AN ANALYSIS OF PEAK PERIOD FREEWAY VOLUME CHARACTERISTICS

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INTRODUCTION

In order to evaluate the traffic movements on any section of freeway, highway, or arterial streets, it is necessary to determine the traffic volume for a number of specific periods of time. A comparison of these volumes to volumes of other facilities, or to accepted standards, is usually necessary to analyze a facility. This comparison of volumes is used in all areas of traffic and transportation engineering. This includes research, planning, design, and the regulation of traffic on the facility under consideration. It is extremely important, therefore, to obtain the volumes for these various periods of time that are used for design and planning purposes as accurately and as economically as possible.

If an accurate expansion factor for application to traffic counts of short duration can be determined, the short-time counts may be acceptable for expansion to longer time intervals. This would provide substantial savings in traffic counting procedures in both time and money. In addition to this, more short-time counts could be made, thus resulting in more accurate results.

Traffic volumes in 5-minute intervals were manually recorded at nineteen urban locations in six Texas cities. A linear regression correlation was made of short-time peak volumes to volumes of longer time intervals. The results showed very good correlation in all areas of analysis. For the locations studied, a statistically acceptable expansion factor has been determined and reported for various short-time peak volumes.

DATA COLLECTION

The data for this research project were provided by the Planning Survey Division (D-10) of the Texas Highway Department. Manual counting techniques were used at nineteen locations on controlled access facilities in Houston, San Antonio, Austin, Beaumont, Dallas, and Fort Worth. Figure 1 shows the location of these Texas cities.

All counts were taken during the five-day work week (Monday through Friday) between June 4, 1963, and August 3, 1963. The counts were made for 5-minute intervals by direction and by lane at each location. In order to make the most efficient use of available personnel, counts were taken successively for the inbound and for the outbound directions. Data collection for one direction began at 10:00 P.M. and continued without interruption for a 24-hour period. Traffic flowing in the opposite direction was then counted for the succeeding 24-hour period. In the analysis it was necessary to group data from the inbound direction taken on another day.

Locations of the 5-minute count stations in the various cities are shown in Figures 2.A through 2.C. All of these stations were located on controlled-access facilities where the number of lanes varied from four to ten. The highway cross section at each of the 5-minute count stations is shown in Figures 3.A through 3.G.

It should be noted that the 5-minute count stations, with the exception of one, were operated on radial facilities.

CALCULATION PROCEDURE

In the analysis, the traffic volumes by lane for each 5-minute period during a 24-hour period in the inbound and for the succeeding 24-hour period in the outbound directions were utilized. This information from each station was coded onto data processing cards and electronic data processing equipment was used for the necessary calculations. The results of the calculations are shown in Appendix 1.

At each station, the peak 5-minute, peak 10-minute, peak 1-hour, peak 2-hour, and the total 24-hour volumes were determined. The beginning time of the occurrence of each of these peak periods was determined and is shown in Column (1) of the tabulations in Appendix 1. Each of these peaks was determined for the inbound and outbound directions, for the inbound A.M. and outbound A.M. directions, and for the inbound P.M. and outbound P.M. directions.

Approximately 11 determinations were made for each peak period selected for study. The volume during the peak period under consideration was determined and the opposing volume during this same period of time was computed. These two volumes are shown in Columns (2) and (3) respectively. These were added together to obtain the total volume for that peak period; the sum is shown in Column (4). The directional distribution, or split, is found in Column (5). The volume, Column (2), of each peak period was then divided by the total inbound 24-hour volume to obtain the values listed in Column 6. Column (7) shows the peak volume listed in Column (2) divided by the total outbound volume for the 24-hour period. Column (8) shows the peak volume listed in Column (2) divided by the total of the inbound and outbound volumes for the 24-hour period.

It was also desirable to determine the relationship of each of the peak periods to the peak hour. Column (9) represents each peak volume divided by the volume of the peak hour in

the inbound direction; whereas, Column (10) is the peak volume divided by the volume during the peak hour in the outbound direction. Column (11) shows the ratio of the peak volume to the volume in both directions during the inbound peak hour. The ratio of the peak volume to the volume in both directions recorded during the peak hour in the outbound direction is shown in Column (12).

Columns (2) through (12) represent the basic calculations that were made from the 5-minute count data. It was from these calculations for each of the 19 count stations that the relationship of short time counts to longer periods of time was determined.

