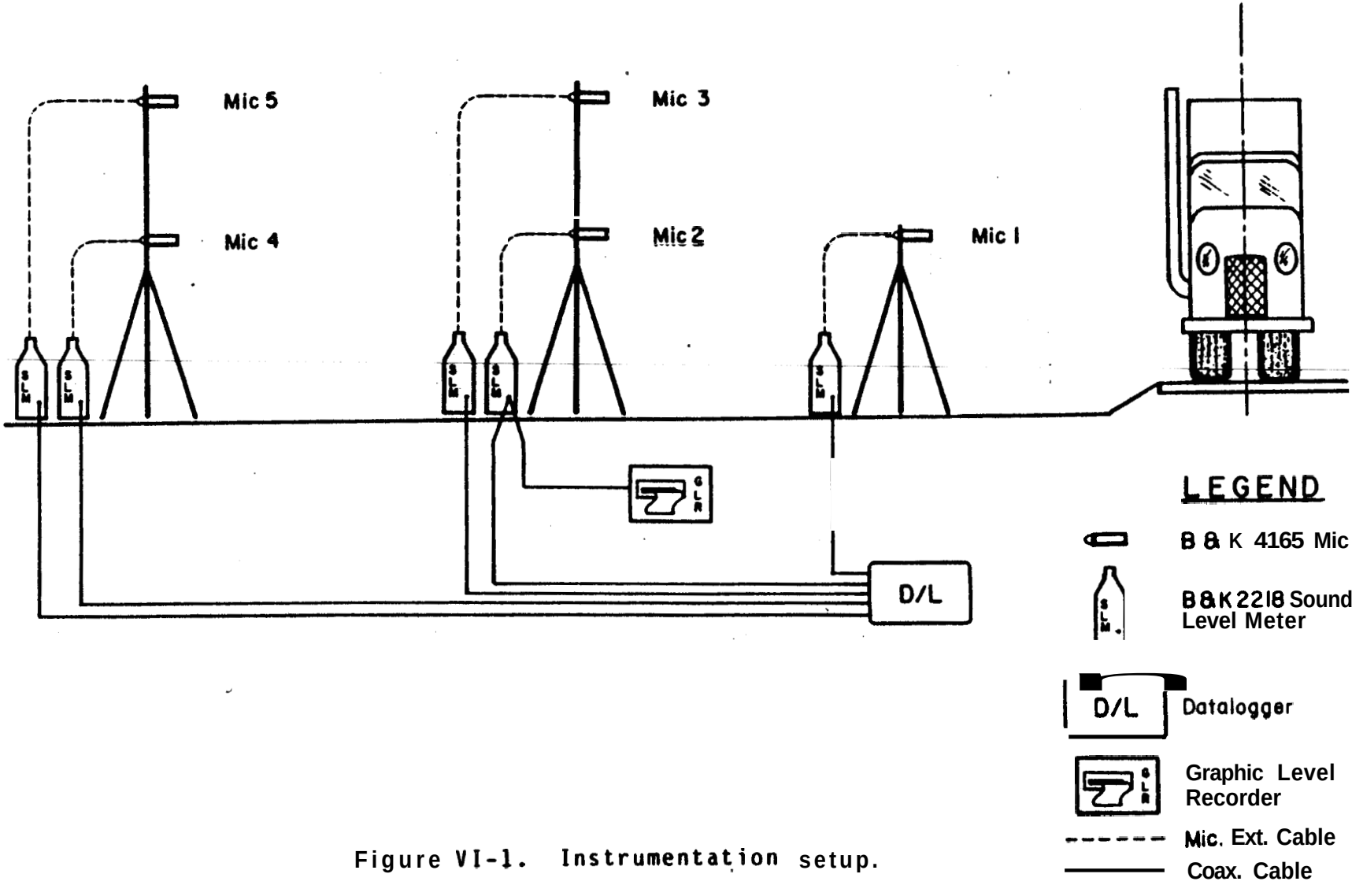


Figure VI-1. Instrumentation setup.

The SLM datalogger system was calibrated before and after each measuring period at each site by a field calibrator. The calibrator was periodically calibrated at the Caltrans Transportation Laboratory (TransLab) in Sacramento. TransLab has the facilities and instruments for performing sound equipment calibrations traceable to the National Bureau of Standards in Washington, D.C., via two Bruel and Kjaer 4160 one-inch laboratory standard microphones. These microphones are sent alternately to NBS every six months to insure the availability of a recently calibrated standard microphone at the TransLab.

VII. SITES

Site Selection and General Requirements

All selected sites for this study were in conformance with emission level site criteria set forth by FHWA-OEP/HEV-78-1 (9) and FHWA-DP-45-1R(4). In addition to these physical criteria, the following general requirements were strived for during the selection process:

1. Adequate representation of hard and soft sites as defined by FHWA-RD-77-108(3).

2. Adequate geographical representation of vehicles.

3. Adequate speed representation.

With the exception of requirements 1 and 2, the six yrade sites followed the same criteria and requirements described above. All grade sites conqisted of compacted, uniformly graded dirt. They were judged to have site characteristics of some what less reflectivity than hard sites. They were typically large emeryency turnouts. All yrade sites were located along major interstate or state freeways. Traffic moved at free flowing speeds averaging 55 to 60 mph on the level approaches to the grades. The sites were located far enouyh uphill to allow truck speeds to decelerate to a sustained "crawl" speed determined mainly by load and yrade. Distances from the bottom of the grade to the site ranged from 1 mile for the 7% grade to 2 miles for the 3% yrade. There were no other constraints on truck speeds such as lane merging, restrictive speed limits, or roadway construction.

These site criteria and requirements will be discussed in greater detail.

Physical Criteria. The following physical criteria were imposed on the sites:

1. The site shall be open without obstacles or large reflecting surfaces within 100 feet of either the vehicle path or microphone positions.

2. The ground surface at the microphones shall be no more than 2 feet above or below the roadway elevation or the plane of pavement (if the cross slope, crown or' superelevation is significant).

3. The ground surface elevatipns along a line perpendicular to the roadway and passing through all microphones shall not vary more than 2 feet parallel to the plane of pavement.

4. The ground within the measurement area may be hard or soft as defined in FHWA-RD-77-108(3).

5. The roadway pavement shall be either concrete or asphalt concrete, dry, and in good condition.

6. The site shall not be near other significant noise sources such as heavily travelled frontage roads, ramps, construction, aircraft, etc.

7. The site shall not be near intersections, lane mergings or any other features that would cause traffic to slow down or speed up. Traffic has to pass at constant speed.

8. Other criteria are discussed in Chapter VIII, Field Measurement Methodology, und'er Typical Instrument Set Ups.

Hard and Soft Site Representation. Of the sixteen level sites selected, five were considered hard sites (sites 2, 9, 11, 12, 14), and eleven soft (sites 1, 3, 5, 6, 7, 10, 15, 16, 17, 18, 19). The effects of hard vs. soft sites on noise levels measured at 50-foot reference distance will be discussed in Chapter X, Data Analysis and Results.

Geographical Representation. California is a large and diverse state with many different types of traffic. Truck traffic, for example, consists of various types: inter-state, urban industrial, rural agricultural, etc. In order to get representative samples of the state's traffic, a few samples were taken at many sites rather than the opposite.

In California, the FHWA Highway Traffic Noise Prediction Model is used mainly with higher speed traffic in urban and suburban regions. Geographical representation was therefore concentrated on these regions. Adequate high speed representation of automobiles and heavy trucks was obtained by sampling in the following areas:

1. Sacramento and vicinity.
2. San Francisco Bay area.
3. Los Angeles/Ventura area.
4. San Diego and vicinity.
5. San Bernardino/Riverside area,

Site selection was limited to the outskirts of the above urban regions to avoid congested traffic conditions.

Low speed traffic and all medium trucks were not necessarily represented geographically because of the relative

difficulty in obtaining enough samples. Low constant speed traffic was generally difficult; to find. Medium trucks were also relatively scarce.

Site Locations and Description?

Selected noise sites were numbered sequentially, in the order of measurement. A total of nineteen level sites were originally selected. However, three sites - sites 4, 8 and 13 - were not used. Site 4 wag a Caltrans test site at the California Highway Patrol Academy. Some limited passby noise measurements were made for another research project at this site, using a medium truck and auto at various speeds. it was decided *not* to include the data in this study because the single medium truck and auto were not representative of the California vehicle population.

The sequential number at site 8 was assigned just before measurement. Because *of* adverse weather conditions, no measurements were made at site 8. Subsequent measurement attempts were also foiled by inclement weather.

Measurements were made at site 13 in the Mojave Desert. Later it was discovered that the roadway is on a 3% grade. This fact went unnoticed at first because the entire desert floor in the area is along an average 3% incline. Profile elevations taken after the noike measurements exposed the gradient.

Although sites 4, 8 and 13 were eliminated, the remaining sites were not renumbered to avoid confusion and maintain correlation with the original data. In addition to the sequential numbers, the sites were also given names.

The six grade sites were numbered 20, 21, 22, 23, 23A and 238. The respective grade percentages were: 6.0%, 7.0%, 3.0%, 4.5%, 5.6%, and 4.2%.

General site locations are shown in Figure VII-1, followed by detailed location descriptions in Table VII-1. Cross sections, layouts and area maps are shown in Appendix A.

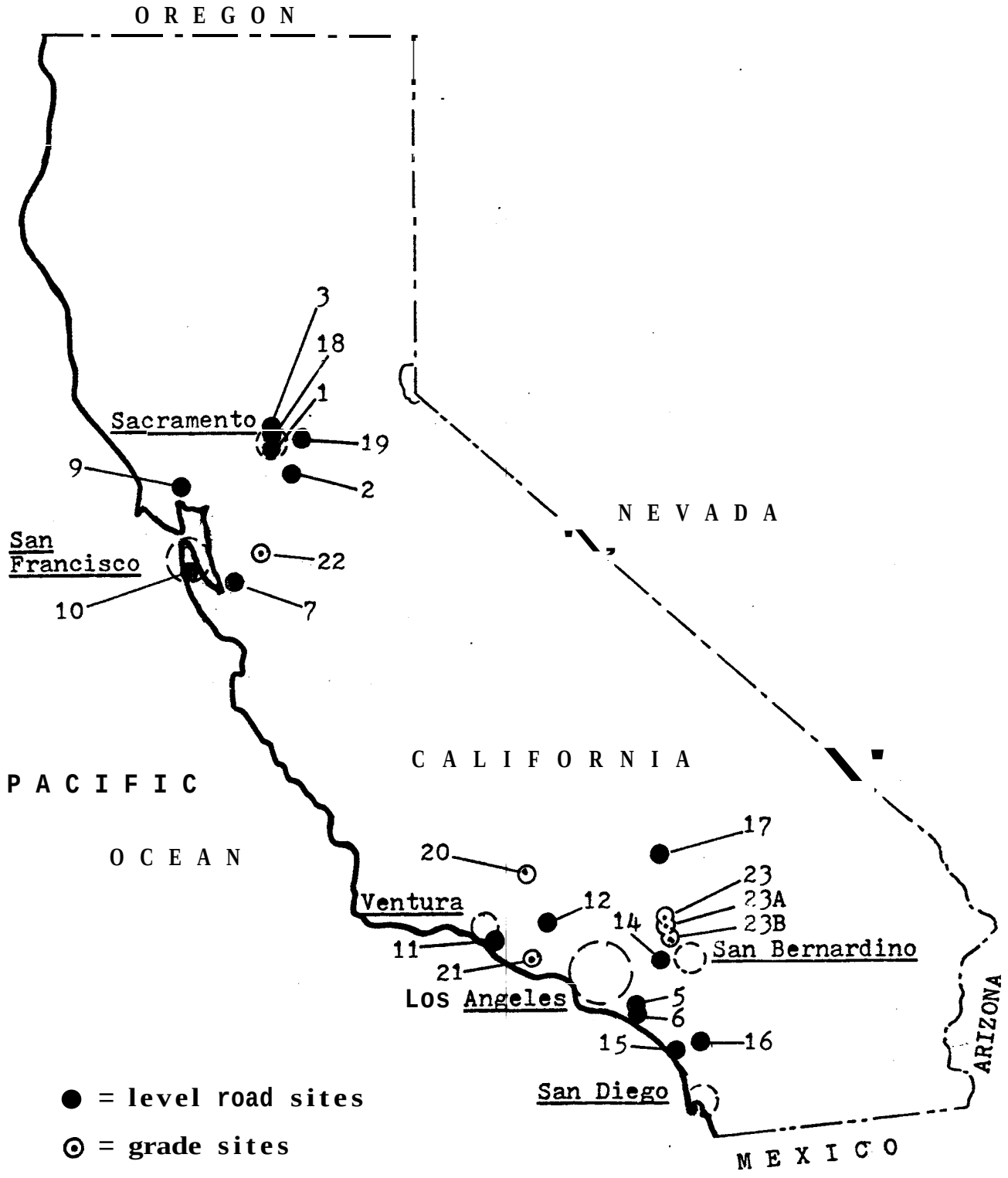


Figure VII-- I. Locations Of Noise Measurement Sites.

TABLE VII-1 SITE LOCATIONS

SITE I.D.		SITE LOCATION						
No.	Name	Dist.	County	Route, Street	P.M.	Description	Date(s) Measured	Hard or Soft
1	Freeport	3	Sac	5	14.7	Southbound 1-5, 1.5 mi. south of Meadowview/Pocket Rd. S. Sacramento.	8-17-82	Soft
2	Mingo	3	Sac	99	5+	Northbound Rte 99, 0.5 mi. north of Mingo Rd., at frontage road cul-de-sac; approx. 4 mi. north of the town of Galt.	8-18-82	Hard (Dirt & Pavement)
3	Elkhorn	3	Sac	Elkhorn Bl.	-	Eastbound Elkhorn Bl, south side, 0.5 mi. east of Rte 99, 200 ft east of a dirt road; approx. 10 mi. northwest of Sacramento.	9-21-82 9-22-82 9-23-82	Soft
4*								
5	Barranca	7	Ora	Barranca Rd.	-	South-eastbound Barranca Rd, south-west side, 0.3 mi. northwest of Culver Dr.; approx. 1 mi. north of 1-405; City of Irvine.	10-27-82	Soft
6	Michelson	7	Ora	Michelson Dr.	-	Eastbound Michelson Dr., south side, 100 ft east of Seton Rd., 100 ft west of Elmtree Ln; approx, 0.6 mi. east of Culver Dr., 0.3 mi. south of 1-405, Irvine.	10-28-82	Soft
7	Mission	4	Ala	680	1.3	Southbound 1-680, 1.1 mi. south of Mission Rd. (south), 1.1 mi. north of Scott Rd., approx 3 mi. north of Milpitas.	1-10-83	Soft

* = Not Used (see text for reasons)

TABLE VII-1 SITE LOCATIONS (Con't.)

SITE I.D.		SITE LOCATION						
No.	Name	Dist.	County	Route, Street	P.M.	Description	Date(s) Measured	Hard or Soft
8*								
9	Weigh-Station	4	Son	37	2.51	Eastbound Rte 37, south side, 0.5 mi. east of Lakeville Rd., at old weigh-station, approx. 6 mi. east of Rte 101 and Novato.	1-11-83	Hard (Pavement)
10	Hills-borough	4	SM	280	15.1	Southbound I-280, 1 mi. north of Black Mountain and Hayne Rd. in Hillsborough	1-12-83	Soft
11	Kimhall	7	Ven	126	2.8	Eastbound Rte 126, 200 ft± east of Kimball Rd. overcrossing, City of Ventura.	2-8-83	Hard (Pavement)
12	Indian Dunes	7	LA	126	3.7	Eastbound Rte 126, south side, 2.1 mi. west of 1-5, 0.4 mi. west of bridge No. 53-93 (Castaic Creek), 3.7 mi. east of Ventura Co. Line.	2-9-83	Hard (Dirt)
13*								
14	San Sevaine	8	SBd	15	7.68	Southbound 1-15, 5.3 mi. north of 1-10, at bridge No. 54-9641-San Sevaine Wash, 0.4 mi, south of Rte 30, in Etiwanda.	2-11-83	Hard (Pavement)
15	Oceanside	11	SD	5	59.4	Northbound I-5, at rest area, large space between 1-5 and rest area, 6 mi. north of Rte 76 and Oceanside.	2-15-83	Soft

* = Not Used (see text for reason)

TABLE VII-1 SITE LOCATIONS (Con't.)

SITE I.D.				SITE LOCATION				
No.	Name	Dist.	County	Route, Street	P.M.	Description	Date(s) Measured	Hard or Soft
16	Half Fifteen	11	SD	15	R48.0	Southbound I-15, 1.5 mi, north of Rte 76 overcrossing, approx. 16 mi. north of Escondido.	2-16-83	Soft
17	Kramer Junction	8	SBd	58	6.8	Eastbound Rte 58, south side 1.4 mi. of Rte 395, at entrance of dirt road; at old wood post: "State Hwy 466".	2-17-83	Soft
18	Richards	3	Sac	Richards Bl.	-	Westbound Richards Bl, north side, 0.05 mi. west of N. 3rd St. and 0.2 mi. east of 1-5, in North Sacramento.	8-30-83 1-19-84	Soft
19	Sunrise	3	Sac	Sunrise Bl.	-	Northbound Sunrise Bl., 0.3 mi. north of White Rock Bl. east side, 1.0 mi. south of Rte 50, near Rancho Cordova.	2-1-84	Soft
20	Grapevine(+6%)	6	Ker	5	6.8	Southbound I-5, west side, 3.8 mi. south of S/B Grapevine exit, north of Fort Tejon.	8-14-84 8-15-84	Soft/Hard
21	Conejo (+7%)	7	Ven	101	10f-	Southbound Rte 101, 3/4 mi.± southeasterly of Camarillo Springs.	12-11-84 12-13-84	Soft/Hard
22	Altamont(+3%)	4	Ala	580	6.5±	Eastbound I-580, south side, 0.4 mi. west of N. Flynn Rd.	1-8-85 1-10-85	Soft/Hard
23	Cajon (+4.5%)	8	SBd	15	R25.2	Northbound I-15, cast side, 11.4 mi. northerly of jct. 1-15 & I-215	1-15-85	Soft/Hard
23A	CajonA(+5.6%)	8	SBd	15	R24.2	Northbound I-15, southeast side, 10.4 mi. northerly of jct. I-15& I-215.	1-29-85	Soft/Hard
23B	CajonB(+4.2%)	8	SBd	15	R14.91	Northbound I-15, northeast side, 1.1 mi, northerly of jct. I-15&I-215.	1-30-85	Soft/Hard

VIII. FIELD MEASUREMENTS

General Approach

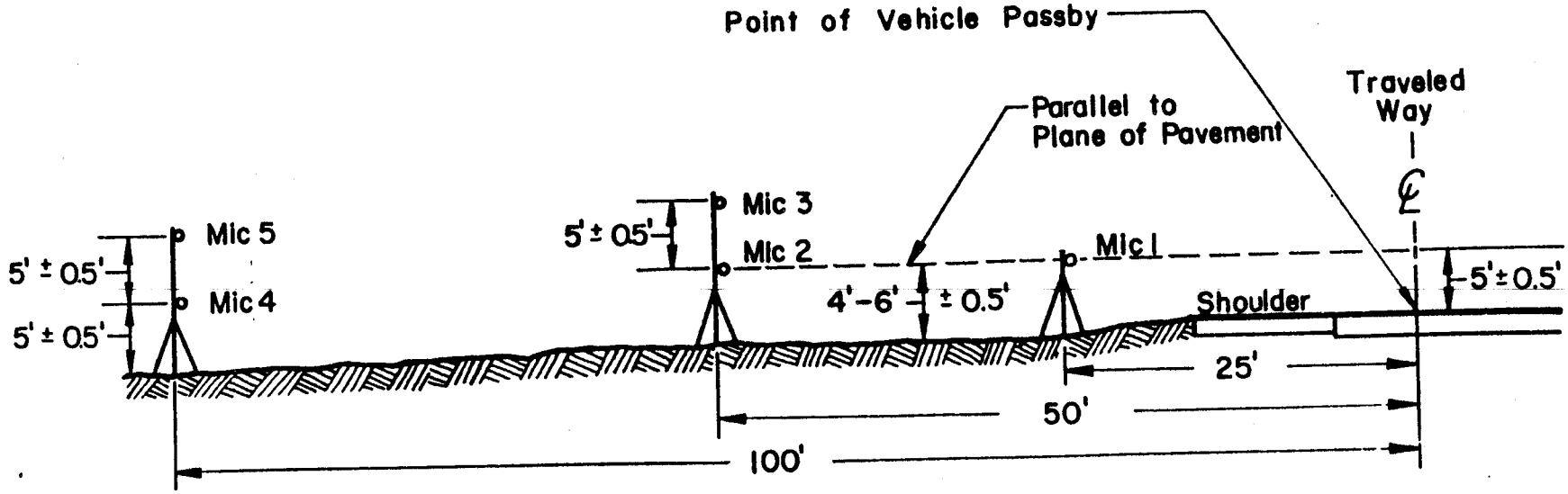
In the interest of safety, at least 2 persons were required to perform field measurements near the highways. Appendix B covers the general safety rules followed during measurements.

The field measurements consisted of three operations: 1) vehicle identification and speed measurements, 2) A-weighted noise measurements, and 3) meteorological measurements. The first operation was performed by a vehicle observer, the last two operations by an instrument operator. All measurement procedures and criteria reported in this chapter were consistent with FHWA-OEP/HEV-78-1(9) and FHWA-DP-45-1R(4).

The following sections discuss the instrument setups, measurement procedures and criteria used in this study.

Typical Instrument Setups

Where space and other conditions permitted the use of five mic's and SLM's, the typical microphone setup shown in Figure VIII-1, was used to measure highest noise levels of individual vehicles. These were assumed to occur when vehicles crossed the point closest to the mic's, called the "Point of (Vehicle) Passby". Figure VIII-1 also shows typical site cross section and setup criteria, including a mic numbering convention used throughout the study, distances from the centerline of vehicle travel and mic height criteria. Mic height criteria were obviously linked to cross section criteria discussed in the preceding chapter. Nine level sites (Nos. 1, 2, 5, 7, 11, 12, 15, 16, 17) had



*Three mic setup is identical, except for elimination of mic 's 4 and 5

Figure VIII-1. Typical setup, five microphones*.

the typical setup shown in Fiyure VIII-1. Of these, there was one exception, site 5. At this site, mics 4 and 5 were located 75 feet from the centerline of traveled way, instead of the typical 100 feet.

At each of the seven remaining level sites, the terrain did not allow a setup of five mic's. At these locations a setup of three mic's was used. Except for the elimination of mic's 4 and 5, the mic location criteria and numbering convention for three mic setups were identical to those shown in Fiyure VIII-1. Sites 3, 6, 9, 10, 14, 18 and 19 had a three mic confiyuration.

Of the six grade sites, four (Nos. 20 thru 23) had the three mic setup. Two of the sites (Nos. 23A and 23B) used only the reference mic at 50 feet. The latter two sites were selected for confirmation of data when preliminary analyses revealed the lack of grade dependency at sites 20 throuyh 23.

Figure VIII-2 shows a typical site layout with rnic clearances for 3 and 5 mic setups. Actual rnic heights, distances, site cross sections , and layouts at each site are illustrated in Appendix B.

The typical setup of five mic's was desiyned to:

'Include site and setup criteria set forth by FHWA-OEP/HEV-78-1(9).

°Include the 50-foot reference distance for energy mean emission level determination(3,9).

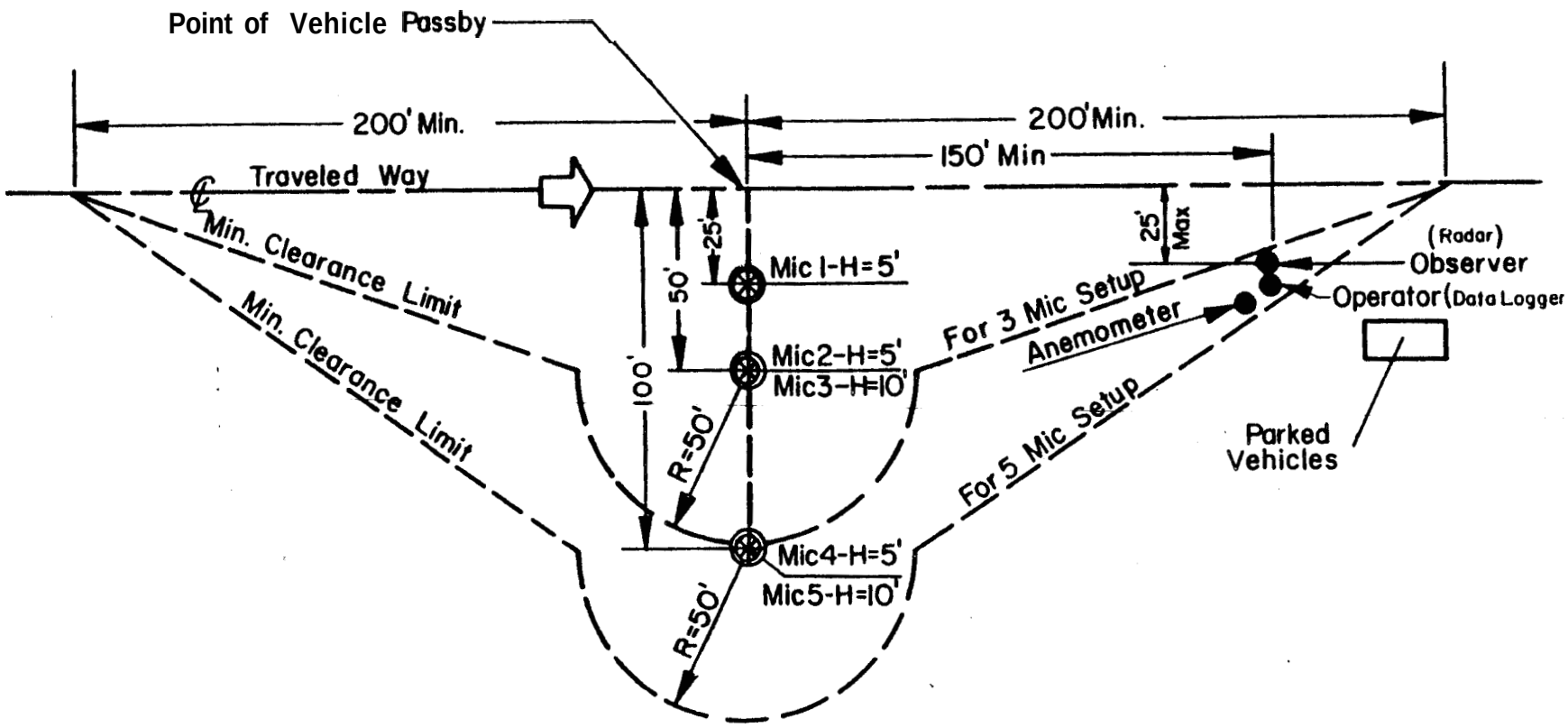


Figure VIII-2. Typical site layout and microphone locations.

"Include a 100-foot distance to measure noise drop-off rate as a function of site type (hard site vs soft site), and wind direction.

"Include average mic heights of 5 and 10 feet at both the 50- and 100-foot distances, to investigate ground attenuation.

The three mic setups at four grade sites were designed to ensure that the grade sites all had the same ground characteristics. This was checked by comparing noise level differences between mic 1 and 2, and mic 1 and 3.

Except for the elimination of the 100-foot distance (mic 4 and 5), the above items also apply to the three mic setups.

Event Quality and Contamination Control

In this report, an event is defined as the set of vehicle, noise, and environmental measurements of a vehicle passby. One of the most challenging problems in measuring vehicle noise emission levels was to insure that measurements were not significantly contaminated by background noise. For the purposes of this report, background noise is defined as the combined noise level of all on and off highway noise sources received by a microphone during a vehicle passby (event), excluding the vehicle passing by and in some instances, such as vehicle separation criteria (discussed in the next section), another designated vehicle. Contamination was especially difficult to avoid for autos because of their relatively high volumes and low noise emission levels compared to trucks.

The quality of the single passby events was maintained by using three noise contamination control strategies: 1) selecting vehicles that were adequately separated from other vehicles, 2) analyzing the GLR trace for compliance with "valid peak" criteria, and 3) audio-visual observation by the radar observer and instrument operator. Strategies number 1 and 3 were enforced in the field at the time of the measurements. Determination of "valid peaks" was done later in the office. The three strategies will be discussed in detail in the following three sections.

Vehicle Separation Criteria. Figures **VIII-3** through **VIII-6** show a progressive development of the minimum vehicle separation criteria used during field measurements.

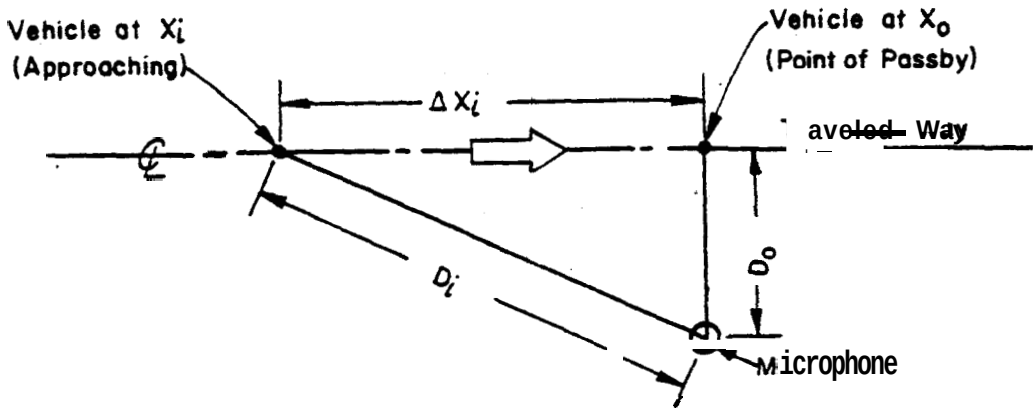
When a vehicle approaches the point of passby at a constant speed, the observed noise level at a microphone is related to the vehicle position as follows:

$$L_i = L_o - 20 \log \frac{\sqrt{\Delta X_i^2 + D_o^2}}{D_o} \qquad \text{Figure VIII-3)}$$

where: L_i is the noise level at vehicle position Xi.
L_o is the highest observed noise level at vehicle position X_o, the point of passby.
ΔX_i is the distance between position X_i and X_o.
D_o is the distance from microphone to X_o.

This relationship is based on two assumptions: 1) the vehicle is a point source, and 2) there is no ground attenuation of the noise.

Figure **VIII-4** is a plot of relative noise levels (L_o=20 dBA) vs ΔX_i for the case of D_o=50 feet. Note that this plot is representative of a point source traveling at a constant



When Vehicle is at X_o:

Highest observed noise level = L_o = Noise Emission Level

When Vehicle is at X_i :

Observed noise level, $L_i = L_o - 20 \text{ Log } \frac{D_i}{D_o} =$

$$L_i = L_o - 20 \text{ Log } \frac{\sqrt{\Delta X_i^2 + D_o^2}}{D_o}$$

(Assuming point source)

Figure VIII-3. Vehicle noise level as a function of vehicle position.

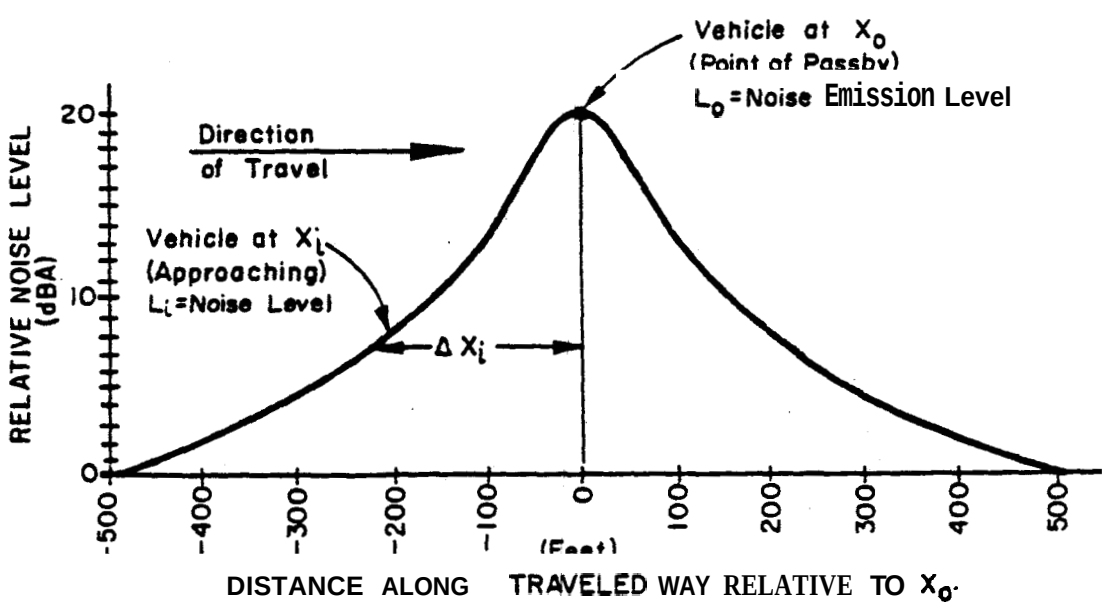


Figure VIII-4. Relative noise level vs. vehicle position [Microphone distance from ℄ travel, D_o = 50 feet).

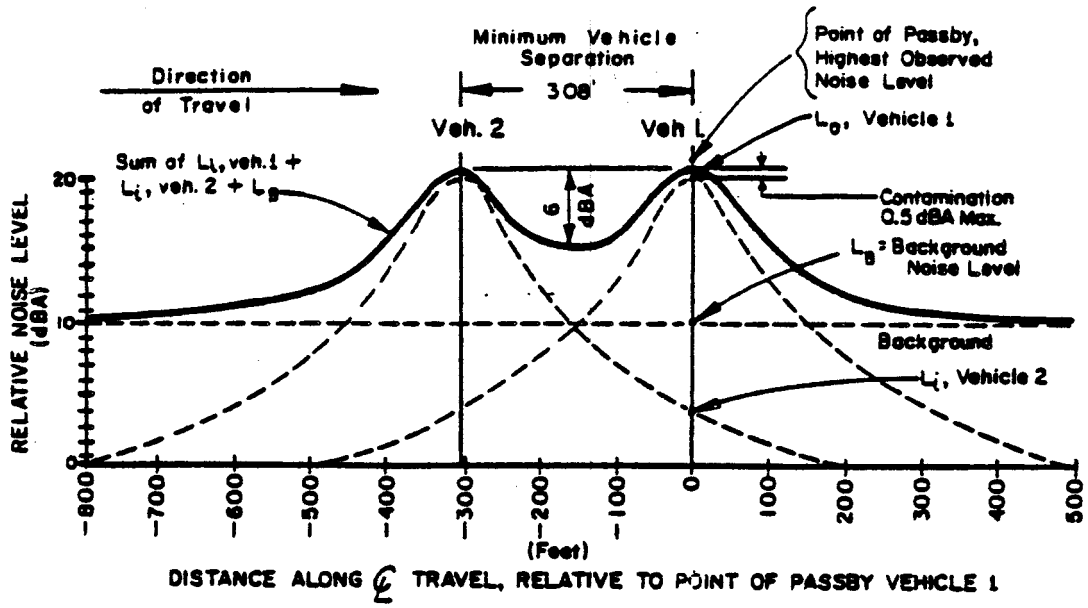


Figure VIII-5. Minimum separation between two vehicles, equal nolsc sources (L_0 = 20 dBA Rel. Noise Level), background nolsc level (L_B) = 10 dBA R.N.L. (D_0 = 50').

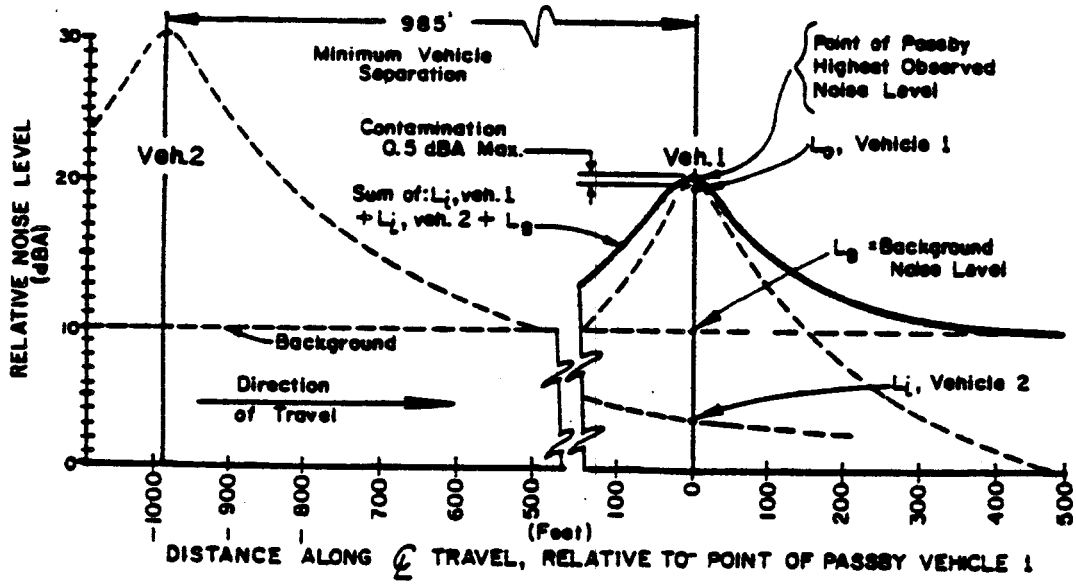


Figure VIII-6. Minimum separation between two vehicles, unequal sources (L_0 veh. 1 = 20 dBA; L_0, veh. 2 = 30 dBA, background noise level (L_B) = 10 dBA Relative Noise Level (D_0 = SO').

speed, with the microphone positioned **50** feet from the centerline of travel. This distance coincides with the reference distance of 15 meters for the National Reference Energy Mean Emission Levels per FHWA-RD-77-108(3).

The noise level vs vehicle position plot in Figure **VIII-4** was used in determining the minimum separation distances between two vehicles in two scenarios approximating conditions (Figures **VIII-5** and **VIII-6**). The first scenario (Figure **VIII-5**), illustrates two vehicles with equal noise source strengths, and a "background" noise level (L_B) of L_0-10 dBA. The two vehicles are separated by a minimum distance so that the highest observed noise 'level includes no more than 0.5 dBA contamination when vehicle **1** crosses the point of passby. Because of the symmetrical relationship between the two noise sources, the same contamination is present when vehicle 2 crosses the point of passby. A GLR documenting the events would produce a trace similar to the solid line in Figure **VIII-5** depicting the sum of L_i vehicle **1** + L_i vehicle **2** + L_B. This scenario approximates the passing of two autos without the presence of trucks, and may also be applied conservatively to the passing of two trucks. The minimum distance of 308 feet between the vehicles provides a criterion of separation when two vehicles of equal noise source are involved.

Because of uncertainties in actual background levels, and the fact that usually more than two vehicles were in the vicinity, the minimum distance criterion between the measured vehicle and any other vehicle of approximately equal source was set at 400 feet. A traffic cone placed 400' ahead of the point of passby aided the observer in estimating the minimum distance criterion in the field.

The second scenario, shown in Figure **VIII-6** involves two vehicles of unequal source strength. In this scenario, the noise source of one vehicle is 10 dBA higher than that of the other vehicle. The background noise is assumed to be 10 dBA below the lower noise source. This scenario approximates that of measuring the noise emission level of an auto while a truck is approaching. In this case, the minimum vehicle separaton should be 985 feet, or approximately 1000 feet, to avoid contamination of more than 0.5 dBA.

The observer in the field had to estimate the 1000-foot distance when the second scenario applied. Usually this did not present a problem. Most auto measurements were taken when there were no trucks in sight. In the cases where trucks were present, the observer and instrument operators made independent judgements as to the measurement quality. Because of the probable presence of considerable ground attentuation and some atmospheric attenuation over a 1000-foot distance (not included in the criterion calculation), this criterion was probably conservative.

Finally, a short discussion about the reverse of scenario 2 (Figure **VIII-6)** should be included. In this scenario the louder vehicle is measured and the quieter vehicle is in %he vicinity. If the difference between the sources is 10 dBA or greater, no separation should be necessary when two vehicles are involved. However, when the louder source is surrounded by several quieter sources, contamination may still occur. No criteria were set to cover this situation, but in general, trucks were not measured with more than two or three autos in the immediate vicinity. In most cases, trucks selected for measurement were adequately separated from autos so that few judgments were necessary.

The vehicle separation criteria used for the field measurements were all for the 50-foot microphone positions. Examination of Figures VIII-3 through VIII-6 indicate that these criteria will always satisfy the 25-foot, but not the 100-foot mic positions. However, mics 4 and 5 were not used for emission level measurements. The purpose of the 100- foot noise measurements was to determine the effects of terrain and wind. Other criteria were used to evaluate the quality of those measurements at the 100-foot distance as shall be discussed in the next section.

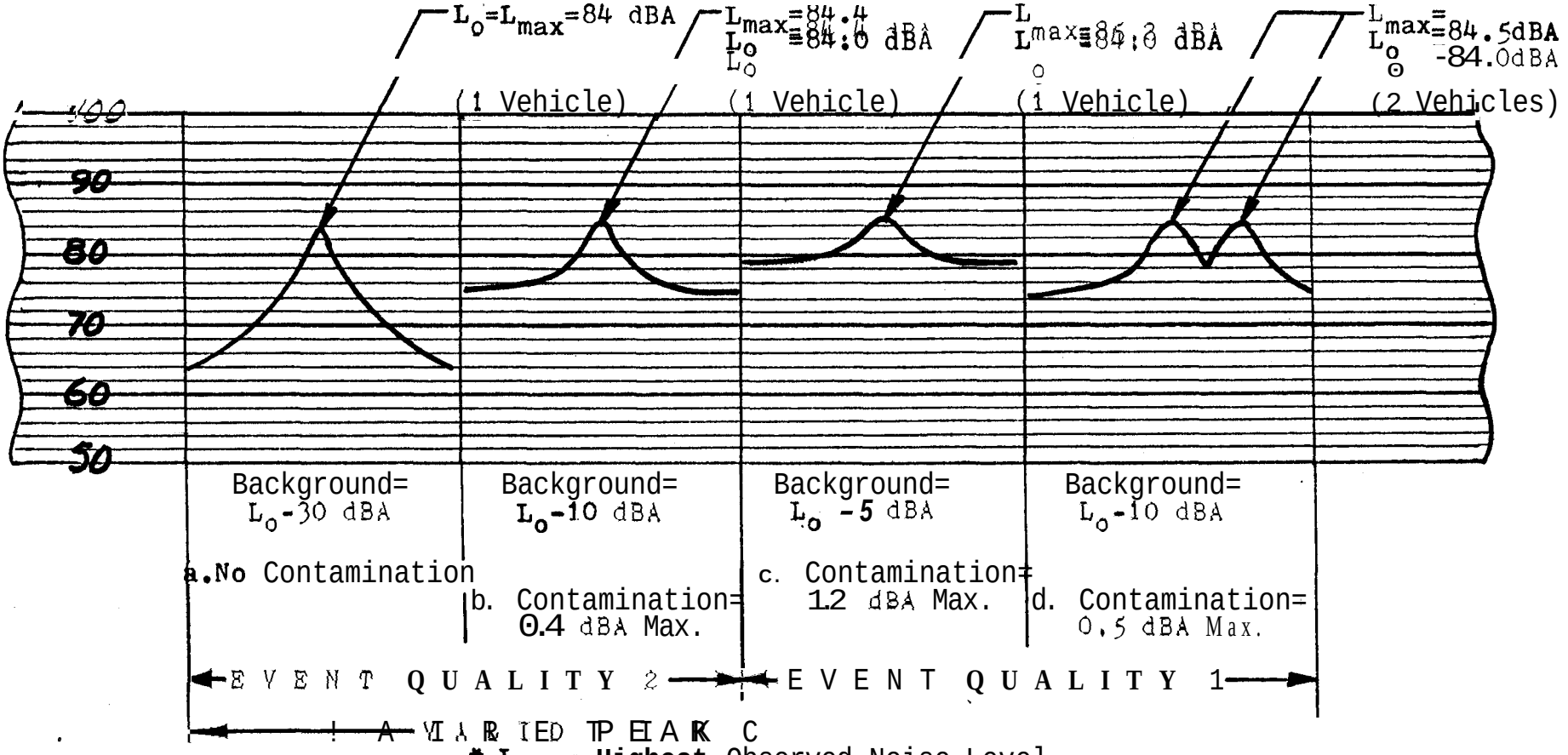
Valid Peak Criteria. Due to uncertainties in background noise levels (defined in the previous section) at the time of measurement, vehicle separation criteria by themselves were not sufficient insurance against contamination. Valid peak criteria were developed to help determine whether background noise contributed to the highest observed noise level of each event (vehicle passby). These criteria were based on a GLR ,trace of the event, recorded at 50 feet from the centerline of vehicle travel at a mic height of 5 feet (Ref mic 2 location).

In order to limit contamination to less than 0.5 dBA, the background noise levels should be at least 10 dBA lower than the h'ighest observed value. This would have been a convenient criterion to use. A study by the New Jersey Department of Transportation(13), however, suggests that accepting only peaks of 10 dBA or greater would introduce a bias toward noisier vehicles. This is especially true when background noise is relatively high. The New Jersey study used a rise and fall criterion of 6 dBA to prevent this bias, at the risk of slightly contaminating the measurement.

Figure VIII-7 shows GLK traces of four passby scenarios and their associated valid peak criteria. Scenario "a" illustrates a single vehicle passby at 54.5 mph (80 feet/sec), with a background noise level of 30 dBA or more below its noise emission level, L_o, of 84 dBA. This trace is unaltered by any background noise. Scenario "b" depicts the same single event with a steady background noise level of L_o - 10 dBA. Note that the highest observed noise level, L_{max}, is 84.4 dBA and the measurement is contaminated by L_{max} - L_o = 0.4 dBA.

Scenarios "a" and "b" comprise "event quality 2". Quality 2 events represent the least contaminated event's. They were used for all analyses, including those made for the 100 ft mic's. The criterion for quality 2 events is a peak that rises 10 dBA or more above the background noise level, measured by a SLM and GLR at a 50 ft distance and 5 ft mic height.

Scenario "c" shows contamination caused by a relatively steady background noise of L_o - 5 dBA. The contamination is 1.2 dBA above the background. Scenario "d" illustrates the trace *of* two vehicles of equal source strength, at the minmum separation distance discussed in the previous section. A steady background noise level of L_o - 10 dBA is assumed. As'shown in Figure VIII-5, the peaks are separated by a 6 dBA valley, and contamination is 0.5 dBA. Scenarios "c" and "d" were grouped into "quality 1" events. These events were used only for emission levels analyses up to and including the 50-foot microphones. Quality 1 events were not used to analyze the noise levels measured at the 100-foot distance. The criterion for quality 1 events is a peak that rises 6-9 dBA above the background. Note that minimum vehicle separation criteria are under no circumstances in conflict with the quality 1 criterion.



* L_{max} = Highest Observed Noise Level
* L_o = Vehicle Noise Emission Level
* Contamination = $L_{max} - L_o$
* When L_{max} - Background Level < 6 dBA, Event Was Rejected (Event Quality 0)

Figure VIII - 7. Valid Peak And Event Quality Criteria

Peaks that rose less than 6 dBA above background were coded event "quality 0" and later ignored in computer analyses.

Audio-visual Observation. The preceding two methods of control1ing noise measurement'contamination - the vehicle separation and valid peak criteria - were objective criteria that required a minimum amount of judgment. Rigid compliance with the criteria appeared to be sufficient insurance against contamination in most cases. In some instances, however, it was necessary to apply subjective, on-the-spot judgment to determine the quality of an event. In these instances, judgments were made through audio-visual observations, i.e., using ears and eyes: Common examples included: sudden rises in background noise during measurements, due to aircraft, nearby construction, sporadic traffic on nearby frontage roads or ramps. When these rapid background noise increases coincided with vehicle passby measurements, they sometimes blended in with GLR traces, and showed valid peaks. Contamination would have gone undetected except for the alertness of the observers during measurements.

Other Event Criteria. In addition to the three contamination control strategies described in the previous sections, there were other factors governing rejection or acceptance of events. These included, but were not necessarily limited to: change of speed during passby, sudden change in environmental conditions (e.g., wind gusts), unusual vehicles, and measurement errors. Criteria for some of these factors will be discussed in the vehicle criteria, environmental criteria, and measurement procedure sections.

Number of Events Accepted and Rejected. When an approaching vehicle was judged to be a likely event, measurement

began and a sequential number was assigned to the event. After the vehicle had passed, an evaluation was made using all previously described criteria. The data were recorded, whether the event was rejected or not. If rejected, the reason for rejection was coded on either the GLR trace, vehicle observation sheet, data logger printout or environmental data sheet. A rejection on one or more of these four data sources was treated as an event quality "0" and the event was iynored in later computer analyses. If the event was accepted it was given a quality 1, except in the valid peak evaluation, where it was assigned either a quality 1 or 2 as previously discussed. For convenience, combinations of qualities 0,1 and 2 and 0, 1 will be called event quality 0, (e.g., 2011 = 0), the combination 2111 will be referred to as quality 2, and the remaininy combination 1111 will be called quality 1.

Of the total of 3045 vehicles measured at mic 2 (50 ft reference mic), on level roadways, the following statistics were derived by quality:

Quality 2 events - 2426 or 79.7% (Accepted)
Quality 1 events - 308 or 10.1% (Accepted)
Quality "0" events - 311 or 10.2% (Rejected)

Of the above 2734 accepted events, 88.7% were quality 2 and 11.3% quality 1.

Of the total of 1905 heavy trucks measured at mic 2 (50 ft reference mic), on grades, the following statistics were derived by quality:

Quality 2 events - 1474 or 77.4% (Accepted)
Quality 1 events - 295 or 15.5% (Accepted)
Quality 0 events - 136 or 7.1% (Rejected)

Of the above 1769 acceptea events, 83.3% were quality 2 and 16.7% quality 1.

Sample Size

For the purposes of determining the sample sizes required for each major vehicle group considered for emission level curves, the following criteria were set:

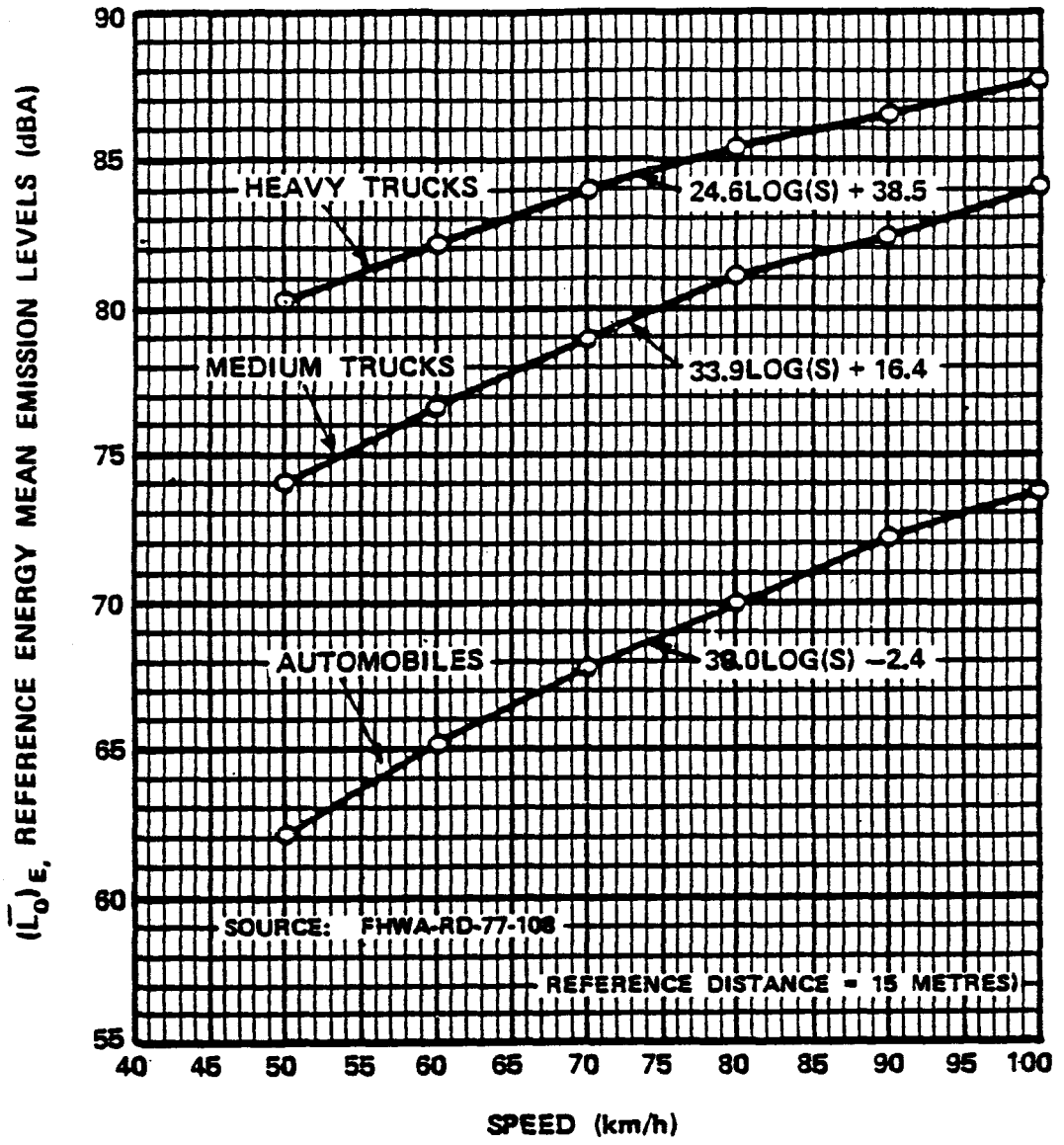
1. Total speed range from 25 mph to 65 mph.

2. Subdivision of the 40 mph range into equal sized intervals (speed classes) small enough to insure that any noise value along the curve inside the speed class is within ±1 dBA from the mean noise value in that speed class.

3. 95% confidence interval for the mean of each speed class of 1 dBA.

The National Reference Energy Mean Emission Level curves (Figure VIII-8) per FHWA-RD-77-108(3) were examined to estimate the speed class size necessary to satisfy above criterion No. 2. Due to its steep slope, the lower end of the automobile curve was selected to represent the greatest change in noise levels with speed. From 50 km/hr to 56.5 km/hr, the FHWA auto emission levels increase 2.0 dBA, or ±1 dBA from the mean level at the 53.25 km/hr center point. A 6.5 km/hr (4 mph) interval would therefore satisfy criterion 2.

The following speed classes were designed to cover the entire range of desired speeds for level roads:



LEGEND:

1. AUTOMOBILES: ALL VEHICLES WITH TWO AXLES AND FOUR WHEELS

2. MEDIUM TRUCKS: ALL VEHICLES WITH TWO AXLES AND SIX WHEELS.

3. HEAVY TRUCKS: ALL VEHICLES WITH THREE OR MORE AXLES.

National Reference Energy Mean Emission Levels as a Function of Speed

Figure VIII-8 (Extracted from FHPM 7-7-3)

Speed Class	Speed Range, mph	Speeds to Nearest 1 mph
0	<24.50	<25
1	24.50 - 28.49	25 - 28
2	28.50 - 32.49	29 - 32
3	32-50 - 36.49	33 - 36
4	36.50 - 40.44	37 - 40
5	40.50 - 44.49	41 - 44
6	44.50 - 48.49	45 - 48
7	48.50 - 52.49	49 - 52
8	52.50 - 56.49	53 - 56
9	56.50 - 60.49	57 - 60
10	60.50 - 64.49	61 - 64
	>64.49	>64

The speed classes for heavy trucks on grade were designed from preliminary data which showed that 10 mph speed intervals were sufficiently narrow to ensure that the means of the speed intervals were within ±1 dBA from the extremes. As with the level road emission levels, linear regression lines were used to estimate the maximum speed interval.

The following speed classes were designed to cover the entire range of desired speeds for heavy trucks on grades:

Speed Class	Speed Range, mph	Speeds to Nearest 1 mph
0	<10.50	<11
1	10.50 - 20.49	11 - 20
2	20.50 - 30.49	21 - 30
3	30.50 - 40.49	31 - 40
4	40.50 - 50.49	41 - 50
5	50.50 - 60.49	51 - 60
6	>60.49	>60

The minimum sample size for each vehicle group and each speed class was initially estimated from FHWA-OEP/HEV-78-1(9). According to the publication, minimum amount of samples using a 95% confidence interval of ±1 dBA around the mean should be:

Autos - 28
Medium Trucks - 46
Heavy Trucks - 37

Another method for calculating a minimum number of samples for each vehicle group and speed class is:

$$n = \left[\frac{(Z_{\alpha/2})(\sigma)}{d}\right]^2 \qquad \text{(Eq. 1)}$$

where: n = minimum number of samples required.
$Z_{\alpha/2}$ = the amount of population standard deviations from the mean, associated with a $(1.00-\alpha)x100\%$ confidence level.
α = significance level.
d = $(1.00-\alpha)x100\%$ confidence interval.
σ = population standard deviation for a vehicle group and speed class.

For d = 1 dBA and α = .05 the formula reduces to:

$$n = (1.96\sigma)^2 \qquad \text{(Eq. 2)}$$

which may be used if σ is known.

After samples have been taken the minimum required number of samples may be calculated by:

$$n = \left[\frac{(t_{\alpha/2;n-1})(S)}{d}\right]^2 \qquad \text{(Eq. 3)}$$

where: $t_{\alpha/2;n-1}$ = the amount of sample standard deviations associated with $(1.00-\alpha).100\%$ confdidence level and $n-1$ degrees of freedom.
S = the sample standard deviation.

Equation 3 was used in this study to determine whether enough samples were taken in each vehicle group and speed class. For a 95% confidence interval of ±1 dBA the equation reduces to:

$$n = [(t_{;n-})(S)]^2 \qquad \text{(Eq. 4)}$$

Table VIII-1 shows the number of events sampled (accepted events only) and the minimum required samples for each vehicle group and speed class. Note that for both autos and heavy trucks sufficient amounts of data were gathered above 32 mph in all speed classes, except for trucks above 64 mph. The mean noise levels for these speed classes are ±1 dBA at 95% confidence levels. At 32 mph and below, however, insufficient amount of data were gathered, resulting in 95% confidence intervals of yreater than ±1 dBA.

For medium trucks the minimum amount of samples required was reached only for all speed classes above 48 mph.

The above minimum sample site criteria affected the confiaence intervals for each speed class. For curve fittiny, different methods were employed for the calculation of regression 1ine confidence "bands". These wi11 be discussed in Chapter X, Data Analyses and Results.

Table VIII-2 shows that for all speed classes, except <11 mph, the number of heavy-truck-on-grade samples exceeded the minimum required.

Vehicle Types and Speed Criteria

The three venicle yroups discussed in FHWA-RD-77-108(3) are the automobiles, medium trucks and heavy trucks. They were defined as follows:

UPHILL HEAVY TRUCK GRADE EMISSION LEVELS.

1. Use default values on p. X-62 (Table X-15) for $(\overline{L_o})_E$ as a function of grade, and

2. Use Average Typical Speeds as a function of grade on p. XI-5 (Table XI-1) for "S" in:

$$L_{eq}(h) = (\overline{L_o})_E + \left(\frac{N_i \pi D_o}{S\ T}\right) + \ldots\ldots \quad \ldots\ldots$$

(Basic FHWA RD 77-108 MODEL Equation)

TABLE VIII-1

NUMBER OF EVENTS SAMPLED AND MINIMUM REQUIRED*
BY VEHICLE GROUP AND SPEED CLASS

- LEVEL ROADS -

		Autos		Medium Trucks		Heavy Trucks	
Speed Class	Speed Range (mph)	Events Sampled	Minimum Required	Events Sampled	Minimum Required	Events Sampled	Minimum Required
0	<25	3	**	1	**	3	**
1	25-28	6	**	7	**	18	50
2	29-32	21	25	8	45	37	49
3	33-36	46	37	20	50	40	32
4	37-40	33	39	15	48	34	22
5	41-44	88	34	16	31	48	20
6	45-48	92	34	19	59	77	25
7	49-52	117	36	32	23	106	27
8	53-56	258	28	69	29	233	31
9	57-60	272	31	78	23	300	21
10	61-64	220	27	44	24	212	23
11	>64	107	35	8	8	46	85
	All Speeds	1263		317		1154	

*95% confidence interval of ±1 dBA around mean of speed class.
**Unable to determine accurately.

TABLE VIII-2

NUMBER OF EVENTS SAMPLED AND MINIMUM REQUIRED*
BY VEHICLE GROUP AND SPEED CLASS

- HEAVY TRUCKS ON GRADES -
(+3% to +7%)

Speed Class	Speed Range (mph)	Medium Trucks Events Sampled	Medium Trucks Minimum Required
0	<11	2	**
1	11-20	143	30
2	21-30	539	25
3	31-40	503	27
4	41-50	325	22
5	51-60	229	19
6	>60	28	17

*95% confidence interval of ±1 dBA around mean of speed class
**Unable to determine accurately.

Automobiles - all vehicles having two axles and four wheels and designed primarily for transportation of nine or fewer passengers (automobiles), or transportation of cargo (light trucks). Generally, the gross vehicle weight is less than 4500 kg (9900 lb).

Medium trucks - all vehicles having two axles and six wheels and designed for transportation of cargo. Generally, the gross weight is greater than 4500 kg (9900 lb) but less than 12,000 kg (26,400 lb).

Heavy trucks - all vehicles having three or more axles and designed for the transportation of cargo. Generally, the gross weight is greater than 12,000 kg (26,400 lb).

These definitions were used throughout this study. However, for the purposes of confirming that vehicles can be placed in these three acoustic source groups, vehicles were identified in greater detail than the above groups. Automobiles were divided into compact and standard categories. This division was made subjectively in the field by the observer. Heavy trucks were categorized by number of axles. The subdivisions resulted in eight vehicle types which are defined in Table VIII-3.

All events were identified in the field and recorded with the passby speeds in miles per hour. The speeds were measured with a radar gun by the observer beginning at a point approximately 400 feet ahead of the point of passby, and ending just beyond the point of passby. The speed at tne point of passby was recorded. If the speed changed more than 3 mph In the 400-foot distance on level roads, the vehicle was assumed to be eccelerating or decelerating

TABLE VIII-3

VEHICLE TYPES

Vehicle Type	Designation	Definition/Description	FHWA-RD-[illegible] Designation
0	Compact Auto	Four cylinders - otherwise same as FHWA automobiles.	Auto
1	Standard Auto	Six or eight cylinders - otherwise same as FHWA automobiles.	Auto
2	Medium Truck	Same as FHWA medium trucks includes 2-axle, 6-tire buses.	Medium Truck
3	3-Axle Truck	Three axles - otherwise same as FHWA heavy trucks.	Heavy Truck
4	4-Axle Truck	Four axles - otherwise same as FHWA heavy trucks.	Heavy Truck
5	5-Axle Truck	Five axles - otherwise same as FHWA heavy trucks.	Heavy Truck
6	>5-Axle Truck	More than five axles - otherwise same as FHWA heavy trucks.	Heavy Truck
7	Miscellaneous	Vehicles not covered under types 0-6. Example: motorcycles	-

and the event rejected. A gradual 3 mph speed change in 400 feet at an average speed of 65 mph corresponds with an acceleration or deceleration of approximately 0.7 mph/sec (1.0 ft/sec^2). Abrupt changes in speed, such as a 3 mph 'change in the last 100 feet before the point of passby, were assessed subjectively on an individual basis. On grades, a stricter criterion of 1 mph maximum change in 400 feet was used to eliminate the chance of slow deceleration.

The vehicle observer was positioned 25 feet from the centerline of travel way and 150 feet beyond the point of passby. This position was chosen to insure an accuracy within 1 mph of the radar gun reading. The radar gun uses the Doppler effect and is most accurate when vehicle travels in the same line with the observer, a feat that, obviously, cannot be achieved safely. When not in line with the vehicle's path, the true speed, S_t, can be calculated from'the apparent speed, S_a, by

$$S_t = \frac{S_a}{\cos\emptyset},$$

where $\emptyset$ is the angle between line of travel and line of sight between radar gun and the target vehicle. At 150 feet or more from the point of passby and no more than 25 feet from the centerline, $\emptyset$ is small enough for S_t to approximate S_a ($S_t - S_a < 1$ mph).

Environmental Measurements and Criteria

One *of* the objectives of this project was to attempt to isolate the effects of wind on vehicle noise emission measurements and noise measurements in general. FHWA-OEP/HEV-78-1(9) and FHWA-DP-45-1R(4) do not recommend taking

noise measurements when wind speeds exceed 19 km/hr (12 mph). All measurement in this study were made at wind speeds below 10 knots (11.5 mph).

Wind speeds and direction were measured with a Belfort anemometer set on top of a 7-foot standard near the instrument operator and observer, at a distance of approximately 25 feet from the centerline of the nearest roadway. The measurements were taken between measured events and gaps in traffic to avoid turbulence from passiny vehicles.

Wind speeds were measured to the nearest 1 knot, and then grouped in three wind speed classes. The following table shows these classes:

Wind Speed Class	Range (knots)	Range (mph)	Speed Used (mph)
0	0-2.5	0-3	0
3	2.5-5.5	3-6	4.5
6	5.5-10	6-12	9

The midpoint speed was later used to compute crosswind components 90° to the roadway.

Wind directions were measured to the nearest 10° azimuth. For the purpose of this study, wind directions were oriented with 0° wind directions blowing perpendicular to the roadway from noise source to receivers (roadway to microphones). See Fiyure VIII-9 for complete azimuth orientation.

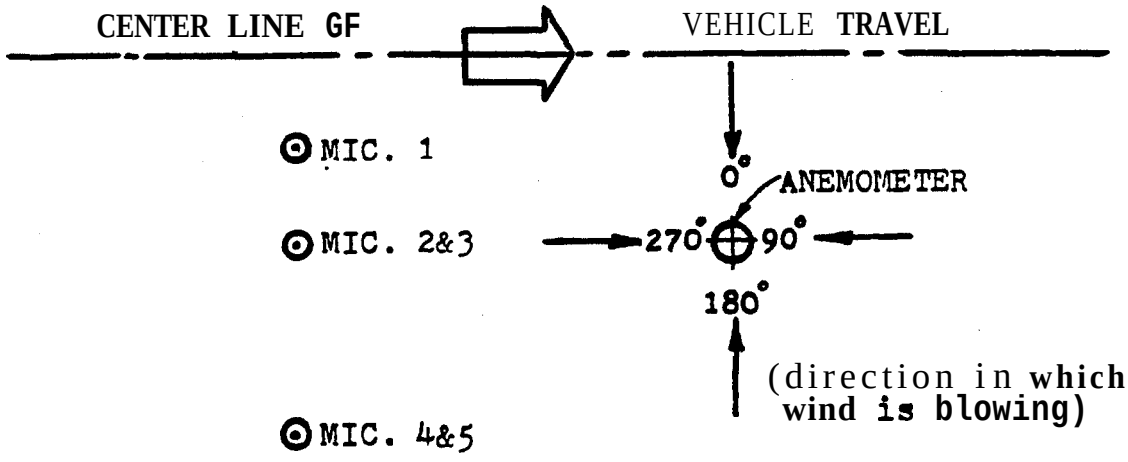


Figure VIII-9 Wind Direction Orientation

The crosswind components were calculated later by midpoint wind speed x cos (wind direction). Example: a wind speed class 3 at 250' direction would result in a cross wind component of 4.5 mph x cos (250°)=-1.5 mph. The minus sign means that the crosswind component is from receivers (mics) to source (roadway). The crosswind components thus calculated were subdivided into the following component intervals:

6 to 12 mph
3 to 6 mph
-3 to +3 mph
-6 to -3 mph
-12 to -6 mph

These intervals were later used to analyze the effects of wind on noise levels at the receivers.

Other important environmental criteria were 90% or greater relative humidity and wet pavement. No measurements were attempted under either condition.

If measurements had been made inadvertently during any of the described adverse environmental criteria, quality "0" would have been assigned to the events and the measurements would have been rejected. No rejections, however, were necessary for environmental reasons.

Measurement Procedures

After surveying the site and laying out the mic locations, the instruments were set up in accordance with the typical setups discussed previously (Figures VI-1, VIII-1 and VIII-2). The SLM's were set on "A" weighted, and "fast" response. Fast response affects the DC output to which the datalogger was connected. The SLM's/datalogger and SLM/GLR system was then turned on and field calibrated. This procedure required 2 persons, one to place a calibrator on each mic and one to read the datalogger and adjust the GLR. SLM's were adjusted to the calibrator value read on the datalogger. The GLR, hooked up to the AC output cf mic 2 SLM was then also adjusted to the value after the SLM adjustment. This procedure insured a system calibration including the datalogger and GLR rather than the SLM. Because of the separation between mics/SLM's and datalogger, radios were required for communication. Field calibration was performed after power was turned on and instruments warmed up. It was checked again before power was turned off. Once the system was turned on and Calibrated, the power was usually not turned off until the end of the day. With few exceptions, the end-of-day calibration check was within 0.2-0.3 dBA of the values at the beginning of the day. The differences never exceeaed 0.5 dBA.

After calibration, the instrument operator and vehicle observer took up positions approximately 150 feet beyond the point of passby and 25 feet from centerline, and began selecting potential events. Selection of a likely event was usually made as the vehicle approached the 400-foot marker (traffic cone) used for estimating the minimum vehicle separation distance. At the time the target vehicle passed the 400-foot marker, the instrument man activated the GLR connected to SLM and mic 2. At the same time, the vehicle observer began monitoring the target vehicle speed with the radar gun. Approximately 200 feet from the point of passby the datalogger was activated by the instrument operator. When the target vehicle reached the passby point, the observer noted and recorded the vehicle's speed and identification. A short time after the vehicle had passed the instrument operator and observer positions, the datalogger and the GLR were deactivated. The observations were all marked with event numbers. Good communications needed to be maintained between the observer and the instrument operator to avoid event numbers getting out of phase between the datalogger printout, GLR chart and the vehicle observer sheet. Wind speeds and wind directions were observed by the instrument operator between events. Frequent observations guaranteed detection of wind shifts. If either wind speed or wind direction changed, the event number and the new wind data were recorded. Relative humidity measurements were taken only when there was uncertainty that the 90% criterion could be met, for example, in fog.

Figures VIII-10 through VIII-15 show examples of a vehicle observation sheet, GLR chart, datalogger printout and site/environmental data sheet.

CALIFORNIA VEHICLE NOISE EMISSION LEVELS - CALTRANS, TRANSLAB

VEHICLE OBSERVATION SHEET

SITE NO: 16 (1101S001) DATE: 2/16/82 NEW ☒ REPEAT ☐ SHEET 3 OF 6

LOCATION: DIST. 11 CO. SD RTE. 15 P.M. 48.0

S/B I-15; 1.5 MI. NO. OF RTE 76 O.C.

OBSERVER: KAY RECORDER: KAY

REMARKS:

SPEED, MPH + REMARK CODE (see back of sheet)

EVENT NO.	AUTO'S 2 AXLE 4 WHEELS COM	AUTO'S 2 AXLE 4 WHEELS STD	MED. TRKS 2 AXLES 6 WHEELS	HEAVY TRUCKS BY AXLES 3 AXLES	4 AXLES	5 AXLES	>5 AXLES	OTHER OR UN-ID. H.T. (specify) (use code on back)
101		54						
2		59C						
3		61						
4		[illegible]				60C		
5		63						
6						60		
7		65						
8		62						
9						59		
10	57							
111		66						
12		61						
13			57					
14		59						
15		71						
16		[illegible]				56		
17		70						
18		57						
19			56					
20						65		
121		65						
22		69						
23						53		
24		55						
25				58				
26			57					
27		[illegible]				57		
28		58C						
29		62						
30						62		
131						57		
32			57C					
33		69						
34		57C						
35			61					
36						53		
37						62		
38						59		
39	60							
40	55							
141	58							
42				55				
43		53						
44		59						
45		[illegible]						
46			59					
47						56		
48			59					
49		67						
150		60						

FLIP PAGE UP FOR CODES

9/82 RWH

Figure VIII-20 Example Of Vehicle Observation Sheet

CODES

REMARK CODES

(Place behind speed in appropriate column, only if necessary).

C = Noise Contamination during measurement of event. (other traffic, aircraft, etc.)

S = Bad Speed (Accel./Decel., bad radargun reading, interference, bad aim, etc.)

NV = Unusually Noisy Vehicle ("clanging", vehicle hit bump, back fire, horn, etc.)

QV = Unusually Quiet Vehicle (coasting, inbetween gears, etc.)

LC = Lane Change or Wrong Lane

W = Very Windy

WP = Wet pavement (due to sudden rain, sprinklers, etc.)

NG = No Good event due to any other reason. (Use typically for unusual cases, or if several of above items occur at same time)

"OTHER" COLUMN CODES

(Use only in "other vehicles" column)

B-3 = 3 AXLE BUS. (3 AXLE BUSSES ARE M.T.'S)

MC = Motorcycle

MH = Large Motor Home (usually considered a M.T.)

HT = Unidentified Heavy Truck (not sure of axle count)

SPECIFY OWN CODES BELOW: (For use in any column)

ADDITIONAL NOTES, COMMENTS, OR CLARIFICATIONS:

Figure VIII-11 Backside of Vehicle Observation Sheet

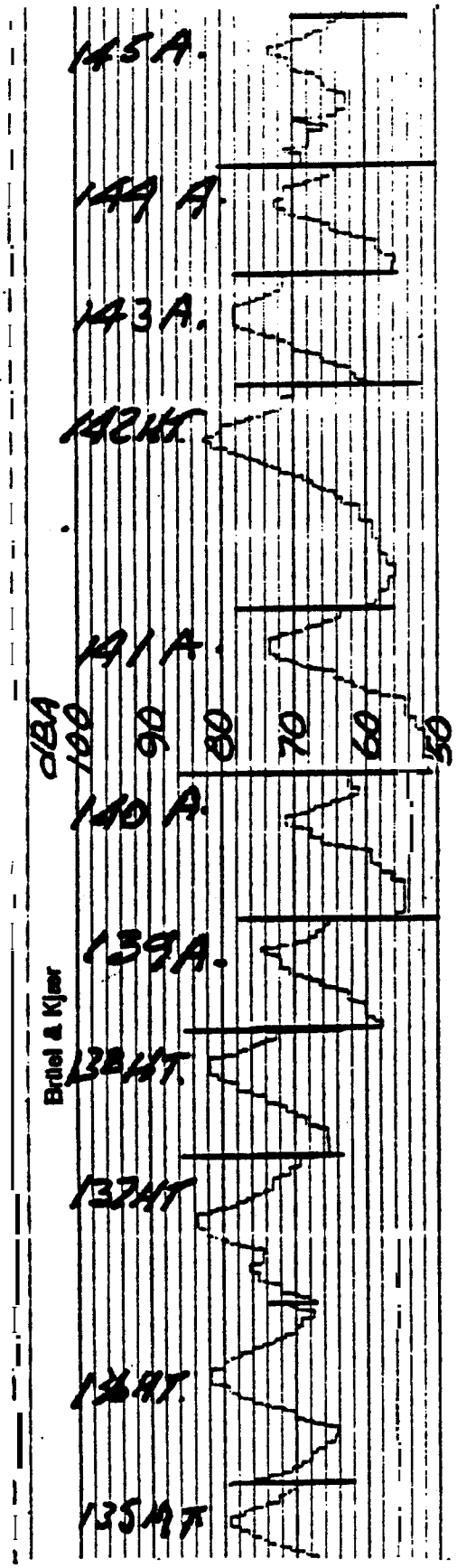


Figure VIII-12 Example Of Graphic Level Recorder Trace

```
++++ PEAK EVENT ++++
SITE          137
 2/16/83     11:35:29
ELAPSED TIME    3.8 S
   CH  1 =   91.01 DB
   CH  2 =   84.19 DB
   CH  3 =   84.56 DB
   CH  4 =   75.81 DB
   CH  5 =   78.23 DB

++++ PEAK EVENT ++++
SITE          138
 2/16/83     11:36:08
ELAPSED TIME    4.2 S
   CH  1 =   89.53 DB
   CH  2 =   82.15 DB
   CH  3 =   83.13 DB
   CH  4 =   73.80 DB
   CH  5 =   75.23 DB

++++ PEAK EVENT ++++
SITE          139
 2/16/83     11:37:12
ELAPSED TIME    3.2 S
   CH  1 =   80.27 DB
   CH  2 =   74.21 DB
   CH  3 =   75.28 DB
   CH  4 =   65.90 DB
   CH  5 =   68.55 DB

++++ PEAK EVENT ++++
SITE          140
 2/16/83     11:38:45
ELAPSED TIME    4.8 S
   CH  1 =   78.46 DB
   CH  2 =   71.03 DB
   CH  3 =   72.22 DB
   CH  4 =   61.73 DB
   CH  5 =   65.30 DB

++++ PEAK EVENT ++++
SITE          141
 2/16/83     11:39:50
ELAPSED TIME    3.2 S
   CH  1 =   81.23 DB
   CH  2 =   73.53 DB
   CH  3 =   74.89 DB
   CH  4 =   65.76 DB
   CH  5 =   68.21 DB
```

Figure VIII-13 Example Of Datalogger Print Out

CALIFORNIA VEHICLE NOISE EMISSION LEVELS - CALTRANS, TRANSLAB

NOISE MEASUREMENT & SITE DATA (BACK SIDE)

SITE NO: 16 (11015001) "WALE FIFTEEN" DATE: 2/16/83 NEW ☐ REPEAT ☐ SHEET 1 OF 1

LOCATION: DIST. 11 CO. SD RTE. 15 P.M. 48.0
S/B I-15 - 1.5 MI. NO. OF RTE 76 O.C.

OPERATOR: HENDRIKS RECORDER: HENDRIKS

REMARKS: EXCELLENT SOFT SITE. AUTOS - TRUCKS GOOD SEPARATION.

NOISE MEASUREMENTS SUMMARY

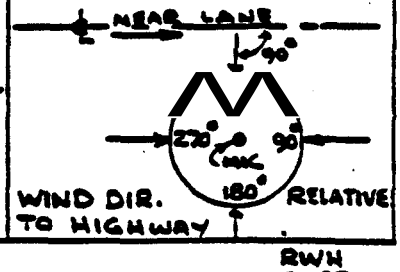
RUN NO.	TIME START	TIME END	Δt HRS/M	Leq(Δt), dBA, SLA//DL MIC. 1	MIC. 2	MIC. 3	MIC. 4	MIC. 5	SINGLE EVENTS NO'S
1									1 - 236
			NO LEQ'S						
AVE									

ENVIRONMENTAL DATA SUMMARY

RUN NO.	EVENT NO.	WIND DATA SPEED (MPH) 0-2	3-5	6-10	DIRECTION DEGREES (See below)	SKY CLR	PTLY CLDY	OVER CAST	TEMP. COLD <50° F	MILD 50-90° F	HOT >90° F	HUMIDITY LO	MED	HI
	1	✓			90°	✓				✓			✓	
	23	✓			90°					✓			✓	
	80	✓			320°	✓				✓			✓	
	108	✓			270°	✓				✓			✓	
	125	✓			90°	✓				✓			✓	
	149		✓		270°	✓				✓			✓	
	159			✓	270°	✓				✓			✓	
	AIRCR.													
	151		✓		90°	✓				✓			✓	
	176			✓	90°	✓				✓			✓	
	183				90°	✓				✓			✓	
	195	✓			90°	✓				✓			✓	
	207			✓	110°	✓				✓			✓	
	212			✓	180°	✓				✓			✓	
	216			✓	90°	✓				✓			✓	
	236			✓	90°	✓				✓			✓	

COMMENTS:

VERY QUIET BACKGROUND. FRONTAGE ROAD ON WEST SIDE APPROX. 200' FROM I-15 W/VERY LITTLE TRAFFIC. DID NOT ACCEPT EVENTS WHEN VEHICLE(S) ON FR. RD.



RWH 9-82

Figure VIII-14 Noise Measurement And Environmental Data Sheet Example

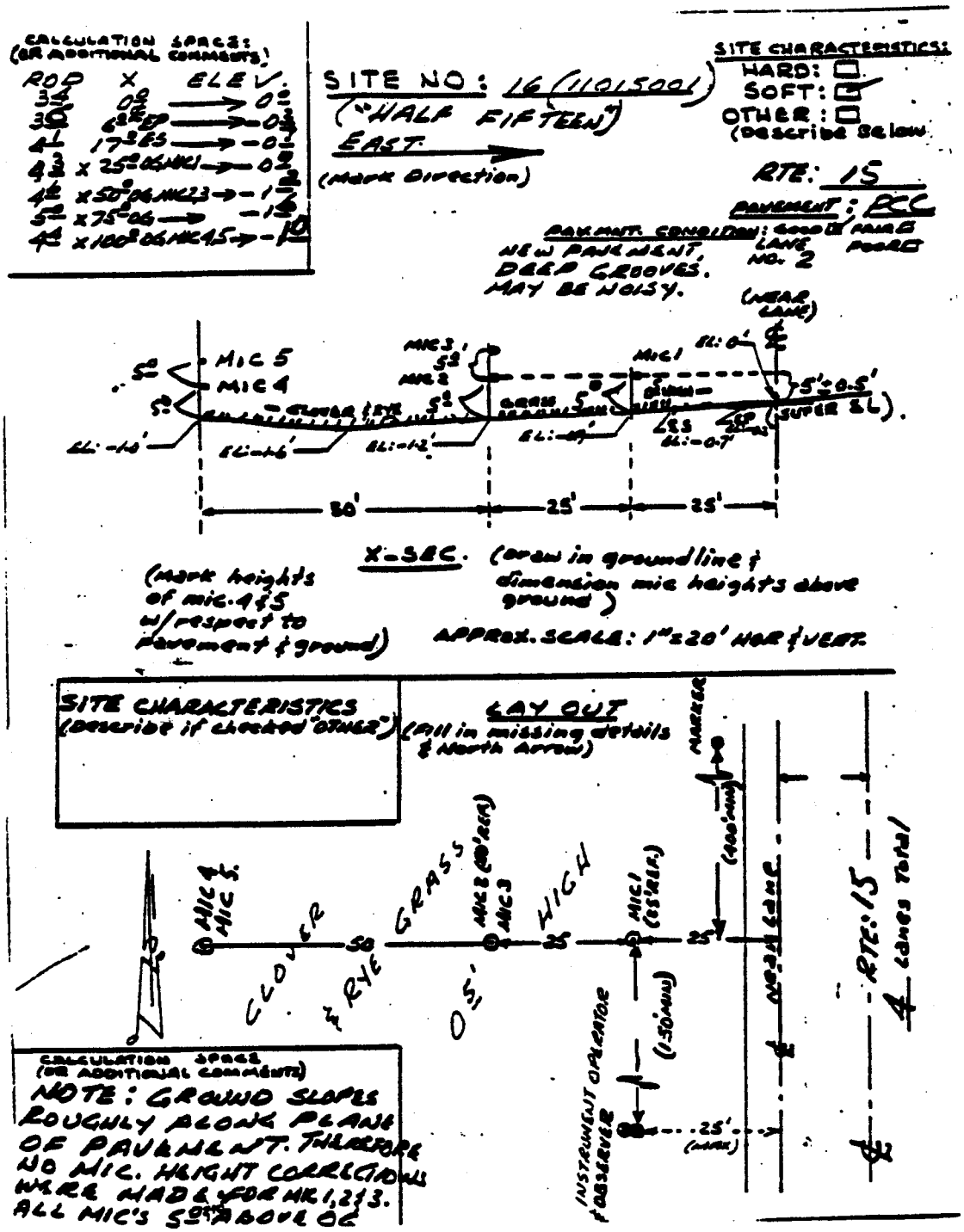


Figure VIII-15 Site Data Sheet
(Example)

IX. DATA PROCESSING OF MEASUREMENT RESULTS

Input and Merging of Data

During field measurements, data were recorded on four different charts or forms: GLR chart, vehicle observation sheet, datalogger printout and environmental data sheet. An interactive computer program named "VENO" was designed to allow separate input of the various data sources at different times and merge them into one masterfile by site and event number. In addition to merging the data, "VENO" incorporated many options such as listing selected data from the master file and performing statistical analyses. There were four input options:, GLR data, vehicle (VEH) data, datalogger (D/L) data, and environmental (ENV) data.. The required inputs for each of the options were:

GLR Data Input

'site number
'event number
'event quality code:
0 = rejected due to contamination or any other reason(s)
1 = valid peak, 6-9 dBA above background
2 = valid peak, 10 dBA or more above background

VEH Data Input

'site number
'event number
'event quality code:
0 = rejected due to contamination or any other reason(s)
1 = event accepted
'vehicle type (0-7)
'vehicle speed (mph)

D/L Data Input

'site number
'mic numbers used
'event number
"event quality code:
0 = rejected due to operator error, malfunction or any other reason(s)
1 = event accepted
'maximum noise level measured by each mic

ENV Data Input

"site number
"date measured
'event number
'event quality
0 = rejected due to adverse environmental condition(s) or any other reason(s)
1 = event accepted
'wind speed
"wind angle

FIGURE IX-1 -DATA SUMMARY EXAMPLE

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	EVENT QUAL. VEH	EVENT QUAL. DEL	EVENT QUAL. ENV	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
7	1	2	1	1	1	5	61	89.4	81.8	83.8	72.0	75.8	3	50	2.9	1/10/83
7	2	2	1	1	1	5	57	87.3	79.9	81.8	69.0	72.9	3	50	2.9	1/10/83
7	3	1	1	1	1	5	57	86.9	80.2	82.2	71.3	74.2	3	50	2.9	1/10/83
7	4	0	1	1	1	2	58	87.0	78.8	81.6	71.9	75.3	3	50	2.9	1/10/83
7	5	2	1	1	1	5	63	86.7	79.4	82.5	70.0	73.7	3	50	2.9	1/10/83
7	6	2	1	1	1	5	61	90.3	82.4	84.5	73.3	76.2	3	50	2.9	1/10/83
7	7	2	1	1	1	5	61	90.6	83.5	85.7	72.9	76.7	3	50	2.9	1/10/83
7	8	1	1	1	1	3	52	86.7	79.8	81.2	69.5	73.3	3	90	0.0	1/10/83
7	9	2	1	1	1	5	58	91.4	84.9	86.3	78.4	78.7	3	90	0.0	1/10/83
7	10	2	1	1	1	5	54	88.7	81.4	84.0	73.3	75.2	3	90	0.0	1/10/83
7	11	2	1	1	1	5	65	90.2	83.0	84.2	73.0	76.3	3	90	0.0	1/10/83
7	12	1	1	1	1	2	55	86.9	79.0	81.2	68.1	73.2	3	90	0.0	1/10/83
7	13	2	1	1	1	5	45	87.1	79.9	81.5	71.6	73.8	3	90	0.0	1/10/83
7	14	2	1	1	1	5	54	92.5	84.5	86.4	74.2	77.7	0	50	0.0	1/10/83
7	15	1	1	1	1	2	54	84.2	77.3	78.9	67.2	71.0	0	50	0.0	1/10/83
7	16	2	1	1	1	2	53	86.2	78.4	80.9	67.8	71.9	3	100	-.8	1/10/83
7	17	2	1	1	1	5	55	92.9	84.5	86.6	73.2	77.0	3	100	-.8	1/10/83
7	18	2	1	1	1	5	60	88.8	82.3	84.1	75.1	78.1	3	100	-.8	1/10/83
7	19	2	1	1	1	2	52	88.0	79.3	82.3	69.0	73.0	3	100	-.8	1/10/83
7	20	1	1	1	1	5	57	88.2	81.3	83.2	71.9	75.5	3	100	-.8	1/10/83
7	21	2	1	1	1	5	56	90.7	82.1	85.1	72.9	76.3	3	100	-.8	1/10/83
7	22	2	1	1	1	2	57	90.3	82.2	84.5	70.9	75.0	0	0	0.0	1/10/83
7	23	2	1	1	1	5	60	89.2	83.5	84.1	74.1	77.0	0	0	0.0	1/10/83
7	24	2	1	1	1	1	53	88.5	81.8	83.3	72.1	75.3	0	0	0.0	1/10/83
7	25	0	1	1	1	1	58	82.0	74.5	77.0	63.8	69.7	0	0	0.0	1/10/83
7	26	2	1	1	1	0	59	78.3	72.3	74.1	61.8	66.1	0	0	0.0	1/10/83
7	27	1	1	1	1	5	56	89.9	82.6	84.5	73.3	77.0	0	0	0.0	1/10/83
7	28	2	1	1	1	0	59	78.8	72.8	73.8	62.5	66.9	0	0	6.0	1/10/83
7	29	1	1	1	1	2	57	85.0	78.0	80.0	67.8	72.4	0	0	0.0	1/10/83
7	30	1	1	1	1	3	60	90.6	83.1	84.1	75.6	77.5	0	0	0.0	1/10/83
7	31	0	1	1	1	2	47	83.5	76.7	78.5	68.3	71.6	0	110	0.0	1/10/83
7	32	2	1	1	1	5	53	89.5	82.6	84.2	72.7	76.3	0	110	0.0	1/10/83
7	33	1	1	1	1	2	61	84.0	76.8	78.7	65.6	70.3	3	110	-1.5	1/10/83
7	34	1	1	1	1	1	56	80.4	72.9	75.5	63.5	68.3	3	110	-1.5	1/10/83
7	35	2	1	1	1	2	61	86.4	78.2	80.6	67.4	72.1	3	110	-1.5	1/10/83
7	36	2	1	1	1	5	59	91.2	84.4	85.2	77.1	78.4	3	110	-1.5	1/10/83
7	37	2	1	1	1	5	57	85.8	79.3	81.0	68.7	72.7	3	110	-1.5	1/10/83
7	38	1	1	1	1	2	53	82.5	74.5	77.1	65.0	69.1	3	110	-1.5	1/10/83
7	39	1	1	1	1	3	53	87.8	80.5	82.6	71.8	74.8	3	110	-1.5	1/10/83
7	40	2	1	1	1	3	56	89.6	80.8	83.4	70.8	74.0	3	110	-1.5	1/10/83
7	41	2	1	1	1	5	55	87.8	80.3	82.0	71.3	74.3	3	110	-1.5	1/10/83
7	42	2	1	1	1	1	64	82.5	75.4	76.7	63.1	67.9	0	0	0.0	1/10/83
7	43	2	1	1	1	5	54	88.5	81.1	83.1	72.1	75.0	0	0	0.0	1/10/83
7	44	2	1	1	1	5	53	86.1	79.2	81.1	68.9	72.5	0	0	0.0	1/10/83
7	45	2	1	1	1	1	63	80.1	74.4	75.7	66.2	69.4	0	0	0.0	1/10/83
7	46	2	1	1	1	2	56	87.8	79.4	81.9	69.5	73.0	0	0	0.0	1/10/83
7	47	2	1	1	1	5	64	89.4	83.0	84.9	74.3	76.7	0	0	0.0	1/10/83
7	48	2	1	1	1	1	53	81.9	74.8	76.9	64.9	68.9	3	90	0.0	1/10/83
7	49	2	1	1	1	2	63	85.9	79.3	80.1	69.8	73.6	3	90	0.0	1/10/83
7	50	2	1	1	1	5	56	86.3	79.3	81.1	68.8	72.7	3	90	0.0	1/10/83
7	51	2	1	1	1	3	55	86.4	79.0	80.6	69.7	72.3	3	90	0.0	1/10/83
7	52	2	1	1	1	5	57	94.3	87.1	88.1	79.4	80.9	3	90	0.0	1/10/83
7	53	2	1	1	1	5	53	86.4	78.5	81.0	67.7	71.3	3	90	0.0	1/10/83
7	54	0	1	1	1	5	46	96.2	89.9	90.9	82.4	83.8	3	90	0.0	1/10/83
7	55	2	1	1	1	5	49	94.9	88.5	89.5	82.8	82.2	3	90	0.0	1/10/83
7	56	2	1	1	1	1	62	79.8	72.6	74.4	62.3	66.2	3	90	0.0	1/10/83
7	57	1	1	1	1	0	50	78.8	74.0	75.2	63.4	68.6	3	90	0.0	1/10/83
7	58	2	1	1	1	5	54	88.5	81.1	83.4	71.8	74.5	3	90	0.0	1/10/83
7	59	1	1	1	1	1	60	80.2	74.4	75.5	69.6	71.1	3	90	0.0	1/10/83
7	60	2	1	1	1	1	61	82.4	75.5	77.8	64.6	69.0	3	90	0.0	1/10/83
7	61	2	1	1	1	2	59	85.3	78.0	79.6	67.3	71.5	3	90	0.0	1/10/83
7	62	2	1	1	1	0	63	80.6	74.5	76.8	62.7	67.6	3	90	0.0	1/10/83
7	63	2	1	1	1	5	56	92.9	85.7	87.6	77.5	78.9	3	90	0.0	1/10/83
7	64	2	1	1	1	5	57	91.8	83.8	85.7	74.5	77.3	3	90	0.0	1/10/83
7	65	2	1	1	1	2	53	84.4	77.6	79.9	67.9	71.7	3	90	0.0	1/10/83
7	66	2	1	1	1	2	66	86.6	79.6	81.4	70.1	73.3	3	90	0.0	1/10/83
7	67	2	1	1	1	3	52	87.2	79.5	81.5	69.5	72.6	3	90	0.0	1/10/83
7	68	2	1	1	1	5	54	90.1	82.9	84.7	75.2	77.1	3	90	0.0	1/10/83
7	59	2	1	1	1	5	56	89.5	82.4	84.3	72.9	76.2	3	90	0.0	1/10/83
7	70	2	1	1	1	5	58	94.5	86.4	89.5	73.5	79.5	3	90	0.0	1/10/83

X. DATA ANALYSES AND RESULTS

Analyses

The following general analyses were performed on the data:

'Developing speed dependent emission levels for compact autos, standard autos, medium trucks, three-, four-, and five-axle heavy trucks on level roads and combining emission levels that were not significantly different.

'Examining effects of hard and soft sites on emission levels at the 50-foot reference distance, and the point source drop-off rates in the near and far fields by vehicle group. These analyses were performed on level roads data only.

°Examining geographical differences in emission levels for two regions designated northern and southern California. These analyses were performed on level roads data only.

'Examining effects of wind on emission level measurements. These analyses were performed on level roads data only.

'Developing speed dependent emission levels for heavy trucks traveling at sustained speeds on grades between +3% and +7%.

'Comparing observed speed distributions on grades with typical speed distributions and developing "default" heavy truck grade emission levels based on these.

All analyses presented in this report assume that the data at each site and within each speed class has a Gaussian (normal) distribution. This was statistically tested with Chi-squared tests (α=0.05). Although in most cases the tests marginally rejected the hypotheses that the data were normally distributed, these rejections were caused by anomalies in a few data points. Without these anomalies, the data showed a strong tendency towards normalcy.

Emission Levels By Vehicle Type - Level Roads

Computation of the mean energy emission levels was performed by computer using the previously mentioned "VENO" program. The program computes emission levels by the two methods described in FHWA-OEP/HEV-78-1(9).

The first method of computation is the curve fitting method using the expression $L_{\overline{OE}} = A + 0.115(S_y)^2 + B \text{ Log (MPH)}$ for each vehicle type, where:

$L_{\overline{OE}}$ is the energy mean emission level

A and B are the y-intercept and slope, respectively in the linear regression equation.

S_y is the standard error of y on Log X.

The curve fitting form was derived from the general relationship:

$L_{\overline{OE}} = L_{\overline{O}} + .115(\sigma)^2$ where:

$L_{\overline{OE}}$ is the energy mean sound level of a source

$L_{\overline{0}}$ is the measured mean sound level of a source

σ is the standard deviation computed from the sound level measurements.

The above general relationship assumes a normal distribution of the sound levels.

The second method used by "VENO" is the computation of the energy mean sound level of each vehicle type in each speed class.

Instead of using the relationship: $L_{\overline{0E}} = L_{\overline{0}} + .115(\sigma)^2$, actual energy averaging was performed by the computer. Spot checks confirmed close agreement between the two methods of energy averaging.

The curve fitting method was used to develop the individual vehicle type energy mean noise emission speed curves for the reference distance of 50 feet, shown in Figures X-1 through X-5. Additional plots, including 95% confidence bands (intervals) for the curves are shown in Appendix D. In all plots LOE is identical to $L_{\overline{0E}}$.

Figure X-1 shows a comparison of compact vs standard auto, (type 0 vs type 1 vehicles) energy mean emission levels vs speed, and respective regression equations. The data included all sites and quality of events was at least 1 in the four categories: GLR, VEH, D/L and ENV. The curves indicate that compact auto (4-cylinder) emission levels are between 1.2 dBA at 25 mph and 1.5 dBA at 65 mph lower than standard automobiles (6 or 8 cylinders). The reasons for this difference are unclear, but it is suspected that the

FIGURE X-1
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES
MIC.92 HT-SFT. DIST-SOFT.

VEH. TYPE: AUTO-COMP LOE=6+37.79*LOG(MPH)
VEH. TYPE: AUTO-STD LOE=6.28+38.47*LOG(MPH)

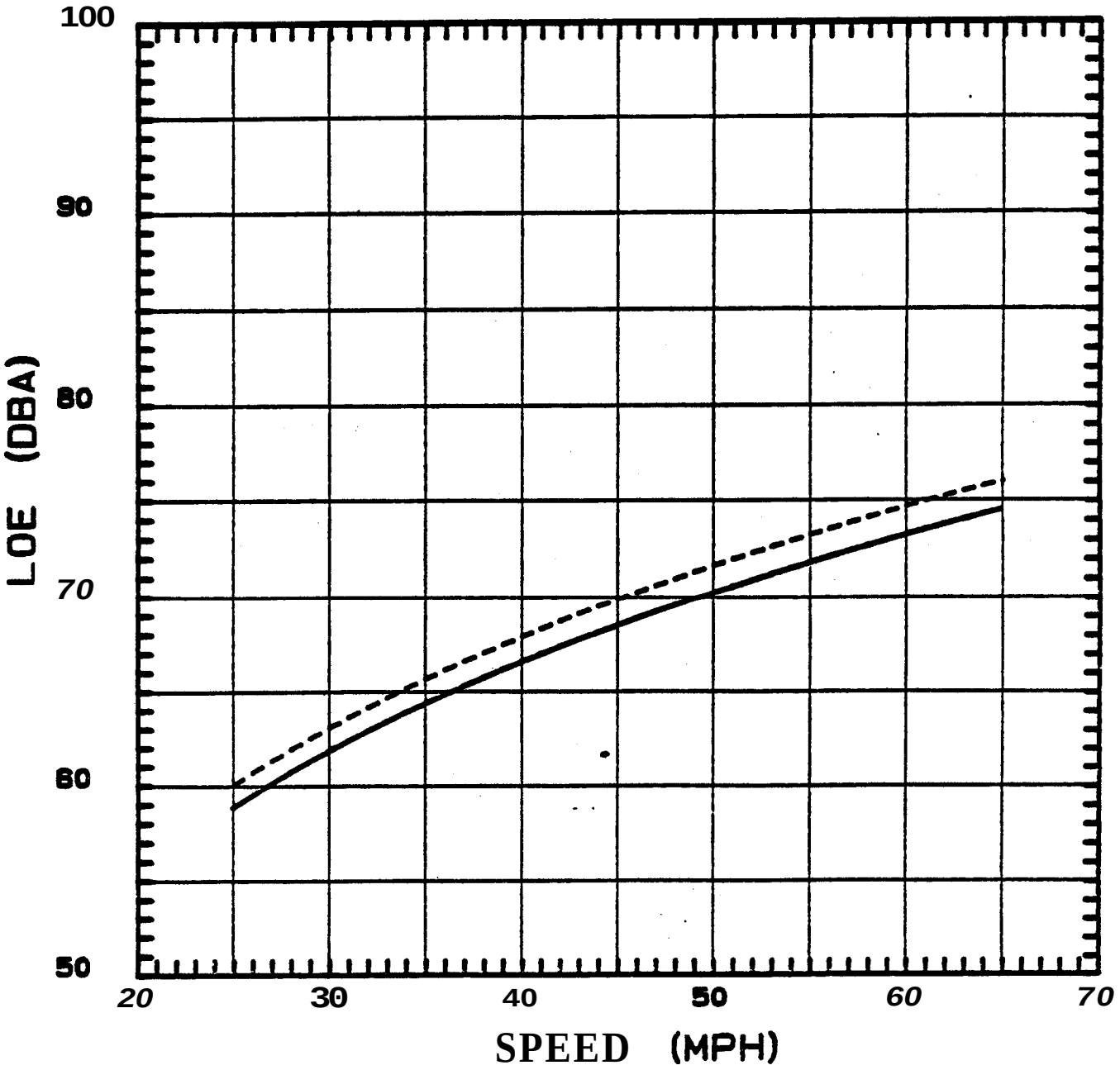


FIGURE X-2
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES
MIC.#2 HT-5FT. DIST-SOFT.

VEH. TYPE: ALL AUTOS LOE=5.21+38.83*LOG(MPH)
VEH. TYPE: FHWA AUTOS LOE=5.5+38.1*LOG(MPH)

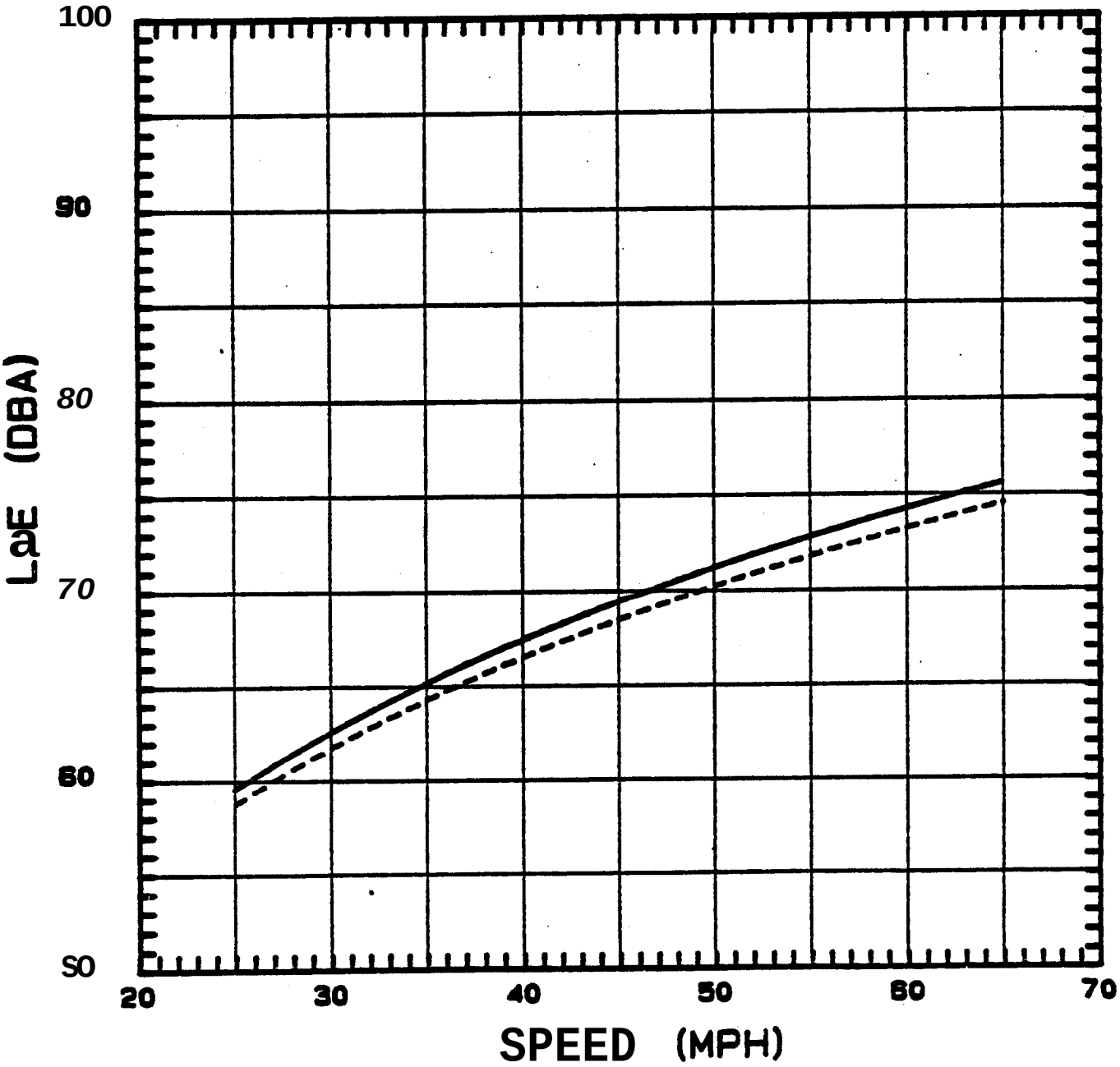


FIGURE X-3
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES
MIC.#2 HT-5FT. DIST-50FT.

VEH. TYPE: MEDIUM TRUCKS LOE=35.34+25.59*LOG (MPH)
VEH. TYPE: FHWA MT LOE=23.4+33.9*LOG (MPH)

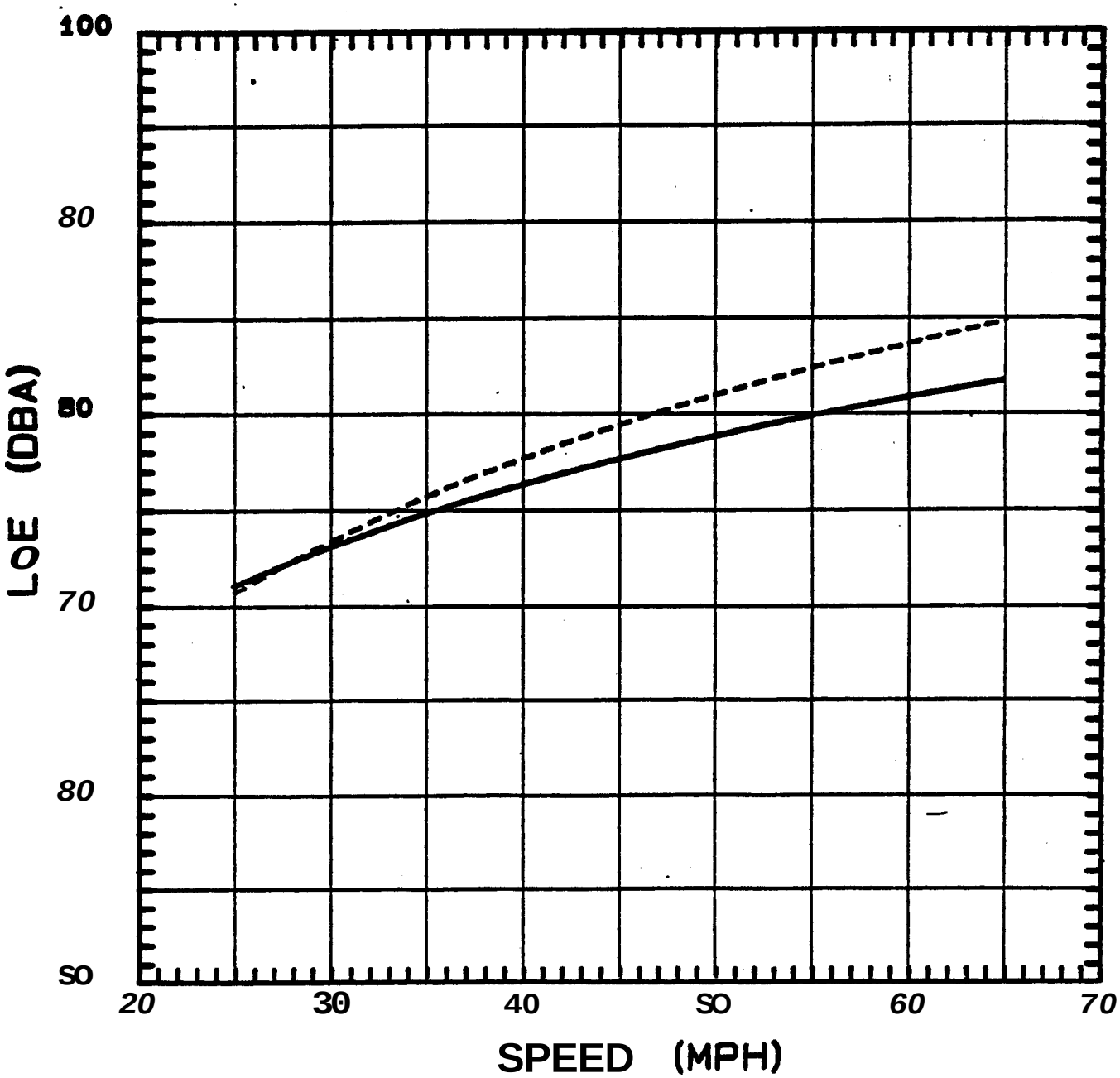


FIGURE X-4
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES
MIC.#2 HT-5FT. DIST-50FT.