DISCUSSION

Comprehensive traffic data from field studies are essential to engineering analysis for location and design. This fact is accepted by all design personnel in the highway field. The data presently considered to be essential are:

1. ADT - average daily traffic
2. DHV - design hour volume
3. K - ratio of DHV to ADT
4. D - percent of traffic in heavier direction of flow
5. T - percent trucks during the design hour

It is known that the "K" factor varies from 12 to 14% for freeways in urban areas. The maximum hourly volumes in urban areas average from 1.2 to 1.4 times the thirtieth highest hourly volumes. The directional distribution (D) is generally accepted to be approximately 55 to 60% in urban areas, with a tendency toward 50% likely as the urban development becomes more concentrated. The "T" factor, or the percent of the DHV made up of trucks in urban areas, is generally 3 to 7%.[1]

The DHV should be representative of the traffic flow expected for some future year. Inherent in any projection into the future are the possibilities of major changes that cannot be forecast; therefore, in order to have the best possible forecast one must utilize the best data and forecasting techniques available. This dictates that all basic data such as ADT, DHV, D, and T must be as precise as practicable. It has been shown

that when the traffic volume on a facility is in the range to 80 to 120 thousand, a difference of 2% in one direction or the other is sufficient to dictate a change in design in many cases.

It should be noted that the thirtieth highest hour has been used in the past as the DHV for all types of facilities. In rural areas this has been accepted as practical and has been accepted as a reasonable approach. In large metropolitan areas, the use of the thirtieth highest hour as the basis for design is considered an outdated practice by some authorities. The volumes of vehicles using the facilities in urban areas are of such magnitude that the use of this design criteria normally results in traffic congestion of considerable magnitude and duration. It has become apparent to those responsible for the design and regulation of urban traffic that a design period other than the thirtieth highest hour is required to obtain a satisfactory level of service.

One approach to the derivation of a design volume is to study the existing characteristics of peak volumes existing in an area and from analysis of these studies determine an economical and practical design volume. The selection of a design volume for an urban area should take into consideration the magnitude and duration of various peak periods, the financial status of participating agencies, and should be coordinated with planned improvements of other facilities in the area.

Perhaps the ideal approach to data collection for design studies would require maintaining continuous 365-day-a-year count stations in all areas, with equipment capable of recording 5-minute volumes by lane and direction. Since this type of operation is not economically feasible, an acceptable substitute is needed. One

solution would involve taking a sample that could be expanded to represent the universe. An investigation was made of the characteristics of various periods to determine a peak period of short duration that could be expanded to an acceptable design volume of longer duration.

Several correlations have been made to relate short-time counts to longer time intervals. Moskowitz and Newman of the California Division of Highways have shown the relationship of the peak 5-minutes to the peak hour for different urban area sizes.[2] Drew and Keese of the Texas Transportation Institute show the relationship of the peak 2-hour period to the peak hour period for ninety-five studies in several states.[3]

Carll and Homburger of the University of California, Berkeley, have studied three facilities in California and have illustrated the relationship of the peak hour to the 24-hour volume. They have also made a 6-minute count and expressed this volume as a ratio to the 24-hour directional volume.[4]

The Bureau of Public Roads has stated that a 24-hour volume in an urban area on a weekday can be considered the same as the ADT within $\pm$10% standard error of the estimate.[5] This concept expressed by the Bureau of Public Roads can be a valuable tool for estimating the ADT.

This study of nineteen urban locations in Texas is broken down into three areas of correlation, which are:

(1) Volumes in the inbound direction

(2) Volumes in the outbound direction

(3) The combined volumes in both directions

Also, a comparison of the 24-hour volume taken from the 5-minute counts to the calculated ADT, which was furnished by the Planning Survey Division of the Texas Highway Department, for each count station has been made.

Several traffic volumes and related characteristics of Texas freeways are shown in Table 1. It is noted from Table 1 that out of nineteen count stations there are only five stations in which the practical capacity is exceeded during the peak A.M. or peak P.M. hour. It is also seen that the range for the P.M. peak hour starting time is substantially less than the range of the A.M. peak hour starting time. This probably is an indication that a substantial number of drivers leave home at various times in the morning to miss the peak traffic period, while their departure time from work does not afford them an opportunity to do the same for the P.M. peak period. The results from this set of data do not indicate that there is a consistent relationship between the population and the beginning of the peak hours. In general, the peak 5-minute flows represent a higher percentage of the peak hour volumes in the peak direction of traffic flow than did those studies by Carll and Homburger. These data from the Texas study indicate that the 5-minute peak, as a percentage of the peak hour for the A.M. period, ranges from 9.4 to 11.9%. In the afternoon peaking period it is found that 5-minute peak period of the P.M. peak hour ranges from 9.2 to 13.7%. Carll and Homburger expressed a 6-minute volume ratio to the peak hour volume. If their 6-minute relationship is reduced directly to a 5-minute relationship, then their values range from 9.0 to 10.0%. In general, it is felt that the reason for the percentages being higher on these nineteen count stations is due to the fact that at the majority of the stations volumes are somewhat less than practical capacity. As the hourly