VEH. TYPE: HT 3-AXLE LOE=55.28+15.8*LOG (MPH)
VEH. TYPE: HT 4-AXLE LOE=59.37+13.69*LOG (MPH)
VEH. TYPE: HT 5-AXLE LOE=51.06+18.88*LOG (MPH)

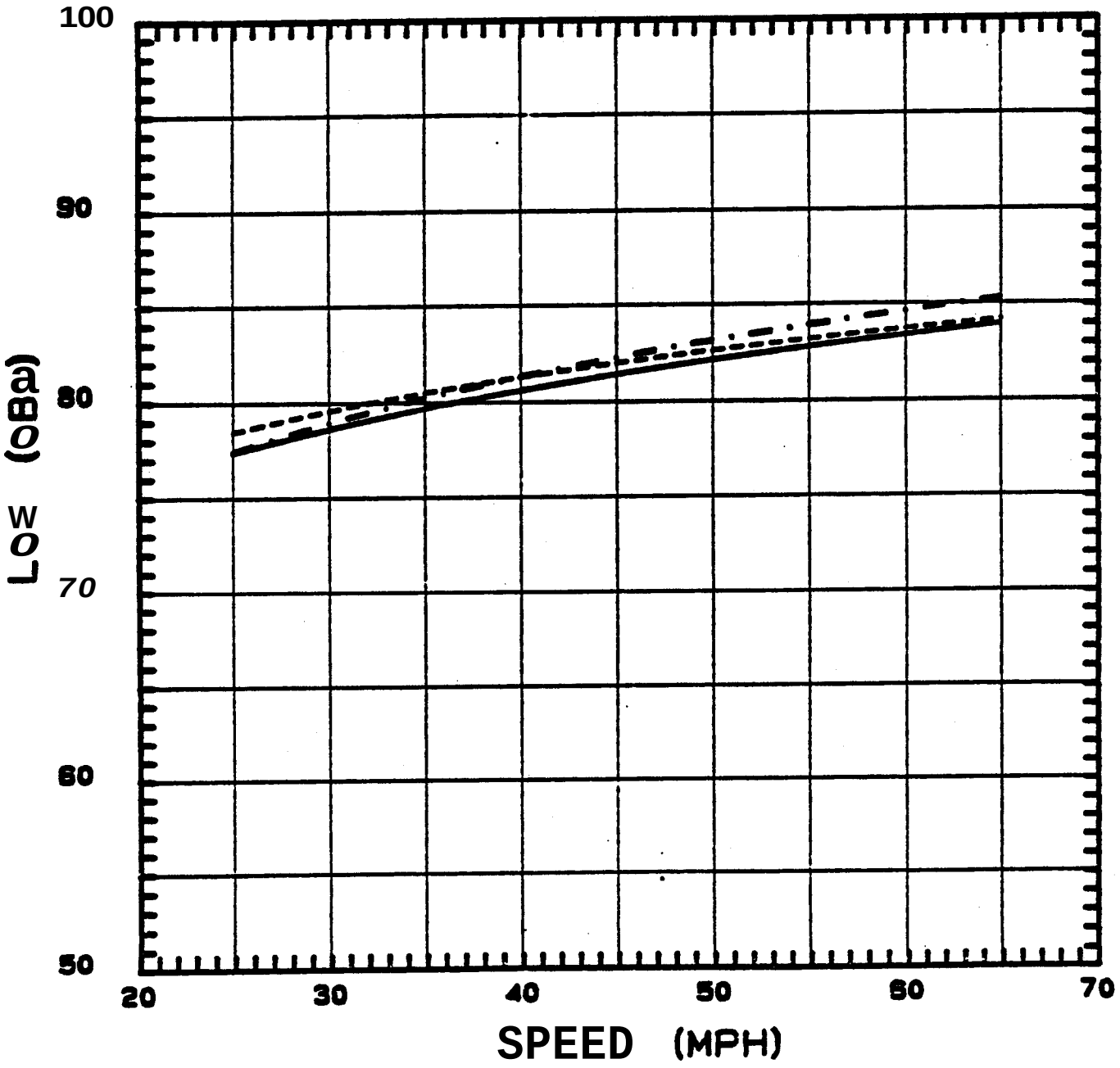
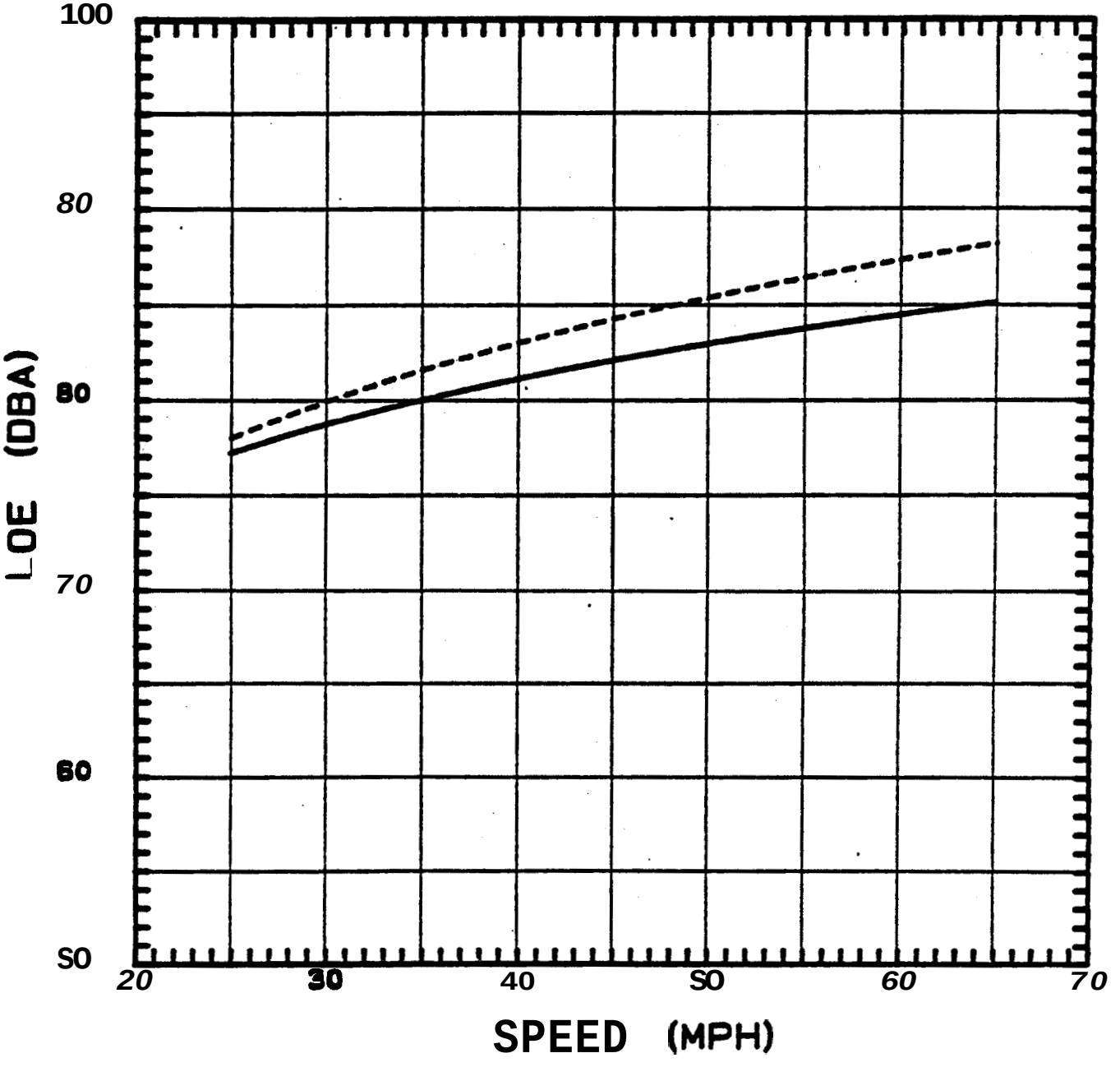


FIGURE X-5
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES
MIC.#2 HT-5FT. DIST-SOFT.

VEH. TYPE: ALL HT LOE=50.37+19.18*LOG(MPH)
VEH. TYPE: FHWA HT LOE=43.6+24.6*LOG(MPH)



compact car fleet contains more later model cars with better mufflers than the standard car fleet.

Because of the diversity in the sixteen sites and the reasonable assumption that no bias was present toward selection of either compact or standard auto events, it may be safe to assume that the ratio of sampled compact vs standard autos is representative of the state's ratio. A combined compact and standard auto emission curve is therefore, a good approximation for all autos, especially since the differences between the two are small.

A combined compact and standard auto curve for California is shown in Figure X-2 in comparison with the FHWA curve. Examination of both curves indicates that the California curve is from 0.7 dBA at 25 mph to 1.0 dBA at 65 mph higher than the FHWA curve (projected down to 25 mph and up to 65 mph).

Figure X-3 shows California's medium truck (vehicle type 2) curve in comparison with FHWA's curve for the speed range of 25 to 65 mph. Again, all sites were included and all medium truck events of at least quality 1 were used to develop the curve. The California curve is from 0.3 dBA higher at 25 mph to 3.2 dBA lower at 65 mph.

Figure X-4 illustrates a comparison of 3-, 4-, and 5-axle trucks (vehicle types 3, 4 and 5) from data gathered at all sixteen sites. Because of the close agreement between the three curves, they were combined into one curve shown in comparison with the FHWA curve (projected up and down) for heavy trucks. There are very few 6- or more axle trucks (type 6 vehicles) in California. Only 1 passby was measured in that category.

Recently, however, as part of an FHWA truck test of three long truck configurations, seven 55 mph passbys of a seven-axle, three-trailer truck were measured at 50 feet, two of which were on 4% and 6% grades and five on level roads.. The limited data suggested that there is no difference between this configuration and other heavy trucks.

The combined heavy truck curve for California is from 0.8 dBA at 25 mph to 3.1 dBA at 65 mph lower than the FHWA curve.

Type 7 vehicles (miscellaneous, such as motorcycles, etc.) also made up a very small portion of the observed vehicle population. They were not numerous enough to justify separate emission level curves as additional vehicle yroups.

The preceding analyses indicate that the vehicle categories defined in FHWA-RD-77-108(3) provide enough resolution to define vehicle emission levels in California. Neither subdivision of these groups nor additional groups appear necessary. Table X-1 summarizes regression statistics for the three major yroups.

The emission levels for the three vehicle groups were also plotted by energy mean noise levels for each speed class at 50 feet. Figure X-6 through X-8 shows the computer-generated plots in comparison with the curve fitting method plots shown in Figure X-2, X-3, and X-5.

The computed values are shown in the "VENO"-generated printouts in Appendix E, for autos, medium trucks and heavy trucks.

TABLE X-1

CALIFORNIA VEHICLE NOISE
EMISSION LEVELS

SUMMARY OF REGRESSION STATISTICS
FOR THE THREE VEHICLE GROUPS
AT REFERENCE DISTANCE OF 50 FEET

AUTOS

Regression Equation (Mean):	4.3+38.8 LOG(MPH)
Regression Equation (Energy Mean):	5.2+38.8 LOG(MPH)
Number of Observations:	1263
Std. Error of Y on Log (X):	2.81
Index of Determination:	0.56
Coeff. of Correlation:	0.75
F-Ratio (Calculated):	1609.1
F-Ratio ($F_{1,n-2,0.05}$):	3.8

MEDIUM TRUCKS

Regression Equation (Mean):	34.4+25.6 LOG(MPH)
Regression Equation (Energy Mean):	35.3+25.6 LOG(MPH)
Number of Observations:	317
Std. Error of Y on LOG(X):	2.83
Index of Determination:	0.42
Coeff. of Correlation:	0.65
F-Ratio (Calculated)	229.2
F-Ratio ($F_{1,n-2,0.05}$):	3.9

HEAVY TRUCKS

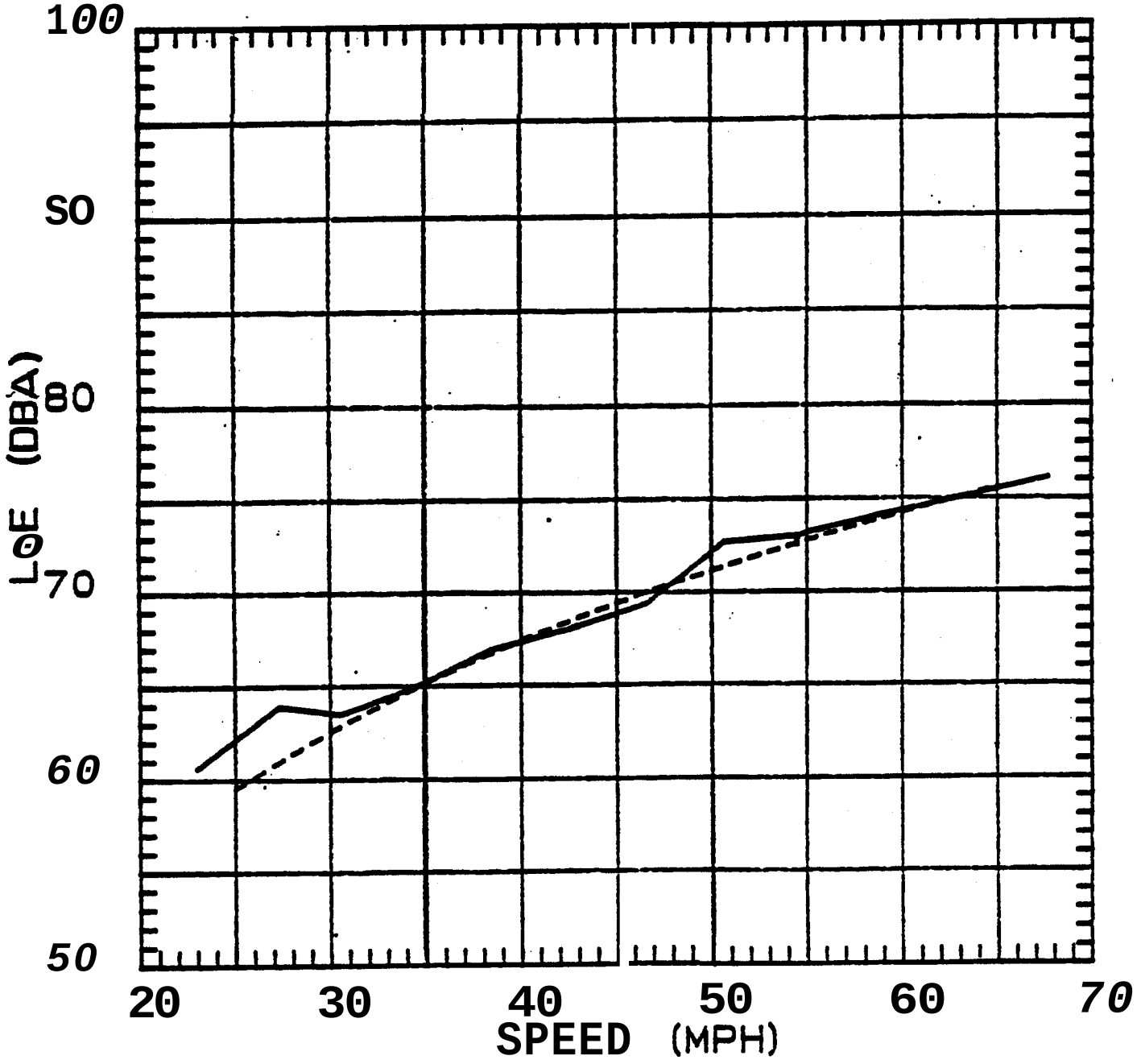
Regression Equation (Mean):	49.5+19.2 LOG(MPH)
Regression Equation (Energy Mean):	50.4+19.2 LOG(MPH)
Number of Observations:	1154
Std. Error of Y on LOG (X):	2.68
Index of Determination:	0.29
Coeff. of Correlation:	0.53
F-Ratio (Calculated):	459.7
F-Ratio ($F_{1,n-2,0.05}$):	3.8

FIGURE X-6

CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

VEHICLE TYPE: ALL AUTOS
MIC #2 HT-5FT. DIST-50FT.

------ ALL SITES LOE=5.21+38.83*LOG(MPH)
——— ALL SITES SPEED CLASS MEAN DATA



FICURE X-7
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

VEHICLE TYPE: MEDIUM TRUCKS
MIC.#2 HT-5FT. DIST-50FT.

------ ALL SITES LOE=35.34+25.59*LOG (MPH)
——— ALL SITES SPEED CLASS MEAN DATA

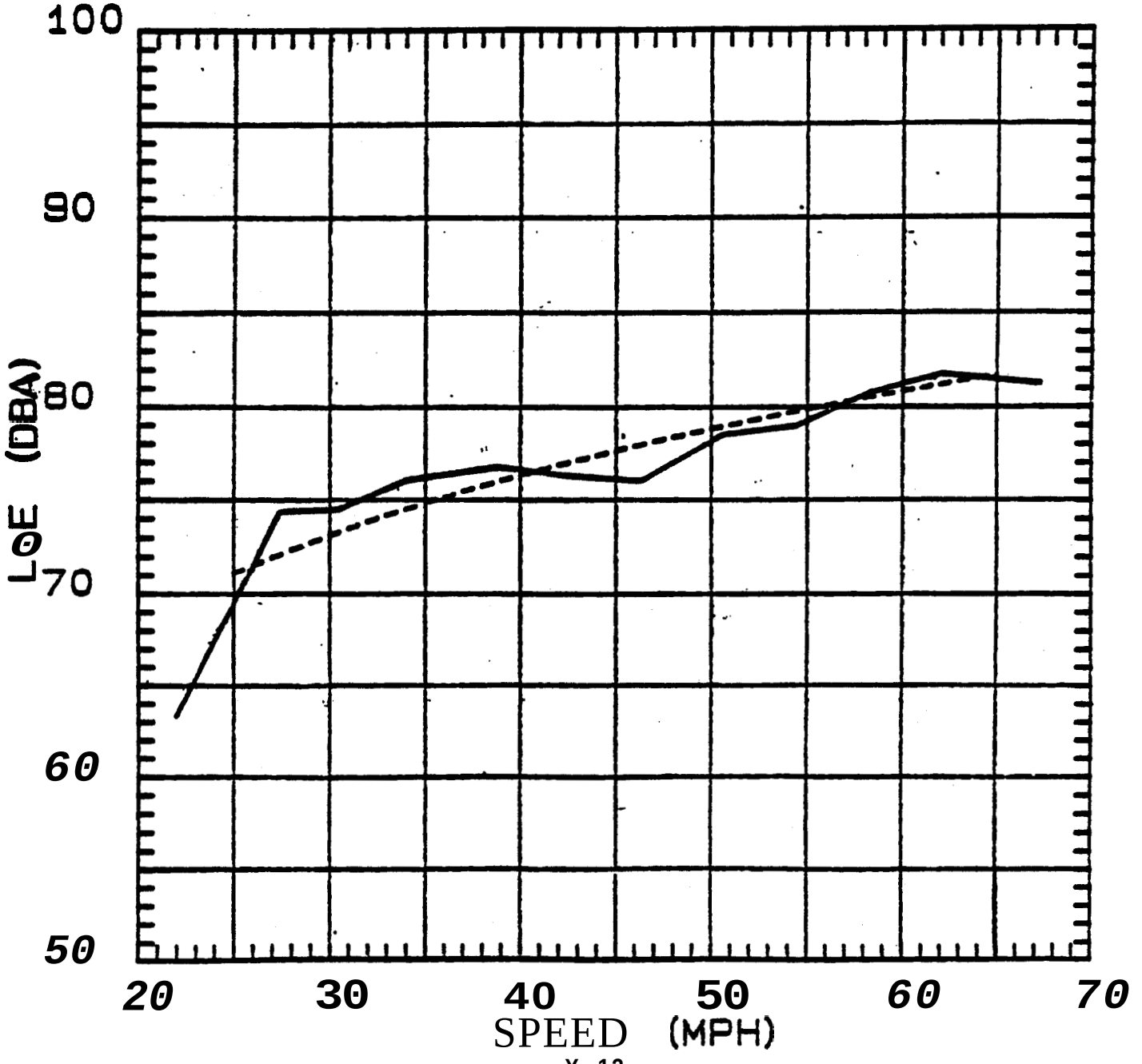
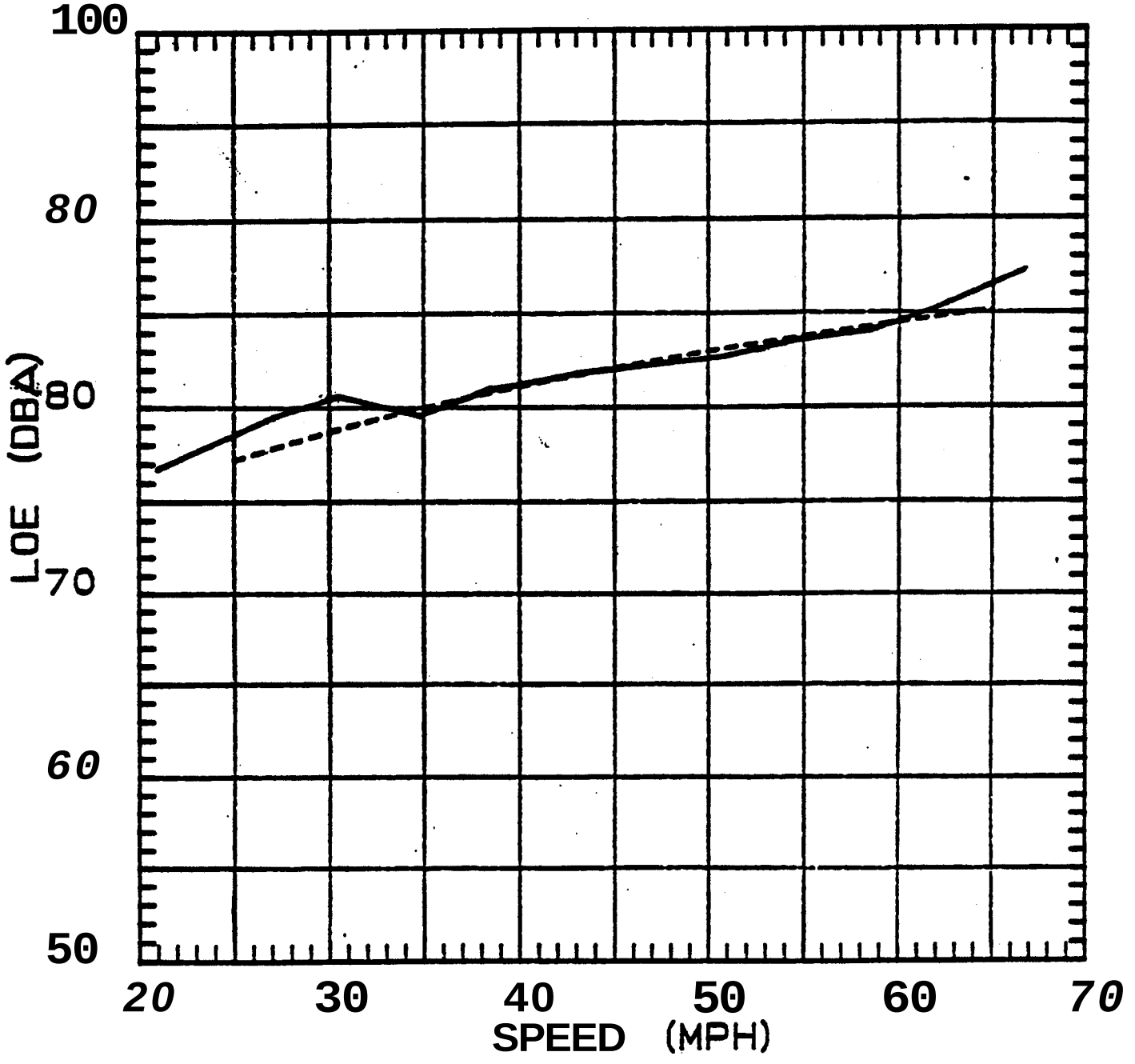


FIGURE X - 8
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

VEHICLE TYPE: HEAVY TRUCKS
MIC.#2 HT-5FT. DIST-50FT.

------ ALL SITES LOE=50.37+19.18*LOG (MPH)
——— ALL SITES SPEED CLASS MEAN DATA



The plots show the inherent differences of the two methods of calculating the emission levels. The curve fitting method produces a smooth line of best fit through all data points, ignoring deviations possibly caused by vehicle operations in low, medium, and high gears.

The energy mean data by speed class, however, do show these deviations within discrete intervals defined by the speed classes.

Figure X-6 shows the plots for autos. Note that three deviations from the regression line exist for the data plotted by speed classes. The first deviation of about 2 to 3 dBA centers at about 23 mph (speed class of <25 mph), and 27 mph (speed class range of 25 to 38 mph), while the second and third deviations of 0.6 and 1.3 dBA center at 46.5 and 51 mph (45 to 48 mph and 49 to 52 mph speed classes), respectively. The deviations at 23 and 37 mph were caused by only nine data points (see Table VIII-1 in Chapter VIII, Field Measurements) and did not prove significant when subjected to a statistical "t"-test, α=0.05(14).

The deviations of 0.6 and 1.3 dBA at 46.5 and 51 mph were judged to be too small to be considered significant. The regression line in Figure X-2 therefore adequately represents the California auto population.

The medium truck plots (Figure X-7) showed the same trend at the low end of the curve. The energy means for the speed-classes were above the regression line between 26 rnph and 41 mph (only one data point at 22 mph caused the sharp dip at the extreme end), and below the regression line between 41 and 51 mph. From 51 mph to 65 rnph deviations

from the regression line were very small. Table VIII-1 in Chapter VIII, Field heasurement indicated that there was adequate data within each speed class for medium trucks only at speeds above 48 mph (beginning with 49 to 52 mph speed class), where deviations from the regression line are small. When the energy means by speed class were coinpared statistically with the energy mean regression line, only the data at 34.1 mph and 46.3 mph proved to be significantly different (significance level 0.05) when subjected to a Student's "t"-test(14). Since medium truck emission level contribution to total noise levels is relatively small, no refinement was made to the energy mean regression line.

The heavy truck plots of energy means by speed class (Figure X-8) showed generally good agreement with the regression line, except at the lower and upper end of the line. At the upper end the deviation was caused by the energy mean of the >64 mph speed class centered at 66.8 mph, beyond the practical 65 mph limit. This deviation was therefore ignored. The deviation of the energy mean of the 61 to 64 mph speed class was only 0.4 dBA, an insignificant amount.

At the lower end of the regression line, the energy means for speed classes 25 to 28 mph and 29 to 32 mph were significantly higher than the regression line by 1.4 and 1.7 dBA respectively or an average of 1.55 dBA. The two energy means were submitted to a "t" test(14) to determine whether they were significantly different from the regression line. The null hypothesis was:

H_o: $\bar{Y} = \mu$, in which:

$\overline{Y}$ is the energy mean emission level for the average speed of the speed class of interest and, μ is the energy mean emission level calculated from the regression equation for the same speed.

The "t" statistic was calculated from

$$t = \frac{(\overline{Y}-\mu)\sqrt{n}}{S}, \text{ in which}$$

n = number of samples to derive $\overline{Y}$, and

S = standard deviation of those samples.

The H_0 was rejected when $t_{(calc)} > t_{(\alpha;n-1)}$.
The level of significance α was set at 0.05.

For the 25 to 28 mph speed class centered at 27.1 mph the following statistics were derived:

μ = 77.9 dBA $\qquad H_0: \overline{Y} = \mu$

$\overline{Y}$ = 79.5 dBA

n = 18

S = 3.4 dBA

$t_{(calculated)} = 2.02$
$t_{(0.05;17)} = 1.74$
Reject H_0.

Conclusion: There was a significant difference between $\overline{Y}$ and μ at 27.1 mph.

The statistics for comparison of the energy mean of the 29 to 32 mph speed class (centered at 30.5 mph) and the regression line were:

μ = 78.9 dBA $\qquad$ H_0: $\bar{Y} = \mu$

$\bar{Y}$ = 80.6 dBA

n = 37

S = 3.5

$t_{(calculated)} = 2.96$
$t_{(0.05;36)} = 1.69$
Reject H_0.

Conclusion: There was a significant difference between $\bar{Y}$ and μ at 30.5 mph.

Because of the importance of heavy truck noise emission levels in predicting highway noise and designing noise barriers, further refinements in the curve appeared justified. Furthermore, the tendency of energy means by speed class to deviate at the lower end of the regression line also appears to be present - though mostly not significantly - in autos and medium trucks.

One explanation for the deviations at the lower end of the curves might be that vehicles in lower gear may produce higher noise levels than may be expected from the regression line, which was strongly weighted by more abundant data at higher speeds.

FHWA-RD-77-108(3) recommends the use of a constant 87 dBA heavy truck emission level at speeds below 50 km/h (31 mph), because at these speeds trucks are likely to be accelerating or decelerating. The proposed emission levels in this study begin at 25 mph, below the FHWA's 31 mph lower limit. They were nevertheless measured at constant speed. It appears reasonable then that under these conditions the sudden step of 6.7 dBA (80.3 dBA at 31 mph

to 87 dBA for speeds less than 31 mph) does not adequately reflect the true picture. Instead, the more subtle increase of 1.5 dBA between approximately 35 mph and 31 mpn, as suggested by the measured data, seems to be more realistic.

The measured data also suggest that below 31 mph, speed dependency resumes at approximately the same slope as the regression line, down to 25 mph.

The deviations were, therefore, incorporated in the California heavy truck emission levels.

Appendix D presents additional emission level vs speed plots. Final California Vehicle Noise (CALVENO) Reference Energy Mean Emission Levels are presented in Chapter XI.

Hard vs Soft Sites

All analyses involving hard and soft site were made using data from the sixteen level road sites only.

Differences at 50 foot reference distance: The FHWA-RD-77-108 (3) report assumes that there are no differences between energy mean emission levels measured at hard sites and soft sites at 50 feet from the source. California data, however, suggest that there are differences between hard and soft sites at 50 feet.

There are several problems in comparing emission levels gathered at one group of sites with those from another group of sites: 1) There is no assurance that the vehicle populations measured at the one group of sites are identical to those of the second group of sites. 2) Environmental conditions (wind speed and direction) are likely to be

different. 3) The speed distributions of the various vehicle types may also be different.

In the study, the first problem was reduced, if not eliminated, by assuming there were no differences between hard and soft sites at 25 feet from the source. In most cases this assumption proved to be valid. In both hard and soft sites, the source was assumed to be on the centerline of the near lane, or 6 feet from the edge of pavement. Most sites, hard or soft, had a paved shoulder of 8 to 10 feet, and the remainder of the sites either had a partially paved (less than 8 feet) or a smoothly graded hard dirt shoulder. The 6-foot distance from source to edge of pavement, plus 8- to 10-foot shoulder at all sites, therefore, guaranteed the first 14 to 16 feet to be hard. In most cases, the remaining 9 to 11 feet to the first microphone could also be considered hard. At any rate, the difference between hard and soft would be almost negligible in 9 to 11 feet.

The noise levels measured at 25 feet were assumed to be unaffected by site variability. Differences in environmental conditions were likewise considered to be negligible at 25 feet. Any differences in energy mean levels measured at 25 feet from the vehicular sources could then be assumed to have been caused by differences in vehicle populations.

The 50 foot mics could then be normalized by setting the 25-foot soft site emission levels equal to the 25-foot hard site levels for autos, medium trucks and heavy trucks. The correction necessary to accomplish this was applied to the 50-foot soft site mics also. Thus, the first two problems- different vehicle populations and environmental conditions - were eliminated. The remaining problem of different

speed distributions was eliminated by comparing only those speed classes that had enough data within each speed class common to hard and soft sites.

Table X-2 shows a statistical comparison of normalized energy mean data, measured at 50 feet reference mic (mic 2). Note that the greatest difference of 2.0 dBA was for autos, while medium trucks were 1.9 dBA and heavy trucks ranged from 1.4 to 1.7 dBA. The normalized differences between hard and soft sites at 50 feet appear to be smaller for higher noise source centroids than those for lower noise centroids. This seems reasonable because ground attenuations increase closer to the ground, According to FHWA-RD-77-108(3), the noise centroid for autos is 0 feet, for medium trucks it is 2.3 feet (0.7 m) and for heavy trucks 8 feet (2.44 m) above the pavement. For all instances shown in Table X-2, the differences between hard and soft sites were statistically significant (level of significance 0.05) when subjected to the Student's "t"-test(14).

Near and Far Field Drcp-Off Rates. Figure X-9 and X-10 show single event drop-off rates for near (less than 50 feet from near lane) and far fields (50 feet or greater from near lane) as a function of hard and soft sites and vehicle groups. Figure X-9 shows data averaged from speed classes with minimum required data only, while Figure X-10 includes average data from all speed classes. As indicated in the figures, the drop-off rates from mic 1 to mics 2 and 3 include quality 1 and 2 data from all sites; the drop-off rates from mics 2 and 3 to mics 4 and 5 include quality 2 data from sites with five mic setups only.

TABLE X-2

STATISTICAL COMPARISON
HARD VS. SOFT SITES
BY VEHICLE TYPE (SPEED CLASSES WITH
ENOUGH DATA ONLY)

$\bar{X}$ = Hard Site Data-$\bar{X}$=Energy Mean, S_x=Std.Dev., n_x=No. of Samples
$\bar{Y}$ = Soft Site Data-$\bar{Y}$=Energy Mean, S_y=Std.Dev., n_y=No. of Samples

		Energy Mean, dBA						50' Ref. Mic. Data					Student's "t" Test		
Vehicle Type	(MPH) Speed Class	$\bar{X}$ @ 25'	$\bar{Y}$ @ 25'	$\bar{X}-\bar{Y}$ @ 25'	$\bar{X}$ @ 50'	$\bar{Y}$ @ 50'	$\bar{Y}$ Norm. @ 50'	$\bar{X}-\bar{Y}$ norm.	S_x	n_x	S_y	n_y	Calc. "t"	Crit. "t"*	Signif. α=0.05
Autos	53-56	79.4	79.5	-0.1	74.2	72.3	72.2	2.0 dBA	2.9	84	2.3	174	6.0	1.66	Yes
	57-60	80.0	80.8	-0.8	74.8	73.6	72.8	2.0 dBA	3.3	96	2.4	176	5.7	1.66	Yes
	61-64	81.3	81.3	0	76.1	74.1	74.1	2.0 dBA	3.5	71	2.0	149	5.4	1.66	Yes
Med.Trks	57-60	87.3	87.2	+0.1	82.1	80.1	80.2	1.9 dBA	2.0	23	2.2	55	3.6	1.67	Yes
Hvy.Trks	49-56	88.2	89.3	**-1.1**	**82.9**	**82.4**	81.3	1.6 dBA	2.5	46	2.7	60	3.1	1.66	**Yes**
	53-56	89.2	89.8	**-0.6**	83.9	83.1	82.5	1.4 dBA	2.9	101	2.7	132	3.8	1.66	Yes
	57-60	90.0	90.2	**-0.2**	84.8	83.3	83.1	1.7 dBA	2.4	123	2.1	177	6.5	1.66	**yes**
	61-64	91.0	91.8	-0.8	85.7	84.9	84.1	1.6 dBA	2.3	81	2.4	131	4.8	1.66	Yes

Student's "t" Test: $$"t" = \frac{\bar{X}-\bar{Y}}{\sqrt{\frac{(n_x-1)S_x^2+(n_y-1)S_y^2}{n_x+n_y-2}\cdot\left(\frac{n_x+n_y}{n_x\cdot n_y}\right)}} =$$

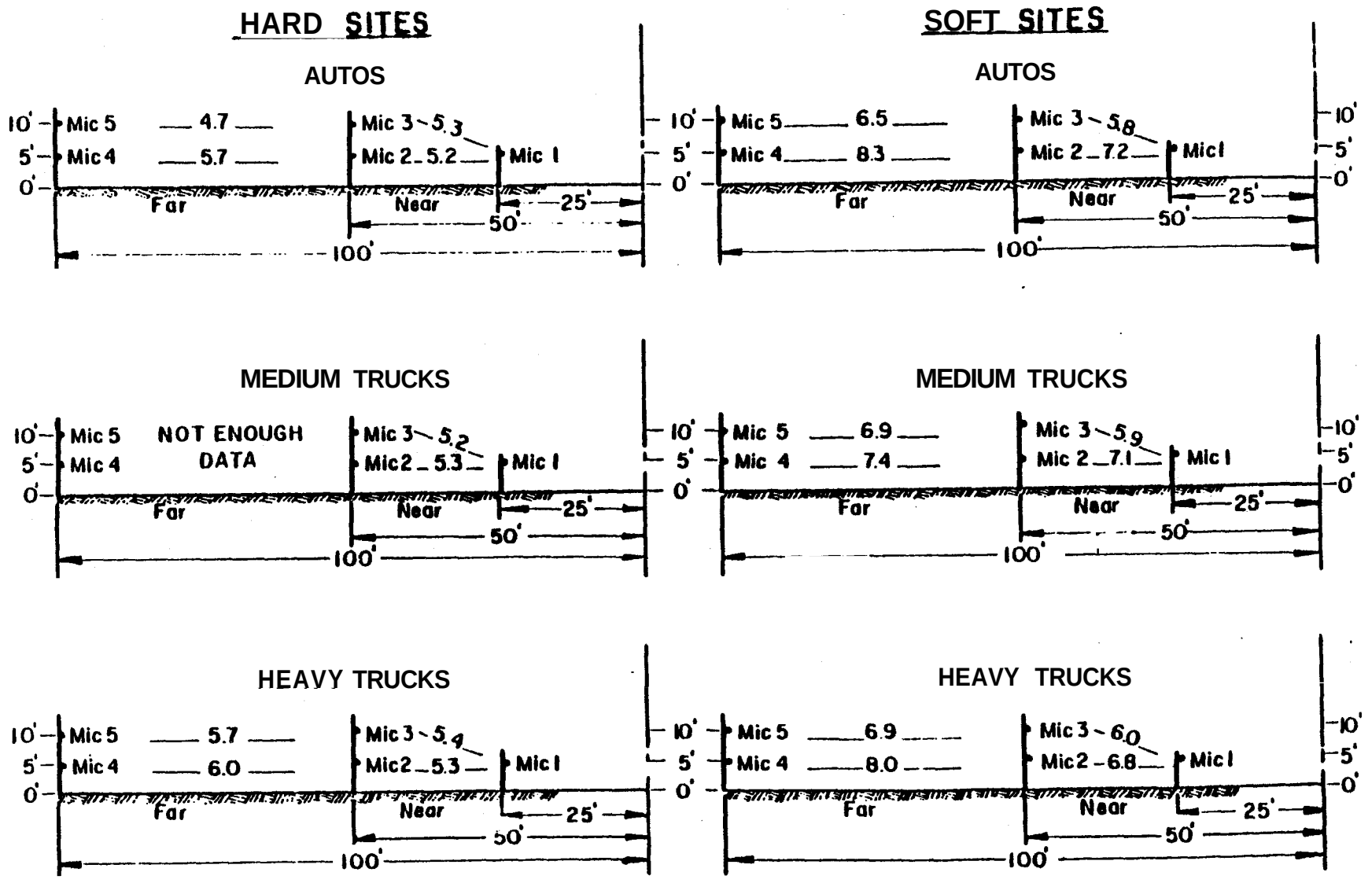
Hypothesis: $H_0 : \mu_x = \mu_y$

Reject H_0 if Calc."t">Crit."t"
The difference is then **significant.**

= Calculated "t" (Calc."t")

Critical "t" (Crit."t") = $t_{(0.05;n_x+n_y-2)}$ from "t" Table* (one-tailed)

*Bowker, A. H., Lieberman, G. J., Engineering Statistics. 2nd edition, Prentice-Hall, Inc., New Jersye, 1972



- Speed classes with minimum required data only
- Mic1 - Mic2 & Mic1 - Mic3: All sites; Event quality 1 and 2
- Mic2 - Mic4 & Mic3 - Mic5: Sites with 5 Mic's; Event quality 2 only.

Figure X-9. Near and far field drop off rates, dBA single events.

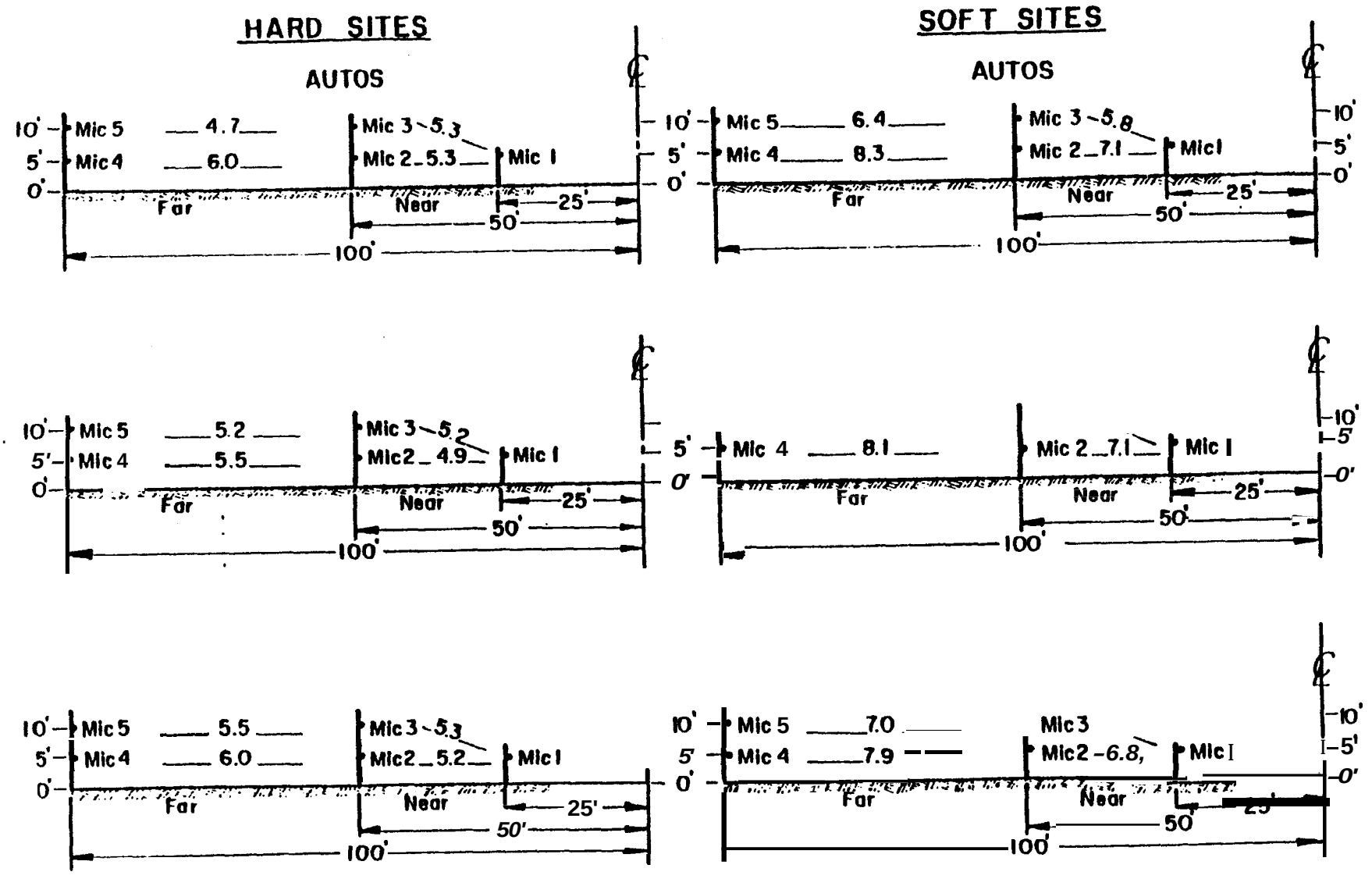


Figure X-10. Near and far field drop off rates, dBA single events.

Theoretical drop-off rates for point sources at hard sites are 6.0 dBA per doubling of distance (/DD). The near field '(25 to 50 feet) drop-off rates in Figures X-9 and X-10 indicated average drop-off rates of 5.2 dBA at 5- and 10-foot heights. This was probably caused by degradation of point sources at close distances.

At the soft sites, the apparent degradation of the point source was offset by excess ground attenuation to approximately 7.0 dBA at a height of 5 feet. At a height of 5 to 10 feet, the average between hard and soft sites was 5.9 dBA, or, the excess ground attenuation barely offset the degradation of the point source.

Further analyses of the near field drop-off rates revealed that they were not dependent on speed.

Vehicle type had a slight effect on the near field drop-off rates at the 5-foot height. Auto and medium truck drop-offs differed by about 2 dBA between hard and soft sites. The difference in near field hard and soft sites drop-off rates for heavy trucks appeared to be approximately 1.5 dBA. The latter was probably due to the higher source height of heavy trucks compared to source heights of autos and medium trucks.

A 6 dBA/DD drop-off rate (20 log $\frac{D}{D_o}$) for point sources corresponds with a 3 dBA/DD rate (10 log $\frac{D}{D_o}$) for line sources, in that there exists no excess attenuation caused by ground absorption (i.e., the drop-off rates equal the rate of geometric spreading with distance).

At the present, FHWA-RD-77-108(3) recommends the use of 10 loy $\frac{D}{D_o}$ as a line source drop-off rate in the near field, regardless of site characteristic. Based on the data presented in Figures **X-9** and **X-10** continuation of this drop-off rate seems reasonable even though differences were measured between hard ana soft sites.

In reality there are few true hard sites while variations in soft sites are endless. The degree at which excess attenuation offsets the degradation effect of point sources between 25 and 50 feet is therefore difficult to predict. The data presented in Figures X-9 and **X-10** suggest that the average near field single event drop-off rates of equally distributed hard and soft sites would be approximately 6.2 dBA/DD for autos, **6.1** dBA/DD for medium trucks, and 6.0 dBA/DD for heavy trucks.

As expected, the far field drop-off rates at hard sites averaged approximately 6 dBA/DD for the five-foot high mic's for all vehicle groups (see Figures **X-9** and **X-10).** At the ten-foot high mic's the drop-off rates appeared to vary with the source height, ranging from 4.7 dBA/DD for autos to an average of 5.6 dBA/DD for heavy trucks.

This variation was probably caused by reflections off the pavement by lower sources, projected to the ten-foot high mic's at 100 feet. At the lower mic's, these reflections were apparently either absent because of a different angle of reflection or else scattered by irregularities in the hard surface.

The soft site far field drop-off rates indicated a greater difference between lower and hiyher mics for low sources

(autos) than higher sources (trucks) as expected. Noise emitted by lower sources experiences greater excess attenuation at soft sites than high sources, due to the lower average height of the noise path to a receiver.

As was the case with hard sites, the noise drop-off rates at the ten-foot high mics were lower for autos and higher for trucks. Again, reflections by lower noise sources are suspected.

It also appears from the two figures (X-9 and X-10) that soft site ground attenuation still exists within 10 feet of the ground, a phenomenon noted in an earlier study (8).

At site 5, the far mics (mics 4 and 5) were positioned at 75 feet instead of 100 feet as was done at all other five mic sites. In order to include mics 4 and 5 data at site 5 with other far mics, a 75- to 100-foot distance adjustment was made to the data measured at site 5 far mics. This adjustment was calculated from noise level differences, AdBA, between mics 2 and 4, and mics 3 and 5, in terms of $X \text{ LOG } (\frac{D}{D_0})$, here X was first solved from AdBA between 50- and -75-foot mics. The values of X were then applied to the D = 100-foot positions to derive the adjustments for mics 4 and 5.

Geographical Differences in Vehicle Populations

Analyses involving geographical differences were performed on level road data only.

Table X-3 shows a statistical comparison between vehicle populations in northern California vs those in southern

TABLE X-3

STATISTICAL COMPARISON OF
VEHICLE POPULATIONS
NORTHERN CALIFORNIA VS. SOUTHERN CALIFORNIA

"Microphones at 25 Feet
'Speed Classes With Enough Data Only

Vehicle Type	Speed Class (MPH)	Energy Means, dBA N.Calif. $\bar{X}$	S.Calif. $\bar{Y}$	Diff. X-Y	Std.Dev's S_x	S_y	No.Samples n_x	n_y	Student's "t"-Test Calc. "t"	Crit. t"	Significant α=0.05*
Autos	45-48	76.7	75.4	1.3	2.2	2.9	45	47	2.4	1.99	Yes
	53-56	79.5	79.5	0	2.3	2.7	160	90	-0.2	1.98	No
	57-60	80.5	80.7	-0.2	2.4	3.2	129	134	-0.6	1.98	NO
	61-64	81.5	81.2	0.3.	2.3	3.1	96	119	0.6	1.98	No
	>64	83.4	82.3	1.1	2.8	3.2	41	62	1.7	1.99	No
Medium Trucks	53-56	85.6	84.7	0.9	2.1	3.1	33	34	1.4	2.00	No
	57-60	87.6	86.9	0.7	2.5	2.2	31	46	1.4	2.00	No
Heavy Trucks	49-52	89.5	87.4	2.1	2.7	2.4	63	41	4.1	1.99	Yes
	53-56	90.1	88.9	1.2	2.5	2.7	111	114	3.3	1.98	Yes
	57-60	90.8	89.7	1.1	2.3	2.1	119	178	4.3	1.98	Yes
	61-64	91.4	91.5	-0.1	2.1	2.6	68	142	-0.4	1.98	NO

Student's "t"-Test: Hypothesis: $H_0 : \mu_x = \mu_y$
Reject H_0 if Calc."t">Crit."t"
The difference is then significant.

$$\text{Calc. "t"} = \frac{\bar{X}-\bar{Y}}{\sqrt{\frac{(n_x-1)S_x^2+(n_y-1)S_y^2}{n_x+n_y-2} \cdot \left(\frac{n_x+n_y}{n_x \cdot n_y}\right)}} =$$

Crit. "t" = (two-tailed, =0.05) = $t_{(.025;n_x+n_y-2)}$ from "t"-Table

*Bowker, A. H., Lieberman, G. J.; Engineering Statistics, 2nd Edition, Prentice-Hall, Inc., New Jersey, 1972.

California. Northern California was represented by sites 1, 2, 3, 7, 9, 10, 18, and 19, while southern California was represented by sites 5, 6, 11, 12, 14, 15, 16 and 17.

Only speed classes with enough data in both geographical categories were compared, To eliminate site and meteorological variations, only the energy mean levels measured at 25 feet were included in the statistical analysis.

Of the five auto speed classes tested, only one (45 to 48 mph) indicated a statistically significant difference of 1.3 dBA between the northern half and the southern half of the state.

No significant difference was detected in the medium trucks. The heavy trucks, however, were statistically different for speeds between 49 mph and 60 mph. The greatest difference was 2.1 dBA at 49 to 52 mph. The north-south differences in remaining speed classes (53 to 60 mph) averaged 1.1 dBA. Although statistically significant, these differences were ignored for practical reasons. By using north-south averages, deviations are limited to a maximum of 0.5 to 1.0 dBA.

Wind Analyses

Wind analyses were performed on data from the sixteen level road sites only.

The wind data discussed in the Environmental Measurements and Criteria section of Chapter VIIIwere compared within the previously discussed crosswind vector intervals. The wind analyses presented the following problems:

1. Differences in vehicle populations needed to be eliminated.

2. Site differences had to be accounted for.

The first problem was solved by simply normalizing noise readings at all 25 -foot mics (mic 1) and adjusting the far field microphones accordingly.

The second problem could not be dealt with satisfactorily. Sites ranged from hard to various degrees of soft characteristics. Previous studies (15,16) have shown that the effects of wind on noise measurement results depend on distance and terrain characteristics, e.g., soft sites experience greater wind effects than hard sites. Ideally, studies involving the effects of wind on noise measurements should be performed on the same site for various wind angles and speeds.

Site effects may be minimized by limiting the source-to-receiver distance. Unfortunately, this strategy also reduces the effects of wind.

The primary objective of the wind study was to examine the effects, if any, at 50 feet. For this distance, the extremes were examined. These were soft site vector winds of 6 to 12 mph (blowing from source to receiver), and -6 to -12 mph (blowing from receiver towards source).

Table X-4 shows these conditions for autos and heavy trucks at mic's 2 and 3. Due to insufficient data for medium trucks, the comparisons were made with 3 to 6 mph vs -12 to -6 mph vector winds. Autos should have shown the greatest difference at mic 2. However, no significant difference

TABLE X - 4
COMPARISON OF' WIND SFFECTS
(+ 6 MPH To + 12 MPH VS - 6 MPH to - 12 MPH)

Soft Sites, Mics 2 and 3
(50 Feet)

MICROPHONE 2

	CROSS WIND RANGE (MPH)	MEAN, (dBA)	No. OF VEH.	STUDENT "t" - TEST DIFF. (dBA)	SIGNIFICANT ? (Alpha = 0.05)
AUTOS	6 to 12	69.3	7		
	-12 to -6	69.6	48	-0.3	NO
XED. TRUCKS	3 to 6	76.5	29		
	-12 to -6	77.0	7	-0.5	NO
HVY. TRUCKS	6 to 12	81.1	7		
	-12 to -6	81.4	7	-0.3	NO

MICROPHONE 3

	CROSS WIND RANGE (MPH)	MEAN, (dBA)	No. OF VEH.	STUDENT "t" - TEST DIFF. (dBA)	SIGNIFICANT ? (Alpha = 0.051
AUTOS	6 to 12	71.1	7		
	-12 to -6	71.4	48	-0.3	NO
MED. TRUCKS	3 to 6	77.6	29		
	-12 to -6	78.0	7	- 0.4	NO
HVY. TRUCKS	6 to 12	81.8	7		
	-12 to -6	81.6	7	0.2	NO

NOTES: Means were normalized using 25 foot (Mic 1) data. Due to insufficient data for meaium trucks in the 6 to 12 Mph range, data In the 3 to 6 Mph range were used.

could be detected after normalizing the 25 foot mic's, adjusting mics 2 and 3, and subjecting these data to the statistical Student "t"-test(14) with a level of significance of 0.05.

Table X-5 shows the effects for all sites, at mic's 2 and 3. Again, no significant difference was detected at 50 feet.

It was concluded that if noise measurements are made with wind speeds of 12 mph or less, the wind direction does not have an effect on noise levels at 50 feet from the source for all vehicle groups.

In order to examine the wind effects at 100 feet from the source, the wind effects at mics 4 and 5 were examined. Table X-6 shows the results. At mic 4, the normalized auto noise levels were 3.4 dBA higher with 6 to 12 mph positive (source to receiver) wind vectors than with 6 to 12 mph negative (receiver to source) wind vectors. The difference was statistically significant when tested with the Student "t"-test (14), (a-0.05). No difference was detected for other vehicle groups or at mic 5. This was probably due to less interference of the ground plane with noise propagation.

The difference at mic 4 may be explained by site variation, wind direction, or both. It is not possible to separate individual contributions by each. No conclusions pertaining to the effects of wind at 100 feet should be drawn from those data,

TABLE X - 5
COMPARISON OF WIND EFFECTS
(+ 6 MPH To + 12 MPH vs - 6 MPH To -12 MPH)

All Sites, Mics 2 and 3
(50 Feet)

MICROPHONE 2

	CROSS WIND RANGE (MPH)	MEAN, (dBA)	No. OF VEH.	STUDENT "t" - TEST DIFF. (dBA)	SIGNIFICANT ? (Alpna = 0.05)
AUTOS	6 to 12	74.1	24		
	-12 to -6	73.9	124	0.2	NO
MED. TRUCKS	6 to 12	83.3	3		
	-12 to -6	64.7	26	-1.4	NO
HVY. TRUCKS	6 to 12	83.9	48		
	-12 to -6	84.3	52	-0.4	NO

MICROPHONE 3

	CROSS WIND RANGS (MPH)	MEAN, (dBA)	No. OF VEH.	STUDENT "t" - TEST DIFF. (dBA)	SIGNIFICANT ? (Alpha = 0.05)
AUTOS	6 to 12	74.6	24		
	-12 to -6	74.4	122	0.2	NO
MED. TRUCKS	6 to 12	84.0	3		
	-12 to -6	84.3	24	-0.3	NO
HVY. TRUCKS	6 to 12	84.4	48		
	-12 to -6	84.3	52	0.1	NO

NOTES: Means were normalized using 25 foot (Mic 1) data.

TABLE X - 6
COMPARISON OF WIND EFFECTS
(+ 6 MPH To + 12 MPH VS - 6 MPH To -12 MPH)

Sites With Five Mics, Mics 4 and 5
(100 Feet)

M I C R O P H O N E 4

	CROSS WIND RANGE (MPH)	MEAN, (dBA)	No. OF VEH.	STUDENT "t" - TEST DIFF. (dBA)	SIGNIFICANT ? (Alpha = 0.05)
AUTOS	6 to 12	68.4	17		
	-12 to -6	65.0	08	3.4	YES
MED. TRUCKS	6 to 12	76.7	3		
	-12 to -6	75.4	7	1.3	NO
HVY. TRUCKS	6 to 12	77.9	41		
	-12 to -6	77.8	7	0.1	NO

M I C R O P H O N E 5

	CROSS WIND RANGE (MPH)	MEAN, (dBA)	No. OF VEH.	STUDENT "t" - TEST DIFF. (dBA)	SIGNIFICANT ? (Alpha = 0.05)
AUTOS	6 to 12	69.9	17		
	-12 to -6	69.2	08	0.7	NO
MED. TRUCKS	6 to 12	76.8	3		
	-12 to -6	77.4	7	-0.6	NO
HVY. TRUCKS	6 to 12	78.2	41		
	-12 to -6	77.6	7	0.6	NO

NOTES: Means were normalized using 25 foot (Mic 1) data.

Emission Levels for Heavy Trucks on Uphill Grades

Examination of the measured truck noise data revealed 29 data points (1.7%) of the 1769 accepted events to be over 90 dBA at 50 feet. The California Vehicle Code limits vehicles over 10,000 lbs to 90 dBA at that distance. This represents the maximum legal limit for any vehicle under any condition at 50 feet in California.

The 1.7% violation occurred in all speed classes when data from all sites were pooled, but not when each site was considered separately. This presented a problem in that the sporadic high values created anomalies in speed and grade analyses.

For the purpose of developing grade noise emission curves in this study, the 29 values greater than 90 dBA were not included until the very end, when their energy was equally distributed over all speeds causing the curves to be adjusted upward.

The 1740 measured noise levels of 90 dBA and lower were examined for 1) grade dependency and 2) speed dependency. From the outset of this study it had been anticipated that analyses of the measured data would reveal both characteristics. The final products of the grade noise research were envisioned to be a family of speed dependent reference energy emission curves for uphill grades up to 7% in increments of, say, 1 percent. The 0%, or level road, reference energy mean emission curve had already been developed.

Two problems needed to be addressed before beginning the grade- and speed-dependency analyses: 1) variability in site characteristics and 2) variability in source characteristics (truck populations and pavement types).

In the level road emission analyses, data from sixteen sites were used to analyze one condition (level road). This relatively large number of sites allowed analyses of variations in site characterisitcs and vehicle populations. The final emission levels represented the average of a large variety of conditions.

For the analyses on grades, however, each site represented one condition (grade). Ideally, several sites should have been selected for each percentage of grade. This, however, would have increased the scope and total cost of the project substantially. Instead, only six sites were selected on grades between +3% and +7%.

In order to reduce the chances of introducing significant variability in site and source characteristics, the sites were carefully selected according to strict criteria (see Chapter VII).

Variability in Site Characteristics. At four of the six grade sites (sites 20 thru 23), three mic's were set up in the same manner as at the seven, three-mic, level road sites. This allowed comparisons to be made between the four sites for mic 1/mic 2 and mic 1/mic 3 noise drop-off rates. This information was used to determine whether ground characteristics were acoustically similar from site to site. Because of logistical reasons, the three-mic setup was not used at sites 23A and 23B. Ground characteristics at these sites, however, appear very similar to the other four sites so that there was no reason to suspect that noise drop-offs were significantly different.

Table X-7 shows the noise drop-offs byspeed classes for each of the four sites. As was noted in the level road

TABLE X-7

AVERAGE NOISE DROP-OFFS ON GRADE SITES

Speed Class	Mic 1 - Mic 2, dBA			
	Site 20	Site 21	Site 22	Site 23
(mph)				
11-20	5.8	6.5	*	*
21-30	6.1	6.1		6.8
31-40	6.0	6.1	6.3	6.0
41-50	5.9	5.9	6.5	6.3
51-60	6.0	*	6.3	6.4
>60	-	-	6.5	*
All Speeds	6.0	6.1	6.4	6.3
All Sites	6.2			

Speed Class	Mic 1 - Mic 3, dBA			
	Site 20	Site 21	Site 22	Site 23
(mph)				
11-20	5.3	6.2	*	*
21-30	5.7	5.7		6.1
31-40	5.5	5.5	5.7	5.6
41-50	5.4	5.5	6.0	5.5
51-60	5.5	*	5.9	5.7
>60	-	-	5.9	*
All Speeds	5.5	5.7	5.9	5.8
All Sites	5.8			

analyses, the drop-offs do not appear to be speed dependent. Acoustically, the grade sites exhibited drop-off rates somewhere between hard and soft site rates when compared with the near field drop-off rate for level roads (see Figures X-9 and X-10), and therefore represent average conditions. In order to examine statistically if significant difference(s) in the ground characteristics existed from site to site, the measured noise levels at the 50 foot mic's (mic 2) were normalized via the 25 foot mic's (mic 1) as was done in the hard vs soft site analyses (Table X-2). This method of normalization assumes that the 25 foot mic's are not affected by ground characteristics at each site due to the proximity of the source.

A one-way analysis of variances (α=0.05) was then performed on the normalized 50 foot data for three cases: 1) all speed classes combined, 2) data in speed class 31 to 40 mph, and 3) data in speed class 41 to 50 mph. The latter two speed classes were the only ones with enough data (95% confidence interval of $\bar{x} \pm 1$ dBA) at all grade sites. Tables X-8 and X-9 show the method of computation and results. In all cases, no significant difference could be detected in site (ground) characteristics.

Variability in Source Characteristics. Source characteristics are affected by several elements, such as truck characteristics (noise contributions from engine, stack, tires, etc.), pavement characteristics (new, old, AC, PCC, grooved, smooth, etc.), truck speed, and road gradient. Speed and grade were the two variables to be examined for their effect on uphill heavy truck noise.

Speed dependency for a given gradient may easily be examined, as the source population tends to stay constant (free of geographical variations).

TABLE X - 8
ANALYSIS OF VARIANCES
Grade Site Characteristics
All Speeds

NORMALIZED ENERGY MEAN DATA
AT 50 FEET (MIC 2)

	SIT3 20	SITE 21	SITS 22	SITS 23
MEAW, dBA :	82.0	81.9	81.6	81.6
STANDARD DEVIATION :	2.38	2.29	2.08	2.67
No. OF OBSERVATIONS :	294	304	332	313
SIGNIFICANCE LEVEL :		0.05		
CALCULATED "F"		2.35		
CRITICAL "F"		2.60		

CONCLUSION: Tnere are NO significant differences in grade site characteristics.

TABLE X - 9
ANALYSIS OF VARIANCSS
Grade Site Characteristics
31-40 Mph and 41-50 Mph

31-40 MPH
NORMALIZED ENERGY MEAN DATA
AT 50 FEET (MIC 2)

	SITE 20	SITE 21	SITE 22	SITE 23
MEAN, dBA :	81.8	81.7	81.4	81.8
STANDARD DEVIATION :	2.31	2.43	2.43	2.77
No. OF OBSERVATIONS :	51	97	83	118
SIGNIFICANCE LEVEL :		0.05		
CALCULATSD "F"		0.47		
CRITICAL "F"		2.60		

CONCLUSION: There are NO significant differences in grade site characteristics.

41-50 MPH
NORMALIZED ENERGY MEAN DATA
A? 50 FEET (MIC 2)

	SITE 20	SITE 21	SITS 22	SITE 23
MEAN, dBA :	82.4	82.4	81.9	82.0
STANDARD DEVIATION :	1.89	2.06	2.35	2.15
No. OF OSSERVATIOMS :	23	73	105	35
SIGNIFICANCE LEVEL :		0.05		
CALCULATED "F"		0.91		
CRITICAL "F"		2.60		

CONCLUSION: Tnere are NO significant differences in graae site characteristics.

Analysis of grade dependency, however, is complicated by the necessity of crossing protentially different source populations, as illustrated in Figure X-11. It is virtually impossible to differentiate individual elements in each source population from total noise measurements. At best, the effects caused by site and speed variations may be removed from the measurements, by examining noise levels at 25 feet only, within each speed class. In addition to gradients, however, two other variable still remain: truck populations and pavement type.

Tables X-10 through X-12 show that at 25 feet there were significant differences between source characteristics at sites 20 through 23, at 31 to 40 mph and 41 to 50 mph, when the data were subjected to a one-way analysis of variance (α=0.05). Further examination showed that at 31 to 40 mph, the source characteristics of sites 21 (+7%) and 22 (+3%) were not significantly different (Table X-11). In the same speed class, data from site 20 (+6%) and site 23 (+4.5%) were also not significantly different. Similarly, the 41 to 50 mph speed class data from sites 21, 22, and 23 were not significantly different (Table X-12). Site 20, however, was significantly different from the other three. Because of the tendency for source characteristics to be similar for +7% and +3% grades, and for +4.5% and +6%, the differences between source characteristics could not be explained by gradient, but more likely by subtle variations in truck populations and pavement.

Grade Dependency. The suspicion that no grade dependency could be detected was confirmed when the energy means of 25 foot mic noise levels were plotted by speed class in Figure X-12. This does not necessarily mean that no grade dependency existed. If it existed, however, it was probably

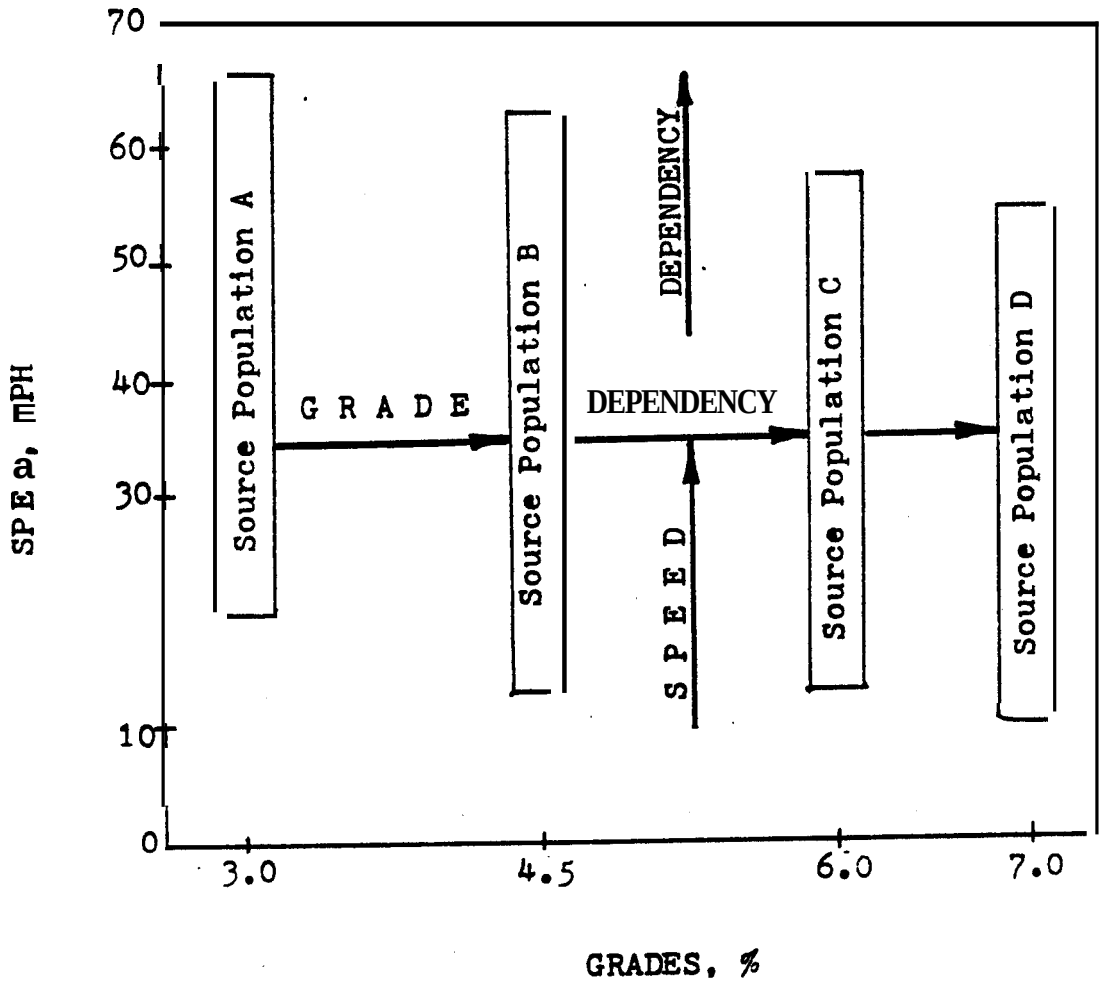


Figure X - 11. Speed Dependency Vs Grade Dependency.

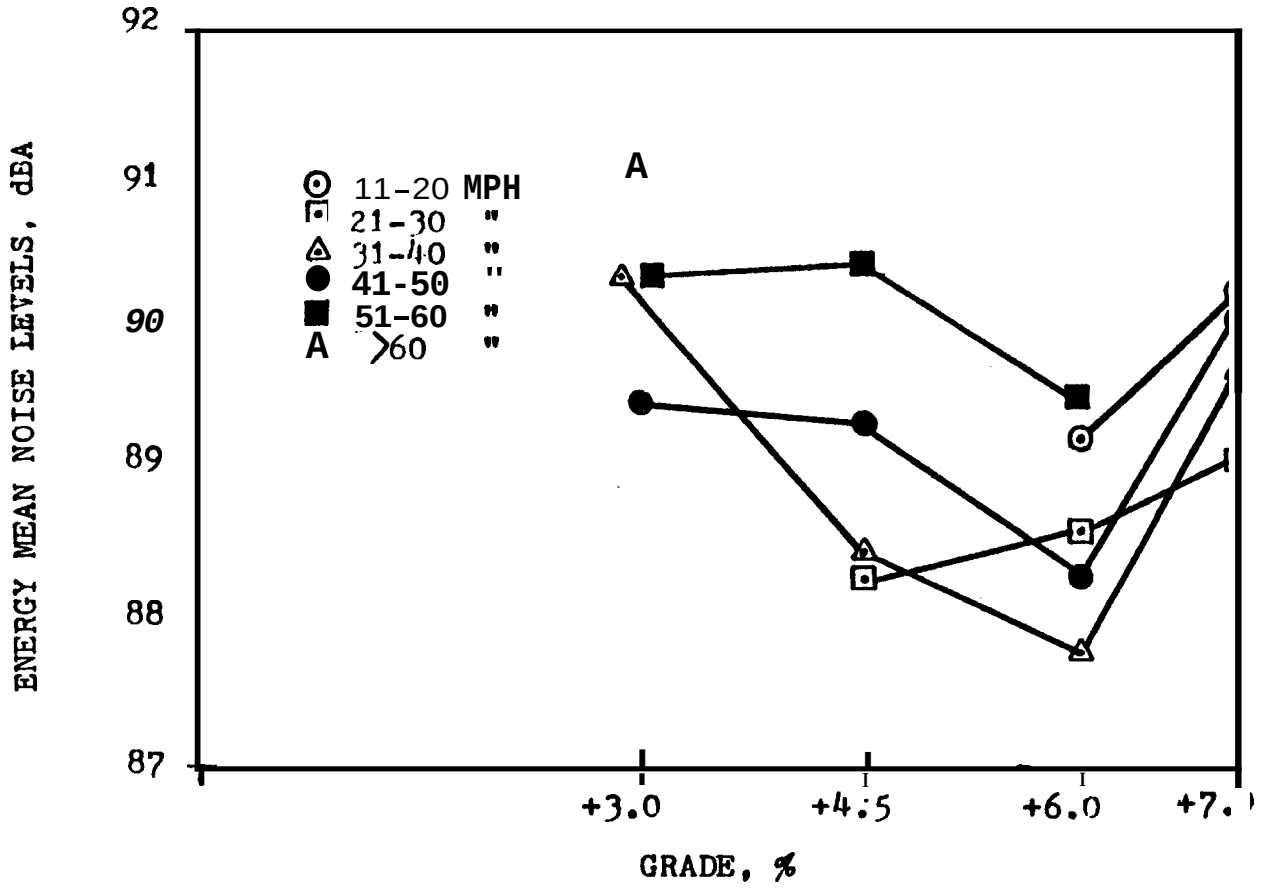


Figure X - 12. Energy mean noise emission levels at 25 feet vs grade, by speed class.

TABLE X - 10
ANALYSIS OF VARIANCES
Source Characteristics
Sites 20 to 23 and 21 to 23
31-40 Mph

	ENERGY MEAN DATA AT 25 FOOT (MIC 1)			
	SITE 20	SITS 21	SITE 22	SITS 23
MEAN, dBA	87.8	89.7	90.3	88.5
STANDARD DEVIATION :	2.20	2.38	2.28	2.47
No. OF OSSERVATIONS :	49	95	82	115
SIGNIFICANCE LEVEL :		0.05		
CALCULATED "F"		16.36		
CRITICAL: "F"		2.60		

CONCLUSION: There ARE significant differences in source characteristics between the four sites.

	ENERGY MEAN DATA AT 25 FOOT (MIC 1)		
	SITE 21	SITE 22	SITE 23
WEAN, dBA	89.7	90.3	88.5
STANDARD DEVIATION :	2.38	2.28	2.47
No. OF OBSERVATIONS :	95	82	115
SIGNIFICANCE LEVEL :		0.05	
CALCULATED "F"		14.72	
CRITICAL "F"		2.99	

CONCLUSION: There ARE significant differences In source characteristics between the three sites.

TABLE 'X - 11
ANALYSIS OF VARIANCES
Source Characteristics
Sites 21 & 22 And Sites 20 & 23
31-40 Mph

ENERGY MEAN DATA AT 25 FOOT (MIC 1)

	SITE 21	SITE 22
MEAN, dBA :	89.7	90.3
STANDARD DEVIATION :	2.38	2.28
No. OF OBSERVATIONS :	95	82
SIGNIFICANCE LEVEL :	0.05	
CALCULATED "F" :	2.92	
CRITICAL "F" :	3.90	

CONCLUSION : There are NO significant differences in source characteristics between the two sites.

SNERGY MEAN DATA AT 25 FOOT (MIC 1)

	SITE 20	SITE 23
MEAN, dBA	87.8	88.5
STANDARD DSVIATION :	2.24	2.47
No. OF OBSSRVATIONS :	49	115
SIGNIFICANCE LEVEL :	0.05	
CALCULATED "F"	2.92	
CRITICAL "F"	3.91	

CONCLUSION : There are NO significant differences in source cnaracteristics between tne two sites.

TABLE X - 12
ANALYSIS OF VARIANCES
Source Characteristics
Sites 20 to 23 and 21 to 23
41-50 Mph

	ENERGY MEAN DATA AT 25 FOOT (MIC 1)			
	SITE 20	SITE 21	SITE 22	SITS 23
MEAN, dBA	88.3	90.0	89.5	89.3
STANDARD DEVIATION :	1.94	1.94	2.34	2.09
No. OF OBSERVATIONS :	23	70	105	33
SIGNIFICANCE LEVEL :		0.05		
CALCULATED "F"		3.74		
CRITICAL "F"		2.60		

CONCLUSION: There ARE significant differences in source characteristics between the four sites.

	ENERGY MEAN DATA AT 25 FOOT (MIC 1)		
	SITE 21	SITE 22	SITE 23
MEAN, dBA	90.0	89.5	89.3
STANDARD DEVIATION :	1.94	2.34	2.09
No. OF OBSERVATIONS :	70	105	33
SIGNIFICANCE' LEVEL :		0.05	
CALCULATED "F"		1.56	
CRITICAL "F"		3.04	

CONCLUSION: There are NO significant differences in source characteristics between the three sites.

weak enough to be masked by the subtle, but statistically significant variations in pavement and truck populations.

Before the results of the on-grade data analyses were known, it had been anticipated that truck noise levels would increase with percentage of grade at any given speed. It certainly seems reasonable to postulate that at same constant speeds, trucks must perform under more power on steeper yrades than those on shallower grades, and therefore emit higher noise levels. The underlying assumptions for this reasoniny are:

1. For a given speed, trucks have same yross weights on steep and shallow grades.

2. Trucks are not performing at maximum or near maximum power in order to have available reserves to maintain same speed on steep and shallow yrades.

The above would probably be true if speed constraints were present, such as slow speed limits, and narrow, winding, slippery or congested road conditions.

The on-grade truck data in this report, however, have been collected under free flowiny conditions without the above constraints.

Under these conditions, trucks traveling on all but the shallowest yrades tend to operate under near maximum power at sustained crawl speeds representing a steady state balance between power, yrade, and gross vehicle weight. For equivalent truck populations, power distributions are equal, and sustained crawl speeds become only a function of yrade percentage and yross vehicle weight.

Figure X-13 shows the consequences of truck crawl speeds that are constrained only by grade (G) and weight (W). Truck populations 1 and 2 (each represented by a single truck) are assumed to have same noise characteristics and

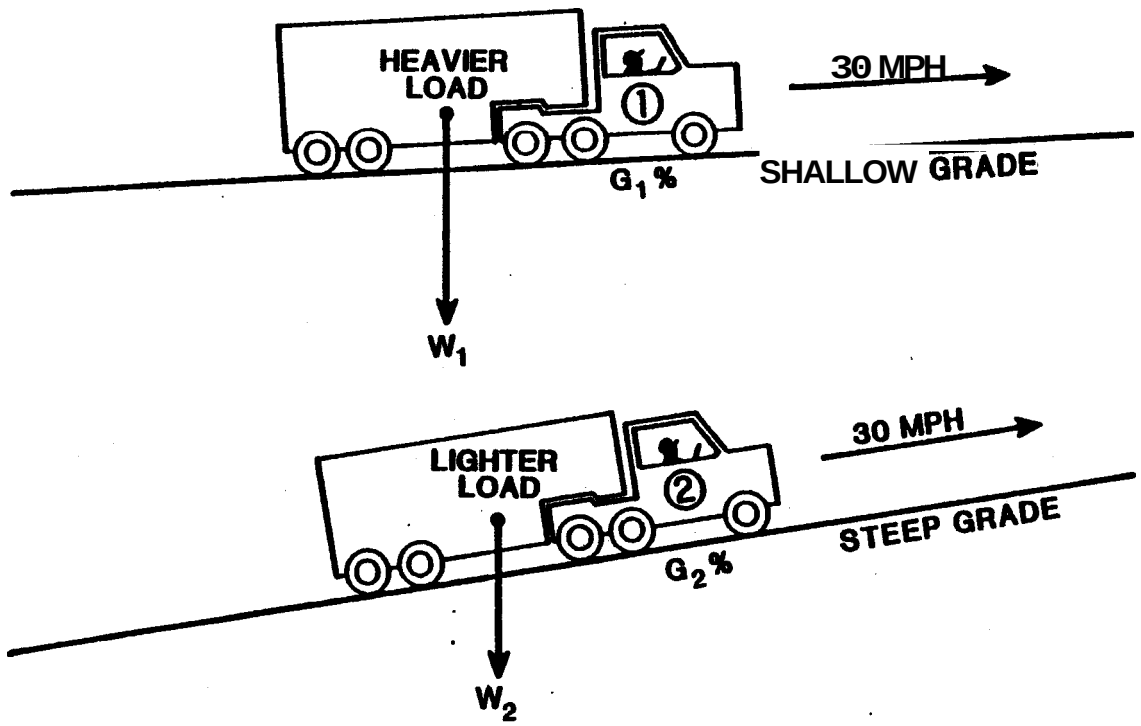


Figure X - 13 SUSTAINED CRAWL SPEED AS A FUNCTION OF 'LOADANDPERCENTAGEOFGRADE

$(G_1W_1 \simeq G_2W_2)$

Power distributions. At equal speeds, e.g., 30 mph; both trucks emit the same speed dependent tire noise. Since both trucks operate under the same (maximum) power and therefore in the same year, enyine noise will also be the same. Note, however, that for both truck populations to travel at the same speeds under near maximum power, population 1 on the shallow grade needs to be loaded heavier than population 2 on the steep yraae, i.e., the products G_1W_1 and G_2W_2 tend to be equal.

This relationship may be further supported by introducing the vertical (upward) component V, of truck speed V, and the vertical distance D_z traveled per time unit t.

$$V_z = G*V, \text{ and}$$

$$V_z = \frac{D_z}{t}$$

In its simplest form (iynoring dray and friction), power (P) is defined as:

$$p = \frac{W*D_z}{t}, \text{ or by substitution:}$$

$$P = W*V_z =$$

$$P = W*G*V.$$

Assuminy that under the free flowiny conditions, P is at or near maximum (P_{max}) at any speed, we may postulate:

$$Pmax = W*G*V = \text{constant},$$

and for the same speeds

$$W_1G_1 = W_2G_2.$$

The above gives an explanation for the observed lack of grade dependency. Additional plots of noise levels at 50 feet further support the lack of grade dependency (Figure X-14).

Speed Dependency. From the above discussion it could be erroneously concluded that if all trucks were operating at or near P_{max} at any speed, a lack of speed dependency would also be observed. However, tire noise is speed dependent, and although engine power tends to be the same at any speed, gearing and transmission noise will be different.

The lack of observed grade dependency allowed pooling of data from all sites by speed class with the obvious advantage of averaging any variations in truck populations, pavement type and conditions at all six sites.

Before pooling the data, speed dependent curves at 50 feet (mic 2) for each site were plotted by the energy means of each speed class (Figure X-15). These plots suggest that at each site a curve of best fit would tend to be best described by a second order polynomial equation rather than a linear regression line similar to those used in level road analysis.

Second order polynomial equations of the general form:

$$Y = a + bX + CX^2$$

were developed for each site in which:

$Y = 10^{L_o/10}$ = relative energy of uphill heavy truck noise level.

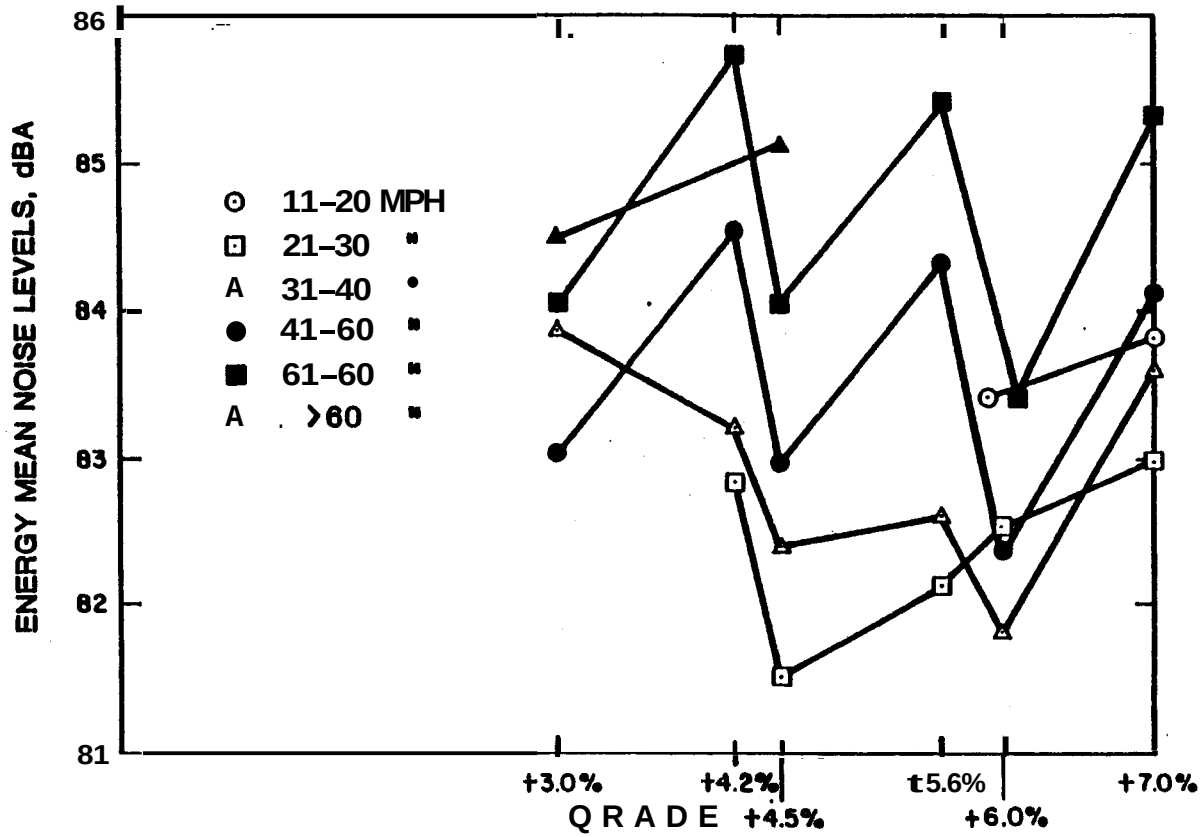


Fig X-14 ENERGY MEAN NOISE LEVELS AT 50 FEET VS. GRADE – BY SPEED CLASS

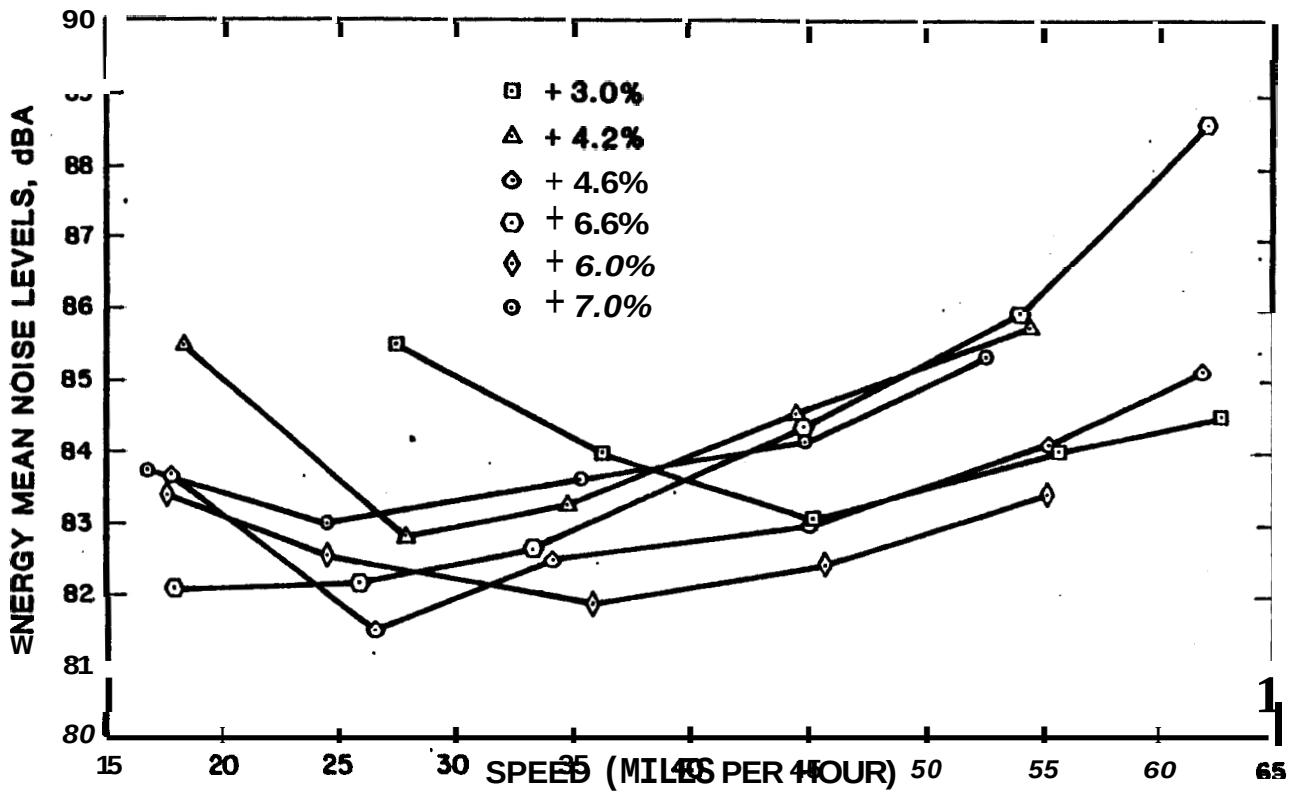


Fig. X-15 PLOTS BY ENERGY MEANS OF 10 MPH SPEED CLASSES

(SPEED VS L_{EQ})

$X = \text{Log}_{10}$ of uphill heavy truck speed, mph.

a, b, and c are coefficients, determined mathematically.

Substituting y and x for the above identities, the equation becomes:

$$10^{L_o/10} = a + b(\text{Log}_{10}\ \text{Speed}) + c(\text{Log}_{10}\ \text{Speed})^2$$

and, converting relative energy to energy mean noise level ($L_{\overline{OE}}$):

$$L_{\overline{OE}} = 10\ \text{Log}_{10}[a + b(\text{Log}_{10}\ \text{Speed}) + c(\text{Log}_{10}\ \text{Speed})^2]$$

Figure X-16 shows the resulting plots of the equations for a range of 10 to 70 mph.

Both figures X-15 and X-16 appear to support the earlier finding of lack of direct grade dependency. Figure X-17 shows a comparison of three plots of $L_{\overline{OE}}$ vs. speed. They were generated from 1740 data points from all six sites at 50 feet (excluding the 29 data points above 90 dBA).

Three methods were used to generate the curves. They were named after the programs used to develop their equations:

1. Linear regression ('Linreg')

2. Plotting energy means of the six speed classes ('Veno')

3. Second order polynomial curve fit ('Polfit').

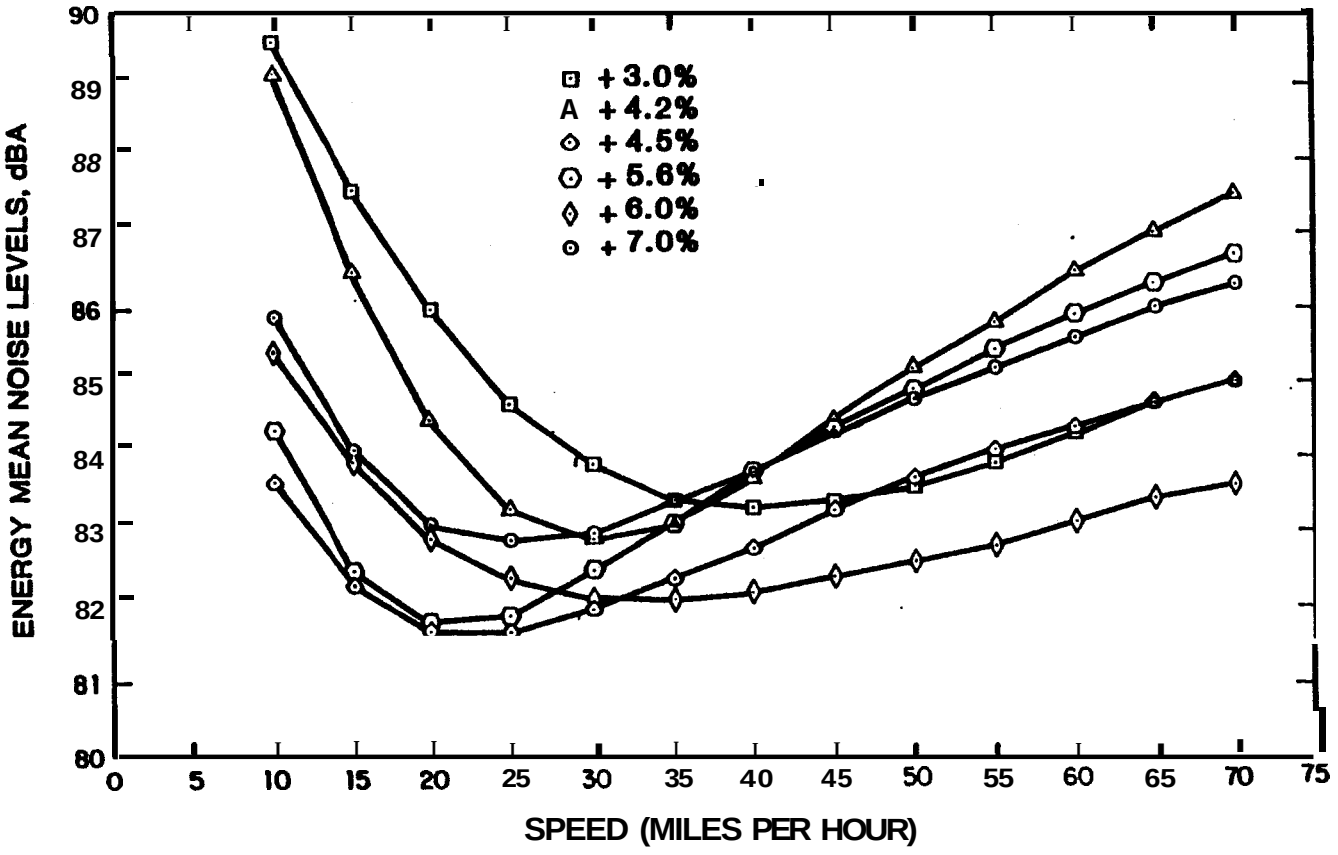


Fig. X-16, ENERGY AVERAGED 2ND DEGREE POLYNOMIAL PLOTS
(INDIVIDUAL SITES–60 FT. DATA)

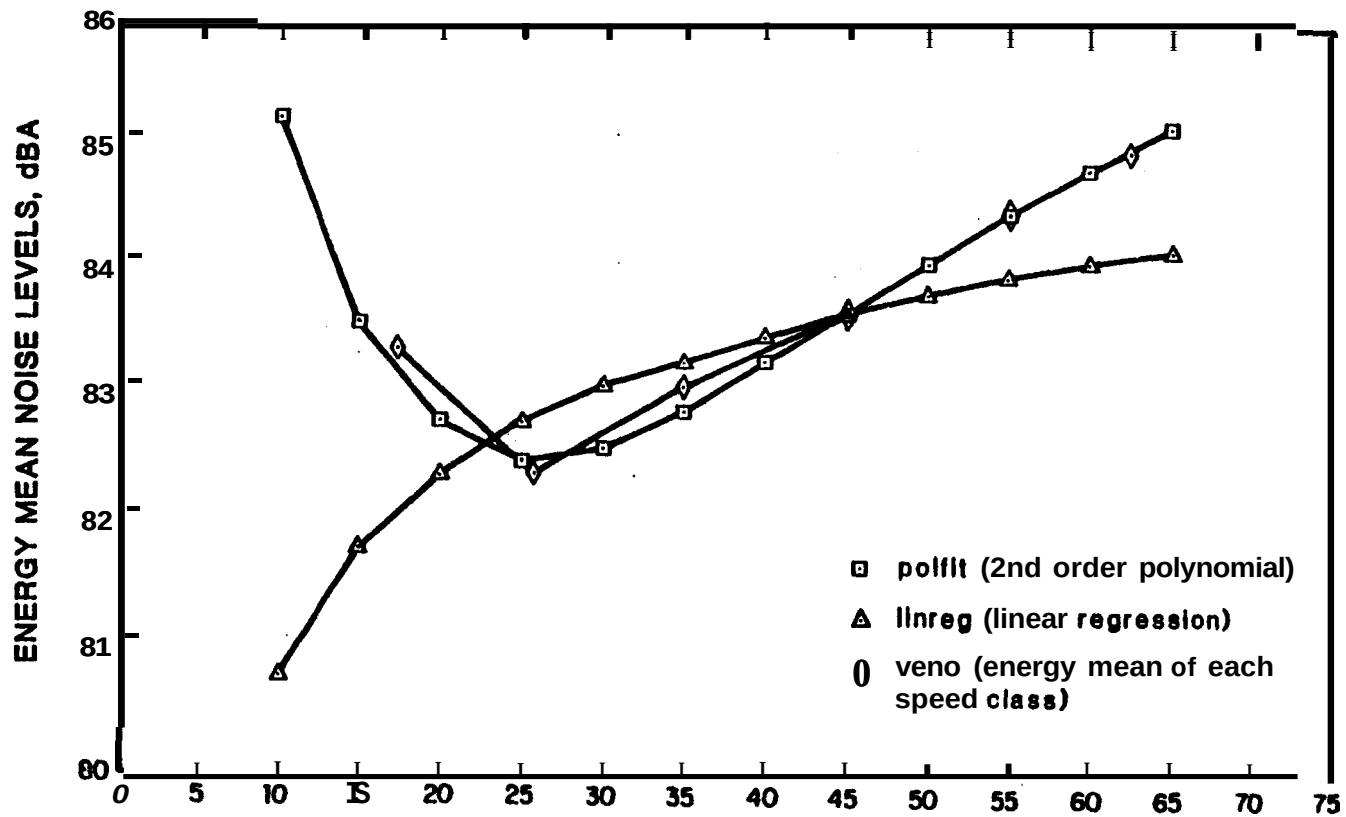


Figure X - 17. $L_{\overline{oe}}$ Vs Speed (Three Methods)

(Grade Sites Combined- 50 foot Data)

The comparison clearly indicates that Veno and Polfit are in close agreement. Of these two curves, Polfit represents a better fit through all the data, whereas the Veno curve only represents the means of 10 mph speed classes. Polfit was therefore selected to represent a speed dependent energy mean emission curve at a reference distance of 50 feet for heavy trucks going uphill on 3% to 7% grades using data of 90 dBA or less only. The equation of this curve is:

$$L_{\overline{OE}} = 10\mathrm{Log}_{10}[2.0295\times10^{9}-2.6266\times10^{9}(\mathrm{Log}_{10}\mathrm{Speed})+ +9.3158\times10^{8}(\mathrm{Log}_{10}\mathrm{Speed})^{2}]$$

The 29 data points above 90 dBA, omitted in the development of the Polfit curve, were then used to adjust the curve upward. The adjustment constant was calculated from the energy mean noise level of all the 50-foot data (including data above 90 dBA - 1769 data points) and the energy mean noise level of the 50 foot data of 90 dBA and below (1740 data points). The difference between these was 0.8 dBA, and was used as a constant to adjust the Polfit upwards along the entire curve. This assumed that the distributions of $\leq$90 dBA and >90 dBA were proportional over all speed classes. Table X-13 tests this assumption, and it appears that except for 21 to 30 mph and 31 to 40 mph speed classes this assumption is fairly accurate. If, however, the two speed classes were combined, the accuracy of the assumption would improve even more.

The adjusted Polfit curve then becomes:

$$L_{\overline{OE}} = 10\mathrm{Log}_{10}[2.0295\times10^{9}-2.6266\times10^{9}(\mathrm{Log}_{10}\mathrm{Speed})+ +9.3158\times10^{8}(\mathrm{Log}_{10}\mathrm{Speed})^{2}]+0.8,$$

TABLE X-13

COMPARISON OF DISTRIBUTIONS
OF ≤90 dBA and >90 dBA DATA

	≤90 dBA	>90 dBA	
Speed Class	Actual n	Actual n	Expected n
<11	2	0	0
11-20	140	3	2.3
21-30	527	12	8.8
31-40	500	3	8.4
41-50	319	6	5.3
51-60	224	5	3r7
>60	28	0	0.5
	1740	29	29

which represents the California Heavy-Truck-On-Grade Noise Reference Energy Mean Emission Level (Calyrade) for yrades of +3% to +7%. The curve is shown in Chapter XI.

Speed Distribution As a Function of Grade. Earlier in this chapter it was concluded that there was a lack of direct grade dependency in the measured noise data. However, there was a significant speed dependency, represented by the Calgrade curve. Examination of observed speed distributions in this study show that - as expected - speeds and grades are inversely proportional.

Unlike level road sites, when free flowing traffic moves within a narrow range of speeds, grades display a much wider ranye. Usiny averaye speeds with Calgrade may present problems, because they are generally near the "say-point" of the curve. Ideally, the entire speed distribution should be integrated with Calyrade. This, however, requires knowledge of uphill heavy truck speed distributions as traffic inputs for noise predictions - information that is not readily available on a routine basis, It was therefore deemed useful to attempt to develop "default" speed distributions based on observations in this study.

Fiyure X-18 presents the speed distributions in 10 mph speed-intervals, observed in this study. The averaye and 12 1/2 percentile of the distribution were compared with those presented in a Caltrans report for grades up to +7% in 1% increments (10). The values between the increments were interpolated. The two points on the observed speed distributions show generally yood ayreement with those on the typical distributions. It was therefore concluded that the observed speed distributions were typical.

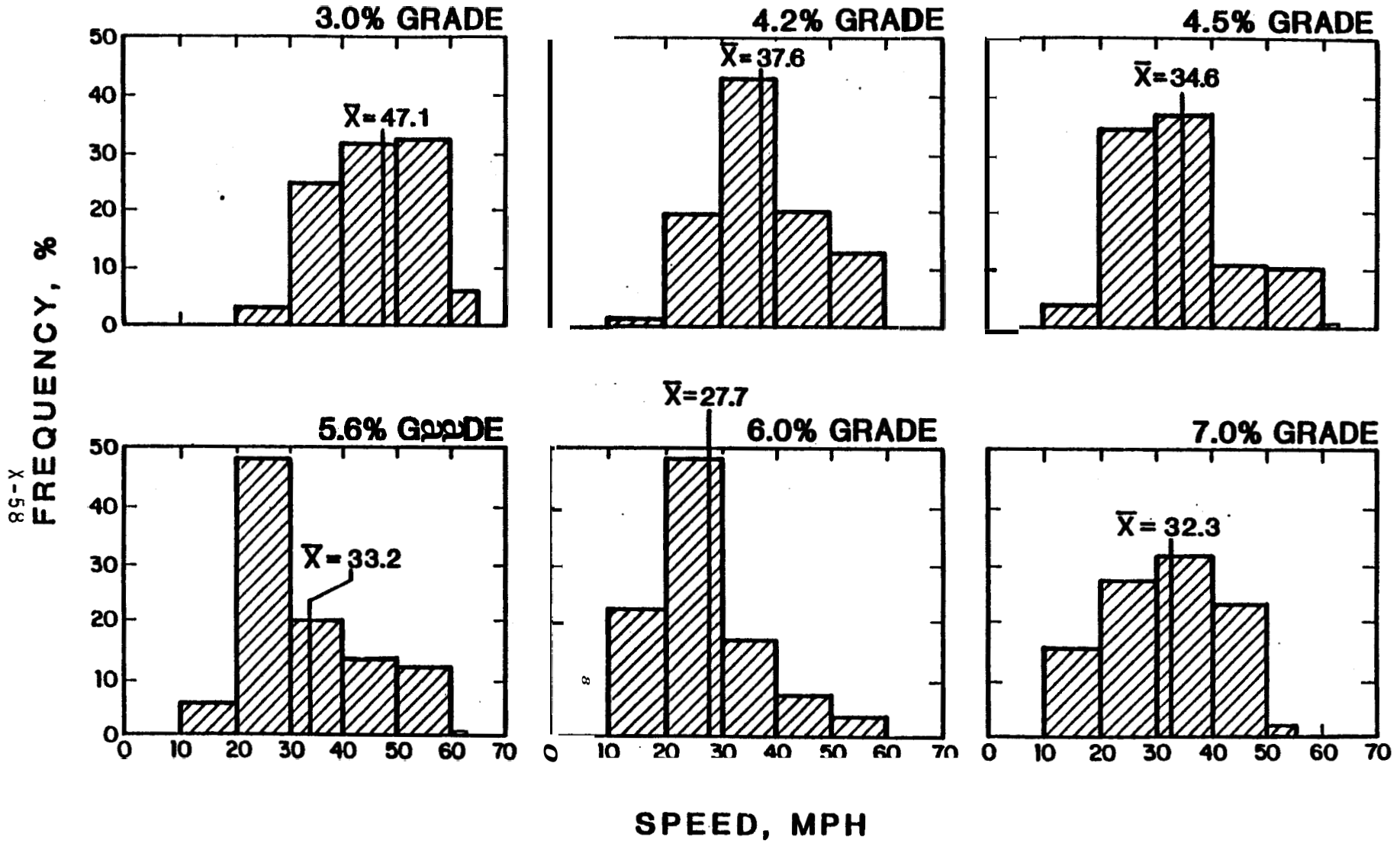


Fig. X-18 SPEED DISTRIBUTION BY GRADE

From the observeh speed distributions default noise emission levels were computed. First, the weighted $L_{\overline{OE}}$ for each grade's speed distribution was calculated (Table X-14). The results were plotted (Figure X-19) along with the 55 mph heavy truck emission level for level roads. A curve of "best fit" was then drawn through the plots. Because of lack of data between 0 and 3% the curve was dashed in this region, implying uncertainty of its location. The apparent discontinuity in the curve below 3% may be explained by the hypothesis that between 0 and 3% grades trucks are not necessarily operating under near maximum power as is the case for 3% to 7% grades. If trucks are not under maximum power, their speeds may be influenced more by speed limits rather than by loading. As was discussed earlier in this chapter, it would be reasonable to suggest that under those conditions a stronger yrade depenaency would exist. On steeper grades, speed dependency would be dominant. The dashed and solid curve in Figure X-19 reflects this. The relationship between the level road noise emission level at 55 mph and the grade data therefore appears reasonable.

Table X-15 shows suggested default values derived from the curve in Figure X-19. These should only be used if speed distributions of uphill heavy trucks are unknown.

TABLE X - 14
$L_{\overline{OE}}$ WEIGHTED BY OBSERVED SPEED DISTRISUTIONS

GRADE %	SPEED CLASS (MPH)	% FREQUENCY OF OCCURRENCE	AVERAGS SPEED (MPH)	$L_{\overline{OE}}$ dBA	RELATIVE SNERGY X 10^6	WEIGHTED ENERGY X 10^6
	11-20	0	-	-	-	-
	21-30	3.2	27.5	83.4	218.8	7.0
	31-40	25.0	36.3	83.8	239.9	60.0
+3.0	41-50	32.1	45.2	84.5	281.8	90.5
	51-60	32.9	55.6	85.4	346.7	114.1
	>60	6.8	62.5	85.9	389.0	26.5
	TOTAL WEIGHTED WEAN ENERGY					298.1
	ENERGY MEAN NOISE EMISSION LEVEL FOR 3.0 % GRADE: 64.7 dBA					
	11-20	1.9	18.3	83.8	239.9	4.6
	21-30	20.0	28.0	83.4	218.8	43.8
	31-40	43.8	34.7	83.7	234.4	102.7
+4.2	41-50	20.5	44.5	84.5	281.8	57.8
	51-60	13.8	54.3	85.3	338.8	46.8
	>60	0	-	-	-	-
	TOTAL WEIGHTED MEAN ENERGY					255.7
	ENERGY MEAN NOISE EMISSION LEVEL FOR 4.2 % GRADE: 84.1 dBA					
	11-20	4.1	17.7	83.9	245.5	10.1
	21-30	34.9	26.7	83.4	218.8	76.4
	31-40	37.5	34.0	83.7	234.4	87.9
+4.5	41-50	11.4	45.1	84.5	281.8	32.1
	51-60	11.1	55.2	85.3	338.8	37.6
	>60	1.0	61.7	85.8	380.2	3.8
	TOTAL WEIGETED MEAN ENERGY					247.9
	ENERGY MEAN NOISE EMISSION LEVEL, FOR 4.5 % GRADE: 83.9 dBA					

TABLE X - 14 (Continued)
$L_{\overline{OE}}$ WEIGHTED BY OBSERVED SPEED DISTRIBUTIONS

GRADE %	SPEED CLASS (MPH)	% FREQUENCY OF OCCURRENCE	AVERAGE SPEED (MPH)	$L_{\overline{OE}}$ dBA	RELATIVS ENERGY X 106	WEIGHTED ENERGY X 10^6
	11-20	5.2	17.9	83.9	245.5	12.8
	21-30	48.6	26.0	83.4	218.8	106.3
	31-40	19.6	33.3	83.6	229.1	44.9
+5.6	41-50	13.8	44.7	84.5	281.8	38.9
	51-60	12.2	53.9	85.2	331.1	40.4
	>60	0.7	62.0	85.8	380.2	2.7
	TOTAL WEIGHTED MEAN ENERGY					246.0
	ENERGY MEAN NOISE EMISSION LEVEL FOR 5.6 % GRADE:					83.9 dBA
	11-20	22.5	17.5	83.9	245.5	55.2
	21-30	49.0	24.5	83.4	218.8	107.2
	'31-40	17.1	35.8	83.8	239.9	41.0
+6.0	41-50	7.7	45.7	84.6	288.4	22.2
	51-60	3.7	55.2	85.3	338.8	12.5
	>60	0	-	-	-	-
	TOTAL WEIGHTED MEAN ENERGY					238.1
	ENERGY MEAN NOISE EMISSION LEVEL FOR 6.0 % GRADE:					83.8 dBA
	11-20	15.2	16.7	84.1	257.0	39.1
	21-30	27.4	24.7	83.4	218.8	60.0
	31-40	31.9	35.3	83.8	239.9	76.5
+7.0	41-50	23.6	44.8	84.5	281.8	66.5
	51-60	1.9	52.5	85.1	323.6	6.1
	>60	0	-	-	-	-
	TOTAL WEIGHTED MEAN ENERGY					248.3
	ENERGY MEAN NOISE EMISSION LEVEL FOR 7.0 % GRADE:					83.9 dBA

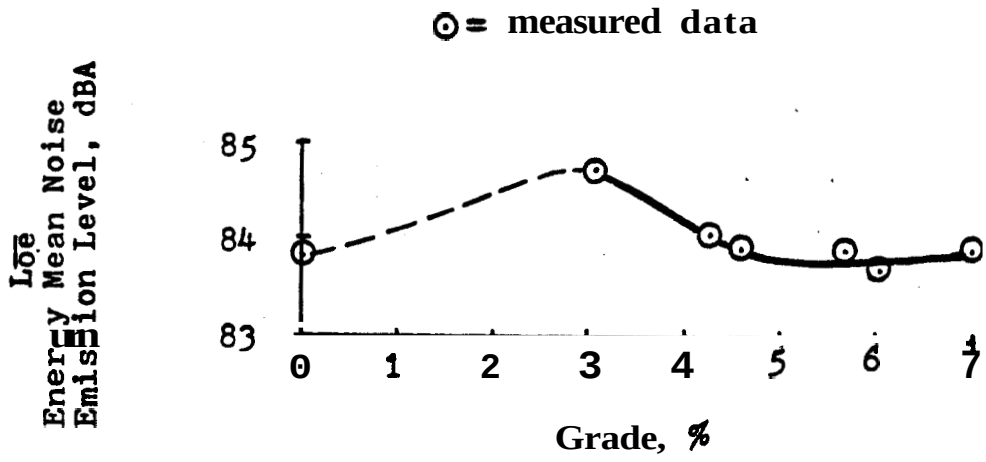


Figure X - 19. Weighted Noise Emission Levels For Observed Speed Distributions Of Uphill Heavy Trucks. (Reference Distance = 50 Feet)

GRADE, %	$L_{\overline{oe}}$, dBA
(Level @ 55 Mph	83.8*)
1	84.0*)
2	84.4
3	84.7
4	84.1
5	83.9
6	83.9
7	83.9

* used to interpolate 2% value only
(for 1% use level road emission levels)

Table X - 15. Suggested Default Values For Grades Steeper Than 1%. (Interpolate fractional Percentages).