volume approaches the practical capacity of the facility, the percentage that the 5-minute peak represents of the peak hour should decrease because the 5-minute volume cannot increase due to capacity limitations.

Carll and Homburger reported that the percent that the A. M. peak hour represents of the 24-hour directional total volume ranges from 9.4 to 24.9% for their study locations. The data from the nineteen Texas urban locations indicate a range of 6.80 to 13.29%. The average for the nineteen studies is 10.50%.

Messrs. Karl Moskowitz and Leonard Newman stated that the peak 5-minute rate of flow was found to be 1.1 times the rate of flow for the peak hour in large metropolitan areas. They further stated that the 5-minute rate of flow in smaller urban areas would be 1.3 times the total hourly rate. The data from the nineteen Texas urban locations indicate a slightly higher rate of flow in the peak direction. It is shown in Table 1 that the rate of flow is approximately 1.2 for the cities of over 500,000 and 1.4 for cities less than 500,000. Additional data are needed to check these values further. Both the A.M. "F" factor and the P.M. "F" factor are shown in Table 1. The distance each count station is located from the central business district of each city and the number of lanes of each facility are also shown in Table 1. There does not appear to be any significant correlation between the distance from the CBD or the number of lanes and the "F" factor.

Table 2 gives the ADT calculated from permanent counters located at each of the 5-minute count station locations and the 24-hour volume from the 5-minute manual counts at the same locations. Of the seventeen stations for which the ADT was available, the 24-hour volume from the 5-minute manual counts at twelve stations fell within

$\pm$10% of the ADT. The 24-hour volumes at two locations were 11.3 and 11.0% of the ADT. This information for the limited number of stations that have been sampled in Texas tends to bear out the relationship given by the BPR in that accuracy of daily volumes would have a $\pm$10% standard error of the estimate when related to the ADT. Thus the daily volumes on urban freeways can be expected to be within reasonable design limits of the ADT.

Figures 4.A through 4.J and Figures 5.A through 5.J represent the correlation of short-time counts to long-time counts. These figures were derived from the calculations found in Appendix 1. Figures 4.A through 4.J show the relationships derived for inbound and outbound directions; whereas, Figures 5.A through 5.J express the relationship for the total volumes in both directions.

Table 3 lists the coefficient of determination, coefficient of correlation, and the standard error of the estimate for each of the twenty figures. As can be seen from Table 3, the coefficients of determination are very high in all cases. The standard errors of the estimate are somewhat higher than is desired, but for a two-variable correlation of this nature, these values are probably as low as can be expected.

Figures 4.A through 4.J represent the correlation of short-time counts to long-time counts for an inbound or outbound direction. In each of these figures the short-time counts fell within the time interval of the long-time counts. The regression equation is shown on each figure.

In Figures 4.A and 4.B is found the 5-minute peak volume plotted against the 1-hour peak volume for the inbound and outbound direction respectively.

The slopes of the two regression lines are similar, being 10.10 and 11.17

respectively. Thus dy/dx, or a change in the 1-hour peak volume with respect to a change in the 5-minute peak volume, is approximately the same whether it is in an outbound or an inbound direction. For small volumes such as would be represented by a 5-minute peak or an hourly peak, this difference of 1.07 (11.17 - 10.10) in the slope would represent a relatively small number of vehicles. An average value of 10.64 $\left(\frac{11.17+10.10}{2}\right)$ multiplied by the change in the 5-minute peak volume would be approximately the same as the change in the peak hour volume.

Figures 4.C and 4.D illustrate the relationship of the 10-minute peak volume to the 1-hour peak volume for the inbound and outbound directions. Again, it is found that the slopes of the two lines are similar and are 5.26 and 5.77. The average slope of the lines in Figures 4.C and 4.D is $5.52\left(\frac{5.26+5.77}{2}\right)$. The ratio of the 10-minute peak volume lines (5.52) to the average slope of the 5-minute peak volume lines (10.64) is 0.522. This magnitude of the slope ratio is to be expected as long as the facility has a short time peak of at least ten minutes. The ratio of the slope of a line of a 10-minute peak period correlated to any time interval to the slope of a line of a 5-minute time period correlated to the same time interval will be 0.50 if the short time peak period is ten minutes or longer. Therefore, the ratio of slopes indicates the length of time of the peak period.