XI. CALIFORNIA VEHICLE NOISE REFERENCE ENERGY MEAN EMISSION LEVELS

Level Roads

Fiyure XI-1 presents the California Vehicle Noise (Calveno) Reference Energy Mean Emission levels. The speed-dependent curves were developed from the measured data at 50 feet from the centerline of vehicle travel at a height of 5 feet, using the methodolovies and criteria discussed in the previous chapters. The curves should be used only for vehicles traveling at constant speed from 25 mph to 65 mph, on level roadways (within ± 1% yradient).

Definitions of the three vehicle yroups are identical to those defined in FHWA-RD-77-108(2).

This study did not attempt to verify existing source heiyhts reported by FHWA-RD-77-108, nor did this study attempt to determine new source heiyhts for autos, medium and heavy trucks.

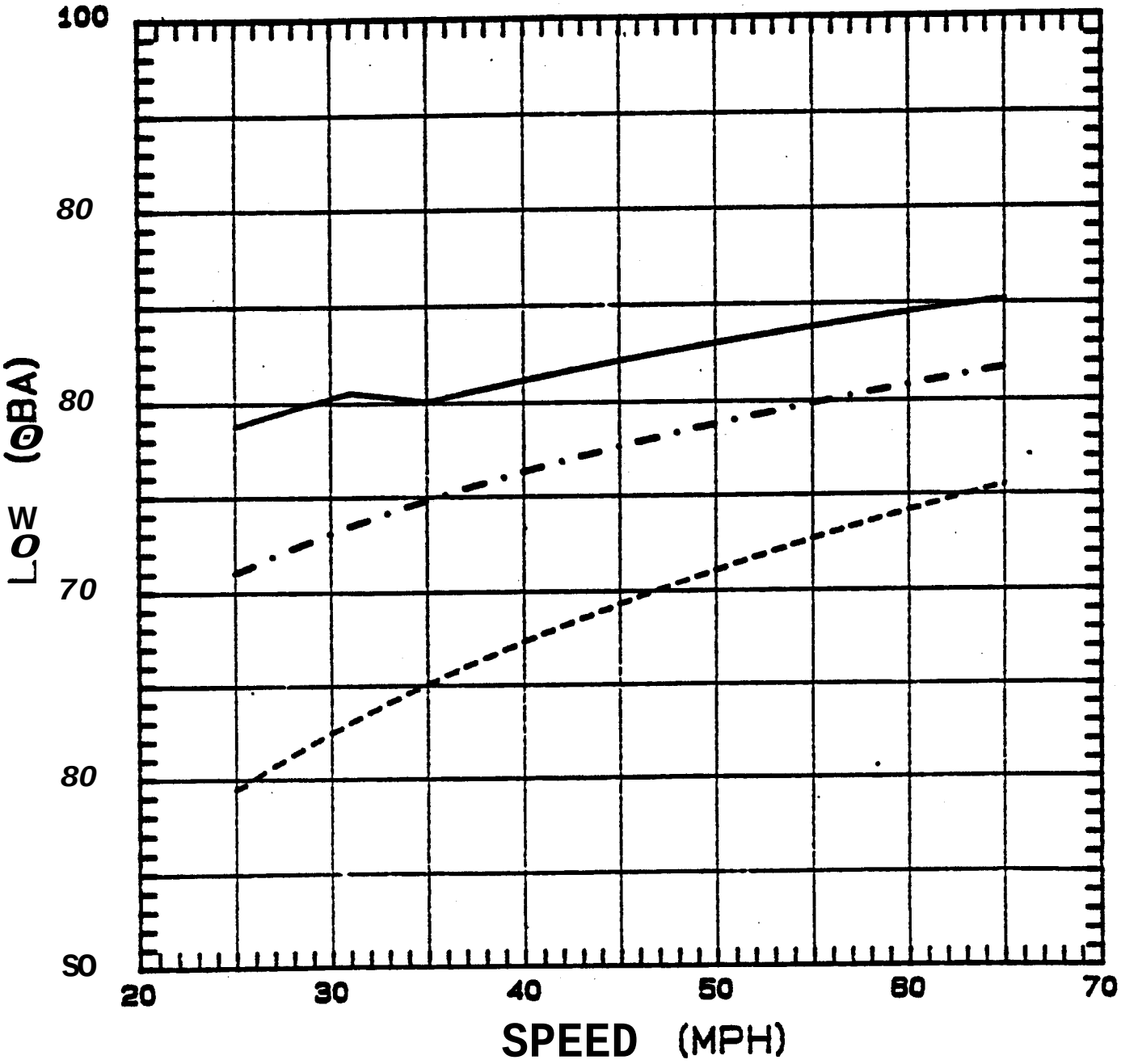
A summary of differences between the California and FHWA-RD-77-108 follows:

Speed (mph)	California - FHWA, dBA		
	Autos	Medium Trucks	Heavy Trucks
31	0.8	-0.5	+0.2
35	0.8	-0.9	-1.6
40	0.8	-1.4	-1.8
45	0.8	-1.8	-2.2
50	0.9	-2.2	-2.4
35	0.9	-2.5	-2.6
60	1.0	-2.9	-2.8

FIGURE XI-1
CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES
MIC.#2 HT-5FT. DIST-SOFT.

VEH.TYPE: ALL AUTOS	LOE= 5.2 + 38.8*LOG(MPH)		
VEH.TYPE: MEDIUM TRUCKS	LOE-35.3 + 25.8*LOG(MPH)		
VEH.TYPE: HEAVY TRUCKS	LOE=51.9 + 19.2*LOG(MPH)	25<MPH<31	
	LOE-50.4 + 19.2*LOG(MPH)	35≤MPH≤65	
	STRAIGHT LINE TRANSITION	31<MPH<35	



It is estimated that for average traffic conditions at 55 mph, noise levels predicted with the California emission levels will be approximately 1 to 2 dBA lower than those predicted with the National emission levels.

A 1981 California TransLab study (8) showed the FHWA-RD-77-108(3) to overpredict by 3 to 4 dBA. This overprediction was partially due to the use of National emission levels. With California emission levels, the overpredictions would be reduced to about 2 dBA.

Grades

Figure XI-2 presents the California Heavy-Truck-On-Grade Noise Reference Energy Mean Emission Levels for 'grades of +3% to +7% (Calgrade). These should only be applied to heavy trucks in uphill direction traveling at sustained crawl speeds.

Differences between Calgrade and the existing NCHRP 117 methodology using average speeds are shown in Table XI-1.

As was indicated in Chapter X, known speed distributions of uphill trucks must be integrated with Calgrade. If, however, this information is not available, default values for typical speed distributions shown in Table X-15 may be used.

Finally, it should be emphasized that Calgrade may only be used'when sustained crawl speeds have been attained and no other speed constraints exist. Figure XI-3 may be used as a guide to determine the average distance needed for a heavy truck to decelerate from 55 mph at the bottom of a grade, to sustained crawl speed at some point on a constant

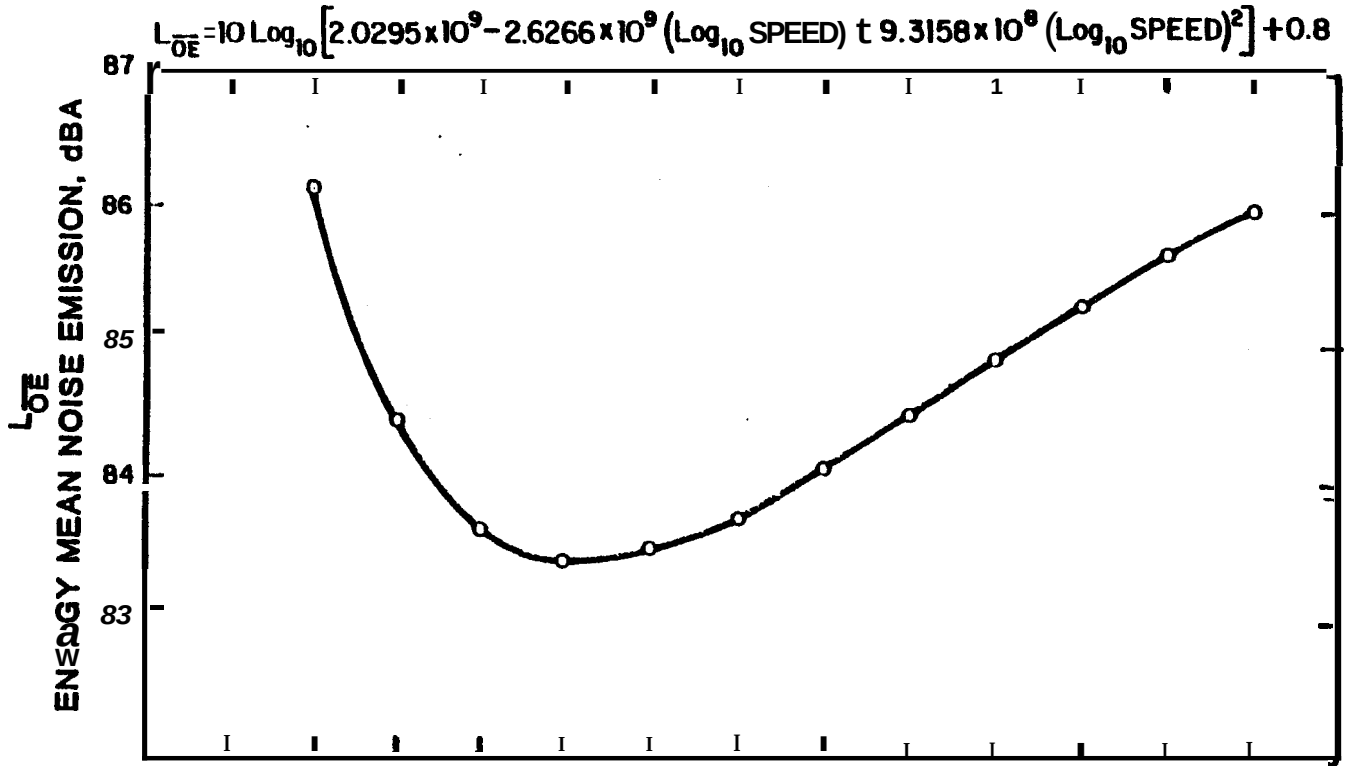


Fig. XI-2 CALIFORNIA HEAVY-TRUCK-ON-GRADE NOISE REFERENCE ENERGY MEAN EMISSION LEVELS-GRADES +3 TO +7%

TABLE XI-1

COMPARISON OF CALGRADE AND NCHRP 117

GRADE	AVERAGE TYPICAL SPEED (MPH)	L_{OE}, dBA BASED ON AVG. SPEED CALGRADE	NCHRP 117*
Level	55	83.8	83.8
+1%	55	84.0**	83.8
+2%	50	84.2**	83.0
+3%	45	84.5	83.1
+4%	40	84.1	83.2
+5%	36	83.8	83.3
+6%	32.5	83.5	84.3
+7%	31	83.4	85.5

*Calveno + NCHRP 117 Grade Correction
**Interpolated Values

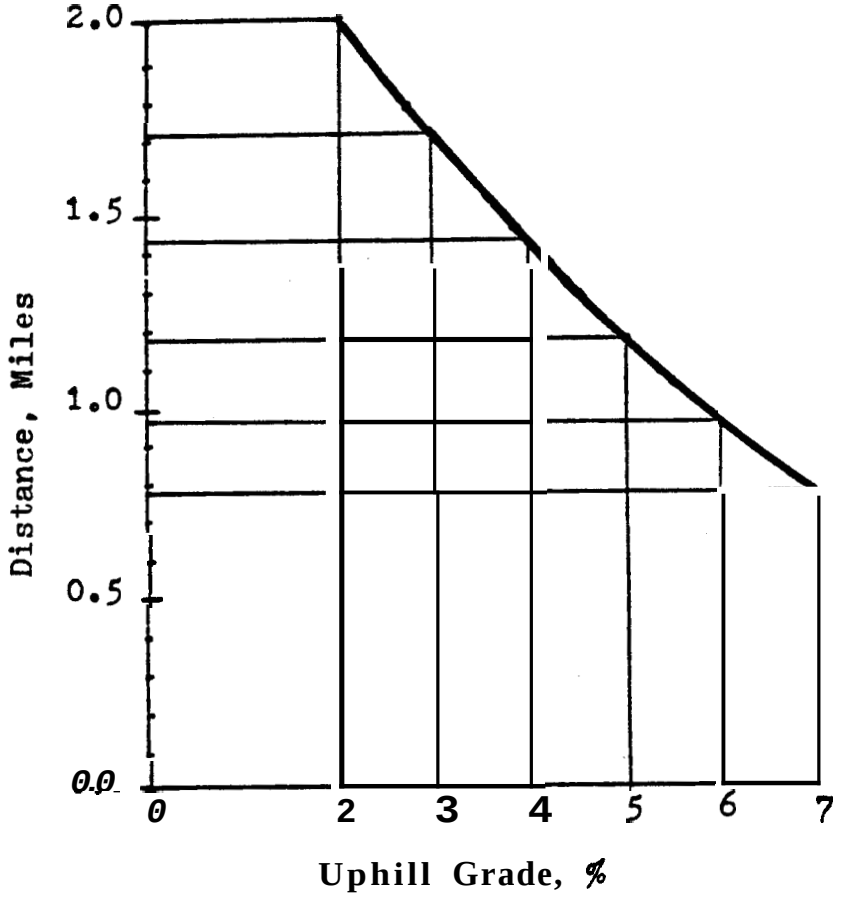


Figure XI - 3. Deceleration distance as a function of uphill grade for an average heavy truck slowing down from 55 Mph to sustained crawl speeds (10).

yrade. The average distance ranges from 0.76 miles for a 7% yrade to 2.00 miles for a 2% grade(10).

In absence of reliable information the author recommends that no yrade corrections (Calyrade or other methods) be made for noise predictions at yrade sites located within the neavy truck deceleration zone, i.e., at distances siynificantly less than those shown in Figure XI-3. In these zones, the author recommends using 55 mph speeds and Calveno (level road emission levels) for tne uphill heavy trucks.

CALVINO - 50' @ LEVEL RDS - @ 5' HT - EVENTS OF 90 + dBA

		dBA
5AX	- 55 MPH	91.7
5AX	- 53 MPH	90.2
5AX	- 60 MPH	90.0
5AX	- 57 MPH	92.7
5AX	- 64 MPH	90.9
5AX	- 67 MPH	90.5
5AX	- 53 MPH	92.3
4AX	- 48 MPH	91.1
5AX	- 67 MPH	90.1
5AX	- 57 MPH	92.0
5AX	- 70 MPH	91.9
5AX	63 MPH	93.9
5AX	- 67 MPH	96.6
5AX	- 61 MPH	91.2

$\bar{X}$ = 60 MPH - 92.0 dBA
1154 HT'S

14/1154 = 1.2% OF HT'S

ALL VEHICLES 2734
14/2734 = 0.5% OF ALL VEHICLES.

HT ON GRADES - 29 OF 1769 HT
= 1.7% OF HT'S

IN GENERAL: 14 + 29 / 1154 + 1769 = 43/29

1.5% OF ALL HT - [illegible] OVER 90 [illegible]
50', 5' HT [illegible]

Memo Re - Speeds in memo 17 July 1987 from Salter.

Extrapolation Scheme.

92

REFERENCES

1. Hendriks, Rudolf W., California Vehicle Noise Emission Levels, California Department of Transportation, Office of Transportation Laboratory, FHWA/CA/TL-84/13, August 1984.

2. Federal-Aid Highway Program Manual, Vol. 7, Ch. 7, Sec. 3, Federal Highway Administration, August 9, 1982.

3. Barry, T. M., and Reagan, J. A., "FHWA Highway Traffic Noise Prediction Model," Federal Highway Administration, FHWA-RD-77-108, December 1978.

4. Bowlby, W., "Sound Procedures for Measuring Highway Noise: Final Report," Federal Highway Administration, FHWA-DPO-45-1R, August 1981.

5. Rudder, F. F., Jr., and Lam, P., "Update of TSC Highway Traffic Noise Prediction Code (1974)," Federal Highway Administration, FHWA-RD-77-19, January 1977.

6. Ma, Y. Y., and Rudder, F. F., Jr., "Statistical Analysis of FHWA Traffic Noise Data," Federal Highway Administration, FHWA-RD-78-64, July 1978.

7. Rickley, E. J., Ford, D. W., and Quinn, R. W., "Highway Noise Measurements for Verification of Prediction Models," Federal Highway Adminisitration, DOT-TSC-FHAW-78-1, April 1976.

8. Hendriks, R. W., and Hatano, M. M., "Evaluation of Noise Barriers," California Department of Transportation, Office of Transportation Laboratory, FHWA/CA/TL-81/07, June 1981.

9. Reagan, J. A., 'Determination of Reference Energy Mean Emission Levels," Federal Highway Administration, FHWA-OEP/HEV-78-1, July 1978.

10. Rooney, F. D., "Speeds of Trucks and Other Vehicles on Grades," California Department of Transportation, June 1983.

11. Design Information Bulletin No. 58 - Noise Barrier, California Department of Transportation, Office of Planning and Design, Memorandum dated December 8, 1980.

12. Specification for Sound Level Meters, American National Standards Institute (ANSI), S 1.4 - 1983.

13. Sasor, S. R., "Determination of Truck Noise Levels for New Jersey," New Jersey Department of Transportation, Division of Research and Development, July 1980.

14. Bowker, A. H., Lieberman, G. J., Engineering Statistics, Second Edition, Prentice-Hall, Inc., 1972.

15. Scholes, W. E., Salridge, A. C., and Sargent, J. W., "Field Performance of a Noise Barrier," Reprint from Journal of Sound and Vibration, Vol. 16, No. 4, 1971 pp. 627-642, Building Research Station Current Paper 24/71, August 1971.

16. Foss, R. N., "Ground Plane Wind Shear Interaction on Accoustic Transmission," Washington State Highway Commission, June 1978.

APPENDIX A

SITS DETAILS
(Level Road Sites Only)

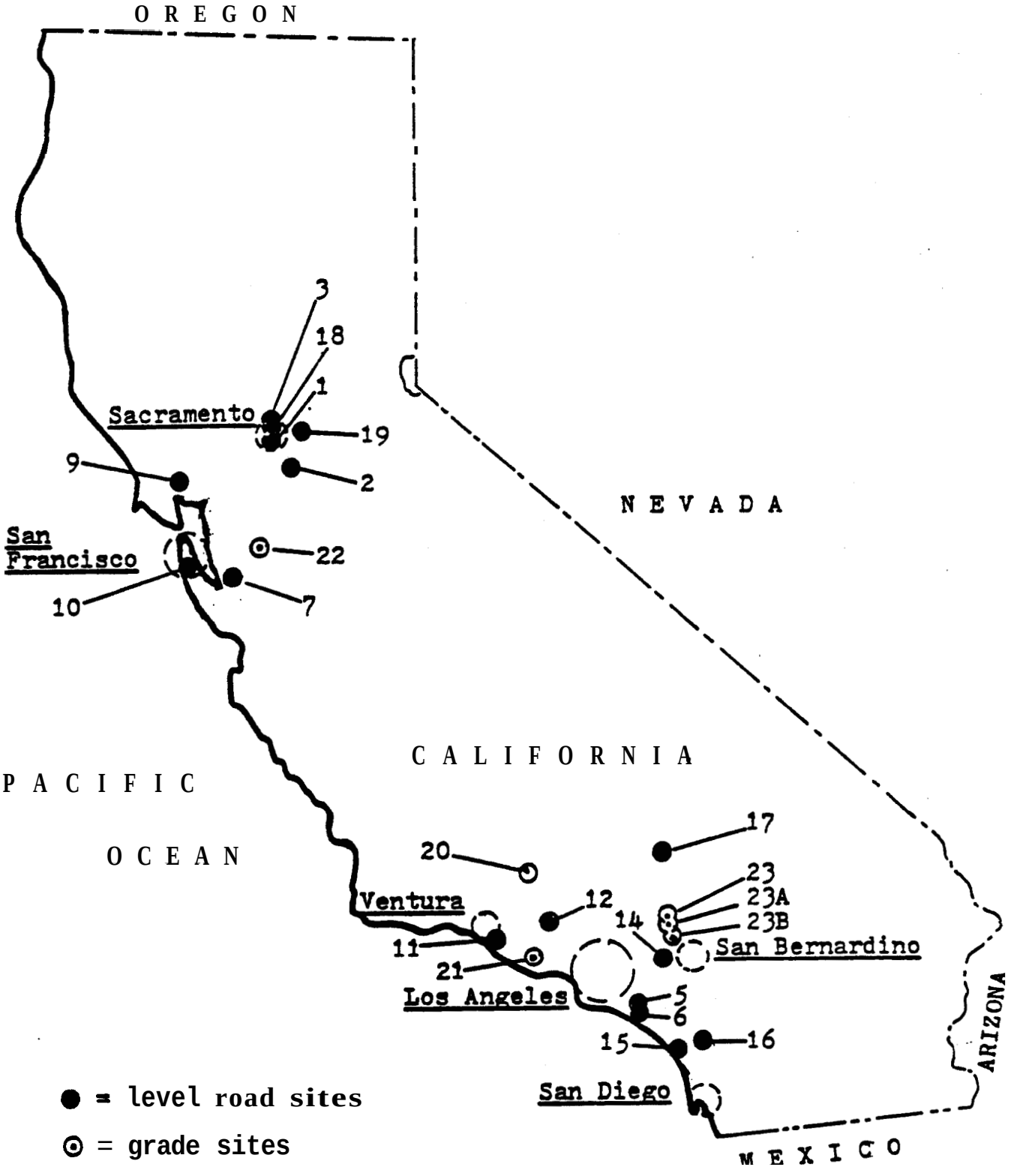
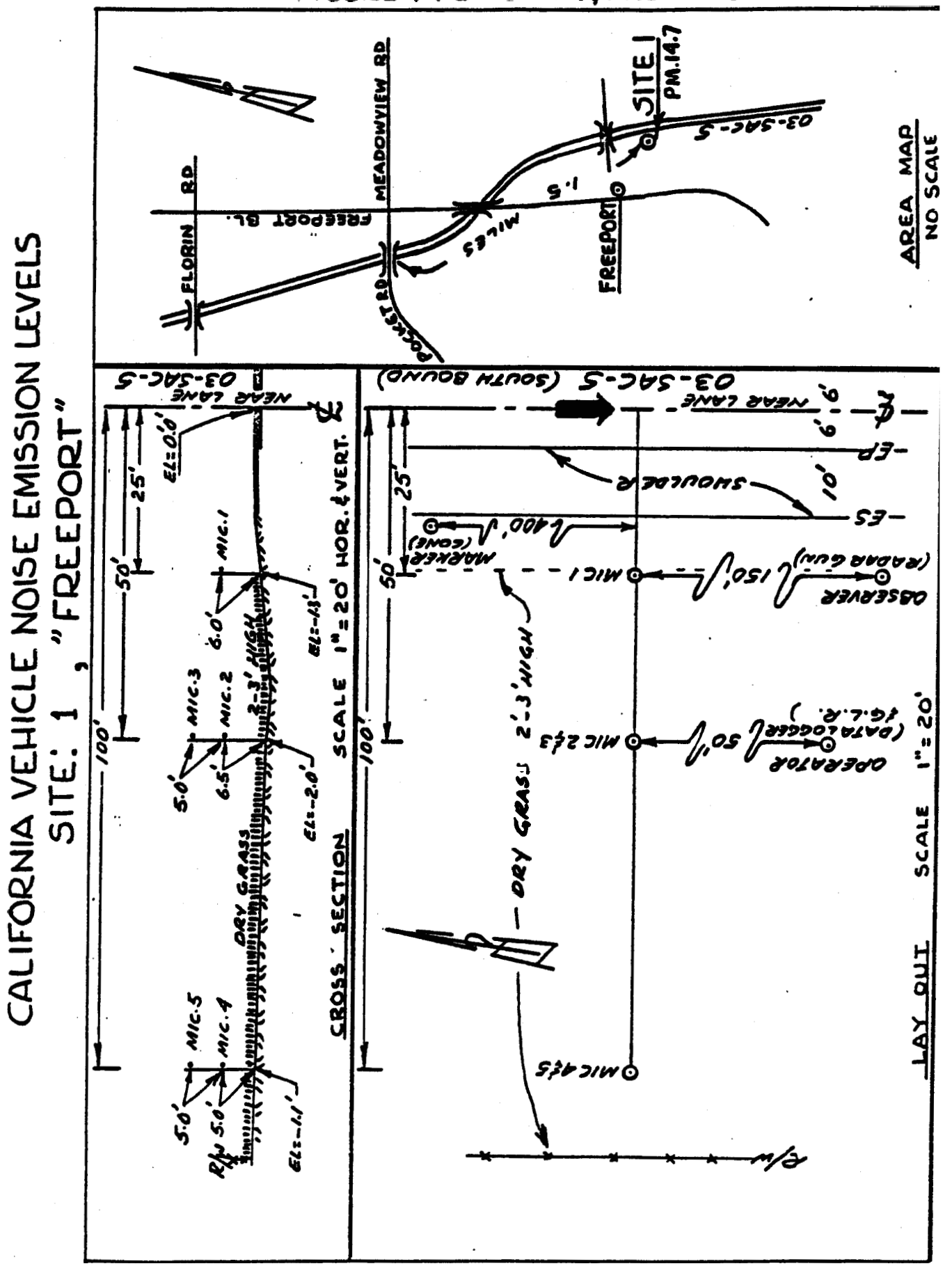


Figure A-1. Locations Of noise Measurement Sites.

FIGURE A-2 SITE I, "FREEPORT"



CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 2, "MINGO"

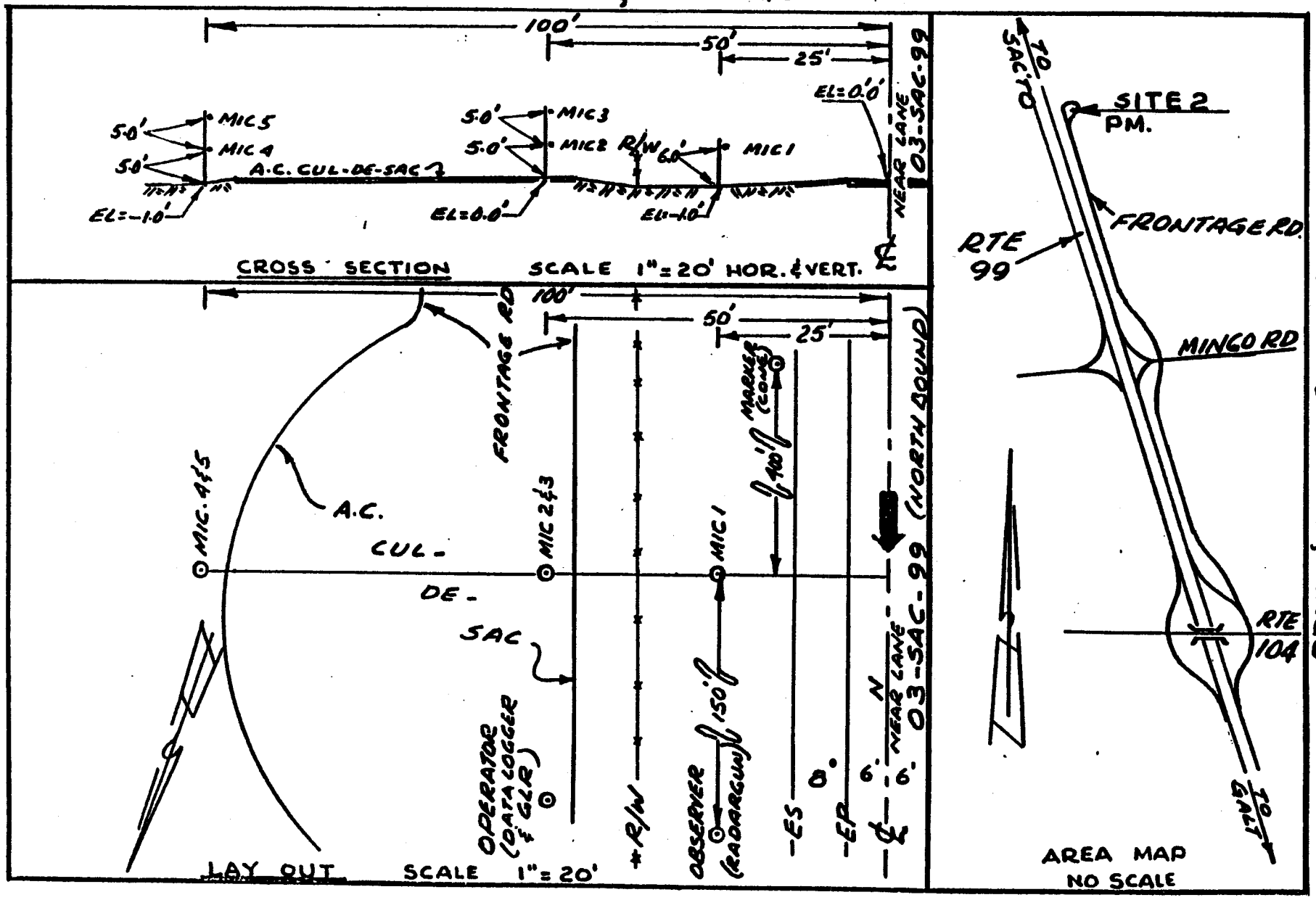


FIGURE A-3 SITE 2, "MINGO"

FIGURE A-4 SITE 3, "ELKHORN"

CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 3, "ELKHORN"

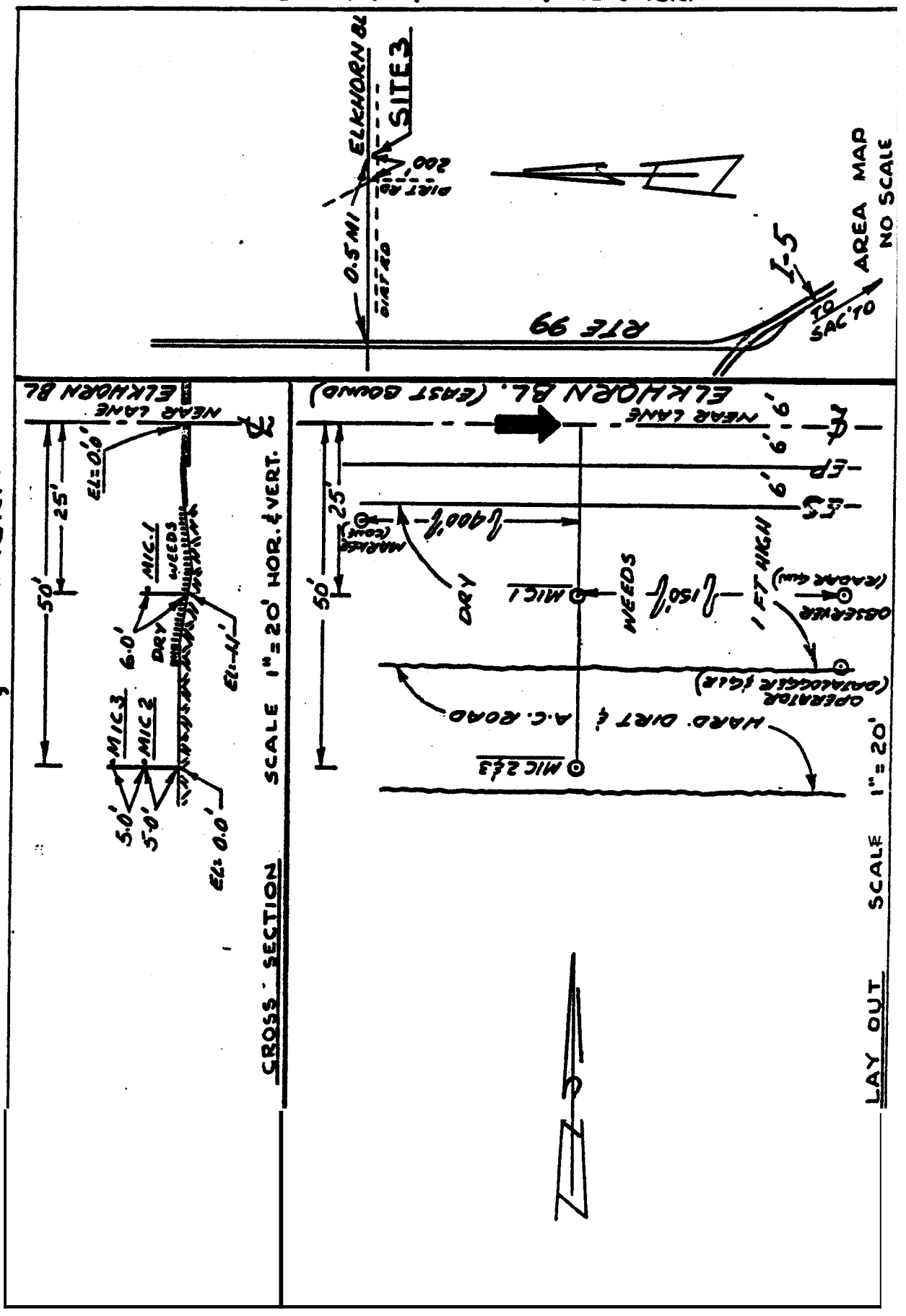


FIGURE A-5 SITE: 5, "BARRANCA"

CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 5, "BARRANCA"

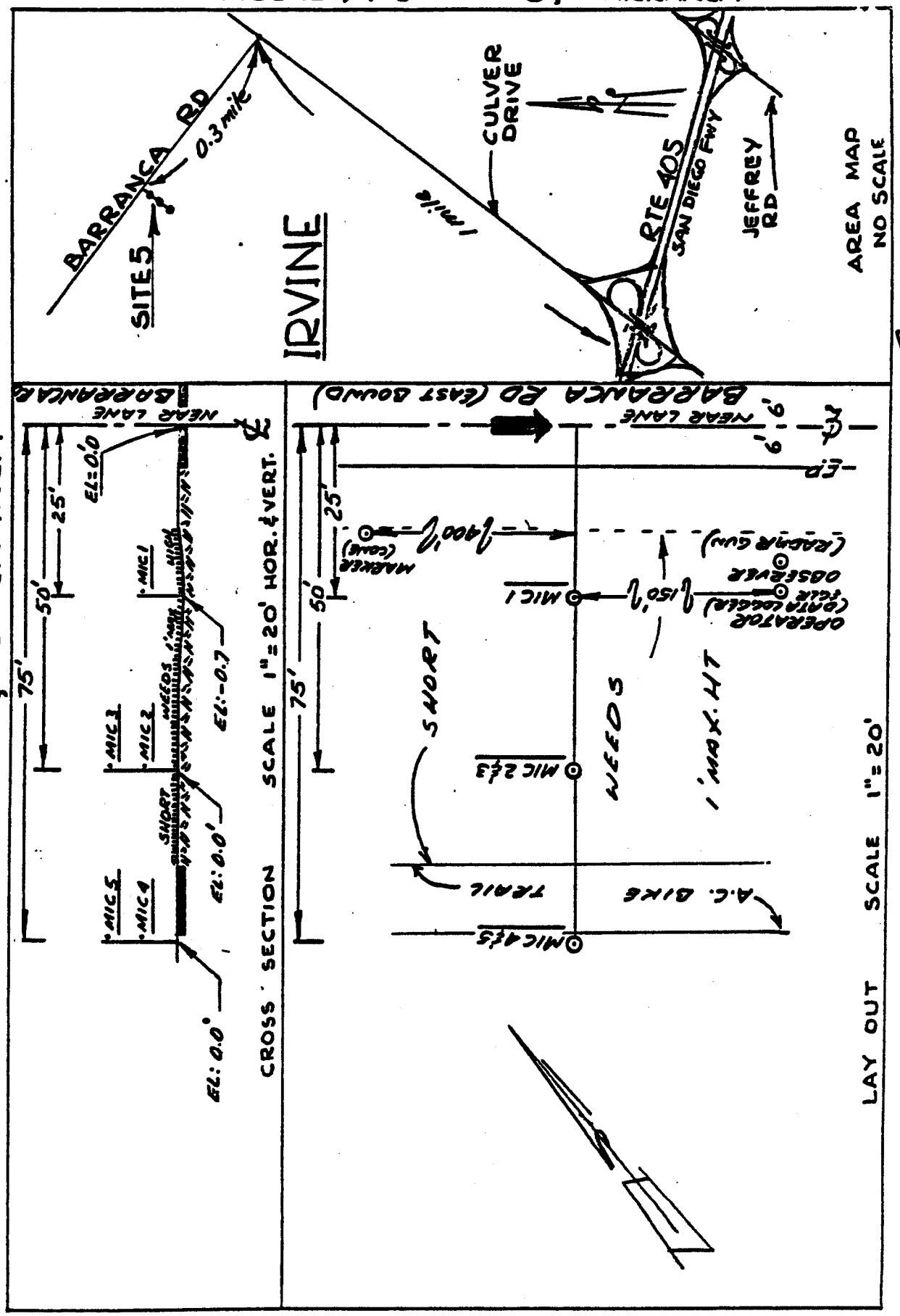
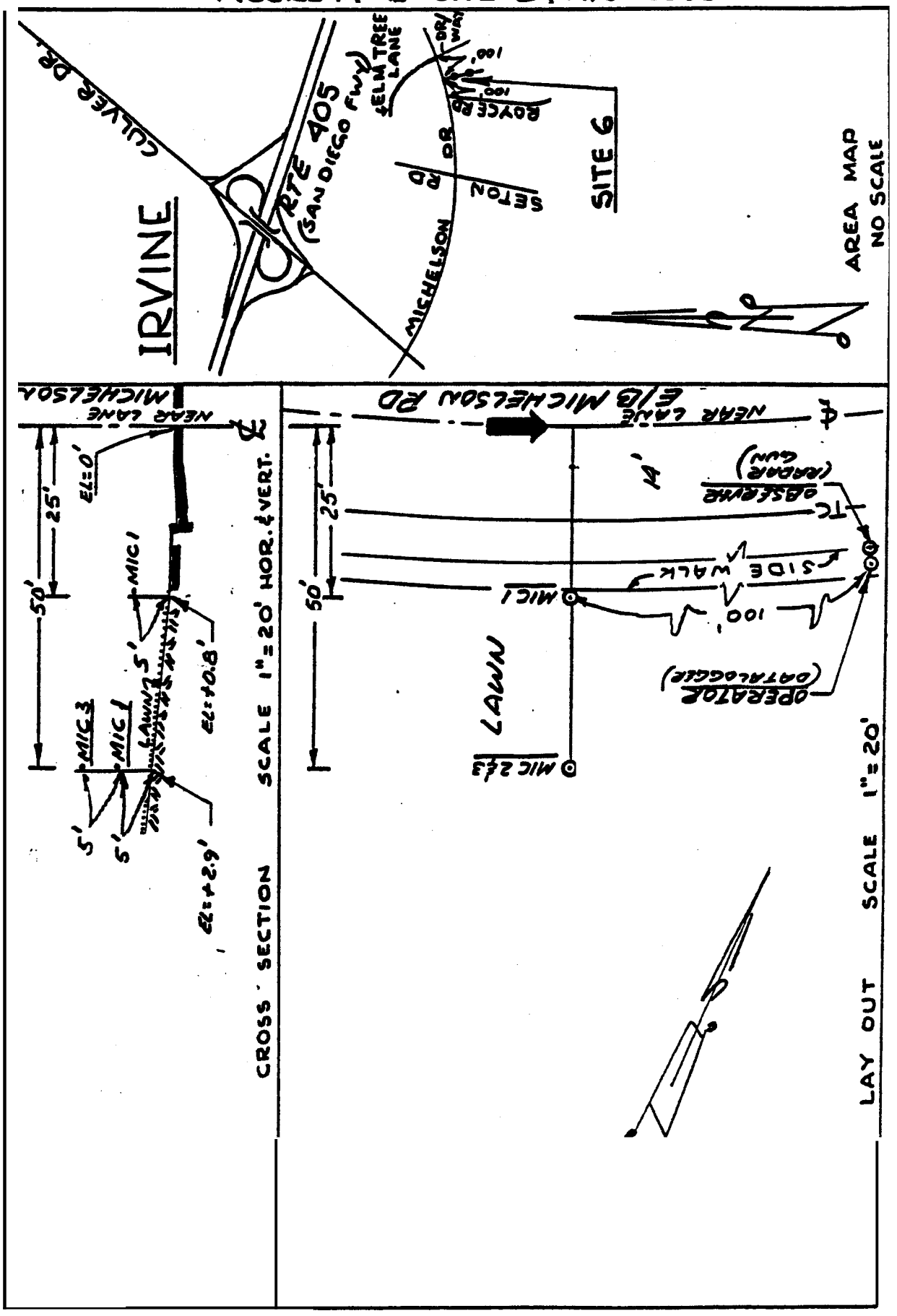


FIGURE A-6 SITE 6, "MICHELSON"



4 BONIA VEHICLE NOISE EMISSION LEVELS
SITE: 6. "MICHELSON"

CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 7, "MISSION"

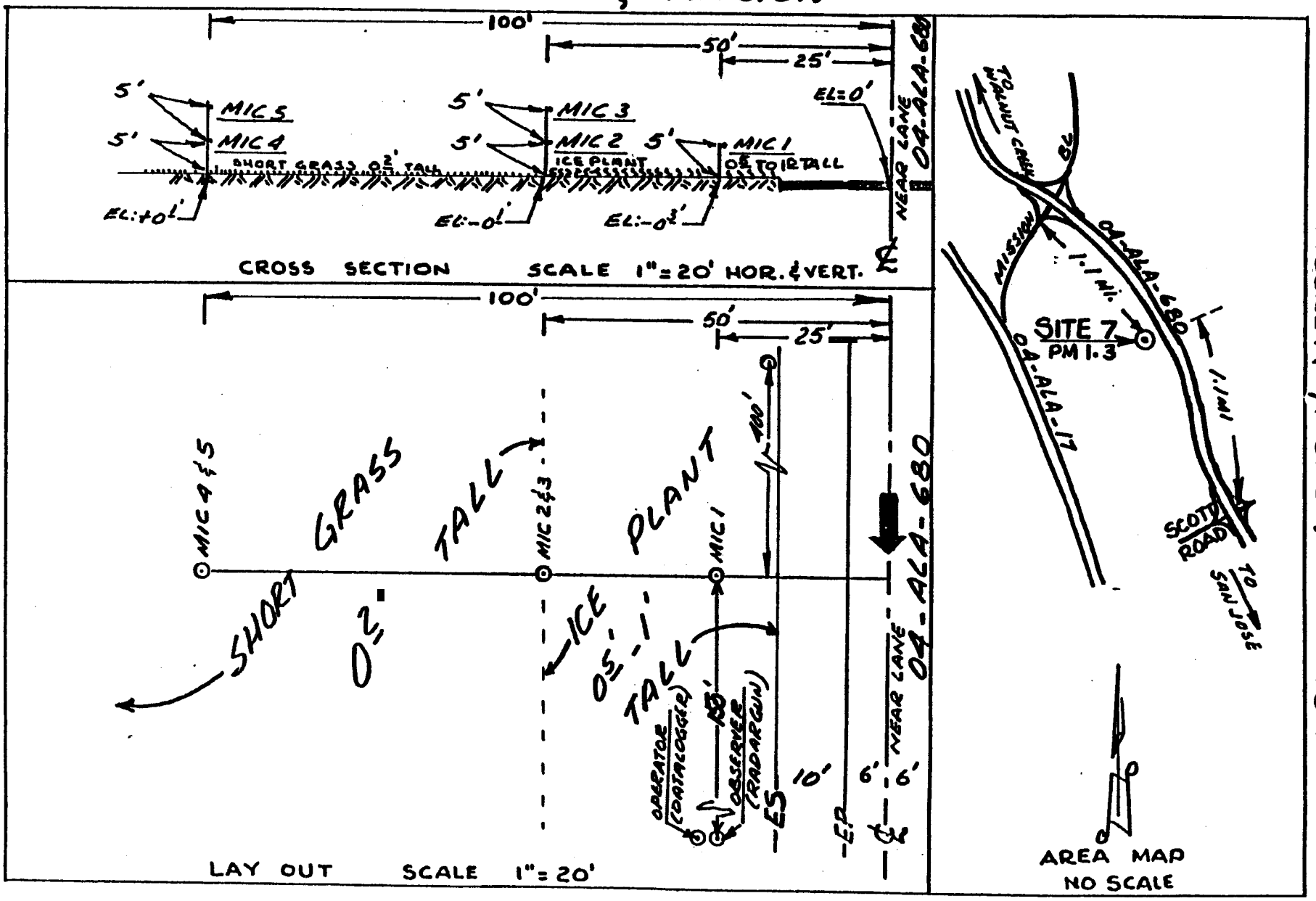


FIGURE A-7 SITE 7 "MISSION"

FIGURE A-8 SITE 9, "WEIGH STATION"

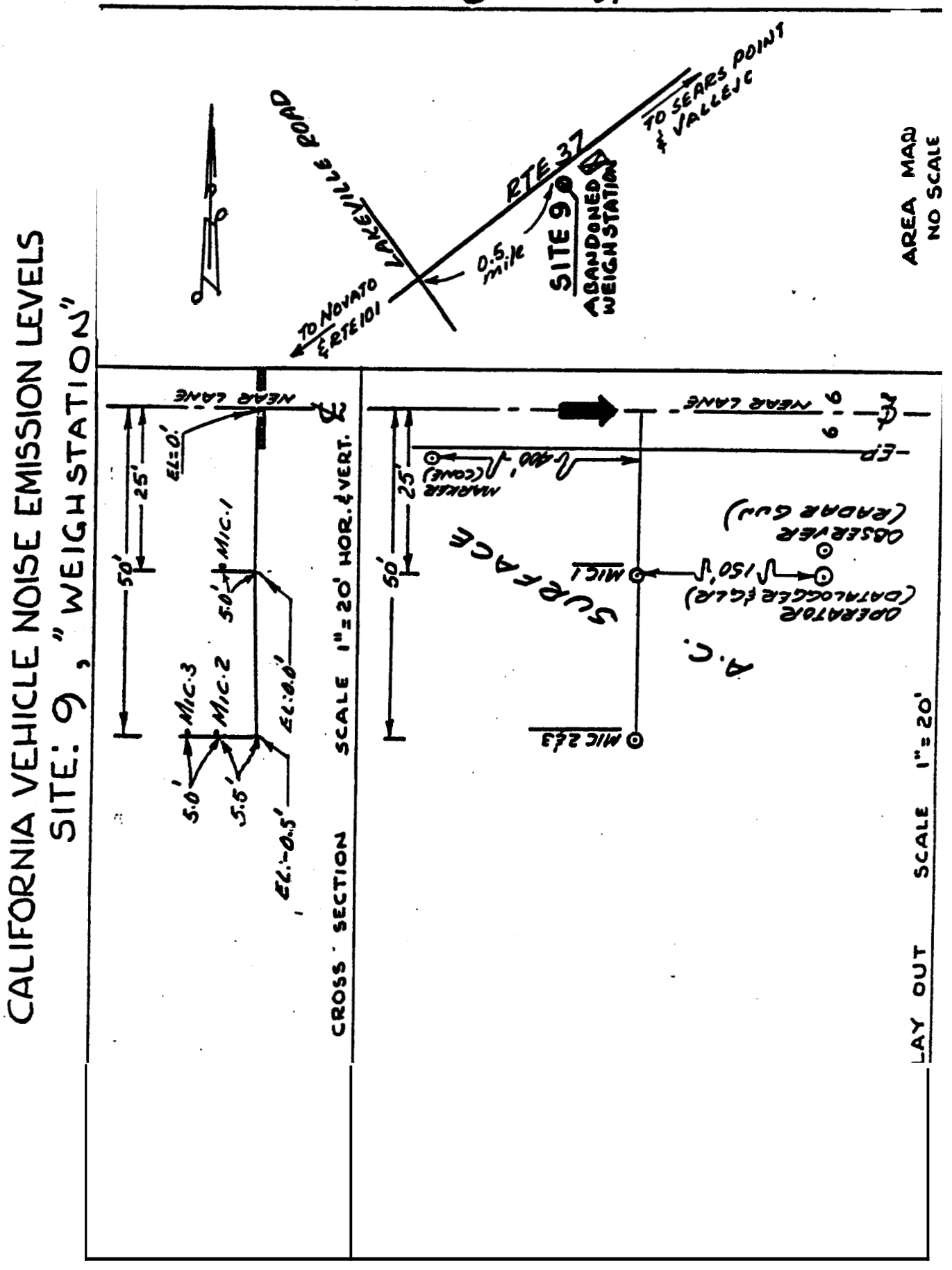
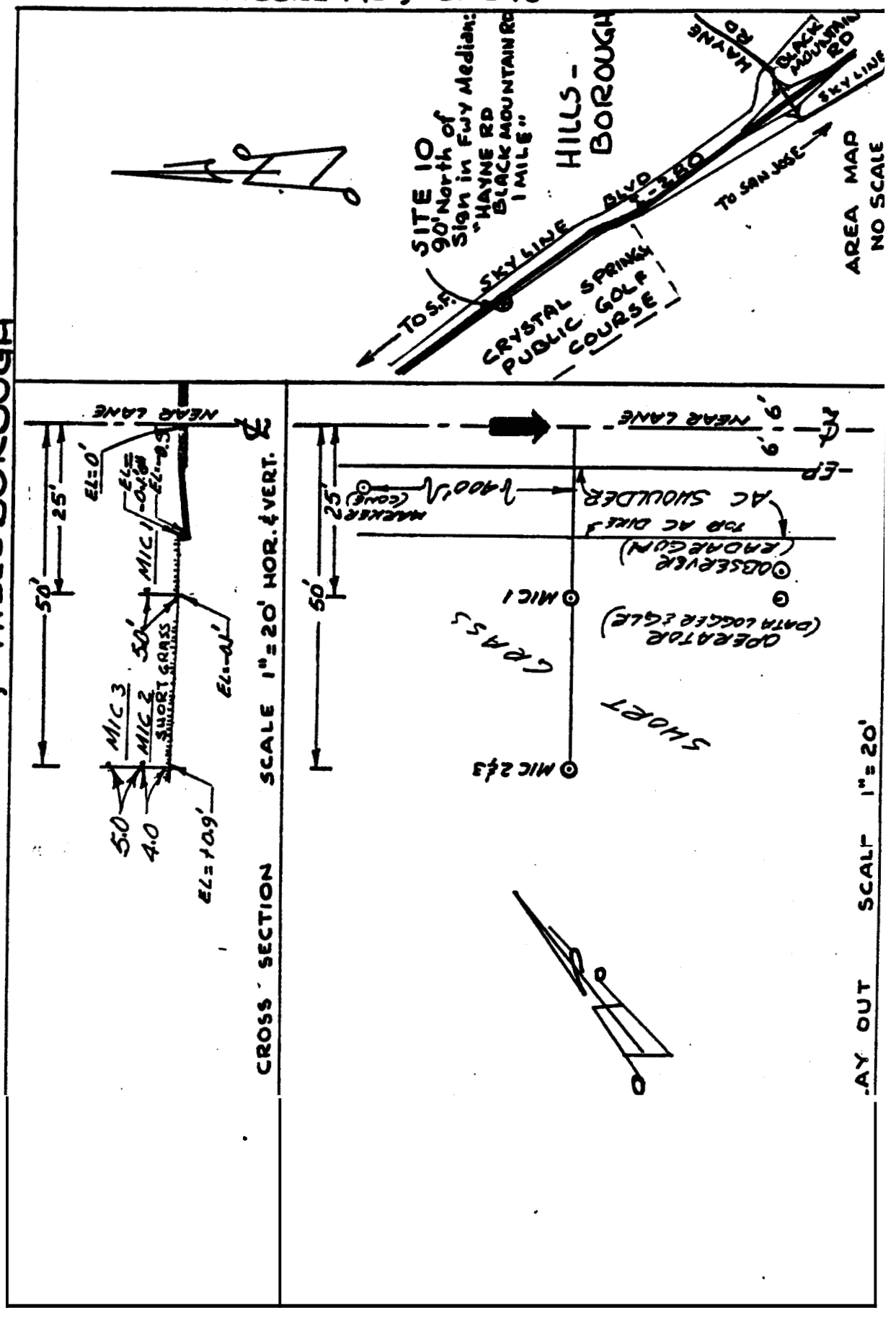


FIGURE A-9 SITE 10



CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 10, "HILLSBOROUGH"

FIGURE A-10 SITE 11

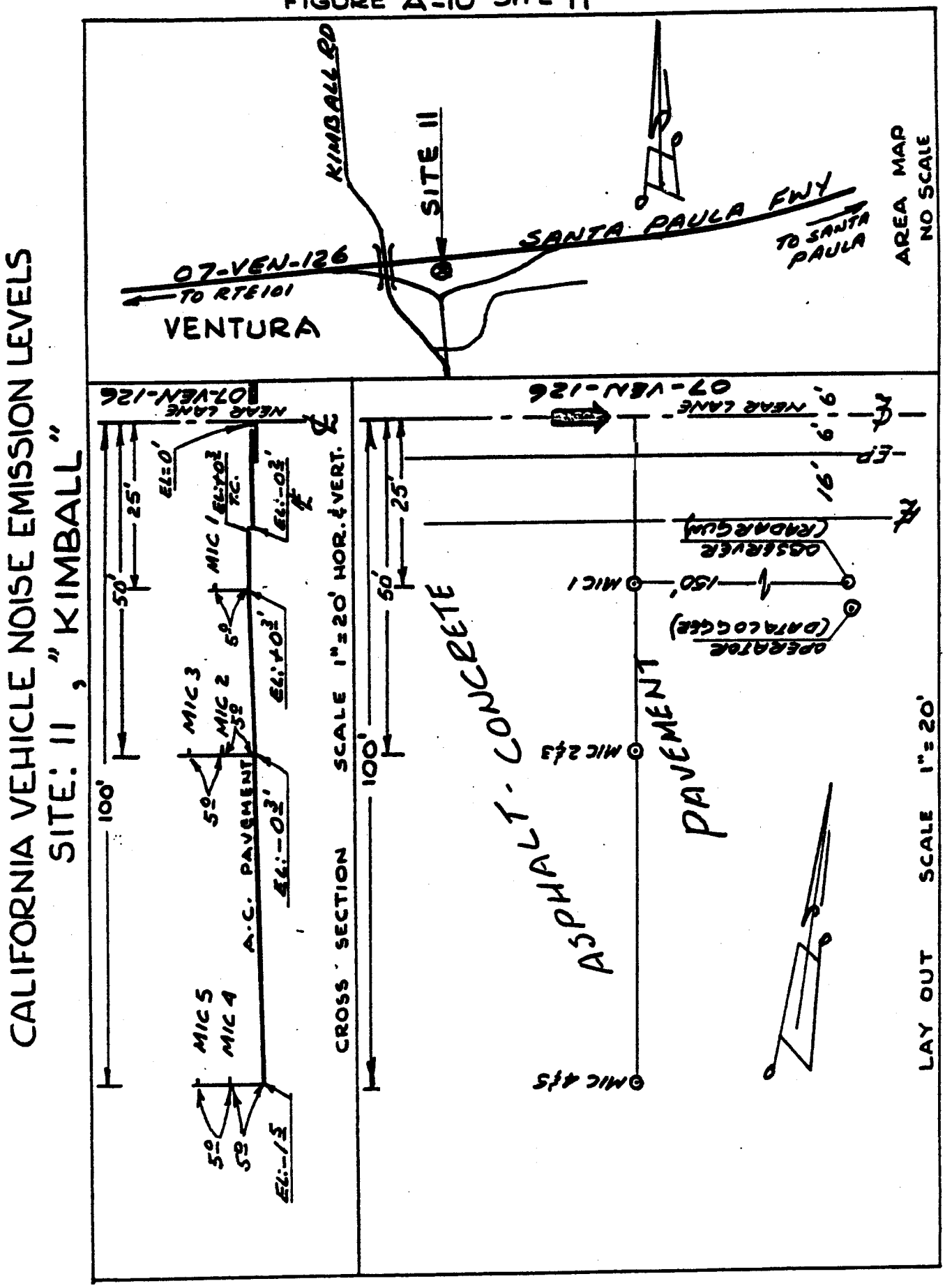


FIGURE A-11 SITE 12

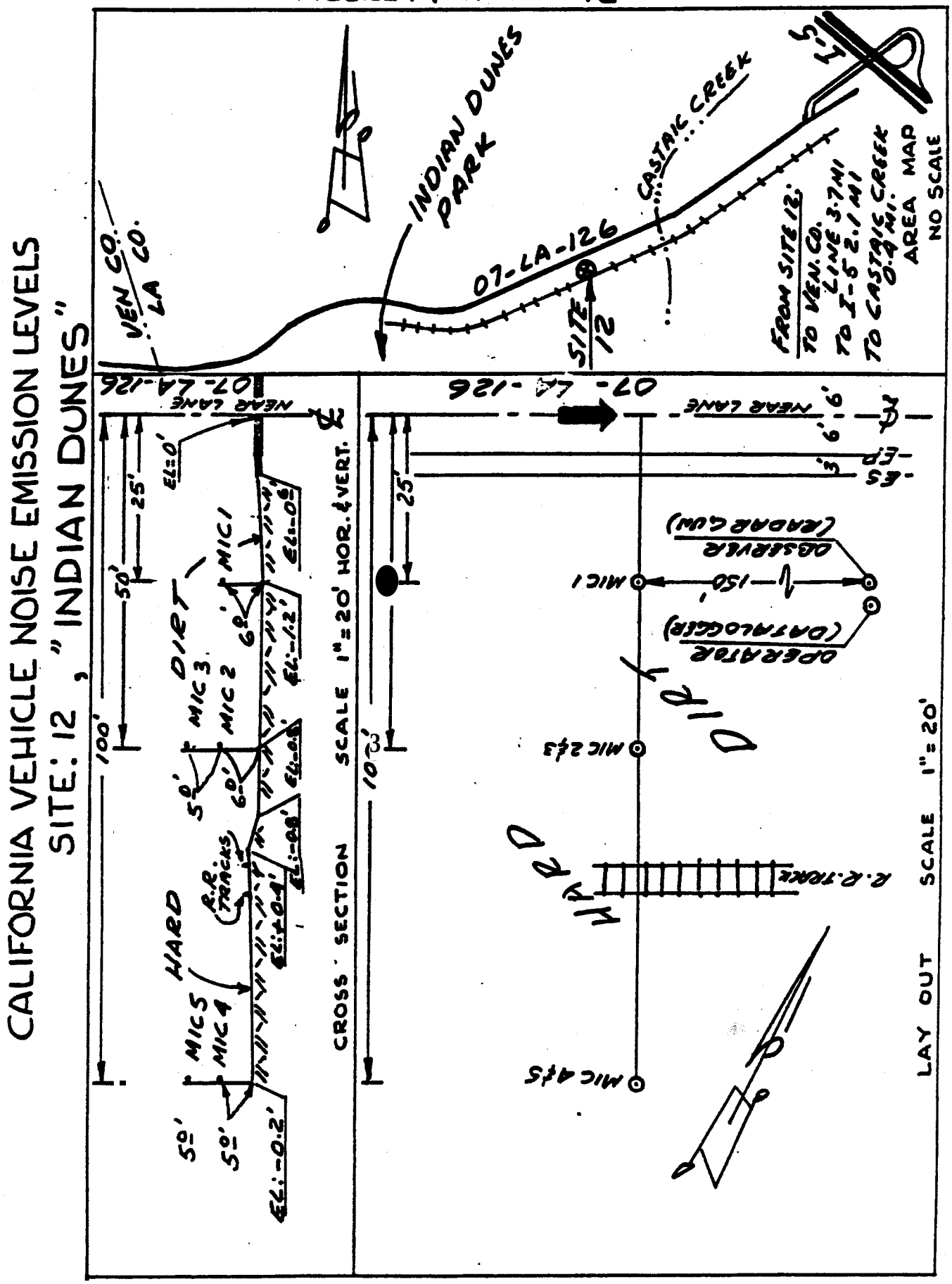


FIGURE A-12 SITE 14

CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 14 "SAN SEVAINE"

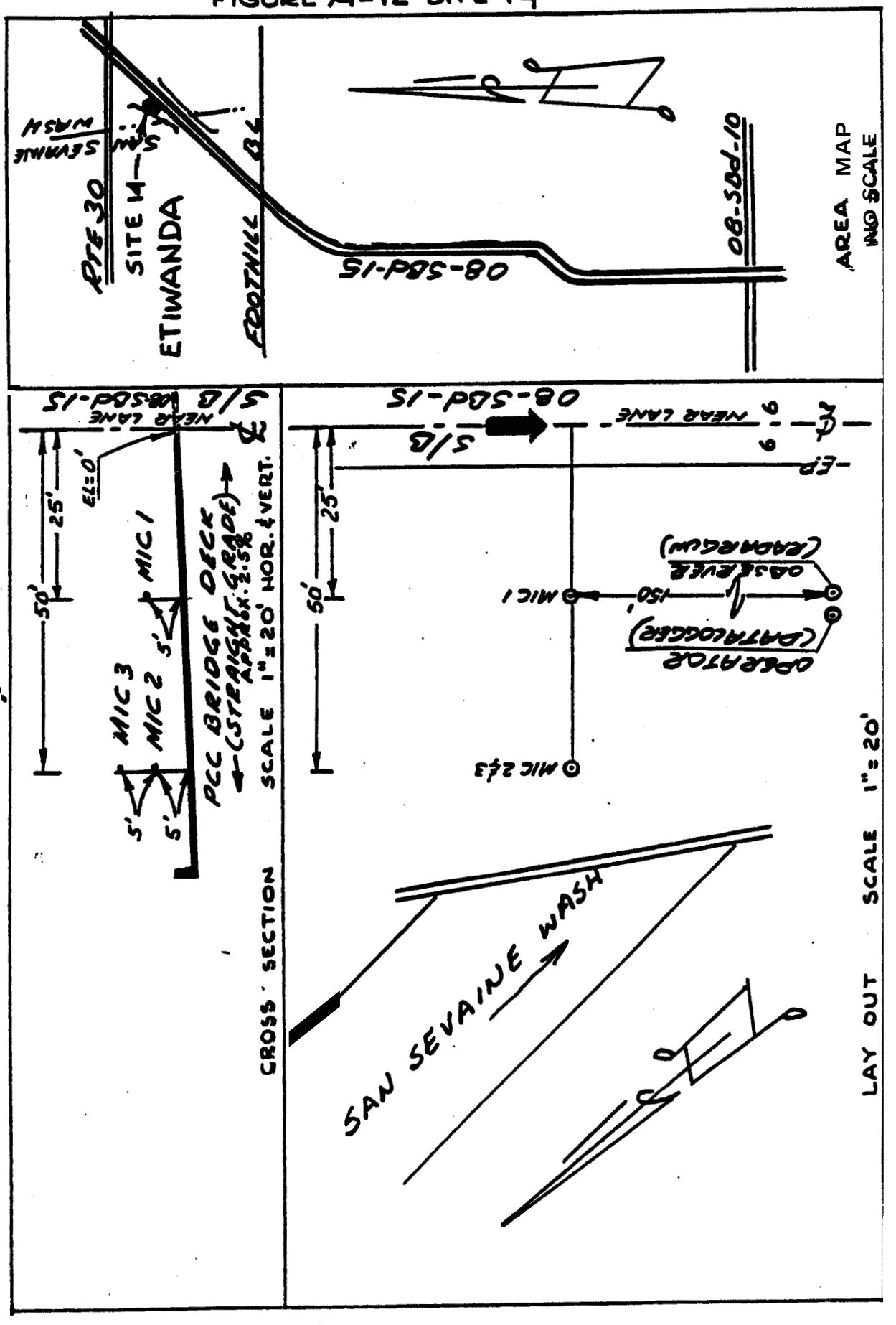


FIGURE A-13 SITE 15

CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 15, "OCEANSIDE"

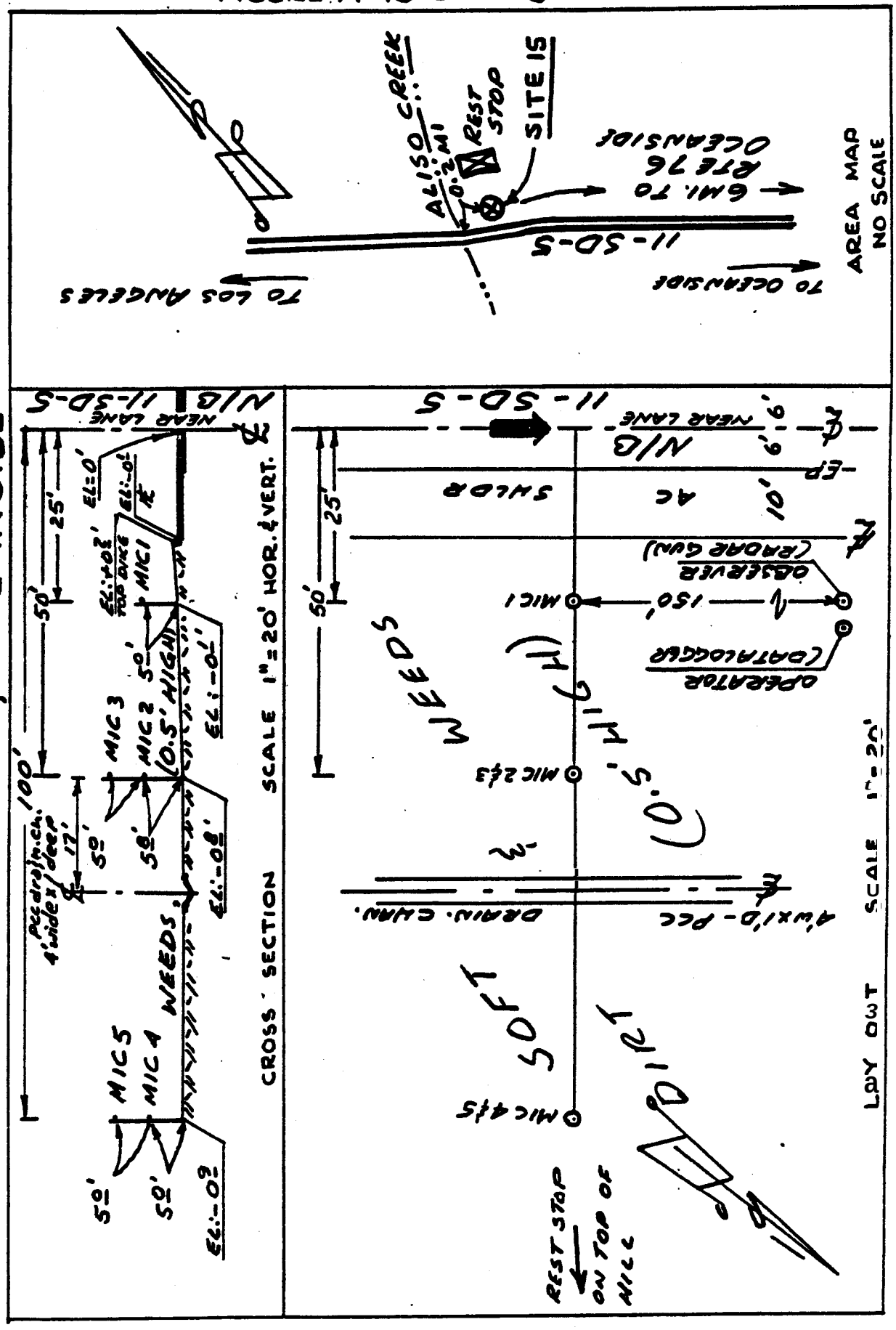
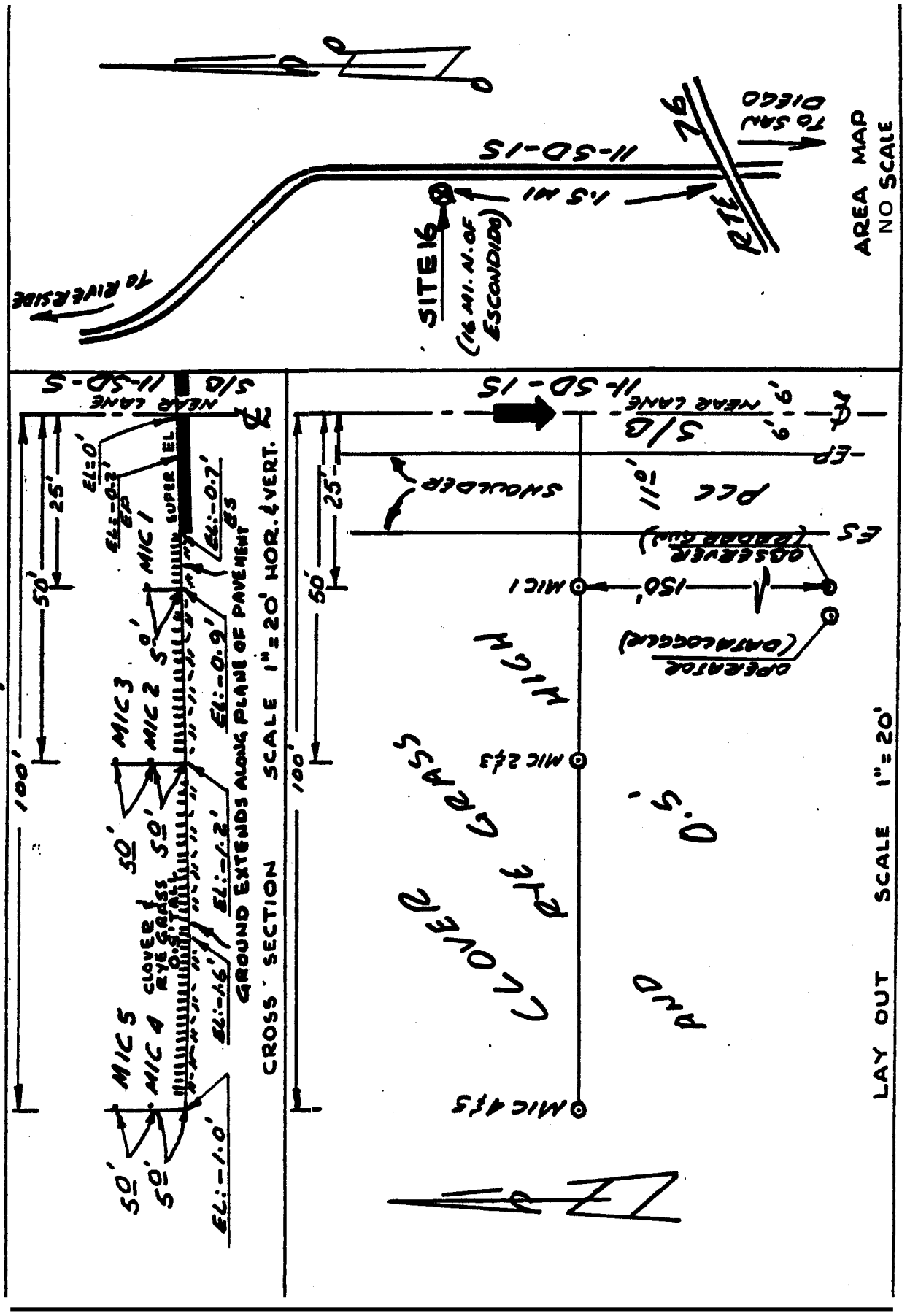


FIGURE A-14 SITE 16



CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 17, "KRAMER JUNCTION"

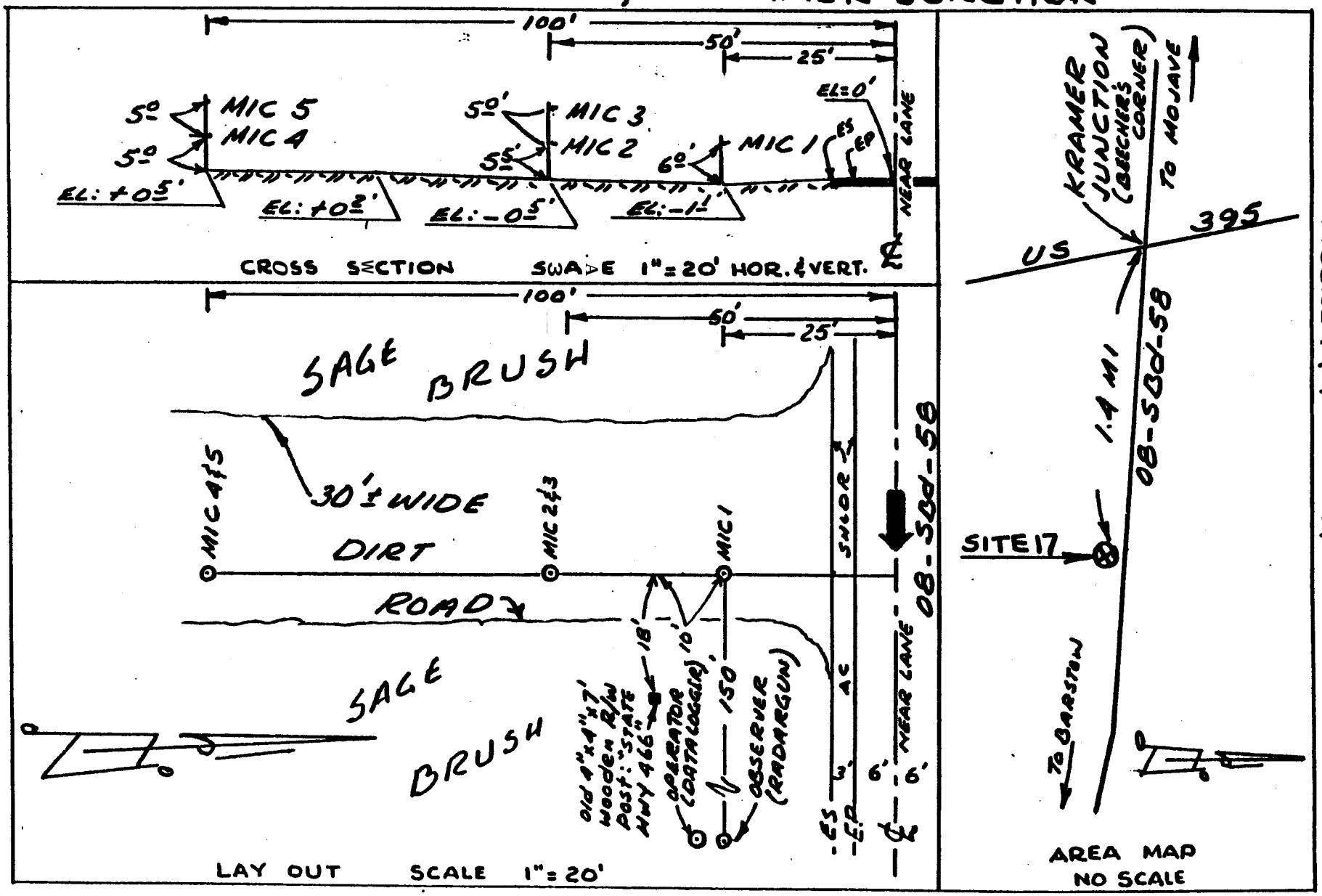


FIGURE A-15 SITE 17

FIGURE A-16 SITE 18

CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 18. "RICHARDS"

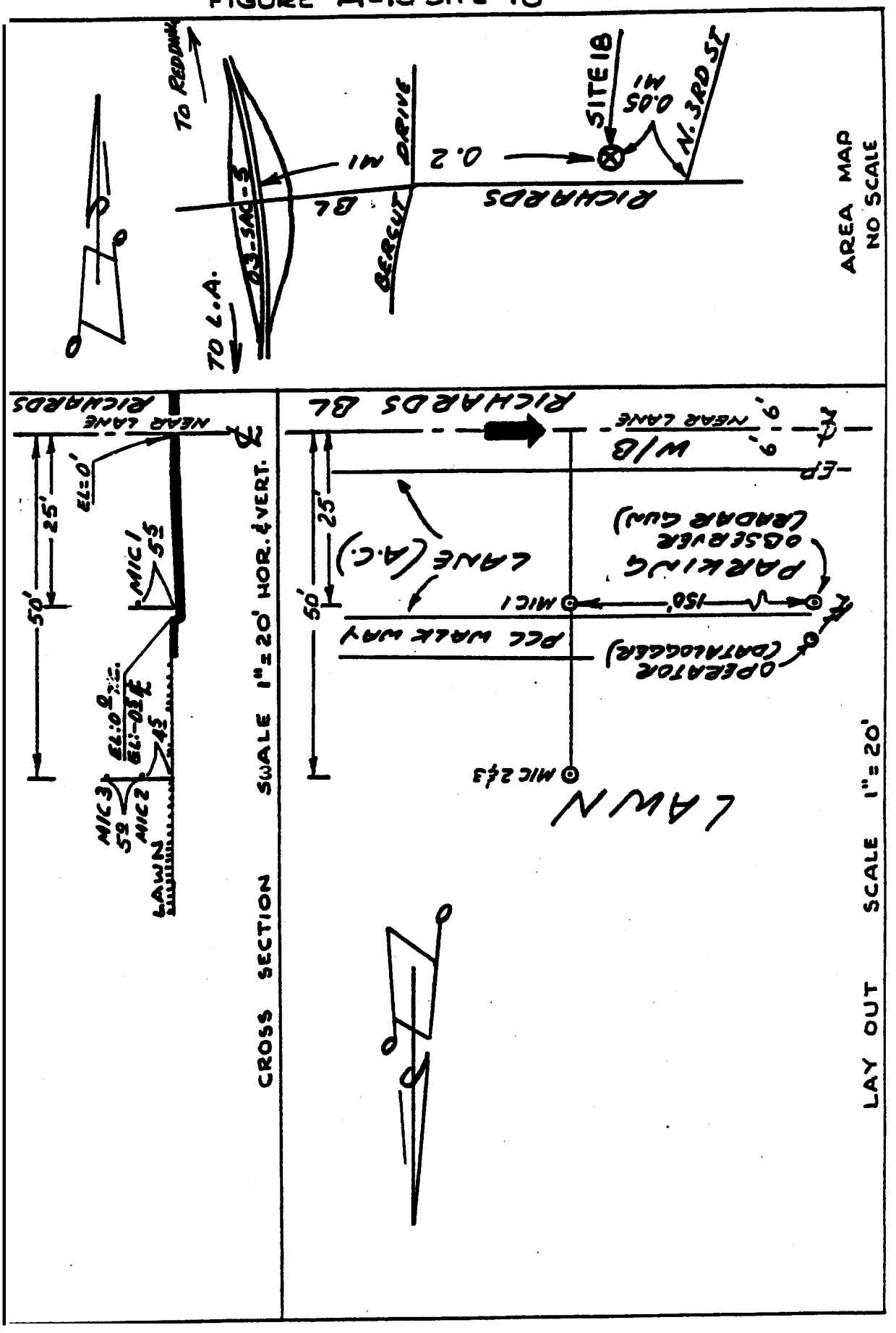
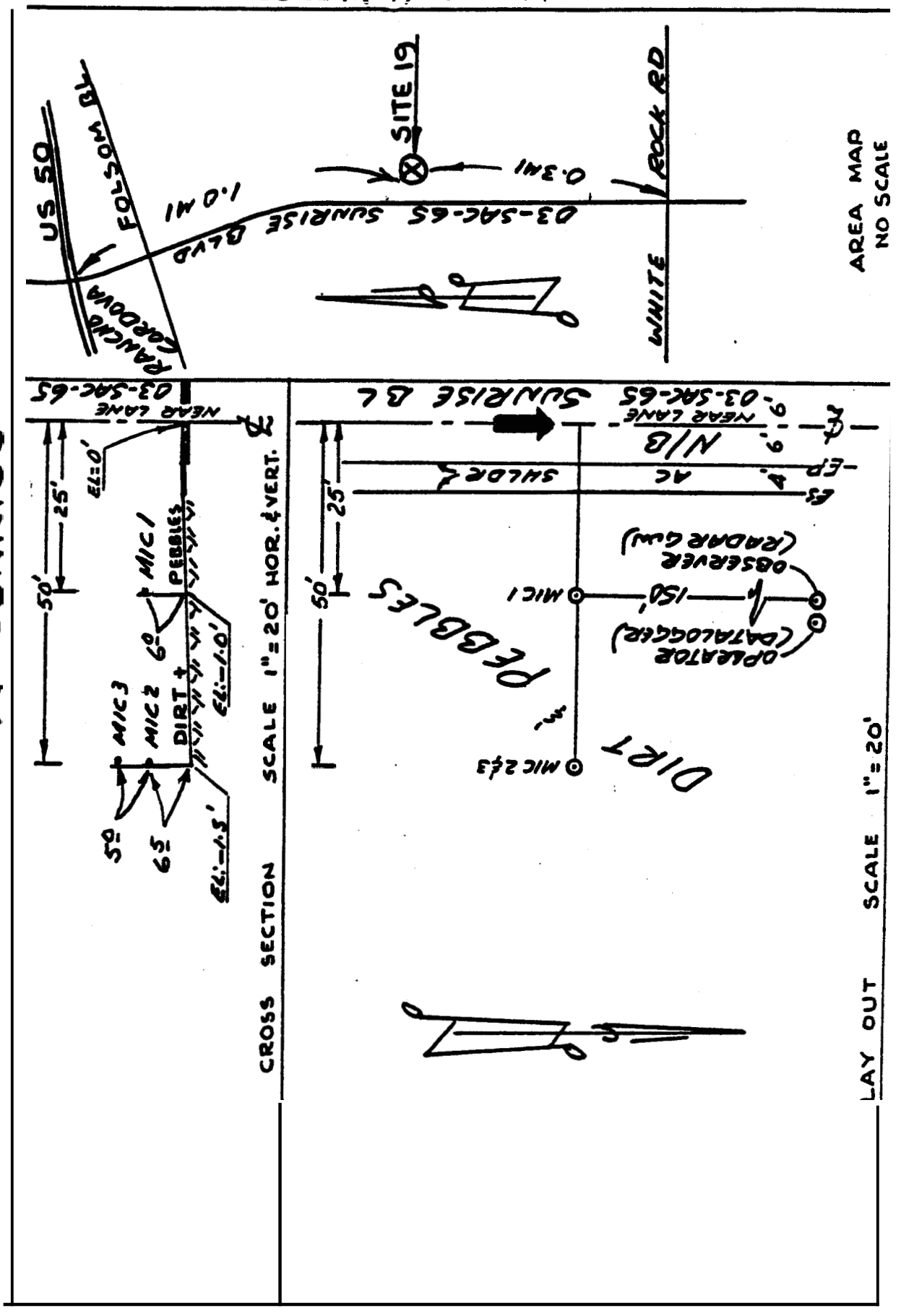


FIGURE A-17 SITE 19

CALIFORNIA VEHICLE NOISE EMISSION LEVELS
SITE: 19, "SUNRISE"



APPENDIX B
SAFETY

ROADSIDE SAFETY

(References: Chapter VIII Czltrans Maintenance Manual, Transportation Laboratory And Enviro-Chemical Branch Safety Codes.)

1. All personnel must wear hard hats, orange shirts or vests, and safety glasses when working- in the field.

2. When ever practical, maintain at least 6 feet of space between moving traffic and work area.

3. Brief excursions on the outside travel way are allowed only when:

   * Traffic is light
   * Excursion is not longer than two minutes
   * Sight distance is at least 500 feet
   * Vehicles are parked off the traveled way
   * Crew consists of at least two men, with no more than one person on the traveled way
   * The look out person should not carry a flag or paddle
   * The traffic should not be influenced in any way by the presence of a person on the traveled way
   * Excursions should be done during breaks in traffic

4. Park vehicles as far from the traffic lanes as possible.

5. Crews on foot should face traffic continuously.

6. One person must be assigned as a look out.

7. Warning signs should not be used for any operation which is carried out entirely beyond a distance of 6 feet from the outside edge of shoulder.

APPENDIX C

DATA SUMMARIES
(level Road Sites Only)

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	DEN	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
1	1	2	1	1	1	63	80.3	74.4	74.5	62.5	70.1	3	180	-4.5	8/17/82
1	2	2	1	1	3	58	90.7	83.9	85.0	77.5	78.4	3	180	-4.5	8/17/82
1	3	2	1	1	4	59	91.0	84.1	84.9	75.8	79.4	3	180	-4.5	8/17/82
1	4	2	1	1	1	58	75.7	70.3	71.8	59.0	66.8	3	180	-4.5	8/17/82
1	5	2	0	0	1	61	91.4	86.2	86.4	76.6	81.0	3	180	-4.5	8/17/82
1	6	2	1	1	5	63	90.6	84.3	85.7	75.4	79.2	3	180	-4.5	8/17/82
1	7	2	1	1	5	64	90.3	83.8	84.1	76.3	79.0	3	180	-4.5	8/17/82
1	8	2	1	1	5	61	95.1	88.7	89.2	81.7	83.6	3	180	-4.5	8/17/82
1	9	2	0	0	7	56	79.9	73.9	74.3	66.1	70.2	3	180	-4.5	8/17/82
1	10	2	0	0	7	58	75.0	55.6	62.2	50.3	56.5	3	180	-4.5	8/17/82
1	11	2	1	1	3	55	83.5	77.2	77.4	69.0	71.4	3	180	-4.5	8/17/82
1	12	2	1	1	1	58	79.6	73.2	73.3	64.9	68.1	3	180	-4.5	8/17/82
1	13	2	1	1	1	60	82.1	75.8	76.2	65.1	69.9	3	180	-4.5	8/17/82
1	14	2	1	1	1	53	79.8	73.2	74.0	60.3	68.5	3	180	-4.5	8/17/82
1	15	2	1	1	1	66	85.7	79.0	79.6	69.1	73.0	3	180	-4.5	8/17/82
1	16	2	1	1	5	69	94.9	88.4	89.9	81.7	83.3	3	180	-4.5	8/17/82
1	17	2	1	1	1	56	77.9	72.0	72.7	62.7	67.7	3	180	-4.5	8/17/82
1	18	2	1	1	5	54	90.4	84.8	84.1	76.2	78.6	3	180	-4.5	8/17/82
1	19	2	1	1	5	57	92.9	86.3	87.6	75.4	80.6	3	180	-4.5	8/17/82
1	20	2	1	1	5	59	91.0	84.8	85.4	75.5	79.7	3	180	-4.5	8/17/82
1	21	2	1	1	1	64	81.4	75.5	74.9	64.7	71.1	3	180	-4.5	8/17/82
1	22	2	1	1	5	59	90.2	84.0	84.2	74.6	78.2	3	180	-4.5	8/17/82
1	23	2	1	1	5	63	88.5	82.6	83.0	73.5	76.6	3	180	-4.5	8/17/82
1	24	2	1	1	5	61	89.0	82.2	83.0	73.6	77.5	3	180	-4.5	8/17/82
1	25	2	1	1	1	54	82.0	76.3	76.8	62.8	70.0	3	180	-4.5	8/17/82
1	26	2	1	1	1	61	79.9	74.4	74.7	62.8	69.3	3	180	-4.5	8/17/82
1	27	2	1	1	1	54	78.9	73.5	74.7	62.7	68.8	3	180	-4.5	8/17/82
1	28	2	1	1	1	56	79.3	73.0	72.9	61.7	68.0	3	180	-4.5	8/17/82
1	29	2	1	1	5	57	90.2	83.7	84.6	76.0	78.0	3	180	-4.5	8/17/82
1	30	2	1	1	1	57	75.8	70.4	70.9	59.9	66.1	3	180	-4.5	8/17/82
1	31	2	1	1	5	59	89.6	84.0	84.6	75.1	80.3	3	180	-4.5	8/17/82
1	32	2	1	1	1	61	80.2	74.6	74.4	61.9	69.8	3	180	-4.5	8/17/82
1	33	2	1	1	5	60	91.4	85.0	85.1	76.1	79.6	3	180	-4.5	8/17/82
1	34	2	1	1	1	64	81.7	74.6	74.5	60.2	70.5	3	180	-4.5	8/17/82
1	35	2	1	1	5	62	95.2	89.2	89.2	82.5	83.1	3	180	-4.5	8/17/82
1	36	2	1	1	3	52	87.5	81.0	82.3	72.9	75.8	3	180	-4.5	8/17/82
1	37	2	0	0	5	61	95.6	89.5	91.3	83.6	86.3	3	180	-4.5	8/17/82
1	38	2	1	1	1	61	76.6	70.9	71.3	58.8	66.7	3	180	-4.5	8/17/82
1	39	2	1	1	2	58	83.4	77.4	77.7	64.4	72.5	3	180	-4.5	8/17/82
1	40	2	1	1	5	46	89.2	83.9	83.4	72.9	77.2	3	180	-4.5	8/17/82
1	41	2	1	1	5	64	91.5	84.7	85.7	77.2	79.8	3	180	-4.5	8/17/82
1	42	2	1	1	5	58	89.4	84.0	84.5	73.5	79.0	3	180	-4.5	8/17/82
1	43	2	1	1	5	56	88.2	82.0	82.5	73.5	76.1	3	180	-4.5	8/17/82
1	44	2	1	1	5	62	91.1	84.3	85.5	74.1	79.3	3	180	-4.5	8/17/82
1	45	2	1	1	1	61	79.3	72.9	72.7	62.9	67.9	3	180	-4.5	8/17/82
1	46	2	1	1	5	62	88.3	82.1	83.0	74.0	76.5	3	180	-4.5	8/17/82
1	47	2	1	1	1	62	82.5	76.2	76.6	63.7	70.4	3	180	-4.5	8/17/82
1	48	2	1	1	5	65	91.8	85.6	86.3	75.7	81.1	3	180	-4.5	8/17/82
1	49	2	0	0	5	60	85.2	80.4	81.1	72.5	76.6	3	180	-4.5	8/17/82
1	50	2	1	1	5	61	88.4	81.6	82.7	73.6	76.9	3	180	-4.5	8/17/82
1	51	2	1	1	5	56	90.5	84.5	84.5	76.0	79.1	3	180	-4.5	8/17/82
1	52	2	1	1	5	55	89.5	83.5	83.8	71.0	78.5	3	180	-4.5	8/17/82
1	53	2	1	1	1	60	79.8	72.9	74.0	62.2	68.1	3	180	-4.5	8/17/82
1	54	2	1	1	5	56	92.1	86.2	86.1	76.4	81.0	3	180	-4.5	8/17/82
1	55	2	0	0	5	44	86.5	80.0	80.4	70.1	75.6	3	180	-4.5	8/17/82
1	56	2	1	1	5	44	85.6	79.6	79.7	70.7	73.6	3	180	-4.5	8/17/82
1	57	2	1	1	5	63	90.5	84.0	85.4	75.1	78.9	3	180	-4.5	8/17/82
1	58	2	1	1	5	59	92.9	86.1	86.7	76.2	80.9	3	180	-4.5	8/17/82
1	59	2	1	1	5	61	88.2	82.2	82.7	72.5	77.4	3	180	-4.5	8/17/82
1	60	2	0	0	5	32	92.7	87.7	87.2	77.6	81.9	3	180	-4.5	8/17/82
1	61	2	1	1	5	60	87.2	81.4	82.5	72.8	77.0	3	180	-4.5	8/17/82
1	62	2	0	1	1	54	81.2	75.0	74.6	62.9	69.7	3	180	-4.5	8/17/82
1	63	2	0	0	1	63	83.7	76.9	78.3	66.4	72.8	3	180	-4.5	8/17/82
1	64	2	1	1	5	61	91.6	84.5	85.5	73.2	79.2	3	180	-4.5	8/17/82
1	65	2	1	1	5	60	89.5	82.9	83.9	75.9	78.9	3	180	-4.5	8/17/82
1	66	2	1	1	5	62	94.0	87.2	88.2	76.8	80.5	3	180	-4.5	8/17/82
1	67	2	1	1	5	55	91.8	85.3	86.1	75.0	79.1	3	180	-4.5	8/17/82
1	68	2	1	1	5	54	89.2	83.0	83.5	71.9	78.0	3	180	-4.5	8/17/82
1	69	2	1	1	5	62	92.5	86.2	87.2	77.0	81.3	3	180	-4.5	8/17/82
1	70	1	1	1	5	56	88.4	81.5	82.3	72.0	76.1	3	180	-4.5	8/17/82

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	DEN	VEH TYPE	VEH SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIP NEDED	WAING DLE	VWEICNTDOR	DATE
							DBA								
1	71	2	0	0	1	1 54	78.9	74.2	76.0	66.3	73.5	3	180	-4.5	8/17/82
1	72	2	1	1	1	5 60	92.6	85.9	86.4	76.6	79.8	3	180	-4.5	8/17/82
1	73	2	1	1	1	1 57	82.2	76.5	76.5	62.7	72.7	3	180	-4.5	8/17/82
1	74	2	1	1	1	2 60	91.8	83.3	83.9	71.0	77.2	3	180	-4.5	8/17/82
1	75	0	0	0	1	1 50	79.1	74.3	75.7	64.8	71.8	3	180	-4.5.	8/17/82
1	76	2	1	1	1	5 62	90.8	84.3	85.3	76.7	79.5	3	180	-4.5	8/17/82
1	77	2	1	1	1	5 55	92.4	84.9	85.2	77.0	80.8	3	180	-4.5	8/17/82
1	78	2	1	1	1	5 64	90.4	84.2	85.1	75.4	79.0	3	180	-4.5	8/17/82
1	79	2	1	1	1	5 54	90.3	84.3	84.9	72.9	78.0	3	180	-4.5	8/17/82
1	80	2	1	1	1	5 58	90.3	83.5	84.0	73.5	78.4	3	180	-4.5	8/17/82
1	81	2	1	1	1	5 62	90.1	83.6	84.4	73.3	78.0	3	180	-4.5	8/17/82
1	82	2	1	1	1	5 61	90.4	84.4	84.7	93.7	79.6	3	180	-4.5	8/17/82
1	83	2	1	1	1	5 63	90.5	84.9	86.0	73.1	79.0	3	180	-4.5	8/17/82
1	84	2	1	1	1	5 56	94.0	87.4	87.5	76.4	80.9	3	180	-4.5	8/17/82
1	85	2	1	1	1	5 60	91.3	85.0	85.4	75.9	80.2	3	180	-4.5	8/17/82
1	86	2	1	1	1	5 61	89.1	82.6	83.1	71.1	77.4	3	180	-4.5	8/17/82
1	87	2	1	1	1	5 60	92.6	86.2	87.2	75.6	80.5	3	180	-4.5	8/17/82
1	88	2	1	1	1	5 54	87.1	80.0	80.8	71.7	75.1	3	180	-4.5	8/17/82
1	89	1	1	1	1	5 60	87.4	80.8	81.5	72.1	75.5	3	180	-4.5	8/17/82
1	90	2	1	1	1	1 57	75.6	69.8	69.6	58.4	64.4	3	180	-4.5	8/17/82
1	91	0	0	0	1	1 63	80.5	75.0	76.1	67.9	72.5	3	180	-4.5	8/17/82
1	92	2	1	1	1	5 56	88.4	81.9	82.7	73.2	76.3	3	180	-4.5	8/17/82
1	93	2	1	1	1	5 60	91.4	84.6	85.8	72.7	7a.a	3	180	-4.5	8/17/82
1	94	2	1	1	1	5 59	89.6	83.4	83.5	74.4	78.0	3	180	-4.5	8/17/82
1	95	2	1	1	1	5 58	92.1	85.5	85.7	76.2	80.6	3	180	-4.5	8/17/82
1	96	0	1	0	1	1 56	76.9	70.8	71.4	61.2	66.0	3	180	-4.5	8/17/82
1	97	0	1	1	1	1 47	72.4	66.9	66.9	58.0	64.8	3	180	-4.5	8/17/82
1	98	2	1	1	1	5 62	93.5	87.1	88.3	79.7	83.0	3	180	-4.5	8/17/82
1	99	2	1	1	1	5 56	90.8	85.5	85.5	77.4	80.7	3	180	-4.5	8/17/82
1	100	2	1	1	1	7 57	80.9	74.9	75.1	59.7	68.3	3	180	-4.5	8/17/82
1	101	2	1	1	1	5 61	91.5	84.8	85.5	77.0	80.4	3	180	-4.5	8/17/82
1	102	2	1	1	1	1 52	86.8	79.7	79.8	66.6	75.2	3	180	-4.5	8/17/82
1	103	2	1	1	1	2 55	88.9	83.0	a2.7	70.1	77.8	3	180	-4.5	8/17/82
1	104	2	1	1	1	5 59	91.8	85.5	86.1	75.6	79.1	3	180	-4.5	8/17/82
1	105	2	1	1	1	5 59	89.5	a3.4	85.0	76.3	78.0	3	180	-4.5	8/17/82
1	106	2	1	1	1	5 62	92.8	86.1	87.0	77.8	81.1	3	180	-4.5	8/17/82
1	107	2	1	1	1	5 60	88.5	81.9	82.7	72.1	76.7	3	180	-4.5	8/17/82
1	108	2	, 1	1	1	5 60	91.3	84.2	84.9	76.1	79.8	3	180	-4.5	8/17/82
1	109	0	0	0	1	1 59	80.5	74.6	76.0	65.0	72.4	3	180	-4.5	8/17/82
1	110	0	0	0	1	1 55	78.9	73.2	73.7	62.9	71.5	3	180	-4.5	8/17/82
1	111	2	1	1	1	5 64	94.5	88.1	89.1	76.6	82.5	3	180	-4.5	8/17/82
1	112	2	1	1	1	5 66	92.1	85.4	86.1	77.7	80.1	3	180	-4.5	8/17/82
1	113	2	1	1	1	5 50	95.3	88.8	89.1	79.6	83.8	3	180	-4.5	8/17/82
1	114	2	1	1	1	2 55	82.2	76.8	77.4	66.0	70.6	3	180	-4.5	8/17/82
1	115	2	1	1	1	5 60	88.8	82.3	82.7	74.3	77.3	3	180	-4.5	8/17/82
1	116	2	1	1	1	5 55	93.4	87.1	87.9	75.9	80.4	3	180	-4.5	8/17/82
1	117	2	1	1	1	5 62	89.4	83.8	84.2	74.7	79.1	3	180	-4.5	8/17/82
1	118	2	1	1	1	5 70	92.8	86.2	86.6	75.1	80.5	3	180	-4.5	8/17/82
1	119	2	3	1	1	7 55	83.2	76.6	77.1	65.4	70.8	3	180	-4.5	8/17/82
1	120	2	1	1	1	5 65	91.1	84.6	85.8	76.6	79.8	3	180	-4.5	8/17/82
1	121	2	1	1	1	5 59	90.8	83.7	85.4	73.1	78.2	3	180	-4.5	8/17/82
1	122	2	1	1	1	5 48	84.4	78.8	79.3	68.9	72.8	3	180	-4.5	8/17/82
1	123	2	1	1	1	5 57	92.9	86.0	86.8	76.a	80.4	3	180	-4.5	8/17/82
1	124	2	1	1	1	5 63	90.7	83.6	84.3	74.1	78.8	3	180	-4.5	8/17/82
1	125	2	1	1	1	1 59	79.4	72.3	71.9	60.0	66.1	3	180	-4.5	8/17/82
1	126	2	1	1	1	5 59	87.8	81.3	82.4	72.1	76.9	3	180	-4.5	8/17/82

DATA SUMMARY

SITE	EVENT	GLR	WHL	DEV	EQUAL.	VEH TYPE	SPEED	MIC (1) 5	MIC (2) 5	MIC (3) 10 DBA	MIC (4) 5	MIC (5) 10	WSIPNEDED	WAINGDLE	VWEICNTDOR	DATE
2	1	2	1	1	1	5	57	87.1	83.9	84.8	80.2	80.2	3	315	3.2	8/18/82
2	2	2	1	1	1	5	59	90.5	83.7	84.9	77.7	77.4	3	315	3.2	8/18/82
2	3	2	1	1	1	1	61	79.0	74.4	73.9	66.8	68.1	3	315	3.2	8/18/82
2	4	2	1	1	1	5	59	90.1	84.4	84.2	77.1	77.5	3	315	3.2	8/18/82
2	5	2	1	1	1	5	62	90.2	84.3	85.0	77.4	77.4	3	315	3.2	8/18/82
2	6	2	1	1	1	2	59	89.9	83.4	84.5	76.7	77.7	3	315	3.2	8/18/82
2	7	2	1	1	1	5	58	90.0	84.2	85.1	77.3	78.0	3	3i5	3.2	8/18/82
2	8	2	1	1	1	2	58	89.7	82.4	83.6	76.2	75.7	3	315	3.2	8/18/82
2	9	2	1	1	1	5	62	93.3	86.6	86.9	79.1	79.3	3	315	3.2	8/18/82
2	10	2	1	1	1	5	60	92.8	87.1	87.7	80.7	80.9	3	315	3.2	8/18/82
2	11	2	1	1	1	5	58	89.2	83.4	83.4	76.1	76.9	3	315	3.2	8/18/82
2	12	1	1	1	1	5	64	91.0	85.8	86.2	78.7	78.6	3	315	3.2	8/18/82
2	13	2	1	1	1	5	57	89.9	84.4	84.7	77.3	78.0	3	315	3.2	8/18/82
2	14	2	1	1	1	1	56	80.3	75.0	74.3	66.9	68.3	3	315	3.2	8/18/82
2	15	2	1	1	1	1	54	80.9	74.8	75.1	67.6	68.8	3	315	3.2	8/18/82
2	16	2	1	1	1	5	61	93.7	87.3	89.0	81.3	80.6	3	315	3.2	8/18/82
2	17	2	1	1	1	5	57	87.8	82.4	83.0	76.0	75.9	3	315	3.2	8/18/82
2	18	2	1	1	1	5	61	90.4	85.1	85.2	78.3	78.6	3	315	3.2	8/18/82
2	19	2	1	1	1	5	60	88.7	82.9	83.4	75.3	76.0	3	315	3.2	8/18/82
2	20	2	1	1	1	1	57	88.2	82.2	82.5	74.2	75.3	3	315	3.2	8/18/82
2	21	2	0	1	1	1	57	89.0	83.1	84.0	77.0	77.3	3	315	3.2	8/18/82
2	22	2	1	1	1	5	62	91.7	86.3	86.8	78.6	79.4	3	315	3.2	8/18/82
2	23	2	1	1	1	2	57	88.1	82.5	82.6	76.6	76.5	3	315	3.2	8/18/82
2	24	0	0	1	1	1	62	79.6	75.7	76.2	68.0	71.2	3	315	3.2	8/18/82
2	25	0	1	1	1	1	62	82.5	78.9	78.4	73.2	75.4	3	315	3.2	8/18/82
2	26	1	0	1	1	5	56	85.8	81.2	81.5	74.5	74.8	3	315	3.2	8/18/82
2	27	2	1	1	1	5	58	91.9	86.5	86.5	79.0	79.4	3	315	3.2	8/18/82
2	28	0	0	1	1	1	60	84.5	80.4	79.8	74.4	75.3	3	315	3.2	8/18/82
2	29	2	1	1	1	1	66	82.6	78.6	78.2	69.8	71.5	3	315	3.2	8/18/82
2	30	2	1	1	1	2	61	94.2	87.5	88.7	82.1	82.3	3	315	3.2	8/18/82
2	31	0	1	1	1	1	57	79.4	74.7	74.8	66.7	69.8	3	315	3.2	8/18/82
2	32	2	1	1	1	5	63	93.4	87.6	87.2	79.3	79.7	3	315	3.2	8/18/82
2	33	2	1	1	1	5	61	91.8	86.7	86.2	78.8	79.0	3	315	3.2	8/18/82
2	34	0	0	1	1	1	64	82.8	80.0	80.2	77.9	78.8	3	315	3.2	8/18/82
2	35	1	1	1	1	5	64	90.4	84.6	84.8	76.8	77.7	3	315	3.2	8/18/82
2	36	2	1	1	1	2	56	84.6	78.2	78.8	71.0	72.1	3	315	3.2	8/18/82
2	37	2	1	1	1	5	62	90.2	85.4	86.1	77.6	78.0	3	315	3.2	8/18/82
2	38	2	1	1	1	2	50	85.1	80.3	80.2	74.1	75.1	3	315	3.2	8/18/82
2	39	1	1	1	1	5	56	91.2	85.2	84.8	77.8	78.0	3	315	3.2	8/18/82
2	40	2	1	1	1	5	57	90.1	83.9	84.3	78.1	78.0	3	315	3.2	8/18/82
2	41	0	0	1	1	5	52	85.0	80.1	80.1	73.5	74.5	3	315	3.2	8/18/82
2	42	1	1	1	1	1	61	82.4	77.4	76.7	7 .8	72.4	3	315	3.2	8/18/82
2	43	2	1	1	1	5	5a	88.3	83.1	82.9	7 .5	75.4	3	315	3.2	8/18/82
2	44	2	1	1	1	1	64	82.2	77.3	76.9	6 .7	70.2	3	315	3.2	8/18/82
2	45	2	1	1	1	1	62	82.3	76.3	76.6	7 .2	71.1	3	315	3.2	8/18/82
2	46	2	1	1	1	5	53	89.5	83.8	84.3	7 .8	77.5	3	315	3.2	8/18/82
2	47	1	1	1	1	5	57	89.3	83.8	84.3	7 .2	76.7	3	315	3.2	8/18/82
2	48	2	1	1	1	5	57	89.9	84.3	84.9	7 .9	77.3	3	315	3.2	8/18/82
2	49	2	1	1	1	5	59	88.2	82.2	82.4	7 .1	75.4	3	315	3.2	8/18/82
2	50	2	1	1	1	1	59	81.0	75.2	79.9	6 .0	68.7	3	315	3.2	8/18/82
2	51	0	0	1	1	5	61	88.3	83.6	84.0	7 .5	77.2	3	315	3.2	8/18/82
2	52	2	1	1	1	5	63	90.4	85.1	85.1	7 .4	79.2	3	315	3.2	8/18/82
2	53	2	1	1	1	5	53	86.7	81.0	80.8	7 .5	74.1	3	315	3.2	8/18/82
2	54	1	1	1	1	5	55	89.8	83.7	85.1	7 .6	77.6	3	315	3.2	8/18/82
2	55	2	1	1	1	5	58	89.9	85.1	a4.9'	7 .3	78.8	6	315	6.4	8/18/82
2	56	0	0	1	1	5	62	81.5	80.7	82.0	7 .2	75.6	6	315	6.4	8/18/82
2	57	2	1	1	1	5	56	90.7	85.4	87.5	78.8	79.3	6	315	6.4	8/18/82
2	58	2	1	1	1	5	59	89.8	83.8	83.9'	7 .5	76.5	6	315	6.4	8/18/82
2	59	2	1	1	1	5	51	88.3	82.7	83.8	7 .3	77.4	6	315	6.4	8/18/82
2	60	2	1	1	1	1	62	84.7	80.5	79.5'	7 .4	73.3	6	315	6.4	8/18/82
2	61	2	1	1	1	5	58	93.4	87.7	87.5	82.0	81.5	6	315	6.4	8/18/82
2	62	2	1	1	1	5	56	88.8	83.6	84.0	79.0	78.4	6	315	6.4	8/18/82
2	63	2	1	1	1	5	57	90.9	85.1	85.9	79.2	78.9	6	315	6.4	8/18/82
2	64	2	1	1	1	1	70	92.0	86.5	86.9	79.1	78.7	6	315	6.4	8/18/82
2	65	2	1	1	1	1	62	79.3	75.0	74.7	6f.6	67.8	6	315	6.4	8/18/82
2	66	2	1	1	1	1	53	78.2	73.3	73.6	65.7	68.1	6	315	6.4	8/18/82
2	67	2	1	1	1	5	60	91.5	86.6	86.3	79.1	79.8	6	315	6.4	8/18/82
2	68	2	1	1	1	5	61	89.6	83.6	84.2	77.0	77.8	6	315	6.4	8/18/82
2	69	1	1	1	1	1	61	81.8	77.8	77.4	68.4	70.7	6	315	6.4	8/18/82
2	70	2	0	1	1	5	60	86.0	81.3	81.5	75.3	76.5	6	315	6.4	8/18/82

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH	DEL	ENV	VEH TYPE	VEH SPED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIP NEDED	WAING DLE	WEICNT DOR	DATE
2	71	1	1	1	1	1	48	76.4	73.0	72.5	65.6	66.8	6	315	6.4	8/18/82
2	72	2	1	1	1	5	60	90.4	85.1	85.7	98.9	78.8	6	315	6.4	8/18/82
2	73	2	0	1	1	5	64	89.1	82.9	83.7	76.9	71.8	6	315	6.4	8/18/82
2	74	0	1	1	1	1	58	78.2	73.3	72.8	65.2	68.5	6	315	6.4	8/18/82
2	75	2	1	1	1	5	61	89.5	85.0	85.2	77.5	78.4	6	315	6.4	8/18/82
2	76	0	1	1	1	1	52	66.6	65.1	66.9	59.7	62.1	6	315	6.4	8/18/82
2	77	2	1	1	1	5	55	90.6	84.2	84.6	78.0	78.9	6	315	6.4	8/18/82
2	78	1	1	1	1	2	57	90.1	83.8	84.0	77.1	78.2	6	315	6.4	8/18/82
2	79	0	1	1	1	1	63	79.4	73.5	74.4	66.5	69.5	6	315	6.4	8/18/82
2	80	2	1	1	1	5	58	90.2	84.2	85.0	77.9	78.1	6	315	6.4	8/18/82
2	81	1	1	1	1	1	65	82.0	77.4	77.2	70.7	71.8	6	315	6.4	8/18/82
2	82	2	1	1	1	5	60	87.4	81.6	81.6	73.8	73.9	6	315	6.4	8/18/82
2	83	2	1	1	1	5	54	86.9	82.4	81.4	74.8	75.7	6	315	6.4	8/18/82
2	84	2	1	1	1	2	64	90.8	84.3	84.6	77.6	77.3	6	315	6.4	8/18/82
2	85	2	1	1	1	1	65	83.7	78.4	77.7	70.6	71.4	6	315	6.4	8/18/82
2	86	2	1	1	1	5	48	87.4	80.8	81.7	75.8	75.7	6	315	6.4	8/18/82
2	87	2	1	1	1	1	53	78.5	73.7	73.3	66.3	67.7	6	315	6.4	8/18/82
2	88	2	1	1	1	5	56	90.2	83.9	85.0	77.3	76.9	6	315	6.4	8/18/82
2	89	2	1	1	1	5	58	88.2	82.9	83.0	75.1	75.7	6	315	6.4	8/18/82
2	90	2	1	1	1	2	59	87.9	81.9	83.4	75.4	75.0	6	315	6.4	8/18/82
2	91	2	1	1	1	5	59	92.5	87.3	87.5	80.8	81.2	6	315	6.4	8/18/82
2	92	0	1	1	1	1	58	79.6	74.6	75.4	69.7	71.2	6	315	6.4	8/18/82
2	93	2	1	1	1	1	62	77.9	72.8	72.7	66.5	67.4	6	315	6.4	8/18/82
2	94	2	1	1	1	5	60	93.9	87.0	88.3	81.2	81.1	6	315	6.4	8/18/82
2	95	0	1	1	1	1	56	78.4	73.6	73.6	65.9	67.3	6	315	6.4	8/18/82
2	96	1	1	1	1	1	52	79.5	74.3	73.9	65.6	67.2	6	315	6.4	8/18/82
2	97	0	1	1	1	2	52	85.0	80.1	80.4	74.3	75.4	6	315	6.4	8/18/82
2	98	2	1	1	1	5	61	90.8	85.4	85.6	79.3	79.2	6	315	6.4	8/18/82
2	99	2	1	1	1	5	56	87.6	82.2	81.9	75.5	76.1	6	315	6.4	8/18/82
2	100	0	1	1	1	2	50	85.0	77.8	78.8	71.2	72.4	6	315	6.4	8/18/82
2	101	2	1	1	1	1	63	78.3	73.1	73.9	65.5	67.1	6	315	6.4	8/18/82
2	102	2	1	1	1	5	59	91.3	86.0	86.5	81.1	79.1	6	315	6.4	8/18/82
2	103	0	1	1	1	1	60	$0.6	75.3	75.1	68.5	70.5	6	315	6.4	8/18/82
2	104	2	1	1	1	5	60	90.4	84.5	85.2	77.5	77.6	6	315	6.4	8/18/82
2	105	2	1	1	1	5	63	90.3	85.0	86.3	78.4	78.9	6	315	6.4	8/18/82
2	106	2	1	1	1	5	55	86.4	80.1	80.7	74.4	74.6	6	315	6.4	8/18/82
2	107	2	1	1	1	5	54	87.9	82.9	82.7	77.2	78.1	6	315	6.4	8/18/82
2	108	2	1	1	1	1	53	83.1	77.3	77.2	70.0	71.6	6	315	6.4	8/18/82
2	109	2	1	1	1	5	60	91.2	84.7	85.3	78.6	79.1	6	315	6.4	8/18/82
2	110	2	1	1	1	5	60	93.1	87.0	87.0	80.1	80.5	6	315	6.4	8/18/82
2	111	0	1	1	1	5	49	87.3	81.7	81.9	75.1	75.6	6	315	6.4	8/18/82
2	112	2	1	1	1	1	58	78.9	74.4	74.2	66.7	69.3	6	315	6.9	8/18/82
2	113	2	1	1	1	5	58	87.8	82.4	81.9	74.9	75.8	6	315	6.4	8/18/82
2	114	1	1	1	1	1	54	77.2	71.0	71.7	66.0	67.0	6	315	6.4	8/18/82
2	115	2	1	1	1	5	59	90.0	83.3	83.9	76.7	76.8	6	315	6.4	8/18/82
2	116	2	1	1	1	5	61	88.4	83.5	83.2	75.3	75.7	6	315	6.4	8/18/82
2	117	2	1	1	1	5	57	90.3	84.2	84.8	79.1	79.6	6	315	6.4	8/18/82
2	118	2	1	1	1	5	64	92.2	86.6	87.2	80.0	80.4	6	315	6.4	8/18/82
2	119	2	1	1	1	5	62	95.2	88.6	89.2	82.3	82.3	6	315	6.4	8/18/82
2	120	0	0	1	1	1	65	83.5	78.8	79.1	74.9	75.3	6	315	6.4	8/18/82
2	121	0	0	1	1	1	59	81.2	77.9	77.6	71.5	73.0	6	315	6.4	8/18/82
2	122	2	1	1	1	5	62	91.3	86.3	85.7	78.5	79.9	6	315	6.4	8/18/82
2	123	0	0	1	1	1	62	82.2	79.3	79.6	75.7	76.0	6	315	6.4	8/18/82
2	124	2	1	1	1	5	54	89.4	83.6	83.7	76.8	76.7	6	315	6.4	8/18/82
2	125	2	1	1	1	5	59	92.0	85.9	85.8	78.3	79.0	6	315	6.4	8/18/82
2	126	2	1	1	1	5	61	90.7	85.2	85.5	78.2	78.8	6	315	6.4	8/18/82
2	127	1	1	1	1	5	58	90.4	84.4	85.1	77.9	78.3	6	315	6.4	8/18/82
2	128	1	1	1	1	1	64	82.2	77.0	77.4	70.4	71.4	6	315	6.4	8/18/82
2	129	1	1	1	1	1	63	82.6	77.6	77.7	69.0	70.7	6	315	6.4	8/18/82
2	130	2	1	1	1	5	51	86.8	81.2	81.9	74.4	74.8	6	315	6.4	8/18/82

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEHL	DEN/V	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
3	1	2	1	1	1	5 46	88.2	81.8	82.3	0.0	0.0	3	345	4.3	9/21/82
3	2	2	1	1	1	1 51	87.3	78.7	81.2	0.0	0.0	3	345	4.3	9/21/82
3	3	0	0	0	1	0 43	90.1	83.9	84.2	0.0	0.0	3	345	4.3	9/21/82
3	4	2	1	1	1	1 48	80.7	73.6	75.3	0.0	0.0	3	345	4.3	9/21/82
3	5	2	1	1	1	1 60	80.1	73.8	74.6	0.0	0.0	0	5	0.0	9/21/82
3	6	2	1	1	1	1 85	85.7	79.7	80.4	0.0	0.0	0	5	0.0	9/21/82
3	7	2	1	1	1	5 43	87.5	81.0	81.8	0.0	0.0	0	5	0.0	9/21/82
3	8	2	1	1	1	1 50	76.9	70.0	71.7	0.0	0.0	0	5	0.0	9/21/82
3	9	2	1	1	1	1 58	77.8	70.8	72.3	0.0	0.0	0	5	0.0	9/21/82
3	10	2	1	1	1	0 54	77.3	70.8	71.9	0.0	0.0	0	5	0.0	9/21/82
3	11	2	1	1	1	1 44	77.8	69.6	71.7	0.0	0.0	0	5	0.0	9/21/82
3	12	2	1	1	1	1 48	76.2	69.3	70.1	0.0	0.0	0	5	0.0	9/21/82
3	13	2	1	1	1	1 52	-1.0	74.0	-1.0	0.0	0.0	0	5	0.0	9/21/82
3	14	2	1	1	1	1 58	77.7	72.2	72.1	0.0	0.0	0	5	0.0	9/21/82
3	15	2	1	1	1	0 47	72.8	65.3	66.8	0.0	0.0	0	5	0.0	9/21/82
3	16	2	1	1	1	0 68	81.3	74.1	75.3	0.0	0.0	0	5	0.0	9/21/82
3	17	2	1	1	1	1 65	78.9	72.2	73.5	0.0	0.0	0	5	0.0	9/21/82
3	18	2	1	1	1	1 53	78.9	72.5	74.1	0.0	0.0	0	5	0.0	9/21/82
3	19	2	1	1	1	1 54	75.9	68.9	71.0	0.0	0.0	0	5	0.0	9/21/82
3	20	2	1	1	1	0 47	74.7	67.5	69.0	0.0	0.0	0	5	0.0	9/21/82
3	21	2	1	1	1	1 52	78.0	70.5	72.3	0.0	0.0	0	5	0.0	9/21/82
3	22	2	1	1	1	1 65	87.5	77.7	81.5	0.0	0.0	0	5	0.0	9/21/82
3	23	2	1	1	1	7 38	82.3	73.5	75.3	0.0	0.0	3	5	4.5	9/21/82
3	24	2	1	1	1	1 55	84.9	77.1	78.5	0.0	0.0	3	5	4.5	9/21/82
3	25	0	0	0	1	1 53	78.4	71.2	72.9	0.0	0.0	3	5	4.5	9/21/82
3	26	2	1	1	1	1 71	80.8	72.9	74.7	0.0	0.0	3	5	4.5	9/21/82
3	27	2	1	1	1	1 52	78.5	70.8	72.3	0.0	0.0	3	5	4.5	9/21/82
3	28	2	1	1	1	5 47	90.8	84.0	85.1	0.0	0.0	3	5	4.5	9/21/82
3	29	2	1	1	1	1 61	78.3	72.4	74.7	0.0	0.0	3	5	4.5	9/21/82
3	30	2	1	1	1	0 56	75.9	68.6	69.9	0.0	0.0	3	5	4.5	9/21/82
3	31	2	1	1	1	1 61	77.2	69.7	72.0	0.0	0.0	3	5	4.5	9/21/82
3	32	2	1	1	1	5 45	89.4	83.6	83.9	0.0	0.0	3	5	4.5	9/21/82
3	33	2	1	1	1	1 46	79.6	71.1	73.4	0.0	0.0	3	5	4.5	9/21/82
3	34	2	1	1	1	1 58	80.2	72.9	75.4	0.0	0.0	3	5	4.5	9/21/82
3	35	2	1	1	1	.5 43	92.3	85.5	85.5	0.0	0.0	3	5	4.5	9/21/82
3	36	2	1	1	1	0 60	77.7	70.9	72.6	0.0	0.0	3	5	4.5	9/21/82
3	37	2	1	1	1	1 57	84.9	75.2	78.3	0.0	0.0	3	5	4.5	9/21/82
3	38	2	1	1	1	2 38	77.5	70.0	72.0	0.0	0.0	3	5	4.5	9/21/82
3	39	2	1	1	1	5 45	86.9	80.1	81.7	0.0	0.0	3	5	4.5	9/21/82
3	40	2	1	1	1	0 44	74.9	67.8	69.1	0.0	0.0	3	5	4.5	9/21/82
3	41	2	1	1	1	1 52	76.8	69.0	70.2	0.0	0.0	3	5	4.5	9/21/82
3	42	2	1	1	1	1 61	77.7	71.1	72.1	0.0	0.0	3	5	4.5	9/21/82
3	43	2	1	1	1	1 64	84.3	75.4	77.8	0.0	0.0	3	5	4.5	9/21/82
3	44	0	0	0	1	2 53	81.7	73.9	75.2	0.0	0.0	3	5	4.5	9/21/82
3	45	2	1	1	1	5 53	93.4	86.2	88.4	0.0	0.0	3	5	4.5	9/21/82
3	46	2	1	1	1	1 54	80.6	73.1	74.6	0.0	0.0	3	5	4.5	9/21/82
3	47	2	0	0	1	1 43	83.5	77.6	80.0	0.0	0.0	3	5	4.5	9/21/82
3	48	2	1	1	1	5 46	-1.0	76.0	-1.0	0.0	0.0	3	5	4.5	9/21/82
3	49	2	1	1	1	5 47	90.7	84.9	84.2	0.0	0.0	3	5	4.5	9/21/82
3	50	2	1	1	1	1 66	82.4	75.0	76.6	0.0	0.0	3	5	4.5	9/21/82
3	51	2	1	1	1	0 50	-1.0	71.0	-1.0	0.0	0.0	3	5	4.5	9/21/82
3	52	2	1	1	1	3 44	-1.0	76.0	-1.0	0.0	0.0	3	5	4.5	9/21/82
3	53	2	1	1	1	1 51	80.3	72.9	74.4	0.0	0.0	3	5	4.5	9/21/82
3	54	2	1	1	1	5 43	88.4	80.9	82.7	0.0	0.0	3	5	4.5	9/21/82
3	55	2	1	1	1	1 62	77.8	70.9	71.9	0.0	0.0	3	5	4.5	9/21/82
3	56	2	1	1	1	1 57	76.4	69.0	70.5	0.0	0.0	3	5	4.5	9/21/82
3	57	2	1	1	1	1 64	81.5	75.0	75.8	0.0	0.0	3	5	4.5	9/21/82
3	58	2	1	1	1	1 55	78.5	70.5	72.4	0.0	0.0	3	5	4.5	9/21/82
3	59	2	1	1	1	5 42	86.5	79.3	80.4	0.0	0.0	3	5	4.5	9/21/82
3	60	2	1	1	1	5 42	88.6	82.4	82.8	0.0	0.0	3	5	4.5	9/21/82
3	61	2	1	1	1	5 44	87.9	80.7	81.8	0.0	0.0	3	10	4.4	9/21/82
3	62	2	1	1	1	0 52	80.5	73.8	75.2	0.0	0.0	3	10	4.4	9/21/82
3	63	2	1	1	1	1 65	81.2	73.4	75.3	0.0	0.0	3	10	4.4	9/21/82
3	64	2	1	1	1	0 54	78.6	71.4	72.5	0.0	0.0	3	10	4.4	9/21/82
3	65	2	1	1	1	0 58	80.0	73.4	74.0	0.0	0.0	3	10	4.4	9/21/82
3	66	2	1	1	1	0 49	76.2	68.8	70.3	0.0	0.0	3	10	4.4	9/21/82
3	67	2	1	1	1	7 44	77.4	70.8	71.2	0.0	0.0	3	10	4.4	9/21/82
3	68	2	1	1	1	1 59	79.5	71.6	73.6	0.0	0.0	3	10	4.4	9/21/82
3	69	2	1	1	1	0 54	76.1	69.6	70.6	0.0	0.0	3	10	4.4	9/21/82
3	70	2	1	1	1	1 51	80.0	72.5	74.2	0.0	0.0	3	10	4.4	9/21/82

VIVA SUMMARY

SITE	LOC. EVENT	GLR	AEH	∂/L	ENV	VEH TYPE	SPEED	MIC (1) S	(2) S	(3) 40 DBA	(4) 5	(5) 10	WSINEDE ∂	WAIN NGDLE	VWEICNTOR ∂	DATE
3	71	2	1	1	1	S	47	86.0	80.3	80.3	0.0	0.0	3	40	4.4	9/21/82
3	26	2	1	1	1	0	51	75.7	68.7	70.2	0.0	0.0	3	40	4.4	9/21/82
3	3E	2	1	1	1	S	45	86.3	80.2	80.5	0.0	0.0	3	10	4.4	9/21/82
3	74	2	1	1	1	1	51	78.2	69.6	71.9	0.0	0.0	3	40	4.4	9/21/82
3	75	2	1	1	1	1	50	76.1	69.6	70.6	0.0	0.0	3	40	4.4	9/21/82
3	96	1	1	1	1	S	38	86.0	78.8	80.8	0.0	0.0	3	40	4.4	9/21/82
3	77	2	1	1	1	7	61	86.5	80.0	80.4	0.0	0.0	3	40	4.4	9/21/82
3	78	2	1	1	1	3	45	83.3	76.0	76.9	0.0	0.0	3	40	4.4	9/21/82
3	6L	2	1	1	1	1	50	78.7	70.9	72.1	0.0	0.0	3	40	4.4	9/21/82
3	80	2	1	1	1	1	54	77.1	70.2	72.2	0.0	040	3	40	4.4	9/21/82
3	81	2	1	1	1	1	63	77.8	70.1	72.3	0.0	0.0	3	40	4.4	9/21/82
3	28	0	0	0	1	1	54	80.9	72.9	75.4	0.0	0.0	3	10	4.4	9/21/82
3	E8	2	1	1	1	1	SS	76.0	68.6	70.8	0.0	0.0	3	40	4.4	9/21/82
3	84	2	1	1	1	2	45	79.4	71.7	74.2	0.0	0.0	3	40	4.4	9/21/82
3	85	2	1	1	1	3	47	85.5	79.1	80.2	0.0	0.0	3	10	4.4	9/21/82
3	86	2	1	1	1	S	45	86.2	79.4	80.6	0.0	0.0	6	285	2.3	9/21/82
3	L8	2	1	1	1	2	48	83.7	76.7	77.1	0.0	0.0	6	285	2.3	9/21/82
3	88	2	1	1	1	0	44	73.0	65.4	66.4	0.0	0.0	6	285	2.3	9/21/82
3	89	2	1	1	1	1	US	77.9	70.5	72.4	0.0	0.0	6	285	2.3	9/21/82
3	90	2	1	1	1	0	63	78.1	71.3	73.1	0.0	0.0	6	285	2.3	9/21/82
3	91	2	1	1	1	0	59	77.7	70.1	72.0	0.0	0.0	6	285	2.3	9/21/82
3	26	2	1	1	1	1	48	76.9	68.2	71.2	0.0	0.0	6	285	2.3	9/21/82
3	E6	2	1	1	1	S	56	92.5	85.7	86.5	0.0	0.0	6	285	2.3	9/21/82
3	94	2	1	1	1	1	56	81.2	73.2	75.5	0.0	0.0	6	285	2.3	9/21/82
3	56	2	1	1	1	1	25	79.2	71.2	73.2	0.0	0.0	6	285	2.3	9/21/82
3	96	2	1	1	1	0	SS	75.5	68.4	70.1	0.0	0.0	6	285	2.3	9/21/82
3	97	1	1	1	1	0	55	75.2	68.4	70.4	0.0	0.0	6	285	2.3	9/21/82
3	98	1	1	1	1	0	96	76.3	69.5	71.3	0.0	0.0	6	285	2.3	9/21/82
3	99	2	1	1	1	1	45	74.9	67.4	69.6	0.0	0.0	6	285	2.3	9/21/82
3	600	2	1	1	1	S	96	89.3	83.5	83.6	0.0	0.0	6	285	2.3	9/21/82
3	101	2	1	1	1	1	58	77.8	70.7	72.5	0.0	0.0	6	285	2.3	9/21/82
3	201	2	1	1	1	1	51	81.2	75.0	76.1	0.0	0.0	6	285	2.3	9/21/82
3	103	2	1	1	1	0	48	76.2	70.0	70.0	0.0	0.0	6	285	2.3	9/21/82
3	104	2	1	1	1	S	48	89.3	83.4	83.4	0.0	0.0	6	285	2.3	9/21/82
3	601	2	1	1	1	S	45	88.6	81.4	82.4	0.0	0.0	3	310	2.9	9/21/82
3	106	2	1	1	1	1	59	78.0	70.5	72.1	0.0	0.0	3	310	2.9	9/21/82
3	107	2	1	1	1	1	65	87.3	79.7	82.1	0.0	0.0	3	310	2.9	9/21/82
3	108	2	1	1	1	S	45	89.9	82.7	83.8	0.0	0.0	6	315	6.4	9/21/82
3	601	2	1	1	1	S	44	86.9	81.0	81.9	0.0	0.0	6	315	6.4	9/21/82
3	Off	2	1	1	1	1	53	76.0	68.3	70.6	0.0	0.0	6	315	6.4	9/21/82
3	111	2	1	1	1	S	43	88.5	82.1	82.5	0.0	0.0	6	315	6.4	9/21/82
3	112	2	1	1	1	S	38	86.5	79.4	80.0	0.0	0.0	6	315	6.4	9/21/82
3	113	2	1	1	1	7	69	78.6	72.7	72.9	0.0	0.0	6	315	6.4	9/21/82
3	114	2	1	1	1	S	50	84.3	77.0	78.1	0.0	0.0	6	315	6.4	9/21/82
3	115	0	0	0	1	0	55	79.6	72.5	74.4	0.0	0.0	6	315	6.4	9/21/82
3	116	2	1	1	1	0	48	74.3	68.4	69.2	0.0	0.0	6	315	6.4	9/21/82
3	117	0	0	0	1	1	59	77.2	70.0	73.9	0.0	0.0	6	315	6.4	9/21/82
3	118	2	1	1	1	1	66	78.8	70.L	72.3	0.0	0.0	6	315	6.4	9/21/82
3	119	0	0	0	1	0	34	80.3	74.7	75.9	0.0	0.0	6	315	6.4	9/21/82
3	120	2	1	1	1	1	50	77.6	70.6	72.2	0.0	0.0	6	315	6.4	9/21/82
3	121	2	1	1	1	1	33	77.2	69.9	71.4	0.0	0.0	6	315	6.9	9/21/82
3	122	2	1	1	1	1	SS	76.4	68.3	71.3	0.0	0.0	6	315	6.4	9/21/82
3	123	2	1	1	1	1	55	76.9	68.7	70.8	0.0	0.0	6	315	6.4	9/21/82
3	124	2	1	1	1	3	96	91.5	84.8	85.5	0.0	0.0	6	315	6.9	9/21/82
3	125	2	1	1	1	S	45	87.0	80.4	81.0	0.0	0.0	6	315	6.4	9/21/82
3	126	2	1	1	1	1	50	82.7	74.8	77.0	0.0	0.0	I	315	3.2	9/21/82
3	127	2	1	1	1	1	25	76.8	68.9	71.5	0.0	0.0	3	315	3.2	9/21/82
3	128	2	1	1	1	0	51	73.6	66.3	68.3	0.0	0.0	3	315	3.2	9/21/82
3	129	2	0	0	1	S	42	84.4	77.7	79.1	0.0	0.0	3	315	3.2	9/21/82
3	130	2	1	1	1	1	59	78.1	71.1	72.9	0.0	0.0	I	315	3.2	9/21/82
3	131	2	0	0	1	1	46	83.5	78.9	80.2	0.0	0.0	3	315	3.2	9/21/82
3	132	2	1	1	1	1	63	83.6	75.4	76.9	0.0	0.0	3	315	3.2	9/21/82
3	133	2	1	1	1	S	25	87.6	81.0	81.6	0.0	0.0	3	315	3.2	9/21/82
3	134	2	1	1	1	1	85	83.2	75.5	78.0	0.0	0.0	3	315	3.2	9/21/82
3	135	2	1	1	1	1	96	78.4	70.5	72.9	0.0	0.0	3	315	3.2	9/21/82
I	136	2	0	0	1	1	57	78.1	69.9	72.5	0.0	0.0	3	315	3.2	9/21/82
3	137	2	1	1	1	S	L5	89.9	83.9	84.0	0.0	0.0	3	315	3.2	9/21/82
3	138	1	0	0	1	1	44	75.7	67.2	69.6	0.0	0.0	3	315	3.2	9/21/82
3	639	2	1	1	1	2	40	80.9	74.0	75.8	0.0	0.0	3	315	3.2	9/21/82
3	140	2	0	0	1	1	53	81.0	73.3	75.4	0.0	0.0	3	315	3.2	9/21/82

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH	DEN	VEH TYP	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
3	141	2 1 1 1	1	45	77.2	68.6	71.5	0.0	0.0	3	315	3.2	9/21/82
3	142	2 1 1 1	0	58	81.3	73.1	76.0	0.0	0.0	3	315	3.2	9/21/82
3	143	2 1 1 1	2	48	84.4	76.2	77.9	0.0	0.0	3	315	3.2	9/21/82
3	144	2 1 1 1	1	61	79.2	71.6	72.7	0.0	0.0	3	315	3.2	9/21/82
3	145	2 1 1 1	0	58	77.3	70.7	72.0	0.0	0.0	3	315	3.2	9/21/82
3	146	2 1 1 1	1	63	81.6	73.7	75.6	0.0	0.0	3	315	3.2	9/21/82
3	147	2 1 1 1	5	46	86.4	79.6	81.2	0.0	0.0	3	315	3.2	9/21/82
3	148	2 1 1 1	1	60	77.2	69.6	71.7	0.0	0.0	3	315	3.2	9/21/82
3	149	2 1 1 1	1	63	79.6	72.7	74.3	0.0	0.0	3	10	4.4	9/21/82
3	150	2 0 0 1	1	64	88.2	82.5	82.7	0.0	0.0	3	10	4.4	9/21/82
3	151	2 1 1 1	1	56	84.0	75.1	78.1	0.0	0.0	3	10	4.4	9/21/82
3	152	2 1 1 1	1	61	88.3	78.1	82.9	0.0	0.0	3	10	4.4	9/21/82
3	153	2 1 1 1	5	55	88.1	82.0	82.5	0.0	0.0	3	10	4.4	9/21/82
3	154	2 1 1 1	1	62	80.2	73.4	74.8	0.0	0.0	3	10	4.4	9/21/82
3	155	2 1 1 1	1	51	78.4	70.9	73.2	0.0	0.0	3	10	4.4	9/21/82
3	156	2 1 1 1	1	58	78.1	70.2	72.4	0.0	0.0	3	10	4.9	9/21/82
3	157	2 1 1 1	1	54	79.0	72.2	73.8	0.0	0.0	3	10	4.4	9/21/82
3	158	2 1 1 1	0	62	78.5	71.6	73.6	0.0	0.0	3	10	4.4	9/21/82
3	159	2 0 0 1	1	58	80.2	72.4	74.3	0.0	0.0	3	10	4.4	9/21/82
3	160	2 1 1 1	1	52	91.5	83.2	85.6	0.0	0.0	3	10	4.4	9/21/82
3	161	2 1 1 1	0	61	81.0	72.8	74.4	0.0	0.0	3	10	4.4	9/21/82
3	162	2 1 1 1	5	50	84.2	78.8	79.1	0.0	0.0	3	10	4.4	9/21/82
3	163	2 1 1 1	4	45	86.7	79.5	80.7	0.0	0.0	3	10	4.4	9/21/82
3	164	2 1 1 1	0	43	73.3	65.2	67.1	0.0	0.0	3	10	4.4	9/21/82
3	165	2 1 1 1	1	62	83.0	75.9	77.6	0.0	0.0	3	10	4.4	9/21/82
3	166	2 1 1 1	0	42	72.3	66.1	66.9	0.0	0.0	3	10	4.4	9/21/82
3	167	2 1 1 1	1	58	78.1	70.7	72.3	0.0	0.0	3	10	4.4	9/21/82
3	168	2 1 1 1	1	54	79.8	71.8	73.9	0.0	0.0	3	10	4.4	9/21/82
3	169	2 1 1 1	1	61	79.1	72.2	73.3	0.0	0.0	3	10	4.4	9/21/82
3	170	2 1 1 1	5	46	87.8	81.8	82.8	0.0	0.0	3	10	4.4	9/21/82
3	171	2 1 1 1	0	42	71.0	63.3	65.3	0.0	0.0	3	10	4.4	9/21/82
3	172	2 1 1 1	1	47	74.1	67.3	69.1	0.0	0.0	3	10	4.4	9/21/82
3	173	2 1 1 1	0	53	77.1	70.8	71.5	0.0	0.0	3	10	4.4	9/21/82
3	174	2 1 1 1	1	53	77.4	69.0	71.1	0.0	0.0	3	10	4.4	9/21/82
3	175	2 1 1 1	0	55	74.1	67.1	68.7	0.0	0.0	3	10	4.4	9/21/82
3	176	2 0 0 1	1	56	77.3	71.6	73.4	0.0	0.0	3	10	4.4	9/21/82
3	177	2 1 1 1	1	46	74.7	66.9	68.5	0.0	0.0	3	10	4.4	9/21/82
3	178	2 1 1 1	5	50	86.4	79.0	81.0	0.0	0.0	3	10	4.4	
3	179	2 1 1 1	5	43	87.3	80.6	81.6	0.0	0.0	3	10	4.4	9/21/82
3	180	2 1 1 1	5	45	90.4	83.5	84.4	0.0	0.0	3	10	4.4	9/21/82
3	181	0 0 0 1	1	55	-1.0	-1.0	-1.0	0.0	0.0	3	10	4.4	9/21/82
3	182	2 1 1 1	5	43	88.1	81.9	82.5	0.0	0.0	3	10	4.4	9/21/82
3	183	2 1 1 1	0	59	75.7	68.3	70.4	0.0	0.0	3	10	4.4	9/21/82
3	184	2 1 1 1	1	54	74.9	66.6	68.9	0.0	0.0	3	10	4.4	9/21/82
3	185	2 1 1 1	1	53	77.9	70.2	71.7	0.0	0.0	3	10	4.4	9/21/82
3	186	2 1 1 1	1	53	80.4	73.1	75.6	0.0	0.0	3	10	4.4	9/21/82
3	187	2 1 1 1	1	51	75.7	68.6	70.2	0.0	0.0	3	10	4.4	9/21/82
3	188	2 1 1 1	5	55	-1.0	91.7	-1.0	0.0	0.0	3	10	4.4	9/21/82
3	189	2 1 1 1	1	56	77.6	70.6	72.3	0.0	0.0	3	10	4.4	9/21/82
3	190	2 1 1 1	2	49	81.4	74.4	75.7	0.0	0.0	3	10	4.4	9/21/82
3	191	2 1 1 1	1	55	78.1	70.8	73.4	0.0	0.0	3	10	4.4	9/21/82
3	192	2 1 1 1	1	56	80.7	74.0	74.7	0.0	0.0	3	10	4.4	9/21/82
3	193	2 0 0 1	1	77	87.3	81.3	81.8	0.0	0.0	3	10	4.4	9/21/82
3	194	2 1 1 1	1	52	77.3	69.1	70.8	0.0	0.0	3	10	4.4	9/21/82
3	195	1 1 1 1	1	46	74.8	68.5	69.1	0.0	0.0	3	10	4.4	9/21/82
3	196	2 1 1 1	1	58	79.1	71.0	72.8	0.0	0.0	3	10	4.4	9/21/82
3	197	2 1 1 1	1	52	83.3	76.a	77.0	0.0	0.0	3	10	4.4	9/21/82
3	198	2 1 1 1	5	45	86.7	80.2	81.3	0.0	0.0	3	10	4.4	9/21/82
3	199	2 1 1 1	0	50	75.3	68.1	69.5	0.0	0.0	3	10	4.4	9/21/82
3	200	2 1 1 1	5	44	86.5	80.0	81.0	0.0	0.0	3	10	4.4	9/21/82
3	201	2 1 1 1	5	44	84.4	77.6	78.3	0.0	0.0	3	330	3.9	9/22/82
3	202	1 1 1 1	1	59	80.2	72.6	74.2	0.0	0.0	3	330	3.9	9/22/82
3	203	2 1 1 1	0	64	80.8	73.0	74.1	0.0	0.0	3	330	3.9	9/22/82
3	204	1 1 1 1	0	48'	77.6	70.7	71.6	0.0	0.0	3	330	3.9	9/22/82
3	205.	2 1 1 1	1	45	75.3	67.8	69.1	0.0	0.0	3	330	3.9	9/22/82
3	206	2 1 1 1	2	51	87.5	79.5	80.8	0.0	0.0	3	330	3.9	9/22/82
3	207	2 1 1 1	0	56	77.3	69.8	71.9	0.0	0.0	0	0	0.0	9/22/82
3	208	2 1 1 1	1	55	79.9	73.0	74.6	0.0	0.0	0	0	0.0	9/22/82
3	209	2 1 1 1	1	53	79.8	72.1	74.1	0.0	0.0	0	330	0.0	9/22/82
3	210	2 1 1 1	1	56	78.7	71.6	72.9	0.0	0.0	0	330	0.0	9/22/82

DATA SUMMARY

SITE	EVENT	LOC.	EVENT QUAL. GLR	VEH/LH	DEN/LV	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
3	211	2	1	1	1	1	59	79.5	72.4	73.9	0.0	0.0	0	330	0.0	9/22/82
3	212	2	1	1	1	1	64	80.5	73.4	75.1	0.0	0.0	0	0	0.0	9/22/82
3	213	2	1	1	1	0	60	80.0	72.7	73.9	0.0	0.0	0	0	0.0	9/22/82
3	214	2	1	1	1	0	46	73.1	65.9	67.6	0.0	0.0	0	0	0.0	9/22/82
3	215	2	1	1	1	1	50	80.3	72.1	74.3	0.0	0.0	0	0	0.0	9/22/82
3	216	2	1	1	1	1	54	77.0	68.9	70.5	0.0	0.0	0	0	0.0	9/22/82
3	217	2	1	1	1	0	56	76.6	69.2	70.5	0.0	0.0	0	0	0.0	9/22/82
3	218	2	1	1	1	0	59	77.0	70.8	71.9	0.0	0.0	0	0	0.0	9/22/82
3	219	2	1	1	1	0	55	77.8	70.1	72.0	0.0	0.0	0	0	0.0	9/22/82
3	220	2	1	1	1	1	70	81.5	74.3	75.6	0.0	0.0	0	0	0.0	9/22/82
3	221	2	1	1	1	0	51	80.2	71.7	73.9	0.0	0.0	0	0	0.0	9/22/82
3	222	2	1	1	1	1	54	77.0	69.5	71.3	0.0	0.0	0	0	0.0	9/22/82
3	223	2	1	1	1	0	62	78.2	71.5	73.2	0.0	0.0	0	0	0.0	9/22/82
3	224	2	1	1	1	1	45	77.5	69.6	91.5	0.0	0.0	0	0	0.0	9/22/82
3	225	2	1	1	1	5	48	90.0	83.3	83.8	0.0	0.0	0	320	0.0	9/22/82
3	226	2	1	1	1	1	50	77.8	69.1	71.6	0.0	0.0	0	320	0.0	9/22/82
3	227	2	1	1	1	0	65	82.1	74.0	76.5	0.0	0.0	0	320	0.0	9/22/82
3	228	2	1	1	1	0	47	78.4	72.7	73.5	0.0	0.0	0	320	0.0	9/22/82
3	229	2	1	1	1	5	54	87.6	81.4	82.1	0.0	0.0	0	320	0.0	9/22/82
3	230	0	0	0	1	0	59	83.0	75.7	78.5	0.0	0*0	0	320	0.0	9/22/82
3	231	2	1	1	1	1	59	78.2	70.8	72.3	0.0	0.0	0	320	0.0	9/22/82
3	232	2	1	1	1	1	51	79.8	71.6	74.5	0.0	0.0	0	320	0.0	9/22/82
3	233	2	1	1	1	5	59	96.4	89.4	91.3	0.0	0.0	0	320	0.0	9/22/82
3	234	2	1	1	1	1	53	79.6	71.7	74.1	0.0	0.0	0	320	0.0	9/22/82
3	235	2	1	1	1	3	51	91.6	84.0	84.7	0.0	0.0	0	320	0.0	9/22/82
3	236	2	1	1	1	1	56	78.6	71.0	72.8	0.0	0.0	0	320	0.0	9/22/82
3	237	2	1	1	1	5	60	93.1	86.3	86.8	0.0	0.0	0	320	0.0	9/22/82
3	238	2	1	1	1	5	54	87.4	81.1	82.8	0.0	0.0	0	320	0.0	9/22/82
3	239	2	1	1	1	0	35	69.9	63.8	64.8	0.0	0.0	0	320	0.0	9/22/82
3	240	2	1	1	1	1	50	81.1	73.3	75.6	0.0	0.0	0	320	0.0	9/22/82
3	241	0	1	0	1	1	50	73.0	67.5	69.9	0.0	0.0	0	320	0.0	9/22/82
3	242	2	1	1	1	1	49	79.5	70.6	73.6	0.0	0.0	0	320	0.0	9/22/82
3	243	0	0	0	1	2	47	82.5	74.4	75.9	0.0	0.0	0	320	0.0	9/22/82
3	244	2	1	1	1	5	55	93.2	85.1	88.2	0.0	0.0	0	320	0.0	9/22/82
3	245	2	1	1	1	1	58	76.7	69.0	71.2	0.0	0.0	0	320	0.0	9/22/82
3	246	2	1	1	1	0	52	77.3	70.6	71.7	0.0	0.0	0	320	0.0	9/22/82
3	247	2	1	1	1	1	39	75.4	67.9	69.4	0.0	0.0	0	320	0.0	9/22/82
3	248	2	1	1	1	1	52	77.1	70.0	71.2	0.0	0.0	0	320	0.0	9/22/82
3	249	2	1	1	1	0	56	77.3	69.6	71.4	0.0	0.0	0	320	0.0	9/22/82
3	250	2	1	1	1	1	57	80.3	72.3	74.0	0.0	0.0	3	310	2.9	9/22/82
3	251	2	1	1	1	7	51	80.6	73.7	74.2	0.0	0.0	3	310	2.9	9/22/82
3	252	2	1	1	1	0	51	76.6	70.1	70.8	0.0	0.0	3	310	2.9	9/22/82
3	253	2	1	1	1	1	49	77.6	71.6	72.3	0.0	0.0	3	310	2.9	9/22/82
3	254	2	1	1	1	1	54	78.4	70.0	73.0	0.0	0.0	3	310	2.9	9/22/82
3	255	2	1	1	1	1	55	76.8	70.1	71.2	0.0	0.0	3	310	2.9	9/22/82
3	256	2	1	1	1	5	45	84.0	76.8	77.8	0.0	0.0	3	310	2.9	9/22/82
3	257	2	1	1	1	1	58	83.8	75.4	77.4	0.0	0.0	3	310	2.9	9/22/82
3	258	2	1	1	1	5	54	90.1	83.5	84.9	0.0	0.0	3	310	2.9	9/22/82
3	259	2	1	1	1	0	66	79.8	72.9	74.3	0.0	0.0	3	310	2.9	9/22/82
3	260	0	0	0	1	1	62	82.2	75.4	78.3	0.0	0.0	3	310	2.9	9/22/82
3	261	2	1	1	1	1	47	72.1	64.1	66.6	0.0	0.0	3	310	2.9	9/22/82
3	262	2	1	1	1	0	57	76.2	68.5	70.6	0.0	0.0	3	280	0.8	9/22/82
3	263	2	1	1	1	1	53	82.8	74.6	77.1	0.0	0.0	3	280	0.8	9/22/82
3	264	2	1	1	1	1	63	79.5	71.4	74.0	0.0	0.0	3	280	0.8	9/22/82
3	265	2	1	1	1	1	63	79.7	72.1	73.8	0.0	0.0	3	280	0.8	9/22/82
3	266	2	1	1	1	1	53	78.1	69.3	72.0	0.0	0.0	3	280	0.8	9/22/82
3	267	2	1	1	1	1	57	79.2	71.0	73.6	0.0	0.0	3	280	0.8	9/22/82
3	268	2	1	1	1	3	54	84.8	78.2	78.4	0.0	0.0	3	280	0.8	9/22/82
3	269	2	1	1	1	5	46	85.5	78.8	80.3	0.0	0.0	3	280	0.8	9/22/82
3	270	2	1	1	1	1	58.	78.4	70.0	72.5	0.0	0.0	3	280	0.8	9/22/82
3	271	2	1	1	1	0	54	74.8	67.8	69.1	0.0	0.0	3	280	0.8	9/22/82
3	272	2	1	1	1	1	38	74.0	66.0	68.5	0.0	0.0	3	280	0.8	9/22/82
3	273	2	1	1	1	1	64	86.5	76.3	80.6	0.0	0.0	3	280	0.8	9/22/82
3	274	2	1	1	1	1	61	-1.0	70.0	-1.0	0.0	0.0	3	280	0.8	9/22/82
3	275	0	0	0	1	1	55	76.4	69.1	71.3	0.0	0.0	3	280	0.8	9/22/82
3	276	2	1	1	1	3	54	91.4	84.0	84.8	0.0	0.0	3	280	0.8	9/22/82
3	277	2	1	1	1	1	56	79.5	71.9	73.2	0.0	0.0	3	310	2.9	9/22/82
3	278	2	1	1	1	0	50	75.7	69.3	70.3	0.0	0.0	0	300	0.0	9/22/82
3	279	2	1	1	1	2	64	84.2	76.2	78.1	0.0	0.0	3	300	2.2	9/22/82
3	280	2	1	1	1	1	49	83.4	73.4	76.4	0.0	0.0	3	300	2.2	9/22/82

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH	D/L	ENV	VEH TYPE	VEH SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDE	WAINGDLE	WEICNTDOR	DATE
3	281	2	1	1	1	1	54	81.6	73.1	74.9	0.0	0.0	3	300	2.2	9/22/82
3	282	2	1	1	1	5	53	85.9	77.9	79.6	0.0	0.0	3	300	2.2	9/22/82
3	283	2	1	1	1	5	41	86.2	79.0	80.6	0.0	0.0	3	300	2.2	9/22/82
3	284	2	1	1	1	5	43	89.4	82.7	83.4	0.0	0.0	3	280	0.8	9/22/82
3	285	2	1	1	1	1	63	-1.0	71.0	-1.0	0.0	0.0	3	280	0.8	9/22/82
3	286	2	1	1	1	2	52	81.6	73.3	75.5	0.0	0.0	3	280	0.8	9/22/82
3	287	2	1	1	1	2	45	81.5	73.7	75.4	0.0	0.0	3	280	0.8	9/22/82
3	288	2	1	1	1	0	43	71.2	63.8	65.8	0.0	0.0	3	280	0.8	9/22/82
3	289	0	0	0	1	5	45	90.4	84.1	85.3	0.0	0.0	3	280	0.8	9/22/82
3	290	2	1	1	1	1	44	78.0	69.9	71.7	0.0	0.0	3	280	0.8	9/22/82
3	291	2	1	1	1	1	53	78.5	70.3	72.6	0.0	0.0	3	280	0.8	9/22/82
3	292	2	1	1	1	0	46	73.0	65.3	67.3	0.0	0.0	3	280	0.8	9/22/82
3	293	2	1	1	1	5	49	89.6	82.6	83.5	0.0	0.0	3	280	0.8	9/22/82
3	294	2	1	1	1	1	55	76.4	68.3	70.7	0.0	0.0	3	280	0.8	9/22/82
3	295	2	1	1	1	0	59	76.2	69.7	71.3	0.0	0.0	3	280	0.8	9/22/82
3	296	2	1	1	1	1	63	81.7	74.2	76.8	0.0	0.0	3	280	0.8	9/22/82
3	297	1	1	1	1	5	52	85.2	79.0	79.2	0.0	0.0	3	280	0.8	9/22/82
3	298	2	1	1	1	1	55	78.3	71.5	73.4	0.0	0.0	3	280	0.8	9/22/82
3	299	2	1	1	1	1	49	76.6	69.1	70.6	0.0	0.0	3	280	0.8	9/22/82
3	300	2	1	1	1	0	54	75.7	68.4	69.7	0.0	0.0	3	280	0.8	9/22/82
3	301	2	1	1	1	1	61	78.3	70.6	72.2	0.0	0.0	3	280	0.8	9/22/82
3	302	2	1	1	1	0	64	79.7	72.4	73.9	0.0	0.0	3	280	0.8	9/22/82
3	303	2	1	1	1	0	64	80.4	73.5	74.6	0.0	0.0	3	280	0.8	9/22/82
3	304	2	1	1	1	5	53	85.8	78.6	79.0	0.0	0.0	3	280	0.8	9/22/82
3	305	2	1	1	1	1	55	76.0	69.0	70.7	0.0	0.0	3	280	0.8	9/22/82
3	306	2	1	1	1	1	52	80.1	73.3	74.5	0.0	0.0	3	280	0.8	9/22/82
3	307	2	1	1	1	1	60	82.3	74.1	76.7	0.0	0.0	3	280	0.8	9/22/82
3	308	0	0	0	1	0	41	93.5	87.3	87.4	0.0	0.0	3	280	0.8	9/22/82
3	309	2	1	1	1	0	59	78.8	71.8	72.6	0.0	0.0	3	280	0.8	9/22/82
3	310	2	1	1	1	5	51	87.5	81.1	82.0	0.0	0.0	3	300	2.2	9/22/82
3	311	2	1	1	1	1	44	74.4	67.4	69.2	0.0	0.0	3	300	2.2	9/22/82
3	312	2	1	1	1	1	49	79.2	72.3	73.1	0.0	0.0	3	300	2.2	9/22/82
3	313	2	1	1	1	0	63	78.1	71.6	72.6	0.0	0.0	3	300	2.2	9/22/82
3	314	2	1	1	1	1	54	80.8	73.3	75.0	0.0	0.0	3	300	2.2	9/22/82
3	315	2	1	1	1	1	54	76.0	68.1	70.5	0.0	0.0	3	300	2.2	9/22/82
3	316	2	1	1	1	5	48	89.7	83.4	83.5	0.0	0.0	3	300	2.2	9/22/82
3	317	2	1	1	1	2	49	83.3	75.0	76.6	0.0	0.0	3	300	2.2	9/22/82
3	318	2	1	1	1	3	51	86.9	80.S	81.7	0.0	0.0	3	300	2.2	9/22/82
3	319	2	1	1	1	1	49	77.6	69.1	72.1	0.0	0.0	3	300	2.2	9/22/82
3	320	2	1	1	1	2	60	84.9	76.9	79.2	0.0	0.0	3	300	2.2	9/22/82
3	321	2	1	1	1	1	60	80.9	72.6	74.2	0.0	0.0	3	300	2.2	9/22/82
3	322	2	1	1	1	1	48	78.8	71.2	73.6	0.0	0.0	3	300	2.2	9/22/82
3	323	2	1	1	1	1	64	80.3	72.5	74.6	0.0	0.0	3	300	2.2	9/22/82
3	324	2	1	1	1	7	54	78.0	72.1	72.3	0.0	0.0	3	300	2.2	9/22/82
3	325	2	1	1	1	0	59	82.2	76.7	77.0	0.0	0.0	3	300	2.2	9/22/82
3	326	2	1	1	1	0	63	77.7	70.8	72.0	0.0	0.0	3	300	2.2	9/22/82
3	327	2	1	1	1	1	67	81.7	73.8	76.5	0.0	0.0	3	300	2.2	9/22/82
3	328	2	1	1	1	1	52	78.9	70.4	72.9	0.0	0.0	3	300	2.2	9/22/82
3	329	2	1	1	1	5	52	89.0	82.3	82.9	0.0	0.0	3	300	2.2	9/22/82
3	330	2	1	1	1	1	58	88.2	79.2	82.5	0.0	0.0	3	300	2.2	9/22/82
3	331	2	1	1	1	0	56	77.2	70.4	71.2	0.0	0.0	3	300	2.2	9/22/82
3	332	2	1	1	1	1	44	82.7	75.2	77.0	0.0	0.0	3	0	4.5	9/22/82
3	333	2	1	1	1	0	55	79.7	72.0	73.3	0.0	0.0	3	0.	4.5	9/22/82
3	334	2	1	1	1	1	44	76.8	69.2	70.7	0.0	0.0	3	0	4.5	9/22/82
3	335	2	1	1	1	5	52	90.1	83.4	83.8	0.0	0.0	3	0	4.5	9/22/82
3	336	2	1	1	1	3	48	89.9	82.3	83.7	0.0	0.0	3	0	4.5	9/22/82
3	337	0	0	0	1	0	55	79.3	72.9	75.6	0.0	0.0	3	0	4.5	9/22/82
3	338	2	1	1	1	1	59	79.5	73.1	74.0	0.0	0.0	3	0	4.5	9/22/82
3	339	2	1	1	1	1	53	78.1	71.1	72.2	0.0	0.0	3	0	4.5	9/22/82
3	340	2	1	1	1	0	50	78.1	71.2	71.8	0.0	0.0	3	0	4.5	9/22/82
3	341	2	1	1	1	2	50	80.9	75.8	77.6	0.0	0.0	3	0	4.5	9/22/82
3	342	2	1	1	1	7	62	-1.0	83.5	-1.0	0.0	0.0	3	0	4.5	9/22/82
3	343	2	1	1	1	0	56	77.7	70.8	72.1	0.0	0.0	3	300	2.2	9/22/82
3	344	2	1	1	1	0	53	76.3	69.0	70.4	0.0	0.0	3	300	2.2	9/22/82
3	345	2	1	1	1	5	52	86.2	79.9	81.0	0.0	0.0	3	300	2.2	9/22/82
3	346	2	1	1	1	3	47	89.8	82.5	83.3	0.0	0.0	3	300	2.2	9/22/82
3	347	2	1	1	1	1	61	84.7	76.2	78.5	0.0	0.0	3	300	2.2	9/22/82
3	348	2	1	1	1	5	44	89.6	84.3	84.4	0.0	0.0	3	300	2.2	9/22/82
3	349	2	1	1	1	3	55	91.5	84.3	85.1	0.0	0.0	3	300	2.2	9/22/82
3	350	2	1	1	1	1	51	77.7	70.0	71.9	0.0	0.0	3	300	2.2	9/22/82

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH VEH VEH VEH	VEH TYPE	VEH SPEED	MIC (1) 5	MIC (2) 5	MIC (3) 10 DBA	MIC (4) 5	MIC (5) 10	WSIPNEDD	WAINGDLE	WEICNTDOR	DATE
3	351	2 0 0 1	0	44		73.2	65.9	68.3	0.0	0.0	3	0	4.5	9/22/82
3	352	2 1 1 1	1	55		78.7	71.4	72.6	0.0	0.0	3	0	4.5	9/22/82
3	353	0 0 0 1	0	52		7a.7	71.3	72.6	0.0	0.0	3	0	4.5	9/22/82
3	354	2 1 1 1	1	47		77.1	68.7	70.2	0.0	0.0	3	0	4.5	9/22/82
3	355	2 1 1 1	5	45		84.2	78.1	78.8	0.0	0.0	3	0	4.5	9/22/82
3	356	2 1 1 1	1	62		78.9	71.6	73.3	0.0	0.0	3	0	4.5	9/22/82
3	357	0 0 0 1	0	63		81.6	74.3	76.4	0.0	0.0	0	0	0.0	9/22/82
3	358	2 1 1 1	1	69		77.1	69.7	71.9	0.0	0.0	0	0	0.0	9/22/82
3	359	2 1 1 1	3	52		88.8	82.9	83.3	0.0	0.0	0	0	0.0	9/22/82
3	360	2 1 1 1	0	60		79.5	72.0	73.4	0.0	0.0	3	330	3.9	9/22/82
3	361	2 1 1 1	1	54		81.1	75.4	76.0	0.0	0.0	3	330	3.9	9/22/82
3	362	2 1 1 1	5	52		85.2	80.5	80.4	0.0	0.0	3	330	3.9	9/22/82
3	363	2 1 1 1	0	44		76.8	70.1	71.4	0.0	0.0	3	330	3.9	9/22/82
3	364	2 1 1 1	0	57		79.7	72.9	74.4	0.0	0.0	0	0	0.0	9/22/82
3	365	2 1 1 1	0	58		78.8	72.0	73.2	0.0	0.0	0	0	0.0	9/22/82
3	366	2 1 1 1	4	39		86.3	79.5	80.4	0.0	0.0	0	0	0.0	9/22/82
3	367	2 1 1 1	2	46		79.9	73.0	74.4	0.0	0.0	0	0	0.0	9/22/82
3	368	2 1 1 1	0	58		78.1	70.2	72.0	0.0	0.0	0	0	0.0	9/22/82
3	369	2 1 1 1	0	58		76.8	69.4	70.8	0.0	0.0	0	0	0.0	9/22/82
3	370	2 1 1 1	5	58		87.5	81.1	82.3	0.0	0.0	0	0	0.0	9/22/82
3	371	2 1 1 1	Q	58		76.5	70.3	71.5	0.0	0.0	0	0	0.0	9/22/82
3	372	2 1 1 1	1	47		73.8	65.8	67.8	0.0	0.0	0	0	0.0	9/22/82
3	373	2 1 1 1	1	64		78.8	70.7	73.1	0.0	0.0	0	0	0.0	9/22/82
3	374	2 1 1 1	0	57		76.8	69.7	70.7	0.0	0.0	0	85	0.0	9/23/82
3	375	2 1 1 1	1	67		82.9	74.8	76.1	0.0	0.0	0	85	0.0	9/23/82
3	376	2 1 1 1	1	62		80.4	73.4	74.6	0.0	0.0	0	85	0.0	9/23/82
3	377	2 1 1 1	5	43		89.4	83.0	83.3	0.0	0.0	0	85	0.0	9/23/82
3	378	2 1 1 1	5	43		87.7	79.8	81.0	0.0	0.0	0	85	0.0	9/23/82
3	379	0 0 0 1	1	59		80.1	74.3	75.7	0.0	0.0	0	85	0.0	9/23/82
3	380	2 1 1 1	5	43		92.2	85.2	85.3	0.0	0.0	0	85	0.0	9/23/82
3	381	2 1 1 1	5	45		90.4	83.3	84.0	0.0	0.0	0	85	0.0	9/23/82
3	382	2 1 1 1	1	58		79.3	72.3	73.8	0.0	0.0	0	85	0.0	9/23/82
3	383	2 1 1 1	5	45		88.0	81.4	82.7	0.0	0.0	0	85	0.0	9/23/82
3	384	2 1 1 1	1	41		77.2	69.9	71.2	0.0	0.0	0	85	0.0	9/23/82
3	385	0 0 0 1	5	45		89.8	83.1	84.0	0.0	0.0	0	85	0.0	9/23/82
3	386	2 1 1 1	7	60		83.1	76.5	77.4	0.0	0.0	0	85	0.0	9/23/82
3	387	2 1 1 1	5	52		85.6	78.7	79.6	0.0	0.0	0	85	0.0	9/23/82
3	388	2 1 1 1	0	42		73.5	66.4	67.8	0.0	0.0	0	85	0.0	9/23/82
3	389	2 1 1 1	1	55		76.4	69.4	70.6	0.0	0.0	0	85	0.0	9/23/82
3	390	2 1 1 1	4	49		89.4	81.1	82.6	0.0	0.0	0	85	0.0	9/23/82
3	391	2 1 1 1	2	56		83.4	75.1	76.5	0.0	0.0	0	85	0.0	9/23/82
3	392	2 1 1 1	0	55		82.2	73.6	75.3	0.0	0.0	0	85	0.0	9/23/82
3	393	2 1 1 1	1	55		78.2	71.0	72.5	0.0	0.0	0	85	0.0	9/23/82
3	394	2 1 1 1	1	59		88.8	79.8	83.4	0.0	0.0	0	85	0.0	9/23/82
3	395	2 1 1 1	1	61		78.7	71.3	72.5	0.0	0.0	0	85	0.0	9/23/82
3	396	2 1 1 1	7	53		84.8	78.8	79.2	0.0	0.0	0	85	0.0	9/23/82
3	397	2 1 1 1	1	64		81.8	74.5	75.3	0.0	0.0	0	85	0.0	9/23/82
3	398	2 1 1 1	1	51		78.6	70.8	72.7	0.0	0.0	0	85	0.0	9/23/82
3	399	0 0 0 1	0	53		80.5	74.1	75.6	0.0	0.0	0	85	0.0	9/23/82
3	400	0 0 0 1	0	58		79.9	73.6	74.8	0.0	0.0	0	85	0.0	9/23/82.
3	401	2 1 1 1	2	58		86.6	79.5	80.6	0.0	0.0	0	85	0.0	9/23/82
3	402	2 1 1 1	5	43		90.4	83.1	83.6	0.0	0.0	0	85	0.0	9/23/82
3	403	2 1 1 1	5	43		86.4	80.0	81.2	0.0	0.0	0	85	0.0	9/23/82
3	404	2 1 1 1	1	52		83.0	74.8	77.3	0.0	0.0	0	85	0.0	9/23/82
3	405	2 1 1 1	1	66		80.1	72.3	73.4	0.0	0.0	0	85	0.0	9/23/82
3	406	2 1 1 1	1	59		76.8	69.3	70.8	0.0	0.0	0	85	0.0	9/23/82
3	407	2 1 1 1	1	61		82.9	75.1	77.3	0.0	0.0	0	350	0.0	9/23/82
3	408	2 1 1 1	1	54		76.8	69.1	70.5	0.0	0.0	0	350	0.0	9/23/82
3	409	2 1 1 1	1	56		77.2	69.3	70.8	0.0	0.0	0	350	0.0	9/23/82
3	410	2 1 1 1	1	66		79.7	71.6	73.4	0.0	0.0	0	350	0.0	9/23/82
3	411	2 1 1 1	0	55		76.8	69.9	70.9	0.0	0.0	0	350	0.0	9/23/82
3	412	2 1 1 1	1	56		78.8	70.9	72.7	0.0	0.0	0	0	0.0	9/23/82
3	413	2 1 1 1	5	50		91.7	84.7	85.7	0.0	0.0	0	0	0.0	9/23/82
3	414	2 1 1 1	1	57		79.6	70.9	73.2	0.0	0.0	0	0	0.0	9/23/82
3	415	2 1 1 1	1	53		86.8	75.3	79.8	0.0	0.0	0	0	0.0	9/23/82
3	416	2 1 1 1	1	66		82.2	74.8	76.2	0.0	0.0	0	0	0.0	9/23/82
3	417	2 1 1 1	1	50		76.8	69.9	71.2	0.0	0.0	0	0	0.0	9/23/82
3	418	2 1 1 1	0	54		76.0	68.7	69.9	0.0	0.0	0	0	0.0	9/23/82
3	419	2 2 1 1	5	41		86.9	79.3	81.0	0.0	0.0	0	0	0.0	9/23/82
3	420	2 1 1 1	5	45		89.8	82.9	83.8	0.0	0.0	0	300	0.0	9/23/82

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH	D/L	ENV	VEH TYPE	VEH SPEED	MIc (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	WEICNTDOR	DATE
3	421	2	1	1	1	1	56	77.8	70.7	71.6	0.0	0.0	0	300	0.0	9/23/82
3	422	2	1	1	1	1	54	79.0	71.5	73.2	0.0	0.0	0	300	0.0	9/23/82
3	423	2	1	1	1	1	54	76.7	68.6	70.5	0.0	0.0	0	300	0.0	9/23/82
3	424	2	1	1	1	1	54	78.0	70.5	72.7	0.0	0.0	0	300	0.0	9/23/82
3	425	2	1	1	1	5	47	84.6	79.1	78.7	0.0	0.0	0	300	0.0	9/23/82
3	426	2	1	1	1	1	54	82.3	75.0	76.6	0.0	0.0	0	300	0.0	9/23/82
3	427	2	1	1	1	1	63	80.4	73.3	74.7	0.0	0.0	0	300	0.0	9/23/82
3	428	2	1	1	1	3	51	92.2	85.1	85.5	0.0	0.0	0	300	0.0	9/23/82
3	429	2	1	1	1	0	44	74.3	67.7	68.4	0.0	0.0	0	300	0.0	9/23/82
3	430	2	1	1	1	0	52	76.2	69.4	70.3	0.0	0.0	0	300	0.0	9/23/82
3	431	2	0	0	1	1	35	72.0	65.0	65.8	0.0	0.0	0	300	0.0	9/23/82
3	432	2	1	1	1	1	56	81.5	72.8	74.9	0.0	0.0	0	300	0.0	9/23/82
3	433	0	1	1	1	5	49	90.0	83.6	83.8	0.0	0.0	0	300	0.0	9/23/82
3	434	0	0	0	1	5	45	87.2	80.2	81.9	0.0	0.0	0	300	0.0	9/23/82
3	435	2	1	1	1	5	39	85.2	78.1	78.7	0.0	0.0	0	300	0.0	9/23/82
3	436	2	1	1	1	3	40	84.1	78.0	77.1	0.0	0.0	0	300	0.0	9/23/82
3	437	2	1	1	1	1	60	82.5	74.9	76.3	0.0	0.0	0	300	0.0	9/23/82
3	438	0	0	0	1	1	50	76.2	69.8	72.0	0.0	0.0	0	300	0.0	9/23/82
3	439	2	1	1	1	1	61	79.7	71.9	73.6	0.0	0.0	0	300	0.0	9/23/82
3	440	2	1	1	1	5	51	88.4	82.4	83.1	0.0	0.0	0	300	0.0	9/23/82
3	441	2	1	1	1	1	63	84.1	76.1	77.2	0.0	0.0	0	300	0.0	9/23/82
3	442	2	1	1	1	1	56	79.9	72.2	74.4	0.0	0.0	0	300	0.0	9/23/82
3	443	2	1	1	1	1	56	81.9	75.7	76.2	0.0	0.0	0	300	0.0	9/23/82
3	444	2	1	1	1	1	59	79.6	71.8	73.0	0.0	0.0	0	300	0.0	9/23/82
3	445	0	0	1	1	1	71	84.7	77.5	80.1	0.0	0.0	0	300	0.0	9/23/82
3	446	2	1	1	1	1	60	80.5	73.6	75.3	0.0	0.0	0	300	0.0	9/23/82
3	447	2	1	1	1	1	56	80.6	72.8	73.6	0.0	0.0	0	300	0.0	9/23/82
3	448	2	1	1	1	1	59	84.6	76.3	77.9	0.0	0.0	0	300	0.0	9/23/82
3	449	2	1	1	1	1	58	77.4	69.0	71.0	0.0	0.0	0	300	0.0	9/23/82
3	450	2	1	1	1	0	56	76.7	69.8	70.9	0.0	0.0	0	300	0.0	9/23/82
3	451	2	1	1	1	1	57	80.9	72.9	74.1	0.0	0.0	0	300	0.0	9/23/82
3	452	2	1	1	1	1	42	76.5	68.7	70.2	0.0	0.0	0	300	0.0	9/23/82
3	453	2	0	1	1	1	55	81.5	74.5	76.6	0.0	0.0	0	300	0.0	9/23/82
3	454	2	1	1	1	1	56	78.5	71.2	72.9	0.0	0.0	0	300	0.0	9/23/82
3	455	2	1	1	1	3	59	90.8	83.1	84.0	0.0	0.0	0	300	0.0	9/23/82
3	456	2	1	1	1	5	59	86.3	79.2	79.8	0.0	0.0	0	300	0.0	9/23/82
3	457	2	1	1	1	0	60	79.3	71.7	73.8	0.0	0.0	0	300	0.0	9/23/82
3	458	2	1	1	1	0	57	76.8	70.8	71.1	0.0	0.0	0	300	0.0	9/23/82
3	459	2	1	1	1	5	44	89.7	80.5	83.2	0.0	0.0	0	300	0.0	9/23/82
3	460	2	1	1	1	5	51	86.9	79.9	80.9	0.0	0.0	0	300	0.0	9/23/82
3	461	2	0	0	1	0	62	81.2	74.8	76.2	0.0	0.0	0	300	0.0	9/23/82
3	462	2	1	1	1	4	42	84.5	77.2	77.6	0.0	0.0	0	300	0.0	9/23/82
3	463	2	1	1	1	1	59	83.6	76.2	77.2	0.0	0.0	0	300	0.0	9/23/82
3	464	0	0	0	1	1	42	86.6	81.8	82.2	0.0	0.0	0	300	0.0	9/23/82
3	465	2	1	1	1	0	59	76.6	68.5	70.2	0.0	0.0	0	300	0.0	9/23/82
3	466	0	0	1	1	1	49	77.5	68.9	71.5	0.0	0.0	0	300	0.0	9/23/82
3	467	2	1	1	1	1	70	81.1	74.1	75.8	0.0	0.0	0	300	0.0	9/23/82
3	468	0	0	0	1	1	25	65.6	57.3	60.0	0.0	0.0	0	300	0.0	9/23/82
3	469	2	1	1	1	1	64	83.7	75.7	77.1	0.0	0.0	0	300	0.0	9/23/82
3	470	2	1	1	1	1	55	77.8	69.5	71.4	0.0	0.0	0	300	0.0	9/23/82
3	471	2	1	1	1	5	46	90.9	84.1	84.5	0.0	0.0	0	300	0.0	9/23/82
3	472	2	1	1	1	5	43	89.8	82.7	83.4	0.0	0.0	0	300	0.0	9/23/82
3	473	2	1	1	1	5	47	89.9	83.5	83.8	0.0	0.0	0	300	0.0	9/23/82
3	474	2	1	1	1	0	56	79.4	71.5	72.6	0.0	0.0	0	5	0.0	9/23/82
3	475	2	1	1	1	1	47	80.0	73.2	74.6	0.0	0.0	0	5	0.0	9/23/82
3	476	2	1	1	1	1	48	76.2	68.1	70.0	0.0	0.0	0	5	0.0	9/23/82
3	477	2	1	1	1	4	48	87.6	80.4	80.8	0.0	0.0	0	5	0.0	9/23/82
3	478	2	1	1	1	1	48	78.2	70.0	72.2	0.0	0.0	0	5	0.0	9/23/82
3	479	2	1	1	1	0	67	78.1	71.5	72.5	0.0	0.0	0	5	0.0	9/23/82
3	480	2	1	1	1	2	55	84.2	76.2	77.0	0.0	0.0	0	5	0.0	9/23/82
3	481	0	0	1	1	1	30	88.9	81.2	82.3	0.0	0.0	0	5	0.0	9/23/82
3	482	2	1	1	1	1	50	81.7	73.5	75.5	0.0	0.0	0	5	0.0	9/23/82
3	483	2	1	1	1	5	46	86.6	79.7	80.6	0.0	0.0	0	5	0.0	9/23/82
3	484	2	1	1	1	5	36	85.7	79.0	79.3	0.0	0.0	3	355	4.5	9/23/82
3	485	2	1	1	1	5	43	92.5	84.8	85.4	0.0	0.0	3	355	4.5	9/23/82
3	486	2	1	1	1	2	43	79.7	71.5	73.0	0.0	0.0	3	355	4.5	9/23/82
3	487	2	1	1	1	0	52	75.5	68.4	69.7	0.0	0.0	3	355	4.5	9/23/82
3	488	2	1	1	1	2	57	82.0	74.1	75.8	0.0	0.0	3	355	4.5	9/23/82
3	489	2	1	1	1	2	53	83.7	76.1	77.4	0.0	0.0	3	355	4.5	9/23/82
3	490	2	1	1	1	1	61	82.0	74.3	75.2	0.0	0.0	3	355	4.5	9/23/82

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH DEL	VEH ENV	VEH TYPE	VEH SPEED	MIC (1) 5	MIC (2) 5	MIC (3) 10 DBA	MIC (4) 5	MIC (5) 10	WSIPNE DED	WAINNGDLE	WEICNTDOR	DATE
3	491	2	1	1	1	5 44	89.2	82.6	82.9	0.0	0.0	3	355	4.5	9/23/82
3	492	2	1	1	1	5 44	85.7	78.5	79.7	0.0	0.0	3	355	4.5	9/23/82
3	493	2	1	1	1	1 73	81.8	74.0	75.8	0.0	0.0	3	355	4.5	9/23/82
3	494	2	1	1	1	5 44	89.8	82.0	83.3	0.0	0.0	3	355	4.5	9/23/82
3	495	2	1	1	1	5 42	88.6	81.2	82.3	0.0	0.0	3	355	4.5	9/23/82
3	496	2	1	1	1	2 40	83.1	75.7	77.0	0.0	0.0	3	355	4.5	9/23/82
3	497	2	1	1	1	1 54	77.7	69.5	71.5	0.0	0.0	3	355	4.5	9/23/82
3	498	2	1	1	1	0 61	78.8	72.6	73.3	0.0	0.0	3	35.5	4.5	9/23/82
3	499	2	1	1	1	1 55	79.9	72.8	74.2	0.0	0.0	3	355	4.5	9/23/82
3	500	2	1	1	1	0 53	77.4	70.5	71.7	0.0	0.0	3	355	4.5	9/23/82
3	501	2	1	1	1	1 56	78.8	70.4	72.0	0.0	0.0	3	355	4.5	9/23/82
3	502	2	1	1	1	1 53	76.8	69.1	71.5	0.0	0.0	3	355	4.5	9/23/82
3	503	2	1	1	1	5 47	83.9	76.6	78.0	0.0	0.0	3	355	4.5	9/23/82
3	504	2	1	1	1	5 50	95.9	88.6	90.2	0.0	0.0	3	355	4.5	9/23/82
3	505	2	1	1	1	5 50	86.9	79.5	80.9	0.0	0.0	3	355	4.5	9/23/82
3	506	2	1	1	1	0 61	79.2	72.6	73.9	0.0	0.0	3	355	4.5	9/23/82
3	507	2	1	1	1	1 52	76.4	68.6	70.4	0.0	0.0	3	355	4.5	9/23/82
3	508	2	1	1	1	1 68	84.3	76.1	78.1	0.0	0.0	3	355	4.5	9/23/82
3	509	2	1	1	1	1 40	80.3	71.4	74.0	0.0	0.0	3	355	4.5	9/23/82
3	510	2	1	1	1	1 60	78.5	71.0	72.6	0.0	0.0	3	355	4.5	9/23/82
3	511	2	1	1	1	0 58	78.5	71.8	72.8	0.0	0.0	3	355	4.5	9/23/82
3	512	2	1	1	1	5 44	93.0	85.5	86.0	0.0	0.0	3	355	4.5	9/23/82
3	513	2	1	1	1	0 65	81.4	73.5	74.8	0.0	0.0	3	355	4.5	9/23/82
3	514	2	1	1	1	5 46	86.7	79.6	81.3	0.0	0.0	3	355	4.5	9/23/82
3	515	2	1	1	1	1 60	80.5	72.8	74.5	0.0	0.0	3	355	4.5	9/23/82
3	516	2	1	1	1	1 50	81.7	73.2	76.3	0.0	0.0	3	355	4.5	9/23/82
3	517	2	1	1	1	1 61	80.2	72.9	73.9	0.0	0.0	3	355	4.5	9/23/82
3	518	2	1	1	1	1 47	80.3	72.4	73.5	0.0	0.0	3	355	4.5	9/23/82
3	519	2	1	1	1	1 43	72.9	65.6	66.8	0.0	0.0	3	355	4.5	9/23/82
3	520	2	1	1	1	1 56	77.6	70.5	71.8	0*0	0.0	3	355	4.5	9/23/82
3	521	2	1	1	1	3 49	92.0	84.3	85.3	0.0	0.0	3	355	4.5	9/23/82
3	522	2	1	1	1	1 54	80.3	93.4	74.3	0.0	0.0	3	355	4.5	9/23/82
3	523	2	1	1	1	0 48	73.4	65.9	67.5	0.0	0.0	3	355	4.5	9/23/82
3	524	2	1	1	1	0 54	77.1	69.5	71.0	0.0	0.0	3	355	4.5	9/23/82
3	525	1	1	1	1	0 50	76.7	69.3	71.0	0.0	0.0	3	355	4.5	9/23/82
3	526	1	1	1	1	0 51	75.9	69.0	70.2	0.0	0.0	3	355	4.5	9/23/82
3	527	2	1	1	1	7 60	86.6	80.4	80.8	0.0	0.0	3	355	4.5	9/23/82
3	528	2	1	1	1	5 43	89.1	82.4	82.8	0.0	0.0	3	355	4.5	9/23/82
3	529	2	1	1	1	1 49	77.7	69.6	72.3	0.0	0.0	3	355	4.5	9/23/82
3	530	2	1	1	1	0 55	78.3	72.0	72.5	0.0	0.0	3	355	4.5	9/23/82
3	531	2	1	1	1	0 64	79.1	72.2	73.5	0.0	0.0	3	355	4.5	9/23/82
3	532	2	1	1	1	1 59	78.6	71.1	72.7	0.0	0.0	3	355	4.5	9/23/82
3	533	2	1	1	1	5 44	90.3	82.9	84.1	0.0	0.0	3	355	4.5	9/23/82
3	534	2	1	1	1	5 44	89.1	82.4	83.2	0.0	0.0	3	355	4.5	9/23/82
3	535	2	1	1	1	1 55	78.3	70.4	72.1	0.0	0.0	3	350	4.4	9/23/82
3	536	1	1	1	1	0 47	73.4	66.0	67.5	0.0	0.0	3	350	4.4	9/23/82
3	537	2	1	1	1	1 61	82.2	74.1	75.5	0.0	0.0	3	350	4.4	9/23/82
3	538	0	0	1	1	1 53	79.3	72.0	73.6	0.0	0.0	3	350	4.4	9/23/82
3	539	2	1	1	1	5 49	91.2	84.1	84.8	0.0	0.0	3	350	4.4	9/23/82
3	540	2	1	1	1	2 53	85.0	77.1	78.5	0.0	0.0	3	350	4.4	9/23/82
3	541	2	1	1	1	0 50	75.9	68.5	69.2	0.0	0.0	3	350	4.4	9/23/82
3	542	2	1	1	1	1 66	78.6	71.0	73.1	0.0	0.0	3	350	4.4	9/23/82
3	543	2	1	1	1	0 60	76.9	70.6	71.8	0.0	0.0	3	350	4.4	9/23/82
3	544	2	1	1	1	5 39	83.2	76.0	76.8	0.0	0.0	3	350	4.4	9/23/82
3	545	2	1	1	1	5 49	89.9	83.0	83.4	0.0	0.0	3	350	4.4	9/23/82
3	546	2	1	1	1	1 59	80.6	72.1	74.2	0.0	0.0	3	350	4.4	9/23/82
3	547	2	1	1	1	1 66	80.5	71.9	73.8	0.0	0.0	3	350	4.4	9/23/82
3	548	2	1	1	1	0 50	77.8	70.0	72.0	0.0	0.0	3	350	4.4	9/23/82
3	549	2	1	1	1	5 57	87.1	79.6	80.7	0.0	0.0	3	350	4.4	9/23/82
3	550	2	1	1	1	0 46	74.5	67.5	69.3	0.0	0.0	3	350	4.4	9/23/82
3	551	2	1	1	1	1 43	76.5	68.6	69.7	0.0	0.0	3	350	4.4	9/23/82
3	552	2	1	1	1	3 50	87.0	79.0	80.3	0.0	0.0	3	350	4.4	9/23/82
3	553	2	1	1	1	1 46	75.2	68.2	68.5	0.0	0.0	3	350	4.4	9/23/82
3	554	2	1	1	1	2 50	82.0	74.3	76.1	0.0	0.0	3	350	4.4	9/23/82
3	555	2	1	1	1	0 50	76.4	69.2	70.6	0.0	0.0	3	350	4.4	9/23/82
3	556	2	1	1	1	1 53	78.1	69.3	71.3	0.0	0.0	3	350	4.4	9/23/82
3	557	2	1	1	1	5 45	86.5	79.6	80.5	0.0	0.0	3	350	4.4	9/23/82
3	558	0	0	0	1	0 51	76.0	68.9	71.6	0.0	0.0	3	350	4.4	9/23/82
3	559	2	1	1	1	3 55	92.2	85.1	84.9	0.0	0.0	3	350	4.4	9/23/82
3	560	2	1	1	1	1 61	85.7	76.7	79.2	0.0	0.0	3	350	4.4	9/23/82

DATA SUMMARY

LOC. SITE	LOC. EVENT	EVENT QUAL. GLR	EVENT QUAL. VEH	EVENT QUAL. D/L	EVENT QUAL. ENV	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDED	WAINNGDLE	VEICNTDOR	DATE
3	561	2	1	1	1	0	51	77.0	68.8	70.6	0.0	0.0	3	350	4.4	9/23/82
3	562	2	1	1	1	5	39	92.0	84.1'	86.0	0.0	0.0	3	350	4.4	9/23/82
3	563	2	1	1	1	1	60	78.7	70.6	72.0	0.0	0.0	3	350	4.4	9/23/82
3	564	1	1	1	1	1	57	78.1	70.8	72.3	0.0	0.0	3	'350	4.4	9/23/82
3	565	2	1	1	1	0	48	73.5	66.0	67.8	0.0	0.0	3	350	4.4	9/23/82
3	566	2	1	1	1	1	41	75.0	66.9	68.1	0.0	0.0	3	350	4.4	9/23/82
3	567	1	1	1	1	1	59	79.8	72.2	73.9	0.0	0.0	3	350	4.4	9/23/82
3	568	2	1	1	1	3	51	88.9	82.1	82.7	0.0	0.0	3	350	4.4	9/23/82
3	569	2	1	1	1	3	43	90.5	81.9	84.0	0.0	0.0	3	350	4.4	9/23/82
3	570	0	0	0	1	5	41	85.1	79.1	80.9	0.0	0.0	3	350	4.4	9/23/82

DATA SUMMARY

LOC. STE	EVENT	EVENT QUAL. GLR	VEH DEL	EVENT	VEH TYPE	VEH SPEED	MIC (1) 5	MIC (2) 5	MIC (3) 10 DBA	MIC (4) 5	MIC (5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
5	1	2	1	1	1	48	73.9	66.6	68.0	62.0	64.3	0	320	0.0	10127182
5	2	2	1	1	1	50	77.6	70.5	71.6	65.0	67.7	0	320	0.0	10127182
5	3	2	1	1	1	57	75.4	68.1	69.9	62.5	65.1	0	320	0.0	10/27/82
5	4	2	1	1	1	42	69.4	65.2	66.7	61.3	64.6	0	320	0.0	10127182
5	5	2	1	1	1	33	66.5	59.9	61.8	56.1	58.3	0	320	0.0	10127182
5	6	2	1	1	1	33	79.9	73.2	73.7	69.4	70.4	0	320	0.0	10127182
5	7	2	1	1	1	46	69.9	63.0	63.6	58.0	60.6	0	320	0.0	10127182
5	8	2	1	1	1	43	79.3	72.1	73.1	67.8	69.2	0	320	0.0	10127182
5	9	2	1	1	1	43	70.2	63.2	64.1	57.6	61.0	0	320	0.0	10127182
5	10	2	1	1	1	42	75.3	68.2	69.2	64.3	65.6	0	290	0.0	10127182
5	11	2	1	1	1	45	78.0	70.2	72.1	65.6	68.1	0	290	0.0	10127182
5	12	2	1	1	1	36	70.5	63.1	64.8	58.1	61.2	0	290	0.0	10127182
5	13	2	1	1	1	44	73.1	65.1	66.6	59.7	63.0	0	290	0.0	10127182
5	14	2	1	1	1	39	71.6	64.4	65.7	58.8	61.8	0	230	0.0	10127182
5	15	2	1	1	1	58	81.7	75.1	75.3	70.1	72.1	0	230	0.0	10127182
5	16	2	1	1	1	50	76.1	68.9	70.4	63.1	66.5	0	230	0.0	10127182
5	17	1	1	1	1	46	73.4	66.9	68.3	66.2	68.3	0	230	0.0	10127182
5	18	2	1	1	1	43	73.2	66.5	67.5	61.9	63.5	0	230	0.0	10127182
5	19	2	1	1	1	47	73.9	67.4	68.7	62.4	65.4	0	230	0.0	10127182
5	20	2	1	1	1	46	77.2	69.6	71.2	65.0	67.7	0	230	0.0	10127182
5	21	2	1	1	1	39	74.2	66.4	67.7	61.7	64.1	0	230	0.0	10127182
5	22	2	1	1	1	42	73.6	66.2	67.6	61.5	63.9	0	280	0.0	10/27/82
5	23	2	1	1	1	41	70.7	64.2	65.4	58.8	62.3	0	280	0.0	10127182
5	24	2	1	1	1	36	70.2	63.6	63.8	58.7	60.6	0	280	0.0	10127182
5	25	2	1	1	1	47	75.2	68.6	69.7	62.8	66.0	0	280	0.0	10127182
5	26	2	1	1	1	39	71.4	64.6	65.6	59.0	62.1	0	280	0.0	10127182
5	27	2	1	1	1	47	74.5	67.3	68.6	61.9	65.0	0	170	0.0	10127182
5	28	2	1	1	1	33	78.1	70.8	71.3	67.2	68.1	0	170	0.0	10127182
5	29	2	1	1	1	45	74.0	66.8	68.3	61.6	64.8	0	170	0.0	10127182
5	30	2	1	1	1	31	85.8	78.9	79.4	76.6	76.9	0	170	0.0	10127182
5	31	2	1	1	1	46	72.8	65.8	66.9	62.0	64.3	0	170	0.0	10127182
5	32	2	1	1	1	44	71.8	64.6	65.9	58.5	62.1	0	170	0.0	10127112
5	33	2	1	1	1	36	70.9	63.9	64.9	58.8	61.4	0	170	0.0	10127182
5	34	2	1	1	1	37	87.7	80.5	81.3	77.1	77.1	0	200	0.0	10127182
5	35	2	1	1	1	46	71.5	65.0	66.2	59.5	62.0	0	200	0.0	10/27/82
5	36	2	1	1	1	62	78.5	71.1	72.8	65.8	68.8	0	200	0.0	10127182
5	37	2	1	1	1	47	76.4	69.3	70.7	63.7	67.1	0	200	0.0	10127182
5	38	2	1	1	1	43	71.6	64.4	65.8	59.9	62.2	0	200	0.0	10127182
5	39	2	1	1	1	48	75.5	68.3	69.5	63.6	66.0	0	200	0.0	10127182
5	40	2	1	1	1	46	72.3	65.4	66.8	59.1	62.8	0	200	0.0	10127182
5	41	2	1	1	1	43	71.1	64.4	64.7	58.7	60.9	0	200	0.0	10127182
5	42	2	1	1	1	43	75.0	68.9	71.0	63.6	67.7	0	200	0.0	10127182
5	43	2	1	1	1	32	72.4	64.1	65.6	58.1	61.8	0	200	0.0	10/27/82
5	44	2	1	1	1	31	71.8	64.1	65.1	60.8	62.2	0	200	0.0	10127182
5	45	2	1	1	1	44	74.4	66.9	68.5	61.5	64.9	0	200	0.0	10127182
5	46	1	1	1	1	50	74.4	67.1	68.3	61.9	64.9	0	200	0.0	10127182
5	47	2	1	1	1	49	74.7	68.5	69.0	63.8	65.9	0	200	0.0	10127182
5	48	2	1	1	1	35	71.5	63.5	65.4	58.9	62.4	0	200	0.0	10127182
5	49	2	1	1	1	53	78.5	70.9	72.3	65.4	68.2	0	200	0.0	10127182
5	50	2	1	1	1	41	72.0	65.3	66.3	60.4	62.5	3	270	0.0	10127182
5	51	2	1	1	1	42	72.6	65.1	66.6	60.2	63.6	3	270	0.0	10127182
5	52	2	1	1	1	42	71.9	65.3	66.2	60.8	63.0	3	270	0.0	10127182
5	53	2	1	1	1	46	72.4	64.9	66.8	60.3	63.3	3	270	0.0	10127182
5	54	2	1	1	1	44	83.8	76.6	78.2	71.2	73.7	3	270	0.0	10127182
5	55	1	1	1	1	31	70.0	62.9	64.2	59.7	62.1	3	270	0.0	10127182
5	56	2	1	1	1	43	72.2	66.0	66.9	60.7	63.3	3	270	0.0	10127182
5	57	1	1	1	1	43	81.2	73.8	74.8	70.6	70.9	3	270	0.0	10127182
5	58	2	1	1	1	46	71.0	64.2	65.1	60.4	61.4	3	270	0.0	10127182
5	59	2	1	1	1	51	77.1	69.2	71.9	63.4	67.1	3	270	0.0	10127182
5	60	2	1	1	1	45	76.5	69.2	70.5	63.9	66.5	3	270	0.0	10127182
5	61	2	1	1	1	42	72.0	64.7	65.4	60.6	62.6	3	270	0.0	10127182
5	62	2	1	1	1	49	74.2	66.8	68.1	61.4	64.6	3	270	0.0	10127182
5	63	2	1	1	1	43	71.0	63.6	65.4	61.3	63.6	6	270	0.0	10127182
5	64	2	1	1	1	42	83.3	76.1	76.9	71.5	72.8	6	270	0.0	10127182
5	65	2	1	1	1	47	75.3	67.8	69.1	63.7	65.6	6	270	0.0	10/27/82
5	66	2	1	1	1	45	74.8	67.4	68.3	63.4	64.7	6	270	0.0	10127182
5	67	2	1	1	1	46	74.1	66.5	68.0	61.2	64.5	6	270	0.0	10127182
5	68	2	1	1	1	40	70.0	62.6	63.7	58.2	60.8	6	270	0.0	10127182
5	69	1	1	1	1	49	75.3	68.6	69.5	63.4	65.8	3	270	0.0	10127182
5	70	2	1	1	1	46	72.9	65.5	66.2	61.7	62.7	3	270	0.0	10127182

DATA SUMMARY

LOC. SITE	EVENT EVENT	EVENT QUAL. GLR	VEH VEH DIL	EVENT QUAL. EVENT QUAL.	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
5	71	2	1	1	1	0 42	72.8	65.4	66.3	61.8	63.5	3	270	0.0	10/27/82
5	72	2	1	1	1	1 50	76.4	69.3	70.5	63.9	66.3	3	340	4.2	10/27/82
5	73	2	1	1	1	1 44	76.6	70.5	71.6	65.8	68.0	3	340	4.2	10/27/82
5	74	2	1	1	1	0 45	70.7	64.1	64.8	60.6	61.9	3	340	4.2	10/27/82
5	75	2	1	1	1	0 45	70.0	62.9	64.2	58.0	60.9	3	340	4.2	10/27/82
5	76	2	1	1	1	1 43	77.9	70.8	71.5	66.2	67.9	3	340	4.2	10/27/82
5	77	2	1	1	1	1 44	71.5	64.4	65.6	59.2	62.2	3	340	4.2	10/27/82
5	78	2	1	1	1	0 44	72.6	65.6	66.8	61.0	63.5	3	340	4.2	10/27/82
5	79	2	1	1	1	0 45	73.5	65.7	66.9	60.1	63.3	3	340	4.2	10/27/82
5	80	2	1	1	1	1 44	72.3	64.9	66.3	58.6	62.5	3	180	-4.5	10/27/82
5	81	2	1	1	1	1 43	73.3	67.0	68.1	62.0	64.8	6	180	-9.0	10/27/82
5	82	2	1	1	1	1 43	72.4	65.2	66.9	59.2	62.2	6	180	-9.0	10/27/82
5	83	2	1	1	1	1 45	72.5	64.7	66.7	59.5	62.3	6	180	-9.0	10/27/82
5	84	2	1	1	1	1 45	75.2	67.4	69.2	62.2	65.5	6	180	-9.0	10/27/82
5	85	2	1	1	1	3 29	87.2	80.9	80.7	76.7	77.3	6	180	-9.0	10/27/82
5	86	2	1	1	1	1 52	77.2	69.7	72.1	63.6	68.4	6	180	-9.0	10/27/82
5	87	2	1	1	1	1 42	72.2	65.7	67.1	58.7	63.2	6	180	-9.0	10/27/82
5	88	2	1	1	1	3 35	85.1	78.3	79.4	74.6	75.3	6	180	-9.0	10/27/82
5	89	2	1	1	1	1 41	73.3	66.1	68.2	62.2	65.5	6	180	-9.0	10/27/82
5	90	2	1	1	1	3 36	87.9	81.3	81.3	78.8	78.1	6	180	-9.0	10/27/82
5	91	2	1	1	1	0 46	81.8	74.3	75.1	68.4	71.4	6	180	-9.0	10127182
5	92	2	1	1	1	0 41	72.8	65.3	67.4	60.5	63.7	6	180	-9.0	10/27/82
5	93	2	1	1	1	1 44	75.3	68.8	69.0	64.4	64.8	6	180	-9.0	10/27/82
5	94	2	1	1	1	0 43	71.1	63.2	65.1	58.7	61.9	6	180	-9.0	10/27/82
5	95	2	1	1	1	0 41	73.9	67.3	68.4	61.9	65.0	6	180	-9.0	10/27/82
5	96	2	1	1	1	2 34	76.8	69.7	70.6	65.0	67.2	6	180	-9.0	10/27/82
5	97	2	1	1	1	1 37	73.5	66.0	68.0	61.1	64.1	6	180	-9.0	10127182
5	98	2	1	1	1	3 25	83.6	77.8	78.0	74.1	74.4	6	180	-9.0	10/27/82
5	99	2	1	1	1	0 42	71.0	64.2	65.9	59.8	63.1	6	180	-9.0	10127182
5	100	2	1	1	1	2 38	80.5	73.5	75.1	67.7	71.4	6	180	-9.0	10/27/82
5	101	2	1	1	1	1 44	76.0	67.5	70.3	61.8	66.4	6	180	-9.0	10/27/82
5	102	2	1	1	1	0 42	72.0	64.8	66.3	59.1	62.8	6	180	-9.0	10/27/82
5	103	2	1	1	1	3 31	97.0	91.0	90.9	88.0	87.3	6	180	-9.0	10/27/82
5	104	2	1	1	1	0 47	73.8	66.7	68.4	61.7	65.0	6	180	-9.0	10/27/82
5	105	2	1	1	1	1 41	70.8	64.5	65.7	59.5	61.6	6	180	-9.0	10/27/82
5	106	0	0	1	1	1 41	73.9	66.6	68.9	61.0	66.9	6	180	-9.0	10127182
5	107	2	1	1	1	1 55	75.0	67.8	70.5	62.7	66.7	6	180	-9.0	10/27/82
5	108	2	1	1	1	2 42	82.1	75.6	76.7	71.6	73.4	6	180	-9.0	10/27/82
5	109	2	1	1	1	0 34	71.5	64.2	66.0	58.2	62.8	6	180	-9.0	10/27/82
5	110	2	1	1	1	1 34	71.7	64.0	65.8	59.2	61.7	6	180	-9.0	10/27/82
5	111	2	1	1	1	0 51	76.5	68.9	71.0	63.1	66.9	6	180	-9.4	10/27/82
5	112	2	1	1	1	0 42	73.0	65.5	67.8	60.1	63.6	6	180	-9.0	10/27/82
5	113	2	1	1	1	0 56	75.2	68.1	71.1	61.9	66.4	6	180	-9.0	10/27/82
5	114	2	1	1	1	1 45	71.6	64.6	65.6	58.2	62.3	6	180	-9.0	10/27/82
5	115	2	1	1	1	1 46	73.9	65.9	68.2	59.5	63.7	6	180	-9.0	10/27/82
5	116	2	1	1	1	1 47	67.4	62.5	65.4	57.1	61.8	6	180	-9.0	10/27/82
5	117	2	1	1	1	2 40	81.6	75.1	75.3	70.3	70.7	6	180	-9.0	10/27/82
5	118	2	0	1	1	0 42	72.6	65.9	67.3	59.3	63.3	6	180	-9.0	10/27/82
5	119	2	1	1	1	1 34	73.0	65.9	66.9	60.4	63.9	6	180	-9.0	10/27/82
5	120	2	0	1	1	1 40	73.0	65.7	67.5	62.0	63.9	6	180	-9.0	10/27/82
5	121	2	1	1	1	2 45	76.2	69.6	71.3	64.8	66.7	6	180	-9.0	10/27/82
5	122	2	1	1	1	0 43	73.2	65.4	67.9	59.9	64.0	6	180	-9.0	10/27/82
5	123	2	1	1	1	1 47	73.3	64.8	67.9	59.4	63.1	6	180	-9.0	10127182
5	124	2	1	1	1	0 43	74.8	67.2	69.0	62.7	66.0	6	180	-9.0	10/27/82
5	125	2	1	1	1	1 41	71.8	64.2	65.8	60.2	64.0	6	180	-9.0	10127182
5	126	2	1	1	1	3 28	87.0	79.9	80.4	76.7	76.1	6	180	-9.0	10/27/82
5	127	2	1	1	1	0 42	68.9	61.5	63.5	55.3	59.3	6	180	-9.0	10/27/82
5	128	2	1	1	1	3 28	87.4	80.9	81.1	77.1	77.4	6	180	-9.0	10/27/82
5	129	2	1	1	1	1 42	72.4	65.6	66.8	60.5	63.1	6	180	-9.0	10/27/82
5	130	2	1	1	1	1 44	73.1	65.4	67.7	59.6	62.7	6	180	-9.0	10/27/82
5	131	2	0	1	1	1 44	73.8	65.4	68.6	60.9	65.8	6	180	-9.0	10/27/82
5	132	2	1	1	1	1 44	73.7	67.1	68.4	62.6	65.1	6	180	-9.0	10/27/82
5	133	2	1	1	1	0 41	72.5	65.4	67.2	59.5	63.5	6	180	-9.0	10/27/82
5	134	2	0	1	1	1 46	72.8	64.8	68.4	61.4	65.2	6	180	-9.0	16/27/82
5	135	2	1	1	1	2 37	84.3	78.1	78.6	74.8	74.7	6	180	-9.0	10/27/82
5	136	2	1	1	1	0 42	70.0	63.9	65.0	58.4	61.9	6	180	-9.0	10/27/82
5	137	2	1	1	1	0 47	76.9	69.8	71.5	62.9	67.7	6	180	-9.0	10/27/82
5	138	2	1	1	1	0 48	74.5	66.6	69.5	62.5	65.7	6	180	-9.0	10/27/82
5	139	2	1	1	1	2 43	79.7	72.9	73.9	69.1	69.9	6	180	-9.0	10/27/82
5	140	0	0	1	1	0 45	73.9	67.4	69.1	63.7	65.3	6	180	-9.0	10/27/82

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH/HL	DEN	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
5	141	2	1	1	1	147	73.7	67.4	69.0	61.6	65.7	6	180	-9.0	10/27/82
5	142	0	0	1	1	043	74.3	68.4	72.1	63.2	68.0	6	180	-9.0	10/27/82
5	143	2	1	1	1	139	70.6	64.2	65.7	61.0	63.2	6	180	-9.0	10/27/82
5	144	0	0	1	1	137	72.7	65.7	70.3	62.9	66.4	6	180	-9.0	10/27/82
5	145	2	1	1	1	153	80.0	73.1	74.9	68.3	70.8	6	180	-9.0	10/27/82
5	146	0	0	1	1	143	72.2	64.0	66.1	58.7	62.2	6	180	-9.0	10/27/82
5	147	2	1	1	1	148	71.9	65.2	66.0	60.4	63.2	6	180	-9.0	10/27/82
5	148	2	1	1	1	043	74.2	67.8	69.7	66.2	67.4	6	180	-9.0	10/27/82
5	149	2	1	1	1	048	73.1	65.6	67.6	60.2	63.8	6	180	-9.0	10/27/82
5	150	2	1	1	1	144	73.5	65.9	67.8	62.0	64.9	6	180	-9.0	10/27/82

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	DEN	VEH TYP	VEH SPED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
									DBA						
6	1	1	1	1	1	35	70.5	63.7	65.0	0.0	0.0	0	250	0.0	10128182
6	2	1	1	1	0	29	68.8	61.9	63.9	0.0	0.0	0	250	0.0	10128182
6	3	1	1	1	0	35	67.3	60.9	61.8	0.0	0.0	0	250	0.0	10128182
6	4	1	1	1	0	38	69.6	62.6	64.5	0.0	0.0	0	250	0.0	10128182
6	5	1	1	1	1	35	69.0	61.7	64.0	0.0	0.0	0	250	0.0	10128182
6	6	1	1	1	1	42	71.8	64.6	65.8	0.0	0.0	0	250	0.0	10128182
6	7	2	1	1	1	28	76.5	68.6	69.4	0.0	0.0	0	250	0.0	10128182
6	8	0	0	0	1	16	54.9	55.4	55.8	0.0	0.0	3	270	0.0	10128182
6	9	0	0	1	1	35	69.6	63.1	64.5	0.0	0.0	3	270	0.0	10/28/82
6	10	2	1	1	1	5 20	77.6	70.6	70.9	0.0	0.0	3	270	0.0	10/28/82
6	11	1	1	1	1	36	71.4	64.4	65.6	0.0	0.0	3	270	0.0	14/28/82
6	12	0	0	1	1	36	68.0	61.6	63.0	0.0	0.0	3	270	0.0	10/28/82
6	13	2	1	1	1	0 37	68.2	61.7	62.8	0.0	0.0	6	280	1.6	10/28/82
6	14	2	1	1	1	1 36	68.8	62.9	64.3	0.0	0.0	6	280	1.6	10128182
6	15	0	1	1	1	0 26	62.3	56.1	57.7	0.0	0.0	6	280	1.6	10/28/82
6	16	2	1	1	1	1 33	67.8	60.7	62.1	0.0	0.0	6	280	1.6	10128182
6	17	0	1	1	1	1 36	69.3	'61.6	63.3	0.0	0.0	6	280	1.6	10/28/82
6	18	2	1	1	1	0 41	70.6	63.9	65.3	0.0	0.0	6	280	1.6	10128182'
6	19	2	1	1	1	1 42	73.2	65.8	67.4	0.0	0.0	6	280	1.6	10/28/82
6	20	2	1	1	1	1 42	72.4	64.9	66.6	0.0	0.0	6	280	1.6	10/28/82
6	21	1	1	1	1	1 26	64.0	56.8	58.3	0.0	0.0	6	280	1.6	10/28/82
6	22	1	1	0	1	1 37	69.0	63.0	63.8	0.0	0.0	6	280	1.6	10128182
6	23	2	1	1	1	2 29	77.7	70.3	71.2	0.0	0.0	6	280	1.6	10/28/82
6	24	2	1	1	1	1 31	73.5	67.9	67.5	0.0	0.0	6	280	1.6	10128182
6	25	0	1	1	1	0 39	72.5	65.7	67.1	0.0	0.0	6	280	1.6	10/28/82
6	26	0	1	1	1	1 33	68.9	62.5	63.7	0.0	0.0	6	280	1.6	10/28/82
6	27	1	1	1	1	0 31	67.8	61.4	62.3	0.0	0.0	6	280	1.6	10128182
6	28	0	1	1	1	1 30	71.2	64.9	65.8	0.0	0.0	6	280	1.6	10/28/82
6	29	1	1	1	1	1 30	69.2	61.8	63.4	0.0	0.0	6	280	1.6	10128182
6	30	0	1	1	1	1 32	67.2	60.7	61.2	0.0	0.0	6	270	0.0	10/28/82
6	31	1	1	1	1	0 30	70.3	65.2	66.2	0.0	0.0	6	270	0.0	10/28/82
6	32	1	1	1	1	0 28	69.6	62.8	63.6	0.0	0.0	6	270	0.0	10128182
6	33	1	1	1	1	1 32	69.4	61.7	63.1	0.0	0.0	6	270	0.0	10128182
6	34	2	1	1	1	1 35	70.1	62.3	63.5	0.0	0.0	6	270	0.0	10128182
6	35	1	1	1	1	1 44	72.4	65.0	67.2	0.0	0.0	6	270	0.0	10128182
6	36	1	1	1	1	1 40	69.7	62.7	63.9	0.0	0.0	6	270	0.0	10128182
6	37	2	1	1	1	1 40	76.3	69.0	67.0	0.0	0.0	6	270	0.0	10/28/82
6	38	2	1	1	1	0 30	69.1	62.8	63.1	0.0	0.0	6	270	0.0	10/28/82
6	39	2	1	1	1	2 28	75.4	68.4	69.5	0.0	0.0	6	270	0.0	10/28/82
6	40	1	1	1	1	1 36	68.4	61.0	62.8	0.0	0.0	6	270	0.0	10/28/82
6	41	1	1	1	1	1 35	66.9	60.6	61.7	0.0	0.0	6	270	0.0	10/28/82
6	42	1	1	1	1	0 37	66.6	62.6	65.3	0.0	0.0	6	270	0.0	10128182
6	43	0	1	1	1	1 32	70.4	62.6	64.8	0.0	0.0	6	270	0.0	10/28/82
6	44	0	0	1	1	1 21	64.3	60.5	61.6	0.0	0.0	6	270	0.0	10/28/82
6	45	1	1	1	1	1 30	67.2	59.7	61.1	0.0	0.0	6	270	0.0	10/28/82
6	46	1	1	1	1	1 26	68.3	61.4	62.6	0.0	0.0	3	270	0.0	10/28/82
6	47	0	1	1	1	0 29	68.8	61.6	63.5	0.0	0.0	3	270	0.0	10128182
6	48	1	1	1	1	0 32	67.0	60.7	61.7	0.0	0.0	3	270	0.0	10/28/82
6	49	2	1	1	1	1 42	75.2	68.4	69.1	0.0	0.0	3	270	0.0	10/28/82
6	50	1	1	1	1	1 44	72.6	65.0	66.7	0.0	0.0	3	270	0.0	10/28/82
6	51	0	1	1	1	1 35	68.5	61.4	63.2	0.0	0.0	3	270	0.0	10/28/82
6	52	1	1	1	1	1 35	68.0	62.1	63.0	0.0	0.0	3	270	0.0	10/28/82
6	53	0	0	1	1	1 38	71.4	65.5	67.7	0.0	0.0	3	270	0.0	10/28/82
6	54	2	1	1	1	0 30	74.3	67.4	68.3	0.0	0.0	3	270	0.0	10/28/82
6	55	1	1	1	1	0 33	67.0	60.2	61.4	0.0	0.0	3	270	0.0	10128182
6	56	1	1	1	1	1 37	69.5	62.9	64.1	0.0	0.0	3	270	0.0	10128182
6	57	2	1	1	1	0 36	68.3	63.4	63.9	0.0	0.0	3	270	0.0	10/28/82
6	58	1	1	1	1	1 32	70.8	64.1	64.6	0.0	0.0	3	270	0.0	10128182
6	59	1	1	1	1	1 29	69.8	63.2	64.2	0.0	0.0	3	270	0.0	10128182
6	60	0	1	1	1	1 38	69.3	63.1	64.2	0.0	0.0	3	270	0.0	10128182
6	61	0	1	1	1	1 28	65.8	59.5	60.7	0.0	0.0	3	270	0.0	10/28/82
6	62	1	1	1	1	1 30	67.7	60.3	61.4	0.0	0.0	3	270	0.0	10128182
6	63	1	1	1	1	1 41	72.0	65.3	66.8	0.0	0.0	3	270	0.0	10/28/82
6	64	1	1	1	1	1 38	70.9	63.1	64.7	0.0	0.0	3	270	0.0	10128182
6	65	1	1	1	1	0 33	67.1	61.1	62.0	0.0	0.0	3	270	0.4	10/28/82
6	66	0	1	1	1	1 31	70.2	63.2	64.6	0.0	0.0	3	270	0.0	10128182
6	67	2	1	1	1	2 26	70.1	62.7	63.6	0.0	0.0	3	270	0.0	10/28/82
6	68	1	1	1	1	1 41	73.2	65.7	67.2	0.0	0.0	3	270	0.0	10128182
6	69	1	1	1	1	0 33	67.6	60.7	61.8	0.0	0.0	3	270	0.0	10/28/82
6	70	1	1	1	1	1 37	70.3	62.8	64.9	0.0	0.0	3	270	0.0	10/28/82

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	EVENT QUAL. VEH	EVENT QUAL. DL	EVENT QUAL. ENV	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
6	71	0	0	1	1	0	30	66.8	61.6	63.2	0.0	0.0	3	270	0.0	10/28/82
6	72	1	1	1	1	1	29	68.0	61.6	62.1	0.0	0.0	6	250	-3.1	10/28/82
6	73	1	1	1	1	1	37	71.1	63.3	64.8	0.0	0.0	6	250	-3.1	10/28/82
6	74	2	1	1	1	0	42	72.5	64.8	66.8	0.0	0.0	6	250	-3.1	10/28/82
6	75	1	1	1	1	0	31	68.4	61.6	62.5	0.0	0.0	6	250	-3.1	10/28/82
6	76	0	1	1	1	1	27	63.6	56.3	58.0	0.0	0.0	6	250	-3.1	10/28/82
6	77	1	1	1	1	1	42	71.8	64.6	66.4	0.0	0.0	6	250	-3.1	10/28/82
6	78	2	1	1	1	0	40	70.2	62.7	64.7	0.0	0.0	6	250	-3.1	10/28/82
6	79	2	1	1	1	2	28	77.5	70.2	71.5	0.0	0.0	6	250	-3.1	10/28/82
6	80	2	1	1	1	1	33	70.0	63.2	63.9	0.0	0.0	6	250	-3.1	10/28/82
6	81	1	1	1	1	2	22	70.2	63.3	64.3	0.0	0.0	6	250	-3.1	10/28/82
6	82	0	1	1	1	1	36	68.1	61.4	63.2	0.0	0.0	6	250	-3.1	10/28/82
6	83	0	1	1	1	0	34	66.2	59.5	61.3	0.0	0.0	6	250	-3.1	10/28/82
6	84	2	1	1	1	0	39	73.8	67.5	69.0	0.0	0.0	6	250	-3.1	10/28/82
6	85	1	1	1	1	1	33	68.8	61.7	63.0	0.0	0.0	6	250	-3.1	10/28/82
6	86	1	1	1	1	0	34	68.8	61.1	63.2	0.0	0.0	6	250	-3.1	10/28/82
6	87	0	1	1	1	0	40	68.0	61.6	63.4	0.0	0.0	6	270	0.0	10/28/82
6	88	0	1	1	1	0	34	66.7	60.4	60.9	0.0	0.0	6	270	0.0	10/28/82
6	89	1	1	1	1	1	34	68.6	62.0	65.2	0.0	0.0	6	270	0.0	10/28/82
6	90	0	0	1	1	0	33	65.5	59.0	61.3	0.0	0.0	6	270	0.0	10/28/82
6	91	1	1	1	1	1	35	72.4	65.2	66.5	0.0	0.0	6	270	0.0	10/28/82
6	92	1	1	1	1	1	29	67.9	65.9	67.0	0.0	0.0	6	270	0.0	10/28/82
6	93	0	1	1	1	1	23	65.5	58.5	59.5	0.0	0.0	6	270	0.0	10/28/82
6	94	1	1	1	1	0	39	70.4	63.6	65.2	0.0	0.0	6	270	0.0	10/28/82
6	95	1	1	1	1	1	21	62.4	55.3	56.9	0.0	0.0	6	270	0.0	10/28/82
6	96	1	1	1	1	1	38	70.4	63.0	64.7	0.0	0.0	6	270	0.0	10/28/82
6	97	1	1	1	1	0	34	66.4	59.9	60.4	0.0	0.0	6	270	0.0	10/28/82
6	98	1	1	1	1	1	42	72.0	64.6	66.1	0.0	0.0	6	270	0.0	10/28/82
6	99	1	1	1	1	0	31	65.8	59.3	60.6	0.0	0.0	6	270	0.0	10/28/82
6	100	1	1	1	1	1	37	70.6	63.2	64.5	0.0	0.0	6	270	0.0	10/28/82
6	101	1	1	1	1	1	34	67.6	62.1	62.8	0.0	0.0	6	270	0.0	10/28/82
6	102	0	1	1	1	1	37	69.7	62.2	63.7	0.0	0.0	6	270	0.0	10/28/82
6	103	1	1	1	1	0	34	67.4	61.7	62.6	0.0	0.0	6	270	0.0	10/28/82
6	104	0	1	1	1	1	27	64.5	57.3	59.2	0.0	0.0	6	276'	0.0	10/28/82
6	105	1	1	1	1	0	39	72.1	65.2	65.9	0.0	0.0	6	270	0.0	10/28/82
6	106	1	1	1	1	0	44	70.6	63.7	65.7	0.0	0.0	6	270	0.0	10/28/82
6	107	1	1	1	1	0	40	71.9	65.1	65.6	0.0	0.0	6	270	0.0	10/28/82
6	108	1	1	1	1	0	34	68.7	64.0	65.8	0.0	0.0	6	270	0.0	10/28/82
6	109	1	1	1	1	1	36	69.1	61.4	63.0	0.0	0.0	6	270	0.0	10/28/82
6	110	1	1	1	1	0	33	66.9	60.4	62.6	0.0	0.0	6	270	0.0	10/28/82
6	111	0	0	1	1	1	31	67.6	61.9	64.0	0.0	0.0	6	270	0.0	10/28/82
6	112	2	1	1	1	2	28	81.0	73.7	74.9	0.0	0.0	6	270	0.0	10/28/82
6	113	0	1	1	1	1	30	66.3	59.3	60.5	0.0	0.0	6	270	0.0	10/28/82
6	114	0	1	1	1	0	35	66.2	60.2	61.0	0.0	0.0	6	270	0.0	10/28/82
6	115	1	1	1	1	1	28	66.3	59.3	60.4	0.0	0.0	6	270	0.0	10/28/82
6	116	1	1	1	1	1	32	67.5	60.2	61.5	0.0	0.0	6	270	0.0	10/28/82
6	117	1	1	1	1	0	24	70.8	64.4	64.7	0.0	0.0	6	270	0.0	10/28/82
6	118	2	1	1	1	2	34	77.9	71.5	72.8	0.0	0.0	6	270	0.0	10/28/82
6	119	2	1	1	1	2	33	78.8	72.4	73.1	0.0	0.0	6	270	0.0	10/28/82
6	120	2	1	4	1	2	35	78.7	72.3	73.9	0.0	0.0	6	270	0.0	10/28/82
6	121	1	1	1	1	1	35	70.2	63.0	64.4	0.0	0.0	6	260	-1.6	10/28/82
6	122	1	1	1	1	0	24	61.1	54.9	56.0	0.0	0.0	6	270	0.0	10/28/82
6	123	1	1	1	1	0	34	72.7	65.7	66.8	0.0	0.0	6	270	0.0	10/28/82
6	124	1	1	1	1	1	39	70.8	63.6	65.4	0.0	0.0	6	270	0.0	10/28/82
6	125	1	1	1	1	1	36	69.9	62.4	64.0	0.0	0.0	6	270	0.0	10/28/82