Figures 4.E and 4.F show the correlation of the peak hour to the peak 2-hour. The regression equation and slope for the inbound direction approximates the regression equation and slope for the outbound direction. This indicates that the vehicles passing the count stations for these 2-hour peak periods have deviated very little in their outbound travel patterns from their inbound travel patterns.

Drew and Keese reported that the peak hour volume can be expected to be between 55 and 60% of the peak 2-hour volume. This would give a slope of 1.67 to 1.82. The data for the nineteen locations in Texas indicate that the slope of the peak hour inbound volume versus the peak 2-hour inbound volume is 1.81. The slope of the peak hour outbound volume lines is 1.84. In general, it can be said that the peak 1-hour volume will be approximately 55% of the peak 2-hour volume regardless of the direction of flow.

Figures 4.G and 4.H show the relationship of the 1-hour peak volume to the 24-hour volume for the inbound and outbound directions. Figures 4.I and 4.J show the correlation of the peak 2-hour period to the 24-hour volume for the inbound and outbound directions. The ratio of the slope of the 2-hour peak volume correlation to the slope of the 1-hour peak volume correlation is approximately 0.55. This indicates that on the facilities under study, the peak flow of traffic continues to some extent over a 2-hour period. However, this is an average of all the facilities sampled. It is certainly evident from these four figures that there is more scatter in the data than in the Figures 4.A through 4.F. The coefficients of determination as shown in Table 1 have dropped to .934, .940, .960, and .953 for the Figures 4.G through 4.J respectively.

Figures 5.A through 5.J represent the correlation of short-time counts to long-time counts for volumes in both directions.

In Figures 5.A through 5.B, the 5-minute volume in both directions during the peak 5-minutes is plotted against the hourly volume in both directions for the inbound and outbound peaks. The slope of the line for the inbound direction is 10.52 and the slope of the line for the outbound direction is 10.61. Figures 5.C and 5.D represent

the 10-minute volume in both directions during the peak hour for the inbound and outbound directions. The slope of the line for the inbound direction is 5.40, and the slope of the line for the outbound direction is 5.59. The ratio of the slope of the inbound 10-minute line to the slope of the 5-minute inbound line is $0.513\left(\frac{5.40}{10.52}\right)$ and the ratio of the slope of the outbound 10-minute line to the slope of the 5-minute outbound line is $0.527\left(\frac{5.59}{10.61}\right)$. It is evident from these two slope ratios that the peaking interval covers a period of at least ten minutes.

Figures 5.E and 5.F show the relationship of the peak hour to the peak 2-hour for volumes in both directions.

In Figures 5.G and 5.H is found the hourly volume in both directions during the peak hour plotted against the 24-hour volume in both directions. In Figures 5.I and 5.J is found the relationship of the 2-hour volume in both directions during the peak two hours and the 24-hour volume. It is seen that the slope of the hourly volume in both directions for the inbound peak hour line is 10.96, and the slope of the 2-hour volume inbound line is 6.08. The ratio of these slopes is 0.555. Thus it is seen that for peak volumes in the inbound direction, the peak period is not continuing at a constant level over the 2-hour period. The slope of the hourly volume line in the outbound direction is 10.61, and the slope of the 2-hour volume line in the outbound direction is 5.70. The ratio of these two slopes is 0.537. It is seen that for the outbound direction the traffic flow conditions are extended over a longer period than for the inbound direction.

In order to make the slope ratio a meaningful number, a design criteria could be established such as to place a numerical value on the ratio that would define the

length of the maximum traffic flow conditions to be tolerated. Of course, it is realized that if a facility is counted in only one location then, with only one point, a slope could not be obtained; however, for a given urban freeway of a reasonable length, several locations could be sampled for various time intervals. These short-time counts could then be correlated for this particular facility to a 24-hour volume and then by a ratio of the slopes of the various lines, a numerical value could be assigned to the period in which the maximum traffic flow conditions exist. The present day trend in dealing with peaking characteristics is to arbitrarily decide when the peak period begins and ends by looking at the distribution of volumes within a given period. However, by a method such as a ratio of slopes, a measure of continuous traffic flow could be mathematically determined.