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	DEN/HLV	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDE	WAINGDLE	VWEICNTDOR	DATE
							DBA								
7	1	2	1	1	1	5 61	89.4	81.8	83.8	72.0	75.8	3	50	2.9	1/10/83
7	2	2	1	1	1	5 57	87.3	79.9	81.8	69.0	72.9	3	50	2.9	1/10/83
7	3	1	1	1	1	5 57	86.9	80.2	82.2	71.3	74.2	3	50	2.9	1/10/83
7	4	0	1	1	1	2 58	87.0	78.8	81.6	71.9	75.3	3	50	2.9	1/10/83
7	5	2	1	1	1	5 63	86.7	79.4	82.5	70.0	73.7	3	50	2.9	1/10/83
7	6	2	1	1	1	5 61	90.3	82.4	84.5	73.3	76.2	3	50	2.9	1/10/83
7	7	2	1	1	1	5 61	90.6	83.5	85.7	72.9	76.7	3	50	2.9	1/10/83
7	8	1	1	1	1	3 52	86.7	79.8	81.2	69.5	73.3	3	90	0.0	1/10/83
7	9	2	1	1	1	5 58	91.4	84.9	86.3	78.4	78.7	3	96	0.0	1/10/83
7	10	2	1	1	1	5 54	88.7	81.4	84.0	73.3	75.2	3	90	0.0	1/10/83
7	11	2	1	1	1	5 65	90.2	83.0	84.2	73.0	76.3	3	90	0.0	1/10/83
7	12	1	1	1	1	2 55	86.9	79.0	81.2	68.1	73.2	3	90	0.0	1/10/83
7	13	2	1	1	1	5 45	87.1	79.9	81.5	71.6	73.8	3	90	0.0	1/10/83
7	14	2	1	1	1	5 54	92.5	84.5	86.4	74.2	77.7	0	50	0.0	1/10/83
7	15	1	1	1	1	2 54	84.2	77.3	78.9	67.2	71.0	0	50	0.0	1/10/83
7	16	2	1	1	1	2 53	86.2	78-4	80.9	67.8	71.9	3	100	-.8	1/10/83
7	17	2	1	1	1	5 55	92.9	84.5	86.6	73.2	77.0	3	100	-.8	1/10/83
7	18	2	1	1	1	5 60	88.8	82.3	84.1	75.1	78.1	3	100	-.8	1/10/83
7	19	2	1	1	1	2 52	88.0	79.3	82.3	69.0	73.0	3	100	-.8	1/10/83
7	20	1	1	1	1	5 57	88.2	81.3	83.2	71.9	75.5	3	100	-.8	1/10/83
7	21	2	1	1	1	5 56	90.7	82.1	85.1	72.9	76.3	3	100	-.8	1/10/83
7	22	2	1	1	1	2 57	90.3	82.2	84.5	70.9	75.0	0	0	0.0	1/10/83
7	23	2	1	1	1	5 60	89.2	83.5	84.1	74.1	77.0	0	0	0.0	1/10/83
7	24	2	1	1	1	1 53	88.5	81.8	83.3	72.1	75.3	0	0	0.0	1/10/83
7	25	0	1	1	1	1 58	82.0	74.5	77.0	63.8	69.7	0	0	0.0	1/10/83
7	26	2	1	1	1	0 59	78.3	72.3	74.1	61.8	66.1	0	0	0.0	1/10/83
7	27	1	1	1	1	5 56	89.9	82.6	84.5	73.3	77.0	0	0	0.0	1/10/83
7	28	2	1	1	1	0 59	78.8	72.8	73.8	62.5	66.9	0	0	0.0	1/10/83
7	29	1	1	1	1	2 57	85.0	78.0	80.0	67.8	72.4	0	0	0.0	1/10/83
7	30	1	1	1	1	3 60	90.6	83.1	84.1	75.6	77.5	0	0	0.0	1/10/83
7	31	0	1	1	1	2 47	83.5	76.7	78.5	68.3	71.6	0	110	0.0	1/10/83
7	32	2	1	1	1	5 53	89.3	82.6	84.2	72.7	76.3	0	110	0.0	1/10/83
7	33	1	1	1	1	2 61	84.0	76.8	78.7	65.6	70.3	3	110	-1.5	1/10/83
7	34	1	1	1	1	1 56	80.4	72.9	75.5	63.5	68.3	3	110	-1.5	1/10/83
7	35	2	1	1	1	2 61	86.4	78.2	80.6	67.4	72.1	3	110	-1.5	1/10/83
7	36	2	1	1	1	5 59	91.2	84.4	85.2	77.1	78.4	3	110	-1.5	1/10/83
7	37	2	1	1	1	5 57	85.8	79.3	81.0	68.7	72.7	3	110	-1.5	1/10/83
7	38	1	1	1	1	2 53	82.5	74.5	77.1	65.0	69.1	3	110	-1.5	1/10/83
7	39	1	1	1	1	3 53	87.8	80.5	82.6	71.8	74.8	3	110	-1.5	1/10/83
7	40	2	1	1	1	3 56	89.6	80.8	83.4	70.8	74.0	3	110	-1.5	1/10/83
7	41	2	1	1	1	5 55	87.8	80.3	82.0	71.3	74.3	3	110	-1.5	1/10/83
7	42	2	1	1	1	1 64	82.5	75.4	76.7	63.1	67.9	0	0	0.0	1/10/83
7	43	2	1	1	1	5 54	88.5	81.1	83.1	72.1	75.0	0	0	0.0	1/10/83
7	44	2	1	1	1	5 53	86.1	79.2	81.1	68.9	72.5	0	0	0.0	1/10/83
7	45	2	1	1	1	1 63	80.1	74.4	75.7	66.2	69.4	0	0	0.0	1/10/83
7	46	2	1	1	1	2 56	87.8	79.4	81.9	69.5	73.0	0	0	0.0	1/10/83
7	47	2	1	1	1	5 64	89.4	83.0	84.9	74.3	76.7	0	0	0.0	1/10/83
7	48	2	1	1	1	1 53	81.9	74.a	76.9	64.9	68.9	3	90	0.0	1/10/83
7	49	2	1	1	1	2 63	85.9	79.3	80.1	69.8	73.6	3	90	0.0	1/10/83
7	50	2	1	1	1	5 56	86.3	79.3	81.1	68.8	72.7	3	90	0.0	1/10/83
7	51	2	1	1	1	3 55	86.4	79.0	80.6	69.7	72.3	3	90	0.0	1/10/83
7	52	2	1	1	1	5 57	94.3	87.1	88-1	79.4	80.9	3	90	0.0	1/10/83
7	53	2	1	1	1	5 53	86.4	78.5	81.0	67.7	71.3	3	90	0.0	1/10/83
7	54	0	1	1	1	5 46	96.2	89.9	90.9	82.4	83.8	3	90	0.0	1/10/83
7	55	2	1	1	1	5 49	94.9	88.5	89.5	82.8	82.2	3	90	0.0	1/10/83
7	56	2	1	1	1	1 62	79.8	72.6	74.4	62.3	66.2	3	90	a.0	1/10/83
7	57	1	1	1	1	0 50	78.8	74.0	75.2	63.4	68.6	3	90	0.0	1/10/83
7	58	2	1	1	1	5 54	88.5	81.1	83.4	71.8	74.5	3	90	0.0	1/10/83
7	59	1	1	1	1	1 60	80.2	74.4	75.5	69.6	71.1	3	90	0.0	1/10/83
7	60	2	1	1	1	1 61	82.4	75.5	77.8	64.6	69.0	3	90	0.0	1/10/83
7	61	2	1	1	1	2 59	85.3	78.0	79.6	67.3	71.5	3	90	0.0	1/10/83
7	62	2	1	1	1	0 63	80.6	74.5	76.8	62.7	67.6	3	90	0.0	1/10/83
7	63	2	1	1	1	5 56	92.9	85.7	87.6	77.5	78.9	3	90	0.0	1/10/83
7	64	2	1	1	1	5 57	91.8	83.8	85.7	74.5	77.3	3	90	0.0	1/10/83
7	65	2	1	1	1	2 53	84.4	77.6	79.9	67.9	71.7	3	90	0.0	1/10/83
7	66	2	1	1	1	2 66	86.6	79.6	81.4	70.1	73.3	3	90	0.0	1/10/83
7	67	2	1	1	1	3 52	87.2	79.5	82.5	69.5	72.6	3	90	0.0	1/10/83
7	68	2	1	1	1	5 54	90.1	82.9	84.7	75.2	77.1	3	90	0.0	1/10/83
7	69	2	1	1	1	5 56	89.5	82.4	84.3	72.9	76.2	3	90	0.0	1/10/83
7	70	2	1	1	1	5 58	94.5	86.4	89.5	73.5	79.5	3	90	0.0	1/10/83

DATA SUMMARY

SITE	EVENT	EVENT QUAL. GLR	VEH QUAL. VEH/L	VEH QUAL. ENV	TYPE	SPEED	MIC (1) 5	MIC (2) 5	MIC (3) 10 DBA	MIC (4) 5	MIC (5) 10	WS IPNEDD	WA INGDLE	WE ICNTDOR	DATE
7	71	1	1	1	1	49	81.2	73.5	76.2	65.5	68.9	3	100	-.8	1110183
7	72	2	1	1	5	46	90.9	84.6	85.4	76.4	78.5	3	100	-.8	1/10/83
7	73	2	1	1	0	58	78.3	71.9	74.0	60.6	65.8	3	100	-.8	1/10/83
7	74	2	1	1	5	45	88.2	80.7	82.7	71.9	74.1	3	100	-.8	1/10/83
7	75	2	1	1	2	62	90.2	83.5	84.9	74.8	78.5	3	100	-.8	1/10/83
7	76	2	1	1	1	61	83.5	76.9	78.5	67.3	70.9	3	100	-.8	1/10/83
7	77	2	1	1	5	62	90.8	83.6	85.7	73.6	77.2	3	100	-.8	1/10/83
7	78	2	1	1	5	50	89.4	81.8	83.5	73.2	75.1	3	100	-.8	1/10/83
7	79	2	1	1	5	56	90.5	83.0	85.3	71.5	75.4	3	100	-.8	1/10/83
7	80	1	1	1	3	44	86.7	79.2	81.5	69.9	73.8	3	100	-.8	1/10/83
7	81	2	1	1	0	56	77.3	71.4	72.6	61.5	65.6	3	100	-.8	1/10/83
7	82	2	1	1	5	55	87.5	81.4	82.9	72.0	75.2	3	100	-.8	1/10/83
7	83	2	1	1	5	60	87.9	81.3	83.3	72.8	75.9	3	100	-.8	1/10/83
7	84	2	1	1	1	55	79.6	72.6	74.1	62.4	66.2	3	100	-.8	1/10183
7	85	2	1	1	5	53	88.3	81.9	84.0	73.0	76.4	3	100	-.8	1/10183
7	86	2	1	1	5	59	90.0	82.6	84.0	72.4	75.6	3	100	-.8	1/10/83
7	87	2	1	1	2	50	82.3	75.5	78.0	64.5	68.7	3	90	0.0	1/10/83
7	88	2	1	1	5	60	90.5	82.4	84.1	73.5	76.0	3	90	0.0	1/10/83
7	89	2	1	1	5	54	90.8	83.7	85.2	75.3	77.3	3	90	0.0	1/10183
7	90	2	1	1	5	55	88.7	81.5	82.8	72.9	75.7	3	90	0.0	1/10/83
7	91	2	1	1	5	62	92.1	84.4	86.5	76.7	78.6	3	90	0.0	1/10183
7	92	0	1	1	2	52	87.1	79.7	81.0	71.2	73.6	3	90	0.0	1/10/83
7	93	1	1	1	2	58	87.5	79.5	82.1	70.3	73.3	0	90	0.0	1/10/83
7	94	2	1	1	4	59	89.3	83.0	85.0	74.2	78.0	0	90	0.0	1/10/83
7	95	2	1	1	1	61	80.3	73.6	75.1	65.9	69.0	0	90	0.0	1/10/83
7	96	2	1	1	0	57	78.7	72.0	74.1	60.5	65.3	0	90	0.0	1/10/83
7	97	2	1	1	5	60	89.2	82.2	84.3	74.2	77.2	0	90	0.0	1/10/83
7	98	2	1	1	3	62	89.3	82.5	84.4	73.6	76.9	0	90	0.0	1/10/83
7	99	2	1	1	5	57	88.9	81.5	83.4	72.8	75.6	0	90	0.0	1/10/83
7	100	2	1	1	1	55	79.3	72.6	74.7	62.3	66.5	0	90	0.0	1/10/83
7	101	2	1	1	5	61	8'9.0	81.5	83.8	72.1	75.7	0	90	0.0	1/10183
7.	102	2	1	1	0	57	77.1	70.7	72.1	61.1	64.8	0	90	0.0	1/10/83
7	103	2	1	1	5	56	88.4	81.4	82: 9	72.6	75.0	0	90	0.0	1/10/83
7	104	1	1	1	2	57	83.1	77.7	80.1	68.4	73.1	0	90	0.0	1/10183
7	105	2	1	1	5	52	86.5	79.9	81.8	69.6	73.2	0	90	0.0	1/10/83
7	106	2	1	1	5	54	89.1	82.4	84.1	73.0	76.4	0	90	0.0	1/10/83
7	107	1	1	1	0	59	78.7	71.9	73.7	60.8	65.0	0	90	0.0	1/10/83
7	108	1	1	1	1	58	78.3	72.6	73.8	64.9	67.6	0	90	0.0	1/10/83
7	1D9	2	1	1	3	54	83.3	75.1	77.5	66.3	69.2	0	90	0.0	1/10/83
7	110	2	1	1	5	47	88.2	81.0	82.8	73.1	74.8	0	90	0.0	1/10/83
7	111	2	1	1	1	54	79.1	72.0	73.7	58.8	65.9	0	90	0.0	1/10/83
7	112	2	1	1	5	46	89.2	81.2	83.0	72.1	74.4	0	90	0.0	1/10183
7	113	2	1	1	5	60	89.9	82.4	84.8	72.9	75.5	0	90	0.0	1/10/83
7	114	2	1	1	2	60	88.1	81.3	82.8	72.1	75.7	0	90	0.0	1/10/83
7	115	2	3	1	3	59	89.0	81.5	83.1	72.0	74.9	0	90	0.0	1/10/83
7	116	2	1	1	2	60	87.7	79.9	81.7	70.2	73.3	0	90	0.0	1/10/83
7	117	2	1	1	5	61	90.1	82.6	85.4	72.9	76.4	0	90	0.0	1/10/83
7	118	2	1	1	5	58	88.4	81.4	83.5	71.8	75.0	0	90	0.0	1/10/83
7	119	1	1	1	1	60	-1.0	75.0	-1.0	-1.0	-1.0	0	90	0.0	1/ 0/ 3
7	120	2	1	1	1	71	86.7	78.7	81.1	66.5	71.5	3	90	0.0	1/10/83
7	121	1	1	1	2	59	84.2	77.0	79.1	67.0	71.8	3	90	0.0	1/10/83
7	122	2	1	1	5	57	87.7	80.6	82.3	70.7	74.8	3	90	0.0	1/10/83
7	123	2	1	1	2	49	86.4	78.0	80.2	69.8	72.9	3	90	0.0	1/110183
7	124	1	1	1	2	56	84.2	77.9	80.3	67.2	72.8	3	90	0.0	1/110183
7	125	1	1	1	5	60	87.2	79.4	81.9	68.9	72.9	3	90	0.0	1/110183
7	126	2	1	1	5	56	90.1	82.1	84.7	72.5	75.5	3	90	0.0	1/10/83
7	127	2	1	1	3	48	87.3	79.7	81.3	72.5	74.3	3	90	0.0	1/10183
7	128	2	1	1	2	53	85.5	77.6	79.7	67.0	71.2	3	90	0.0	1/10/83
7	129	2	1	1	3	59	87.6	79.6	82.0	69.4	73.9	3	90	0.0	1/10/83
7	130	2	1	1	4	54	87.8	79.9	81.4	71.0	73.7	3	90	0.0	1/10183
7	131	0	1	1	0	50	77.6	71.5	73.3	63.3	67.3	3	90	0.0	1/10/83
7	132	1	1	1	5	55	87.1	80.1	82.0	69.9	74.0	3	90	0.0	1/10/83
7	133	2	1	1	1	55	78.4	72.4	74.0	60.7	65.6	3	90	0.0	1/10/83
7	134	2	1	1	0	50	75.3	68.1	70.6	56.3	61.8	3	90	0.0	1/10/83
7	135	2	1	1	5	55	89.3	80.7	82.8	70.7	74.0	3	90	0.0	1/110183
7	136	2	1	1	2	51	85.3	76.9	78.5	68.9	71.0	3	90	0.0	1/10/83
7	137	2	1	1	5	61	90.1	83.0	85.4	73.9	77.3	3	90	0.0	1/10/83
7	138	2	1	1	5	58	91.9	83.9	86.4	73.2	76.9	3	90	0.0	1/10/83
7	139	2	1	1	2	57	90.0	82.0	84.6	68.9	74.6	3	90	0.0	1/10/83
7	140	1	1	1	0	47	78.2	70.8	73.2	-1.0	-1.0	3	90	0.0	1/10/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	D/L	ENV	WEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
								DBA								
7	141	2	1	1	1	3	57	94.3	85.9	88.3	77.0	80.1	3	90	0.0	1/10/83
7	142	2	1	1	1	5	59	87.2	80.3	82.0	71.5	74.9	3	90	0.0	1110183
7	143	2	1	1	1	5	53	85.7	78.3	80.4	71.1	72.9	3	90	0.0	1/10/83
7	144	2	1	1	1	2	62	85.9	78.4	80.4	68.6	72.7	3	90	0.0	1/10/83
7	145	2	1	1	1	5	51	88.0	79.4	82.2	69.0	73.0	3	90	0.0	1/10/83
7	146	2	1	1	1	5	61	91.5	84.2	86.8	73.1	77.3	3	90	0.0	1110183
7	147	2	1	1	1	5	64	90.6	82.9	85.5	73.5	77.0	3	90	0.0	1/10/83
7	148	2	1	1	1	5	59	90.2	82.0	84.6	71.2	75.4	3	90	0.0	1110183
7	149	2	1	1	1	5	57	89.8	81.9	83.8	72.2	75.3	3	120	-2.2	1/10/83
7	150	1	1	1	1	2	60	87.2	79.9	81.7	70.8	74.6	3	120	-2.2	1110183
7	151	2	1	1	1	5	59	86.9	79.7	81.6	71.1	74.0	3	120	-2.2	1110183
7	152	2	1	1	1	3	53	89.1	81.9	82.5	72.8	76.6	3	120	-2.2	1110183
7	153	0	1	1	1	1	50	79.0	71.3	73.0	62.8	66.4	3	120	-2.2	1110183
7	154	2	1	1	1	5	55	90.2	81.8	84.7	72.2	75.3	6	110	-3.1	1/10/83
7	155	2	1	1	1	5	56	89.4	82.2	84.1	73.3	75.7	6	110	-3.1	1/10/83
7	156	2	1	1	1	5	56	87.3	79.8	82.2	71.1	73.8	6	110	-3.1	1/10/83
7	157	2	1	1	1	1	66	81.1	74.5	76.0	63.2	67.5	6	110	-3.1	1110183
7	158	2	1	1	1	2	56	85.4	77.4	80.1	68.3	72.4	6	110	-3.1	1110183
7	159	1	1	1	1	1	52	81.3	73.3	76.1	65.0	67.5	6	110	-3.1	1/10/83
7	160	2	1	1	1	3	55	91.4	85.7	85.2	77.3	79.4	6	110	-3.1	1/10/83
7	161	2	1	1	1	2	51	84.3	77.5	79.3	70.2	71.7	6	110	-3.1	1/10/83
7	162	2	1	1	1	2	61	87.5	79.3	81.3	69.3	73.3	6	110	-3.1	1110183
7	163	2	1	1	1	2	53	87.3	80.1	81.5	72.5	74.7	6	110	-3.1	1110183
7	164	1	1	1	1	0	48	77.3	70.4	71.9	62.3	64.5	6	110	-3.1	1010183
7	165	2	1	1	1	5	52	87.7	80.9	82.9	72.1	75.8	6	90	0.0	1110183
7	166	2	1	1	1	5	57	90.6	82.6	85.5	71.5	75.6	6	110	-3.1	1/10/83
7	167	2	1	1	1	2	52	84.7	76.9	79.1	67.8	70.6	6	110	-3.1	1110183
7	168	1	1	1	1	3	46	86.8	79.9	81.4	71.4	74.5	6	110	-3.1	1/10/83
7	169	2	1	1	1	3	41	88.9	80.0	82.9	71.9	75.2	6	110	-3.1	1/10/83
7	170	2	1	1	1	5	53	96.5	90.2	90.8	83.1	84.7	6	110	-3.1	1/10/83
7	171	1	1	1	1	3	53	85.9	78.4	80.5	70.4	72.8	6	110	-3.1	1/10/83
7	172	0	1	1	1	2	50	88.6	83.8	86.2	74.6	78.0	6	110	-3.1	1/10/83
7	173	2	1	1	1	5	56	91.5	84.2	85.8	75.4	78.7	6	110	-3.1	1/10/83
7	174	2	1	1	1	5	52	88.7	81.4	83.1	72.4	75.2	6	110	-3.1	1110183
7	175	2	1	1	1	5	60	93.4	86.2	87.9	77.5	79.6	6	110	-3.1	1110183
7	176	2	1	1	1	1	68	83.7	76.3	78.7	64.7	68.8	6	110	-3.1	1/10/83
7	177	2	1	1	1	1	63	86.6	77.8	81.3	65.1	70.4	6	110	-3.1	1/10/83
7	178	2	1	1	1	5	53	87.3	79.2	81.5	69.3	72.7	6	110	-3.1	1/10/83
7	179	2	1	1	1	2	58	83.7	76.0	79.4	64.4	68.9	6	110	-3.1	1/10/83
7	180	0	1	1	1	5	50	86.1	79.6	81.6	72.3	74.8	6	110	-3.1	1/10/83
7	181	1	1	1	1	5	59	87.7	81.5	83.3	72.4	76.5	6	110	-3.1	1/10/83
7	182	1	1	1	1	5	52	87.5	80.1	82.1	71.9	75.2	6	110	-3.1	1110183
7	183	2	1	1	1	5	55	87.8	80.3	82.3	71.7	74.1	6	110	-3.1	1/10/83
7	184	0	1	1	1	4	55	88.1	80.5	82.9	70.8	74.9	6	110	-3.1	1110183
7	185	2	1	1	1	1	54	80.4	72.4	75.3	62.7	66.2	6	110	-3.1	1110083
7	186	1	1	1	1	2	53	82.9	75.8	78.9	64.5	69.1	6	110	-3.1	1/10/83
7	187	2	1	1	1	2	59	86.5	78.4	81.0	69.0	72.6	6	110	-3.1	1110183
7	188	1	1	1	1	1	54	78.3	71.9	73.6	64.8	67.4	6	110	-3.1	1/10/83
7	189	2	1	1	1	2	53	89.8	81.0	84.7	69.0	74.2	6	110	-3.1	1110183
7	190	2	1	1	1	4	52	88.4	81.2	83.0	70.6	74.9	6	110	-3.1	1/10/83
7	191	1	1	1	1	2	46	80.5	72.8	75.9	64.4	66.7	6	110	-3.1	1110183
7	192	0	1	1	1	1	50	78.7	73.4	75.9	63.4	68.9	6	110	-3.1	1/10/83
7	193	2	1	1	1	5	46	89.1	81.0	83.7	71.9	75.2	6	110	-3.1	1/10/83
7	194	2	1	1	1	2	59	87.2	78.1	82.1	67.0	71.5	6	110	-3.1	1/10/83
7	195	2	1	1	1	1	59	81.1	73.0	76.0	59.6	65.7	6	150	-7.8	1/10/83
7	196	2	1	1	1	3	54	87.7	79.4	81.5	70.8	74.5	0	270	0.0	1110/83
7	197	0	1	1	1	5	60	97.1	90.6	91.0	87.4	84.5	0	270	0.0	1/10/83
7	198	2	1	1	1	5	58	87.8	80.4	82.1	71.2	74.4	0	270	0.0	1110183
7	199	2	1	1	1	2	55	86.3	79.5	80.7	70.5	73.1	0	270	0.0	1110/83
7	200	2	1	1	1	5	55	93.6	85.7	88.3	76.4	78.9	6	270	0.0	1/10/83
7	201	2	1	1	1	5	51	86.5	79.3	81.8	70.0	73.2	6	270	0.0	1/10/83
7	202	2	1	1	1	5	56	92.5	86.7	87.9	76.9	78.8	6	270	0.0	1110/83
7	203	2	1	1	1	3	51	84.9	76.8	79.4	66.9	70.6	6	270	0.0	1110183
7	204	2	1	1	1	3	58	86.2	78.9	82.3	68.8	73.6	6	270	0.0	1/10183
7	205	2	1	1	1	4	62	90.6	84.5	84.8	76.7	78.0	6	240	-4.5	1/10/83
7	206	2	1	1	1	1	53	80.2	73.7	75.6	64.8	68.6	6	240	-4.5	1/10/83
7	207	2	1	1	1	2	54	86.2	78.7	80.4	68.2	72.6	6	240	-4.5	1110183
7	208	2	1	1	1	4	62	92.2	85.3	86.6	76.2	78.3	6	240	-4.5	1110183
7	209	2	1	1	1	2	62	83.7	76.7	78.4	66.3	69.9	6	240	-4.5.	1/10/83
7	210	2	1	1	1	5	59	86.1	80.0	81.3	74.0	75.9	6	240	-4.5	1/10/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	D/L	ENV	VEH TYPE	SPEED	MC (1) 5 DBA	MC (2) 5 DBA	MC (3) 10 DBA	MC (4) 5 DBA	MC (5) 10 DBA	WSIPNEDED	WAINGDLE	VEICNTDOR	DATE
7	211	0	1	1	1	2	50	84.2	78.2	80.4	70.3	73.4	6	240	-4.5	1/10/83
7	212	2	1	1	1	5	51	86.5	79.5	81.1	69.2	73.3	6	240	-4.5	1/10/83
7	213	0	1	1	1	5	58	87.9	81.7	83.5	73.0	75.6	6	240	-4.5	1/10/83
7	214	2	1	1	1	5	53	88.5	82.0	83.9	74.1	76.4	6	270	0.0	1/10/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	DEL/HV	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
									DBA						
9	1	2 1 1 1	0	55			79.1	76.0	75.3	0.0	0.0	6	180	-9.0	1/11/83
9	2	2 1 1 1	2	55			-1.0	84.0	-1.0	0.0	0.0	6	180	-9.0	1/11/83
9	3	2 1 1 1	0	59			80.5	75.0	75.4	0.0	0.0	6	180	-9.0	1/11/83
9	4	2 1 1 1	0	55			78.1	73.0	73.6	0.0	0.0	6	180	-9.0	1/11/83
9	5	2 1 1 1	5	45			89.2	84.6	84.5	0.0	0.0	6	180	-9.0	1/11/83
9	6	2 1 1 1	2	58			-1.0	83.0	-1.0	0.0	0.0	6	180	-9.0	1/11/83
9	7	2 1 1 1	1	56			-1.0	75.5	-1.0	0.0	0.0	6	180	-9.0	1/11/83
9	8	2 1 1 1	5	53			86.5	80.7	81.2	0.0	0.0	6	180	-9.0	1/11/83
9	9	2 1 1 1	5	52			86.6	81.0	81.2	0.0	0.0	6	180	-9.0	1/11/83
9	10	1 1 1 1	0	53			77.7	72.8	72.6	0.0	0.0	6	180	-9.0	1/11/83
9	11	2 1 1 1	5	49			91.4	86.8	86.2	0.0	0.0	6	180	-9.0	1/11/83
9	12	2 1 1 1	1	61			80.3	75.6	76.1	0.0	0.0	6	180	-9.0	1/11/83
9	13	2 1 1 1	0	57			79.1	74.5	73.6	0.0	0.0	6	180	-9.0	1/11/83
9	14	2 1 1 1	1	51			77.4	72.5	72.0	0.0	0.0	6	180	-9.0	1/11/83
9	15	2 1 1 1	0	58			80.2	75.4	74.7	0.0	0.0	6	180	-9.0	1/11/83
9	16	2 1 1 1	1	61			80.7	74.4	74.4	0.0	0.0	6	180	-9.0	1/11/83
9	17	2 1 1 1	0	53			77.5	71.9	71.6	0.0	0.0	6	180	-9.0	1/11/83
9	18	2 1 1 1	1	57			81.4	76.1	75.6	0.0	0.0	6	180	-9.0	1/11/83
9	19	2 1 1 1	2	56			84.9	79.1	79.6	0.0	0.0	6	180	-9.0	1/11/83
9	20	2 1 1 1	5	55			95.8	89.8	90.2	0.0	0.0	6	180	-9.0	1/11/83
9	21	2 1 1 1	2	52			82.8	77.8	77.4	0.0	0.0	6	180	-9.0	1/11/83
9	22	2 1 1 1	1	52			84.8	79.0	78.6	0.0	0.0	6	180	-9.0	1/11/83
9	23	2 1 1 1	5	59			88.7	83.7	83.5	0.0	0.0	6	180	-9.0	1/11/83
9	24	2 1 1 1	5	55			88.7	83.9	83.6	0.0	0.0	6	180	-9.0	1/11/83
9	25	2 1 1 1	5	43			83.4	78.1	78.6	0.0	0.0	6	180	-9.0	1/11/83
9	26	2 1 1 1	5	61			92.9	89.1	87.3	0.0	0.0	6	180	-9.0	1/11/83
9	27	2 1 1 1	0	55			77.3	72.2	71.9	0.0	0.0	6	180	-9.0	1/11/83
9	28	2 0 1 1	1	49			82.4	76.9	77.8	0.0	0.0	6	170	-8.9	1/11/83
9	29	2 1 1 1	5	55			87.1	82.4	82.2	0.0	0.0	6	170	-8.9	1/11/83
9	30	2 1 1 1	1	57			80.9	75.5	75.9	0.0	0.0	6	170	-8.9	1/11/83
9	31	2 1 1 1	2	55			89.2	84.0	83.7	0.0	0.0	6	170	-8.9	1/11/13
9	32	2 1 1 1	5	46			88.6	82.8	82.8	0.0	0.0	6	170	-8.9	1/11/83
9	33	2 1 1 1	0	48			74.8	70.4	70.2	0.0	0.0	6	170	-8.9	1/11/83
9	34	2 1 1 1	5	65			91.8	86.2	86.2	0.0	0.0	6	170	-8.9	1/11/83
9	35	2 1 1 1	2	60			87.4	83.3	82.1	0.0	0.0	6	170	-8.9	1/11/83
9	36	2 1 1 1	0	53			77.6	72.6	72.8	0.0	0.0	6	170	-8.9	1/11/83
9	37	2 1 1 1	5	54			90.0	84.4	84.8	0.0	0.0	6	170	-8.9	1/11/83
9	38	2 1 1 1	1	44			77.2	72.9	72.1	0.0	0.0	6	170	-8.9	1/11/83
9	39	2 1 1 1	5	57			88.6	83.3	83.1	0.0	0.0	6	170	-8.9	1/11/83
9	40	2 1 1 1	5	50			87.0	81.5	81.6	0.0	0.0	6	170	-8.9	1/11/83
9	41	2 1 1 1	5	52			90.7	85.4	85.7	0.0	0.0	6	170	-8.9	1/11/83
9	42	2 1 1 1	2	55			83.7	79.2	78.5	0.0	0.0	6	170	-8.9	1/11/83
9	43	2 1 1 1	5	57			90.7	86.5	85.5	0.0	0.0	6	170	-8.9	1/11/83
9	44	2 1 1 1	0	57			82.0	75.6	75.8	0.0	0.0	6	170	-8.9	1/11/83
9	45	2 1 1 1	5	53			85.4	79.5	80.5	0.0	0.0	6	170	-8.9	1/11/83
9	46	2 1 1 1	5	49			87.0	83.2	82.5	0.0	0.0	6	170	-8.9	1/11/83
9	47	2 1 1 1	1	54			80.8	74.7	75.7	0.0	0.0	6	170	-8.9	1/11/83
9	48	2 1 1 1	0	64			81.5	76.8	77.4	0.0	0.0	6	170	-8.9	1/11/83
9	49	2 1 1 1	5	51			87.2	83.3	82.5	0.0	0.0	6	170	-8.9	1/11/83
9	50	2 1 1 1	2	49			84.7	80.6	79.9	0.0	0.0	6	170	-8.9	1/11/83
9	51	2 1 1 1	1	60			81.6	76.0	76.6	0.0	0.0	6	170	-8.9	1/11/83
9	52	2 1 1 1	1	54			80.3	74.6	75.5	0.0	0.0	6	170	-8.9	1/11/83
9	53	2 1 1 1	0	56			78.2	72.6	72.6	0.0	0.0	6	170	-8.9	1/11/83
9	54	2 1 1 1	5	52			86.4	80.8	81.0	0.0	0.0	6	170	-8.9	1/11/83
9	55	2 1 1 1	5	57			90.5	84.6	84.7	0.0	0.0	6	170	-8.9	1/11/83
9	56	1 1 1 1	5	62			93.0	87.4	88.0	0.0	0.0	6	170	-8.9	1/11/83
9	57	1 1 1 1	0	46			77.1	72.2	72.8	0.0	0.0	6	170	-8.9	1/11/83
9	58	1 1 1 1	1	52			79.4	74.9	74.5	0.0	0.0	6	170	-8.9	1/11/83
9	59	1 1 1 1	5	54			89.1	83.1	83.6	0.0	0.0	6	170	-8.9	1/11/83
9	60	1 1 1 1	1	52			80.4	74.1	74.4	0.0	0.0	6	170	-8.9	1/11/83
9	61	1 1 1 1	2	43			85.2	80.7	79.9	0.0	0.0	6	170	-8.9	1/11/83
9	62	1 1 1 1	0	61			79.6	75.6	74.2	0.0	0.0	6	170	-8.9	1/11/83
9	63	2 1 1 1	5	53			89.1	83.8	83.8	0.0	0.0	6	170	-8.9	1/11/83
9	64	1 1 1 1	5	52			92.5	86.7	86.7	0.0	0.0	6	170	-8.9	1/11/83
9	65	1 1 1 1	0	60			80.5	75.3	76.2	0.0	0.0	6	170	-8.9	1/11/83
9	66	1 1 1 1	0	56			76.9	71.9	72.6	0.0	0.0	6	170	-8.9	1/11/83
9	67	0 1 1 1	0	60			77.6	72.8	72.7	0.0	0.0	6	170	-8.9	1/11/83
9	68	1 1 1 1	1	60			81.9	77.4	77.4	0.0	0.0	6	170	-8.9	1/11/83
9	69	2 1 1 1	1	62			82.7	76.9	77.4	0.0	0.0	6	170	-8.9	1/11/83
9	70	2 1 1 1	0	51			77.2	72.5	72.0	0.0	0.0	6	170	-8.9	1/11/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH QUAL. VEH	DEL/LV	VEH TYPE	SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDED	WAINGDLE	VWEICNTDOR	DATE
9	71	2	1	1	1	2 57	85.1	80.2	79.5	0.0	0.0	6	170	-8.9	1/11/83
9	72	1	1	1	1	5 56	90.7	85.2	85.0	0.0	0.0	6	170	-8.9	1/11/83
9	73	1	1	1	1	0 50	75.0	70.0	69.9	0.0	0.0	6	170	-8.9	1/11/83
9	74	1	1	1	1	5 54	89.5	83.3	84.1	0.0	0.0	6	170	-8.9	1/11/83
9	75	0	1	1	1	5 55	89.0	84.1	83.6	0.0	0.0	6	170	-8.9	1/11/83
9	76	1	1	1	1	1 58	80.2	75.8	75.2	0.0	0.0	6	150	-7.8	1/11/83
9	77	1	1	1	1	0 70	81.9	76.3	76.1	0.0	0.0	6	150	-7.8	1/11/83
9	78	0	1	1	1	1 64	80.5	75.1	75.4	0.0	0.0	6	150	-7.8	1/11/83
9	79	1	1	1	1	0 60	79.6	75.1	75.1	0.0	0.0	6	150	-7.8	1/11/83
9	80	1	1	1	1	1 58	80.9	76.0	74.3	0.0	0.0	6	150	-7.8	1/11/83
9	81	0	1	1	1	1 61	79.7	75.8	75.2	0.0	0.0	6	150	-7.8	1/11/83
9	82	0	0	1	1	2 40	77.4	73.8	74.1	0.0	0.0	6	150	-7.8	1/11/83
9	83	2	1	1	1	0 53	76.0	70.9	71.2	0.0	0.0	6	150	-7.8	1/11/83
9	84	1	1	1	1	0 52	77.1	72.1	71.5	0.0	0.0	6	150	-7.8	1/11/83
9	85	2	1	1	1	1 55	78.8	73.4	73.2	0.0	0.0	6	150	-7.8	1/11/83
9	86	1	1	1	1	0 55	78.0	72.6	72.2	0.0	0.0	6	150	-7.8	1/11/83
9	87	0	1	1	1	2 55	86.8	80.3	79.9	0.0	0.0	6	150	-7.8	1/11/83
9	88	1	0	1	1	0 55	81.9	77.9	77.3	0.0	0.0	6	150	-7.8	1/11/83
9	89	0	1	1	1	5 51	89.9	84.7	84.9	0.0	0.0	6	150	-7.8	1/11/83
9	90	1	1	1	1	0 61	78.6	73.7	73.3	0.0	0.0	6	170	-8.9	1/11/83
9	91	2	1	1	1	5 46	83.5	77.8	77.9	0.0	0.0	6	170	-8.9	1/11/83
9	92	1	1	1	1	2 48	83.0	77.9	79.3	0.0	0.0	6	170	-8.9	1/11/83
9	93	0	1	1	1	2 52	84.0	78.8	79.3	0.0	0.0	6	170	-8.9	1/11/83
9	94	1	1	1	1	4 54	88.8	83.2	83.2	0.0	0.0	6	170	-8.9	1/11/83
9	95	1	1	1	1	0 56	76.6	71.6	71.5	0.0	0.0	6	170	-8.9	1/11/83
9	96	2	1	1	1	1 61	80.5	74.2	74.3	0.0	0.0	6	170	-8.9	1/11/83
9	97	1	1	1	1	1 55	78.3	73.9	73.0	0.0	0.0	6	170	-8.9	1/11/83
9	98	0	1	1	1	1 57	79.1	74.8	73.8	0.0	0.0	6	170	-8.9	1/11/83
9	99	1	1	1	1	0 55	76.5	71.3	70.3	0.0	0.0	6	170	-8.9	1/11/83
9	100	0	1	1	1	0 54	79.8	74.5	73.4	0.0	0.0	6	170	-8.9	1/11/83
9	101	2	1	1	1	1 61	80.1	74.8	75.0	0.0	0.0	6	170	-8.9	1/11/83
9	102	2	1	1	1	1 55	79.5	74.7	74.7	0.0	0.0	6	170	-8.9	1/11/83
9	103	2	1	1	1	1 56	79.6	74.7	74.6	0.0	0.0	6	170	-8.9	1/11/83
9	104	2	1	1	1	0 48	76.7	71.3	71.2	0.0	0.0	6	170	-8.9	1/11/83
9	105	2	1	1	1	2 49	82.5	78.5	77.3	0.0	0.0	6	170	-8.9	1/11/83
9	106	2	1	1	1	1 65	80.5	76.1	75.0	0.0	0.0	6	170	-8.9	1/11/83
9	107	0	0	1	1	5 54	87.6	83.1	82.5	0.0	0.0	6	170	-8.9	1/11/83
9	108	2	1	1	1	1 68	82.5	78.6	77.3	0.0	0.0	6	170	-8.9	1/11/83
9	109	2	1	1	1	1 48	76.9	71.6	71.4	0.0	0.0	6	170	-8.9	1/11/83
9	110	2	1	1	1	3 53	86.4	81.2	80.5	0.0	0.0	6	170	-8.9	1/11/83
9	111	2	1	1	1	5 52	89.9	84.8	84.4	0.0	0.0	3	150	-3.9	1/11/83
9	112	2	1	1	1	5 48	88.2	82.6	82.9	0.0	0.0	3	150	-3.9	1/11/83
9	113	2	1	1	1	0 55	75.9	71.1	70.7	0.0	0.0	3	150	-3.9	1/11/83
9	114	1	1	1	1	5 48	90.4	85.4	85.2	0.0	0.0	3	150	-3.9	1/11/83
9	115	2	1	1	1	5 54	94.8	88.4	88.1	0.0	0.0	3	150	-3.9	1/11/83
9	116	2	1	1	1	2 62	86.7	81.3	80.8	0.0	0.0	3	150	-3.9	1/11/83
9	117	2	1	1	1	1 55	79.0	73.3	73.8	0.0	0.0	3	150	-3.9	1/11/83
9	118	2	1	1	1	0 49	79.0	73.5	72.9	0.0	0.0	3	150	-3.9	1/11/83
9	119	2	1	1	1	2 60	85.0	80.8	79.4	0.0	0.0	3	150	-3.9	1/11/83
9	120	2	1	1	1	2 53	83.2	77.7	77.1	0.0	0.0	3	150	-3.9	1/11/83
9	121	2	1	1	1	3 60	89.4	83.7	83.9	0.0	0.0	3	150	-3.9	1/11/83
9	122	2	1	1	1	5 54	91.3	85.6	85.6	0.0	0.0	3	150	-3.9	1/11/83
9	123	2	1	1	1	1 64	80.7	75.8	74.8	0.0	0.0	3	180	-4.5	1/11/83
9	124	2	1	1	1	5 42	87.9	83.6	84.4	0.0	0.0	3	180	-4.5	1/11/83
9	125	2	1	1	1	1 75	82.4	78.1	77.3	0.0	0.0	3	180	-4.5	1/11/83
9	126	2	1	1	1	1 53	86.5	80.6	80.5	0.0	0.0	6	190	-8.9	1/11/83
9	127	2	1	1	1	3 52	90.1	84.0	84.8	0.0	0.0	6	190	-8.9	1/11/83
9	128	0	1	1	1	5 41	86.5	80.7	80.5	0.0	0.0	6	190	-8.9	1/11/83
9	129	2	1	1	1	3 52	85.0	79.9	80.1	0.0	0.0	6	200	-8.5	1/11/83
9	130	2	1	1	1	5 51	95.7	89.3	89.2	0.0	0.0	6	200	-8.5	1/11/83
9	131	2	1	1	1	5 54	92.4	88.3	87.1	0.0	0.0	6	200	-8.5	1/11/83
9	132	2	1	1	1	2 50	84.6	79.7	79.0	0.0	0.0	6	200	-8.5	1/11/83
9	133	2	1	1	1	1 51	80.7	76.0	74.5	0.0	0.0	6	200	-8.5	1/11/83
9	134	2	1	1	1	5 52	88.1	83.8	82.9	0.0	0.0	6	200	-8.5	1/11/83
9	135	2	1	1	1	0 61	82.3	77.1	77.0	0.0	0.0	6	200	-8.5	1/11/83
9	136	2	1	1	1	5 59	100.1	92.9	95.2	0.0	0.0	6	200	-8.5	1/11/83
9	137	2	1	1	1	2 55	84.9	79.3	79.5	0.0	0.0	6	200	-8.5	1/11/83
9	138	2	1	1	1	5 54	88.8	83.1	83.0	0.0	0.0	6	200	-8.5	1/11/83
9	139	2	1	1	1	0 60	80.7	75.9	76.7	0.0	0.0	6	200	-8.5	1/11/83
9	140	2	1	1	1	0 55	80.2	75.5	75.3	0.0	0.0	6	200	-8.5	1/11/83

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH VEL	DEL	ENV	TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	WEICNTDOR	DATE
9	141	2	1	1	1	1	60	81.8	77.1	76.7	0.0	0.0	6	200	-8.5	1/11/83
9	142	2	1	1	1	1	60	81.1	76.4	76.1	0.0	0.0	6	200	-8.5	1/11/83
9	143	1	1	1	1	2	57	85.4	81.1	80.2	0.0	0.0	6	200	-8.5	1/11/83
9	144	2	1	1	1	0	62	79.4	74.9	74.2	0.0	0.0	6	200	-8.5	1/11/83
9	145	2	1	1	1	1	61	84.2	79.3	79.2	0.0	0.0	6	200	-8.5	1/11/83
9	146	2	1	1	1	3	60	88.9	83.7	83.1	0.0	0.0	6	200	-8.5	1/11/83
9	147	2	1	1	1	1	57	81.8	77.1	76.5	0.0	0.0	6	200	-8.5	1/11/83
9	148	2	1	1	1	0	57	80.2	74.9	74.0	0.0	0.0	6	200	-8.5	1/11/83
9	149	2	1	1	1	2	55	84.2	79.1	78.6	0.0	0.0	6	200	-8.5	1/11/83
9	150	2	1	1	1	0	65	81.2	76.0	75.8	0.0	0.0	3	190	-4.4	1/11/83
9	151	2	1	1	1	0	66	82.4	77.9	77.5	0.0	0.0	3	190	-4.4	1/11/83
9	152	2	1	1	1	0	70	82.6	77.6	77.5	0.0	0.0	3	190	-4.4	1/11/83
9	153	2	1	1	1	5	61	92.5	87.2	86.9	0.0	0.0	3	190	-4.4	1/11/83
9	154	2	1	1	1	1	57	80.9	75.5	74.8	0.0	0.0	3	190	-4.4	1/11/83
9	155	2	1	1	1	0	56	79.4	73.6	73.7	0.0	0.0	3	190	-4.4	1/11/83
9	156	2	1	1	1	5	53	87.7	82.5	82.3	0.0	0.0	3	190	-4.4	1/11/83
9	157	2	1	1	1	0	50	77.1	73.2	71.7	0.0	0.0	3	190	-4.4	1/11/83
9	158	1	1	1	1	1	60	81.0	75.5	75.4	0.0	0.0	3	190	-4.4	1/11/83
9	159	2	1	1	1	5	64	95.4	90.9	90.6	0.0	0.0	6	200	-8.5	1/11/83
9	160	2	1	1	1	5	56	90.5	84.9	85.2	0.0	0.0	6	200	-8.5	1/11/83
9	161	2	1	1	1	0	55	80.6	75.5	75.1	0.0	0.0	6	200	-8.5	1/11/83
9	162	0	1	1	1	0	54	78.4	74.1	74.0	0.0	0.0	6	200	-8.5	1/11/83
9	163	1	1	1	1	5	53	88.1	82.7	82.8	0.0	0.0	6	200	-8.5	1/11/83
9	164	0	0	1	1	1	48	83.3	79.4	79.3	0.0	0.0	6	200	-8.5	1/11/83
9	165	2	1	1	1	1	57	81.5	76.7	75.6	0.0	0.0	6	200	-8.5	1/11/83
9	166	0	0	1	1	5	45	86.2	80.9	80.9	0.0	0.0	6	200	-8.5	1/11/83
9	167	2	1	1	1	3	45	84.3	79.7	79.3	0.0	0.0	6	200	-8.5	1/11/83
9	168	2	1	1	1	1	59	81.4	76.0	76.1	0.0	0.0	6	200	-8.5	1/11/83
9	169	2	1	1	1	1	62	81.5	76.4	75.3	0.0	0.0	6	200	-8.5	1/11/83
9	170	2	1	1	1	1	55	-1.0	75.5	-1.0	0.0	0.0	6	200	-8.5	1/11/83
9	171	2	1	1	1	1	51	79.6	74.0	73.7	0.0	0.0	6	200	-8.5	1/11/83
9	172	2	1	1	1	5	47	87.9	82.6	82.6	0.0	0.0	6	200	-8.5	1/11/83
9	173	2	1	1	1	2	51	84.7	79.3	79.1	0.0	0.0	6	200	-8.5	1/11/83
9	174	2	1	1	1	2	61	88.3	83.0	82.5	0.0	0.0	6	200	-8.5	1/11/83
9	175	2	1	1	1	5	52	87.0	81.7	81.6	0.0	0.0	3	180	-4.5	1/11/83
9	176	1	1	1	1	0	57	79.1	74.5	74.3	0.0	0.0	3	180	-4.5	1/11/83
9	177	0	1	1	1	2	59	88.3	82.4	82.3	0.0	0.0	3	180	-4.5	1/11/83
9	178	0	0	1	1	1	56	77.8	73.2	72.7	0.0	0.0	3	180	-4.5	1/11/83
9	179	1	1	1	1	1	53	80.0	75.2	74.5	0.0	0.0	3	180	-4.5	1/11/83
9	180	2	1	1	1	1	59	79.8	75.1	74.4	0.0	0.0	3	180	-4.5	1/11/83
9	181	1	1	1	1	5	56	87.4	83.7	82.7	0.0	0.0	3	180	-4.5	1/11/83
9	182	1	1	1	1	2	58	87.9	83.1	83.1	0.0	0.0	3	180	-4.5	1/11/83
9	183	1	1	1	1	1	65	83.2	77.5	77.6	0.0	0.0	3	180	-4.5	1/11/83
9	184	2	1	1	1	0	52	78.3	73.6	72.6	0.0	0.0	3	180	-4.5	1/11/83
9	185	2	1	1	1	1	57	80.0	75.0	74.3	0.0	0.0	3	180	-4.5	1/11/83
9	186	1	1	1	1	5	47	88.2	83.6	83.0	0.0	0.0	3	180	-4.5	1/11/83
9	187	2	1	1	1	1	60	81.5	76.3	76.1	0.0	0.0	3	180	-4.5	1/11/83
9	188	2	1	1	1	5	48	91.9	86.4	86.2	0.0	0.0	3	180	-4.5	1/11/83
9	189	2	1	1	1	0	55	78.2	73.2	72.7	0.0	0.0	3	180	-4.5	1/11/83
9	190	2	1	1	1	1	59	82.2	76.3	76.2	0.0	0.0	3	180	-4.5	1/11/83
9	191	2	1	1	1	0	55	84.6	79.2	79.4	0.0	0.0	3	180	-4.5	1/11/83
9	192	2	1	1	1	1	58	79.2	73.5	72.8	0.0	0.0	3	180	-4.5	1/11/83
9	193	2	1	1	1	0	59	80.8	75.1	75.3	0.0	0.0	3	180	-4.5	1/11/83
9	194	2	1	1	1	5	58	93.1	88.3	87.1	0.0	0.0	6	180	-9.0	1/11/83
9	195	2	1	1	1	0	58	78.7	74.2	73.4	0.0	0.0	6	180	-9.0	1/11/83
9	196	2	1	1	1	0	59	81.5	76.8	75.8	0.0	0.0	6	180	-9.0	1/11/83
9	197	1	1	1	1	1	55	79.8	74.9	74.6	0.0	0.0	6	180	-9.0	1/11/83
9	198	2	1	1	1	0	58	79.5	75.4	74.4	0.0	0.0	6	180	-9.0	1/11/83
9	199	2	1	1	1	2	54	86.7	83.4	83.5	0.0	0.0	6	180	-9.0	1/11/83
9	200	2	1	1	1	1	53	82.0	77.2	77.2	0.0	0.0	6	180	-9.0	1/11/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	D/L	ENV	VEH TYPE	SPEED	MPC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	WEICNTDOR	DATE
10	1	1	1	1	1	1	52	78.4	70.2	72.5	0.0	0.0	3	290	1.5	1/12/83
10	2	2	1	1	1	1	57	79.9	73.4	74.7	0.0	0.0	3	290	1.5	1/12/83
10	3	2	1	1	1	2	56	82.5	76.3	76.6	0.0	0.0	3	290	1.5	1/12/83
10	4	0	0	1	1	1	62	80.1	74.1	75.8	0.0	0.0	3	290	1.5	1/12/83
10	5	2	1	1	1	1	61	78.6	71.8	73.4	0.0	0.0	3	290	1.5	1/12/83
10	6	1	1	1	1	3	61	86.0	80.7	81.6	0.0	0.0	3	290	1.5	1/12/83
10	7	0	1	1	1	1	51	75.6	69.6	71.2	0.0	0.0	3	290	1.5	1/12/83
10	8	1	1	1	1	0	61	78.1	72.7	73.6	0.0	0.0	3	290	1.5	1/12/83
10	9	2	1	1	1	3	51	90.4	85.1	85.0	0.0	0.0	3	290	1.5	1/12/83
10	10	1	1	1	1	3	59	84.6	79.8	80.0	0.0	0.0	3	290	1.5	1/12/83
10	11	2	1	1	1	1	54	79.7	72.8	74.3	0.0	0.0	3	290	1.5	1/12/83
10	12	2	1	1	1	0	65	-1.0	73.5	-1.0	0.0	0.0	3	290	1.5	1/12/83
10	13	2	1	1	1	3	52	88.0	81.b	82.4	0.0	0.0	3	290	1.5	1/12/83
10	14	2	1	1	1	4	50	91.0	85.i	86.3	0.0	0.0	3	290	1.5	1/12/83
10	15	2	1	1	1	0	56	76.3	71.3	72.3	0.0	0.0	3	290	1.5	1/12/83
10	16	1	1	1	1	0	46	74.7	68.4	69.4	0.0	0.0	3	290	1.5	1/12/83
10	17	1	1	1	1	0	55	76.5	70.4	72.2	0.0	0.0	3	290	1.5	1/12/83
10	18	0	0	1	1	1	57	79.1	74.1	75.3	0.0	0.0	3	290	1.5	1/12/83
10	19	0	1	1	1	1	56	80.1	73.1	74.9	0.0	0.0	3	290	1.5	1/12/83
10	20	2	1	1	1	5	57	90.8	83.9	85.6	0.0	0.0	3	290	1.5	1/12/83
10	21	1	1	1	1	0	53	76.1	69.8	71.6	0.0	0.0	3	290	1.5	1/12/83
10	22	1	1	1	1	2	52	83.7	76.6	78.2	0.0	0.0	3	290	1.5	1/12/83
10	23	1	1	1	1	1	55	78.3	71.4	73.2	0.0	0.0	3	290	1.5	1/12/83
10	24	1	1	1	1	1	64	84.0	77.8	78.5	0.0	0.0	3	290	1.5	1/12/83
10	25	0	0	1	1	0	54	73.6	69.2	70.0	0.0	0.0	3	290	1.5	1/12/83
10	26	0	0	1	1	0	60	82.3	77.5	79.7	0.0	0.0	3	290	1.5	1/12/83
10	27	0	1	1	1	1	63	80.2	74.5	75.7	0.0	0.0	0	0	0.0	1/12/83
10	28	0	1	1	1	0	62	82.6	77.0	78.2	0.0	0.0	0	0	0.0	1/12/83
10	29	0	0	1	1	0	50	76.2	72.8	73.0	0.0	0.0	0	0	0.0	1/12/83
10	30	2	1	1	1	3	45	88.9	82.6	83.4	0.0	0.0	0	0	0.0	1/12/83
10	31	1	1	1	1	0	50	75.0	68.9	70.3	0.0	0.0	0	0	0.0	1/12/83
10	32	1	1	1	1	1	53	76.6	69.5	71.1	0.0	0*0	0	0	0.0	1/12/83
10	33	1	1	1	1	1	53	39.0	72.1	74.0	0.0	0.0	0	0	0.0	1/12/83
10	34	2	1	1	1	5	60	89.2	83.1	83.7	0.0	0.0	0	0	0.0	1/12/83
10	35	1	1	1	1	0	47	78.8	73.6	73.6	0.0	0.0	0	0	0.0	1/12/83
10	36	2	1	1	1	2	50	84.2	77.7	78.8	0.0	0.0	0	0	0.0	1/12/83
10	37	0	1	1	1	1	57	80.7	73.0	75.0	0.0	0.0	0	0	0.0	1/12/83
10	38	0	0	1	1	0	58	78.2	73.9	74.6	0.0	0.0	0	0	0.0	1/12/83
10	39	0	0	1	1	0	56	77.2	73.6	74.1	0.0	0.0	0	0	0.0	1/12/83
10	40	2	1	1	1	3	54	92.4	85.6	87.2	0.0	0.0	0	0	0.0	1/12/83
10	41	1	1	1	1	0	42	73.8	69.5	70.2	0.0	0.0	0	0	0.0	1/12/83
10	42	2	1	1	1	5	60	-1.0	83.0	-1.0	0.0	0.0	0	0	0.0	1/12/83
10	43	2	1	1	1	5	45	87.2	80.5	81.9	0.0	0.0	0	0	0.0	1/12/83
10	44	2	1	1	1	3	57	88.3	82.0	82.8	0.0	0.0	3	290	1.5	1/12/83
10	45	2	1	1	1	0	54	76.6	70.2	71.4	0.0	0.0	3	290	1.5	1/12/83
10	46	1	1	1	1	1	60	81.7	74.3	76.4	0.0	0.0	3	290	1.5	1/12/83
10	47	2	1	1	1	1	55	80.1	73.6	74.7	0.0	0.0	3	290	1.5	1/12/83
10	48	0	0	1	1	1	60	78.6	72.9	74.2	0.0	0.0	3	290	1.5	1/12/83
10	49	2	1	1	1	5	43	91.4	85.0	86.4	0.0	0.0	3	290	1.5	1/12/83
10	50	1	1	1	1	2	52	83.7	78.1	78.5	0.0	0.0	3	290	1.5	1/12/83
10	51	1	1	1	1	1	54	79.4	72.9	74.3	0.0	0.0	3	290	1.5	1/12/83
10	52	0	0	1	1	1	57	77.7	71.8	72.9	0.0	0.0	0	0	0.0	1/12/83
10	53	1	1	1	1	2	52	85.0	79.6	80.6	0.0	0.0	0	0	0.0	1/12/83
10	54	2	1	1	1	2	50	-1.0	82.5	-1.0	0.0	0.0	0	0	0.0	1/12/83
10	55	0	0	0	1	0	46	79.4	73.3	75.2	0.0	0.0	0	0	0.0	1/12/83
10	56	1	1	1	1	0	54	76.3	71.0	72.3	0.0	0.0	0	0	0.0	1/12/83
10	57	1	1	1	1	0	55	77.0	70.7	71.6	0.0	0.0	0	0	0.0	1/12/83
10	58	1	1	1	1	1	51	76.1	70.8	71.5	0.0	0.0	0	0	0.0	1/12/83
10	59	1	1	1	1	2	54	81.3.	73.8	75.2	0.0	0.0	0	0	0.0	1/12/83
10	60	1	1	1	1	0	56	75.2	69.7	70.7	0.0	0.0	0	0	0.0	1/12/83
10	61	1	1	1	1	1	58	78.4	70.9	73.0	0.0	0.0	0	0	0.0	1/12/83
10	62	1	1	1	1	0	64	78.6	72.2	74.2	0.0	0.0	0	0	0.0	1/12/83
10	63	2	1	1	1	2	62	88.3	82.1	82.5	0.0	0.0	0	0	0.0	1/12/83
10	64	0	1	1	1	0	58	80.5	74.5	75.6	0.0	0.0	0	0	0.0	1/12/83
10	65	1	1	1	1	1	61	81.6	73.9	76.3	0.0	0.0	0	0	0.0	1/12/83
10	66	1	1	1	1	0	57	78.1	71.3	73.2	0.0	0.0	0	0	0.0	1/12/83
10	67	0	0	1	1	0	48	77.4	70.8	72.2	0.0	0.0	0	0	0.0	1/12/83
10	68	1	1	1	1	2	58	84.5	79.2	78.5	0.0	0.0	0	0	0.0	1/12/83
10	69	2	1	1	1	2	58	92.2	86.0	86.4	0.0	0.0	0	0	0.0	1/12/83
10	70	2	1	1	1	5	50	85.1	78.7	79.8	0.0	0.0	0	0	0.0	1/12/83

DATA SUMMARY

LOC.	EVENT	EVENT QUAL.				VEH		MIC								
STE	EVENT	GLR	VEH	D/L	ENV	TYPE	SPEED	(1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
								DBA								
10	71	2	1	1	1	5	59	88.0	82.1	82.4	0.0	0.0	0	0	0.0	1/12/83
10	72	0	1	1	1	0	46	77.6	74.6	74.9	0.0	0.0	0	0	0.0	1/12/83
10	73	1	1	1	1	1	61	80.1	73.1	74.7	0.0	0.0	0	0	0.0	1/12/83
10	74	1	1	1	1	1	57	81.3	74.2	75.4	0.0	0.0	0	0	0.0	1/12/83
10	75	0	1	1	1	0	51	77.6	72.9	73.6	0.0	0.0	0	0	0.0	1/12/83
10	76	1	1	1	1	1	57	76.7	71.0	72.3	0.0	0.0	0	0	0.0	1/12/83
10	77	1	1	1	1	3	61	85.1	78.3	79.5	0.0	0.0	0	0	0.0	1/12/83
10	78	0	1	1	1	0	56	80.0	74.4	75.3	0.0	0.0	0	0	0.0	1/12/83
10	79	1	1	1	1	2	53	84.6	78.8	79.8	0.0	0.0	0	0	0.0	1/12/83
10	80	1	1	1	1	2	56	85.3	78.9	79.9	0.0	0.0	0	0	0.0	1/12/83
10	81	0	1	1	1	2	55	82.4	76.8	77.1	0.0	0.0	0	0	0.0	1/12/83
10	82	0	1	1	1	1	62	80.0	73.3	74.4	0.0	0.0	0	0	0.0	1/12/83
10	83	2	1	1	1	2	50	83.8	77.8	78.8	0.0	0.0	0	0	0.0	1/12/83
10	84	1	1	1	1	2	60	87.1	80.1	81.2	0.0	0.0	0	0	0.0	1/12/83
10	85	2	1	1	1	5	54	86.2	80.4	81.3	0.0	0.0	0	0	0.0	1/12/83
10	86	1	1	1	1	3	42	84.3	77.6	77.8	0.0	0.0	0	0	0.0	1/12/83
10	87	0	1	1	1	0	52	77.7	72.5	72.8	0.0	0.0	0	0	0.0	1/12/83
10	88	1	1	1	1	0	64	82.4	75.6	77.4	0.0	0.0	0	0	0.0	1/12/83
10	89	0	1	1	1	0	59	79.2	73.2	74.7	0.0	0.0	0	0	0.0	1/12/83
10	90	1	1	1	1	2	55	86.3	78.6	81.4	0.0	0.0	0	0	0.0	1/12/83
10	91	2	1	1	1	5	54	88.8	82.6	83.1	0.0	0.0	0	0	0.0	1/12/83
10	92	1	1	1	1	1	48	76.2	70.9	72.3	0.0	0.0	0	0	0.0	1/12/83
10	93	0	0	1	1	1	55	78.7	74.6	75.7	0.0	0.0	0	0	0.0	1/12/83
10	94	1	1	1	1	0	57	77.3	72.1	72.9	0.0	0.0	0	0	0.0	1/12/83
10	95	1	1	1	1	0	57	75.6	69.8	71.3	0.0	0.0	0	0	0.0	1/12/83
10	96	2	1	1	1	2	52	89.1	82.4	83.3	0.0	0.0	0	0	0.0	1/12/83
10	97	1	1	1	1	2	45	81.7	76.5	77.3	0.0	0.0	0	0	0.0	1/12/83
10	98	0	1	1	1	0	54	75.4	69.7	71.0	0.0	0.0	0	0	0.0	1/12/83
10	99	1	1	1	1	0	54	78.3	72.0	72.9	0.0	0.0	0	0	0.0	1/12/83
10	100	0	1	1	1	1	59	80.6	73.2	75.2	0.0	0.0	0	0	0.0	1/12/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH VEL	DEH/L	EVH	TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIP NEDD	WAING NDLE	VWEIC NTDOR	DATE
								DBA								
11	1	2	1	1	1	1	54	83.1	78.7	78.8	73.7	73.7.	3	300	2.2	2/ 8/83
11	2	2	1	1	1	0	54	76.8	72.2	72.7	66.4	66.9	3	300	2.2	2/ 8/83
11	3	2	1	1	1	1	57	77.9	74.1	74.1	69.6	70.0	3	300	2.2	2/ 8/83
11	4	2	1	1	1	1	63	77.4	72.5	72.4	67.8	67.9	3	300	2.2	2/ 8/83
11	5	2	1	1	1	1	67	81.0	77.1	76.6	72.7	71.8	3	300	2.2	2/ 8/83
11	6	2	1	3	1	0	59	77.3	73.0	73.0	67.4	68.4	3	300	2.2	2/ 8/83
11	7	2	1	1	1	2	64	85.4	81.0	81.2	76.7	76.3	3	300	2.2	2/ 8/83
11	8	1	1	1	1	0	62	78.0	73.4	73.3	68.4	68.6	3	300	2.2	2/ 8/83
11	9	2	1	1	1	5	59	87.4	82.8	83.3	78.2	77.7	3	300	2.2	2/ 8/83
11	10	1	1	1	1	0	64	74.3	71.9	72.7	69.5	70.0	3	300	2.2	2/ 8/83
11	11	2	1	1	1	5	61	87.7	82.4	83.1	78.2	78.0	3	300	2.2	2/ 8/83
11	12	1	1	1	1	0	63	78.6	74.1	74.7	69.6	71.2	3	300	2.2	2/ 8/83
11	13	2	1	1	1	3	44	87.9	82.3	81.7	76.3	77.3	6	250	-3.1	2/ 8/83
11	14	2	1	1	1	5	57	87.0	82.3	82.3	77.3	77.0	6	250	-3.1	2/ 8/83
11	15	1	1	1	1	1	56	75.4	71.3	71.2	66.3	66.9	6	250	-3.1	2/ 8/83
11	16	2	1	1	1	5	60	87.1	82.2	82.5	76.8	76.3	6	250	-3.1	2/ 8/83
11	17	1	1	1	1	2	56	83.9	78.4	78.7	73.7	73.6	6	250	-3.1	2/ 8/83
11	18	2	1	1	1	5	67	88.4	84.4	84.1	80.7	79.8	6	270	0.0	2/ 8/83
11	19	1	1	1	1	1	57	78.1	72.8	73.4	68.2	68.8	6	270	0.0	2/ 8/83
11	20	2	1	1	1	2	56	87.3	82.3	82.2	77.0	77.0	6	270	0.0	2/. 8/83
11	21	2	1	1	1	1	59	77.4	73.5	73.6	68.2	69.4	6	270	0.0	2/ 8/83
11	22	2	1	1	1	1	55	84.3	79.3	80.0	74.6	75.1	6	270	0.0	2/ 8/83
11	23	2	1	1	1	5	66	87.9	83.1	83.2	78.0	77.8	6	270	0.0	2/ 8/83
11	24	2	1	1	1	5	58	90.1	84.5	84.4	79.8	78.6	6	270	0.0	2/ 8/83
11	25	1	1	1	1	5	60	87.4	82.1	82.4	78.0	77.1	6	270	0.0	2/ 8/83
11	26	2	1	1	1	5	60	88.1	83.3	83.8	79.4	78.1	6	270	0.0	2/ 8/83
11	27	2	1	1	1	0	50	75.7	71.3	71.1	66.2	66.5	6	270	0.0	2/ 8/83
11	28	2	1	1	1	5	54	88.4	83.7	83.0	78.7	77.7	6	270	0.0	2/ 8/83
11	29	1	1	1	1	1	65	78.4	73.5	73.5	69.1	68.6	6	270	0.0	2/ 8/83
11	30	2	1	1	1	5	56	87.4	81.6	82.2	78.2	77.0	6	270	0.0	2/ 8/83
11	31	0	1	0	1	2	59	82.5	77.4	77.3	72.6	72.5	6	270	0.0	2/ 8/83
11	32	2	1	1	1	2	55	80.3	75.4	75.3	70.2	70.9	6	270	0.0	2/ 8/83
11	33	2	1	1	1	2	41	81.1	75.2	75.8	70.7	70.5	6	270	0.0	2/ 8/83
11	34	2	1	1	1	0	68	80.3	74.8	74.9	69.6	70.0	6	270	0.0	2/ 8/83
11	35	1	1	1	1	5	64	87.8	82.6	82.8	78.1	77.2	6	270	0.0	2/ 8/83
11	36	1	1	1	1	1	54	-1.0	73.5	-1.0	-1.0	-1.0	6	270	0.0	2/ 8/83
11	37	2	1	1	1	7	64	87.7	82.4	82.4	77.8	77.2	6	270	0.0	2/ 8/83
11	38	2	1	1	1	1	54	76.5	71.0	71.8	66.4	67.1	6	270	0.0	2/ 8/83
11	39	0	1	1	1	1	60	77.4	72.6	73.4	68.6	69.4	6	270	0.0	2/ 8/83
11	40	2	1	1	1	5	58	90.2	86.1	85.3	82.2	81.5	6	270	0.0	21 8/83
11	41	2	1	1	1	5	61	87.9	83.2	82.8	78.3	78.4	6	270	0.0	2/ 8/83
11	42	2	1	1	1	5	56	89.1	84.6	84.8	78.7	78.4	6	270	0.0	2/ 8/83
11	43	1	1	1	1	2	55	78.8	74.1	74.4	69.7	68.7	6	270	0.0	2/ 8/83
11	44	0	1	1	1	5	58	86.9	82.1	82.5	78.1	78.3	6	270	0.0	2/ 8/83
11	45	2	1	1	1	0	55	78.0	73.7	73.7	68.2	68.8	6	270	0.0	2/ 8/83
11	46	2	1	1	1	2	52	82.0	77.6	77.1	73.6	71.9	6	270	0.0	2/ 8/83
11	47	2	1	1	1	1	57	78.2	73.3	73.4	68.4	68.8	6	270	0.0	2/ 8/83
11	48	2	1	1	1	5	61	87.4	82.8	82.8	78.2	77.9	6	270	0.0	2/ 8/83
11	49	2	1	1	1	3	56	84.2	78.6	79.4	74.9	73.9	6	270	0.0	2/ 8/83
11	50	1	1	1	1	1	61	77.1	72.6	72.8	68.2	68.9	6	270	0.0	2/ 8/83
11	51	0	1	1	1	1	66	80.9	76.4	76.9	73.1	72.6	6	270	0.0	2/ 8/83
11	52	1	1	1	1	5	49	86.2	80.9	81.1	76.8	76.3	6	270	0.0	2/ 8/83
11	53	1	1	1	1	1	59	76.6	71.9	71.9	66.6	67.3	6	270	0.0	2/ 8/83
11	54	2	1	1	1	5	63	88.7	84.3	84.6	79.3	78.9	6	270	0.0	2/ 8/83
11	55	2	1	1	1	1	67	80.2	75.4	75.7	69.0	71.3	6	270	0.0	2/ 8/83
11	56	0	1	1	1	0	60	76.8	71.9	72.1	67.1	68.6	6	270	0.0	2/ 8/83
11	57	0	0	1	1	0	50	75.7	71.2	72.2	68.8	69.7	6	270	0.0	2/ 8/83
11	58	2	1	1	1	3	58	86.8	82.6	82.4	77.8	77.7	6	270	0.0	2/ 8/83
11	59	2	1	1	1	1	54	76.2	71.7	72.3	67.1	68.1	6	270	0.0	2/ 8/83
11	60	0	1	1	1	1	67	80.9	76.2	76.7	72.1	71.7	6	270	0.0	2/ 8/83
11	61	2	1	1	1	5	61	85.3	80.4	80.8	75.5	75.5	6	270	0.0	2/ 8/83
11	62	1	1	1	1	1	60	77.0	72.4	72.4	68.0	67.9	6	270	0.0	2/ 8/83
11	63	2	1	1	1	1	49	73.8	69.0	69.7	63.4	65.6	6	270	0.0	2/ 8/83
11	64	2	1	1	1	0	64	77.3	72.8	73.0	67.4	68.8	6	270	0.0	2/ 8/83
11	65	2	1	1	1	1	63	80.7	75.2	77.0	71.2	70.7	6	270	0.0	2/ 8/83
11	66	2	1	1	1	1	57	78.0	72.4	74.0	66.5	67.4	6	280	1.6	2/ 8/83
11	67	2	1	1	1	2	65	84.8	79.2	79.5	73.9	73.7	6	280	1.6	2/ 8/83
11	68	2	1	1	1	1	63	76.8	72.1	73.0	67.0	67.6	6	280	1.6	2/ 8/83
11	69	2	1	1	1	1	56	79.8	73.8	75.0	70.2	71.7	6	280	1.6	2/ 8/83
11	70	2	1	1	1	5	55	91.3	86.2	86.4	80.2	80.8	6	280	1.6	2/ 8/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VHL	DV	EN	VEH TYP	SPED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINNGDLE	WEICNTDOR	DATE
11	71	1	1	1	1	0	57	77.9	73.0	73.6	69.2	68.9	6	280	1.6	2/ 8/83
11	72	2	1	1	1	5	59	90.4	86.2	86.0	80.3	79.8	6	280	1.6	2/ 8/83
11	73	1	1	1	1.	1	50	75.5	70.5	71.2	65.8	67.6	6	280	1.6	2/ 8/83
11	74	0	0	0	1	0	60	77.6	72.8	73.5	68.8	69.3	6	280	1.6	2/ 8/83
11	75	0	1	1	1	1	57	76.6	69.8	71.7	65.7	66.2	6	280	1.6	2/ 8/83
11	76	2	1	1	1	0	55	76.4	72.6	71.0	67.5	67.4	6	280	1.6	2/ 8/83
11	77	1	1	1	1	1	67	78.2	73.3	73.6	68.1	68.2	6	280	1.6	2/ 8/83
11	78	0	0	1	1	0	57	76.5	72.7	72.3	68.2	69.4	6	280	1.6	2/ 8/83
11	79	2	1	1	1	5	51	84.7	79.8	79.7	74.8	74.9	6	280	1.6	2/ 8/83
11	80	1	1	1	1	0	60	76.7	71.7	72.5	66.4	67.5	6	280	1.6	2/ 8/83
11	81	2	1	1	1	0	60	75.8	71.1	72.0	66.3	66.6	6	280	1.6	2/ 8/83
11	82	2	1	1	1	3	62	86.5	81.1	81.6	76.7	75.9	6	280	1.6	2/ 8/83
11	83	1	1	1	1	0	65	77.8	73.1	73.9	68.1	68.8	6	280	1.6	2/ 8/83
11	84	2	1	1	1	1	59	76.7	72.2	72.9	67.3	69.1	6	280	1.6	2/ 8/83
11	85	2	0	1	1	3	60	87.6	82.9	82.6	77.7	77.7	6	280	1.6	2/ 8/83
11	86	2	1	1	1	2	60	85.1	79.7	80.6	75.3	75.3	6	280	1.6	2/ 8/83
11	87	1	1	1	1	1	60	83.5	77.5	77.9	73.2	73.2	6	280	1.6	2/ 8/83
11	88	2	1	1	1	5	61	90.3	85.2	84.8	80.9	80.2	6	280	1.6	2/ 8/83
11	89	2	1	1	1	2	63	85.3	80.5	80.6	75.0	75.4	6	280	1.6	2/ 8/83
11	90	2	1	1	1	1	61	78.1	73.5	73.3	68.3	68.5	6	280	1.6	2/ 8/83
11	91	2	1	1	1	1	71	79.9	73.9	75.7	70.5	68.7	6	280	1.6	2/ 8/83
11	92	2	1	1	1	1	54	81.0	76.5	76.3	70.9	71.3	6	280	1.6	2/ 8/83
11	93	2	1	1	1	3	58	85.5	81.0	81.2	76.4	76.2	6	280	1.6	2/ 8/83
11	94	2	1	1	1	5	62	87.4	82.6	82.6	78.1	77.1	6	280	1.6	2/ 8/83
11	95	1	1	1	1	0	61	78.0	73.7	74.3	68.2	69.4	6	280	1.6	2/ 8/83
11	96	2	1	1	1	5	59	84.6	79.5	80.2	75.7	76.1	6	280	1.6	2/ 8/83
11	97	0	1	0	1	0	61	75.6	71.3	72.1	68.7	69.2	6	280	1.6	2/ 8/83
11	98	2	1	1	1	5	63	88.1	83.2	83.5	78.7	78.0	6	280	1.6	2/ 8/83
11	99	0	0	1	1	5	57	86.0	80.5	81.4	76.7	75.7	6	280	1.6	2/ 8/83
11	100	0	0	1	1	1	63	84.8	79.8	80.4	74.6	75.7	6	280	1.6	2/ 8/83
11	101	2	1	1	1	5	62	88.5	83.1	83.2	79.9	78.3	6	270	0.0	2/ 8/83
11	102	2	1	1	1	1	60	79.6	74.3	75.2	68.4	69.6	6	270	0.0	2/ 8/83
11	103	2	1	1	1	5	60	86.2	80.6	81.2	76.0	76.9	6	27.0	0.0	2/ 8/83
11	104	2	1	1	1	2	58	86.0	80.5	80.8	74.4	76.4	6	270	0.0	2/ 8/83
11	105	2	1	1	1	5	55	88.4	82.8	82.7	77.8	77.4	6	270	0.0	2/ 8/83
11	106	2	1	1	1	0	62	79.4	74.4	74.9	68.6	70.2	6	270	0.0	2/ 8/83
11	107	2	1	1	1	5	59	87.6	82.2	82.3	77.1	76.8	6	270	0.0	2/ 8/83
11	108	0	1	1	1	1	59	77.2	72.3	72.8	68.3	68.3	6	270	0.0	2/ 8/83
11	109	0	1	1	1	1	63	78.5	73.6	74.2	69.2	69.8	6	270	0.0	2/ 8/83
11	110	2	1	1	1	3	54	82.7	77.7	77.6	72.9	72.7	6	270	0.0	2/ 8/83
11	111	2	1	1	1	5	67	96.0	90.5	91.5	85.9	85.4	6	270	0.0	2/ 8/83
11	112	2	1	1	1	0	63	86.9	81.5	82.2	75.8	75.9	6	270	0.0	2/ 8/83
11	113	0	0	1	1	5	60	88.5	84.4	84.4	79.9	79.9	6	270	0.0	2/ 8/83
11	114	0	0	1	1	1	50	77.4	73.2	73.7	70.8	70.6	6	270	0.0	2/ 8/83
11	115	2	1	1	1	5	63	91.1	87.2	87.4	83.2	82.8	6	270	0.0	2/ 8/83
11	116	2	1	1	1	2	60	83.4	79.5	78.4	74.7	73.4	6	270	0.0	2/ 8/83
11	117	2	1	1	1	2	59	84.7	79.8	80.1	75.0	74.9	6	270	0.0	2/ 8/83
11	118	2	1	1	1	2	53	80.6	76.1	76.0	72.8	72.2	6	270	0.0	2/ 8/83
11	119	2	1	1	1	2	56	81.7	76.3	76.7	71.9	71.3	6	270	0.0	2/ 8/83
11	120	2	1	1	1	2	56	83.3	78.7	78.8	75.1	74.8	6	270	0.0	2/ 8/83
11	121	2	1	1	1	2	56	84.0	79.6	79.6	74.3	74.5	6	270	0.0	2/ 8/83
11	122	2	1	1	1	5	70	88.6	84.0	84.0	79.5	78.2	6	270	0.0	2/ 8/83
11	123	0	0	1	1	1	60	78.5	72.9	74.4	68.5	69.4	6	270	0.0	2/ 8/83
11	124	0	1	1	1	1	55	77.1	72.7	73.4	68.8	69.6	6	270	0.0	2/ 8/83
11	125	2	1	1	1	5	65	89.0	84.3	84.1	80.2	79.1	6	270	0.0	2/ 8/83
11	126	2	1	1	1	2	61	87.4	81.4	81.7	77.4	76.6	6	270	0.0	2/ 8/83
11	127	1	1	1	1	0	55	76.6	71.7	72.6	67.8	68.9	6	270	0.0	2/ 8/83
11	128	1	1	1	1	1	67	79.0	73.5	74.8	69.7	68.9	6	270	0.0	2/ 8/83
11	129	0	0	1	1	2	60	85.5	80.6	80.4	77.1	76.9	6	270	0.0	2/ 8/83
11	130	1	1	1	1	3	66	88.9	82.3	83.7	78.5	77.1	6	270	0.0	2/ 8/83
11	131	2	1	1	1	0	58	75.4	70.0	71.6	65.4	66.5	6	270	0.0	2/ 8/83
11	132	2	1	1	1	1	64	82.0	77.0	77.3	71.1	71.5	6	270	0.0	2/ 8/83
11	133	1	1	1	1	1	57	82.8	77.5	77.8	72.4	72.0	6	270	0.0	2/ 8/83
11	134	2	1	1	1	5	62	85.9	80.5	80.5	76.4	74.8	6	270	0.0	2/ 8/83
11	135	2	1	1	1	3	60	87.6	81.9	82.4	78.6	77.8	6	270	0.0	2/ 8/83
11	136	2	1	1	1	2	57	86.9	81.3	81.2	76.3	75.4	6	270	0.0	2/ 8/83
11	137	0	1	1	1	3	61	85.6	81.4	80.8	76.7	76.6	6	270	0.0	2/ 8/83
11	138	2	1	1	1	2	45	77.5	73.1	73.2	68.0	68.8	6	270	0.0	2/ 8/83
11	139	2	1	1	1	5	57	89.4	84.4	85.2	80.7	79.8	6	270	0.0	2/ 8/83
11	140	0	1	1	1	5	55	89.0	85.3	84.7	80.4	80.6	6	270	0.0	2/ 8/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	D/L	ENV	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIP NEDED	WAING DLE	WEICNTDOR	DATE
11	141	1	1	1	1	0	64	81.1	75.3	76.2	70.3	70.9	6	270	0.0	2/ 8/83
11	142	1	1	1	1	1	61	78.0	72.6	74.0	68.2	68.3	6	270	0.0	2/ 8/83
11	143	2	1	1	1	1	59	76.4	70.7	71.4	66.6	68.4	6	270	0.0	2/ 8/83
11	144	2	1	1	1	1	55	77.9	72.3	73.3	67.5	68.9	6	270	0.0	2/ 8/83
11	145	2	1	1	1	0	57	77.7	73.4	73.2	67.3	68.9	6	270	0.0	2/ 8/83
11	146	0	0	1	1	0	52	76.3	72.5	73.4	67.9	90.4	6	270	0.0	2/ 8/83
11	147	0	0	1	1	1	55	79.8	75.7	75.9	72.1	72.1	6	270	0.0	2/ 8/83
11	148	0	0	1	1	1	56	76.3	71.8	72.4	66.9	67.6	6	270	0.0	2/ 8/83
11	149	0	1	1	1	0	53	77.8	72.9	73.8	68.2	70.5	6	270	0.0	2/ 8/83
11	150	2	1	1	1	5	52	84.0	79.3	79.3	74.9	74.4	6	270	0.0	2/ 8/83
11	151	2	1	1	1	1	55	76.6	72.2	72.1	66.9	68.1	6	270	0.0	2/ 8/83
11	152	2	1	1	1	1	53	78.9	73.4	74.3	68.5	69.7	6	270	0.0	2/ 8/83
11	153	2	1	1	1	5	54	85.0	79.9	79.8	76.0	75.2	6	270	0.0	2/ 8/83
11	154	2	1	1	1	5	58	87.5	84.0	83.5	79.1	77.7	6	270	0.0	2/ 8/83
11	155	2	1	1	1	2	69	85.9	81.6	81.1	77.8	76.5	6	270	0.0	2/ 8/83
11	156	0	1	1	1	2	60	82.9	77.9	77.5	74.2	73.4	6	270	0.0	2/ 8/83
11	157	2	1	1	1	2	60	85.1	80.0	79.9	76.2	74.4	6	270	0.0	2/ 8/83
11	158	2	1	1	1	5	63	88.9	84.0	84.1	78.7	78.6	6	270	0.0	2/ 8/83
11	159	2	1	1	1	5	61	88.2	84.1	83.9	79.3	79.0	6	270	0.0	2/ 8/83
11	160	2	1	1	3	3	59	85.5	80.2	80.7	76.0	74.7	6	270	0.0	2/ 8/83
11	161	2	1	1	1	5	71	89.1	85.1	84.5	81.0	79.6	6	270	0.0	2/ 8/83
11	162	2	1	1	1	3	64	91.2	85.5	86.7	81.2	79.6	6	270	0.0	2/ 8/83
11	163	2	1	1	1	5	60	84.6	80.1	79.7	75.2	75.1	6	270	0.0	2/ 8/83
11	164	0	1	1	1	1	61	77.7	72.9	73.2	67.7	68.5	6	270	0.0	2/ 8/83
11	165	2	1	1	1	5	59	89.3	84.0	84.9	79.7	78.5	6	270	0.0	2/ 8/83
11	166	2	1	1	1	2	53	82.4	77.9	77.0	72.3	73.1	6	270	0.0	2/ 8/83
11	167	2	1	1	1	2	59	91.2	87.0	87.5	78.1	79.3	6	270	0.0	2/ 8/83
11	168	2	1	1	1	1	60	79.0	74.3	75.4	70.6	71.4	6	270	0.0	2/ 8/83
11	169	2	1	1	1	5	56	85.2	80.3	81.0	77.2	75.3	6	270	0.0	2/ 8/83
11	170	2	1	1	1	5	61	88.5	84.1	84.1	80.1	79.0	6	270	0.0	2/ 8/83
11	171	2	1	1	1	5	57	86.6	82.1	81.9	78.8	77.6	6	270	0.0	2/ 8/83
11	172	2	1	1	1	0	56	77.5	73.4	72.6	67.8	68.9	6	270	0.0	2/ 8/83
11	173	2	1	1	1	3	66	87.7	82.6	82.8	78.2	77.5	6	270	0.0	2/ 8/83
11	174	2	1	1	1	3	62	86.0	82.1	81.6	77.3	77.7	6	270	0.0	2/ 8/83
11	175	2	1	1	1	2	58	82.2	77.1	77.6	73.8	73.6	6	270	0.0	2/ 8/83
11	176	2	1	1	1	5	56	85.1	80.3	79.9	75.5	75.1	6	270	0.0	2/ 8/83
11	177	2	1	1	1	0	62	79.7	74.4	74.5	69.0	69.6	6	270	0.0	2/ 8/83
11	178	2	1	1	1	1	62	78.2	73.4	74.5	69.4	68.6	6	270	0.0	21 8/83
11	179	2	1	1	1	1	62	84.9	79.9	80.3	74.3	74.9	6	270	0.0	2/ 8/83
11	180	0	1	1	1	0	61	76.0	70.9	71.5	66.2	66.6	6	270	0.0	2/ 8/83
11	181	2	1	1	1	5	59	86.4	82.1	81.6	77.8	76.7	6	270	0.0	2/ 8/83
11	182	2	1	1	1	3	56	90.5	85.2	85.9	79.4	79.7	6	270	0.0	2/ 8/83
11	183	2	1	1	1	0	59	78.7	73.6	73.8	69.3	70.0	6	270	0.0	2/ 8/83
11	184	2	1	1	1	5	61	86.9	81.9	82.3	78.0	77.0	6	270	0.0	2/ 8/83
11	185	2	1	1	1	5	59	84.7	79.7	80.2	75.8	75.5	6	270	0.0	2/ 8/83
11	186	2	1	1	1	5	64	88.5	84.0	83.4	79.3	78.2	6	270	0.0	2/ 8/83
11	187	2	1	1	1	5	62	90.7	84.7	85.2	81.7	81.7	6	270	0.0	2/ 8/83
11	188	2	1	1	1	2	62	89.3	85.3	84.6	81.3	80.2	6	270	0.0	2/ 8/83
11	189	2	1	1	1	3	56	84.7	79.1	80.1	74.8	74.8	6	270	0.0	2/ 8/83
11	190	2	1	1	1	1	71	80.3	75.0	76.1	70.0	70.0	6	270	0.0	2/ 8/83
11	191	1	1	1	1	1	57	78.1	72.4	73.7	68.6	68.8	6	270	0.0	2/ 8/83
11	192	2	1	1	1	0	56	80.8	75.0	76.1	70.6	70.3	6	270	0.0	2/ 8/83
11	193	0	1	1	1	1	63	79.6	73.7	75.2	69.0	68.7	6	270	0.0	2/ 8/83
11	194	0	1	1	1	0	63	77.8	73.7	73.3	68.2	69.9	6	270	0.0	2/ 8/83
11	195	2	1	1	1	0	61	75.5	70.8	71.2	66.1	67.0	6	270	0.0	2/ 8/83
11	196	2	1	1	1	3	57	88.1	83.6	83.3	77.3	77.2	6	270	0.0	2/ 8/83
11	197	2	1	1	1	3	53	85.8	80.4	80.5	76.3	75.6	6	270	0.0	2/ 8/83
11	198	2	1	1	1	0	56	77.9	73.5	72.9	69.3	69.6	6	270	0.0	2/ 8/83
11	199	2	1	1	1	0	61	77.2	71.9	72.3	66.0	67.8	6	270	0.0	2/ 8/83
11	200	2	1	1	1	4	61	86.2	80.2	80.5	76.3	75.2	6	270	0.0	2/ 8/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	DEN	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIP NEDD	WAING DLE	VWEIC NTOR	DATE
									DBA						
12	1	2	1	1	1	60	81.1	75.3	75.0	68.9	70.6	0	90	0.0	2/ 9/83
12	2	2	1	1	3	56	84.1	78.5	78.9	71.5	73.1	0	90	0.0	2/ 9/83
12	3	2	1	1	1	63	75.6	70.8	70.4	64.5	67.3	0	90	0.0	2/ 9/83
12	4	2	1	1	0	61	73.7	68.1	68.4	61.8	64.7	0	90	0.0	2/ 9/83
12	5	2	1	1	5	59	91.3	87.1	86.4	80.8	82.1	0	90	0.0	2/ 9/83
12	6	1	1	1	0	50	73.0	67.5	67.5	61.2	63.3	0	90	0.0	2/ 9/83
12	7	2	1	1	2	46	82.3	76.8	76.6	70.2	71.6	0	90	0.0	2/ 9/83
12	8	2	1	1	5	56	86.7	81.9	81.4	74.8	76.4	0	90	0.0	2/ 9/83
12	9	2	1	1	5	60	88.2	83.9	83.2	78.3	79.0	0	90	0.0	2/ 9/83
12	10	2	1	1	3	54	85.8	80.7	79.8	72.9	74.1	0	90	0.0	2/ 9/83
12	11	2	1	1	0	46	71.9	66.3	66.1	60.4	61.0	0	90	0.0	2/ 9/83
12	12	2	1	1	5	69	90.0	85.3	84.9	77.9	79.8	0	90	0.0	2/ 9/83
12	13	2	1	1	5	58	86.7	82.0	81.6	75.2	76.9	0	90	0.0	2/ 9/83
12	14	2	1	1	1	56	74.7	68.7	68.9	62.5	64.4	0	90	0.0	2/ 9/83
12	15	2	1	1	5	57	84.0	79.4	79.0	72.7	74.6	0	90	0.0	2/ 9/83
12	16	2	1	1	5	51	85.7	81.2	80.6	74.2	75.4	0	300	0.0	2/ 9/83
12	17	2	1	1	1	59	76.2	70.7	70.7	64.8	66.7	0	300	0.0	2/ 9/83
12	18	2	1	1	5	52	84.2	79.4	78.7	72.9	73.7	0	300	0.0	2/ 9/83
12	19	2	1	1	5	53	86.8	83.3	81.7	75.6	76.8	0	300	0.0	2/ 9/83
12	20	2	1	1	1	56	79.7	74.5	74.0	69.0	70.4	0	300	0.0	2/ 9/83
12	21	2	1	1	5	58	91.7	88.1	86.3	81.2	81.8	0	300	0.0	2/ 9/83
12	22	2	1	1	1	60	75.5	70.4	70.2	64.1	66.9	0	300	0.0	2/ 9/83
12	23	2	1	1	5	52	89.5	85.1	84.0	78.9	80.4	0	300	0.0	2/ 9/83
12	24	2	1	1	0	60	73.6	67.5	68.1	61.8	63.5	0	300	0.0	2/ 9/83
12	25	2	1	1	5	62	87.9	82.8	82.3	75.6	76.8	0	300	0.0	2/ 9/83
12	26	2	1	1	2	55	84.6	81.2	79.2	74.4	74.9	0	300	0.0	2/ 9/83
12	27	2	1	1	1	61	75.8	71.3	70.9	65.1	66.3	0	300	0.0	2/ 9/83
12	28	2	1	1	1	54	76.7	71.3	71.3	64.6	67.2	0	300	0.0	2/ 9/83
12	29	2	1	1	5	53	85.6	81.8	80.9	75.9	76.6	0	300	0.0	2/ 9/83
12	30	2	1	1	2	59	86.3	81.3	80.7	74.3	75.a	0	270	0.0	2/ 9/83
12	31	2	1	1	1	60	73.3	67.8	67.1	61.1	63.3	0	270	0.0	2/ 9/83
12	32	2	1	1	0	56	75.2	69.9	69.6	63.4	65.4	0	270	0.0	2/ 9/83
12	33	2	1	1	3	59	86.3	81.0	80.6	74.2	75.9	0	270	0.0	2/ 9/83
12	34	2	1	1	0	64	77.2	71.7	71.5	65.2	67.1	0	270	0.0	2/ 9/83
12	35	2	1	1	1	61	73.9	68.8	68.8	63.2	64.8	0	270	0.0	2/ 9/83
12	36	2	1	1	1	58	73.6	68.2	68.0	61.7	63.5	0	270	0.0	2/ 9/83
12	37	2	1	1	5	53	87.9	82.3	83.0	76.6	76.4	0	270	0.0	2/ 9/83
12	38	2	1	1	0	60	77.9	72.7	72.6	66.3	67.8	0	270	0.0	2/ 9/83
12	39	0	1	1	2	46	82.5	77.3	77.1	71.4	73.4	0	270	0.0	2/ 9/83
12	40	2	1	1	2	55	79.1	74.3	73.3	66.8	69.0	0	300	0.0	2/ 9/83
12	41	2	1	1	1	64	79.1	74.6	73.8	67.2	69.0	0	300	0.0	2/ 9/83
12	42	2	1	1	0	58	75.8	70.7	70.4	64.7	65.5	0	300	0.0	2/ 9/83
12	43	2	1	1	1	57	77.0	71.1	70.8	64.2	66.8	0	300	0.0	2/ 9/83
12	44	2	1	1	1	65	76.0	70.7	70.3	64.0	66.6	0	300	0.0	2/ 9/83
12	45	2	1	1	5	45	86.3	80.9	81.0	74.8	75.6	0	300	0.0	2/ 9/83
12	46	2	1	1	0	55	77.8	72.3	71.8	66.1	67.8	0	300	0.0	2/ 9/83
12	47	2	1	1	1	61	76.6	71.1	70.9	64.9	66.5	0	300	0.0	2/ 9/83
12	48	2	1	1	0	58	74.6	69.4	69.1	63.1	64.5	0	300	0.0	2/ 9/83
12	49	2	1	1	5	49	84.7	80.2	80.0	73.6	74.3	0	300	0.0	2/ 9/83
12	50	2	1	1	2	52	78.0	73.1	72.4	66.6	68.7	0	300	0.0	2/ 9/83
12	51	2	1	1	0	59	72.6	67.2	67.3	61.5	63.0	0	300	0.0	2/ 9/83
12	52	2	1	1	5	54	86.6	82.3	81.9	75.9	77.7	0	300	0.0	2/ 9/83
12	53	2	1	1	0	54	76.1	70.2	70.6	63.6	65.3	0	300	0.0	2/ 9/83
12	54	2	1	1	5	54	88.6	84.2	83.2	77.5	78.4	0	300	0.0	2/ 9/83
12	55	2	1	1	1	52	74.5	69.2	68.9	62.0	64.5	0	300	0.0	2/ 9/83
12	56	2	1	1	1	57	73.4	68.4	68.1	61.4	64.0	0	300	0.0	2/ 9/83
12	57	2	1	1	5	54	83.1	78.2	77.8	70.9	73.6	0	300	0.0	2/ 9/83
12	58	2	1	1	5	57	88.4	84.0	83.2	77.3	79.7	0	300	0.0	2/ 9/83
12	59	2	1	1	5	59	88.8	84.2	84.2	76.0	78.7	0	120	0.0	2/ 9/83
12	60	1	1	1	3	46	83.2	78.4	77.8	71.9	72.8	0	120	0.0	2/ 9/83
12	61	2	1	1	3	51	84.9	80.0	79.2	72.9	74.2	0	120	0.0	2/ 9/83
12	62	2	1	1	1	56	74.3	69.5	69.5	63.7	64.9	0	120	0.0	2/ 9/83
12	63	1	1	1	1	64	76.0	71.4	71.1	66.5	67.5	0	120	0.0	2/ 9/83
12	64	2	1	1	2	54	80.2	74.6	74.3	67.5	69.5	3	330	3.9	2/ 9/83
12	65	2	1	1	0	47	72.1	66.8	66.9	61.0	62.9	3	330	3.9	2/ 9/83
12	66	2	1	1	1	55	79.1	73.7	73.3	67.8	68.5	3	330	3.9	2/ 9/83
12	67	2	1	1	5	54	88.3	83.5	82.7	76.1	77.8	3	330	3.9	2/ 9/83
12	68	2	1	1	3	52	83.6	78.8	78.2	72.6	73.5	3	330	3.9	2/ 9/83
12	69	2	1	1	1	53	78.1	72.3	72.0	66.0	68.4	3	330	3.9	2/ 9/83
12	70	2	1	1	1	52	74.6	69.3	69.0	62.6	64.8	3	330	3.9	2/ 9/83