Figures 4.A through 4.J have been summarized in Table 4. If the reciprocal of the slope of each line is calculated, then this value would be the average percent that the smaller volume is of the larger volume. This is the method used to determine the values listed in Table 4. In Table 5 is found the summary of Figures 5.A through 5.J. The reciprocal of the slope of each line is used for the values in Table 5.

As can be seen from the discussion of Figures 4.A through 4.J and Figures 5.A through 5.J, a definite relationship exists between the short-time counts and the long-time counts. The coefficients of determination for each of these figures in Table 3 show that the relationship has very good correlation and that a longer time interval may be projected from a short-time count with acceptable accuracy.

The primary purpose of this report was to determine if a short-time volume could, with an acceptable accuracy, be expanded to a longer time period for the nineteen count stations. From the results obtained, it is felt that short-time counts can be expanded and remain within reasonable limits of accuracy.

Figures 6.A through 6.J indicate by a histogram the relative magnitude of the individual 5-minute peak volumes within the peak inbound and outbound hours. The "plateau" (a period in which a series of successive 5-minute volumes are approximately equal during peak hours) on histogram plots observed by other researchers is apparent on some of the loaded facilities; however, it is not evident in all cases.

RECOMMENDATIONS

It is evident from the data presented that traffic counts of short duration can be used to estimate the traffic volumes for longer time intervals, the resulting volumes being well within the limits necessary for design purposes. It is proposed that a co-ordinated system of short duration counts be systematically operated in urban locations throughout the State of Texas. These shall include 5-minute count stations operating in some of the smaller cities--down to 10,000 population. The 5-minute counts should be made at least once a year.

The 5-minute count stations should be located on radial and circumferential controlled-access facilities. An analysis of the data should be made to determine any variance in directional distribution between a radial or circumferential facility.

There are many additional avenues of investigation of the basic data still unexplored. There are many additional factors which may have an influence on the peak period characteristics. These include the relative location of entrance ramps, exit ramps, the number of lanes, capacity, the width of median, the height of curb, progression to high-speed lanes, the population of urban areas, the distance from the CBD, and etc. These variables should be investigated to determine their influence in the expansion of a short-time count.