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH/HL	DEN	VEH TYPE	VEH SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIP NEDD	WAIN NGDLE	VWEICNTDOR	DATE
							DBA								
12	71	2	1	1	1	3 5 4	85.6	81.1	80.1	72.9	75.1	3	330	3.9	2/ 9/83
12	72	2	1	1	1	5 57	87.2	82.7	81.9	76.2	77.2	3	330	3.9	2/ 9/83
12	73	2	1	1	1	3 53	87.0	82.9	81.6	95.9	77.5	3	330	3.9	2/ 9/83
12	74	2	1	1	1	0 65	74.7	69.3	69.2	64.2	64.1	3	330	3.9	2/ 9/83
12	75	2	1	1	1	5 54	87.0	82.6	82.3	76.8	78.4	3	330	3.9	2/ 9/83
12	76	2	1	1	1	1 59	73.5	68.2	68.1	62.6	63.5	3	330	3.9	2/ 9/83
12	77	2	1	1	1	1 60	72.4	66.7	66.5	59.9	61.8	3	330	3.9	2/ 9/83
12	78	2	1	1	1	3 56	87.5	82.4	81.8	75.5	76.5	3	330	3.9	2/ 9/83
12	79	2	1	1	1	0 63	76.7	70.7	71.1	64.6	66.2	3	330	3.9	2/ 9/83
12	80	2	1	1	1	2 49	83.1	78.3	77.4	71.4	72.6	3	330	3.9	2/ 9/83
12	81	2	1	1	1	5 53	88.9	83.7	83.4	76.7	78.4	3	330	3.9	2/ 9/83
12	82	2	1	1	1	0 60	75.2	69.6	70.1	63.0	64.9	3	330	3.9	2/ 9/83
12	83	1	1	1	1	1 64	75.8	69.9	70.3	63.5	65.5	3	330	3.9	2/ 9/83
12	84	2	1	1	1	5 58	90.2	84.9	86.3	78.4	80.4	3	330	3.9	2/ 9/83
12	85	2	1	1	1	5 47	85.9	80.8	81.1	74.5	76.0	0	290	0.0	2/ 9/83
12	86	2	1	1	1	5 49	87.5	82.7	82.9	76.1	77.3	3	300	2.2	2/ 9/83
12	87	1	1	1	1	0 54	74.2	67.9	68.1	61.3	63.6	3	300	2.2	2/ 9/83
12	88	0	0	1	1	0 59	76.8	72.6	73.3	65.1	68.6	3	300	2.2	2/ 9/83
12	89	2	0	1	1	0 41	66.3	60.7	60.9	54.4	56.9	3	300	2.2	2/ 9/83
12	90	2	1	1	1	1 51	69.5	65.3	65.4	60.1	62.8	3	300	2.2	2/ 9/83
12	91	2	1	1	1	1 67	77.3	71.6	71.3	62.7	68.0	3	270	0.0	2/ 9/83
12	92	2	1	1	1	1 61	76.1	70.1	70.6	63.3	66.6	6	250	-3.1	2/ 9/83
12	93	2	1	1	1	1 61	74.9	69.9	69.7	62.9	65.2	6	250	-3.1	2/ 9/83
12	94	2	1	1	1	0 57	84.5	80.6	99.2	73.3	75.0	6	250	-3.1	21 9/83
12	95	2	1	1	1	5 57	85.6	81.2	81.3	73.4	75.4	6	250	-3.1	2/ 9/83
12	96	2	1	1	1	0 46	73.5	68.6	68.3	62.5	63.5	6	250	-3.1	2/ 9/83
12	97	2	1	1	1	1 61	78.7	74.5	73.5	67.9	69.3	6	250	-3.1	2/ 9/83
12	98	2	1	1	1	3 51	84.0	78.9	78.9	72.6	73.3	6	250	-3.1	2/ 9/83
12	99	2	1	1	1	5 60	85.9	80.2	80.9	74.0	75.1	6	250	-3.1	2/ 9/83
12	100	2	1	1	1	1 46	76.4	71.6	71.1	66.0	67.2	6	250	-3.1	2/ 9/83
12	101	2	1	1	1	0 65	73.4	67.5	68.3	61.5	63.1	3	270	0.0	2/ 9/83
12	102	1	1	1	1	1 57	75.2	69.8	69.8	63.0	65.8	3	270	0.0	2/ 9/83
12	103	0	0	1	1	1 59	73.7	68.4	69.5	61.9	65.4	3	270	0.0	
12	104	0	0	1	1	1 64	74.3	68.8	69.4	64.3	65.9	3	270	0.0	20 9/83
12	105	2	1	1	1	3 48	84.2	79.0	78.7	71.6	73.9	3	270	0.0	2/ 9/83
12	106	2	1	1	1	3 60	85.1	80.1	80.3	73.0	76.7	3	270	0.0	2/ 9/83
12	107	2	1	1	1	2 54	81.7	76.8	75.6	71.1	72.2	3	270	0.0	2/ 9/83
12	108	2	1	1	1	5 43	84.6	80.3	79.0	73.8	74.9	3	270	0.0	2/ 9/83
12	109	2	1	1	1	5 53	87.8	84.4	82.3	78.3	77.8	3	270	0.0	2/ 9/83
12	110	2	1	1	1	5 60	89.5	84.4	84.2	76.5	79.0	3	270	0.0	2/ 9/83
12	111	2	1	1	1	4 49	82.4	77.8	77.5	71.7	73.2	3	270	0.0	2/ 9/83
12	112	1	1	1	1	2 44	79.0	75.0	74.4	69.1	71.3	6	270	0.0	2/ 9/83
12	113	2	1	1	1	1 57	83.7	78.7	78.2	71.0	72.7	6	270	0.0	2/ 9/83
12	114	2	1	1	1	5 58	87.3	82.9	83.6	74.7	77.0	6	270	0.0	2/ 9/83
12	115	2	1	1	1	1 54	74.5	68.5	68.5	62.0	64.8	6	270	0.0	2/ 9/83
12	116	2	1	1	1	5 53	85.6	79.9	80.4	73.8	75.1	6	270	0.0	2/ 9/83
12	117	2	1	1	1	1 56	80.1	76.2	74.6	68.8	71.0	6	270	0.0	2/ 9/83
12	118	2	1	1	1	1 60	72.7	67.0	67.1	61.7	63.3	6	270	0.0	2/ 9/83
12	119	2	1	1	1	1 54	78.3	73.0	72.7	65.8	68.8	6	270	0.0	2/ 9/83
12	120	2	1	1	1	5 58	90.6	85.1	85.0	79.0	80.0	6	270	0.0	2/ 9/83
12	121	2	1	1	1	2 48	82.0	77.3	76.5	69.9	71.7	6	270	0.0	2/ 9/83
12	122	2	1	1	1	1 54	80.4	75.3	74.8	68.9	69.7	6	270	0.0	2/ 9/83
12	123	1	1	1	1	0 65	76.1	70.4	70.8	63.8	65.3	6	270	0.0	2/ 9/83
12	124	2	1	1	1	3 53	87.4	82.3	82.2	74.9	76.9	6	270	0.0	2/ 9/83
12	125	2	1	1	1	5 53	80.4	74.7	74.5	68.4	70.4	6	270	0.0	2/ 9/83
12	126	0	1	1	1	1 56	74.5	69.6	70.0	63.7	65.2	6	270	0.0	2/ 9/83
12	127	2	1	1	1	7 73	81.3	75.5	76.0	69.8	71.1	6	270	0.0	2/ 9/83
12	128	2	1	1	1	2 55	82.5	77.1	76.7	70.7	72.8	6	270	0.0	2/ 9/83
12	129	2	1	1	1	5 60	82.4	77.6	77.2	70.8	72.4	6	270	0.0	2/ 9/83
12	130	2	1	1	1	5 52	85.5	80.1	75.1	75.3	0.0	3	270	0.0	2/ 9/83
12	131	0	0	1	1	2 48	76.3	71.7	70.9	65.5	67.3	3	270	0.0	2/ 9/83
12	132	2	1	1	1	1 58	75.7	70.4	64.2	65.5	0.0	6	270	0.0	2/ 9/83
12	133	2	1	1	1	1 56	75.3	70.3	70.4	64.3	65.8	6	270	0.0	2/ 9/83
12	134	2	1	1	1	3 55	85.8	81.1	81.0	74.0	75.5	6	270	0.0	2/ 9/83
12	135	2	1	1	1	5 51	82.7	77.8	77.2	71.9	73.2	6	270	0.0	2/ 9/83
12	136	1	1	1	1	0 58	77.0	72.5	72.3	66.6	68.3	6	270	0.0	2/ 9/83
12	137	2	1	1	1	5 55	96.4	92.3	90.0	86.9	85.0	6	270	0.0	2/ 9/83
12	138	2	1	1	1	3 53	84.9	79.3	78.7	72.3	73.8	6	270	0.0	2/ 9/83
12	139	2	1	1	1	5 53	83.5	78.8	78.6	72.6	73.8	6	270	0.0	2/ 9/83
12	140	2	1	1	1	3 49	88.5	83.3	82.2	76.2	77.0	6	270	0.0	2/ 9/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH/LV	DEN	WEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDED	WAINGDLE	WEICNTDOR	DATE
							DBA								
12	141	2	1	1	1	5 56	92.4	86.9	87.5	79.6	81.1	6	270	0.0	2/ 9/83
12	142	2	1	1	1	1 58	73.4	67.5	67.8	61.6	63.5	6	270	0.0	2/ 9/83
12	143	2	1	1	1	0 64	75.2	69.4	69.4	62.6	64.9	6	270	0.0	2/ 9/83
12	144	2	1	1	1	1 66	77.9	72.3	72.0	66.0	67.4	6	270	0.0	2/ 9/83
12	145	2	1	1	1	2 55	77.9	73.7	74.3	68.4	70.5	6	270	0.0	2/ 9/83
12	146	1	1	1	1	1 58	73.9	68.5	69.1	62.9	64.1	6	290	3.1	2/ 9/83
12	147	2	1	1	1	3 53	82.3	76.9	76.3	69.5	72.5	6	290	3.1	2/ 9/83
12	148	2	1	1	1	5 47	84.0	78.4	78.6	70.9	72.5	6	290	3.1	2/ 9/83
12	149	2	1	1	1	5 58	89.9	83.9	83.7	76.9	78.5	6	290	3.1	2/ 9/83
12	150	2	1	1	1	1 63	91.8	85.5	85.5	79.3	80.0	6	290	3.1	2/ 9/83
12	151	2	1	1	1	4 56	85.9	81.5	80.6	75.7	77.6	6	290	3.1	2/ 9/83
12	152	2	1	1	1	1 61	75.6	70.1	70.1	64.3	64.8	6	290	3.1	2/ 9/83
12	153	2	1	1	1	3 48	87.9	83.2	82.4	77.2	77.1	6	290	3.1	2/ 9/83
12	154	2	1	1	1	5 58	84.3	78.8	78.8	72.3	74.0	6	290	3.1	2/ 9/83
12	155	2	1	1	1	1 56	75.5	69.5	69.9	62.2	64.7	6	290	3.1	2/ 9/83
12	156	2	1	1	1	3 56	82.2	77.1	77.0	69.4	72.2	6	290	3.1	2/ 9/83
12	157	2	1	1	1	1 59	74.7	69.4	69.4	62.7	65.5	6	'290	3.1	2/ 9/83
12	158	0	0	1	1	2 57	83.0	79.6	79.0	73.7	76.0	6	290	3.1	2/ 9/83
12	159	2	1	1	1	1 65	77.7	71.6	71.9	65.0	67.6	6	290	3.1	2/ 9/83
12	160	2	1	1	1	4 48	96.5	91.1	90.7	83.9	84.8	6	290	3.1	2/ 9/83
12	161	2	1	1	1	1 44	76.7	72.0	71.7	66.9	68.0	6	290	3.1	2/ 9/83
12	162	2	1	1	1	3 51	88.6	83.2	82.1	75.4	77.5	6	290	3.1	2/ 9/83
12	163	2	1	1	1	0 70	87.5	71.8	82.1	75.3	77.3	6	290	3.1	2/ 9/83
12	164	2	1	1	1	1 55	73.3	67.4	67.7	61.7	62.8	6	290	3.1	2/ 9/83
12	165	2	1	1	1	0 65	72.9	67.0	67.3	61.2	63.3	6	290	3.1	2/ 9/83
12	166	2	1	1	1	1 55	72.7	66.3	67.4	60.3	62.8	6	290	3.1	2/ 9/83
12	167	2	1	1	1	5 54	94.8	88.8	89.9	82.7	83.0	6	290	3.1	2/ 9/83
12	168	2	1	1	1	3 49	84.4	79.5	79.1	72.2	74.4	6	290	3.1	2/ 9/83
12	169	2	1	1	1	3 59	91.1	85.8	85.3	79.1	80.7	6	290	3.1	2/ 9/83
12	170	2	1	1	1	1 61	74.4	68.9	69.4	62.9	64.4	6	290	3.1	2/ 9/83
12	171	1	1	1	1	1 64	78.0	72.4	72.8	65.1	67.4	6	290	3.1	2/ 9/83
12	172	2	1	1	1	0 63	73.0	66.9	67.7	61.1	62.1	6	290	3.1	2/ 9/83
12	173	2	1	1	1	5 51	85.3	80.1	79.9	73.5	74.8	6	290	3.1	2/ 9/83
12	174	2	1	1	1	5 56	18.0	82.3	81.8	75.0	75.9	6	290	3.1	2/ 9/83
12	175	1	1	1	1	1 51	72.7	67.7	67.6	62.2	63.1	6	290	3.1	2/ 9/83
12	176	2	1	1	1	3 59	90.5	85.0	84.2	77.9	79.5	6	290	3.1	2/ 9/83
12	177	2	1	1	1	3 55	89.6	85.3	84.4	78.7	79.9	6	290	3.1	2/ 9/83
12	178	2	1	1	1	5 61	83.9	78.8	78.4	72.4	73.3	6	290	3.1	2/ 9/83
12	179	0	0	1	1	4 58	84.6	79.2	79.7	75.2	76.0	6	290	3.1	2/ 9/83
12	180	2	1	1	1	1 66	-1.0	72.5	72.4	66.5	68.3	6	290	3.1	2/ 9/83
12	181	2	1	1	1	5 58	-1.0	87.2	87.5	79.6	81.2	6	290	3.1	2/ 9/83
12	182	2	1	1	1	1 63	-1.0	72.4	72.2	66.0	67.7	6	290	3.1	2/ 9/83
12	183	2	1	1	1	0 60	-1.0	69.0	68.9	62.9	65.4	6	290	3.1	2/ 9/83
12	184	2	1	1	1	1 55	-1.0	70.9	71.9	64.1	66.1	6	290	3.1	2/ 9/83
12	185	2	1	1	1	5 52	-1.0	80.2	79.3	-1.0	-1.0	6	290	3.1	2/ 9/83
12	186	2	1	1	1	5 53	-1.0	85.9	85.4	80.3	81.9	6	290	3.1	2/ 9/83
12	187	2	1	1	1	5 53	-1.0	76.4	76.1	69.5	72.0	6	290	3.1	2/ 9/83
12	188	2	1	1	1	5 64	-1.0	86.2	85.4	79.5	-1.0	6	290	3.1	2/ 9/83
12	189	0	0	1	1	5 61	-1.0	85.1	85.4	77.3	78.9	6	290	3.1	2/ 9/83
12	190	2	1	1	1	5 55	-1.0	83.8	83.0	77.1	78.7	6	290	3.1	2/ 9/83
12	191	2	1	1	1	5 55	-1.0	82.6	82.0	76.0	77.1	6	290	3.1	2/ 9/83
12	192	2	1	1	1	1 58	-1.0	69.9	70.1	63.6	65.8	6	290	3.1	2/ 9/83
12	193	2	1	1	1	1 60	-1.0	69.8	69.9	63.4	64.4	6	290	3.1	2/ 9/83
12	194	2	1	1	1	1 54	-1.0	69.6	69.7	63.5	63.9	6	290	3.1	2/ 9/83
12	195	2	1	1	1	0 55	-1.0	65.9	66.2	59.2	60.6	3	260	-.8	2/ 9/83
12	196	2	1	1	1	5 55	-1.0	79.7	79.8	72.2	74.8	3	260	-.8	2/ 9/83
12	197	2	1	1	1	0 57	-1.0	69.2	69.7	61.5	64.9	3	260	-.8	2/ 9/83
12	198	1	1	1	1	0 35	-1.0	64.0	63.8	58.3	59.8	3	260	-.8	2/ 9/83
12	199	2	1	1	1	5 52	-1.0	81.6	81.2	74.4	76.8	3	260	-.8	2/ 9/83
12	200	2	1	1	1	1 59	-1.0	72.4	71.7	66.6	67.3	6	270	0.0	2/ 9/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	DEL	ENV	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDE D	WAINNGDLE	VWEICNTDOR	DATE
14	1	2	1	1	1	5	56	92.8	87.4	77.7	0.0	0.0	3	60	2.3	2/11/83
14	2	0	1	1	1	1	61	83.0	77.5	77.7	0.0	0.0	3	60	2.3	2/11/83
14	3	2	1	1	1	3	52	90.4	86.1	85.8	0.0	0.0	3	60	2.3	2/11/83
14	4	2	1	1	1	5	62	91.9	86.2	86.0	0.0	0.0	0	60	0.0	2/11/83
14	5	2	1	1	1	5	60	90.9	86.2	85.8	0.0	0.0	0	60	0.0	2/11/83
14	6	2	1	1	1	5	61	89.8	84.6	84.7	0.0	0.0	0	60	0.0	2/11/83
14	7	2	1	1	1	5	52	88.7	84.5	83.5	0.0	0.0	0	60	0.0	2/11/83
14	8	2	1	1	1	5	62	89.1	84.0	83.6	0.0	0.0	0	60	0.0	2/11/83
14	9	2	1	1	1	5	67	95.1	90.1	90.5	0.0	0.0	0	60	0.0	2/11/83
14	10	2	1	1	1	5	68	93.6	87.8	87.7	0.0	0.0	0	60	0.0	2/11/83
14	11	2	1	1	1	1	67	82.7	77.1	77.4	0.0	0.0	0	60	0.0	2/11/83
14	12	2	1	1	1	3	64	86.4	81.5	81.0	0.0	0.0	0	60	0.0	2/11/83
14	13	2	1	1	1	5	57	91.8	86.1	85.9	0.0	0.0	0	60	0.0	2/11/83
14	14	2	1	1	1	3	58	87.5	82.2	81.6	0.0	0.0	0	60	0.0	2/11/83
14	15	1	1	1	1	1	59	80.9	75.9	75.5	0.0	0.0	0	60	0.0	2/11/83
14	16	2	1	1	1	5	51	86.2	81.2	80.7	0.0	0.0	0	60	0.0	2/11/83
14	17	2	1	1	1	0	64	83.9	79.4	98.4	0.0	0.0	0	60	0.0	2/11/83
14	18	0	0	1	1	0	59	80.7	76.2	76.2	0.0	0.0	0	60	0.0	2/11/83
14	19	2	1	1	1	5	55	90.9	85.2	85.1	0.0	0.0	0	60	0.0	2/11/83
14	20	2	1	1	1	5	57	90.5	85.3	85.6	0.0	0.0	0	90	0.0	2/11/83
14	21	2	1	1	1	5	66	90.5	85.8	85.3	0.0	0.0	0	90	0.0	2/11/83
14	22	1	1	1	1	0	48	78.1	73.7	73.4	0.0	0.0	0	90	0.0	2/11/83
14	23	2	1	1	1	5	57	89.5	84.2	84.5	0.0	0.0	0	90	0.0	2/11/83
14	24	2	1	1	1	5	66	92.1	86.9	86.9	0.0	0.0	0	90	0.0	2/11/83
14	25	2	1	1	1	1	58	85.1	80.0	79.8	0.0	0.0	0	90	0.0,	2/11/83
14	26	2	1	1	1	5	61	89.6	84.3	84.2	0.0	0.0	0	90	0.0	2/11/83
14	27	2	1	1	1	5	55	87.3	82.0	81.9	0.0	0.0	0	90	0.0	2/11/83
14	28	2	1	1	1	5	61	91.8	86.1	86.4	0.0	0.0	0	90	0.0	2/11/83
14	29	2	1	1	1	5	64	91.2	86.1	85.8	0.0	0.0	0	90	0.0	2/11/83
14	30	0	1	1	1	7	54	78.9	74.1	74.3	0.0	0.0	3	270	0.0	2/11/83
14	31	2	1	1	1	5	59	90.6	85.5	85.0	0.0	0.0	3	270	0.0	2/11/83
14	32	2	1	1	1	3	55	90.7	85.7	85.5	0.0	0.0	3	270	0.0	2/11/83
14	33	2	1	1	1	5	57	90.0	84.7	84.9	0.0	0.0	3	270	0.0	2/11/83
14	34	2	1	1	1	5	57	-1.0	92.0	-1.0	0.0	0.0	3	270	0.0	2/11/83
14	35	2	1	1	1	5	53	89.9	84.6	84.4	0.0	0.0	3	270	0.0	2/11/83
14	36	2	1	1	1	2	59	86.1	80.3	80.3	0.0	0.0	3	270	0.0	2/11/83
14	37	2	1	1	1	5	62	90.3	85.7	85.6	0.0	0.0	3	270	0.0	2/11/83
14	38	2	1	1	1	2	53	89.1	83.9	83.3	0.0	0.0	3	270	0.0	2/11/83
14	39	2	1	1	1	5	60	90.4	85.8	85.1	0.0	0.0	3	270	0.0	2/11/83
14	40	2	1	1	1	5	55	90.8	85.2	85.1	0.0	0.0	3	270	0.0	2/11/83
14	41	1	1	1	1	0	54	81.0	76.4	76.9	0.0	0.0	3	270	0.0	2/31/83
14	42	2	1	1	1	3	55	92.2	87.6	86.6	0.0	0.0	3	270	0.0	2/11/83
14	43	2	1	1	1	5	62	90.9	85.2	85.3	0.0	0.0	3	270	0.0	2/11/83
14	44	2	1	1	1	0	60	81.8	76.3	77.1	0.0	0.0	3	270	0.0	2/11/83
14	45	2	1	1	1	5	58	92.2	86.6	86.8	0.0	0.0	3	270	0.0	2/11/83
14	46	2	1	1	1	5	57	89.4	83.6	83.9	0.0	0.0	3	270	0.0	2/11/83
14	47	2	1	1	1	5	64	90.0	84.4	84.6	0.0	0.0	3	270	0.0	2/11/83
14	48	2	1	1	1	5	61	89.3	84.0	83.9	0.0	0.0	3	270	0.0	2/11/83
14	49	2	1	1	1	5	61	95.1	89.5	89.4	0.0	0.0	3	270	0.0	2/11/83
14	50	1	1	1	1	1	55	78.2	73.9	73.9	0.0	0.0	3	270	0.0	2/11/83
14	51	1	1	1	1	1	48	80.3	74.8	74.7	0.0	0.0	3	270	0.0	2/11/83
14	52	2	1	1	1	1	56	82.6	78.3	77.7	0.0	0.0	3	270	0.0	2/11/83
14	53	2	1	1	1	5	57	90.8	85.6	85.3	0.0	0.0	3	270	0.0	2/11/83
14	54	2	1	1	1	5	58	91.5	85.3	85.8	0.0	0.0	3	270	0.0	2/11/83
14	55	2	1	1	1	5	56	90.5	85.5	84.6	0.0	0.0	3	270	0.0	2/11/83
14	56	2	1	1	1	5	57	89.9	85.6	84.3	0.0	0.0	3	270	0.0	2/11/83
14	57	2	1	1	1	2	55	84.3	79.1	78.8	0.0	0.0	3	270	0.0	2/11/83
14	58	2	1	1	1	5	53	88.2	84.0	83.5	0.0	0.0	3	270	0.0	2/11/83
14	59	2	1	1	1	4	61	88.4	83.5	82.7	0.0	0.0	3	270	0.0	2/11/83
14	60	1	1	1	1	0	66	82.2	76.5	77.0	0.0	0.0	0	90	0.0	2/11/83
14	61	2	1	1	1	4	51	89.0	83.3	83.2	0.0	0.0	0	90	0.0	2/11/83
14	62	2	1	1	1	1	57	83.7	77.5	78.1	0.0	0.0	0	90	0.0	2/11/83
14	63	2	1	1	1	2	59	87.7	83.5	82.1	0.0	0.0	0	90	0.0	2/11/83
14	64	1	1	1	1	5	50	87.5	82.7	82.1	0.0	0.0	0	90	0.0	2/11/83
14	65	2	1	1	1	2	53	83.8	80.0	79.2	0.0	0.0	0	90	0.0	2/11/83
14	66	0	0	1	1	1	62	81.4	76.5	77.0	0.0	0.0	0	90	0.0	2/11/83
14	67	2	1	1	1	1	54	82.6	77.1	76.8	0.0	0.0	0	90	0.0	2/11/83
14	68	2	1	1	1	4	62	93.6	88.8	88.0	0.0	0.0	0	90	0.0	2/11/83
14	69	2	1	1	1	2	63	85.8	80.7	80.2	0.0	0.0	0	90	0.0	2/11/83
14	70	2	1	1	1	1	71	86.8	81.4	81.3	0.0	0.0	0	90	0.0	2/11/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	DEL/HV	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDD	WAINGDLE	WEICNTDOR	DATE
14	71	2	1	1 1	5	63	90.7	86.0	85.4	0.0	0.0	0	90	0.0	2/11/83
14	72	2	1	1 1	5	62	91.0	86.3	85.8	0.0	0.0	0	90	0.0	2/11/83
14	73	2	1	1 1	5	63	91.7	85.9	85.9	0.0	0.0	0	90	0.0	2/11/83
14	74	2	1	1 1	5	60	89.8	84.4	84.5	0.0	0.0	0	90	0.0	2/11/83
14	75	2	1	1 1	5	69	91.9	86.6	86.3	0.0	0.0	0	90	0.0	2/11/83
14	76	2	1	1 1	5	55	87.0	81.7	81.6	0.0	0.0	0	90	0.0	2/11/83
14	77	2	1	1 1	1	55	82.0	76.8	76.6	0.0	0.0	0	90	0.0	2/11/83
14	78	2	1	1 1	1	65	83.6	78.4	78.2	0.0	0.0	0	90	0.0	2/11/83
14	79	2	1	1 1	3	50	88.7	82.7	82.8	0.0	0.0	0	90	0.0	2/11/83
14	80	2	1	1 1	5	58	91.2	85.8	85.7	0.0	0.0	0	90	0.0	2/11/83
14	81	2	1	1 1	1	63	87.4	81.9	81.7	0.0	0.0	0	90	0.0	2/11/83
14	82	2	1	1 1	5	65	91.6	87.4	86.7	0.0	0.0	0	90	0.0	2/11/83
14	83	2	1	1 1	5	60	91.0	85.8	85.7	0.0	0.0	0	90	0.0	2/11/83
14	84	2	1	1 1	5	53	85.1	79.9	80.2	0.0	0.0	0	90	0.0	2/11/83
14	85	2	1	1 1	5	61	92.7	86.1	86.9	0.0	0.0	0	90	0.0	2/11/83
14	86	2	1	1 1	0	60	78.3	73.4	73.4	0.0	0.0	0	90	0.0	2/11/83
14	87	2	1	1 1	5	58	89.3	83.7	83.5	0.0	0.0	0	90	0.0	2/11/83
14	88	2	1	1 1	5	53	90.3	85.5	85.1	0.0	0.0	0	90	0.0	2/11/83
14	89	2	1	1 1	0	56	78.2	72.5	72.5	0.0	0.0	0	90	0.0	2/11/83
14	90	2	1	1 1	5	54	90.0	84.4	84.3	0.0	0.0	0	90	0.0	2/11/83
14	91	2	1	1 1	5	64	92.0	87.2	87.2	0.0	0.0	0	90	0.0	2/11/83
14	92	2	1	1 1	5	58	89.8	85.1	84.4	0.0	0.0	0	90	0.0	2/11/83
14	93	2	1	1 1	5	59	89.0	83.4	83.3	0.0	0.0	0	90	0.0	2/11/83
14	94	2	1	1 1	5	60	85.8	80.4	80.0	0.0	0.0	0	90	0.0	2/11/83
14	95	1	1	1 1	0	56	79.2	75.1	74.9	0.0	0.0	0	90	0.0	2/11/83
14	96	2	0	1 1	5	49	85.4	80.6	80.1	0.0	0.0	0	90	0.0	2/11/83
14	97	2	1	1 1	5	51	88.2	83.1	82.6	0.0	0.0	0	90	0.0	2/11/83
14	98	0	0	1 1	5	61	93.4	89.7	89.1	0.0	0.0	0	90	0.0	2/11/83
14	99	2	1	1 1	3	57	87.8	82.8	82.6	0.0	0.0	0	90	0.0	2/11/83
14	100	2	1	1 1	5	64	94.6	89.3	89.6	0.0	0.0	0	90	0.0	2/11/83
14	101	2	1	1 1	5	65	91.8	87.1	86.7	0.0	0.0	0	90	0.0	2/11/83
14	102	2	1	1 1	5	62	89.3	85.0	85.1	0.0	0.0	0	90	0.0	2/11/83
14	103	2	1	1 1	5	51	87.0	82.8	82.0	0.0	0.0	0	90	0.0	2/11/83
14	104	1	1	1 1	5	59	88.5	83.7	83.6	0.0	0.0	0	90	0.0	2/11/83
14	105	2	1	1 1	5	60	88.1	83.0	82.6	0.0	0.0	0	90	0.0	2/11/83
14	106	2	0	1 1	5	55	90.2	84.8	84.5	0.0	0.0	0	90	0.0	2/11/83
14	107	2	1	1 1	5	58	88.4	82.9	83.2	0.0	0.0	0	90	0.0	2/11/83
14	108	0	0	1 1	5	55	90.7	85.9	85.4	0.0	0.0	0	90	0.0	2/11/83
14	109	2	1	1 1	5	55	90.6	85.0	84.9	0.0	0.0	0	90	0.0	2/11/83
14	110	2	1	1 1	4	56	89.0	84.4	84.4	0.0	0.0	0	90	0.0	2/11/83
14	111	0	1	1 1	1	46	79.6	74.9	74.7	0.0	0.0	0	90	0.0	2/11/83
14	112	2	1	1 1	5	62	93.7	88.4	88.7	0.0	0.0	0	90	0.0	2/11/83
14	113	2	1	1 1	5	63	92.4	87.0	87.2	0.0	0.0	0	90	0.0	2/11/83
14	114	0	1	1 1	0	58	79.7	74.8	75.0	0.0	0.0	0	90	0.0	2/11/83
14	115	2	1	1 1	5	64	92.9	87.7	87.7	0.0	0.0	0	90	0.0	2/11/83
14	116	2	1	1 1	5	58	88.6	84.1	83.6	0.0	0.0	0	90	0.0	2/11/83
14	117	2	1	1 1	3	63	91.2	85.5	85.2	0.0	0.0	0	90	0.0	2/11/83
14	118	2	1	1 1	5	54	90.1	83.9	84.3	0.0	0.0	0	90	0.0	2/11/83
14	119	2	1	1 1	5	52	88.9	84.7	84.9	0.0	0.0	0	90	0.0	2/11/83
14	120	2	1	1 1	5	56	90.8	85.5	85.9	0.0	0.0	0	90	0.0	2/11/83
14	121	2	1	1 1	5	64	90.1	83.9	84.5	0.0	0.0	0	90	0.0	2/11/83
14	122	1	1	1 1	0	57	80.2	75.2	75.5	0.0	0.0	0	90	0.0	2/11/83
14	123	2	1	1 1	3	56	86.8	81.8	81.9	0.0	0.0	0	90	0.0	2/11/83
14	124	2	1	1 1	5	61	90.8	85.2	85.1	0.0	0.0	0	90	0.0	2/11/83
14	125	2	1	1 1	5	59	92.2	86.7	87.8	0.0	0.0	0	90	0.0	2/11/83
14	126	2	1	1 1	0	58	80.0	75.4	75.4	0.0	0.0	0	70	0.0	2/11/83
14	127	2	1	1 1	5	57	89.2	84.3	83.8	0.0	0.0	0	70	0.0	2/11/83
14	128	2	1	1 1	1	58	82.0	77.5	78.0	0.0	0.0	0	70	0.0	2/11/83
14	129	2	1	1 1	1	53	82.9	77.1	77.0	0.0	0.0	0	70	0.0	2/11/83
14	130	1	1	1 1	1	58	81.6	76.5	76.5	0.0	0.0	0	70	0.0	2/11/83
14	131	2	1	1 1	5	60	90.1	84.0	83.8	0.0	0.0	0	70	0.0	2/11/83
14	132	2	1	1 1	5	58	89.9	85.5	84.9	0.0	0.0	0	70	0.0	2/11/83
14	133	2	1	1 1	2	61	85.3	80.1	79.4	0.0	0.0	0	70	0.0	2/11/83
14	134	2	1	1 1	1	57	80.9	76.3	75.7	0.0	0.0	0	70	0.0	2/11/83
14	135	2	1	1 1	7	61	91.0	85.8	86.1	0.0	0.0	0	70	0.0	2/11/83
14	136	2	1	1 1	2	48	84.3	78.9	78.8	0.0	0.0	0	70	0.0	2/11/83
14	137	2	1	1 1	5	52	87.3	82.4	82.4	0.0	0.0	0	70	0.0	2/11/83
14	138	2	1	1 1	5	57	89.6	84.2	84.2	0.0	0.0	0	70	0.0	2/11/83
14	139	2	1	1 1	5	58	85.8	80.8	80.5	0.0	0.0	0	70	0.0	2/11/83
14	140	2	1	1 1	5	55	87.0	82.1	82.2	0.0	0.0	0	70	0.0	2/11/83

DATA SUMMARY

LOC.		EVENT QUAL.				VEH		MIC								
S TE	EVENT	GLR	VEH	D/L	ENV	TYPE	SPEED	(1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDED	WAINGDLE	VEICNTDOR	DATE
								DBA								
14	141	2	1	1	1	5	62	89.1	83.8	83.8	0.0	0.0	0	70	0.0	2/11/83
14	142	2	1	1	1	5	53	86.3	80.6	80.4	0.0	0.0	0	70	0.0	2/11/83
14	143	2	1	1	1	0	58	79.1	74.5	74.3	0.0	0.0	0	70	0.0	2/11/83
14	144	2	1	1	1	2	62	89.6	84.4	84.0	0.0	0.0	0	70	0.0	2/11/83
14	145	2	1	1	1	5	63	91.1	85.7	85.2	0.0	0.0	0	70	0.0	2/11/83
14	146	2	1	1	1	1	51	87.0	81.7	82.0	0.0	0.0	0	70	0.0	2/11/83
14	147	2	1	1	1	1	61	82.2	76.S	76.5	0.0	0.0	0	70	0.0	2/11/83
14	148	1	1	1	1	1	63	82.6	78.1	77.5	0.0	0.0	0	70	0.0	2/11/83
14	149	2	1	1	1	5	65	92.5	87.8	87.7	0.0	0.0	0	70	0.0	2/11/83
14	150	2	1	1	1	0	61	80.6	75.9	76.0	0.0	0.0	0	70	0.0	2/11/83
14	151	2	1	1	1	1	63	80.5	75.5	75.3	0.0	0.0	0	70	0.0	2/11/83
14	152	2	1	1	1	5	59	92.5	87.1	87.2	0.0	0.0	0	70	0.0	2/11/83
14	153	2	1	1	1	2	58	86.4	81.0	80.4	0.0	0.0	0	70	0.0	2/11/83
14	154	0	1	1	1	4	53	84.5	78.9	78.6	0.0	0.0	0	70	0.0	2/11/83
14	155	2	1	1	1	7	60	77.3	72.5	72.4	0.0	0.0	0	70	0.0	2/11/83
14	156	2	1	1	1	2	64	87.6	82.2	81.8	0.0	0.0	0	70	0.0	2/11/83
14	157	2	1	1	1	5	59	91.9	86.2	86.9	0.0	0.0	0	70	0.0	2/11/83
14	158	2	1	1	1	1	65	82.7	76.7	77.4	0.0	0.0	0	70	0.0	2/11/83
14	159	2	1	1	1	5	61	93.8	88.1	87.9	0.0	0.0	0	70	0.0	2/11/83
14	160	2	1	1	1	5	60	92.0	87.0	86.8	0.0	0.0	0	70	0.0	2/11/83
14	161	2	1	1	1	1	58	81.3	76.0	76.0	0.0	0.0	0	70	0.0	2/11/83
14	162	2	1	1	1	5	63	92.8	87.2	87.9	0.0	0.0	0	70	0.0	2/11/83
14	163	1	1	1	1	2	56	85.9	81.5	80.4	0.0	0.0	0	70	0.0	2/11/83
i4	164	2	1	1	1	5	63	90.5	85.4	86.2	0.0	0.0	0	70	0.0	2/11/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH HL	DEN	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
15	1	2	1	1	2	61	86.6	79.6	80.0	71.7	73.2	3	270	0.0	2/15/83
15	2	2	1	1	1	63	80.3	74.1	74.6	66.0	69.2	3	270	0.0	2/15/83
15	3	2	1	1	5	52	88.2	80.4	81.8	73.2	74.7	3	270	0.0	2/15/83
15	4	2	1	1	5	53	90.2	82.4	83.7	75.3	76.4	3	270	0.0	2/15/83
15	5	2	1	1	5	62	91.4	84.6	85.8	77.6	7a.9	3	270	0.0	2/15/83
15	6	2	1	1	5	62	91.1	83.8	85.2	-1.0	-1.0	3	270	0.0	2/15/83
15	7	2	1	1	5	61	89.9	81.8	83.6	74.7	76.2	3	270	0.0	2/15/83
15	8	2	1	1	5	62	93.3	85.7	87.2	78.4	80.1	3	270	0.0	2/15/83
15	9	2	1	1	5	66	90.3	83.4	84.8	77.2	78.0	3	270	0.0	2/15/83
15	10	0	1	1	1	53	74.9	68.6	70.3	65.7	67.2	0	130	0.0	2/15/83
15	11	0	1	0	1	2	65	90.4	84.3	77.4	-1.0	-1.0	0	130	0.0	2/15/83
15	12	2	1	1	1	4	64	93.2	85.3	86.9	79.0	79.5	0	130	0.0	2/15/83
15	13	1	1	1	1	1	60	83.9	76.7	78.0	68.8	71.4	0	130	0.0	2/15/83
15	14	2	1	1	1	5	61	90.1	83.4	83.8	76.1	77.0	0	130	0.0	2/15/83
15	15	2	1	1	1	5	60	89.0	81.8	82.8	75.0	76.0	0	130	0.0	2/15/83
15	16	0	1	1	1	1	55	80.8	74.4	75.7	67.2	70.2	0	130	0.0	2/15/83
15	17	1	1	1	1	2	61	88.9	81.6	82.3	75.4	76.3	3	270	0.0	2/15/83
15	18	0	0	1	1	5	61	93.9	87.5	87.9	80.7	82.3	3	270	0.0	2/15/83
15	19	2	1	1	1	5	59	87.8	80.5	81.0	73.8	74.0	3	270	0.0	2/15/83
15	20	0	1	1	1	2	51	84.0	77.2	78.4	70.9	73.1	0	270	0.0	2/15/83
15	21	2	1	1	1	5	70	99.6	91.9	93.3	84.5	86.2	0	270	0.0	2/15/83
15	22	1	1	1	1	5	54	86.1	78.8	80.2	72.0	73.6	0	270	0.0	2/15/83
15	23	2	1	1	1	2	62	90.1	82.2	83.2	74.8	75.8	0	270	0.0	2/15/83
15	24	2	1	1	1	7	57	86.2	78.5	79.9	71.8	73.5	0	270	0.0	2/15/83
15	25	2	1	1	1	2	59	87.3	80.8	81.5	74.8	76.5	0	270	0.0	2/15/83
15	26	2	1	1	1	5	56	87.8	80.6	81.7	73.4	75.4	0	270	0.0	2/15/83
15	27	2	1	1	1	5	63	91.0	84.0	-1.0	-1.0	-1.0	0	270	0.0	2/15/83
15	28	2	1	1	1	5	63	101.6	95.1	94.0	85.2	87.0	0	270	0.0	2/15/83
15	29	2	1	1	1	5	57	87.2	79.9	81.0	73.1	74.4	0	270	0.0	2/15/83
15	30	2	1	1	1	5	60	89.4	82.6	83.9	74.8	76.5	0	270	0.0	2/15/83
15	31	2	1	1	1	5	60	93.4	87.2	87.9	80.5	81.1	0	270	0.0	2/15/83
15	32	2	1	1	1	5	60	90.0	81.8	-1.0	75.7	76.7	0	270	0.0	2/15/83
15	33	2	1	1	1	5	61	89.4	82.2	83.1	74.7	76.2	0	270	0.0	2/15/83
15	34	2	1	1	1	5	62	89.8	82.0	83.2	74.7	-1.0	0	270	0.0	2/15/83
15	35	1	1	1	1	5	61	88.2	81.4	82.6	74.3	75.8	0	270	0.0	2/15/83
15	36	2	1	1	1	2	61	87.9	80.1	81.4	72.3	73.9	0	270	0.0	2/15/83
15	37	2	1	1	1	5	57	90.1	82.8	84.3	75.7	77.0	0	270	0.0	2/15/83
15	38	0	1	1	1	5	58	88.6	82.2	83.2	76.0	77.3	0	270	0.0	2/15/83
15	39	2	1	1	1	5	62	89.9	82.6	83.6	74.9	76.9	0	270	0.0	2/15/83
15	40	2	1	1	1	5	60	92.2	85.5	86.6	78.4	79.9	0	270	0.0	2/15/83
15	41	2	1	1	1	5	63	91.0	83.6	84.9	76.3	78.5	0	270	0.0	2/15/83
15	42	2	1	1	1	5	60	88.3	82.0	82.7	73.8	75.5	0	270	0.0	2/15/83
15	43	2	1	1	1	5	60	89.4	81.3	82.6	73.7	75.3	0	270	0.0	2/15/83
15	44	2	1	1	1	5	57	90.4	83.3	84.5	76.3	77.7	0	270	0.0	2/15/83
15	45	2	1	1	1	5	62	90.0	82.4	84.0	74.9	76.8	0	270	0.0	2/15/83
15	46	2	1	1	1	5	48	89.3	82.1	83.1	75.4	76.4	0	270	0.0	2/15/83
15	47	2	1	1	1	5	57	92.1	85.2	85.7	77.3	78.2	0	270	0.0	2/15/83
15	48	2	1	1	1	5	59	89.4	82.5	83.8	76.0	77.3	0	270	0.0	2/15/83
15	49	2	1	1	1	5	59	90.7	84.1	84.6	77.1	77.7	0	270	0.0	2/15/83
15	50	2	1	1	1	5	63	91.2	84.2	85.5	76.a	78.5	0	270	0.0	2/15/83
15	51	2	1	1	1	5	62	87.7	80.7	81.8	73.6	74.8	0	270	0.0	2/15/83
15	52	2	1	1	1	2	61	89.7	82.0	-1.0	-1.0	-1.0	0	270	0.0	2/15/83
15	53	2	1	1	1	5	62	91.5	84.3	85.4	76.3	79.0	0	270	0.0	2/15/83
15	54	1	1	1	1	5	45	84.7	78.7	79.6	71.5	73.5	0	270	0.0	2/15/83
15	55	0	0	1	1	5	60	83.8	78.0	79.6	72.4	73.9	0	240	0.0	2/15/83
15	56	2	1	1	1	5	60	91.6	84.6	85.9	77.1	78.5	0	240	0.0	2/15/83
15	57	2	1	1	1	5	63	89.8	83.0	84.0	75.8	77.3	0	240	0.0	2/15/83
15	58	2	1	1	1	5	67	102.8	96.6	97.4	88.7	89.5	0	240	0.0	2/15/83
15	59	0	1	1	1	5	54	89.6	82.2	83.4	75.5	78.3	0	240	0.0	2/15/83
15	60	2	1	1	1	5	70	93.5	86.4	86.9	80.8	80.7	0	240	0.0	2/15/83
15	61	2	1	1	1	5	63	88.0	80.9	82.0	74.3	75.2	0	240	0.0	2/15/83
15	62	2	1	1	1	5	59	90.2	83.7	84.4	76.4	77.8	0	240	0.0	2/15/83
15	63	2	1	1	1	3	54	92.1	84.7	85.4	77.4	79.1	0	240	0.0	2/15/83
15	64	2	1	1	1	4	57	90.2	83.7	84.9	76.2	78.2	0	240	0.0	2/15/83
15	65	2	1	1	1	2	58	82.7	78.2	78.8	70.0	74.0	0	240	0.0	
15	66	2	1	1	1	5	61	95.1	a9.9	90.3	83.8	84.0	0	240	0.0	2/15/83
15	67	2	1	1	1	3	59	93.3	85.8	86.9	77.2	79.5	0	240	0.0	2/15/83
15	68	2	1	1	1	5	66	90.4	83.6	84.3	76.3	78.4	0	240	0.0	2/15/83
15	69	2	1	1	1	5	54	87.0	80.1	81.1	-1.0	-1.0	0	240	0.0	2/15/83
15	70	2	1	1	1	5	61	99.8	91.2	93.3	84.3	85.5	0	240	0.0	2/15/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	DEN	VEH TYPE	VEH SPEED	MIC (1) 5'	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDED	WAINGDLE	VWEICNTDOR	DATE
15	71	2	1	1	5	67	96.2	88.7	90.1	81.3	82.5	0	240	0.0	2/15/83
15	72	2	1	1	2	58	85.3	78.0	78.9	70.5	72.3	0	240	0.0	2/15/83
15	73	2	1	1	3	47	86.4	79.0	80.4	72.2	73.7	0	240	0.0	2/15/83
15	74	2	1	1	1	63	77.9	71.5	73.7	64.3	68.0	0	240	0.0	2/15/83
15	75	2	1	1	5	62	93.8	86.6	88.0	79.7	80.5	0	240	0.0	2/15/83
15	76	2	1	1	5	55	88.7	81.6	83.2	75.1	76.5	0	240	0.0	2/15/83
15	77	2	1	1	7	61	86.7	80.1	71.1	70.0	72.7	0	240	0.0	2/15/83
15	78	2	1	1	5	'59	88.1	81.0	82.4	74.7	75.8	0	240	0.0	2/15/83
15	79	2	1	1	5	62	90.7	83.1	84.6	76.2	77.6	0	240	0.0	2/15/83
15	80	2	1	1	2	62	88.9	80.6	82.9	73.9	75.7	0	240	0.0	2/15/83
15	81	2	1	1	5	65	92.3	85.3	86.0	78.4	79.1	0	240	0.0	2/15/83
15	82	2	1	1	5	65	95.5	88.0	89.7	80.3	a2.1	0	240	0.0	2/15/83
15	83	2	1	1	5	55	85.0	79.2	80.1	73.4	75.9	0	240	0.0	2/15/83
15	84	2	1	1	5	60	89.5	82.7	83.a	75.6	77.0	0	240	0.0	2/15/83
15	85	0	1	1	0	64	78.9	72.2	73.9	65.3	67.6	0	240	0.0	2/15/83
15	86	2	1	1	5	60	88.8	81.2	82.6	73.8	75.4	0	240	0.0	2/15/83
15	87	2	1	1	3	55	95.2	89.4	88.5	83.0	82.3	0	240	0.0	2/15/83
15	88	2	1	1	5	58	93.5	88.4	87.4	83.1	82.6	0	240	0.0	2/15/83
15	89	0	0	1	5	55	92.6	86.7	87.4	79.6	82.5	0	240	0.0	2/15/83
15	90	0	0	1	4	60	87.3	81.0	82.4	75.2	76.3	0	240	0.0	2/15/83
15	91	2	1	1	3	63	90.1	82.8	83.8	75.4	76.4	0	240	0.0	2/15/83
15	92	2	1	1	5	60	93.0	87.1	87.1	80.5	81.2	0	240	0.0	2/15/83
15	93	2	1	1	5	61	93.7	87.1	88.2	80.0	81.2	0	240	0.0	2/15/83
15	94	2	1	1	5	58	86.0	79.4	80.5	72.3	74.3	0	240	0.0	2/15/83
15	95	2	1	1	5	56	92.7	85.3	86.5	78.1	79.5	0	240	0.0	2/15/83
15	96	2	1	1	5	61	93.9	85.8	87.2	78.5	79.3	0	240	0.0	2/15/83
15	97	2	1	1	5	64	91.8	85.8	86.1	78.4	79.4	0	240	0.0	2/15/83
15	98	1	1	1	0	59	78.7	72.1	73.0	64.5	67.2	0	240	0.0	2/15/83
15	99	2	1	1	5	54	88.2	80.8	82.3	74.8	76.0	0	240	0.0	2/15/83
15	100	1	1	1	2	59	82.2	76.3	77.2	69.5	71.7	0	240	0.0	2/15/83
15	101	2	1	1	4	65	92.0	84.5	85.7	77.7	78.2	0	240	0.0	2/15/83
15	102	2	1	1	7	60	88.0	80.7	81.3	73.2	75.1	0	240	0.0	2/15/83
15	103	2	1	1	2	61	86.5	79.2	ao.6	73.4	74.6	0	240	0.0	2/15/83
15	104	2	1	1	4	5a	89.5	81.8	83.1	74.3	75.8	0	240	0.0	2/15/83
15	105	2	1	1	5	57	90.0	83.3	84.5	76.8	78.1	0	240	0.0	2/15/83
15	106	2	1	1	2	59	87.1	79.0	80.8	72.0	74.2	0	0	0.0	2/15/83
15	107	1	1	1	5	56	85.9	79.3	79.8	73.2	74.9	0	0	0.0	2/15/83
15	108	2	1	1	2	57	85.7	79.7	80.1	74.5	75.4	0	0	0.0	2/15/83
15	109	2	1	1	5	62	89.7	82.5	83.5	74.6	76.5	0	0	0.0	2/15/83
15	110	2	1	1	5	51	86.5	79.6	80.6	73.3	74.8	0	0	0.0	2/15/83
15	111	2	1	1	3	57	88.8	81.6	82.2	76.2	76.1	0	0	0.0	
15	112	2	1	1	3	61	89.1	82.2	82.8	75.0	76.4	0	0	0.0	2/15/83
15	113	2	1	1	3	64	88.1	80.5	81.8	73.6	75.4	0	0	0.0	2/15/83
15	114	2	1	1	5	60	91.4	84.4	86.6	77.7	79.6	a	0	0.0	2/15/83
15	115	2	1	1	3	67	93.4	85.2	87.1	77.8	79.5	0	0	0.0	2/15/83
15	116	0	1	1	2	51	87.3	79.1	80.9	73.4	75.5	0	0	0.0	2/15/83
15	117	2	1	1	2	63	90.0	82.9	83.0	76.5	77.0	0	0	0.0	2/15/83
15	118	2	1	1	5	62	94.5	87.2	88.1	80.0	81.4	0	0	0.0	2/15/83
15	119	2	1	1	5	68	93.9	86.3	87.6	78.7	80.4	0			2/15/83
15	120	2	1	1	5	54	89.9	83.1	83.9	76.4	76.9	0	0	0.0	2/15/83
15	121	2	1	1	5	60	88.4	80.7	82.1	73.5	75.3	0	0	0.0	2/15/83
15	122	2	1	1	3	60	91.8	83.8	84.7	77.5	77.6	0	0	0.0	2/15/83
15	123	2	1	1	3	61	94.a	89.0	89.5	83.2	83.4	0	0	0.0	2/15/83
15	124	2	1	1	2	50	85.4	79.4	79.2	71.0	73.6	0	0	0.0	2/15/83
15	125	2	1	1	5	61	92.6	85.4	86.0	78.4	79.2	0	0	0.0	2/15/83
15	126	2	1	1	5	57	88.1	80.9	82.1	73.3	74.9	0	0	0.0	2/15/83
15	127	2	1	1	2	62	89.9	83.2	84.8	75.6	77.8	0	0	0.0	2/15/83
15	128	2	1	1	3	64	93.4	87.3	87.5	80.2	80.8	0	0	0.0	2/15/83
15	129	2	1	1	2	57	86.1	79.4	80.5	72.9	73.7	0	0	0.0	2/15/83
15	130	2	1	1	2	56	85.0	7a.4	78.8	71.9	72.8	0	0	0.0	2/15/83
15	131	2	1	1	5	59	90.6	82.8	83.8	-1.0	-1.0	0	0	0.0	2/15/83
15	132	2	1	1	4	58	86.8	79.9	80.8	72.6	74.1	0	0	0.0	2/15/83
15	133	2	1	1	2	55	87.8	80.1	81.4	73.5	74.9	0	0	0.0	2/15/83
15	134	2	1	1	5	55	87.8	79.9	81.6	73.2	74.2	0	0	0.0	2/15/83
15	135	2	1	1	2	60	89.0	82.1	82.9	75.2	76.2	0	0	0.0	2/15/83
15	136	2	1	1	5	59	88.9	81.8	82.9	74.4	76.1	0	0	0.0	2/15/83
15	137	2	1	1	5	55	88.6	83.3	85.3	75.8	78.1	0	0	0.0	2/15/83
15	138	2	1	1	4	63	90.1	82.8	84.5	76.1	77.4	0			2/15/83
15	139	2	1	1	5	47	89.0	81.0	82.5	74.4	75.5	0	0	0.0	2/15/83
15	140	2	1	1	5	61	92.9	85.9	87.0	78.1	79.9	0	0	0.0	2/15/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	DEN/HLV	VEH TYPE	VEH SPEED	MIC (1) 5	MIC (2) 5	MIC (3) 10 DBA	MIC (4) 5	MIC (5) 10	USIPNEDD	WAINGDLE	WEICNTDOR	DATE
15	141	0	0	1 1	2	54	82.6	75.6	76.5	70.6	71.6	0	0	0.0	2/15/83
15	142	0	1	1 1	2	59	87.0	79.1	80.5	73.0	74.5	0	0	0.0	2/15/83
15	143	2	1	1 1	5	50	92.8	85.5	86.2	78.7	79.4	0	0	0.0	2/15/83
15	144	2	1	1 1	5	61	93.1	86.0	87.1	78.5	80.0	0	0	0.0	2/15/83
15	145	0	1	1 1	2	39	86.1	79.2	80.1	72.3	74.2	0	0	0.0	2/15/83
15	146	2	1	1 1	2	64	89.3	81.4	83.1	74.1	75.4	0	0	0.0	2/15/83
15	147	2	1	1 1	2	55	85.9	79.0	79.0	72.3	73.1	0	0	0.0	2/15/83
15	148	2	1	1 1	5	62	91.4	84.2	85.2	77.8	78.6	0	0	0.0	2/15/83
15	149	1	1	1 1	3	52	84.8	78.8	79.3	73.1	74.4	0	0	0.0	2/15/83
15	150	2	1	1 1	2	62	91.3	84.7	84.8	76.2	78.2	0	0	0.0	2/15/83
15	151	2	1	1 1	2	65	89.6	82.6	83.5	75.3	77.5	3	30	3.9	2/15/83
15	152	2	1	1 1	3	57	89.5	82.3	83.2	75.6	76.4	3	30	3.9	2/15/83
15	153	2	1	1 1	5	62	90.4	82.5	-1.0	-1.0	-1.0	3	30	3.9	2/15/83
15	154	0	1	1 1	2	56	86.2	79.7	80.2	74.1	74.9	3	30	3.9	2/15/83
15	155	2	1	1 1	4	58	89.7	82.1	83.5	74.9	76.3	3	30	3.9	2/15/83
15	156	2	1	1 1	5	61	91.3	84.8	85.5	78.3	-1.0	3	30	3.9	2/15/83
15	157	2	1	1 1	4	60	89.7	82.6	83.6	75.9	76.5	3	30	3.9	2/15/83
15	158	2	1	1 1	2	59	86.5	79.8	80.3	73.0	71.1	3	30	3.9	2/15/83
15	159	2	1	1 1	2	57	87.4	80.9	81.2	74.7	76.2,	3	30	3.9	2/15/83
15	160	2	1	1 1	5	56	86.6	79.5	-1.0	70.3	70.0	3	30	3.9	2/15/83
15	161	2	1	1 1	2	62	88.6	81.5	81.7	74.5	74.8	3	30	3.9	2/15/83
15	162	2	1	1 1	5	59	89.6	82.0	83.4	75.2	76.5	3	30	3.9	2/15/83
15	163	2	1	1 1	4	59	88.9	82.2	73.9	72.1	73.2	3	30	3.9	2/15/83
15	164	2	1	1 1	2	57	86.1	79.5	81.2	73.5	74.1	3	30	3.9	2/15/83
15	165	0	1	1 1	1	63	81.0	73.2	75.2	67.2	69.4	3	30	3.9	2/15/83
15	166	2	1	1 1	5	57	87.5	80.9	81.6	73.7	75.5	3	30	3.9	2/15/83
15	167	2	1	1 1	2	60	85.8	77.6	78.8	71.3	72.5	3	30	3.9	2/15/83
15	168	2	1	1 1	1	64	81.5	74.8	75.7	66.5	69.4	3	30	3.9	2/15/83
15	169	2	1	1 1	5	46	89.0	83.0	83.4	76.3	76.3	3	30	3.9	2/15/83
15	170	2	1	1 1	5	56	90.1	82.4	83.6	75.5	76.9	3	30	3.9	2/15/83
15	171	2	1	1 1	5	50	87.1	79.6	80.7	72.0	73.4	3	30	3.9	2/15/83
15	172	2	1	1 1	2	60	90.2	82.9	83.5	77.3	77.2	3	30	3.9	2/15/83
15	173	2	1	1 1	4	63	90.6	83.3	84.2	76.3	77.3	3	30	3.9	2/15/83
15	174	0	1	1 1	0	46	75.7	69.4	70.3	62.8	65.6	3	30	3.9	2/15/83
15	175	2	1	1 1	5	59	92.6	85.4	86.3	79.9	79.8	3	30	3.9	2/15/83
15	176	2	1	1 1	5	68	96.9	89.9	90.4	83.5	84.2	3	30	3.9	2/15/83
15	177	0	0	0 1	1	63	80.9	74.2	75.2	66.6	68.6	3	30	3.9	2/15/83
15	178	0	0	0 1	1	64	85.7	77.1	79.9	70.4	72.2	3	30	3.9	2/15/83
15	179	2	1	1 1	2	59	90.1	82.1	83.5	75.5	76.1	3	30	3.9	2/15/83
15	180	2	1	1 1	3	50	88.5	81.4	81.8	74.2	75.7	3	30	3.9	2/15/83
15	181	2	1	1 1	2	61	88.1	79.3	81.1	71.9	73.6	3	30	3.9	2/15/83
15	182	2	1	1 1	2	58	84.7	77.6	78.9	71.3	72.4	3	30	3.9	2/15/83
15	183	0	0	1 1	1	55	78.9	74.2	75.4	68.2	70.5	3	30	3.9	2/15/83
15	184	2	1	1 1	5	58	90.6	83.0	84.2	76.7	78.0	3	30	3.9	2/15/83
15	185	2	1	1 1	5	60	87.8	82.7	83.7	75.4	76.9	3	30	3.9	2/15/83
15	186	1	1	1 1	5	60	91.3	84.1	84.8	77.4	79.0	3	30	3.9	2/15/83
15	187	1	1	1 1	1	55	79.8	73.6	74.7	68.0	70.0	3	60	2.3	2/15/83
15	188	2	1	1 1	2	63	88.9	81.0	82.7	73.3	76.0	3	60	2.3	2/15/83
15	189	2	1	1 1	2	68	88.7	81.5	83.1	74.2	75.3	3	60	2.3	2/15/83
15	190	2	1	1 1	2	62	85.6	78.8	79.4	71.9	73.2	3	60	2.3	2/15/83
15	191	2	1	1 1	2	61	88.4	81.4	82.2	73.7	75.6	3	60	2.3	2/15/83
15	192	2	1	1 1	5	67	91.7	84.3	84.9	76.4	78.5	3	60	2.3	2/15/83
15	193	2	1	1 1.	2	57	91.0	82.9	84.3	75.7	77.0	3	60	2.3	2/15/83
15	194	0	0	1 1	0	60	79.9	75.8	76.0	69.0	71.4	3	60	2.3	2/15/83
15	195	2	1	1 1	2	62	90.8	83.7	'84.5	77.0	77.9	3	60	2.3	2/15/83
15	196	2	1	1 1	1	58	79.0	72.5	73.6	65.0	67.4	3	60	2.3	2/15/83
15	197	2	1	1 1	5	62	90.0	82.3	83.3	74.5	76.5	3	60	2.3	2/15/83
15	198	2	1	1 1	5	62	91.1	84.3	85.7	78.3	78.9	3	60	2.3	2/15/83
15	199	2	1	1 1	5	57	88.6	81.1	82.7	73.4	75.1	3	60	2.3	2/15/83
15	200	2	1	1 1	4	53	91.0	83.9	85.0	76.0	77.8	3	60	2.3	2/15/83
15	201	2	1	1 1	4	55	89.2	81.1	82.5	75.1	75.5	3	60	2.3	2/15/83
15	202	2	1	1 1	2	52	89.2	80.6	82.5	74.1	75.7	3	60	2.3	2/15/83
15	203	2	1	1 1	5	59	90.2	83.8	83.8	76.7	78.0	3	60	2.3	2/15/83
15	204	2	1	1 1	5	61	89.1	82.1	82.7	75.2	72.5	3	60	2.3	2/15/83
15	205	2	1	1 1	1	63	81.1	76.4	77.2	71.1	72.5	3	60	2.3	2/15/83
15	206	1	1	1 1	1	59	83.2	76.1	77.3	69.8	71.0	3	60	2.3	2/15/83
15	207	2	1	1 1	5	61	94.4	88.0	88.4	80.7	81.0	3	60	2.3	2/15/83
15	208	2	1	1 1	3	63	89.4	81.6	82.5	74.7	75.9	3	60	2.3	2/15/83
15	209	2	1	1 1	5	66	93.9	87.2	88.1	80.0	80.4	3	60	2.3	2/15/83
15	210	2	1	1 1	4	60	91.0	83.0	84.7	76.1	75.0	3	60	2.3	2/15/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	DEN/LEV	VEH TYPE	VEH SPED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSINDED	WAINGDLE	VWEICNTDOR	DATE
15	211	2	1	1 1	4	62	93.5	86.2	87.4	78.6	79.8	3	60	2.3	2/15/83
15	212	2	1	1 1	5	54	87.8	80.0	81.4	72.7	74.2	3	60	2.3	2/15/83
15	213	0	1	1 1	5	60	89.1	82.4	83.6	76.0	77.3	3	60	2.3	2/15/83
15	214	2	1	1 1	4	59	9'0.8	83.2	84.4	76.2	78.0	3	60	2.3	2/15/83
15	215	2	1	1 1	4	54	89.3	81.6	-1.0	71.3	72.7	3	60	2.3	2/15/83
15	216	2	1	1 1	5	56	89.2	82.2	83.2	75.5	77.1	3	60	2.3	2/15/83
15	217	2	1	1 1	5	62	90.7	83.4	86.1	76.5	77.1	3	60	2.3	2/15/83
15	218	2	1	1 1	5	52	89.4	81.8	82.8	75.2	75.9	3	60	2.3	2/15/83
15	219	1	1	1 1	1	50	74.8	68.7	69.3	62.6	65.0	3	60	2.3	2/15/83
15	220	2	1	1 1	3	61	86.9	79.0	80.1	72.5	73.6	3	60	2.3	2/15/83
15	221	2	1	1 1	2	60	86.2	78.4	80.0	71.8	73.4	3	60	2.3	2/15/83
15	222	2	1	1 1	5	63	89.8	83.3	83.7	77.2	78.3	3	60	2.3	2/15/83
15	223	2	1	1 1	5	61	93.8	88.0	88.0	81.2	82.0	3	60	2.3	2/15/83
15	224	2	1	1 1	2	53	87.0	79.9	81.4	72.3	74.7	3	60	2.3	2/15/83
15	225	2	1	1 1	5	59	89.7	81.4	83.4	74.5	75.8	3	60	2.3	2/13/83
15	226	2	1	1 1	5	62	94.9	87.9	88.8	80.9	81.7	3	60	2.3	2/15/83
15	227	0	1	1 1	2	49	84.1	76.3	77.3	69.4	71.1	3	60	2.3	2/15/83
15	228	2	1	1 1	2	63	86.7	78.5	79.7	71.0	72.7	3	60	2.3	2/15/83
15	229	2	1	1 1	2	60	88.3	80.7	81.3	72.9	74.3	3	60	2.3	2/15/83
15	230	0	1	1 1	2	58	87.0	80.9	74.5	70.7	74.9	3	60	2.3	2/15/83
15	231	2	1	1 1	3	52	91.7	84.4	85.8	78.4	79.3	3	60	2.3	2/15/83
15	232	2	1	1 1	4	62	92.4	83.1	86.4	76.3	77.1	3	60	2.3	2/15/83
15	233	0	1	1 1	1	54	78.8	71.2	72.7	63.7	66.2	3	60	2.3	2/15/83
15	234	2	1	1 1	5	60	88.5	80.9	82.0	74.1	75.1	3	60	2.3	2/15/83
15	235	2	1	1 1	3	59	94.3	88.4	88.8	82.8	82.1	3	60	2.3	2/15/83
15	236	2	1	1 1	4	58	88.1	80.9	82.0	68.2	70.8	3	60	2.3	2/15/83
15	237	2	1	1 1	5	61	89.6	82.7	83.9	75.5	77.3	3	60	2.3	2/15/83
15	238	2	1	1 1	5	61	90.0	83.1	84.1	75.7	77.5	3	60	2.3	2/15/83
15	239	2	1	1 1	3	60	89.1	80.7	82.5	73.4	75.3	3	60	2.3	2/15/83
15	240	0	1	1 1	1	55	78.7	73.9	74.5	68.1	70.3	3	60	2.3	2/15/83
15	241	2	1	1 1	2	61	87.1	79.9	80.9	73.0	73.9	3	60	2.3	2/15/83
15	242	2	1	1 1	1	54	83.2	75.8	77.3	67.3	69.7	3	60	2.3	2/15/83
15	243	2	1	1 1	5	57	89.6	82.0	83.4	74.7	75.7	3	60	2.3	2/13/83
15	244	2	1	1 1	2	66	88.9	81.0	82.9	74.1	75.9	3	60	2.3	2/15/83
15	245	2	1	1 1	5	57	92.4	84.6	86.4	78.2	78.7	3	60	2.3	2/15/83
15	246	2	1	1 1	5	62	92.9	84.3	86.3	77.2	78.0	3	60	2.3	2/15/83
15	247	2	1	1 1	4	61	87.2	79.9	81.0	66.6	67.9	3	60	2.3	2/15/83
15	248	0	1	1 1	3	57	85.3	77.5	70.9	72.5	73.6	3	60	2.3	2/15/83
15	249	2	1	1 1	5	54	87.3	81.3	82.7	74.5	76.1	3	60	2.3	2/15/83
15	250	2	1	1 1	3	63	91.8	84.4	85.1	77.0	79.2	3	60	2.3	2/15/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH QUAL. VEH	DL	ENV	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIPNEDE	WAINGDLE	VWEICNTDOR	DATE
16	1	2	1	1	1	0	57	79.7	72.8	74.1	65.2	68.1	0	90	0.0	2/16/83
16	2	2	1	1	1	4	54	86.0	80.0	81.0	73.0	74.2	0	90	0.0	2/16/83
16	3	2	1	1	1	1	61	82.1	75.5	75.9	66.4	69.5	0	90	0.0	2/16/83
16	4	2	1	1	1	5	62	90.5	84.0	84.5	75.8	66.9	0	90	0.0	2/16/83
16	5	2	1	1	1	4	56	88.5	81.8	82.1	74.6	76.8	0	90	0.0	2/16/83
16	6	2	1	1	1	5	57	90.7	83.4	84.5	75.5	77.7	0	90	0.0	2/16/83
16	7	2	1	1	1	5	64	91.6	84.9	85.9	76.5	78.6	0	90	0.0	2/16/83
16	8	2	1	1	1	1	56	80.0	73.0	73.8	64.8	68.1	0	90	0.0	2/16/83
16	9	2	1	1	1	1	52	80.1	72.0	73.2	62.8	66.0	0	90	0.0	2/16/83
16	10	2	1	1	1	5	57	88.3	82.2	82.9	73.8	75.7	0	90	0.0	2/16/83
16	11	2	1	1	1	3	58	87.7	80.7	81.3	73.1	75.0	0	90	0.0	2/16/83
16	12	2	1	1	1	5	58	90.5	83.6	84.9	75.6	77.9	0	90	0.0	2/16/83
16	13	2	1	1	1	1	58	85.0	77.8	79.5	69.7	72.3	0	90	0.0	2/16/83
16	14	2	1	1	1	5	60	89.9	83.6	84.0	76.3	77.2	0	90	0.0	2/16/83
16	15	2	1	1	1	1	82	88.5	82.1	82.4	72.8	75.3	0	90	0.0	2/16/83
16	16	0	1	1	1	2	58	86.4	79.7	79.8	73.0	73.9	0	90	0.0	2/16/83
16	17	2	1	1	1	0	55	79.9	73.0	73.7	64.0	66.5	0	90	0.0	2/16/83
16	18	1	1	1	1	5	60	88.3	82.0	83.2	75.3	77.4	0	90	0.0	2/16/83
16	19	2	1	1	1	0	65	83.6	76.4	77.7	67.5	70.5	0	90	0.0	2/16/83
16	20	2	1	1	1	0	66	81.9	75.2	75.9	67.8	70.8	0	90	0.0	2/16/83
16	21	2	1	1	1	5	59	91.0	83.6	85.0	76.2	78.3	0	90	0.0	2/16/83
16	22	2	1	1	1	1	65	84.3	77.4	79.1	69.9	72.6	0	90	0.0	2/16/83
16	23	2	1	1	1	1	60	80.9	73.9	74.5	64.8	67.8	0	90	0.0	2/16/83
16	24	2	1	1	1	1	56	79.4	71.9	73.1	63.6	66.4	0	90	0.0	2/16/83
16	25	1	1	1	1	3	54	86.8	80.7	81.0	72.9	75.0	0	90	0.0	2/16/83
16	26	2	1	1	1	2	60	87.4	79.9	80.9	71.8	73.6	0	90	0.0	2/16/83
16	27	2	1	1	1	1	59	82.5	75.7	76.4	67.0	69.9	0	90	0.0	2/16/83
16	28	2	1	1	1	1	61	83.0	75.2	75.9	67.8	69.8	0	90	0.0	2/16/83
16	29	2	1	1	1	5	61	92.7	85.5	86.0	77.2	78.5	0	90	0.0	2/16/83
16	30	2	1	1	1	0	54	79.9	72.7	73.6	63.8	67.5	0	90	0.0	2/16/83
16	31	2	1	1	1	4	57	87.0	80.8	81.9	73.0	76.4	0	90	0.0	2/16/83
16	32	2	1	1	1	5	61	91.7	84.2	84.9	77.1	77.9	0	90	0.0	2/16/83
16	33	0	0	1	1	2	57	85.0	78.2	79.4	71.5	73.0	0	90	0.0	2/16/83
16	34	2	1	1	1	5	63	89.5	82.6	83.3	74.8	76.3	0	90	0.0	2/16/83
16	35	2	1	1	1	1	67	82.2	75.0	75.7	66.7	69.5	0	90	0.0	2/16/83
16	36	2	1	1	1	2	64	86.5	79.1	80.9	70.2	73.8	0	90	0.0	2/16/83
16	37	2	1	1	1	1	60	79.4	72.5	74.2	60.4	67.8	0	90	0.0	2/16/83
16	38	0	0	1	1	1	60	85.0	79.9	80.5	72.2	75.2	0	90	0.0	2/16/83
16	39	2	1	1	1	1	62	80.8	73.8	74.6	65.4	68.2	0	90	0.0	2/16/83
16	40	2	1	1	1	3	58	89.7	82.8	83.7	74.9	76.7	0	90	0.0	2/16/83
16	41	2	1	1	1	1	67	84.7	77.4	78.4	68.5	71.1	0	90	0.0	2/16/83
16	42	2	1	1	1	0	54	77.7	71.1	72.3	63.8	66.1	0	90	0.0	2/16/83
16	43	2	1	1	1	1	58	79.9	73.3	74.2	66.8	68.9	0	90	0.0	2/16/83
16	44	2	1	1	1	0	60	79.5	71.8	73.6	63.2	66.2	0	90	0.0	2/16/83
16	45	2	1	1	1	1	63	80.2	73.0	74.8	66.8	69.3	0	90	0.0	2/16/83
16	46	2	1	1	1	1	63	81.9	74.7	75.7	65.9	69.1	0	90	0.0	2/16/83
16	47	2	1	1	1	1	53	82.9	75.4	76.3	66.8	69.4	0	90	0.0	2/16/83
16	48	2	1	1	1	1	64	82.3	74.8	76.0	66.1	68.7	0	90	0.0	2/16/83
16	49	2	1	1	1	1	61	81.2	73.5	74.8	65.1	68.4	0	90	0.0	2/16/83
16	50	0	1	1	1	1	76	88.3	82.0	82.0	79.8	76.7	0	90	0.0	2/16/83
16	51	0	0	1	1	2	56	84.2	77.3	78.1	69.4	71.5	0	90	0.0	2/16/83
16	52	2	1	1	1	2	51	86.4	79.9	79.8	72.6	73.2	0	90	0.0	2/16/83
16	53	2	1	1	1	1	57	82.8	75.5	76.5	67.6	69.7	0	90	0.0	2/16/83
16	54'	2	1	1	1	1	60	78.8	72.4	73.4	65.8	67.0	0	90	0.0	2/16/83
16	55	2	1	1	1	0	57	83.0	76.4	76.6	68.7	69.8	0	90	0.0	2/16/83
16	56	2	1	1	1	5	54	87.5	81.7	81.8	74.8	75.6	0	90	0.0	2/16/83
16	57	2	1	1	1	0	62	80.5	73.9	74.8	66.0	68.8	0	90	0.0	2/16/83
16	58	2	1	1	1	1	63	83.8	77.1	77.4	67.9	70.9	0	90	0.0	2/16/83
16	59	2	1	1	1	1	57	85.1	78.3	78.8	69.5	72.2	0	90	0.0	2/16/83
16	60	0	0	1	1	0	62	78.6	71.8	73.7	67.7	69.7	0	90	0.0	2/16/83
16	61	0	0	1	1	1	53	78.5	71.4	72.7	63.7	67.2	0	90	0.0	2/16/83
16	62	2	1	1	1	5	60	87.8	81.4	82.6	74.0	75.5	0	90	0.0	2/16/83
16	63	2	0	1	1	5	62	88.7	82.3	83.4	74.1	76.4	0	90'	0.0	2/16/83
16	64	2	1	1	1	1	58	81.9	74.0	75.1	64.8	68.4	0	90	0.0	2/16/83
16	65	2	1	1	1	5	60	90.2	83.3	83.8	75.1	76.5	0	90	0.0	2/16/83
16	66	0	0	1	1	1	51	82.9	76.6	77.6	69.6	72.7	0	90	0.0	2/16/83
16	67	2	1	1	1	5	60	89.1	81.5	82.6	73.2	74.9	0	90	0.0	2/16/83
16	68	2	1	1	1	5	57	89.8	82.6	83.7	74.8	76.8	0	90	0.0	2/16/83
16	69	2	1	1	1	5	60	88.5	81.8	82.7	73.7	75.4	0	90	0.0	2/16/83
16	70	2	1	1	1	1	59	85.2	77.0	77.9	69.2	70.9	0	90	0.0	2/16/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	DEN	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDED	WAINGDLE	VWEICNTDOR	DATE
							DBA								
16	71	2 1 1 1			1	58	81.1	74.2	76.3	66.1	69.4	0	90	0.0	2/16/83
16	72	2 1 1 1			5	53	90.7	84.1	85.4	75.9	78.2	0	90	0.0	2/16/83
16	73	2 1 1 1			1	61	80.8	73.5	74.3	65.0	67.7	0	90	0.0	2/16/83
16	74	2 1 1 1			5	58	88.6	81.3	82.1	73.7	75.2	0	90	0.0	2/16/83
16	75	2 1 1 1			1	60	81.0	73.3	74.7	65.7	68.0	0	90	0.0	2/16/83
16	76	2 1 1 1			1	61	82.1	74.9	75.9	66.0	68.6	0	90	0.0	2/16/83
16	77	0 0 1 1			0	59	79.8	73.1	74.4	64.9	68.0	0	90	0.0	2/16/83
16	78	2 1 1 1			0	54	76.2	69.4	62.5	58.1	63.3	0	90	0.0	2/16/83
16	79	2 1 1 1			1	66	81.0	73.8	74.6	64.8	67.6	0	90	0.0	2/16/83
16	80	2 1 1 1			2	58	88.1	81.3	81.9	73.4	75.7	0	90	0.0	2/16/83
16	81	0 0 1 1			1	49	75.6	69.7	71.2	63.5	67.4	0	90	0.0	2/16/83
16	82	2 1 1 1			1	63	82.0	75.0	76.2	65.9	68.5	0	90	0.0	2/16/83
16	83	2 1 1 1			1	64	82.4	74.9	76.1	66.1	69.2	0	90	0.0	2/16/83
16	84	2 1 1 1			5	58	90.1	83.5	83.9	76.3	77.2	0	90	0.0	2/16/83
16	85	2 1 1 1			0	63	82.1	75.0	76.1	66.3	-1.0	0	90	0.0	2/16/83
16	86	2 1 1 1			1	77	87.0	78.6	81.0	69.9	73.7	0	90	0.0	2/16/83
16	87	2 1 1 1			1	74	83.6	76.5	77.7	67.1	70.4	0	90	0.0	2/16/83
16	88	2 1 1 1			5	53	89.5	82.3	82.7	73.9	75.6	0	90	0.0	2/16/83
16	89	2 1 1 1			3	60	88.3	80.2	81.6	72.6	74.4	0	320	0.0	2/16/83
16	90	0 1 0 1			1	54	66.2	60.3	63.0	59.0	63.3	0	320	0.0	2/16/83
16	91	2 1 1 1			5	57	93.3	86.5	87.5	76.6	79.2	0	320	0.0	2/16/83
16	92	2 1 1 1			1	54	78.5	72.1	73.5	65.1	67.3	0	320	0.0	2/16/83
16	93	0 1 1 1			0	53	78.9	71.9	73.0	64.3	67.0	0	320	0.0	2/16/83
16	94	2 1 1 1			5	56	88.2	81.9	82.5	74.5	75.8	0	320	0.0	2/16/83
16	95	0 0 1 1			1	51	81.9	74.1	75.3	66.8	69.7	0	320	0.0	2/16/83
16	96	2 1 1 1			1	56	80.6	73.3	74.3	65.3	67.3	0	320	0.0	2/16/83
16	97	2 1 1 1			2	54	85.1	77.7	77.8	69.5	71.5	0	320	0.0	2/16/83
16	98	0 0 1 1			0	62	85.1	78.0	78.6	69.5	72.2	0	320	0.0	2/16/83
16	99	0 1 1 1			1	61	82.4	75.8	76.3	67.2	70.1	0	320	0.0	2/16/83
16	100	2 1 1 1			5	59	89.9	82.2	83.3	75.1	76.5	0	320	0.0	2/16/83
16	101	2 1 1 1			1	54	80.6	74.4	74.7	65.8	68.9	0	320	0.0	2/16/83
16	102	0 0 0 1			1	59	-1.0	65.0	67.8	64.7	68.6	0	320	0.0	2/16/83
16	103	2 1 1 1			1	61	82.3	75.3	76.3	67.3	69.4	0	320	0.0	2/16/83
16	104	0 0 1 1			5	60	91.4	84.5	85.0	76.7	77.9	0	320	0.0	2/16/83
16	105	2 1 1 1			1	63	80.7	74.7	75.4	66.9	69.2	0	320	0.0	2/16/83
16	106	2 1 1 1			5	60	86.3	80.1	80.9	72.7	74.3	0	320	0.0	2/16/83
16	107	2 1 1 1			1	65	82.0	75.6	76.2	67.0	69.8	0	320	0.0	2/16/83
16	108	2 1 1 1			1	62	80.5	73.9	75.1	65.8	68.4	0	270	0.0	2/16/83
16	109	2 1 1 1			5	59	91.8	85.3	85.9	77.8	79.1	0	270	0.0	2/16/83
16	110	2 1 1 1			0	57	78.8	72.3	72.9	64.6	67.2	0	270	0.0	2/16/83
16	111	2 1 1 1			1	66	83.6	76.4	77.4	68.1	70.7	0	270	0.0	2/16/83
16	112	2 1 1 1			1	61	79.3	72.3	73.8	63.9	67.3	0	270	0.0	2/16/83
16	113	2 1 1 1			2	57	84.4	76.9	77.7	69.3	71.0	0	270	0.0	2/16/83
16	114	2 1 1 1			1	59	-1.0	72.0	-1.0	-1.0	-1.0	0	270	0.0	2/16/83
16	115	2 1 1 1			1	71	84.4	76.7	78.1	68.3	71.1	0	270	0.0	2/16/83
16	116	2 1 1 1			5	56	88.9	82.4	83.0	74.4	76.2	0	270	0.0	2/16/83
16	117	2 1 1 1			1	70	82.3	75.7	77.0	66.8	69.4	0	270	0.0	2/16/83
16	118	2 1 1 1			1	57	83.0	75.7	76.9	67.3	69.8	0	270	0.0	2/16/83
16	119	2 1 1 1			2	56	90.7	83.7	84.3	75.7	77.3	0	270	0.0	2/16/83.
16	120	2 1 1 1			5	65	92.7	85.9	86.5	78.0	79.8	0	270	0.0	2/16/83
16	121	2 1 1 1			1	55	79.9	72.8	74.0	65.6	67.4	0	270	0.0	2/16/83
16	122	2 1 1 1			1	64	85.1	77.9	79.1	69.0	71.9	0	270	0.0	2/16/83
16	123	1 1 1 1			5	53	87.1	80.1	81.5	73.2	75.0	0	270	0.0	2/16/83
16	124	2 1 1 1			1	55	80.5	73.0	-1.0	-1.0	-1.0	0	270	0.0	2/16/83
16	125	2 1 1 1			3	58	88.9	82.0	82.9	74.1	75.7	0	270	0.0	2/16/83
16	126	2 1 1 1			2	57	86.4	79.4	79.9	71.7	73.4	0	270	0.0	2/16/83
16	127	2 1 1 1			5	57	89.6	82.8	84.0	76.1	76.8	0	270	0.0	2/16/83
16	128	0 0 1 1			1	58	80.8	73.4	74.4	66.6	69.1	0	270	0.0	2/16/83
16	129	2 1 1 1			1	62	81.8	74.3	75.2	68.5	69.5	0	270	0.0	2/16/83
16	130	2 1 1 1			5	62	91.0	84.5	84.6	77.3	77.8	0	270	0.0	2/16/83
16	131	2 1 1 1			5	57	93.9	87.4	88.5	80.8	81.7	0	270	0.0	2/16/83
16	132	0 0 1 1			2	57	85.4	77.6	79.7	70.4	73.2	0	270	0.0	2/16/83
16	133	2 1 1 1			1	49	79.2	72.2	73.3	64.2	67.2	0	270	0.0	2/16/83
16	134	0 0 1 1			1	51	77.2	70.3	72.2	64.7	65.8	0	270	0.0	2/16/83
16	135	2 1 1 1			2	61	86.9	79.2	80.1	71.3	73.1	0	270	0.0	2/16/83
16	136	2 1 1 1			5	53	88.8	81.9	82.5	74.3	75.3	0	270	0.0	2/16/83
16	137	2 1 1 1			5	62	91.0	84.2	84.6	75.8	78.2	0	270	0.0	2/16/83
16	138	2 1 1 1			5	59	89.5	82.2	83.1	73.8	75.2	0	270	0.0	2/16/83
16	139	2 1 1 1			0	60	80.3	74.2	75.3	65.9	68.6	0	270	0.0	2/16/83
16	140	2 1 1 1			0	50	78.5	71.0	72.2	61.7	65.3	0	270	0.0	2/16/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH HL	VEH DN	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
16	141	2	1	1	1	0 58	81.2	73.5	74.9	65.8	68.2	0	270	0.0	2/16/83
16	142	2	1	1	1	3 55	89.0	82.2	82.1	74.3	75.5	0	270	0.0	2/16/83
16	143	2	1	1	1	1 53	85.8	78.7	78.9	71.1	72.4	0	270	0.0	2/16/83
16	144	2	1	1	1	1 59	79.5	72.5	74.0	64.1	67.4	0	270	0.0	2/16/83
16	145	2	1	1	1	1 55	80.6	73.4	74.3	-1.0	-1.0	0	90	0.0	2/16/83
16	146	2	1	1	1	2 59	86.4	79.4	80.6	72.1	73.8	0	90	0.0	2/16/83
16	147	2	1	1	1	5 56	87.7	80.2	81.7	73.6	75.2	0	90	0.0	2/16/83
16	148	2	1	1	1	2 69	88.6	80.9	81.8	73.0	75.7	0	90	0.0	2/16/83
16	149	2	1	1	1	1 67	83.6	75.7	77.6	67.3	70.9	3	270	0.0	2/16/83
16	150	1	1	1	1	1 60	80.9	73.4	74.9	65.9	68.7	6	270	0.0	2/16/83
16	151	2	1	1	1	5 63	94.9	87.4	88.4	80.5	82.0	3	90	0.0	2/16/83
16	152	0	1	1	1	1 50	81.0	72.4	74.1	65.8	68.5	3	90	0.0	2/16/83
16	153	2	1	1	1	2 56	85.7	78.3	79.8	71.2'	73.3	3	90	0.0	2/16/83
16	154	1	1	1	1	2 47	83.6	76.6	77.8	68.9	71.1	3	90	0.0	2/16/83
16	155	2	1	1	1	3 60	87.1	79.7	80.5	71.7	73.8	3	90	0.0	2/16/83
16	156	2	1	1	1	0 55	80.3	73.2	74.6	65.2	68.2	3	90	0.0	2/16/83
16	157	2	1	1	1	5 56	90.0	83.4	83.8	75.4	77.0	3	90	0.0	2/16/83
16	158	2	1	1	1	0 51	78.0	71.1	71.8	63.0	65.7	3	90	0.0	2/16/83
16	159	2	1	1	1	0 63	78.7	71.9	72.9	63.2	66.5	3	90	0.0	2/16/83
16	160	2	1	1	1	5 57	88.9	81.8	82.7	74.0	75.5	3	90	0.0	2/16/83
16	161	2	1	1	1	5 54	88.1	81.3	81.9	73.4	75.0	3	90	0.0	2/16/83
16	162	2	1	1	1	4 64	93.5	86.2	86.6	78.7	80.2	3	90	0.0	2/16/83
16	163	2	1	1	1	0 61	77.4	70.4	72.0	62.1	65.1	3	90	0.0	2/16/83
16	164	2	1	1	1	5 61	90.5	83.9	84.5	75.9	77.8	3	90	0.0	2/16/83
16	165	2	1	1	1	3 53	92.4	85.9	86.5	78.5	79.8	3	90	0.0	2/16/83
16	166	2	1	1	1	1 65	82.9	75.8	77.0	66.1	69.5	3	90	0.0	2/16/83
16	167	2	1	1	1	0 59	80.5	72.6	74.1	67.2	70.1	3	90	0.0	2/16/83
16	168	2	1	1	1	1 62	82.8	75.8	76.8	67.2	70.1	3	90	0.0	2/16/83
16	169	2	1	1	1	2 58	85.8	78.0	79.4	70.5	72.1	3	90	0.0	2/16/83
16	170	2	1	1	1	5 62	89.6	82.9	84.0	75.6	77.4	3	90	0.0	2/16/83
16	171	2	1	1	1	0 64	81.8	74.6	76.0	66.9	69.2	3	90	0.0	2/16/83
16	172	2	1	1	1	1 63	82.1	73.9	75.5	66.3	68.6	3	90	0.0	2/16/83
16	173	2	1	1	1	1 61	83.7	76.5	77.7	68.5	70.6	3	90	0.0	2/16/83
16	174	0	1	1	1	1 65	81.7	74.9	76.6	68.8	71.0	3	90	0.0	2/16/83
16	175	2	1	1	1	1 61	84.5	76.9	78.0	68.8	70.9	3	90	0.0	2/16/83
16	176	2	1	1	1	1 54	78.7	71.2	72.4	63.2	65.7	6	90	0.0	2/16/83
16	177	2	1	1	1	0 59	80.7	73.7	75.0	66.0	69.0	6	90	0.0	2/16/83
16	178	2	1	1	1	2 58	87.0	80.2	80.7	73.4	74.5	6	90	0.0	2/16/83
16	179	2	1	1	1	1 53	78.8	71.9	73.5	64.2	67.8	6	90	0.0	2/16/83
16	180	2	1	1	1	1 56	80.5	73.1	74.7	64.4	67.4	6	90	0.0	2/16/83
16	181	2	1	1	1	5 59	90.3	83.1	84.0	75.3	76.7	6	90	0.0	2/16/83
16	182	2	1	1	1	6 58	91.7	84.4	85.3	76.9	78.1	6	90	0.0	2/16/83
16	183	2	1	1	1	5 61	89.9	83.2	83.9	75.1	76.9	6	90	0.0	2/16/83
16	184	2	1	1	1	1 56	85.9	78.3	79.7	69.5	72.0	6	90	0.0	2/16/83
16	185	0	0	1	1	0 57	79.3	72.2	73.0	64.3	67.7	6	90	0.0	2/16/83
16	186	2	1	1	1	1 54	80.9	73.1	74.9	65.1	67.8	6	90	0.0	2/16/83
16	187	2	1	1	1	0 61	80.8	73.9	75.2	65.9	69.0	6	90	0.0	2/16/83
16	188	2	1	1	1	1 48	80.5	72.5	74.3	64.5	67.3	6	90	0.0	2/16/83
16	189	2	1	1	1	5 65	89.1	81.9	83.2	74.1	76.4	6	90	0.0	2/16/83
16	190	2	1	1	1	1 53	80.6	73.4	75.0	65.9	68.7	6	90	0.0	2/16/83
16	191	2	1	1	1	2 55	85.5	78.6	79.8	70.8	72.5	6	90	0.0	2/16/83
16	192	2	1	1	1	1 61	85.0	77.3	78.1	68.5	71.1	6	90	0.0	2/16/83
16	193	2	1	1	1	1 81	86.3	79.1	80.4	70.8	73.7	6	90	0.0	2/16/83
16	194	2	1	1	1	0 65	81.7	74.8	76.3	65.9	69.5	6	90	0.0	2/16/83
16	195	2	1	1	1	5 58	91.1	84.4	85.5	76.3	78.2	0	90	0.0	2/16/83
16	196	2	1	1	1	1 54	-1.0	72.0	-1.0	-1.0	-1.0	0	90	0.0	2/16/83
16	197	2	1	1	1	1 59	85.7	78.5	79.1	70.9	72.1	0	90	0.0	2/16/83
16	198	2	1	1	1	5 56	88.7	81.7	82.7	74.4	76.0	0	90	0.0	2/16/83
16	199	2	1	1	1	5 57	88.1	81.8	82.4	73.8	75.4	0	90	0.0	2/16/83
16	200	2	1	1	1	1 61	79.8	73.2	74.0	65.5	68.3	0	90	0.0	2/16/83
16	201	2	1	1	1	5 64	89.7	82.8	83.8	74.6	77.0	0	90	0.0	2/16/83
16	202	0	0	1	1	0 54	79.1	72.3	73.9	65.4	68.9	0	90	0.0	2/16/83
16	203	2	1	1	1	1 60	80.7	73.0	74.6	64.7	67.2	0	90	0.0	2/16/83
16	204	2	1	1	1	3 55	87.2	80.2	81.0	73.0	74.3	0	90	0.0	2/16/83
16	205	2	1	1	1	4 57	88.8	81.8	82.3	74.3	75.4	0	90	0.0	2/16/83
16	206	2	1	1	1	1 60	81.7	75.2	76.7	67.1	70.1	0	90	0.0	2/16/83
16	207	2	1	3	1	0 51	77.2	71.2	72.5	64.5	66.8	6	110	-3.1	2/16/83
16	208	2	1	1	1	1 67	82.0	74.5	76.1	66.2	69.1	6	110	-3.1	2/16/83
16	209	2	1	1	1	0 59	81.9	74.6	75.7	65.4	68.7	6	110	-3.1	2/16/83
16	210	2	1	1	1	1 57	79.4	72.6	73.2	64.3	67.2	6	110	-3.1	2/16/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH	DEL	EN V	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSPD	WAND	WEIC DOR	DATE
16	211	2	1	1	1	5	51	88.1	80.7	82.0	73.2	74.7	6	110	-3.1	2/16/83
16	212	2	1	1	1	5	60	90.5	84.9	85.8	77.4	80.4	6	110	-3.1	2/16/83
16	213	2	1	1	1	1	58	81.6	74.4	75.7	66.1	-1.0	6	110	-3.1	2/16/83
16	214	2	1	1	1	5	60	90.2	83.5	84.3	75.9	77.3	6	110	-3.1	2/16/83
16	215	2	1	1	1	1	46	78.2	70.5	72.8	62.4	-1.0	6	110	-3.1	2/16/83
16	216	2	1	1	1	0	58	79.2	71.9	74.1	64.0	67.2	6	110	-3.1	2/16/83
16	217	2	1	1	1	0	61	79.9	72.2	74.0	64.4	67.2	6	110	-3.1	2/16/83
16	218	2	1	1	1	2	63	86.2	79.3	62.0	57.3	62.6	6	110	-3.1	2/16/83
16	219	2	1	1	1	2	55	85.6	78.2	79.3	70.0	72.0	6	110	-3.1	2/16/83
16	220	2	1	1	1	1	60	82.4	74.5	75.4	65.7	69.2	6	110	-3.1	2/16/83
16	221	2	1	1	1	2	57	88.0	81.0	81.6	73.9	75.2	6	110	-3.1	2/16/83
16	222	2	1	1	1	0	64	80.5	72.9	74.5	64.4	67.2	6	110	-3.1	2/16/83
16	223	2	1	1	1	5	69	95.1	88.3	88.8	79.9	82.2	6	110	-3.1	2/16/83
16	224	2	1	1	1	1	60	81.3	74.4	75.3	66.4	69.5	6	110	-3.1	2/16/83
16	225	2	1	1	1	5	64	90.3	83.4	84.9	75.6	77.9	6	110	-3.1	2/16/83
16	226	2	1	1	1	1	58	80.7	73.3	74.7	65.3	67.6	6	110	-3.1	2/16/83
16	227	2	1	1	1	5	59	89.9	83.0	83.7	75.0	76.9	6	110	-3.1	2/16/83
16	228	2	1	1	1	1	59	83.0	75.9	77.1	67.3	70.2	6	110	-3.1	2/16/83
16	229	2	1	1	1	0	63	79.9	73.3	75.0	66.0	68.4	6	110	-3.1	2/16/83
16	230	2	1	1	1	1	60	83.3	76.1	77.5	66.9	69.9	6	110	-3.1	2/16/83
16	231	2	1	1	1	1	66	82.4	75.3	76.4	66.8	70.3	6	110	-3.1	2/16/83
16	232	2	1	1	1	1	60	83.1	75.3	76.1	67.2	70.0	6	100	-1.6	2/16/83
16	233	2	1	1	1	2	59	87.7	81.8	81.5	73.2	76.3	6	100	-1.6	2/16/83
16	234	2	1	1	1	0	54	78.8	71.3	72.6	62.4	65.7	6	100	-1.6	2/16/83
16	235	2	1	1	1	1	58	82.3	74.8	76.2	65.5	69.8	6	100	-1.6	2/16/83
16	236	2	1	1	1	0	62	80.0	72.3	73.9	64.9	68.0	6	90	0.0	2/16/83
16	237	2	1	1	1	1	60	80.9	74.1	75.5	65.2	68.3	6	90	0.0	2/16/83
16	238	2	1	1	1	1	59	82.0	74.8	75.7	66.3	68.8	6	90	0.0	2/16/83
16	239	2	1	1	1	1	54	80.2	73.6	74.7	65.2	67.8	6	90	0.0	2/16/83
16	240	2	1	1	1	2	61	86.4	79.1	80.4	70.4	73.3	6	90	0.0	2/16/83
16	241	2	1	1	1	5	55	89.9	82.9	83.3	75.6	76.8	6	90	0.0	2/16/83
16	242	2	1	1	1	1	53	80.9	73.0	-1.0	64.0	65.1	6	90	0.0	2/16/83
16	243	2	1	1	1	2	54	83.5	76.6	77.5	68.4	71.3	6	90	0.0	2/16/83
16	244	2	1	1	1	5	62	91.4	84.6	86.2	76.0	78.7	6	90	0.0	2/16/83
16	245	2	1	1	1	0	55	80.0	72.5	74.2	63.8	66.9	6	90	0.0	2/16/83
16	246	2	1	1	1	1	62	82.5	75.4	76.2	67.8	71.0	6	90	0.0	2/16/83
16	247	2	1	1	1	5	57	90.2	83.1	84.0	74.7	76.4	6	90	0.0	2/16/83
16	248	2	1	1	1	1	52	85.6	77.8	78.6	68.6	71.0	6	90	0.0	2/16/83
16	249	2	1	1	1	1	59	91.9	84.3	85.8	75.2	77.6	6	90	0.0	2/16/83
16	250	2	1	1	1	1	57	80.7	73.2	74.5	64.3	67.6	6	90	0.0	2/16/83
16	251	2	1	1	1	1	62	82.3	74.5	75.6	66.0	68.9	6	90	0.0	2/16/83
16	252	2	1	1	1	1	68	83.5	75.8	77.2	68.3	70.3	6	90	0.0	2/16/83
16	253	2	1	1	1	5	63	94.4	86.7	88.5	79.6	80.0	6	90	0.0	2/16/83
16	254	2	1	1	1	2	55	84.1	76.7	77.6	69.0	70.9	6	90	0.0	2/16/83
16	255	2	1	1	1	5	61	91.9	84.4	86.0	77.2	79.0	6	90	0.0	2/16/83
16	256	2	1	1	1	0	51	77.7	70.9	-1.0	-1.0	-1.0	6	90	0.0	2/16/83
16	257	2	1	1	1	0	62	81.5	74.0	-1.0	-1.0	-1.0	6	90	0.0	2/16/83
16	258	2	1	1	1	1	57	78.8	71.3	73.0	62.3	65.7	6	90	0.0	2/16/83
16	259	2	1	1	1	0	52	79.5	72.4	73.4	64.5	67.8	6	90	0.0	2/16/83
16	260	2	1	1	1	2	53	86.2	79.2	79.8	72.1	73.3	6	90	0.0	2/16/83
16	261	2	1	1	1	1	60	-1.0	76.0	-1.0	-1.0	-1.0	6	90	0.0	2/16/83
16	262	2	1	1	1	1	65	85.0	76.8	79.0	67.0	70.7	6	90	0.0	2/16/83
16	263	2	1	1	1	5	60	89.9	84.3	85.0	78.2	79.0	6	90	0.0	2/16/83
16	264	2	1	1	1	4	63	89.8	83.2	83.5	75.6	77.2	6	90	0.0	2/16/83
16	265	2	1	1	1	1	48	78.0	70.9	71.5	62.6	65.5	6	90	0.0	2/16/83
16	266	2	1	1	1	0	60	82.2	74.5	75.6	67.1	68.0	6	90	0.0	2/16/83
16	267	0	0	1	1	1	44	76.7	70.9	72.2	65.0	67.5	6	90	0.0	2/16/83
16	268	2	1	1	1	0	53	79.6	72.3	73.3	63.4	66.9	6	90	0.0	2/16/83
16	269	2	1	1	1	5	53	87.4	80.6	81.3	73.3	74.7	6	90	0.0	2/16/83
16	270	2	1	1	1	1	58	80.2	72.4	74.0	64.1	67.0	6	90	0.0	2/16/83
16	271	2	0	1	1	1	56	80.7	74.2	74.8	65.3	68.5	6	90	0.0	2/16/83
16	272	2	1	1	1	5	58	89.2	81.4	82.6	73.8	75.6	6	90	0.0	2/16/83
16	273	2	1	1	1	0	51	78.9	72.0	73.3	63.4	66.7	6	90	0.0	2/16/83
16	274	2	1	1	1	0	53	77.7	70.1	72.0	63.9	65.4	6	90	0.0	2/16/83
16	275	2	1	1	1	1	61	81.7	74.2	63.8	60.4	66.1	6	90	0.0	2/16/83
16	276	2	1	1	1	1	65	81.1	73.6	75.7	65.7	68.5	6	90	0.0	2/16/83

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH	DEL/HV	VEH TYPE	VEH SPEED	MIC (1) 5	MIC (2) 5	MIC (3) 10	MIC (4) 5	MIC (5) 10	WSIPNEDED	WAINGDLE	VWEICNTDOR	DATE
							DBA								
17	1	2 1 1 1			0	54	79.1	72.2	72.5	66.2	66.5	0	45	0.0	2/17/83
17	2	2 1 1 1			1	60	80.1	73.7	74.4	68.5	68.2	0	45	0.0	2/17/83
17	3	2 1 1 1			0	52	74.0	67.6	68.4	61.3	62.2	0	45	0.0	2/17/83
17	4	2 1 1 1			5	62	88.0	82.0	82.9	75.9	76.2	0	45	0.0	2/17/83
17	5	2 1 1 1			5	62	89.1	83.4	83.4	77.3	77.7	0	90	0.0	2/17/83
17	6	2 1 1 1			0	57	79.6	73.2	73.9	66.2	67.1	0	90	0.0	2/17/83
17	7	2 1 1 1			1	60	80.6	74.5	75.4	67.6	68.3	0	90	0.0	2/17/83
17	8	2 1 1 1			0	53	74.2	67.8	68.4	61.1	62.0	0	90	0.0	2/17/83
17	9	2 1 1 1			1	55	-1.0	70.0	-1.0	-1.0	-1.0	0	90	0.0	2/17/83
17	10	2 1 1 1			1	64	78.1	71.2	72.5	65.0	65.5	0	90	0.0	2/17/83
17	11	2 1 1 1			0	65	82.8	76.0	76.8	69.6	70.3	0	230	0.0	2/17/83
17	12	2 1 1 1			1	64	80.2	73.3	74.2	67.3	67.5	0	230	0.0	2/17/83
17	13	2 1 1 1			0	60	77.5	71.4	72.1	64.7	75.3	0	230	0.0	2/17/83
17	14	2 1 1 1			0	72	81.8	75.4	76.3	69.0	69.9	0	230	0.0	2/17/83
17	15	2 1 1 1			1	61	85.3	79.0	79.6	73.1	73.1	0	230	0.0	2/17/83
17	16	2 1 1 1			1	59	79.8	73.6	74.0	66.9	66.9	0	230	0.0	2/17/83
17	17	2 1 1 1			0	62	77.7	71.0	71.7	64.7	65.6	0	230	0.0	2/17/83
17	18	2 1 1 1			7	66	-1.0	76.0	-1.0	-1.0	-1.0	0	230	0.0	2/17/83
17	19	2 1 1 1			7	62	-1.0	74.0	-1.0	-1.0	-1.0	0	230	0.0	2/17/83
17	20	2 1 1 1			7	65	82.1	76.5	76.7	70.3	70.9	0	230	0.0	2/17/83
17	21	2 1 1 1			0	59	76.9	70.3	71.6	63.4	64.8	0	230	0.0	2/17/83
17	22	2 1 1 1			1	59	76.7	70.0	70.3	63.4	64.0	0	230	0.0	2/17/83
17	23	2 1 1 1			0	57	77.6	70.9	71.6	63.8	65.3	0	230	0.0	2/17/83
17	24	2 1 1 1			1	70	82.3	75.9	76.4	69.4	70.0	0	230	0.0	2/17/83
17	25	2 1 1 1			5	58	85.6	79.3	80.1	73.1	73.2	0	230	0.0	2/17/83
17	26	2 1 1 1			1	62	79.9	73.4	73.9	67.0	67.3	0	270	0.0	2/17/83
17	27	2 1 1 1			0	64	81.0	75.1	75.7	67.6	69.1	0	270	0.0	2/17/83
17	28	2 1 1 1			2	57	86.4	80.2	79.9	74.8	74.1	0	270	0.0	2/17/83
17	29	2 1 1 1			5	55	-1.0	79.0	-1.0	-1.0	-1.0	0	270	0.0	2/17/83
17	30	2 1 1 1			0	53	73.7	67.8	69.3	63.8	66.5	0	270	0.0	2/17/83
17	31	2 1 1 1			0	51	73.8	67.4	68.6	60.5	62.1	0	270	0.0	2/17/83
17	32	2 1 1 1			1	70	78.6	72.3	73.1	66.3	66.3	0	270	0.0	2/17/83
17	33	2 1 1 1			1	55	79.8	73.4	73.8	66.6	67.4	0	270	0.0	2/17/83
17	34	2 1 1 1			1	55	77.8	71.1	71.9	65.0	65.6	0	270	0.0	2/17/83
17	35	2 1 1 1			2	58	83.6	77.9	78.6	71.2	71.6	0	270	0.0	2/17/83
17	36	2 1 1 1			3	60	90.1	83.6	84.4	76.5	77.4	0	270	0.0	2/17/83
17	37	2 1 1 1			1	68	78.9	72.9	73.5	65.9	67.3	0	270	0.0	2/17/83
17	38	2 1 1 1			0	59	77.6	71.0	71.8	63.9	64.7	0	270	0.0	2/17/83
17	39	2 1 1 1			5	64	91.6	85.5	85.7	-1.0	-1.0	0	270	0.0	2/17/83
17	40	2 1 1 1			5	65	88.6	83.1	83.3	76.4	76.6	0	270	0.0	2/17/83
17	41	2 1 1 1			1	69	83.0	76.3	77.6	69.4	70.3	0	270	0.0	2/17/83
17	42	2 1 1 1			5	56	92.0	87.2	86.5	81.8	81.7	0	270	0.0	2/17/83
17	43	2 1 1 1			5	56	86.4	80.0	80.5	73.5	73.9	0	270	0.0	2/17/83
17	44	2 1 1 1			0	64	78.9	73.1	74.0	65.1	67.0	0	270	0.0	2/17/83
17	45	2 1 1 1			0	54	74.8	68.0	69.2	61.6	62.0	0	270	0.0	2/17/83
17	46	2 1 1 1			1	64	79.0	72.3	73.6	66.4	66.9	0	270	0.0	2/17/83
17	47	2 1 1 1			1	68	80.8	74.3	75.5	68.0	68.4	0	270	0.0	2/17/83
17	48	2 1 1 1			5	63	88.6	82.7	82.9	77.0	76.8	0	270	0.0	2/17/83
17	49	2 1 1 1			5	55	87.0	82.3	81.8	76.1	75.9	0	270	0.0	2/17/83
17	50	2 1 1 1			5	50	85.4	79.3	80.0	72.3	72.4	0	270	0.0	2/17/83
17	51	2 1 1 1			1	58	80.1	74.2	74.9	68.0	67.6	0	270	0.0	2/17/83
17	52	2 1 1 1			2	51	81.9	75.0	75.9	68.6	68.6	0	270	0.0	2/17/83
17	53	2 1 1 1			5	67	90.4	84.4	85.0	77.9	78.5	0	270	0.0	2/17/83
17	54	2 1 1 1			1	60	81.5	74.8	75.4	68.6	68.4	0	270	0.0	2/17/83
17	55	2 1 1 1			1	64	79.1	72.1	73.5	66.5	67.2	0	270	0.0	2/17/83
17	56	2 1 1 1			2	55	-1.0	74.0	-1.0	-1.0	-1.0	0	270	0.0	2/17/83
17	57	2 1 1 1			1	54	76.5	69.6	70.8	63.9	64.2	0	270	0.0	2/17/83
17	58	2 1 1 1			1	61	79.3	73.0	74.0	66.7	67.1	0	270	0.0	2/17/83
17	59	2 1 1 1			0	60	75.6	69-2	69.8	63.4	63.6	0	270	0.0	2/17/83
17	60	2 1 1 1			1	58	77.1	70.7	71.4	64.8	65.0	0	270	0.0	2/17/83.
17	61	2 1 1 1			1	64	80.8	74.6	75.0	67.6	68.3	0	270	0.0	2/17/83
17	62	2 1 1 1			1	54	80.9	74.6	74.8	67.4	68.2	0	270	0.0	2/17/83
17	63	2 1 1 1			5	63	89.1	83.7	84.0	78.3	78.5	0	270	0.0	2/17/83
17	64	2 1 1 1			1	74	83.4	76.6	77.7	69.9	71.3	0	90	0.0	2/17/83
17	65	2 1 1 1			1	67	80.2	73.6	74.4	66.6	67.6	0	90	0.0	2/17/83
17	66	2 1 1 1			5	52	86.5	80.5	81.0	74.5	74.9	0	90	0.0	2/17/83
17	67	2 1 1 1			0	59	77.4	70.9	72.0	64.2	64.9	0	90	0.0	2/17/83
17	68	2 1 1 1			1	59	78.7	72.5	73.1	66.7	66.8	0	90	0.0	2/17/83
17	69	2 1 1 1			5	58	87.0	81.3	82.1	75.1	75.0	0	90	0.0	2/17/83
17	70	0 0 1 1			1	60	82.0	77.5	78.7	70.9	73.0	0	90	0.0	2/17/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GLR	VEH/HL	DEN/LV	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	WEICNTDOR	DATE
							DBA								
17	71	2	1	1	1	51	78.8	72.6	72.8	66.0	66.5	0	90	0.0	2/17/83
17	72	2	1	1	1	57	83.8	77.7	78.2	70.9	71.2	0	90	0.0	2/17/83
17	73	2	1	1	1	63	78.3	71.6	72.6	65.5	66.0	0	90	0.0	2/17/83
17	74	2	1	1	1	71	87.9	82.4	82.2	77.3	76.6	0	90	0.0	2/17/83
17	75	2	1	1	1	71	80.6	74.1	74.9	67.3	68.6	0	90	0.0	2/17/83
17	76	2	1	1	1	56	88.2	81.4	82.2	76.2	76.0	0	90	0.0	2/17/83
17	77	2	1	1	1	63	77.4	70.9	71.8	64.8	65.3	0	90	0.0	2/17/83
17	78	2	1	1	1	44	87.1	80.9	81.0	75.2	74.8	0	90	0.0	2/17/83
17	79	2	1	1	1	62	77.0	71.0	71.2	63.8	64.6	0	90	0.0	2/17/83
17	80	2	1	1	1	54	84.4	79.0	79.4	72.2	72.4	0	90	0.0	2/17/83
17	81	2	1	1	1	52	85.8	80.2	79.8	74.2	74.0	0	90	0.0	2/17/83
17	82	0	0	1	1	56	80.1	73.9	7S.2	67.0	67.9	0	90	0.0	2/17/83
17	83	2	1	1	1	56	86.2	80.4	81.5	73.9	74.1	0	90	0.0	2/17/83
17	84	2	1	1	1	52	83.5	77.5	78.7	72.4	72.7	0	90	0.0	2/17/83
17	85	2	1	1	1	56	85.1	79.3	79.5	73.0	73.3	0	90	0.0	2/17/83
17	86	2	1	1	1	61	87.5	81.5	81.7	75.1	75.4	0	90	0.0	2/17/83
17	87	2	1	1	1	63	79.3	73.0	60.1	58.0	65.5	0	90	0.0	2/17/83
17	88	2	1	1	1	65	-1.0	86.0	-1.0	-1.0	-1.0	0	90	0.0	2/17/83
17	89	0	0	1	1	65	80.4	74.0	75.4	68.3	70.1	0	90	0.0	2/17/83
17	90	2	1	1	1	64	78.3	72.3	73.6	66.5	67.1	0	90	0.0	2/17/83
17	91	2	1	1	1	60	78.8	72.2	73.2	65.8	66.8	0	90	0.0	2/17/83
17	92	2	1	1	1	62	79.2	74.1	75.0	67.8	68.6	0	90	0.0	2/17/83
17	93	2	1	1	1	66	80.7	74.1	75.0	67.8	61.6	0	90	0.0	2/17/83
17	94	2	1	1	1	55	79.0	72.1	73.2	65.8	66.4	0	90	0.0	2/17/83
17	95	2	1	1	1	58	83.3	76.9	77.5	71.0	71.3	0	90	0.0	2/17/83
17	96	2	1	1	1	66	-1.0	72.0	-1.0	-1.0	-1.0	0	90	0.0	2/17/83
17	97	2	1	1	1	68	79.4	73.0	73.8	67.5	68.3	0	90	0.0	2/17/83
17	98	2	1	1	1	66	78.4	72.0	72.7	65.1	65.5	0	90	0.0	2/17/83
17	99	2	1	1	1	58	77.6	71.1	71.3	65.0	64.8	0	90	0.0	2/17/83
17	100	2	1	1	1	58	-1.0	68.0	-1.0	-1.0	-1.0	0	90	0.0	2/17/83
17	101	2	1	1	1	54	-1.0	79.0	-1.0	-1.0	-1.0	0	90	0.0	2/17/83
17	102	2	1	1	1	54	77.5	71.2	72.5	64.6	66.6	0	90	0.0	2/17/83
17	103	2	1	1	1	59	84.7	79.0	79.8	73.5	73.6	0	90	0.0	2/17/83
17	104	2	1	1	1	61	88.1	82.1	82.8	75.7	75.9	0	90	0.0	2/17/83
17	105	2	1	1	1	64	81.3	74.6	75.3	68.2	68.7	0	90	0.0	2/17/83
17	106	2	1	1	1	57	83.9	77.8	77.9	71.8	71.8	0	90	0.0	2/17/83
17	107	2	1	1	1	59	80.9	74.4	75.2	68.9	68.8	0	90	0.0	2/17/83
17	108	2	1	1	1	63	76.1	69.7	70.6	63.1	63.9	0	90	0.0	2/17/83.
17	109	2	1	1	1	60	91.3	85.9	85.9	79.6	80.2	0	90	0.0	2/17/83
17	110	2	1	1	1	61	88.6	82.8	82.7	77.2	77.0	0	90	0.0	2/17/83
17	111	2	1	1	1	56	79.2	72.8	73.9	66.3	66.9	0	90	0.0	2/17/83
17	112	2	1	1	1	59	89.7	84.4	84.2	77.7	77.9	0	90	0.0	2/17/83
17	113	2	1	1	1	55	89.1	83.2	83.8	77.7	77.7	0	90	0.0	2/17/83
17	114	2	1	1	1	65	70.7	69.5	71.0	67.2	69.2	0	90	0.0	2/17/83
17	115	2	1	1	1	62	80.4	73.7	75.1	67.2	69.2	0	90	0.0	2/17/83
17	116	2	1	1	1	70	79.9	73.6	74.2	66.7	68.0	0	90	0.0	2/17/83
17	117	2	1	1	1	57	81.5	75.2	75.9	69.5	70.1	0	90	0.0	2/17/83
17	118	2	1	1	1	57	76.2	69.8	70.6	64.2	65.1	0	90	0.0	2/17/83
17	119	2	1	1	1	57	78.2	71.7	72.7	65.3	65.9	0	90	0.0	2/17/83
17	120	2	1	1	1	62	89.6	83.6	84.2	77.2	77.4	0	90	0.0	2/17/83
17	121	2	1	1	1	59	77.0	70.9	71.4	64.7	64.7	0	90	0.0	2/17/83
17	122	2	1	1	1	38	77.0	70.7	71.2	63.9	64.9	0	90	0.0	2/17/83
17	123	2	1	1	1	58	77.8	71.7	71.9	64.6	65.6	0	90	0.0	2/17/83
17	124	2	1	1	1	64	90.2	85.1	84.7	78.4	78.1	0	90	0.0	2/17/83
17	125	2	1	1	1	70	72.1	67.0	69.2	63.3	65.2	0	90	0.0	2/17/83
17	126	2	1	1	1	59	81.S	75.0	75.7	68.9	70.0	0	90	0.0	2/17/83
17	127	2	1	1	1	56	76.7	70.0	71.3	63.5	64.2	0	90	0.0	2/17/83
17	128	2	1	1	1	63	76.3	69.8	70.7	63.6	64.0	0	90	0.0	2/17/83
17	129	2	1	1	1	52	76.4	70.1	71.0	63.7	64.6	0	90	0.0	2/17/83
17	130	2	1	1	1	60	80.1	73.0	74.0	66.1	66.8	0	90	0.0	2/17/83
17	131	2	1	1	1	60	83.8	78.3	78.3	71.1	71.8	3	60	2.3	2/17/83
17	132	2	1	1	1	60	81.5	74.6	75.3	68.6	68.6	6	70	3.1	2/17/83
17	133	2	1	1	1	59	87.8	81.7	82.0	76.4	75.3	6	70	3.1	2/17/83
17	134	2	1	1	1	53	80.3	73.2	73.7	66.3	67.0	6	70	3.1	2/17/83
17	135	2	1	1	1	61	82.0	75.7	76.5	70.2	70.3	6	70	3.1	2/17/83
17	136	2	1	1	1	48	77.7	72.0	72.4	65.4	65.4	6	70	3.1	
17	137	2	1	1	1	67	-1.0	72.0	-1.0	-1.0	-1.0	6	70	3.1	2/17/83
17	138	2	1	1	1	55	90.7	85.5	85.5	78.4	78.6	6	70	3.1	2/17/83
17	139	2	1	1	1	67	79.1	73.1	73.2	66.0	66.8	6	70	3.1	2/17/83
17	140	2	1	1	1	55	89.3	83.6	84.0	77.0	77.3	3	90	0.0	2/17/83

DATA SUMMARY

LOC. SITE	LOC. EVENT	EVENT QUAL. GLR	EVENT QUAL. VEH	EVENT QUAL. D/L	EVENT QUAL. ENV	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNE DED	WAINNGDLE	VWEICNTDOR	DATE
17	141	2	1	1	1	1	63	80.8	74.3	75.2	68.0	68.9	3	90	0.0	2/17/83
17	142	2	1	1	1	2	60	90.0	84.4	84.6	78.5	78.7	3	90	0.0	2/17/83
17	143	2	1	1	1	1	53	79.2	72.8	72.9	65.8	66.4	3	90	0.0	2/17/83
17	144	2	1	1	1	1	63	80.3	73.1	73.8	67.6	67.9	3	90	0.0	2/17/83
17	145	2	1	1	1	5	64	86.6	81.0	81.5	74.4	75.4	3	90	0.0	2/17/83
17	146	2	1	1	1	0	64	83.1	76.9	78.1	71.6	71.3	3	90	0.0	2/17/83
17	147	2	1	1	1	1	63	78.9	72.5	73.7	66.2	66.9	3	90	0.0	2/17/83
17	148	2	1	1	1	2	53	80.4	73.7	74.8	67.7	68.0	3	90	0.0	2/17/83
17	149	2	1	1	1	1	63	81.4	75.8	76.2	68.8	68.3	3	60	2.3	2/17/83
17	150	2	1	1	1	1	61	83.7	77.5	78.2	71.1	71.2	0	20	0.0	2/17/83
17	151	2	1	1	1	5	57	85.6	80.2	80.5	75.5	75.1	0	0	0.0	2/17/83
17	152	2	1	1	1	2	55	79.1	72.6	73.4	66.4	66.7	0	0	0.0	2/17/83
17	153	2	1	1	1	1	69	80.1	73.2	74.7	66.4	67.1	0	0	0.0	2/17/83
17	154	2	1	1	1	1	71	81.8	75.6	76.3	68.8	69.4	0	0	0.0	2/17/83
17	155	2	1	1	1	0	62	-1.0	70.0	-1.0	-1.0	-1.0	0	0	0.0	2/17/83
17	156	2	1	1	1	1	64	79.1	72.2	73.4	65.5	66.2	0	0	0.0	2/17/83
17	157	2	1	1	1	1	53	76.9	70.3	71.4	63.5	64.4	0	0	0.0	2/17/83
17	158	2	1	1	1	1	62	-1.0	73.0	-1.0	-1.0	-1.0	0	0	0.0	2/17/83
17	159	2	1	1	1	1	62	82.5	76.5	76.6	70.5	70.8	0	0	0.0	2/17/83
17	160	2	1	1	1	5	62	-1.0	82.0	-1.0	-1.0	-1.0	0	0	0.0	2/17/83
17	161	2	1	1	1	1	58	78.5	72.3	73.4	65.9	66.6	0	0	0.0	2/17/83

DATA SUMMARY

LOC. SITE	EVENT	QUAL. GVR	VEHICLE	DEL	EVENT	VEH TYPE	VEH SPEED	MIC (1) 5	(2) 5	(3) 10 DBA	(4) 5	(5) 10	WSIP NEDED	WAING DLE	VWEICNTDOR	DATE
18	1	2	1	1	1	5	29	87.5	81.5	81.7	0.0	0.0	3	30	3.9	8130183
18	2	2	1	1	1	0	34	73.5	67.5	67.6	0.0	0.0	3	30	3.9	8/30/83
18	3	0	0	1	1	2	35	78.6	73.6	73.6	0.0	0.0	3	30	3.9	8/30/83
18	4	2	1	1	1	3	34	83.3	76.4	77.1	0.0	0.0	3	30	3.9	8/30/83
18	5	0	0	1	1	5	35	82.9	77.9	78.4	0.0	0.0	3	30	3.9	8/30/83
18	6	2	1	1	1	1	38	73.2	68.0	67.8	0.0	0.0	3	60	2.3	8/30/83
18	7	2	1	1	1	1	35	74.7	68.7	68.6	0.0	0.0	3	60	2.3	8/30/83
18	8	2	1	1	1	1	28	69.8	64.6	64.3	0.0	0.0	3	60	2.3	8/30/83
18	9	2	1	1	1	2	32	81.5	75.2	75.4	0.0	0.0	3	60	2.3	8/30/83
18	10	2	1	1	1	5	31	83.1	76.6	77.3	0.0	0.0	3	60	2.3	8/30/83
18	11	2	1	1	2	5	29	84.7	78.1	78.9	0.0	0.0	6	60	4.5	8/30/83
18	12	2	1	1	1	5	26	90.1	83.0	83.3	0.0	0.0	6	60	4.5	8/30/83
18	13	2	1	1	1	5	35	81.9	76.1	76.8	0.0	0.0	3	60	2.3	8130183
18	14	2	1	1	1	5	31	86.9	80.5	81.8	0.0	0.0	3	60	2.3	8/30/83
18	15	2	1	1	1	3	33	78.9	73.6	73.6	0.0	0.0	3	60	2.3	8/30/83
18	16	2	1	1	1	4	35	84.6	79.1	79.3	0.0	0.0	3	60	2.3	8130183
18	17	2	1	1	1	5	30	82.6	78.3	78.6	0.0	0.0	3	60	2.3	8/30/83
18	18	2	1	1	1	3	34	81.5	75.8	76.4	0.0	0.0	3	60	2.3	8/30/83
18	19	2	1	1	1	5	38	87.8	82.4	82.1	0.0	0.0	3	60	2.3	8/30/83
18	20	2	1	1	1	3	36	80.6	74.7	74.8	0.0	0.0	6	60	4.5	8/30/83
18	21	2	1	1	1	3	28	88.5	82.0	82.2	0.0	0.0	6	60	4.5	8/30/83
18	22	2	1	1	1	2	33	76.2	70.3	70.0	0.0	0.0	6	60	4.5	8/30/83
18	23	2	1	1	1	6	33	87.4	82.1	82.2	0.0	0.0	6	60	4.5	8/30/83
18	24	2	1	1	1	3	39	90.2	84.2	84.7	0.0	0.0	0	60	0.0	8/30/83
18	25	2	1	1	1	2	41	83.7	77.6	77.6	0.0	0.0	0	60	0.0	8/30/83
18	26	2	1	1	1	5	21	84.7	78.4	78.6	0.0	0.0	0	60	0.0	8/30/83
18	27	2	1	1	1	5	38	84.4	78.9	78.6	0.0	0.0	0	60	0.0	8/34/83
18	28	2	1	1	1	3	28	83.3	76.9	77.3	0.0	0.0	0	60	0.0	8130183
18	29	2	1	1	1	3	31	79.3	74.2	74.1	0.0	0.0	0	60	0.0	8130183
18	30	2	1	1	1	5	30	88.0	82.8	83.4	0.0	0.0	0	60	0.0	8/30/83
18	31	2	1	1	1	5	35	87.6	82.3	82.9	0.0	0.0	0	60	0.0	8130183
18	32	2	1	1	1	4	31	87.1	81.0	81.2	0.0	0.0	0	60	0.0	8130183
18	33	2	1	1	1	5	31	82.2	77.0	77.0	0.0	0.0	0	60	0.0	8130183
18	34	2	1	1	1	2	32	78.1	72.4	72.5	0.0	0.0	6	70	3.1	8/30/83
18	35	2	1	1	1	2	27	83.7	76.5	77.3	0.0	0.0	6	70	3.1	8/30/83
18	36	2	1	1	1	5	29	85.1	79.1	79.4	0.0	0.0	6	70	3.1	8/30/83
18	37	2	1	1	1	3	32	77.5	71.7	71.8	0.0	0.0	6	70	3.1	8/30/83
18	38	2	1	1	1	5	34	82.7	76.4	76.8	0.0	0.0	6	70	3.1	8/30/83
18	39	2	1	1	1	5	28	80.6	74.7	74.9	0.0	0.0	0	60	0.0	8/30/83
18	40	2	1	1	1	5	32	86.1	79.5	80.0	0.0	0.0	0	60	0.0	8/30/83
18	41	2	1	1	1	3	41	84.7	79.0	79.1	0.0	0.0	0	60	0.0	8/30/83
18	42	2	1	1	1	5	27	92.4	85.3	85.8	0.0	0.0	0	270	0.0	8130183
18	43	2	1	1	1	5	33	85.S	78.4	78.7	0.0	0.0	0	270	0.0	8/30/83
18	44	2	1	1	1	3	36	91.8	85.2	85.5	0.0	0.0	0	270	0.0	8/30/83
18	45	2	1	1	1	5	31	84.6	78.4	79.3	0.0	0.0	0	270	0.0	8/30/83
18	46	2	1	1	1	5	37	86.8	79.7	80.8	0.0	0.0	0	270	0.0	8/30/83
18	47	2	1	1	1	3	36	83.2	76.6	77.4	0.0	0.0	0	270	0.0	8/30/83
18	48	2	1	1	1	4	39	87.1	81.2	81.7	0.0	0.0	3	60	2.3	8130/83
18	49	2	1	1	1	5	38	86.2	80.3	80.5	0.0	0.0	3	60	2.3	8/30/83
18	50	2	1	1	1	5	30	83.7	77.6	77.7	0.0	0.0	3	60	2.3	8/30/83
18	51	2	1	1	1	3	37	84.8	78.0	78.7	0.0	0.0	3	60	2.3	8/30/83
18	52	2	1	1	1	5	35	84.9	79.2	79.7	0.0	0.0	3	60	2.3	8130183
18	53	2	1	1	1	3	35	83.5	77.0	77.7	0.0	0.0	3	60	2.3	8130183
18	54	2	1	1	1	2	36	84.4	78.8	78.5	0.0	0.0	3	60	2.3	8130183
18	55	2	1	1	1	3	36	77.3	72.5	72.2	0.0	0.0	3	60	2.3	8/30/83
18	56	2	1	1	1	5	32	85.7	79.0	79.3	0.0	0.0	3	60	2.3	8/30/83
18	57	2	1	1	1	5	35	81.9	75.9	76.2	0.0	0.0	3	60	2.3	8/30/83
18	58	2	1	1	1	5	39	87.9	80.9	83.4	0.0	0.0	3	60	2.3	8/30/83
18	59	2	1	1	1	2	30	77.8	74.5	74.2	0.0	0.0	3	50	2.9	8/30/83
18	60	0	0	1	1	1	38	73.9	69.6	70.0	0.0	0.0	3	50	2.9	8/30/83
18	61	2	1	1	1	5	31	84.2	77.7	78.6	0.0	0.0	3	50	2.9	8/30/83
18	62	2	1	1	1	3	30	82.1	76.4	76.8	0.0	0.0	6	60	4.5	8030183
18	63	2	1	1	1	4	34	86.5	80.6	82.3	0.0	0.0	6	60	4.5	8/30/83
18	64	2	1	1	1	3	32	79.8	74.6	75.0	0.0	0.0	6	60	4.5	8/30/83
18	65	2	1	1	1	2	35	81.3	75.7	75.6	0.0	0.0	6	60	4.5	8130183
18	66	2	1	1	1	2	36	80.7	75.1	75.5	0.0	0.0	6	60	4.5	8/30/83
18	67	2	1	1	1	3	30	81.7	76.0	76.9	0.0	0.0	6	60	4.5	8/30/83
18	68	2	1	2	1	1	37	76.0	71.9	70.8	0.0	0.0	3	60	2.3	8/30/83
18	69	2	1	1	1	5	34	83.8	77.9	78.4	0.0	0.0	3	60	2.3	8130183
18	70	2	1	1	1	3	29	78.8	72.1	72.5	0.0	0.0	3	60	2.3	8130183

DATA SUMMARY

SITE	LOC. EVENT	EVENT QUAL. GLR	VEH QUAL. VEH/HL	DEN	VEH TYPE	VEH SPED	MIC DBA (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	WEICNTDOR	DATE
18	71	2	1 1	1	5	22	80.0	77.7	78.4	0.0	0.0	3	60	2.3	8/30/83
18	72	0	0 1	1	5	27	81.4	75.8	76.1	0.0	0.0	3	60	2.3	8/30/83
18	73	0	0 1	1	2	32	78.9	74.3	74.5	0.0	0.0	3	60	2.3	8/30/83
18	74	0	0 1	1	3	22	83.4	76.2	77.3	0.0	0.0	3	60	2.3	8/30/83
18	75	0	0 1	I	3	34	84.8	78.9	79.0	0.0	0.0	3	60	2.3	8/30/83
18	76	0	0 1	1	5	30	83.5	77.3	77.4	0.0	0.0	3	60	2.3	8/30/83
18	77	0	0 1	1	3	29	85.2	79.8	78.8	0.0	0.0	3	60	2.3	8/30/83
18	78	0	0 1	1	2	36	83.9	77.5	78.0	0.0	0.0	3	60	2.3	8/30/83
18	79	0	0 1	1	0	0	83.0	76.6	77.0	0.0	0.0	3	60	2.3	8/30/83
18	80	2	1 1	1	3	30	84.3	78.0	78.3	0.0	0.0	3	60	2.3	8/30/83
18	81	0	0 1	1	4	31	77.9	72.3	73.2	0.0	0.0	3	60	2.3	8/30/83
18	82	2	1 1	1	3	40	-1.0	75.9	76.2	0.0	0.0	3	60	2.3	8/30/83
18	83	2	1 1	1	2	33	82.3	77.1	76.7	0.0	0.0	3	60	2.3	8/30/83
18	84	2	1 1	1	5	30	82.9	76.2	77.2	0.0	0.0	0	60	0.0	8/30/83
18	85	2	1 1	1	5	32	82.8	75.8	76.2	0.0	0.0	0	60	0.0	8/30/83
18	86	2	1 1	1	2	36	78.2	72.4	72.1	0.0	0.0	0	150	0.0	1/19/84
18	87	2	1 1	1	3	39	86.6	80.0	81.2	0.0	0.0	0	150	0.0	1/19/84
18	88	2	1 1	1	4	39	88.7	82.3	83.0	0.0	0.0	0	150	0.0	1/19/84
18	89	2	1 1	1	2	30	80.4	73.6	73.2	0.0	0.0	0	150	0.0	1/19/86
18	90	2	1 1	1	1	38	76.8	70.2	71.3	0.0	0.0	0	150	0.0	1/19/84
18	91	2	1 1	1	1	36	76.1	71.6	70.6	0.0	0.0	0	150	0.0	1/19/84
18	92	2	1 1	1	5	29	86.2	79.5	80.2	0.0	0.0	0	150	0.0	1/19/84
18	93	2	1 1	1	2	34	85.4	78.7	78.8	0.0	0.0	0	260	0.0	1/19/84
18	94	2	1 1	1	0	45	76.5	72.0	71.2	0.0	0.0	0	260	0.0	1/19/84
18	95	2	1 1	1	1	39	76.2	69.7	70.2	0.0	0.0	0	260	0.0	1/19/84
18	96	2	1 1	1	5	35	82.7	75.6	76.7	0.0	0.0	0	260	0.0	1/19/84
18	97	2	1 1	1	0	41	77.6	71.9	71.4	0.0	0.0	0	260	0.0	1/19/84
18	98	2	1 1	1	5	31	86.1	78.5	78.9	0.0	0.0	0	260	0.0	1/19/84
18	99	1	1 1	1	1	36	73.3	69.1	69.4	0.0	0.0	0	260	0.0	1/19/84
38	100	2	1 1	1	1	41	81.6	74.7	74.2	0.0	0.0	0	30	0.0	1/19/84
18	101	2	1 1	1	2	37	82.4	76.3	77.1	0.0	0.0	0	30	0.0	1/19/84
18	102	1	1 1	1	2	28	78.3	73.6	74.2	0.0	0.0	0	30	0.0	1/19/84
18	103	2	1 1	1	5	39	84.8	78.6	78.0	0.0	0.0	0	30	0.0	1/19/84
18	104	2	1 1	1	1	38	77.6	71.0	70.1	0.0	0.0	0	30	0.0	1/19/84
18	105	2	1 1	1	3	29	82.7	78.0	78.1	0.0	0.0	0	30	0.0	1/19/84
18	106	2	1 1	1	2	41	84.6	77.8	77.9	0.0	0.0	0	30	0.0	1/19/84
18	107	2	1 1	1	5	35	83.3	77.4	77.7	0.0	0.0	0	80	0.0	1/19/84
18	108	2	1 1	1	0	35	76.5	70.6	70.9	0.0	0.0	0	80	0.0	1/19/84
18	109	2	1 1	1	5	35	83.4	77.3	77.7	0.0	0.0	0	80	0.0	1/19/84
18	110	2	1 1	1	5	40	87.1.	80.9	81.0	0.0	0.0	0	80	0.0	1/19/84
18	111	2	1 1	1	3	25	83.9	78.0	77.0	0.0	0.0	3	280	0.8	1/19/84
18	112	2	1 1	1	5	27	84.7	78.0	78.7	0.0	0.0	3	280	0.8	1/19/84
18	113	2	1 1	1	3	37	85.8	80.2	79.6	0.0	0.0	3	280	0.8	1/19/84
18	114	2	1 1	1	5	34	87.6	81.3	80.6	0.0	0.0	3	280	0.8	1/19/84
18	115	2	0 1	1	5	34	92.2	85.7	85.5	0.0	0.0	3	280	0.8	1/19/84
18	116	2	1 1	1	5	28	86.5	78.6	79.6	0.0	0.0	3	280	0.8	1/19/84
18	117	2	1 1	1	5	36	82.7	76.2	76.2	0.0	0.0	3	280	0.8	1/19/84
18	118	2	1 1	1	2	39	86.8	79.5	79.7	0.0	0.0	3	280	0.8	1/19/84
18	119	2	1 1	1	3	37	84.0	78.4	77.6	0.0	0.0	3	280	0.8	1/19/84
18	120	2	1 1	1	2	27	83.1	79.1	79.3	0.0	0.0	3	280	0.8	1/19/84
18	121	2	1 1	1	2	39	76.9	72.6	71.5	0.0	0.0	3	280	0.8	1/19/84
18	122	2	1 1	1	2	42	76.8	71.9	71.2	0.0	0.0	3	280	0.8	1/19/84
18	123	2	1 1	1	3	31	80.8	75.5	74.8	0.0	0.0	0	40	0.0	1/19/84
18	124	2	1 1	1	5	32	91.8	84.4	86.4	0.0	0.0	0	40	0.0	1/19/84
18	125	2	1 1	1	2	34	89.5	82.4	81.9	0.0	0.0	0	40	0.0	1/19/84
18	126	2	1 1	1	5	28	84.9	77.5	77.9	0.0	0.0	0	40	0.0	1/19/84
18	127	2	1 1	1	3	34	83.1	76.1	76.1	0.0	0.0	0	40	0.0	1/19/84
18	128	2	1 1	1	3	28	82.1	74.9	74.5	0.0	0.0	0	40	0.0	1/19/84
18	129	2	1 1	1	5	34	86.8	80.2	80.4	0.0	0.0	3	70	1.5	1/19/84
18	330	2	1 1	1	2	35	80.6	75.2	74.6	0.0	0.0	3	70	1.5	1/19/84
18	131	2	1 1	1	3	38	88.2	81.6	81.6	0.0	0.0	0	90	0.0	1/19/84
18	132	2	1 1	1	3	26	84.4	78.9	78.4	0.0	0.0	0	90	0.0	1/19/84
18	133	1	1 1	1	2	34	81.7	76.3	75.9	0.0	0.0	0	90	0.0	1/19/84
18	134	2	1 1	1	5	27	85.8	79.2	79.5	0.0	0.0	0	90	0.0	1/19/84
18	135	2	1 1	1	3	28	78.1	71.1	71.4	0.0	0.0	0	90	0.0	1/19/ 8

DATA SUMMARY

LOC. SITE	EVENT	EVENT QUAL. GLR	VEH/LN	DEN	VEH TYPE	SPEED	MIC (1) 5	(2) 5	(3) 10	(4) 5	(5) 10	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
							DBA								
19	1	1	1	1	5	32	86.2	80.1	80.7	0.0	0.0	3	270	0.0	2/ 1/ 8
19	2	1	1	1	5	36	84.5	80.5	81.0	0.0	0.0	3	270	0.0	2/ 1/ 8
19	3	1	1	1	5	38	86.7	80.6	80.8	0.0	0.0	3	270	0.0	2/ 1/ 8
19	4	1	1	1	1	55	83.2	75.7	76.5	0.0	0.0	3	270	0.0	2/ 1/ 8
19	5	1	1	1	1	34	76.1	69.3	69.2	0.0	0.0	3	270	0.0	2/ 1/ 8
19	6	1	1	1	1	44	82.4	75.3	75.7	0.0	0.0	3	270	0.0	2/ 1/ 8
19	7	1	1	1	0	35	74.4	67.6	67.9	0.0	0.0	3	270	0.0	2/ 1/ 8
19	8	1	1	1	3	39	85.2	78.0	78.5	0.0	0.0	3	270	0.0	2/ 1/ 8
19	9	1	1	1	3	33	86.4	79.4	79.6	0.0	0.0	3	270	0.0	2/ 1/ 8
19	10	1	1	1	1	39	76.2	67.9	69.0	0.0	0.0	3	270	0.0	2/ 1/ 8
19	11	1	1	1	2	30	79.3	74.2	74.4	0.0	0.0	3	270	0.0	2/ 1/ 8
19	12	1	1	1	2	39	79.8	72.4	72.3	0.0	0.0	3	270	0.0	2/ 1/ 8
19	13	2	1	1	2	38	79.1	72.8	73.1	0.0	0.0	3	270	0.0	2/ 1/ 8
19	14	2	1	1	2	44	85.0	78.7	78.4	0.0	0.0	3	270	0.0	2/ 1/ 8
19	15	2	1	1	2	33	81.3	74.3	74.4	0.0	0.0	3	270	0.0	2/ 1/ 8
19	16	2	1	1	2	37	83.4	76.3	76.1	0.0	0.0	3	270	0.0	2/ 1/ 8
19	17	2	0	1	5	32	89.9	84.6	83.6	0.0	0.0	3	270	0.0	2/ 1/ 8
19	18	2	1	1	3	35	83.7	77.5	77.6	0.0	0.0	3	270	0.0	2/ 1/ 8
19	19	2	1	1	2	34	79.2	72.8	72.9	0.0	0.0	3	270	0.0	2/ 1/ 8
19	20	2	1	1	2	41	82.6	75.6	75.7	0.0	0.0	3	270	0.0	2/ 1/ 8
19	21	2	1	1	5	40	89.8	83.0	83.7	0.0	0.0	3	270	0.0	2/ 1/ 8
19	22	2	1	1	5	29	89.9	83.7	83.6	0.0	0.0	3	270	0.0	2/ 1/ 8
19	23	2	1	1	3	37	86.3	78.9	78.5	0.0	0.0	3	270	0.0	2/ 1/ 8
19	24	2	1	1	3	43	87.0	80.5	80.6	0.0	0.0	3	270	0.0	2/ 1/ 8
19	25	2	1	1	2	33	86.7	79.4	79.4	0.0	0.0	3	270	0.0	2/ 1/ 8
19	26	2	1	1	3	39	92.5	86.5	85.7	0.0	0.0	3	270	0.0	2/ 1/ 8
19	27	2	1	1	5	33	88.6	82.1	82.2	0.0	0.0	3	270	0.0	2/ 1/ 8
19	28	2	1	1	5	40	91.9	83.5	84.5	0.0	0.0	3	270	0.0	2/ 1/ 8
19	29	2	1	1	2	42	84.2	77.6	77.8	0.0	0.0	3	270	0.0	2/ 1/ 8
19	30	2	1	1	2	46	84.6	78.4	78.5	0.0	0.0	3	270	0.0	2/ 1/ 8
19	31	2	1	1	3	35	83.3	76.6	76.5	0.0	0.0	3	270	0.0	2/ 1/ 8
19	32	2	1	1	2	46	85.8	78.1	78.1	0.0	0.0	3	270	0.0	2/ 1/ 8
19	33	2	1	1	3	45	86.7	80.3	80.0	0.0	0.0	3	270	0.0	2/ 1/ 8
19	34	2	1	1	2	41	82.4	75.4	75.8	0.0	0.0	3	270	0.0	2/ 1/ 8
19	35	2	1	1	3	39	84.3	77.8	77.7	0.0	0.0	3	270	0.0	2/ 1/ 8
19	36	2	1	1	3	43	86.6	80.1	80.2	0.0	0.0	3	270	0.0	2/ 1/ 8
19	37	2	1	1	3	35	88.5	81.5	81.6	0.0	0.0	3	270	0.0	2/ 1/ 8
19	38	2	1	1	2	39	88.5	81.0	81.2	0.0	0.0	3	270	0.0	2/ 1/ 8
19	39	2	1	1	3	50	88.7	82.5	82.3	0.0	0.0	3	270	0.0	2/ 1/ 8
19	40	2	1	1	2	31	85.0	78.8	79.0	0.0	0.0	3	270	0.0	2/ 1/ 8
19	41	2	1	1	2	46	83.0	64.0	66.0	0.0	0.0	3	270	0.0	2/ 1/ 8
19	42	2	1	1	2	47	83.0	76.4	76.7	0.0	0.0	3	270	0.0	2/ 1/ 8
19	43	2	1	1	3	46	87.9	81.6	81.2	0.0	0.0	3	270	0.0	2/ 1/ 8
19	44	1	1	1	5	31	86.2	80.3	81.6	0.0	0.0	3	270	0.0	2/ 1/ 8
19	45	2	1	1	1	42	79.3	70.6	70.5	0.0	0.0	0	0	0.0	2/ 1/ 8
19	46	2	1	1	1	49	79.1	71.2	72.2	0.0	0.0	0	0	0.0	2/ 1/ 8
19	47	2	1	1	5	36	88.5	82.0	82.1	0.0	0.0	0	0	0.0	2/ 1/ 8
19	48	2	0	1	3	41	88.7	81.5	81.9	0.0	0.0	0	0	0.0	2/ 1/ 8
19	49	2	1	1	2	40	87.8	81.0	81.0	0.0	0.0	0	0	0.0	2/ 1/ 8
19	50	2	1	1	1	45	79.2	72.6	73.5	0.0	0.0	0	0	0.0	2/ 1/ 8
19	51	2	0	1	5	37	87.2	80.9	80.9	0.0	0.0	0	0	0.0	2/ 1/ 8
19	52	2	1	1	5	31	87.4	80.5	82.2	0.0	0.0	0	0	0.0	2/ 1/ 8
19	53	2	1	1	3	34	85.1	78.4	79.0	0.0	0.0	0	0	0.0	2/ 1/ 8
19	54	2	1	1	3	95	88.8	82.3	82.3	0.0	0.0	0	0	0.0	2/ 1/ 8
19	55	2	1	1	3	35	87.9	82.3	80.9	0.0	0.0	0	0	0.0	2/ 1/ 8
19	56	2	1	1	3	31	85.0	77.1	77.6	0.0	0.0	0	0	0.0	2/ 1/ 8
19	57	2	1	1	5	36	90.5	83.1	83.7	0.0	0.0	0	0	0.0	2/ 1/ 8
19	58	2	1	1	5	40	85.9	79.2	79.4	0.0	0.0	0	0	0.0	2/ 1/ 8
19	59	2	1	1	3	38	87.8	80.7	81.9	0.0	0.0	0	0	0.0	2/ 1/ 8
19	60	2	1	1	2	39	81.8	75.4	76.3	0.0	0.0	0	0	0.0	2/ 1/ 8
19	61	2	1	1	5	45	87.3	80.0	80.9	0.0	0.0	0	0	0.0	2/ 1/ 8
19	62	2	1	1	5	25	81.5	75.4	75.7	0.0	0.0	0	0	0.0	2/ 1/ 8
19	63	2	1	1	5	33	87.7	82.8	83.2	0.0	0.0	0	0	0.0	2/ 1/ 8
19	64	2	1	1	3	36	87.2	78.5	79.1	0.0	0.0	0	0	0.0	2/ 1/ 8
19	65	2	1	1	3	28	83.2	75.5	76.2	0.0	0.0	0	0	0.0	2/ 1/ 8
19	66	2	1	1	2	30	76.8	69.9	70.2	0.0	0.0	0	0	0.0	2/ 1/ 8
19	67	2	1	1	2	34	83.4	74.5	75.6	0.0	0.0	0	0	0.0	2/ 1/ 8
19	68	2	1	1	3	35	84.5	77.9	78.4	0.0	0.0	0	0	0.0	2/ 1/ 8
19	69	2	1	1	2	45	84.0	76.3	77.1	0.0	0.0	0	0	0.0	2/ 1/ 8
19	70	2	1	1	3	37	89.1	81.5	81.9	0.0	0.0	0	0	0.0	2/ 1/ 8

DATA SUMMARY

LOC. SITE	LOC. EVENT	EVENT QUAL. GLR	EVENT QUAL. VEH	EVENT QUAL. DEL	EVENT QUAL. ENV	VEH TYPE	VEH SPEED	MIC (1) 5 DBA	MIC (2) 5 DBA	MIC (3) 10 DBA	MIC (4) 5 DBA	MIC (5) 10 DBA	WSIPNEDD	WAINGDLE	VWEICNTDOR	DATE
19	71	2	1	1	1	3	30	84.1	77.4	77.8	0.0	0.0	0	0	0.0	2/ 1/ 8

APPENDIX D

RESULTS OF ANALYSES
(Level Road Sites Only)

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********************************** DATA SUMMARY ********************** PAGE : 1  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-com                           15:01:29  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
*********************************************************************************
```

	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
REGRESSION EQUATION :					
L0 = A + B*LOG(MPH) A =	14.13	5.27	7.73	7.86	20.06
B =	36.36	37.79	36.90	32.38	26.61
NUMBER OF OBSERVATIONS	415	425	417	191	190
STD. ERROR OF Y ON LOG(X)	2.32	2.52	2.36	2.76	2.55
INDEX OF DETERMINATION	0.63	0.61	0.63	0.39	0.34
COEFF. OF CORRELATION	0.79	0.78	0.79	0.63	0.58
F RATIO	694.94	656.98	702.69	121.55	96.01
L0 :					
MEAN	76.60	70.23	71.12	63.99	66.19
VARIANCE	14.46	16.14	14.95	12.45	9.74
STD. DEV.	3.80	4.02	3.87	3.53	3.12
L0E :					
A + 0.115*S0^2	14.75	6.00	8.37	8.74	20.80

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********************************** DATA SUMMARY ********************** PAGE : 2 *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22 *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-com                           15:01:29 *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                             *
* MIN. EVENT QUAL. 1 1 1 1                                                       *
*********************************************************************************
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	MIC-1	MIC-2	MIC-3	MIC-4	mic-5
SPEED CLASS DATA					
CLASS 0 (<25)					
NUMBER OF POINTS	2	2	2	0	0
MIN. PTS. REQUIRED	7595	7285	6110	0	0
MEAN MPH	24.00	24.00	24.00	0.00	0.00
MEAN ENERGY (DBA)	68.23	61.85	62.24	0.00	0.00
MEAN DBA	65.95	59.65	60.35	0.00	0.00
STD. DEV. MEAN DBA	6.86	6.72	6-15	0.00	0.00
CLASS 1 (25-28)					
NUMBER OF POINTS	1	1	1	0	0
MIN. PTS. REQUIRED	0	0	0	6	0
MEAN MPH	28.00	28.00	28.00	0.00	0.00
MEAN ENERGY (DBA)	69.60	62.80	63.60	0.00	0.00
MEAN DBA	69.60	62.80	63.60	0.00	0.00
STD. DEV. MEAN DBA	0.00	0.00.	0.00	0.00	0.00
CLASS 2 (29-32)					
NUMBER OF POINTS	8	8	8	0	0
MIN. PTS. REQUIRED	37	38	36	0	0
MEAN MPH	30.50	30.50	30.50	0.00	0.00
MEAN ENERGY (DBA)	69.73	63.30	64.30	0.00	0.00
MEAN DBA	68.94	62-54	63-37	0.00	0.00
STD. DEV. MEAN DBA	2.56	2.60	2.53	0.00	0.00
CLASS 3 (33-36)					
NUMBER OF POINTS	19	20	20	5	5
MIN. PTS. REQUIRED	37	35	30	1	12
MEAN MPH	34.37'	34.40	34.40	35.20	35.20
MEAN ENERGY (DBA)	70.86	64-42	65.21	58.59	61.54
MEAN DBA	69.82	63.39	64.37	58.50	61.40
STD. DEV. MEAN DBA	2-90	2.83	2.61	0.31	1.24
CLASS 4 (37-40)					
NUMBER OF POINTS	9	9	9	1	1
MIN. PTS. REQUIRED	24	18	16	0	0
MEAN MPH	38.78	38.78	38.78	40.00	40.00
MEAN ENERGY (DBA)	70.77	64-12	65.53	58.20	60.88
MEAN DBA	70.31	63.73	65.19	58.20	60.80
STD. DEV. MEAN DBA	2.14	1.85	1.73	0.00	0.00
CLASS 5 (41-44)					
NUMBER OF POINTS	37	37	37	23	23
MIN. PTS. REQUIRED	25	29	24	42	28
MEAN MPH	42.54	42.54	42-54	42.43	42.43
MEAN ENERGY (DBA)	73-98	67.08	68.24	62.48	64.74
MEAN DBA	72.85	65.85	67.24	60.77	63.62
STD. DEV. MEAN DBA	2.50	2.70	2.44	3.12	2.56

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********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-com                           15:01:30  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 6 (45-48)					
NUMBER OF POINTS	40	40	40	19	19
MIN. PTS. REQUIRED	28	36	31	24	33
MEAN MPH	46.70	46.70	46.70	46.37	46.37
MEAN ENERGY (DBA)	75.48	69.14	70.01	62.28	65.05
MEAN DBA	74.65	68.07	69.12	61.55	64.07
STD. DEV. MEAN DBA	2.63	3.02	2.80	2.33	2.72
CLASS 7 (49-52)					
NUMBER OF POINTS	43	44	42	17	17
MIN. PTS. REQUIRED	12	15	12	21	19
MEAN MPH	50.65	50.64	50.64	50.59	50.59
MEAN ENERGY (DBA)	76.96	70.52	71.36	63.08	65.82
MEAN DBA	76.61	70.07	71.00	62.66	65.41
STD. DEV. MEAN DBA	1.75	1.96	1.76	2.16	2.03
CLASS 8 (53-56)					
NUMBER OF POINTS	83	84	84	29	29
MIN. PTS. REQUIRED	14	21	20	36	23
MEAN MPH	54.72	54.73	54.73	54.59	54.59
MEAN ENERGY (DBA)	77.93	71.91	72.48	65.26	66.80
MEAN DBA	77.47	71.24	71.90	64.30	66-26
STD. DEV. MEAN DBA	1.89	2.29	2.24	2.93	2-34:
CLASS 9 (57-60)					
NUMBER OF POINTS	88	91	98	4s	45
MIN. PTS. REQUIRED	19	24	18	31	28
MEAN MPH	58.48	58.47	58.48	58.56	58.56
MEAN ENERGY (DBA)	79.13	73.09	73.71	65.97	68.23
MEAN DBA	78.60	72.36	73.20	64.98	67.23
STD. DEV. MEAN DBA	2.16	2.44	2.14	2.79	2.66
CLASS 10 (61-64)					
NUMBER OF POINTS	61	62	60	38	37
MIN. PTS. REQUIRED	23	24	23	35	25
MEAN MPH	62.59	62.58	62.60	62.66	62.65
MEAN ENERGY (DBA)	79.83.	73.83	74.65	67.39	68.69
MEAN DBA	79.14	73.04	73.93	66.18	67.89
STD. DEV. MEAN DEA	2.48	2.44	2.39	2.94	2.52
CLASS 11 (>64)					
NUMBER OF POINTS	24	27	24	14	14
MIN. PTS. REQUIRED	49	33	47	63	68
MPX	66.67	66.59	66.67	66.57	66.57
MEAN ENERGY (DBA)	81.36	74.28	75.84	68.44	70.12
MEAN DBA	80.24	73.52	74.74	66.81	68.31
STD. DEV. MEAN DBA	3.39	2.80	3.32	3.67	3.82

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********************************** DATA SUMMARY ********************** PAGE : 1
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-std                           15:04:03
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS
* MIN. EVENT QUAL. 1 1 1 1
*****************************************************************************
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		MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
REGRESSION EQUATION :						
LØ = A + B*LOG(MPH)	A =	14.91	5.34	9.10	12.91	21.23
	B =	36.83	38.47	36.89	29.99	26.57
NUMBER OF OBSERVATIONS		819	838	824	419	416
STD. ERROR OF Y ON LOG(X)		2.98	2.86	2.88	2.89	2.40
INDEX OF DETERMINATION		0.52	0.54	0.52	8.32	0.35
COEFF. OF CORRELATION		0.72	0.74	0.72	a.57	0.59
F RATIO		869.97	984.74	890.31	196.22	221.87
LØ :						
MEAN		78.73	72.01	73.03	65.44	67.77
VARIANCE		17.39	17.78	17.24	12.26	8.85
STD. DEV.		4.17	4.22	4.15	3.50	2.97
LØE :						
A + 0.115*SØ^2		15.88	6.28	10.06	13.87	21.89

```
********************************** DATA SUMMARY ********************** PAGE : 2  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-std                           15:04:03  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
***********************************************************************************
```

	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
SPEED CLASS DATA					
CLASS 0 (<25)					
NUMBER OF POINTS	1	1	1	0	0
MIN. PTS. REQUIRED	0	0	0	0	0
MEAN MPH	21.00	21.00	21.00	0.00	0.00
MEAN ENERGY (DBA)	62.40	55.30	56.90	0.00	0.00
MEAN DBA	62.40	55.30	56.90	0.00	0.00
STD. DEV. MEAN DBA	0.00	0.00	0.00	0.00	0.00
CLASS 1 (25-28)					
NUMBER OF POINTS	5	5	5	0	0
MIN. PTS. REQUIRED	17f	164	138	0	0
MEAN MPH	27.20	27.20	27.29	0.00	0.00
MEAN ENERGY (DBA)	71.32	64.10	64.77	0.00	0.00
MEAN DBA	68.98	62.14	63.00	0.00	0.00
STD. DEV. MEAN DBA	4.73	4.61	4.23	0.00	8.00
CLASS 2 (29-32)					
NUMBER OF POINTS	13	13	13	3	3
MIN. PTS. REQUIRED	19	27	20	34	1
MEAN MPH	30.62	30.62	30.62	31.33	31.33
MEAN ENERGY (DBA)	70.09	63.53	64.37	59.67	62.04
MEAN DBA	69.63	62.88	63.91	59.53	62.03
STD. DEV. MEAN DBA	2.02	2.36	2.07	1.36	0.21
CLASS 3 (33-36)					
NUMBER OF POINTS	26	26	26	4	4
MIN. PTS. REQUIRED	36	44	32	34	54
MEAN MPH	34.73	34.73	34.73	34.25	34.25
MEAN ENERGY (DBA)	71.72	65.31	66.08	58.72	61.71
MEAN DBA	70.64	63.92	65.13	58.45	61.27
STD. DEV. MEAN DBA	2.93	3.22	2.73	1.83	2.30
CLASS 4 (37-40)					
NUMBER OF POINTS	24	24	24	6	6
MIN. PTS. REQUIRED	40	44	34	23	18
MEAN MPH	38.33	38.33	38.33	38.50	38.50
MEAN ENERGY (DBA)	74.56	67.56	68.40	61.27	63.51
MEAN DBA	73-48	66.41	67.46	60.92	63.37
STD. DEV. MEAN DBA	3.05	3.20	2.80	1.88	1.23
CLASS 5 (41-44)					
NUMBER OF POINTS	51	51	51	27	27
MIN. PTS. REQUIRED	36	35	29	25	17
MEAN MPH	42.73	42.73	42.73	42.81	42.81
MEAN ENERGY (DBA)	75.65	68.57	69.62	62.18	64.77
MEAN DBA	74.41	67.32	68.61	61.46	64.29
STD. DEV. MEAN DBA	2.98	2.96	2.69	2.41	2.03

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********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-std                           15:04:04  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
*************************************************************************************
```

	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 6 (45-48)					
NUMBER OF POINTS	52	52	52	28	27
MIN. PTS. REQUIRED	30	32	27	26	15
MEAN MPH	46.63	46.63	46.63	46.50	46.52
MEAN ENERGY (DBA)	76.52	69.49	70.81	62.92	65.40
MEAN DBA	75.72	68.59	70.05	621.27	65.00
STD. DEV. MEAN DBA	2.73	2.81	2.58	2.48	1.90
CLASS 7 (49-52)					
NUMBER OF POINTS	72	73	72	20	20
MIN. PTS. REQUIRED*	50	44	45	18	30
MEAN MPH	50.76	50.78	50.76	50.75	50.75
MEAN ENERGY (DBA)	80.86	73.61	74.98	64.46	67.95
MEAN DBA	79.00	71.91	73-26	64.00	66.82
STD. DEV. MEAN DBA	3.5s	3,32	3.34	2.03	2.78
CLASS 8 (53-56)					
NUMBER OF POINTS	167	174	167	76	76
MIN. PTS. REQUIRED	26	29	25	37	25
MEAN MPR	54.49	54.49	54.49	54.46	54.46
MEAN ENERGY (DBA)	80.09	73.44	74.45	66.74	68.71
MEAN DBA	79.24	72.50	73.63	65.55	67.91
STD. DEV. MEAN DBA	2.53	2-71	2.49	3.02	2.49
CLASS 9 (57-60)					
NUMBER OF POINTS	175	181	178	102	100
MIN. PTS. REQUIRED	37	33	37	41	29
MEAN MPH	58.54	58.56	58.54	58.63	58.64
MEAN ENERGY (DBA)	81.15	74.44	75.37	67.12	68.99
MEAN DBA	79.93	73.38	74.20	65.90	68.06
STD. DEV. MEAN DBA	3.05	2.89	3.03	3.20	2.70
CLASS 10 (61-64)					
NUMBER OF POINTS	154	158	155	101	101
MIN. PTS. REQUIRED	31	27	37	38	22
MEAN MPH	62.26	62.26	62.26	62.32	62.32
MEAN ENERGY (DBA)	81.80	75.19	76.04	67.92	69.68
MEAN DBA	80.79	74.24	75.01	66.55	68-85
STD. DEV. MEAN DBA	2.79	.2-62	3.03	3.09	2.33
CLASS 11 (>64)					
NUMBER OF POINTS	79	80	80	52	52
MIN. PTS. REQUIRED	33	33	33	29	22
MEAN MPH	68.23	68.20	68.20	68.33	68.33
MEAN ENERGY (DBA)	83.13	76.54	77.49	69.13	70.67
MEAN DBA	82.04	75.38	76.38	67.97	69.88
STD. DEV. MEAN DBA	2.86	2.85	2.85	2.69	2.34

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********************************** DATA SUMMARY ********************** PAGE : 1  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-com A-std                     15:07:29  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
***********************************************************************************
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		MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
REGRESSION EQUATION :						
LØ = A + B*LOG(MPH)	A =	13.33	4.31	7.48	9.92	19.18
	B =	37.44	38.83	37.57	31.54	27.55
NUMBER OF OBSERVATIONS		1234	1263	1241	610	606
STD. ERROR OF Y ON LOG(X)		2.82	2.81	2.79	2.88	2.50
INDEX OF DETERMINATION		0.54	0.56	0.55	0.35	0.36
COEFF. OF CORRELATION		0.74	0.75	0.74	0.59	0.60
F RATIO		1460.56	1609.05	1519.16	330.28	333.39
LØ :						
MEAN		78.01	71.41	72.39	64.99	67.28
VARIANCE		17.40	17.92	17.27	12.76	9.66
STD. DEV.		4.17	4.23	4.16	3.57	3.11
LØE :						
A + 0.115*SØ^2		14.25	5.21	8.37	10.88	19.90

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********************************** DATA SUMMARY ********************** PAGE : 2  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-com A-std                     15:07:29  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
SPEED CLASS DATA					
CLASS 0 (<25)					
NUMBER OF POINTS	3	3	3	0	0
MIN. PTS. REQUIRED	513	535	424	0	0
MEAN MPH	23.00	23.00	23.00	0.00	0.00
MEAN ENERGY (DBA)	67.00	60.55	61.07	q.00	0.00
MEAN DBA	64.77	58.20	59.20	0.00	0.00
STD. DEV. MEAN DBA	5.27	5.37	4.78	d.00	0.00
CLASS 1 (25-28)					
NUMBER OF POINTS	6	6	6	0	0
MIN. PTS. REQUIRED	119	113	95	0	0
MEAN MPH	27.33	27.33	27-33	0.00	0.00
MEAN ENERGY (DBA)	71.08	63.90	64.60	0.00	0.00
MEAN DBA	69-08	62.25	63.10	0.00	0.00
STD. DEV. MEAN DBA	4.24	4.13.	3.79	0.00	0.00
CLASS 2 (29-32)					
NUMBER OF POINTS	21	21	21	3	3
MIN. PTS. REQUIRED	21	25	21	34	1
MEAN MPH	30.57	30.57	30.57	31.33	31.33
MEAN ENERGY (DBA)	69.96	63.44	64.34	59.67	62.04
MEAN DBA	69.37	62.95	63.78	59.53	62.83
STD. DEV. MEAN DBA	2.20	2-40	2.20	1-36	0.21
CLASS 3 (33-36)					
NUMBER OF POINTS	45	46	46	9	9
MIN. PTS. REQUIRED	34	37	29	7	15
MEAN MPH	34.58	34.59	34.59	34.78	34.78
MEAN ENERGY (DBA)	71.38	64.95	65.72	58.65	61.62
MEAN DBA	70.29	63.69	64.80	58.52	61.34
STD. DEV. MEAN DBA	2.91	3.03	2.68	1.14	1.66
CLASS 4 (37-40)					
NUMBER OF POINTS	33	33	33	7	7
MIN. PTS. REQUIRED	40	39	30	24	13
MEAN MPH	38.45	38.45	38.45	38.71	38.71
MEAN ENERGY (DBA)	73.81	66.86	67.78	68.94	63.21
MEAN DBA	72.62	65.68	66.84	60.53	63.00
STD. DEV. MEAN DBA	3.15	3.11	2.73	2.00	1.48
CLASS 5 (41-44)					
NUMBER OF POINTS	88	88	88	50	50
MIN. PTS. REQUIRED	33	34	28	36	21
MEAN MPH	42.65	42.65	42.65	42.64	42.64
MEAN ENERGY (DBA)	75.02	68.00	69.09	62.32	64.76
MEAN DEA	73.75	66.70	68.04	61.14	63.98
STD. DEV. MEAN DBA	2.88	2.93	2.66	2.75	2.29

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********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  A-com A-std                     15:07:30  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 6 (45-48)					
NUMBER OP POINTS	92	92	92	47	46
MIN. PTS. REQUIRED	30	34	29	23	21
MEAN MPH	46.66	46.66	46.66	46.45	46.46
MEAN ENERGY (DBA)	76.10	69.34	70.48	62.67	65.26
MEAN DBA	75.26	68.36	69.65	61.98	64.62
STD. DEV. MEAN DBA	2.73	2.90	2.70	2.42	2.29
CLASS 7 (49-52)					
NUMBER OF POINTS	115	117	114	37	37
MIN. PTS. REQUIRED	41	36	37	19	26
MEAN MPH	50.72	58.73	50.72	50.68	50.68
MEAN ENERGY (DBA)	79.77	72.68	73.97	63.88	67.10
MEAN DBA	78.10	71.21	72.42	63.39	66.17
STD. DEV. MEAN DBA	3.21	3.01	3.06	2.17	2.53
CLASS 8 (53-56)					
NUMBER OF POINTS	250	258	251	105	105
MIN. PTS. REQUIRED	25	28	26	37	26
MEAN MPH	54.56	54.57	54.57	54.50	54.50
MEAN ENERGY (DBA)	79.48	72.99	73.88	66.38	68.26
MEAN DBA	78.65	72.09	73.05	65.28	67.45
STD. DEV. MEAN DBA	2.48	2.64	2.54	3.03	2.55
CLASS 9 (57-60)					
NUMBER OF POINTS	263	272	268	147	145
MIN. PTS. REQUIRED	32	31	31	38	29
MEAN MPH	58.52	58.53	58.52	58.61	58.61
MEAN ENERGY (DBA)	80.57	74.03	74.88	66.80	68.77
MEAN DBA	79.49	73.04	73.86	65.62	67.80
STD. DEV. MEAN DBA	2.85	2.79	2.80	3.10	2.71
CLASS 10 (61-64)					
NUMBER OF POINTS	215	220	215	139	138
MIN. PTS. REQUIRED	31	27	34	37	23
MEAN MPH	62.35	62.35	62.36	62.41	62.41
MEAN ENERGY (DBA)	81.32	74.85	75.70	67.78	69.43
MEAN DBA	80.32	73.91	74.71	66.45	68.59
STD. DEV. MEAN DBA	2.78	2.62	2.90	3.05	2.42
CLASS 11 (>64)					
NUMBER OF POINTS	103	107	104	66	66
MIN. PTS. REQUIRED	38	35	37	34	31
MEAN MPH	67.86	67.79	67.85	67.95	67.95
MEAN ENERGY (DBA)	82.78	76.07	77.16	69.00	70.56
MEAN DBA	82.62	74.91	76.00	67.72	69.55
STD. DEV. MEAN DBA	3.07	2.94	3.03	2.93	2.76

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********************************** DATA SUMMARY ********************** PAGE : 1  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  MT                              15:09:34  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
***********************************************************************************
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
REGRESSION EQUATION :					
LØ = A + B*LOG(MPH) A =	40.56	34.42	34.06	27.27	29.84
B =	25.79	25.59	26.17	25.33	25.35
NUMBER OF OBSERVATIONS	313	317	312	187	187
STD. ERROR OF Y ON LOG(X)	2.72	2.83	2.86	3.39	2.52
INDEX OF DETERMINATION	Ø.45	Ø.42	Ø.43	0.14	0.23
COEFF. OF CORRELATION	0.67	0.65	0.66	Ø.38	0.48
F RATIO	251.62	229.19	233.70	31.34	56.68
La:					
MEAN	84.57	78.10	78.72	71.53	73e33
VARIANCE	13-36	13.82	14.33	13-35	8.26
STD. DEV.	3.65	3.72	3.98	3.65	2.87
LØE :					
A + Ø.115*SØ^2	41.41	35.34	35.00	28.59	29.77

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********************************** DATA SUMMARY ********************** PAGE : 2  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS    VEHICLE TYPE(S)  MT                             15:09:34  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
SPEED CLASS DATA					
CLASS 0 (<25)					
NUMBER OF POINTS	1	1	1	0	0
MIN. PTS. REQUIRED	0	0	0	0	0
MEAN MPH	22.80	22.00	22.00	0.00	0.00
MEAN ENERGY (DBA)	70.20	63.30	64.30	0.00	0.00
MEAN DBA	70.20	63.30	64.30	0.00	0.00
STD. DEV. MEAN DBA	0.00	0.00	0.00,	0.00	0.00
CLASS 1 (25-28)					
NUMBER OF POINTS	7	7	7	0	0
MIN. PTS. REQUIRED"	135	178	166	0	0
MEAN MPH	27.43	27.43	27.43	0.00	0.00
MEAN ENERGY (DBA)	80.20	74.37	75.00	0.00	0.00
MEAN DBA	78.44	72.03	72.90	0.00	0.00
STD. DEV. MEAN DBA	4.75	5.46	5.26	0.00	0.00
CLASS 2 (29-32)					
NUMBER OF POINTS	8	8	8	0	0
MIN. PTS. REQUIRED	40	45	41	0	0
MEAN MPH	30.50	30.50	38.50	0.00	0.00
MEAN ENERGY (DBA)	80.43	74.48	74.59	0.00	0.00
MEAN DBA	79.57	73.61	73.76	0.00	0.05
STD. DEV. MEAN DBA	2.68	2.85	2-72	0.00	0.00
CLASS 3 (33-36)					
NUMBER OF POINTS	20	20	20	3	3
MIN. PTS. REQUIRED	52	50	42	90	50
MEAN MPH	34.10	34.10	34.10	33.33	33.33
MEAN ENERGY (DBA)	82.59	76.02	76.00	67.56	68.78
MEAN DBA	81.05	74.63	74.86	67.20	68.57
STD. DEV. MEAN DBA	3.44	3.38	3.08	2.20	1.65
CLASS 4 (37-40)					
NUMBER OF POINTS	15	15	15	3	3
MIN. PTS. REWIRED	56	48	44	239	84
MEAN MPH	38-67	38.67	38.67	38.33	38.33
MEAN DBA (DBA)	83.64	76-73	77.16	71.93	72.64
STD. DEV. MEAN	82.29	75.58	76-14	70.93	72.27
CLASS 5 (41-44) DBA	3.48	3-23	3-10	3.59	2.14
NUMBER OF POINTS	16	16	16	7	7
MIN. PTS. REQUIRED	28	31	26	11	17
MEAN MPH	42.38	42.38	42.38	42.86	42.86
MEAN ENERGY (DBA)	82.51	76-25	76.46	70.19	71.57
MEAN DBA	81.90	75.50	75.89	70.01	71.27
STD. DEV. MEAN DBA	2.49	2.62	2.37	1.37	1.70

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********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  MT                              15:09:34  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 6 (45-48)					
NUMBER OF POINTS	19	19	19	6	6
MIN. PTS. REQUIRED	27	59	43	42	37
MEAN MPH	46.32	46.32	46.32	46.17	46.17
MEAN ENERGY (DBA)	82.70	75.96	76.64	68.25	69.93
MEAN DBA	82.13	74.95	75.90	67.70	69.43
STD. DEV. MEAN DBA	2.50	3.66	3.14	2.53	2.36
CLASS 7 (49-52)					
NUMBER OF POINTS	31	32	31	14	14
MIN. PTS. REQUIRED	24	23	20	38	24
MEAN MW	50.71	50.69	50.71	50.86	50.86
MEAN ENERGY (DBA)	84.79	78.48	79.10	70.98	72.47
MEAN DBA	84.12	77.85	78.55	70.16	71.95
STD. DEV. MEAN DBA	2.44	2.42	2.25	2.87	2.25
CLASS 8 (53-56)					
NUMBER OF POINTS	67	69	67	47	47
MIN. PTS. REQUIRED	30	29	29	34	24
MEAN MPH	54.57	54.58	54.57	54.57	54.57
MEAN ENERGY (DBA)	85.16	78.98	79.60	71.05	72.89
MEAN DBA	84.35	78.11	78.81	70.06	72.23
STD. DEV. MEAN DBA	2.72	2.71	2.67	2.91	2.43
CLASS 9 (57-60)					
NUMBER OP POINTS	77	78	77	63	63
MIN. PTS. REQUIRED	22	23	20	40	19
MEAN MPH	58.45	58.45	58.45	58.44	58.44
MEAN ENERGY (DBA)	87.18	80.78	81.47	73.48	74.72
MEAN DBA	86.53	80.11	80.87	72.45	74.19
STD. DEV. MEAN DBA	2.35	2.37	2.22	3.17	2.15
CLASS 10 (61-64)					
NUMBER OF POINTS	44	44	43	36	36
MIN. PTS. REQUIRED	19	24	55	86	45
MEAN MW	62.07	62.07	62.09	62.06	62.06
MEAN ENERGY (DBA)	88.41	81.74	82.38	75.00	75.94
MEAN DBA	87.84	81.02	81.43	73.05	74.86
STD. DEV. MEAN DBA	2.18	2.46	3.71	4.62	3.34
CLASS 11 (>64)					
NUMBER OF POINTS	8	8	8	8	8
MIN. PTS. REQUIRED	16	8	9	33	12
MEAN MPH	67.38	67.38	67.38	67.38	67.38
MEAN ENERGY (DBA)	87.89	81.24	82.10	75.03	75.76
MEAN DBA	87.62	81.10	81.94	74.46	75.56
STD. DEV. MEAN DBA	1.68	1.21	1.29	2.44	1.44

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********************************** DATA SUMMARY ********************** PAGE : 1  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-3                            15:11:21  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
***************************************************************************************
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
REGRESSION EQUATION :					
LØ = A + B*LOG(MPH) A =	62.05	54.25	52.37	79.00	76.92
B =	14.93	15.80	17.19	-2.48	-.48
NUMBER OP OBSERVATIONS	203	205	204	106	106
STD. ERROR OF Y ON LOG(X)	3.26	2.99	2.91	3.65	2.86
INDEX OF DETERMINATION	0.20	0.25	0.29	Ø.ØØ	Ø.ØØ
COEFF. OP CORRELATION	0.45	Ø.5Ø	Ø.54	-.06	-.Ø1
F RATIO	5Ø.55	67.08	83.87	d.34	0.02
La :					
MEAN	87.Ø5	80.69	81.14	74.72	76.09
VARIANCE	13.20	11.87	11.95	13.27	8.Ø8
STD. DEV.	3.63	3.45	3.46	3.64	2.84
LØE :					
A + Ø.115*SØ^2	63.27	55.28	53.34	8Ø.53	77.86

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********************************** DATA SUMMARY ********************** PAGE : 2  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-3                            15:11:21  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
***********************************************************************************
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	MIC-1	MIC-2	MIC-3	mic-4	mic-5
SPEED CLASS DATA					
CLASS 1 (25-28)					
NUMBER OF POINTS	10	10	10	3	3
MIN. PTS. REQUIRED	46	52	53	49	42
MEAN MPH	27.28	27.20	27.20	27.00	27.00
MEAN ENERGY (DBA)	04.99	78.50	78.60	76.15	76.14
MEAN DBA	84.15	77.59	77.65	79.97	75.97
STD. DEV. MEAN DBA	2.99	3.19	3.21	1.63	1.50
CLASS 2 (29-32)					
NUMBER-OF POINTS	14	14	14	3	3
MIN. PTS. REQUIRED"	110	102	100	795	643
MEAN HPH	30.43	30.43	30.43	30.33	30.33
MEAN ENERGY (DBA)	87.40	81.32	81-33	83.82	83.29
MEAN DBA	83.29	77.27	77.48	80.43	80.50
STD. DEV. MEAN DBA	4.86	4.68	4.62	6.55	5.89
CLASS 3 (33-36)					
NUMBER OF POINTS	19	19	19	2	2
MIN. PTS. REQUIRED	54	42	411424	633	
MEAN MPH	34.89.	34.89	34.89	35.50	35.50
MEAN ENERGY (DBA)	85.68	79.04	79.22	77.19	76.92
MEAN DBA	84-36	77.87	78.12	76.70	76.70
STD. DEV. MEAN DBA	3.49	3.09	3.06	2.97	1.98
CLASS 4 (37-40)					
NUMBER OF POINTS	14	15	15	1	1
MIN. PTS. REQUIRED	30	34	35	0	0
MEAN MPH	38.07	38.20	38.20	37.00	37.00
MEAN ENERGY (DBA)	87.66	80.95	81.04	77.10	77.10
MEAN DBA	86.90	80.01	80.15	77.10	77.10
STD. DEV. MEAN DBA	2.51	2.71	2.77	0.00	0.00
CLASS 5 (41-44)					
NUMBER OF POINTS	8	9	8	3	3
MIN. PTS. REQUIRED	24	21	22	198	57
MEAN MP?!	42-63	42.78	42.63	43.00	43.00
MEAN ENERGY (DBA)	87.51	80.00	81.37	73.55	75.67
MEAN DBA	87.07	79-62	80.97	72.70	75.43
STD. DEV. MEAN DBA	2.05	1.90	2.00	3.27	1.76
CLASS 6 (45-48)					
NUMBER OF POINTS	15	15	15	6	6
MIN. PTS. REQUIRED	23	18	19	32	14
MEAN MPH	46.40	46.40	46.40	47.17	47.17
MEAN ENERGY (DBA)	87.23	80.78	81.25	73.38	74.61
MEAN DBA	86.73	80.37	80.82	72.80	74.38
STD. DEV. MEAN DBA	2.23	2.00	2.05	2.19	1.46

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********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-3                            15:11:22  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
***********************************************************************************
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 7 (49-52)					
NUMBER OF POINTS	27	27	27	13	13
MIN. PTS. REQUIRED	28	25	23	43	25
MEAN MPH	51.04	51.04	51.04	51.08	51.08
MEAN ENERGY (DBA)	88.63	82.31	82.73	73.73	75.32
MEAN DBA	87.93	81.67	82.14	72.80	74.74
STD. DEV. MEAN DBA	2.56	2.42	2.33	3.01	2.30
CLASS 8 (53-56)					
NUMBER OF POINTS	41	41	41	31:	31
MIN. PTS. REQUIRED	44	43	39	51	34
MEAN MPH	54.49	54.49	54.49	54.42	54.42
MEAN ENERGY (DBA)	88.99	82.90	83.07	75.25	76-35
MEAN DBA	87.74	81.66	81.99	73.67	75.32
STD. DEV. MEAN DBA	3.32	3.28	3.12	3.58	2.93
CLASS 9 (57-60)					
NUMBER OF POINTS	34	34	34	27	27
MIN. PTS. REQUIRED	23	18	17	40	20
MEAN MPH	58.71	58.71	58.71	58.74	58.74
MEAN ENERGY (DBA)	89.55	83.00	83.68	76.43	77.42
MEAN DBA	88.85	82.44	83.11	75.41	76.84
STD. DEV. MEAN DBA	2-42	2.14	2.08	3.06	2.19
CLASS 10 (61-64)					
NUMBER OF POINTS	17	17	17	13	13
MIN. PTS. REQUIRED	35	36	30	48	32
MEAN MPH	62.35	62.35	62.35	62.38	62.38
MEAN ENERGY (DBA)	89.94	83.71	84.11	77.93	78.37
MEAN DBA	89.05	82.75	83.26	76.74	77.55
STD. DEV. MEAN DBA	2.78	2.82	2.60	3.17	2.59
CLASS 11 (>64)					
NUMBER OF POINTS	4	4	4	4	4
MIN. PTS. REQUIRED	1004	504	490	305	209
MEAN MPH	66.00	66.00	66.00	66.00	66.00
MEAN ENERGY (DBA)	89.50	82.38	83.76	77.04	77.10
MEAN DBA	85.If	79.90	81.15	75.42	75-82
STD. DEV. MEAN DBA	9.96	7.05	7.02	5.49	4.54,

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********************************** DATA SUMMARY ********************** PAGE : 1  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-4                            15:12:59  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
*************************************************************************************
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		MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
REGRESSION EQUATION :						
LØ = A + B*LOG(MPH)	A =	59.53	58.74	59.11	41.99	60.76
	B =	17.11	13.69	13.86	18.64	8.87
NUMBER OF OBSERVATIONS		51	51	50	35	35
STD. ERROR OF Y ON LOG(X)		2.31	2.34	2.72	3.19	3.01
INDEX OF DETERMINATION		0.25	0.17	0.14	0.03	0.01
COEFF. OF CORRELATION		0.50	0.41	0.37	0.19	0.10
F RATIO		16.26	10.15	7.67	1.19	0.30
LØ :						
MEAN		89.13	82.43	83.08	74.88	76.41
VARIANCE		6.96	6.47	8.43	10.22	8.90
STD. DEV.		2.64	2.54	2.90	3.20	2.98
LØE :						
A + 0.115*SØ^2		60.15	59.37	59.97	43.16	61.81