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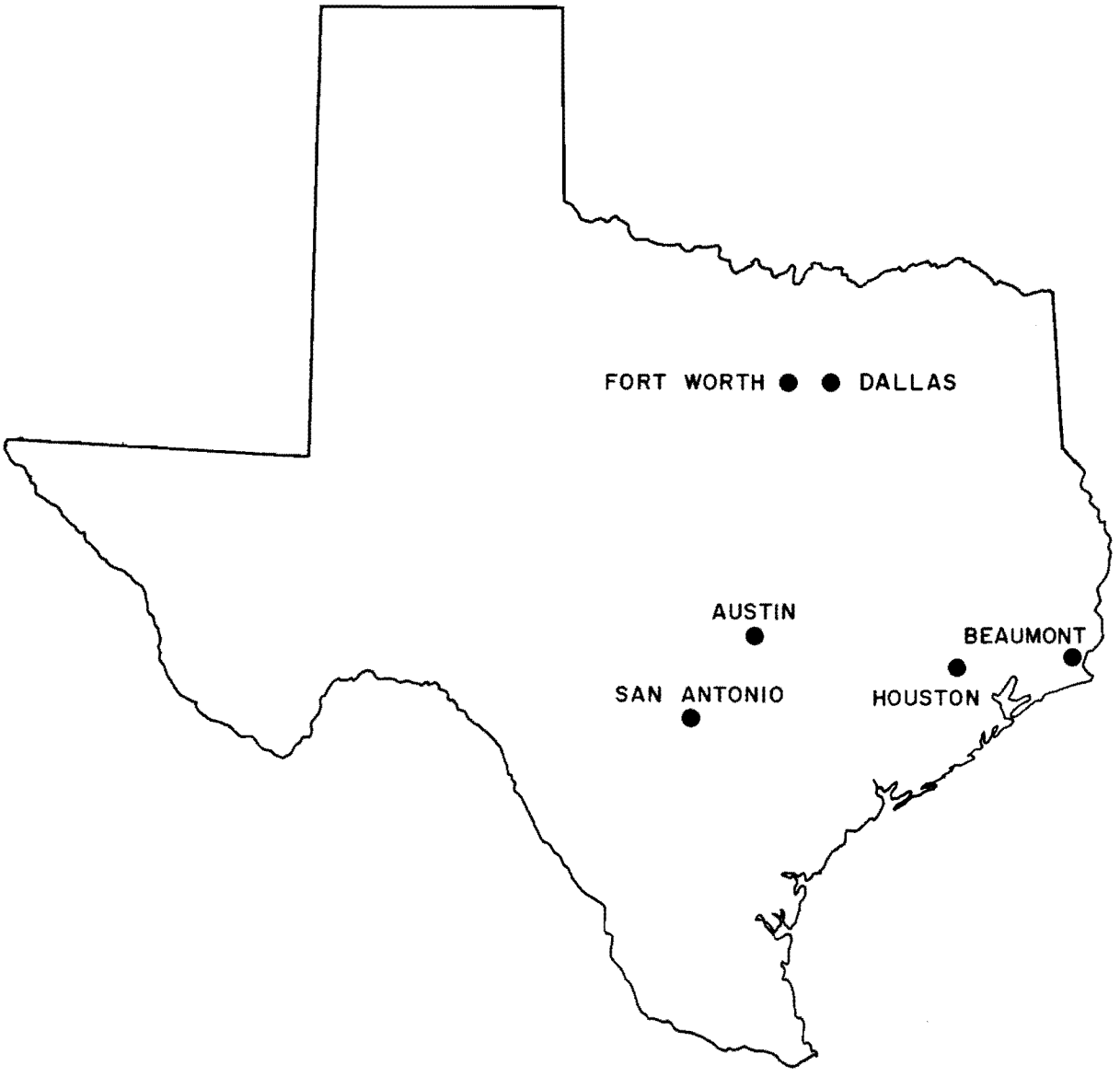