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********************************** DATA SUMMARY ********************** PAGE : 2  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-4                            15:13:00  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
***********************************************************************************
```

	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
SPEED CLASS DATA					
CLASS 2 (29-32)					
NUMBER OF POINTS	1	1	1	0	0
MIN. PTS. REQUIRED	0	0	0	0	0
MEAN MPH	31.00	31.00	31.00	0.00	0.00
MEAN ENERGY (DBA)	87.10	81.00	81.20	0.00	0.00
MEAN DBA	87.10	81.00	81.20	0.00	0.00
STD. DEV. MEAN DBA	0.00	0.00	0.00	0.00	0.00
CLASS 3 (33-36)					
NUMBER-OF POINTS	2	2	2	0	0
MIN. PTS. REQUIRED	291	182	726		0
MEAN MPH	34.58	34.50	34.50	0.00	8.00
MEAN ENERGY (DBA)	85.65	79.91	81.05	0.00	0.00
MEAN DBA	85.55	79.85	80.80	0.00	0.00
STD. DEV. MEAN DBA	1.34	1.06	2.12	0.00	0.00
CLASS 4 (37-40)					
NUMBER OF POINTS	3	3	3	0	0
MIN. PTS. REQUIRED	28	37	31	0	0
MEAN MPH	39.00	39.00	39.00	0.00	0.00
MEAN ENERGY (DBA)	87.48	81.15	81.83	0.00	8.00
MEAN DBA	87.37	81.00	81.70	0.00	0.08
STD. DEV. MEAN DBA	1-22	1.41	1.30	0.00	0.00
CLASS 5 (41-44)					
NUMBER OF POINTS	1	1	1	0	0
MIN. PTS. REQUIRED	0	0	0	0	0
MEAN MPH	42.00	42.00	42.00	0.00	0.00
MEAN ENERGY (DBA)	84.50	77.20	77.60	0.00	0.00
MEAN DBA	84.50	77.20	77.60	0.00	0.00
STD. DEV. MEAN DBA	0.00	0.00	0.00	0.00	0.00
CLASS 6 (45-48)					
NUMBER OF POINTS	3	3	3	1	1
MIN. PTS. REQUIRED	543	771	611	0	0
MEAN MPH	47.00	47.00	47.00	48.00	48.00
MEAN ENERGY (DBA)	92.64	86.95	86.73	83.90	84.80
MEAN DBA	90.27	83.67	84.07	83.90	84.80
STD. DEV. MEAN DBA	5.42	6-45	5.74	0.00	0.00
CLASS 7 (49-52)					
NUMBER OF POINTS	5	5	5	2	2
MIN. PTS. REQUIRED	84	58	77	98	233
MEAN MPH	50.20	50.20	50.20	50.50	50.50
MEAN ENERGY (DBA)	88.80	82-35	83.32	71.18	74.13
MEAN DBA	88.04	81.70	82.52	71.15	74.05
STD. DEV. MEAN DBA	3.30	2.74	3.17	0.78	1.20

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********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-4                            15:13:00  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
*********************************************************************************
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 8 (53-56)					
NUMBER OF POINTS	9	9	8	7	7
MIN. PTS. REQUIRED	14	14	14	25	24
MEAN MPH	54.67	54.67	54.75	54.57	54.57
MEAN ENERGY (DBA)	88.65	82.20	82.79	74.20	75.85
MEAN DBA	88.39	81.93	82.52	73.81	75.47
STD. DEV. MEAN DBA	1.62	1.60	1.58	2.06	2.01
CLASS 9 (57-60)					
NUMBER OF POINTS	13	13	13	13	13
MIN. PTS. REQUIRED	9	7	42	25	26
MEAN MPH	58.38	58.38	58.38	58.38	58.38
MEAN ENERGY (DBA)	89.48	82.39	83.32	74.58	76.44
MEAN DBA	89.29	82.24	82.69	74.14	75.93
STD. DEV. MEAN DBA	1.37	1.21	2.97	2.27	2-32
CLASS 10 (61-64)					
NUMBER OF POINTS	13	13	13	11	11
MIN. PTS. REQUIRED	29	28	27	56	56
MEAN MPH	62.31	62.31	62.31	62.45	62.45
MEAN ENERGY (DBA)	91.45	84.65	85.40	76.78	77.86
MEAN DBA	90.87	84.02	84.85	76.04	77.08
STD. DEV. MEAN DBA	2.48	2.44	2.40	3.35	3.37
CLASS 11 (a64)					
NUMBER OF POINTS	1	1	1	1	1
MIN. PTS. REQUIRED	0	0	0	0	0
MEAN MPH	65.00	65.00	65.00	65.00	65.00
MEAN ENERGY (DBA)	92.00	84.50	85.70	77.70	78.20
MEAN DBA	92.00	84.50	85.70	77.70	78.20
STD. DEV. MEAN DBA	0.00	0.00	0.00	0.00	0.00

********** DATA SUMMARY ********** PAGE : 1 *
SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19 84/06/22 *
ALL VEHICLE SPEEDS VEHICLE TYPE(S) HT-5 15:15:25 *
ALL WIND SPEEDS ALL WIND ANGLES ALL WIND VECTORS *
MIN. EVENT QUAL. 1 1 1 1 *
****

		MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
REGRESSION EQUATION :						
LØ = A + B*LOG(MPH)	A =	58.46	50.30	50.78	17.78	23.37
	B =	17.75	18.88	18.96	32.92	30.65
NUMBER OF OBSERVATIONS		881	898	886	566	562
STD. ERROR OF Y ON LOG(X)		2.58	2.57	2.49	2.91	2.44
INDEX OF DETERMINATION		0.23	0.26	0.27	0.13	0.16
COEFF. OF CORRELATION		0.48	0.51	0.52	0.37	0.40
F RATIO		268.60	307.09	329.88	86.97	106.14
LØ :						
MEAN		89.20	83.00	83.62	75.83	77.41
VARIANCE		8.69	8.88	8.48	9.77	7.09
STD. DEV.		2.95	2.98	2.91	3.13	2.66
LØE :						
A + 0.115*SØ^2		59.23	51.06	51.49	18.76	24.06

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********************************** DATA SUMMARY ********************** PAGE : 2  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-5                            15:15:25  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
SPEED CLASS DATA					
CLASS 0 (<25)					
NUMBER OF POINTS	3	3	3	0	0
MIN. PTS. REQUIRED	242	345	357	0	0
MEAN MPH	21.00	21.00	21.00	0.00	0.00
MEAN ENERGY (DBA)	81.79	76.68	77.10	B.00	0.00
MEAN DBA	80.77	75.57	75.97	0.00	0.00
STD. DEV. MEAN DBA	3.61	4.32	4.39	0.00	0.00
CLASS 1 (25-28)					
NUMBER OF POINTS	8	8	8	0	0
MIN. PTS. REQUIRED	88	72	74	0	0
MEAN MPH	27.00	27.00	27.00	8.00	0.00
MEAN ENERGY (DBA)	87.49	80.40	80.87	0.00	0.00.
MEAN DBA	85.81	78.96	79.42	0.00	0.00
STD. DEV. MEAN DBA	3.97	3.60.	3.64	0.00	0.00
CLASS 2 (29-32)					
NUMBER OF POINTS	22	22	22	0	0
MIN. PTS. REQUIRED	25	23	27	0	0
MEAN MPH	30.59	30.59	30.59	0.00	0.00
MEAN ENERGY (DBA)	86.35	79.96	80.78	0.00	0.00
MEAN DBA	85.63	79.32	80.00	0.00	0.00
STD. DEV. MEAN DBA	2.41	2.30	2.50	0.00	0.00
CLASS 3 (33-36)					
NUMBER OF POINTS	19	19	19	0	0
MIN. PTS. REQUIRED	30	30	28	0	0
MEAN MPH	34.74	34.74	34.74	0.00	0.00
MEAN ENERGY (DBA)	86.04	79.86	80.18	0.00	0.00
MEAN DBA	85.28	79.14	79.49	0.00	0.00
STD. DEV. MEAN DBA	2.59	2.59	2.51	0.00	0.00
CLASS 4 (37-40)					
NUMBER OF POINTS	16	16	16	0	0
MIN. PTS. REQUIRED	27	21	28	0	0
MEAN MPH	38.75	38.75	38.75	0.00	0.00
MEAN ENERGY (DBA)	87.75	80.78	81.65	0.00	0.00
MEAN DBA	87.01	80.27	80.94	0.00	0.08
STD. DEV. MEAN DBA	2.46	2.16	2.49	0.00	0.00
CLASS 5 (41-44)					
NUMBER OF POINTS	38	38	38	3	3
MIN. PTS. REQUIRED	21	18	16	98	10
MEAN MPH	43.16	43.16	43.16	43.67	43.67
MEAN ENERGY (DBA)	88.95	82.14	82.87	73.61	74.47
MEAN DBA	88.37	81.64	82.42	73.23	74.43
STD. DEV. MEAN DBA	2.27	2.09	2.01	2.30	0.72

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********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-5                            15:15:26  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 6 (45-48)					
NUMBER OF POINTS	58	59	58	16	16
MIN. PTS. REQUIRED	18	21	16	21	12
MEAN MPH	46.14	46.14	46.14	46.38	46.38
MEAN ENERGY (DBA)	88.31	81.93	82.58	73.76	75.43
MEAN DBA	87.84	81.36	82.16	73.27	75.14
STD. DEV. MEAN DBA	2.11	2.30	2.00	2.18	1.60
CLASS 7 (49-52)					
NUMBER OF POINTS	72	74	74	34	33
MIN. PTS. REQUIRED	31	29	30	36	28
MEAN MPH	50.97	51.00	51.00	51.03	51.00
MEAN ENERGY (DBA)	88.89	82.77	83.18	75.25	76.54
MEAN DBA	87.77	81.77	82.16	74.05	75.47
STD. DEV. MEAN DBA	2.80	2-71	2.74	2.99	2.64
CLASS 8 (53-56)					
NUMBER OF POINTS	175	183	179	134	134
MIN. PTS. REQUIRED	25	29	26	36	25
MEAN MPH	54.63	54.62	54.61	54.74	54.74
MEAN ENERGY (DBA)	89.69	83.67	84.10	76.07	77.40
MEAN DBA	88.91	82.72	83.33	74.81	76.59
STD. DEV. MEAN DBA	2.51	2.69	2.53	3.02	2.51
CLASS 9 (57-60)					
NUMBER OF POINTS	250	253	250	203	203
MIN. PTS. REQUIRED	2fa	21	19	29	18
MEAN MPH	58.60	58.59	58.59	58.65	58.65
MEAN ENERGY (DBA)	90.23	84.18	84.76	76.68	77.92
MEAN DBA	89.61	83.51	84.14	75.83	77.41
STD. DEV. MEAN DBA	2.23	2.30	2.17	2.70	2.12
CLASS 10 (61-64)					
NUMBER OF POINTS	180	182	179	145	142
MIN. PTS. REQUIRED	22	21	19	30	23
MEAN MPH	62.07	62.08	62.08	62.01	62.01
MEAN ENERGY (DBA)	91.61	85.36	85.94	77.83	79.09
MEAN DBA	90.83	84.63	85.31	76.91	78.39
STD. DEV. MEAN DBA	2.34	2.31	2.28	2.74	2.42
CLASS 11 (>64)					
NUMBER OF POINTS	40	41	40	31	31
MIN. PTS. REQUIRED	80	67	66	78	64
MEAN MPH	66.92	66.88	66.92	67.13	67.13
MEAN ENERGY (DBA)	93.81	87.52	88.20	80.62	81.61
MEAN DBA	91.94	85.95	86.47	78.67	79.98
STD. DEV. MEAN DBA	4.47	4.09	4.06	4.42	4.01

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********************************** DATA SUMMARY ********************** PAGE : 1  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE($)  HT-3 HT-4 HT-5                  15:18:26  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
*********************************************************************************
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	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
EGRESSION EQUATION :					
L0 = A + B*LOG(MPH) A =	57.52	49.54	49.09	48.03	49.31
B =	18.18	19.18	19.79	15.70	15.85
NUMBER OF OBSERVATIONS	1135	1154	1140	707	703
STD. ERROR OF Y ON LOG(X)	2.73	2.68	2.63	3.15	2.65
INDEX OF DETERMINATION	0.26	0.29	8.31	0.05	0.07
COEFF. OF CORRELATION	0.51	0.53	0.56	0.23	0.27
F RATIO	395.37	459.70	507.52	39.43	56-73
L0 :					
MEAN	88.81	82.57	83.15	75.61	77.16
VARIANCE	10.08	10.06	9.98	10.46	7.56
STD. DEV.	3.17	3.17	3.16	3.23	2.75
L0E :					
A + 0.115*S0^2	58.38	50.37	49.88	49.17	50.12

********** DATA SUMMARY ********** PAGE : 2

SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19 84/06/22

ALL VEHICLE SPEEDS VEHICLE TYPE(S) €IT-3 €IT-4 AT-5 15:18:26

ALL WIND SPEEDS ALL WIND ANGLES ALL WIND VECTORS

MIN. EVENT QUAL. 1 1 1 1

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	MIC-1	MIC-2	MIC-3	MfC-4	MIC-5
;PEED CLASS DATA					
CLASS 0 (<25)					
NUMBER OF POINTS	3	3	3	0	0
MIN. PTS. REQUIRED	242	345	357	0	0
MEAN MPH	21.00	21.00	21.00	0.00	0.00
MEAN ENERGY (DBA)	81.79	76.68	77.10	0.00	0.00
MEAN DBA	80.77	75.57	75.97	0.00	0.00
STD. DEV. MEAN DBA	3.61	4.32	4.39	0.00	B.00
CLASS 1 (25-28)					
NUMBER OF POINTS	18	18	18	3	3
MIN. PTS. REQUIRED	53	50	52	49	42
MEAN MPH	27.11	27.11	27.11	27.00	27.00
MEAN ENERGY (DBA)	86.26	79.45	79.76	76.15	76.14
MEAN DBA	84.89	78.20	78.44	75.97	75.97
STD. DEV. MEAN DBA	3.45	3.35	3.42	1.63	1.50
CLASS 2 (29-32)					
NUMBER OF POINTS	37	37	37	3	3
MIN. PTS. REQUIRED	53	49	52	795	643
MEAN MPH	30.54	30.54	30.54	30.33	30.33
MEAN WERGY (DBA)	86.80	80.55	81.01	83.82	83.29
MEAN DBA	84.79	78.59	79.08	80.43	80.50
STD. DEV. MEAN DBA	3.66	3.49	3.61	6.55	5.89
CLASS 3 (33-36)					
NUMBER OF POINTS	40	40	40	2	2
MIN. PTS. REQUIRED	36	32	32	1424	633
MEAN MPH	34.80	34.80	34.80	35.50	35.50
MEAN ENERGY (DBA)	85.85	79.49	79.00	77.19	76.92
MEAN DBA	84.85	78.57	78.90	76.70	76.70
STD. DEV. MEAN DBA	3.00	2.83	2.83	2.97	1.98
CLASS 4 (37-40)					
NUMBER OF POINTS	33	34	34	1	1
MIN. PTS. REQUIRED	22	22	26	0	0
MEAN MPX	38-48	38.53	38.53	37.00	37.00
MEAN ENERGY (DBA)	87.69	80.89	81.41	77.10	77.10
MEAN DBA	87-00	80.22	80.66	77.10	77.10
STD. DEV. MEAN DBA	2.35	2.33	2.54	0.00	0.00
CLASS 5 (41-44)					
NUMBER OF POINTS	47	48	47	6	6
MIN. PTS. REQUIRED	21	20	18	43	12
MEAN MPH	43.04	43.06	43.04	43.33	43.33
MEAN ENERGY (DBA)	88.67	81.74	82.58	73.58	75.11
MEAN DBA	88.06	81.17	82.87	72.97	74.93
STD. DEV. MEAN DBA	2.30	2.26	2.15	2.55	1.32

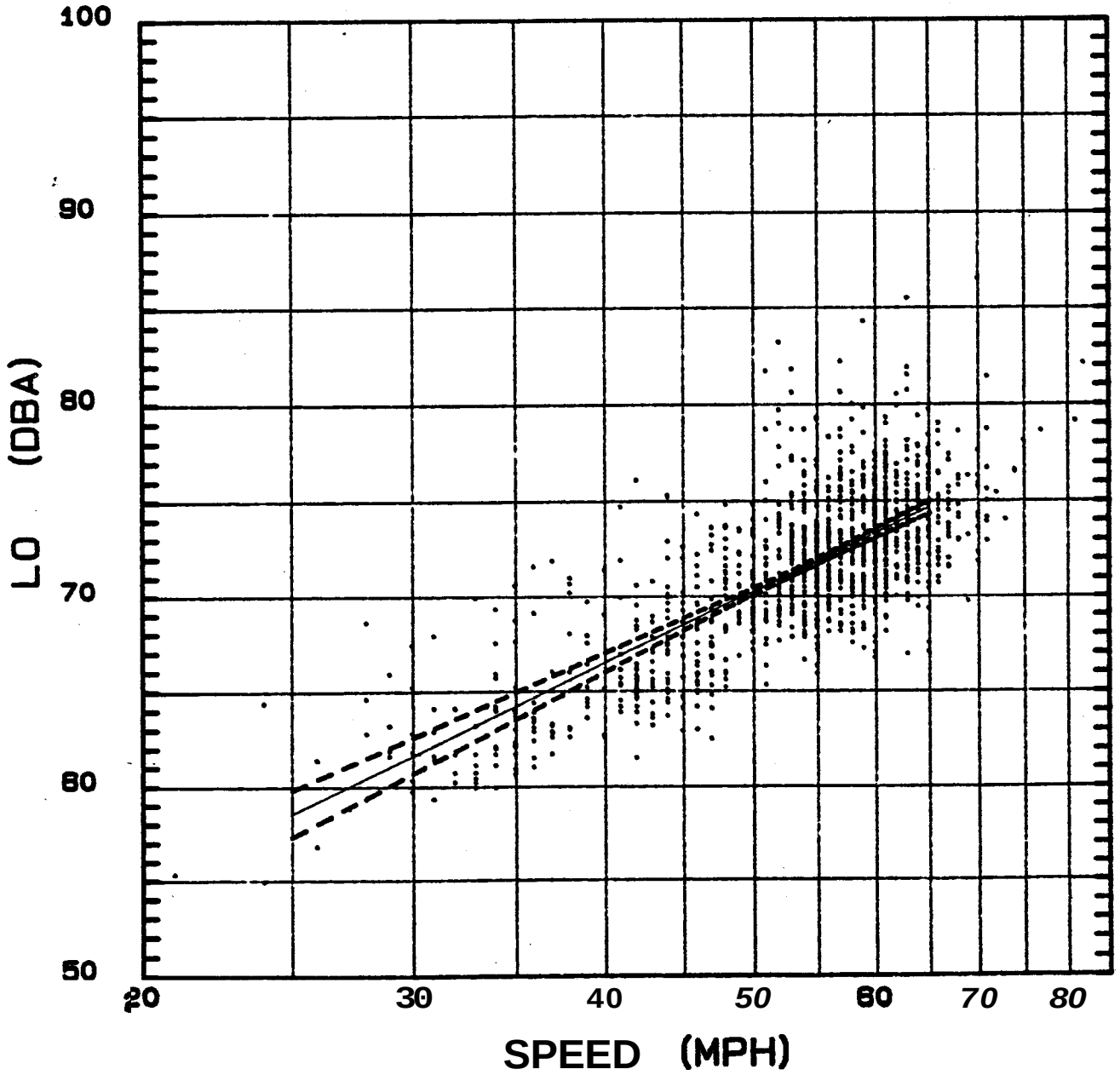
```
********************************** DATA SUMMARY ********************** PAGE : 3  *
* SITES-1,2,3,5,6,7,9,10,11,12,14,15,16,17,18,19                        84/06/22  *
* ALL VEHICLE SPEEDS   VEHICLE TYPE(S)  HT-3 HT-4 HT-5                  15:18:27  *
* ALL WIND SPEEDS  ALL WIND ANGLES  ALL WIND VECTORS                              *
* MIN. EVENT QUAL. 1 1 1 1                                                        *
*********************************************************************************
```

	MIC-1	MIC-2	MIC-3	MIC-4	MIC-5
CLASS 6 (45-48)					
NUMBER OF POINTS	76	77	76	23	23
MIN. PTS. REQUIRED	22	25	21	40	28
MEAN MPH	46.22	46.22	46.22	46.65	46.65
MEAN ENERGY (DBA)	88.42	82.10	82.63	75.17	76.53
MEAN DBA	87.72	81.26	81.97	73.61	75.37
STD. DEV. MEAN DEA	2.36	2.50	2.28	3.06	2.56
CLASS 7 (49-52)					
NUMBER OF POINTS	104	106	106	49	48
MIN. PTS. REQUIRED	30	27	28	36	25
MEAN MPK	50.95	50.97	50.97	51.02	51.00
MEAN ENERGY (DBA)	88.82	82.64	83.08	74.78	76.16
MEAN DBA	87.82	81.74	82.17	73.60	75.21
STD. DEV. MEAN DEA	2.74	2.62	2.64	3.00	2.51
CLASS 8 (53-56)					
NUMBER OF POINTS	225	233	228	172	172
MIN. PTS. REQUIRED	29	31	28	39	27
MEAN MPH	54.60	54.61	54.59	54.67	54.67
MEAN ENERGY (DBA)	89.53	83.49	83.89	75.87	77.17
MEAN DBA	88.68	82.51	83.06	74.57	76-31
STD. DEV. MEAN DBA	2.68	2.79	2.66	3-11	2.61
CLASS 9 (57-60)					
NUMBER OF POINTS	297	300	297	243	243
MIN. PTS. REQUIRED	20	21	20	30	19
MEAN MPH	58.60	58.60	58.59	58.65	58-65
MEAN ENERGY (DBA)	90.13	83.99	84.59	76.56	77.80
MEAN DBA	89.51	03.34	83.96	75.69	77.27
STD. DEV. MEAN DBA	2.23	2.27	2.23	2.74	2.16
CLASS 10 (61-64)					
NUMBER OF POINTS	210	212	209	169	166
MIN. PTS. REQUIRED	24	23	21	31	25
MEAN MPH	62.11	62.12	62.11	62.07	62.07
MEAN ENERGY (DBA)	91.48	85.21	85.79	77.78	78.97
MEAN DBA	90.69	84.44	85.11	76.84	78.23
STD. DEV. MEAN DBA	2.43	2.40	2.31	2.80	2.51
CLASS 11 (>64)					
NUMBER OF POINTS	45	46	45	36	36
MIN. PTS. REQUIRED	113	85	81	82	69
MEAN MPH	66.80	66.76	66.80	66.94	66.94
MEAN ENERGY (DBA)	93.53	87.20	87.90	80.28	81.21
MEAN DBA	91.34	85.39	85.98	78.28	79.47
STD. DEV. MEAN DBA	5.32	4.60	4.51	4.52	4.17

CALIFORNIA VEHICLE NOISE EMISSIONS
LO VS. SPEED

VEHICLE TYPE: ALL AUTOS
MIC.#2 HT-5FT. DIST-SOFT.

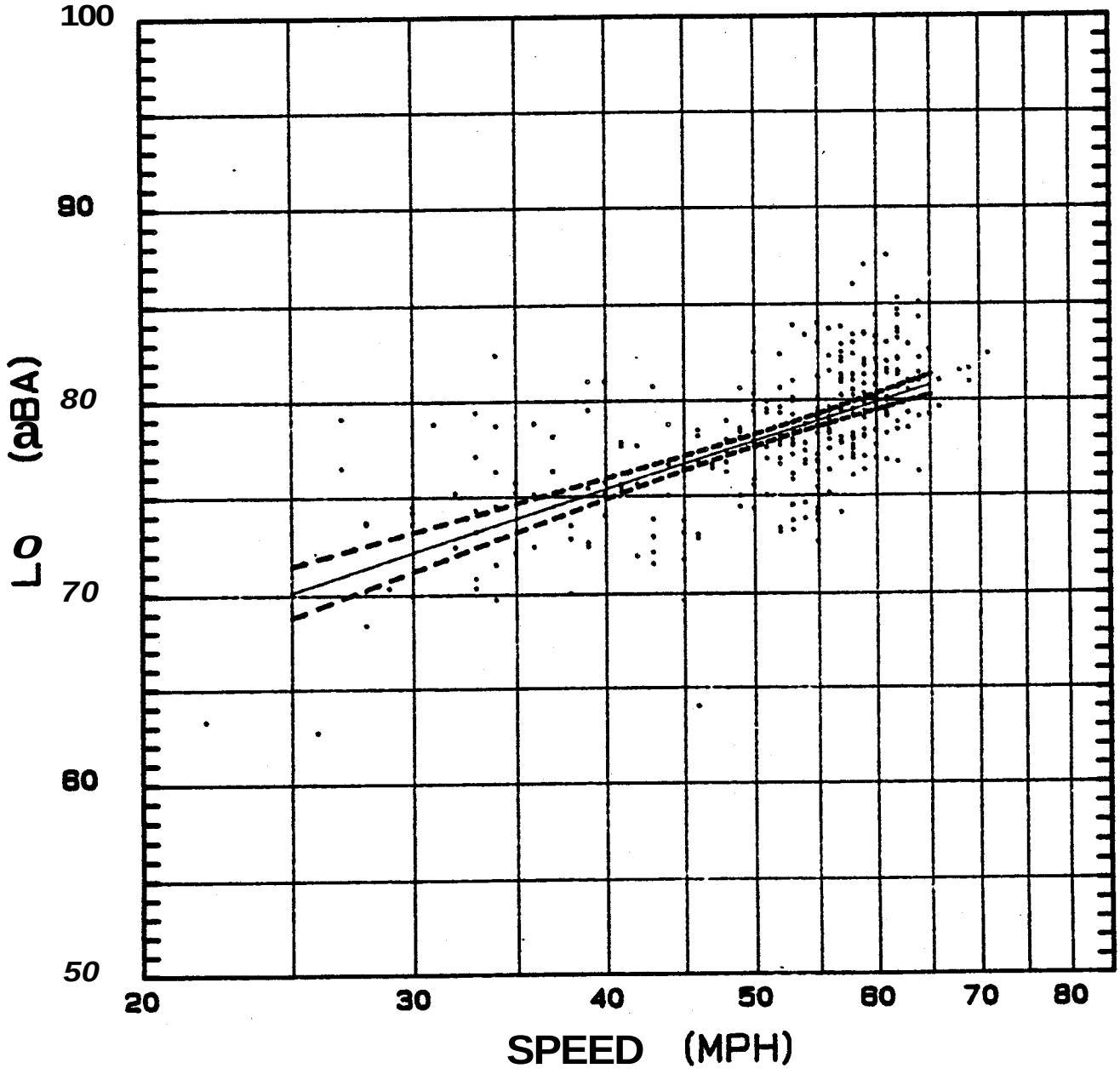
ALL SITES -- 4LL DATA POINTS
——— ALL SITES LO =4.31+38.83*LOG (MPH)
------ 95% CONFIDENCE INTERVALS FOR PREDICTION EQUATION



CALIFORNIA VEHICLE NOISE EMISSIONS
LO VS. SPEED

VEHICLE TYPE: MEDIUM TRUCKS
MIC.#2 HT-5FT. DIST-50FT.

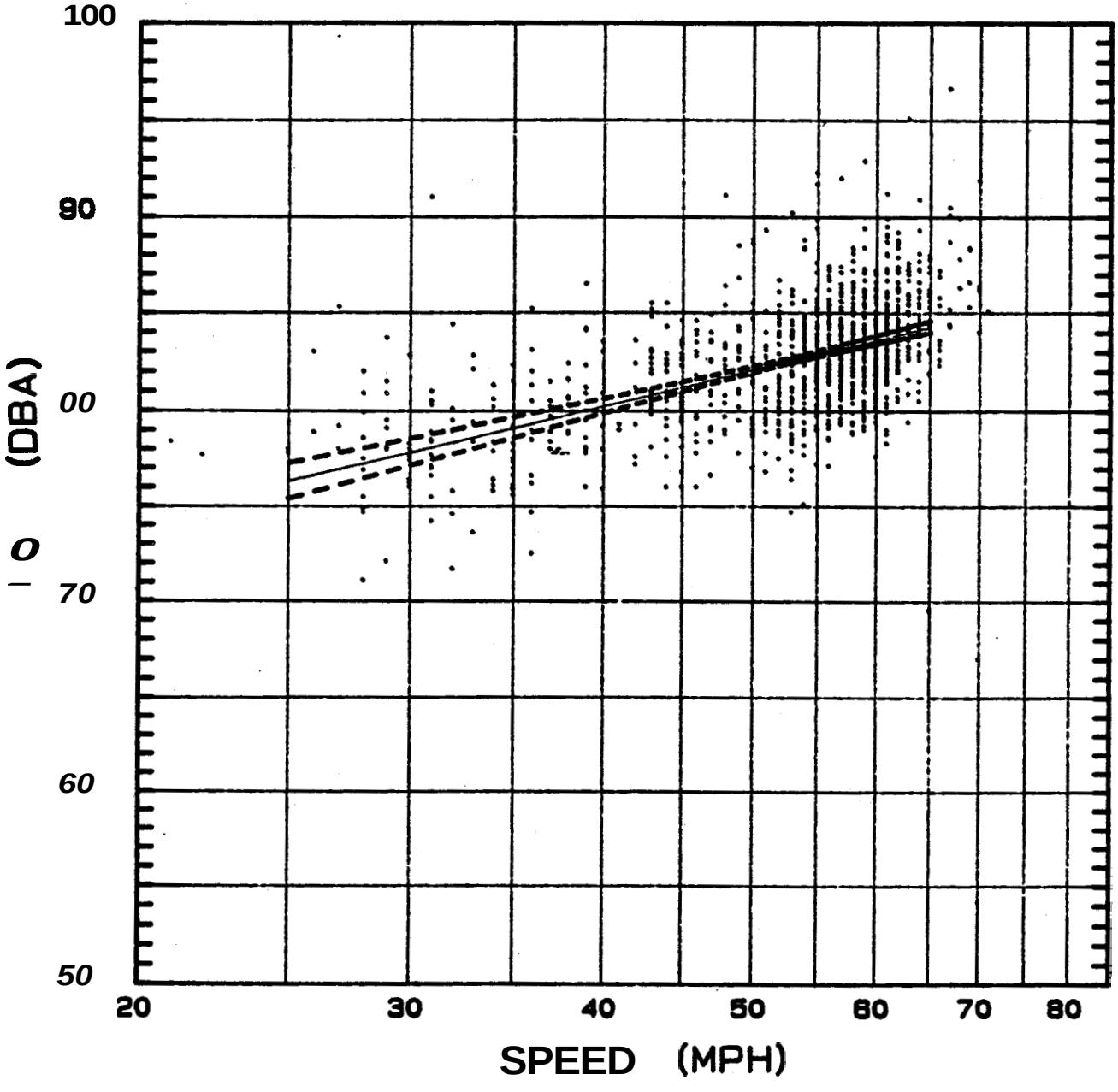
ALL SITES -- ALL DATA POINTS
——— ALL SITES LO =34.42+25.59*LOG (MPH)
------ 95% CONFIDENCE INTERVALS FOR PREDICTION EQUATION



CALIFORNIA VEHICLE NOISE EMISSIONS
LO VS. SPEED

VEHICLE TYPE: HEAVY TRUCKS
MIC.#2 HT-5FT. DIST-50FT.

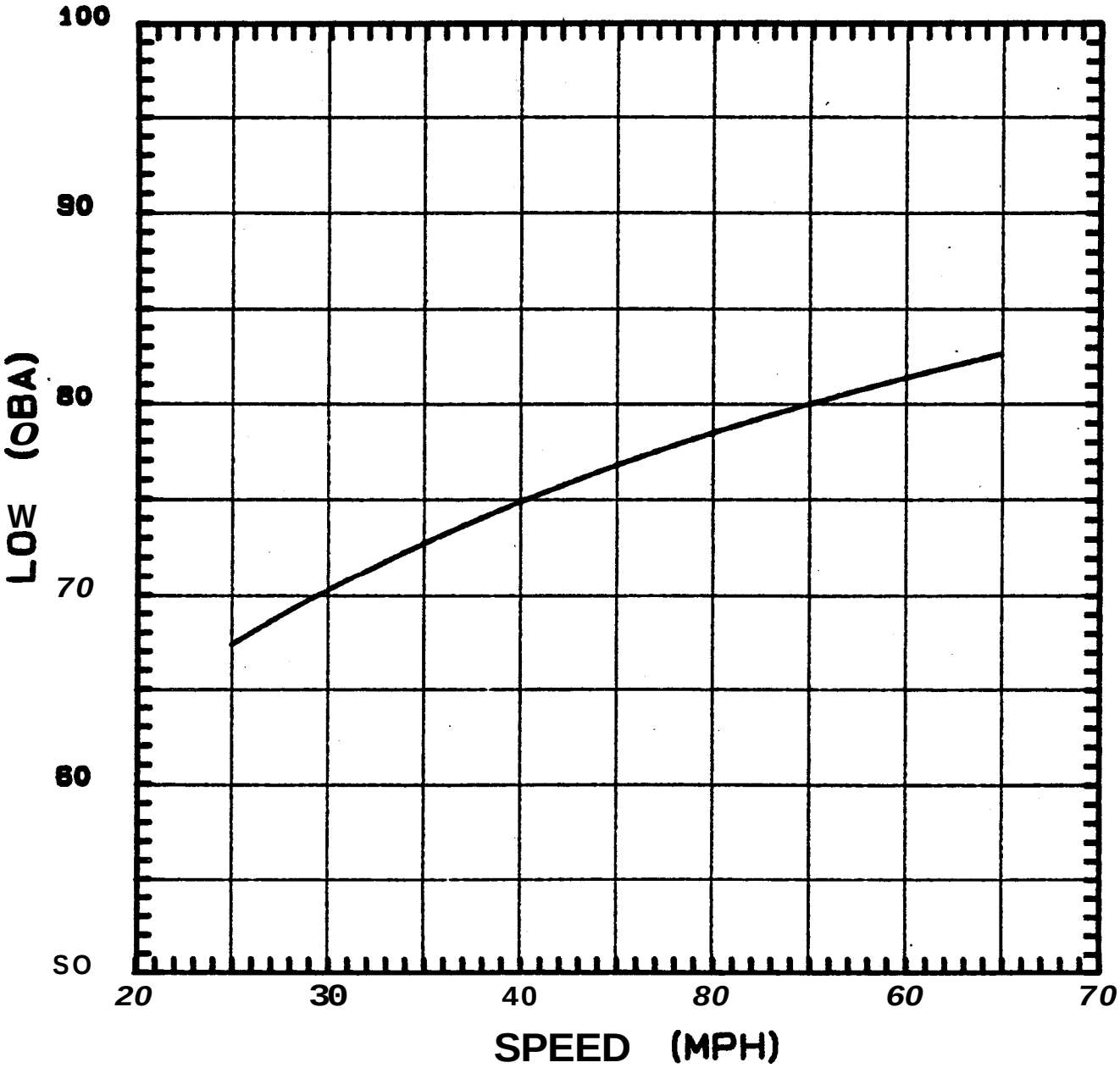
ALL SITES -- ALL DATA POINTS
——— ALL SITES LO =49.54+19.18*LOG (MPH)
------ 95% CONFIDENCE INTERVALS FOR PREDICTION EQUATION



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#1 HT-5FT. DIST-25FT.

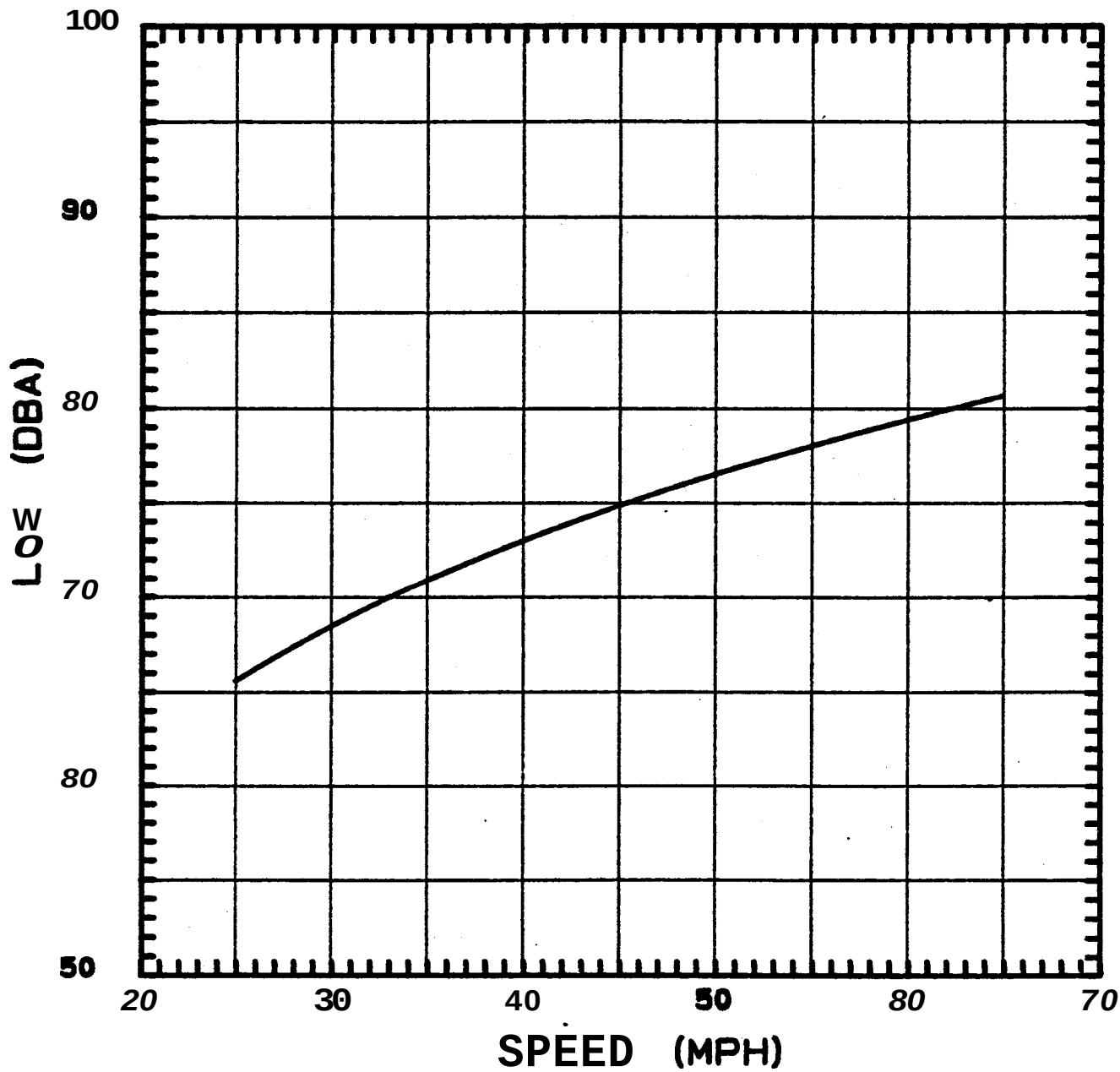
VEH. TYPE: AUTO-STD LOE=15.88+36.83*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#1 HT-5FT. DIST-25FT.

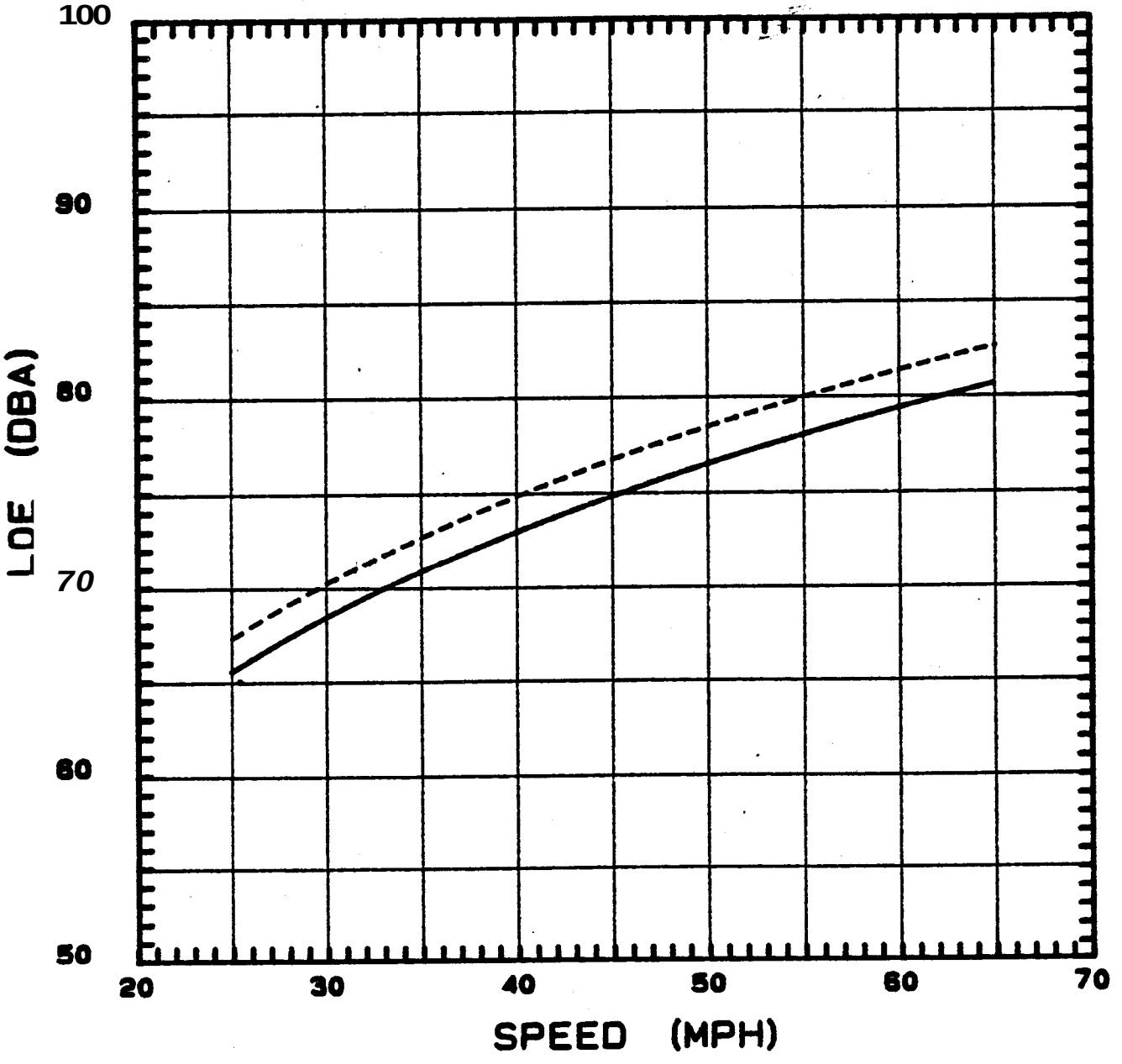
—— VEH. TYPE: AUTO-COMP LOE=14.75+36.36*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#1 HT-5FT. DIST-25FT.

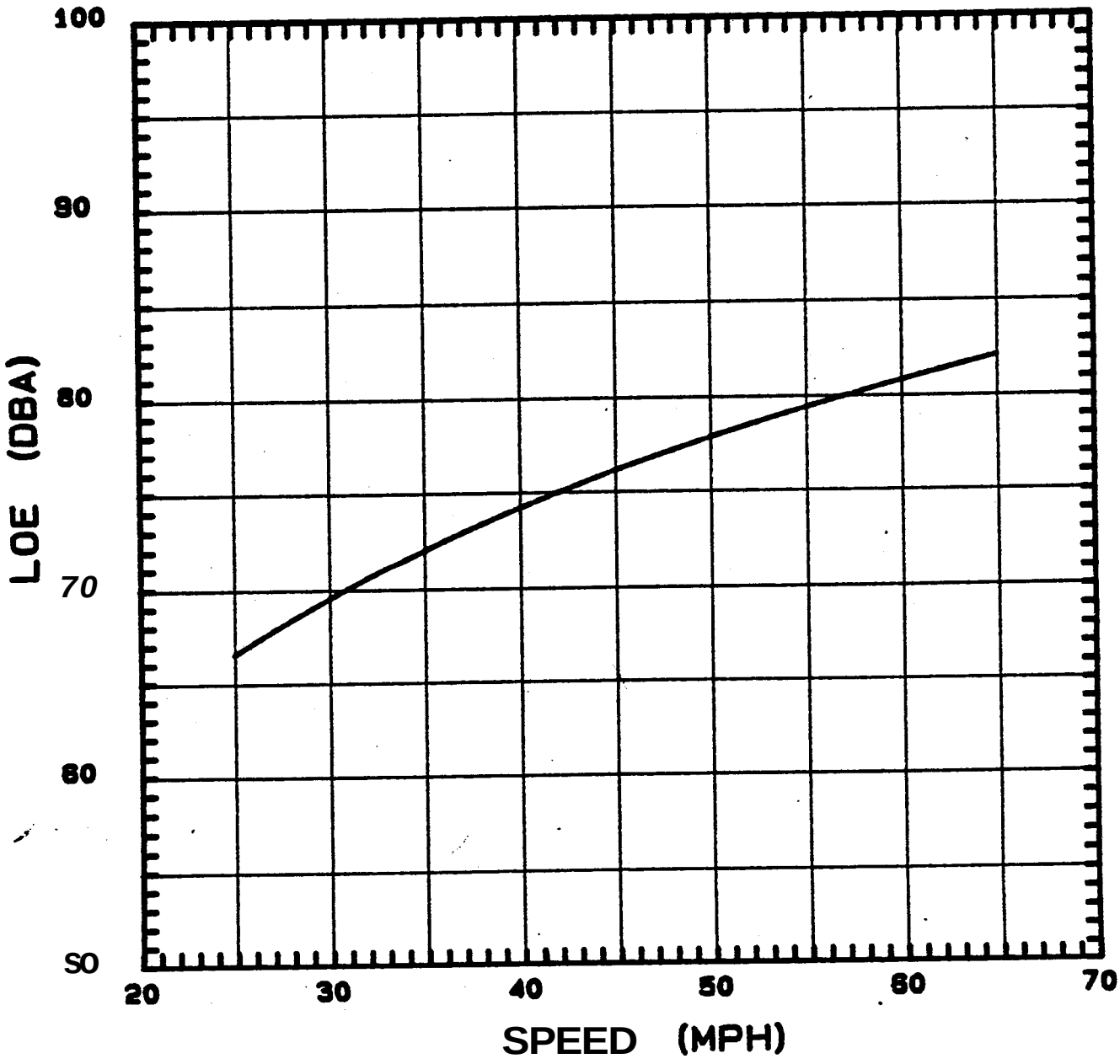
——— VEH. TYPE: AUTO-COMP LOE=14.75+36.36*LOG (MPH)
- - - - VEH. TYPE: AUTO-STD LOE=15.88+36.83*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#1 HT-5FT. DIST-25FT.

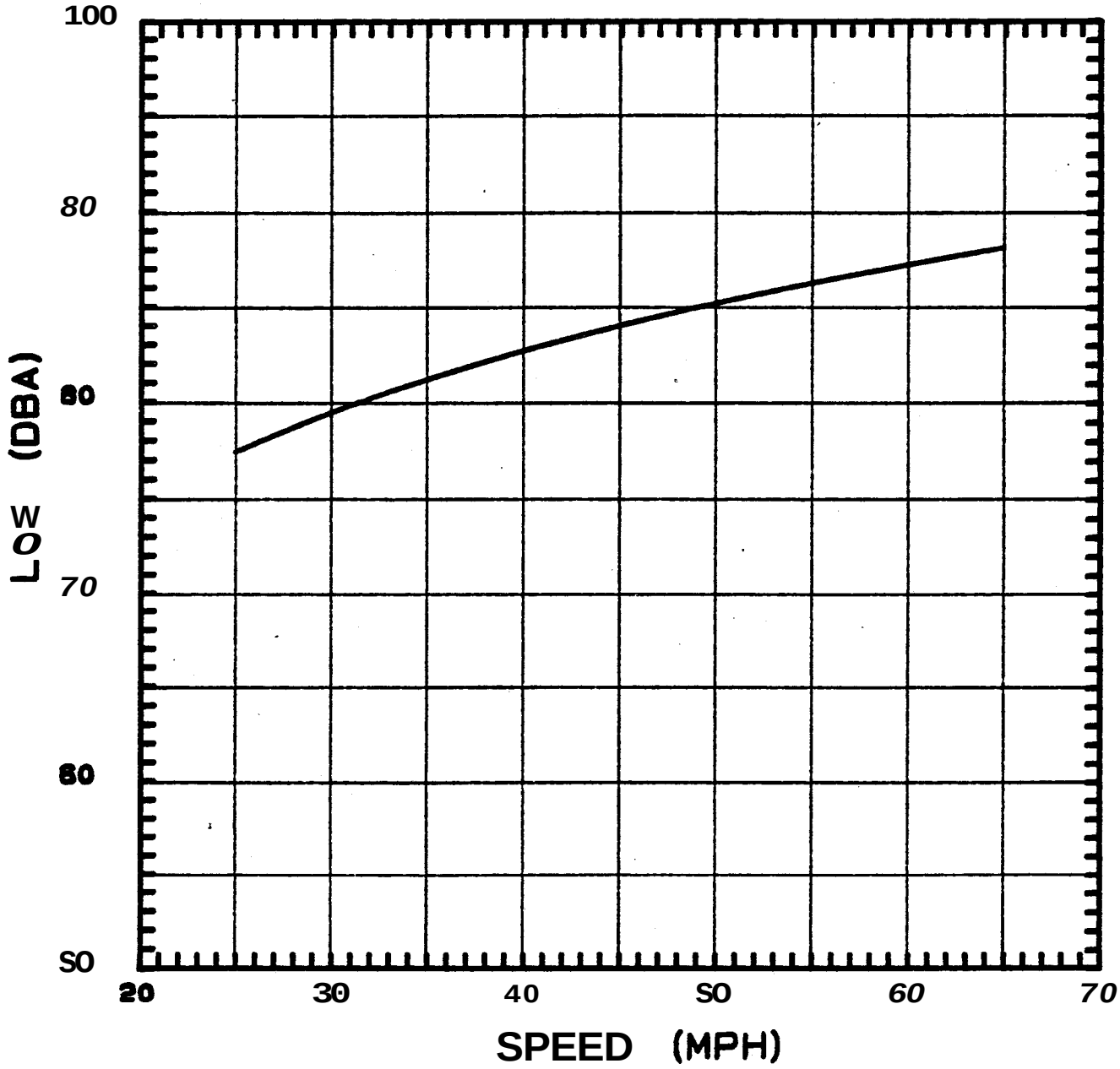
VEH. TYPE ALL AUTOS LOE=14.25+37.44*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.8. 13
MIC.#1 HT-5FT. DIST-25FT.

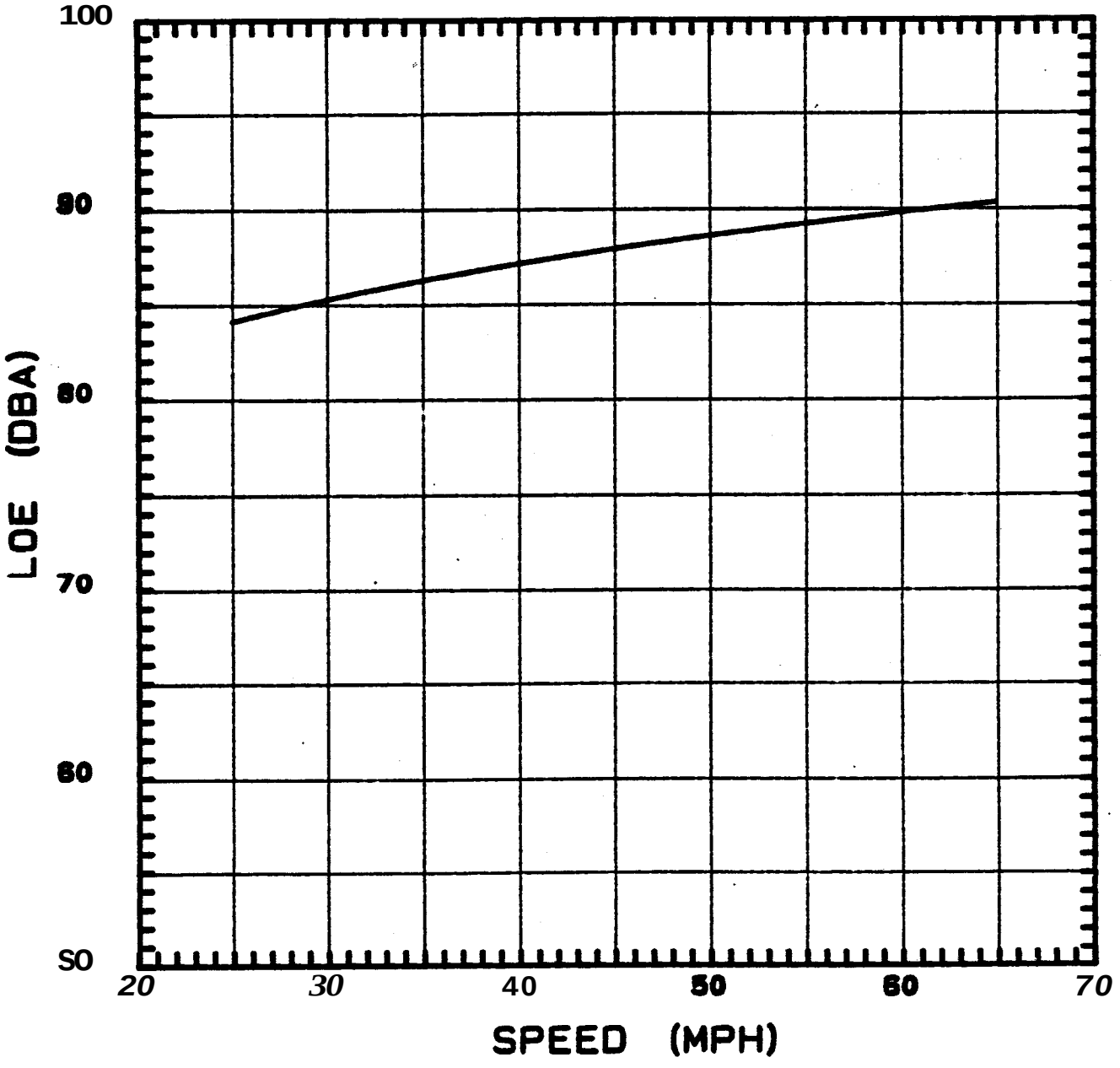
—— VEH. TYPE: MEDIUM TRUCKS LOE=41.41+25.79*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LO€ VS. SPEED

ALL SITES EXCEPT 4, a, 13
MIC.#1 HT-5FT. DIST-25FT.

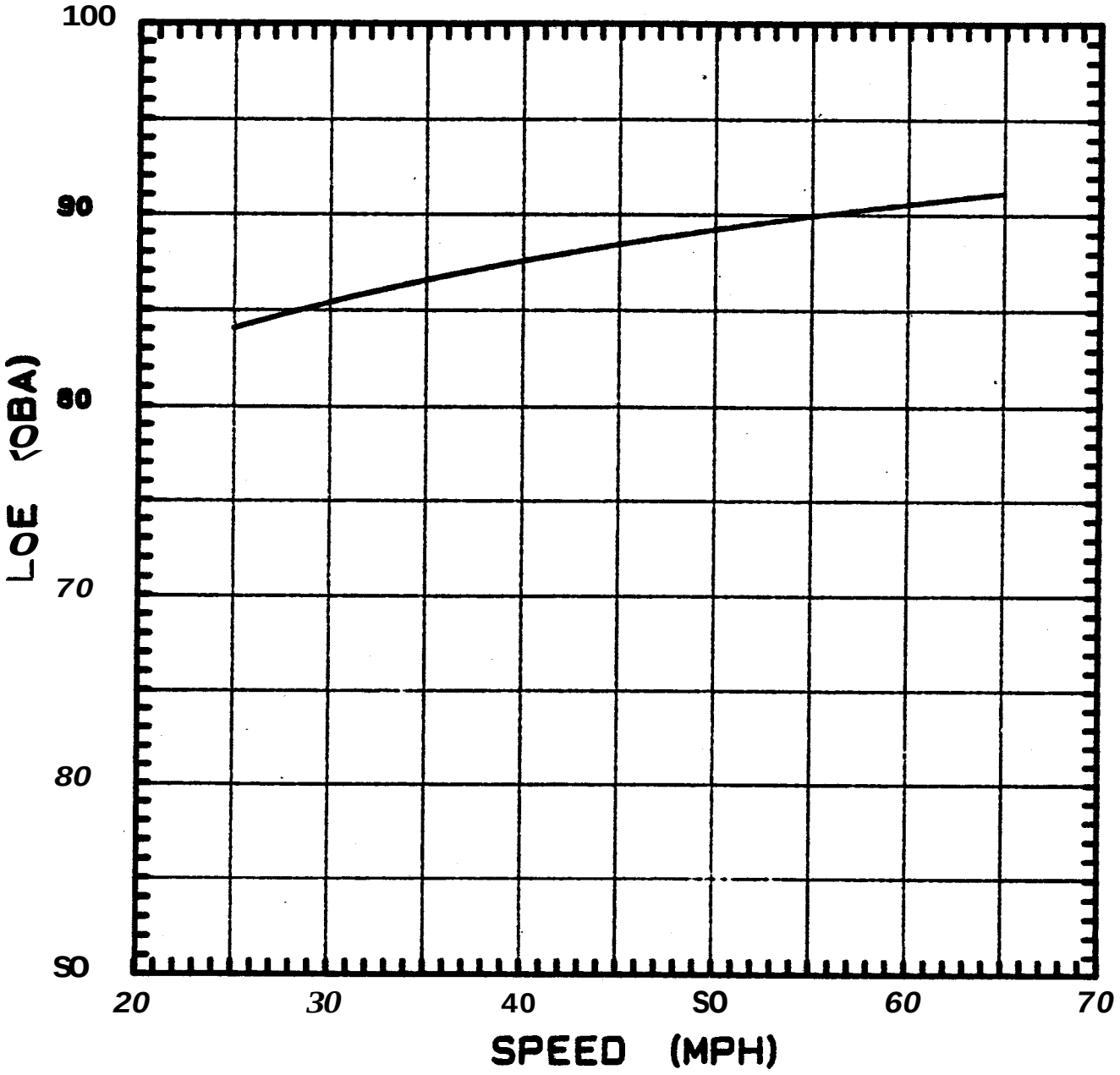
VEH. TYPE HT 3-AXLE LOE=63.27+14.93*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#1 HT-5FT. DIST-25FT.

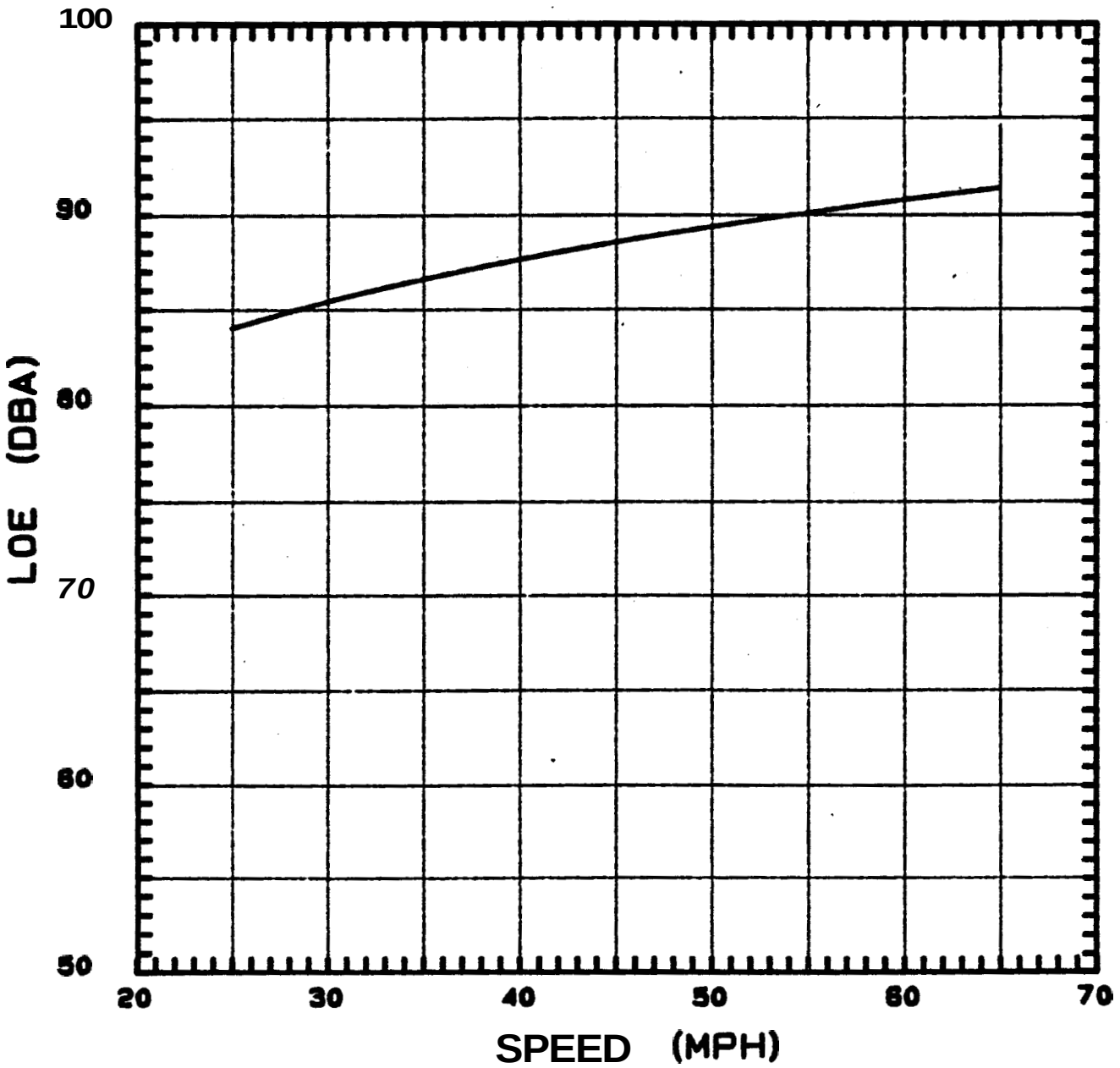
—— VEH, TYPE HT 4-AXLE LOE=60.15+17.11*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LO€ VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#1 HT-5FT. DIST-25FT.

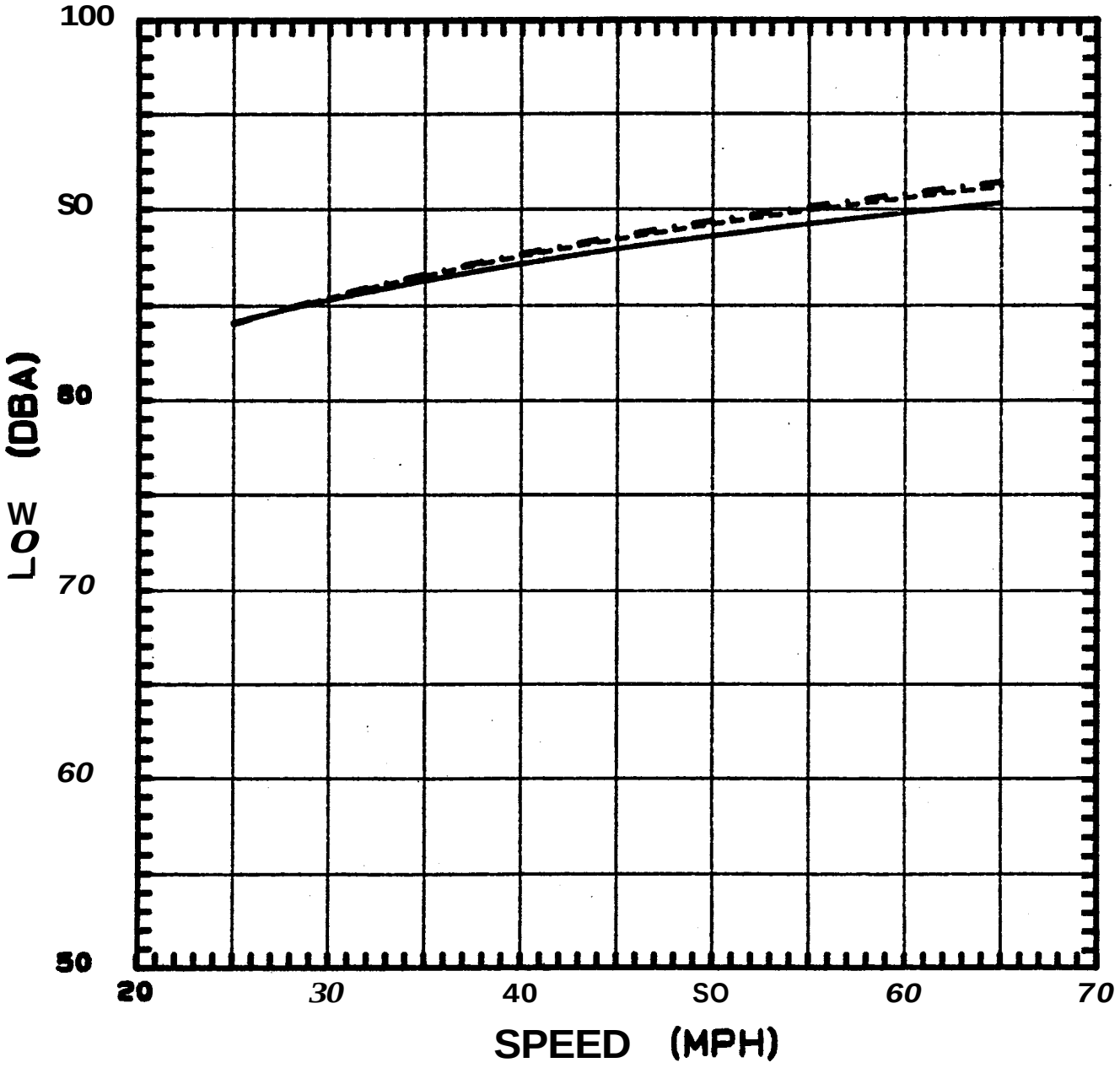
VEH. TYPE: HT 5-AXLE LOE=59.23+17.75*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.8, 13
MIC.#1 HT-5FT. DIST-25FT.

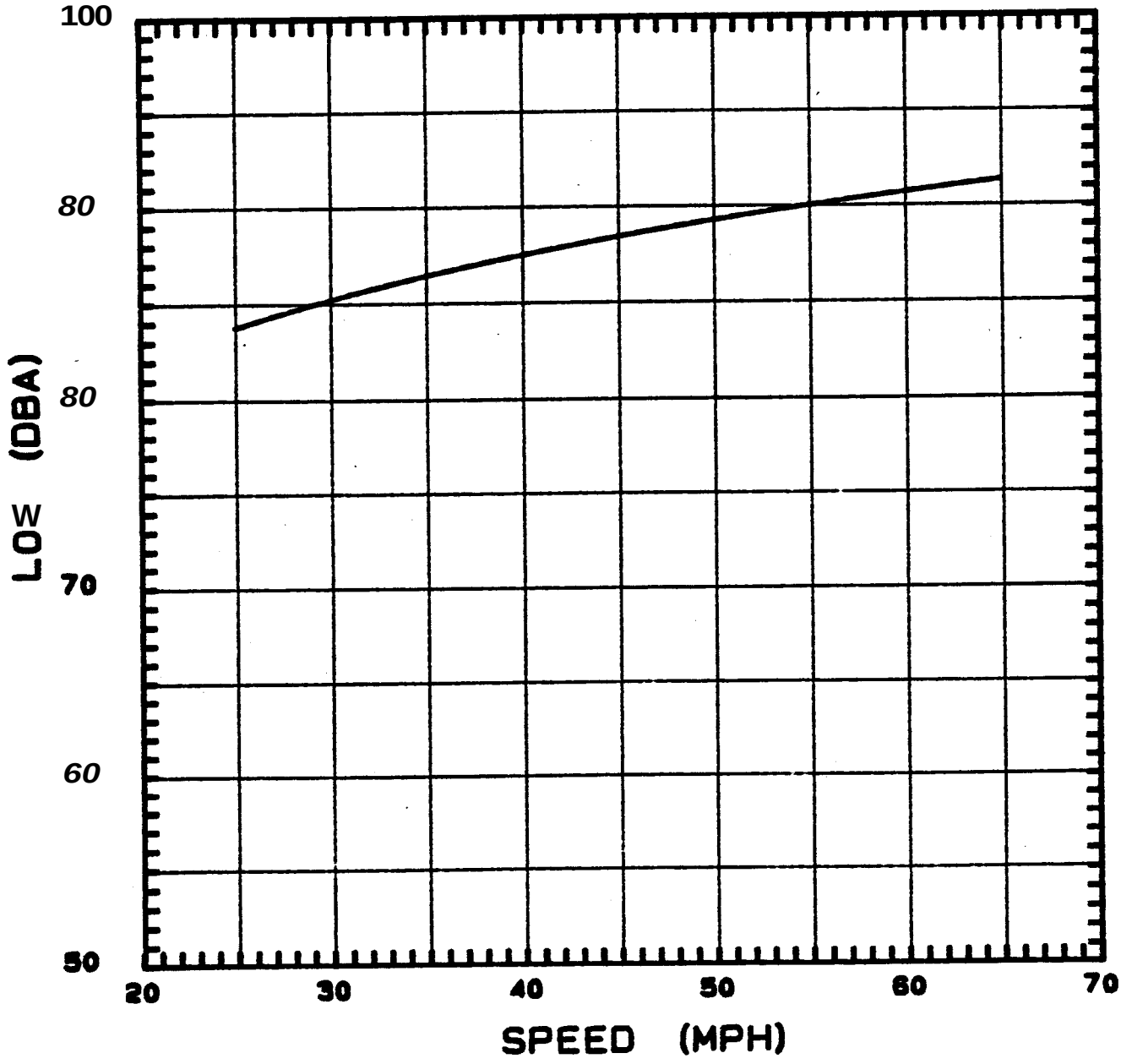
——— VEH. TYPE: HT 3-AXLE LOE=63.27+14.93*LOG (MPH)
------ VEH. TYPE HT 4-AXLE LOE=60.15+17.11*LOG (MPH)
-.-.- VEH. TYPE: HT 5-AXLE LOE=59.23+17.75*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LO€ VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#1 HT-5FT. DIST-25FT.

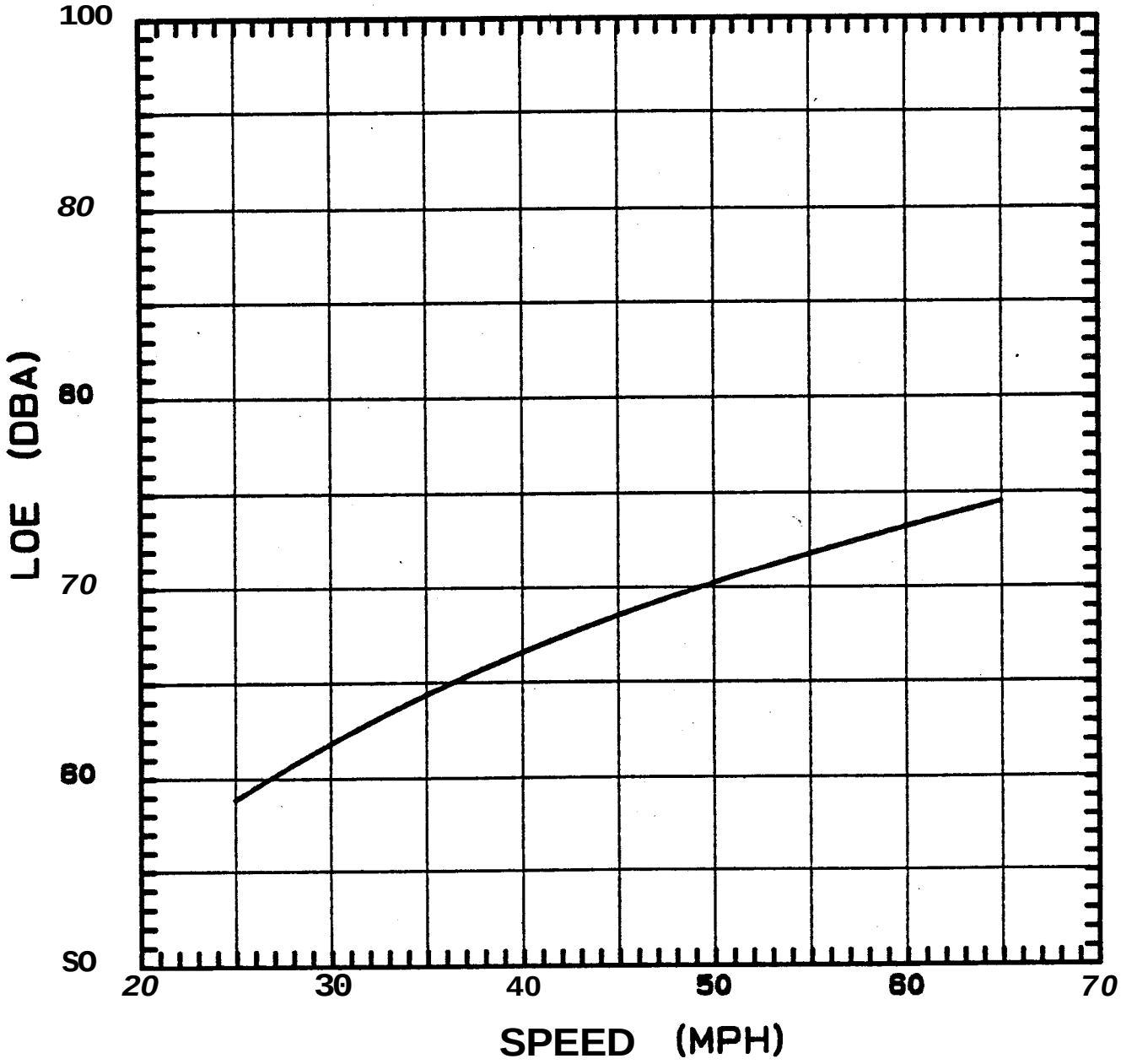
—— VEH. TYPE: ALL HT LOE=58.38+18.18*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8. 13
MIC.#2 HT-5FT. DIST-SOFT.

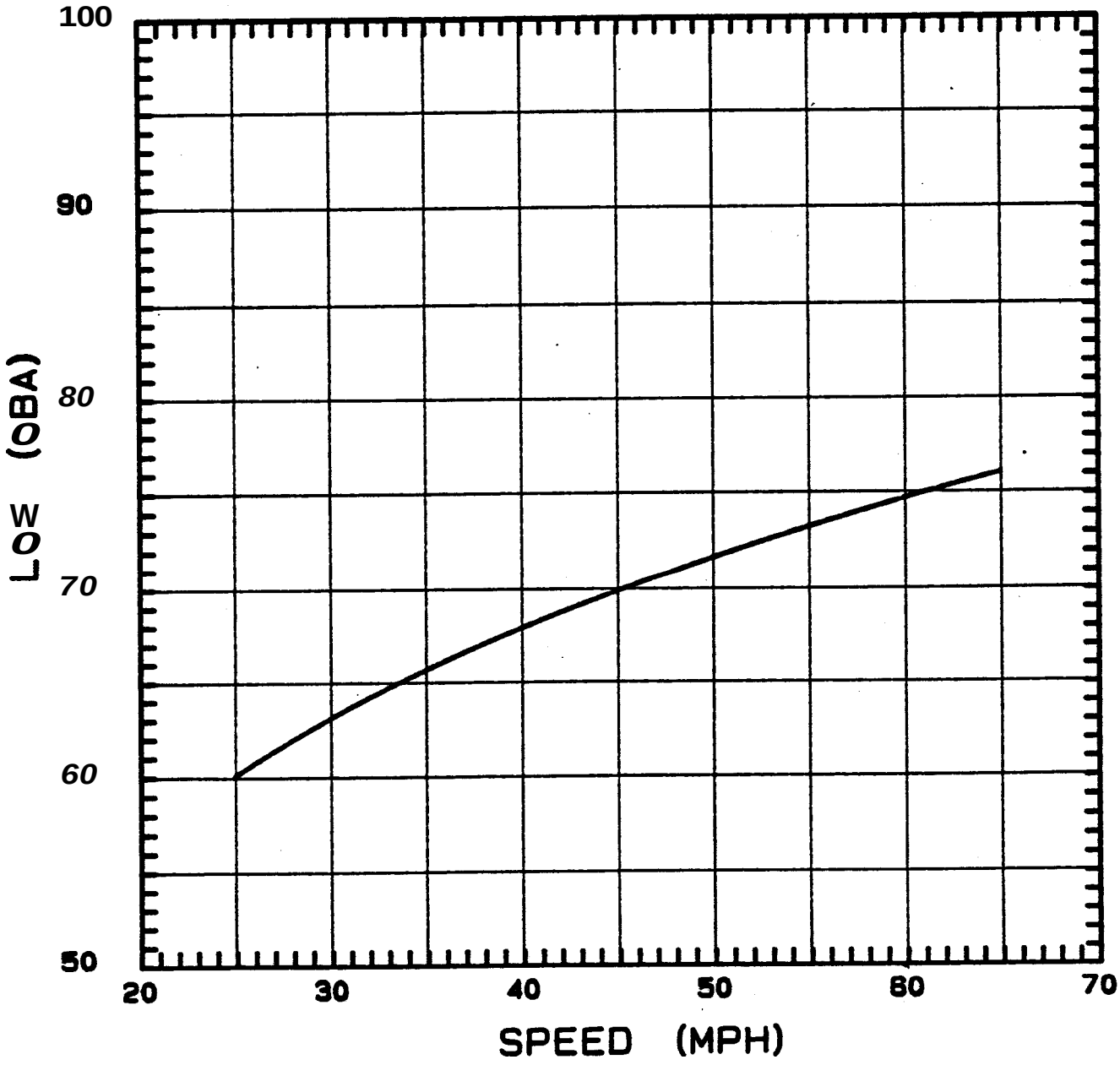
VEH. TYPE: AUTO-CQMP LOE=6+37.79*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#2 HT-5FT. DIST-50FT.

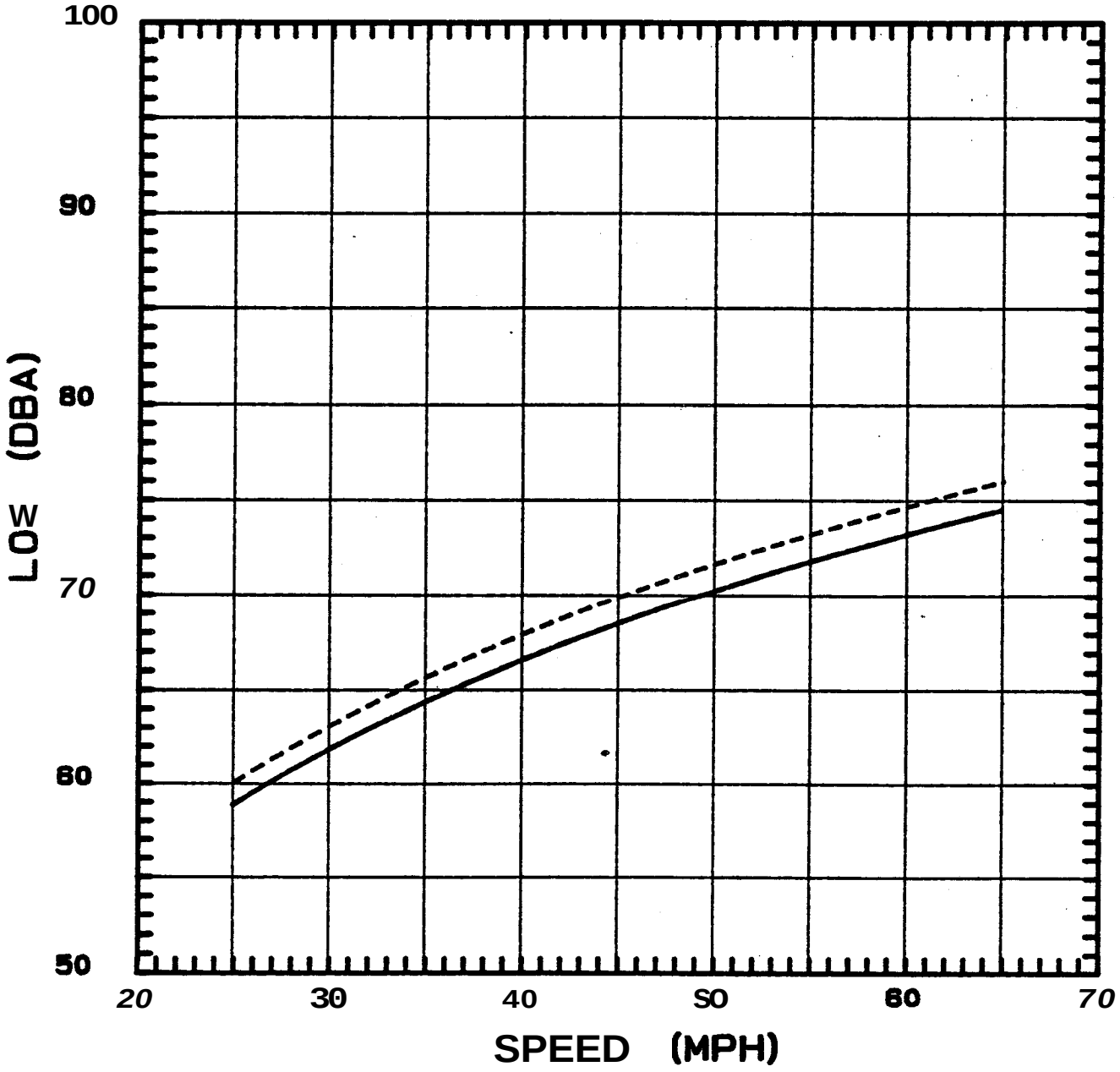
VEH. TYPE: AUTO-STD LOE=6.28+38.47*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4. 8. 13
MIC.#2 HT-5FT. DIST-SOFT.

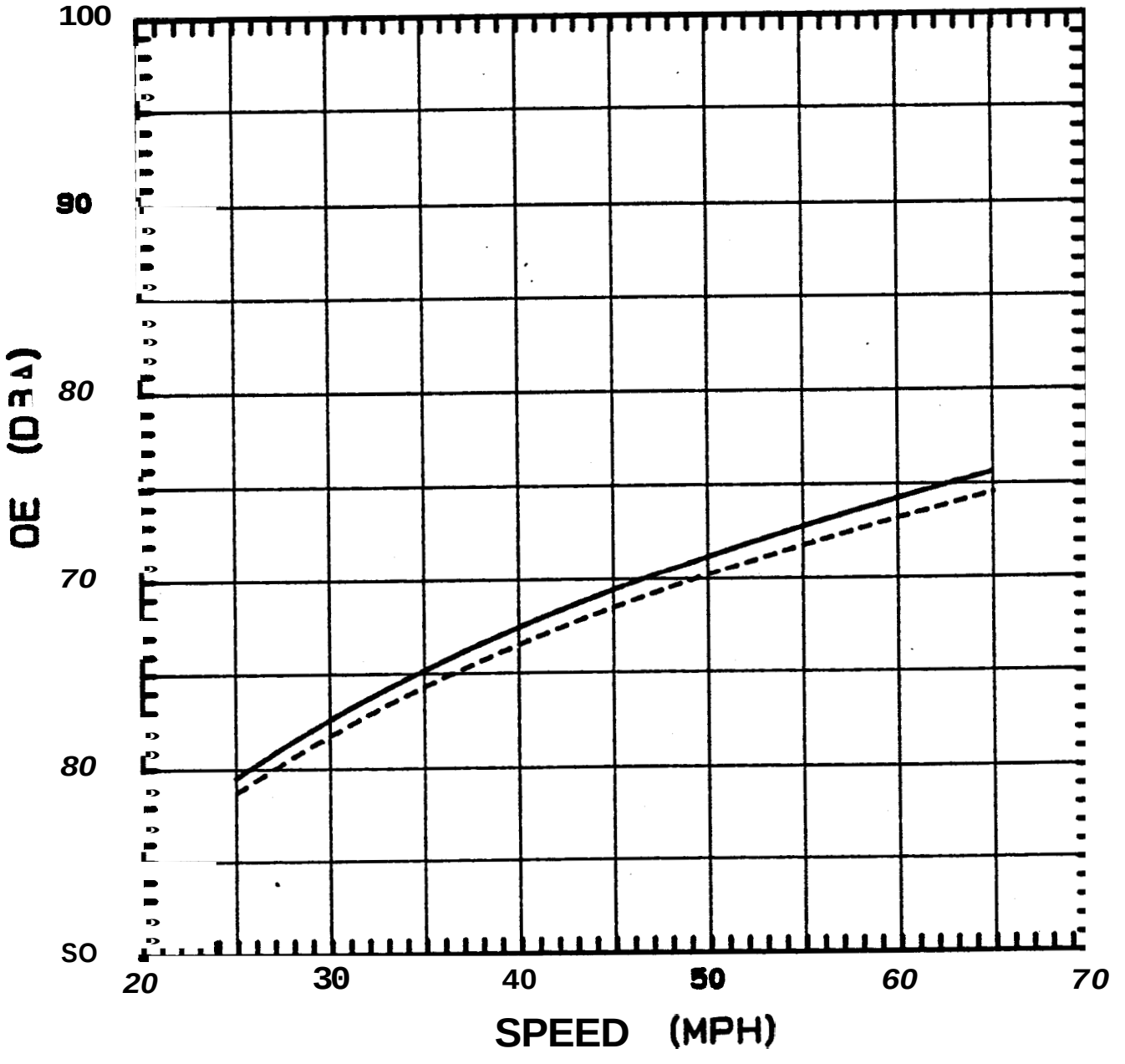
VEH. TYPE: AUTO-COMP LOE=6+37.79*LOG (MPH)
VEH. TYPE: AUTO-STD LOE=6.28+38.47*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.8. 13
MIC.#2 HT-5FT. DIST-SOFT,

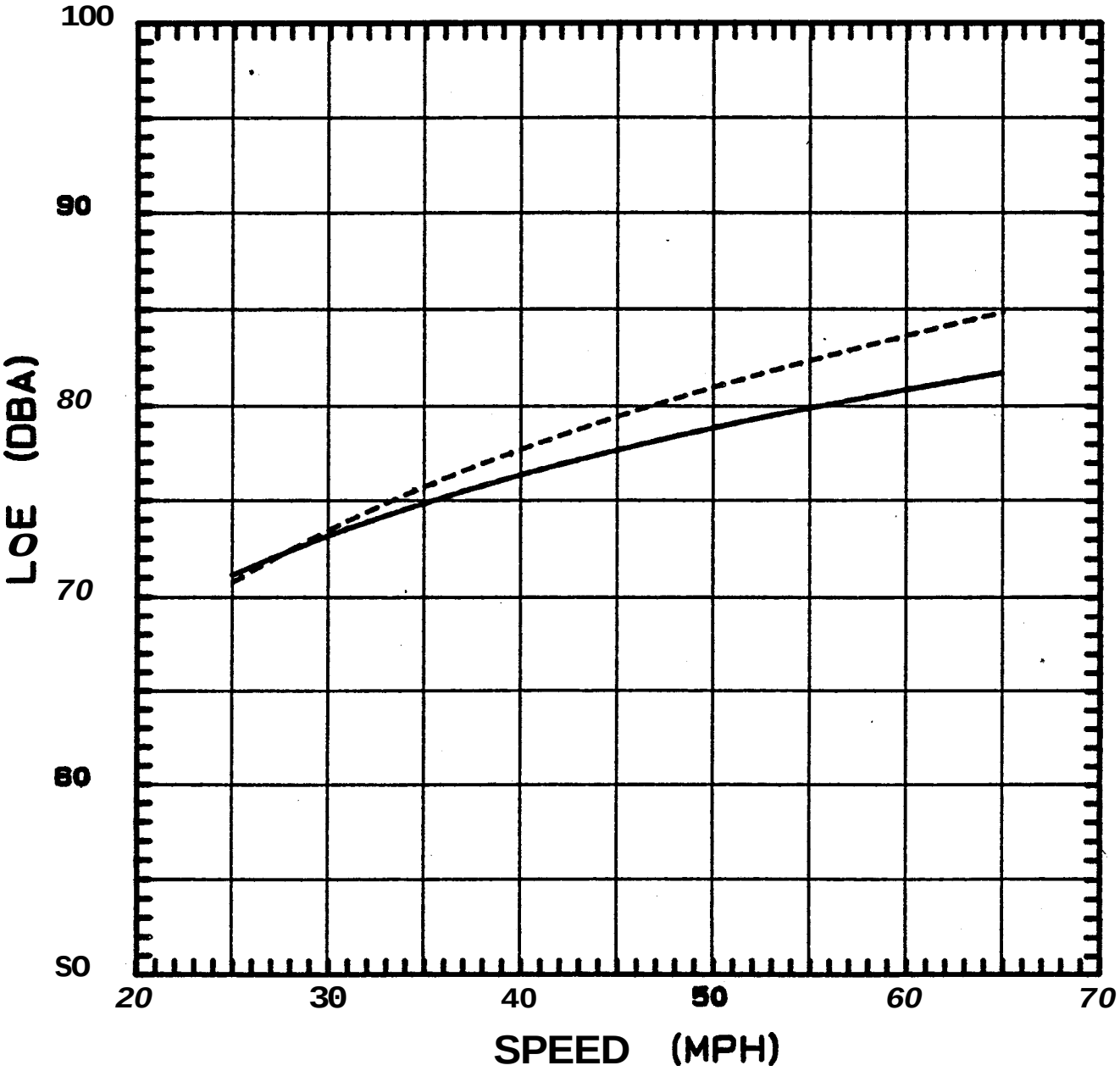
——— VEH, TYPE: ALL AUTOS LOE=5.21+38.83*LOG (MPH)
- - - - VEH. TYPE: FHWA AUTOS LOE=5.5+38.1*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#2 HT-5FT. DIST-50FT.

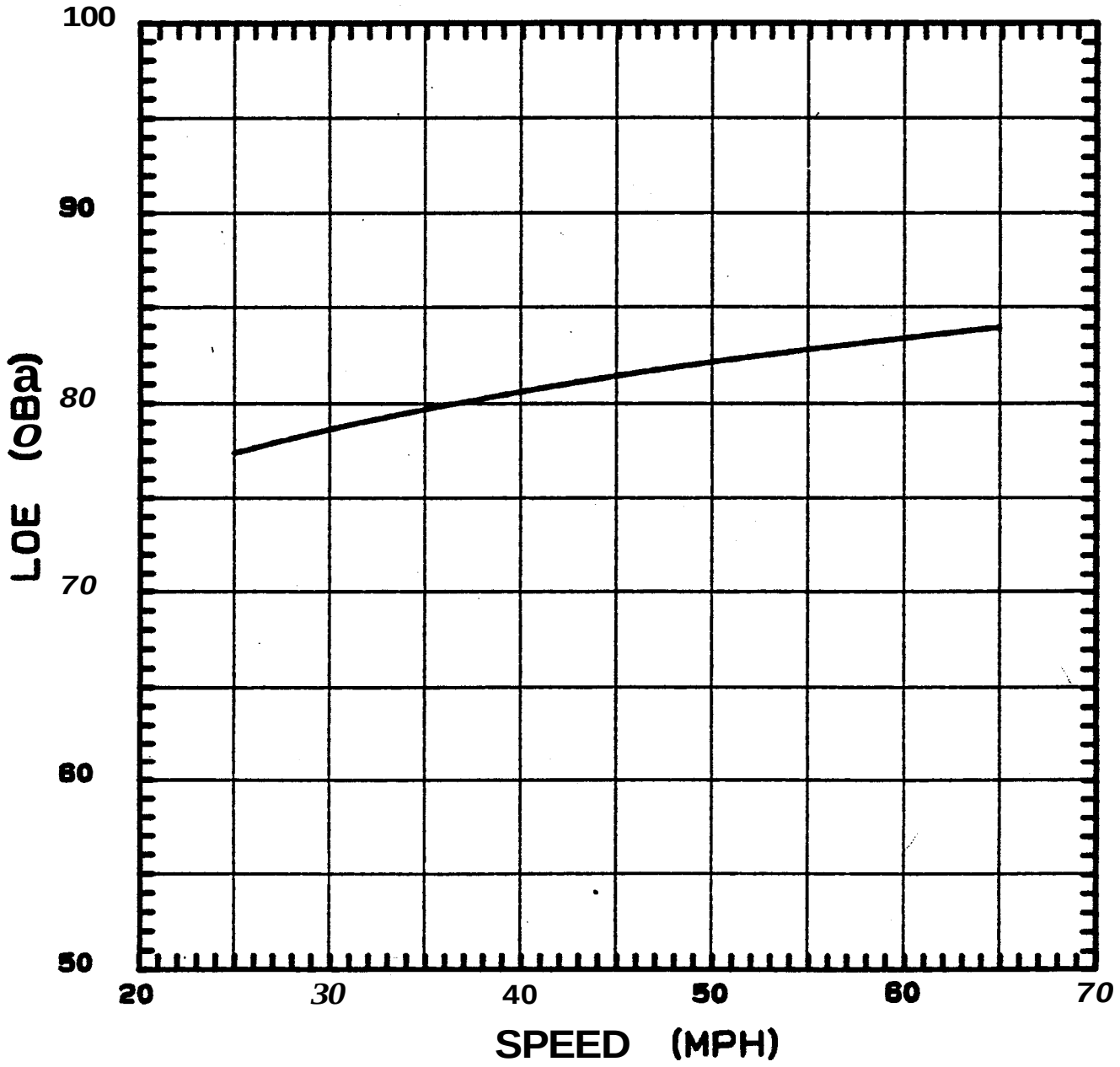
——— VEH. TYPE: MEDIUM TRUCKS LOE=35.34+25.59*LOG(MPH)
- - - - VEH. TYPE: FHWA MT LOE=23.4+33.9*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.8. 13
MIC.#2 HT-SFT. DIST-SOFT.

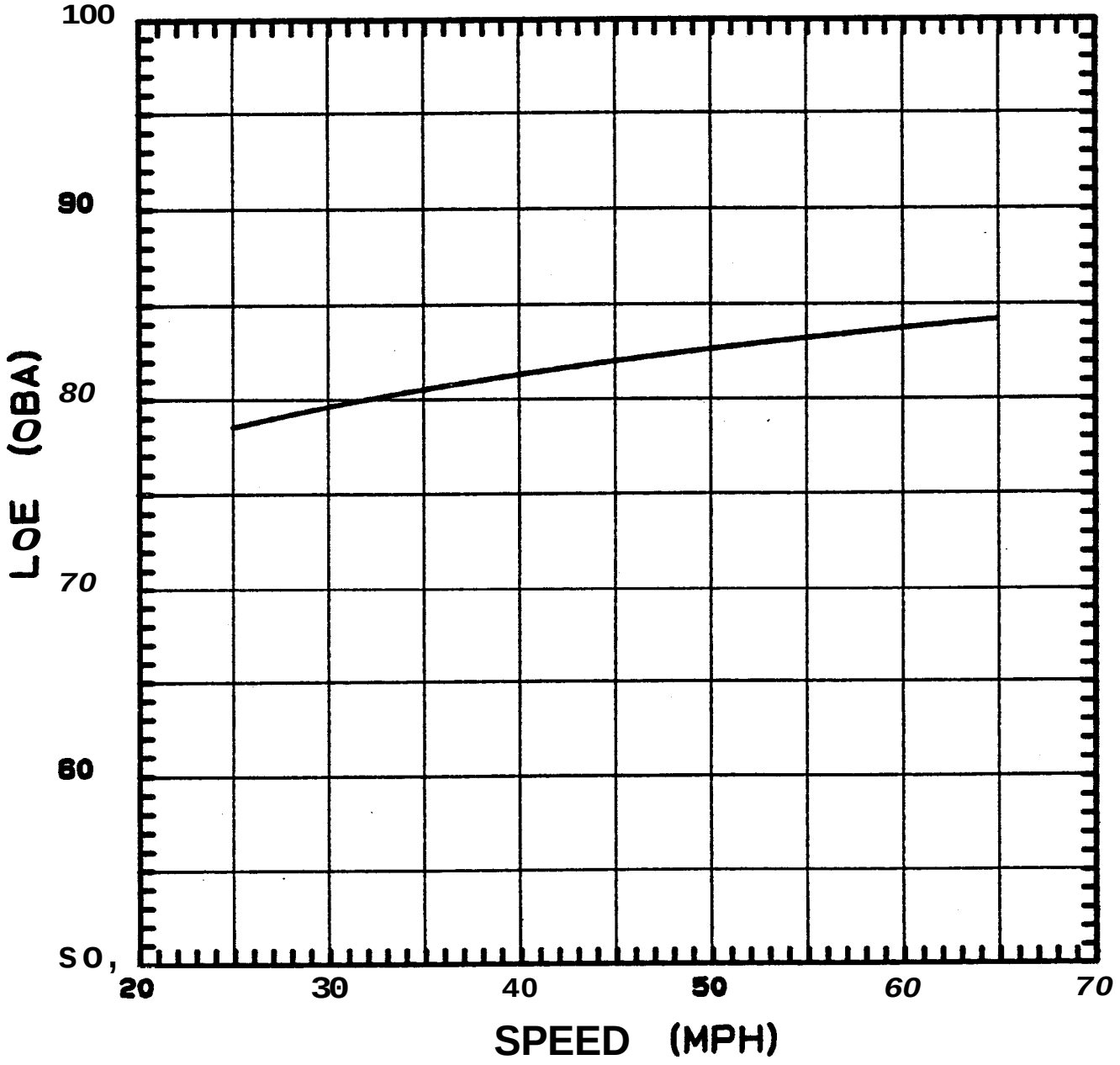
VEH. TYPE: HT 3-AXLE LOE=55.28+15.8*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4. 8, 13
MIC.#2 HT-5FT. DIST-SOFT.

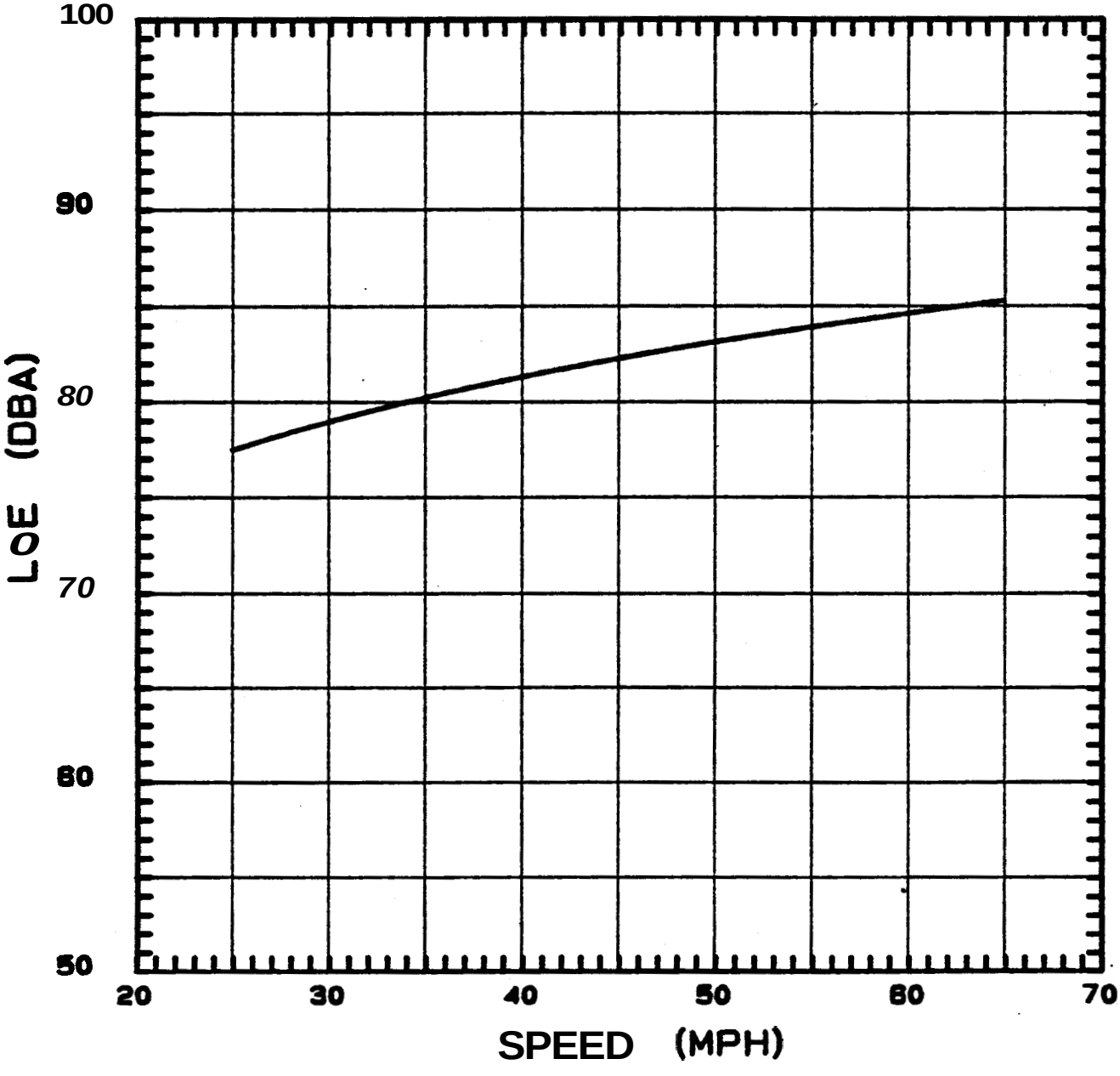
VEH. TYPE: HT 4-AXLE LOE=59.37+13.69*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#2 HT-5FT. DIST-SOFT.

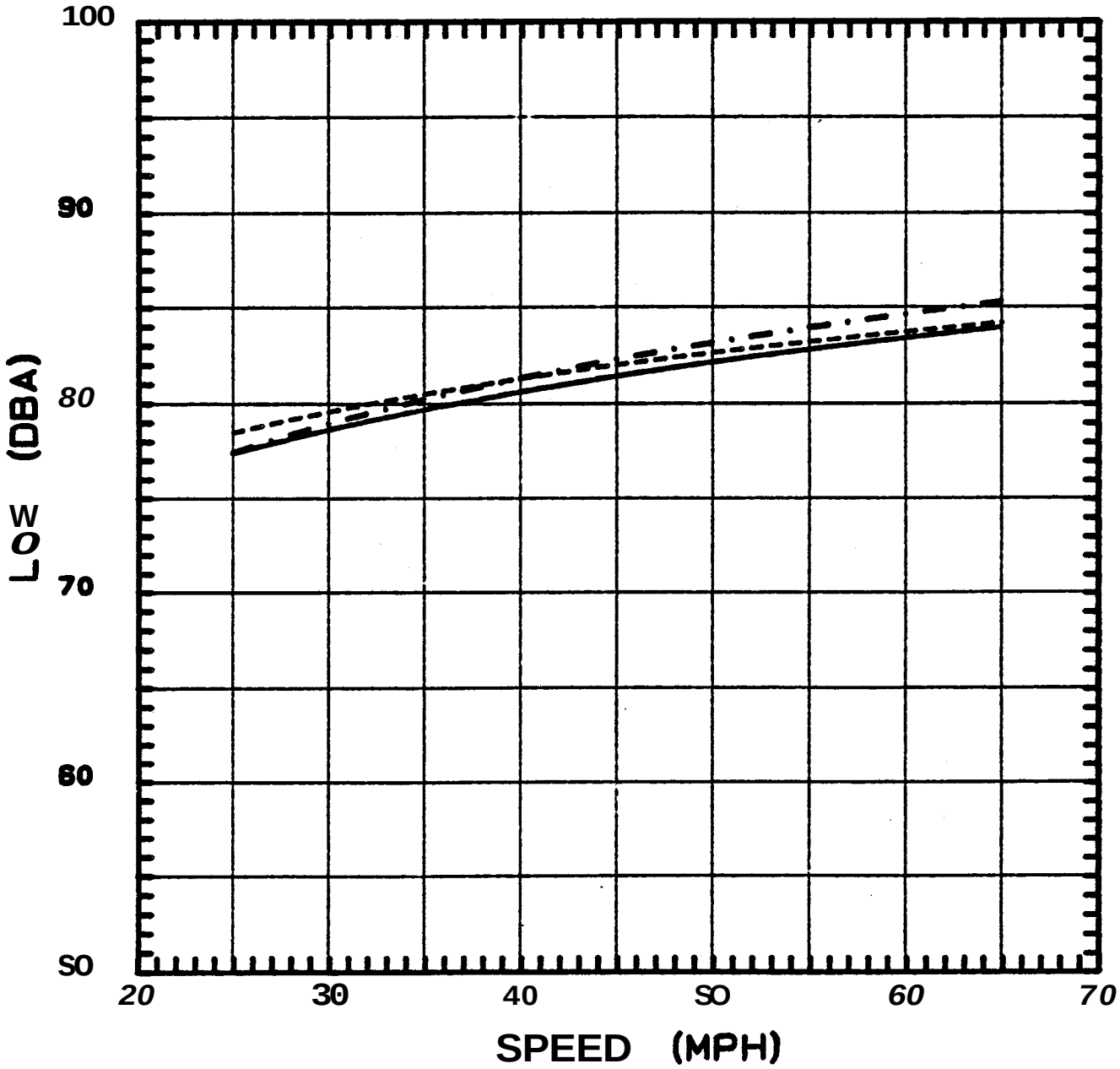
VEH. TYPE: HT 5-AXLE LOE=51.06+18.88*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#2 HT-5FT. DIST-50FT.

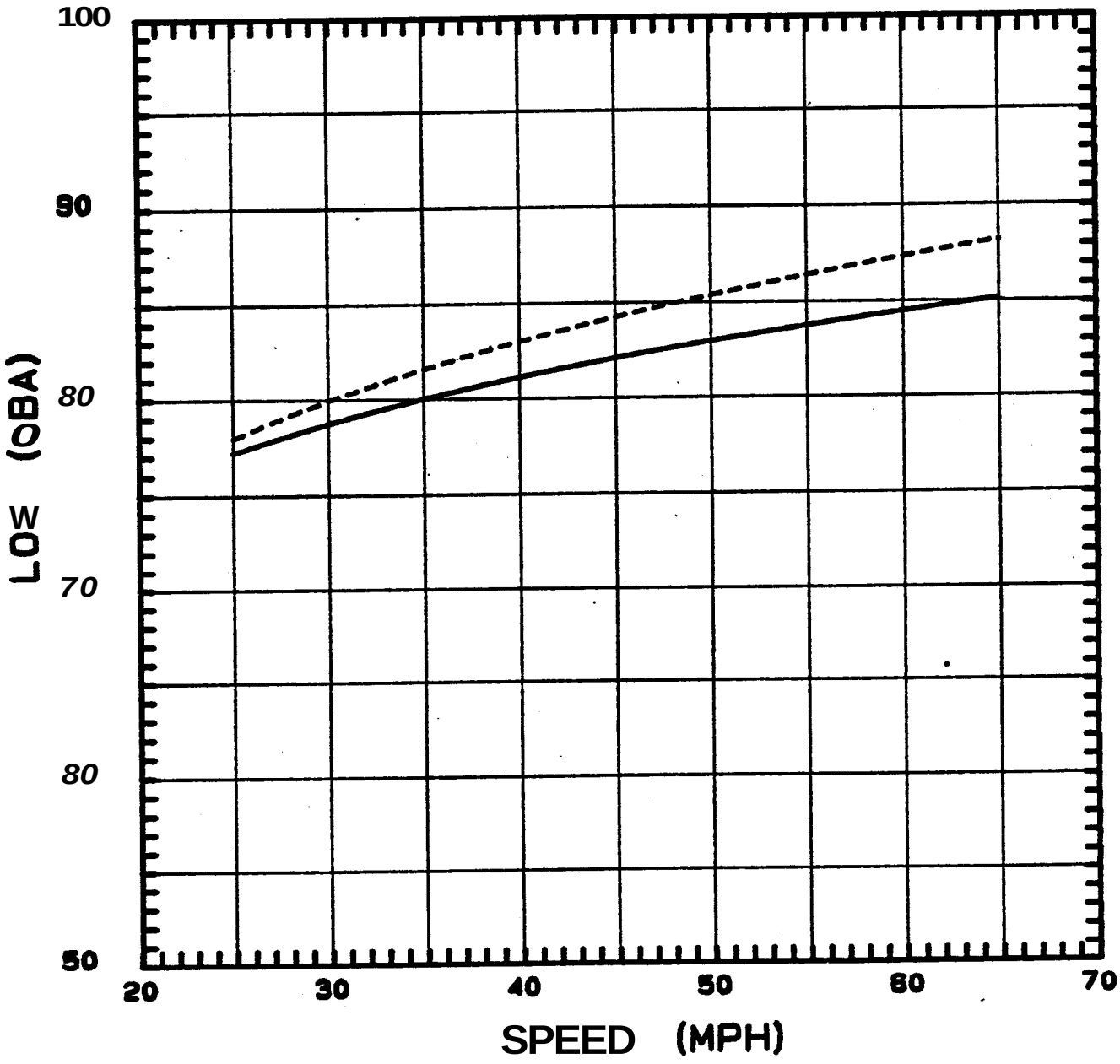
VEH. TYPE: HT 3-AXLE LOE=55.28+15.8*LOG (MPH)
VEH. TYPE: HT 4-AXLE LOE=59.37+13.69*LOG (MPH)
VEH. TYPE: HT 5-AXLE LOE=51.06+18.88*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.8, 13
MIC.#2 HT-5FT. DIST-50FT.

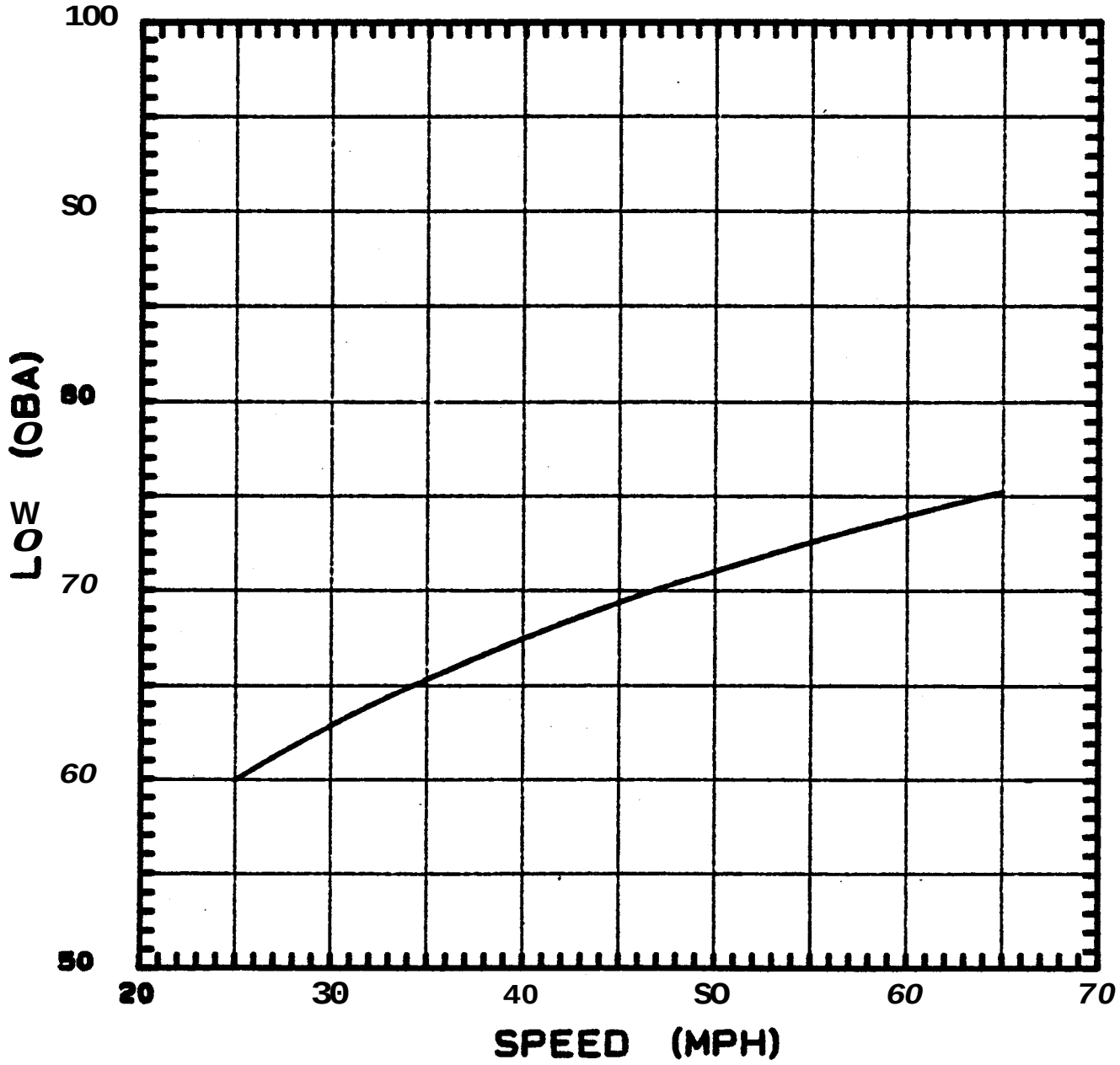
——— VEH. TYPE: ALL HT LOE=50.37+19.18*LOG (MPH)
------ VEH. TYPE FHWA HT LOE=43.6+24.6*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#3 HT-10FT. DIST-50FT.

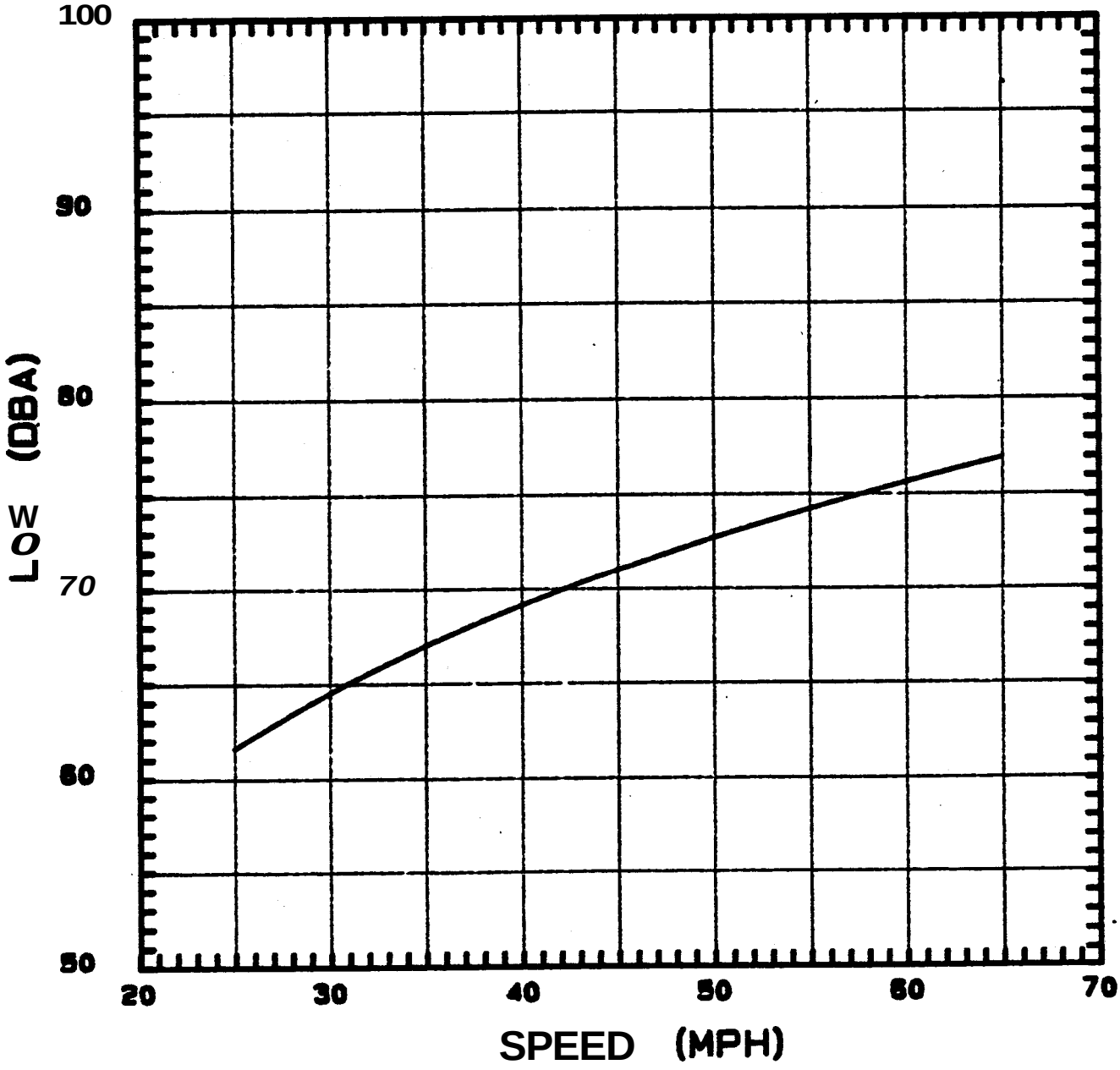
—— VEH. TYPE AUTO-COMP LOE=8.37+36.9*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#3 HT-10FT. DIST-50FT.

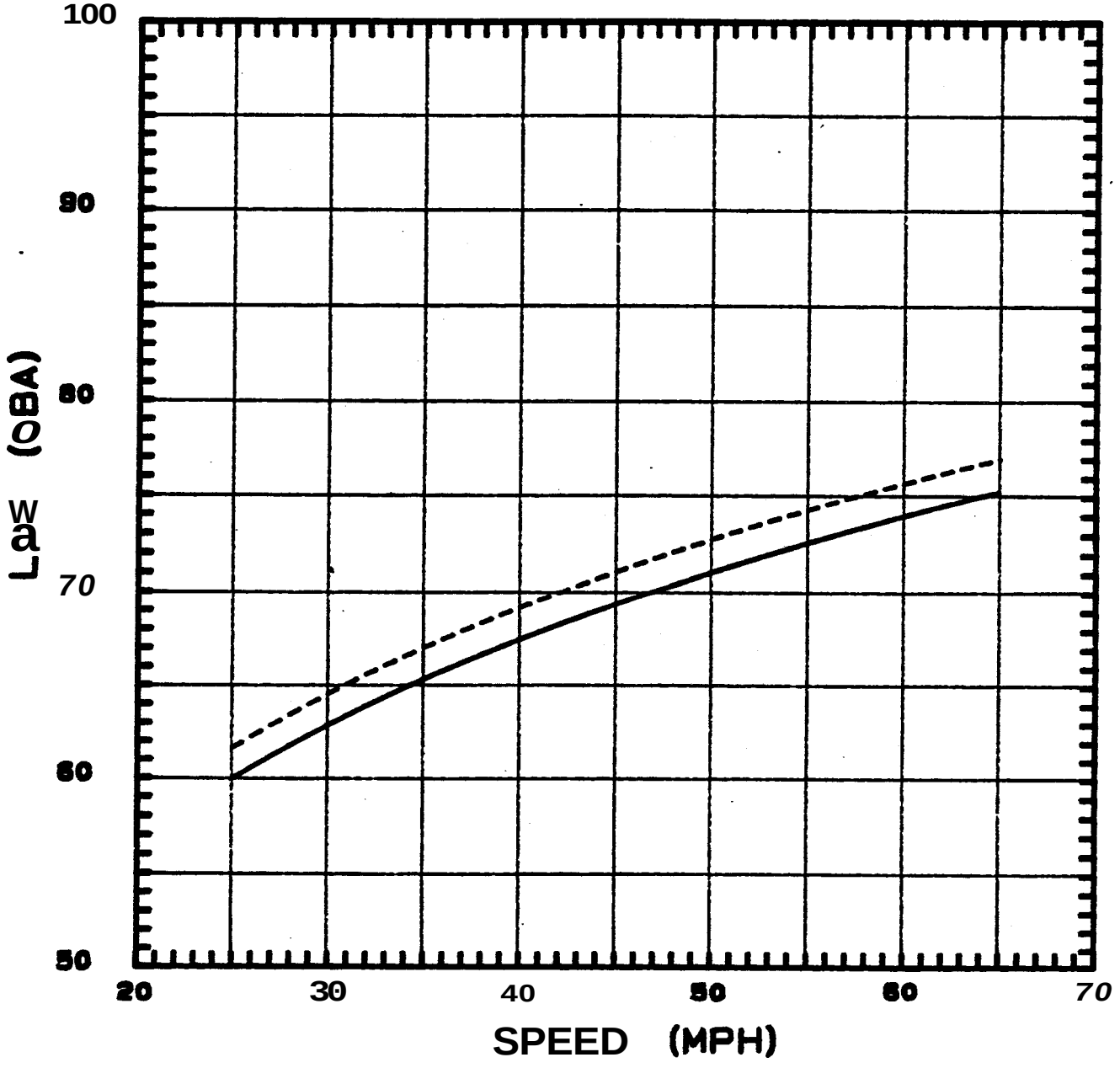
—— VEH. TYPE: AUTO-STD LOE=10.06+36.89*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.6, 13
MIC.#3 HT-10FT. OIST-SOFT.

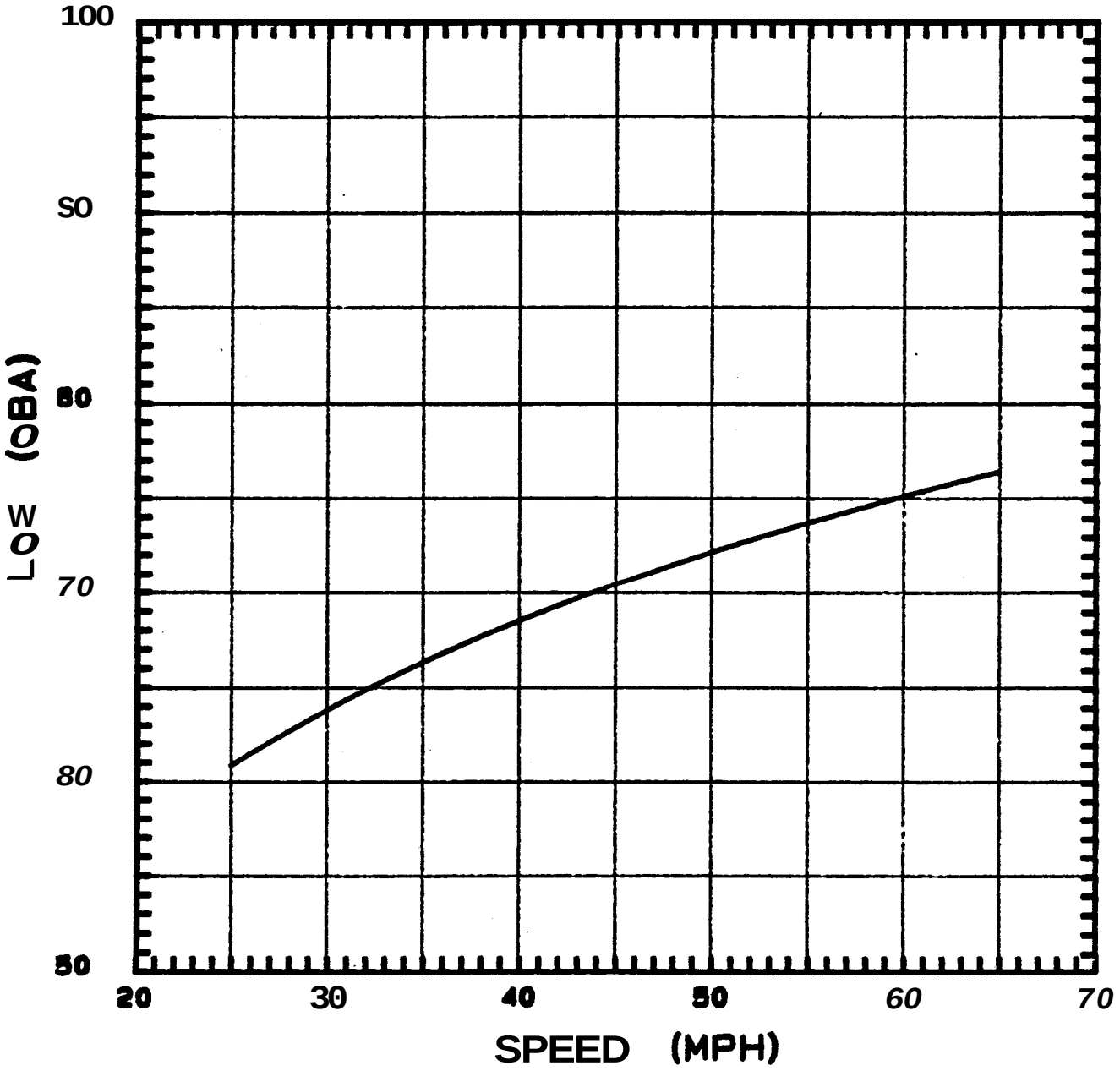
——— VEH. TYPE AUTO-COMP LOE=8.37+36.9*LOG (MPH)
------ VEH, TYPE: AUTO-STD LOE=10.06+36.89*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#3 HT-10FT. DIST-50FT.

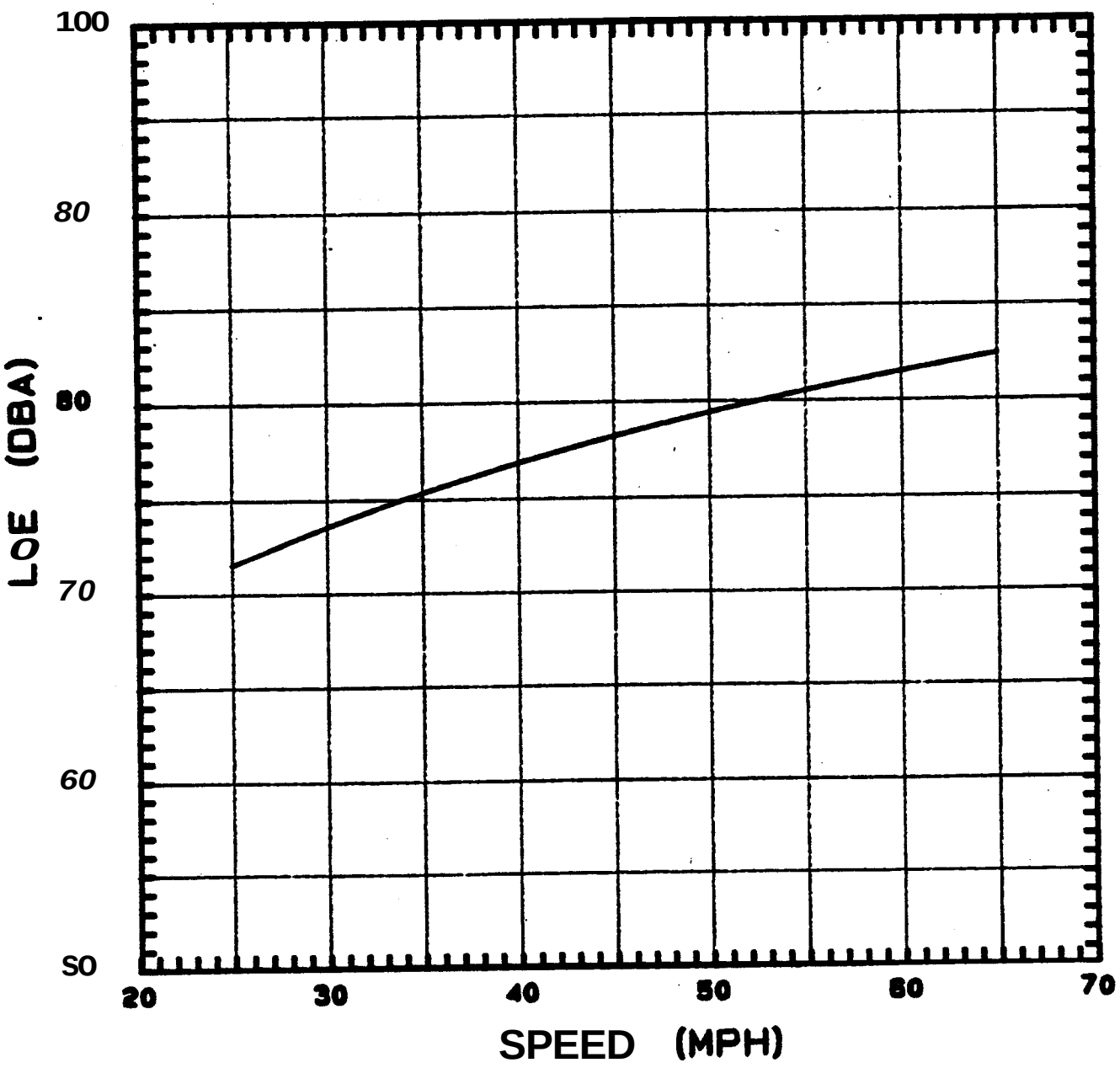
VEH. TYPE: ALL AUTOS LOE=8.37+37.57*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#3 HT-IOFT. DIST-50FT.

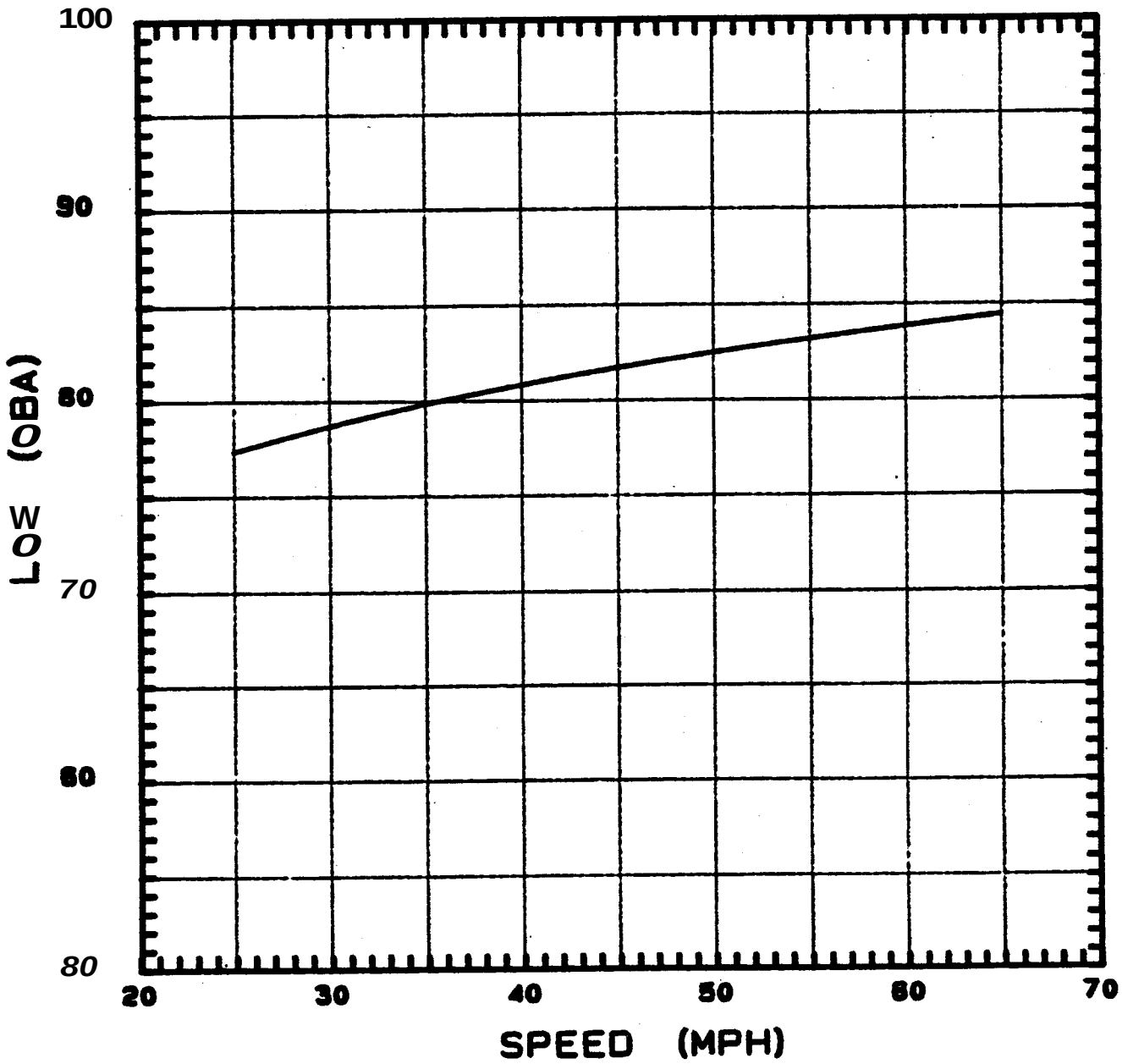
—— VEH. TYPE: MEDIUM TRUCKS LOE=35+26.17*LOG(MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#3 HT-10FT. DIST-SOFT.

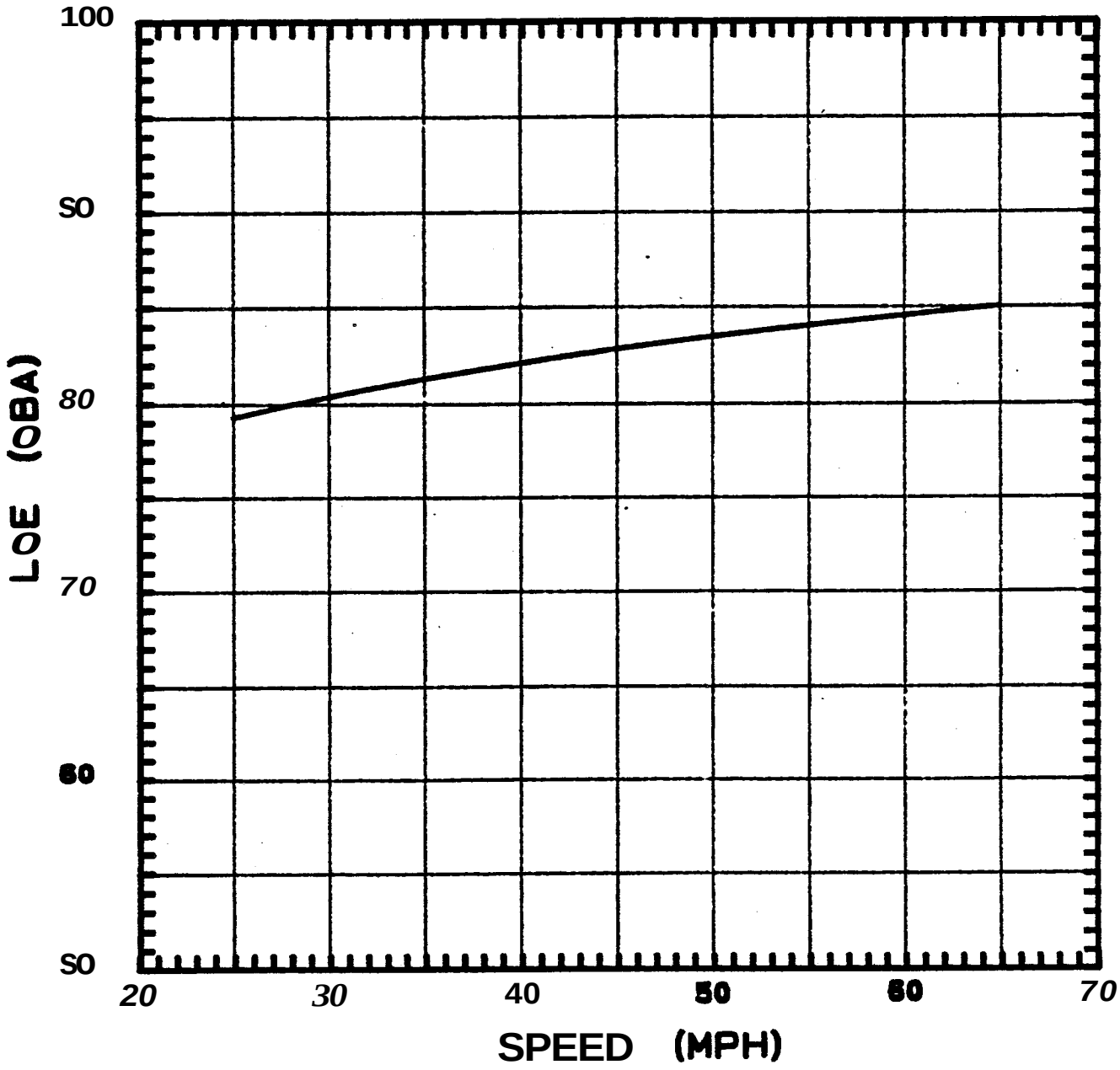
—— VEH. TYPE HT 3-AXLE LOE=53.34+17.19*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#3 HT-IOFT. DIST-50FT.

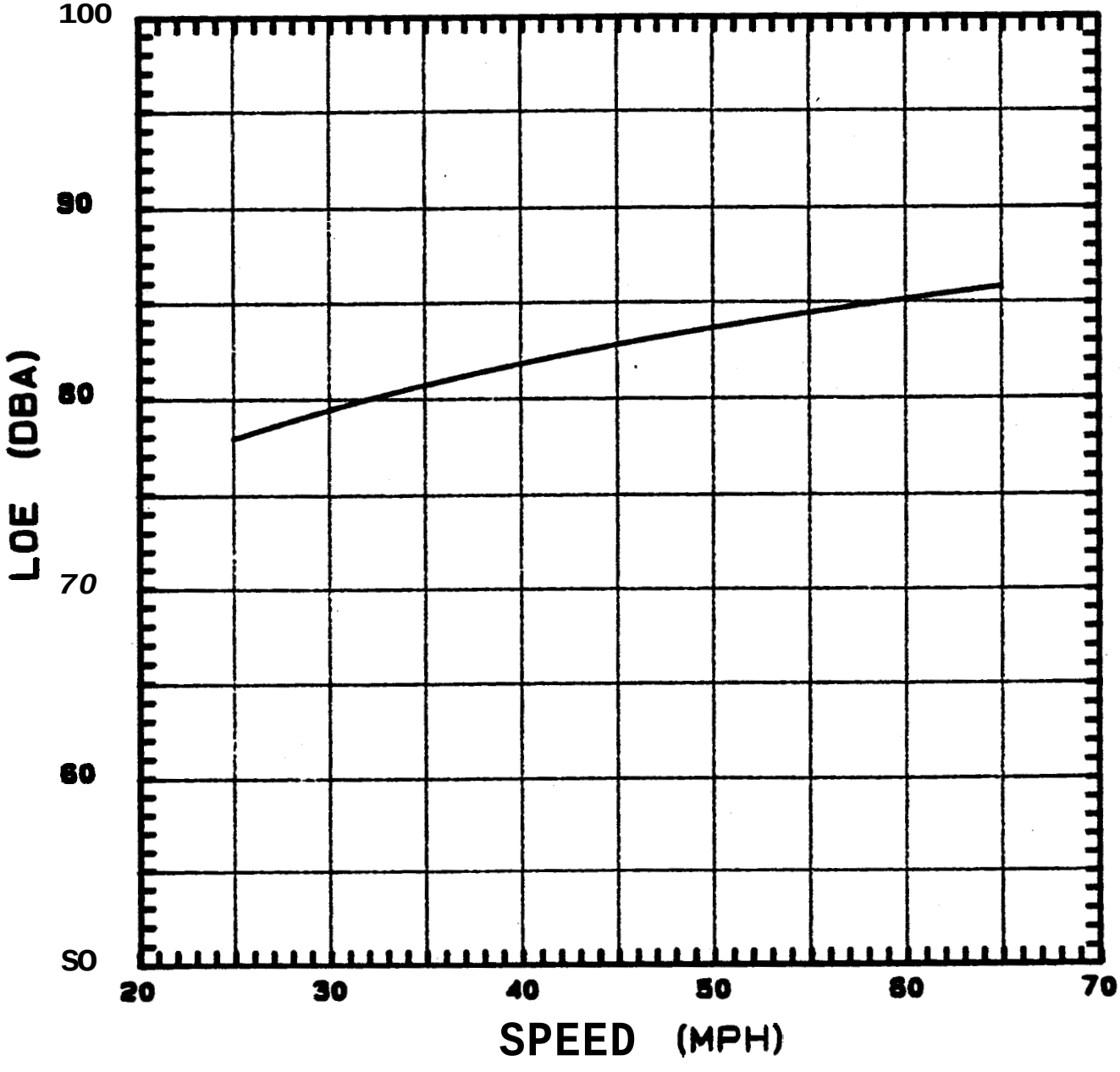
VEH. TYPE: HT 4-AXLE LOE=59.97+13.86*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.8. 13
MIC.#3 HT-10FT. DIST-50FT.

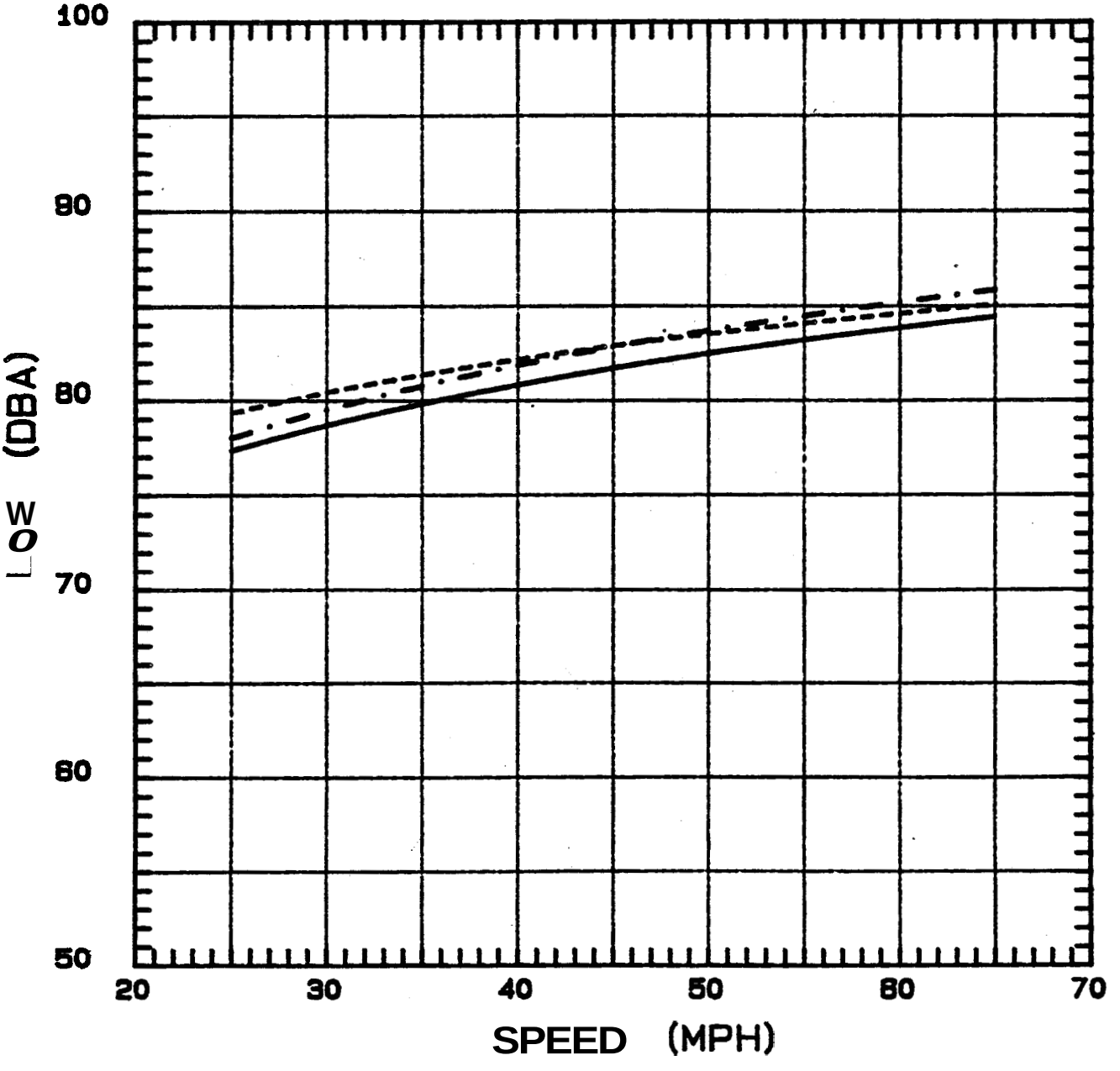
VEH. TYPE: HT 5-AXLE LOE=51.49+18.96*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4.8. 13
MIC.#3 HT-10FT. DIST-50FT.

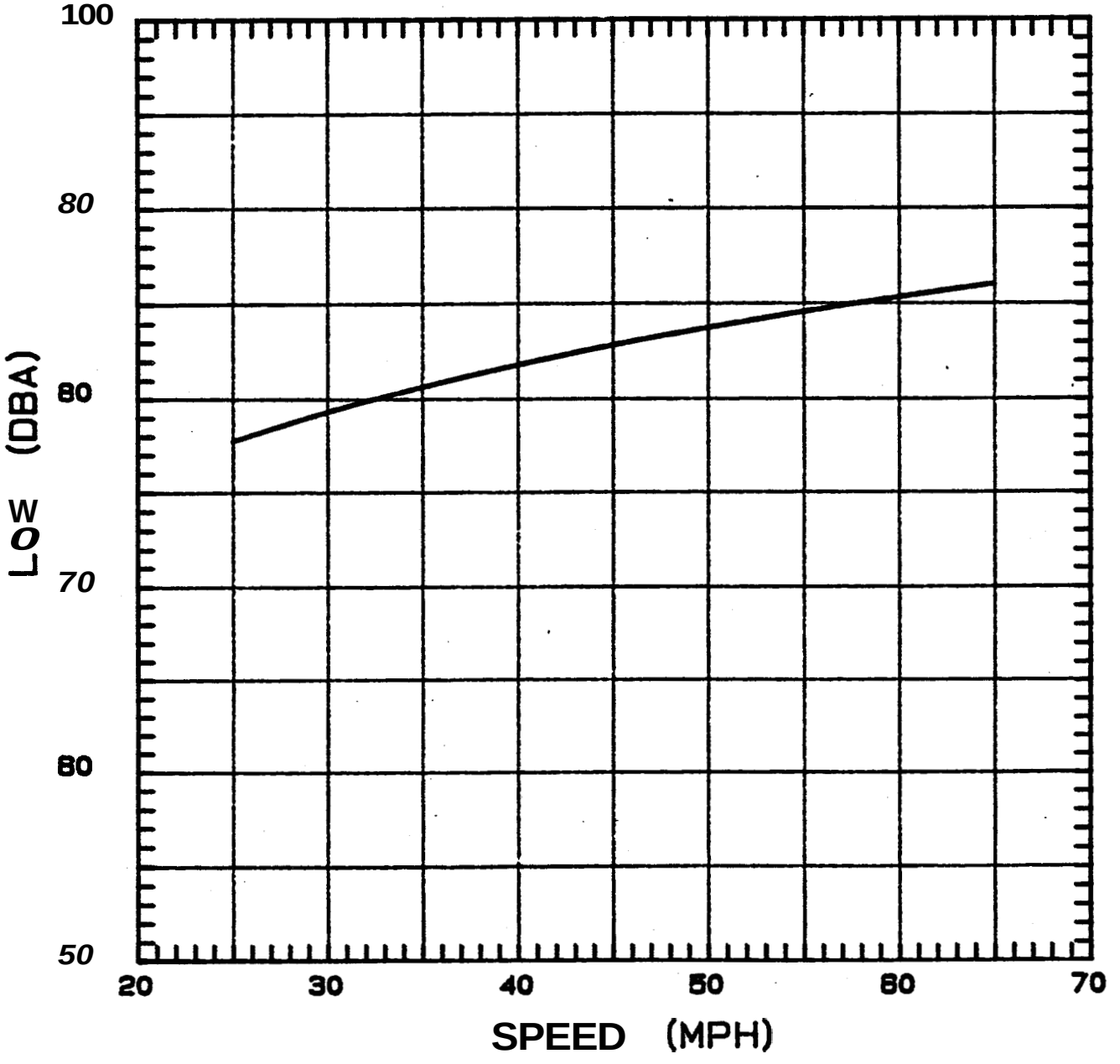
———	VEH. TYPE:	HT 3-AXLE	LOE=53.34+17.19*LOG (MPH)
- - - -	VEH. TYPE	HT 4-AXLE	LOE=59.57+13.88*LOG (MPH)
- · - ·	VEH. TYPE	HT 5-AXLE	LOE=51.49+18.98*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES EXCEPT 4, 8, 13
MIC.#3 HT-IOFT. DIST-50FT.

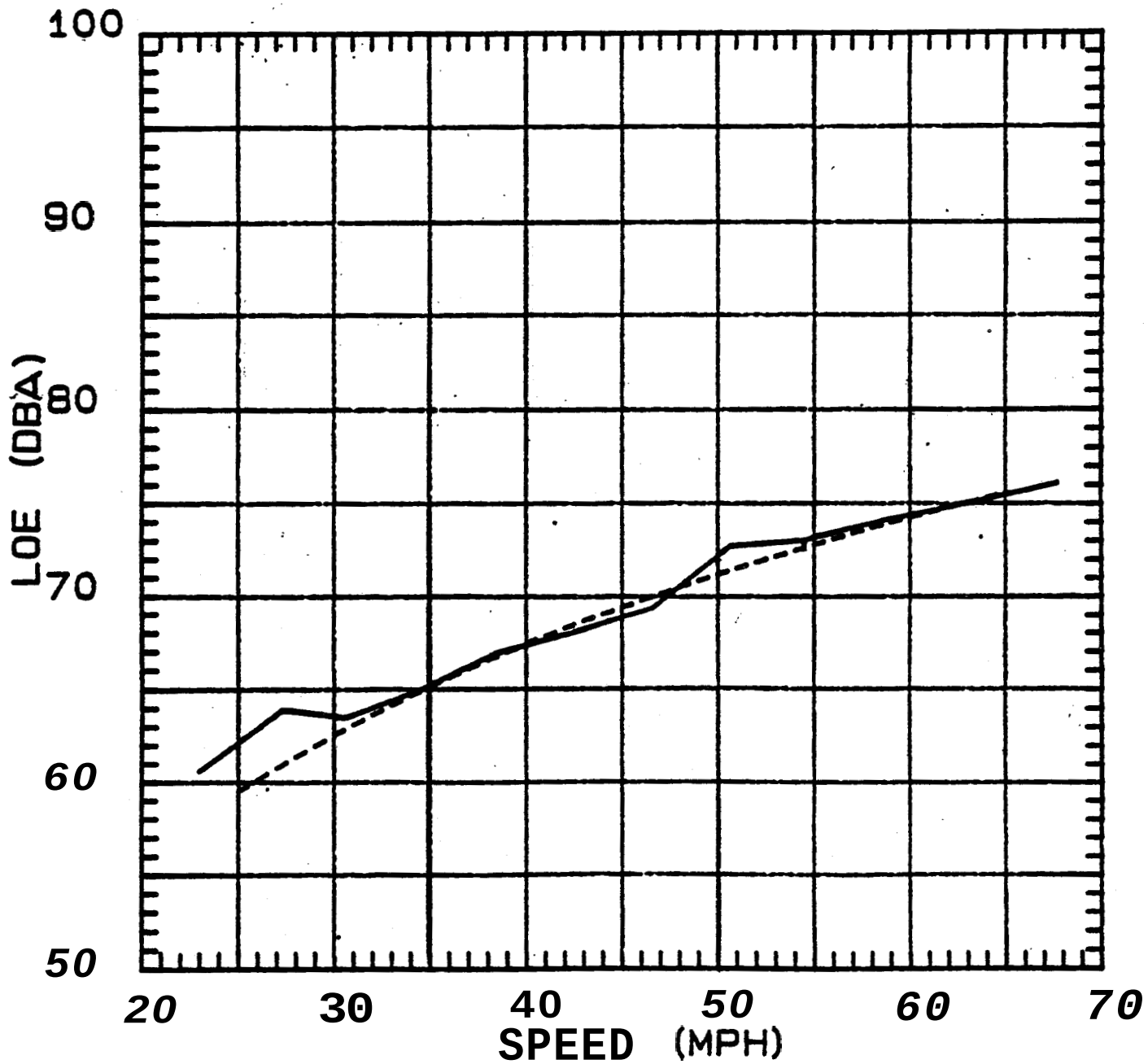
VEH. TYPE: ALL HT LOE-49.88+19.97*LOG (MPH)



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

VEHICLE TYPE: ALL AUTOS
MIC. #2 HT-5FT DIST-50FT

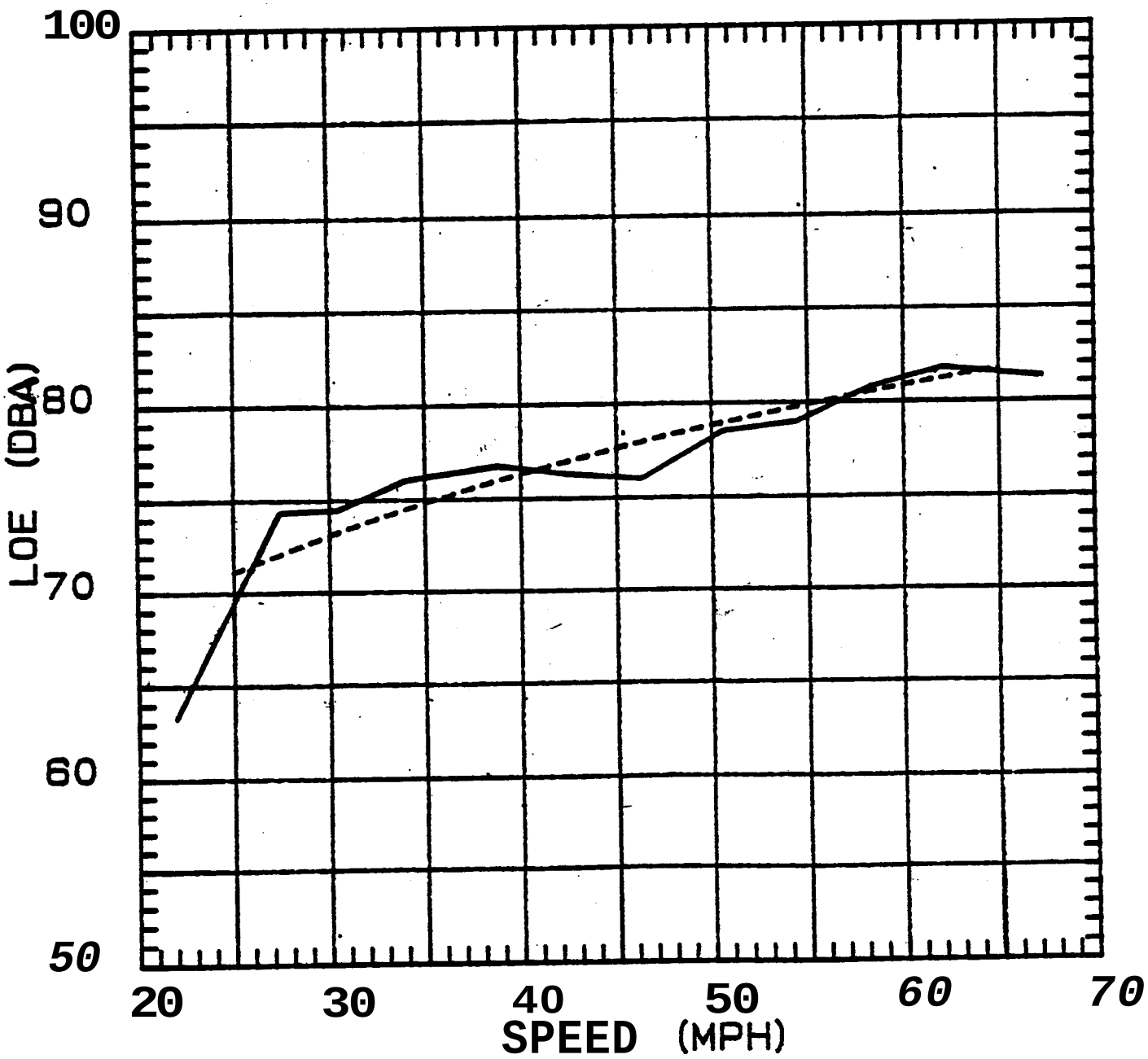
------ ALL SITES LOE=5.21+38.83*LOG (MPH)
——— ALL SITES SPEED CLASS MEAN OATA



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

VEHICLE TYPE: MEDIUM TRUCKS
MIC.#2 HT-5FT. DIST-50FT.

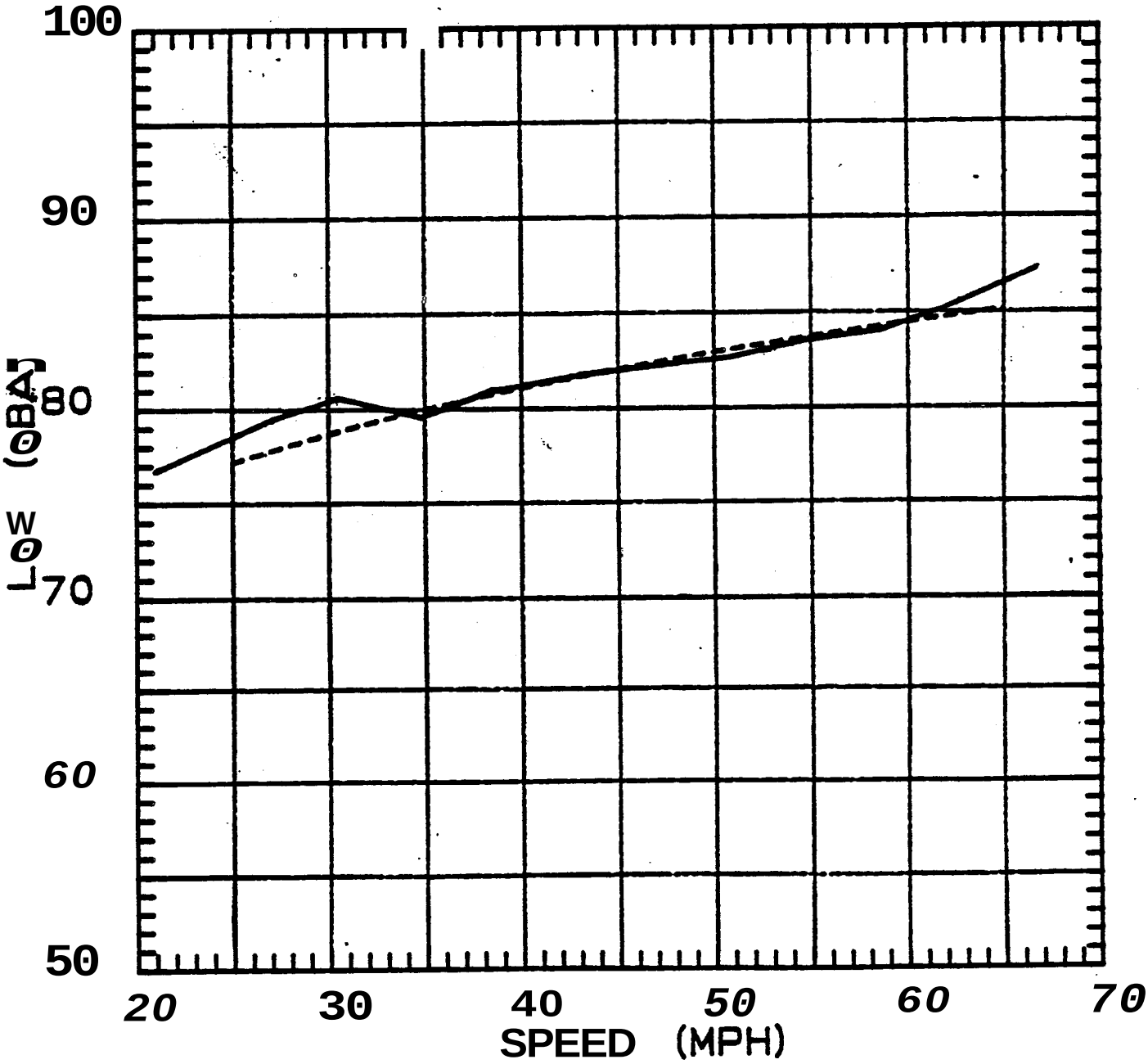
------ ALL SITES LOE=35.34+25.59*LOG(MPH)
——— ALL SITES SPEED CLASS MEAN DATA



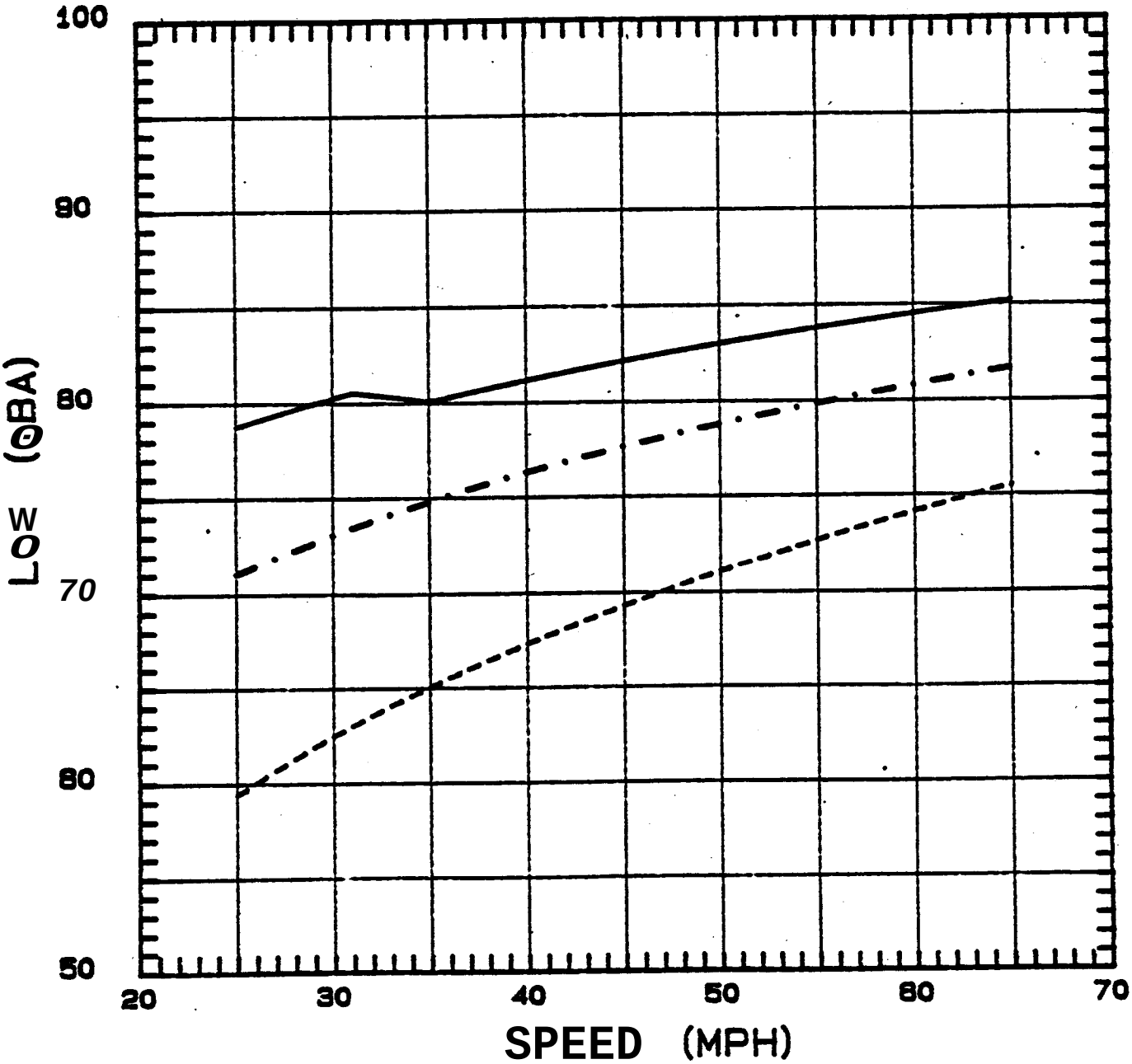
CALIFORNIA VEHICLE 'NOISE EMISSIONS
LOE VS. SPEED

VEHICLE TYPE: HEAVY TRUCKS
MIC.#2 HT-5FT. OIST-SOFT.

------ ALL SITES LOE=50.37+19.18*LOG (MPH)
——— ALL SITES SPEED CLASS MEAN DATA



CALIFORNIA VEHICLE NOISE EMISSIONS
LOE VS. SPEED

ALL SITES
MIC.#2 HT-5FT. DIST-50FT.

------ VEH.TYPE: ALL AUTOS LOE= 5.2 + 38.8*LOG(MPH)
-·-·- VEH.TYPE: MEDIUM TRUCKS LOE=35.3 + 25.6*LOG(MPH)
——— VEH.TYPE: HEAVY TRUCKS LOE=51.9 + 19.2*LOG(MPH) 25<MPH<31
LOE-50.4 + 19.2*LOG(MPH) 35<MPH<65
STRAIGHT LINE TRANSITION 31<MPH<35