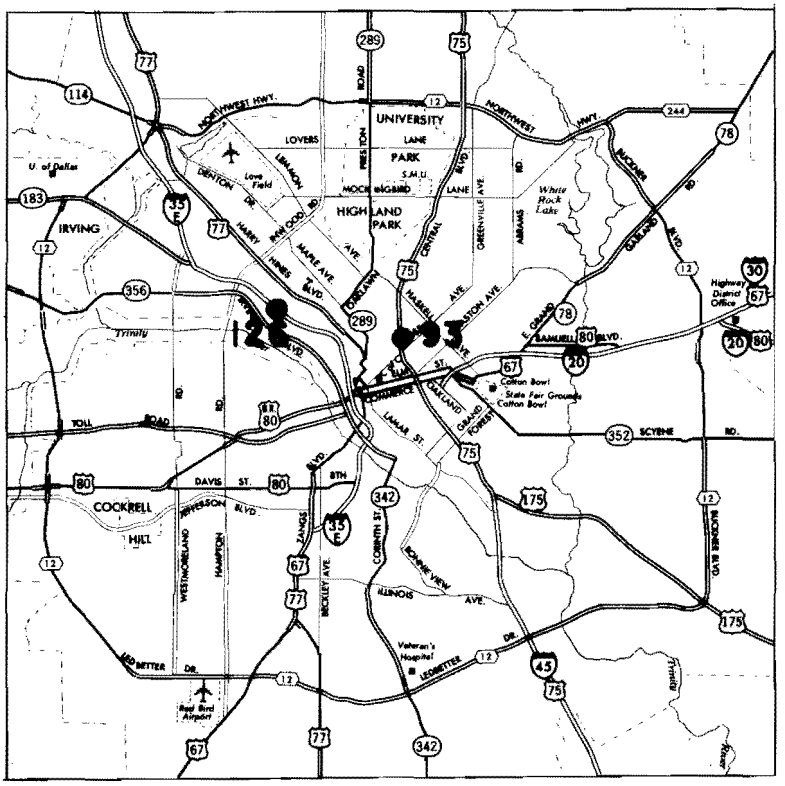
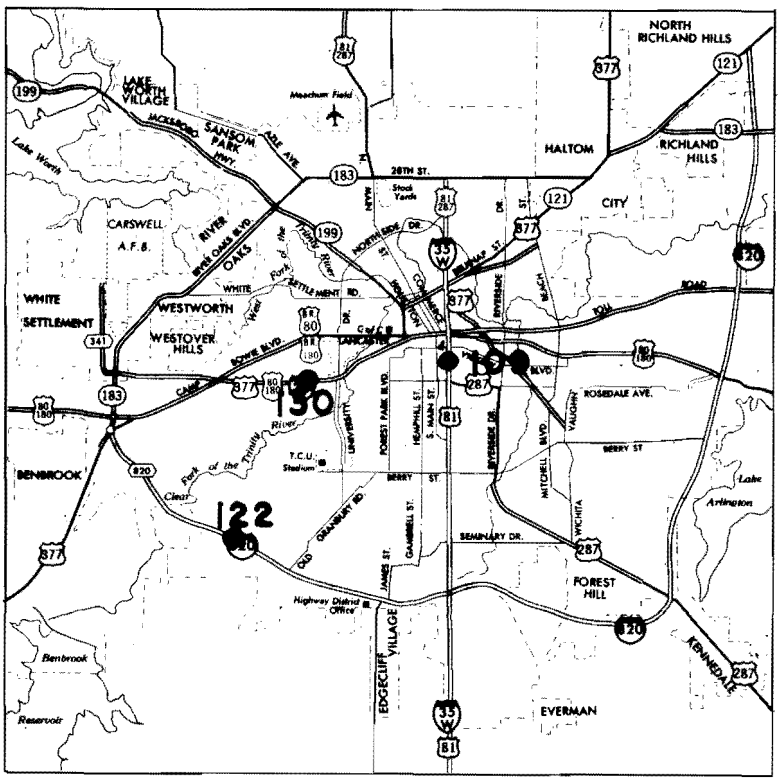


FIGURE 1

TEXAS CITIES IN WHICH FIVE MINUTE COUNTS WERE MADE IN 1963



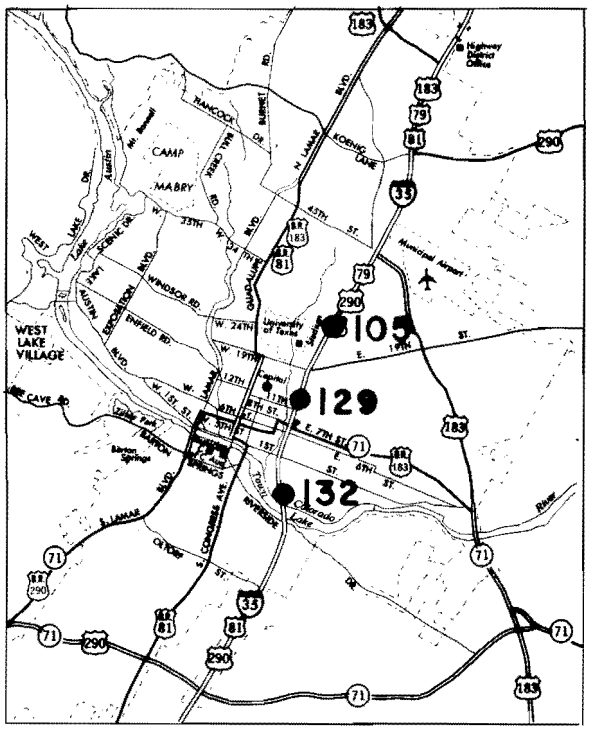
DALLAS



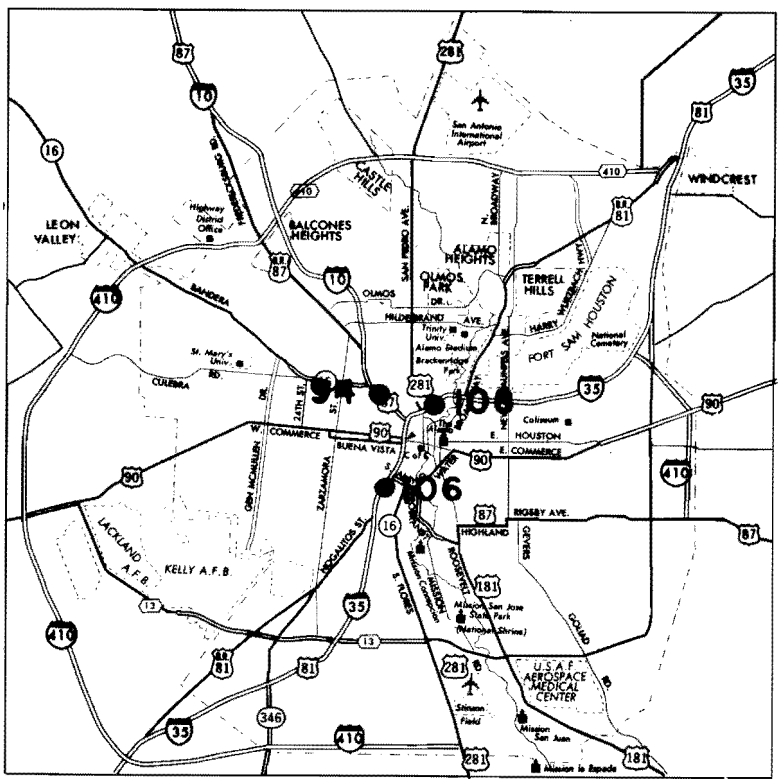
FORT WORTH

LOCATION OF INDIVIDUAL FIVE MINUTE COUNT STATIONS IN EACH CITY

FIGURE 2.A



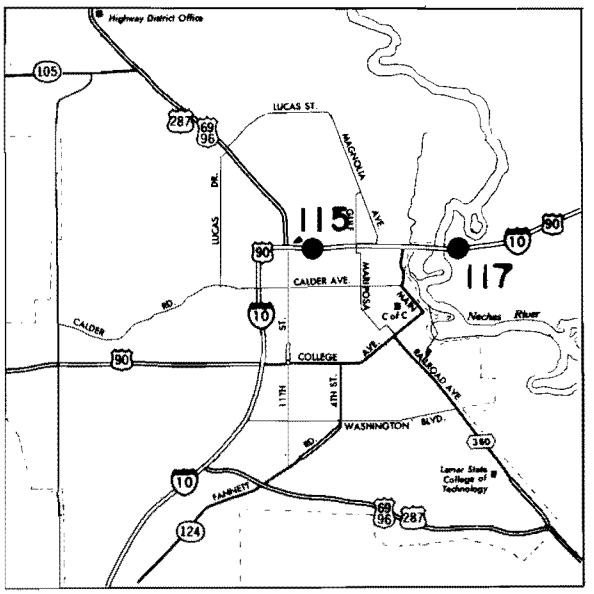
AUSTIN



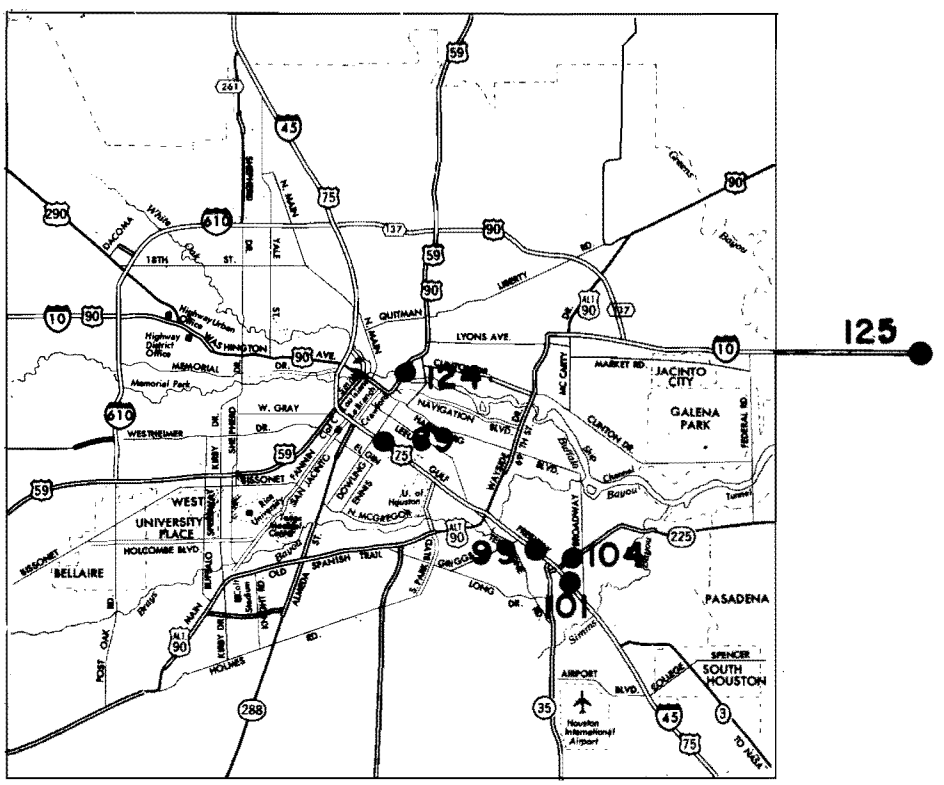
SAN ANTONIO

LOCATION OF INDIVIDUAL FIVE MINUTE COUNT STATIONS IN EACH CITY

FIGURE 2.B



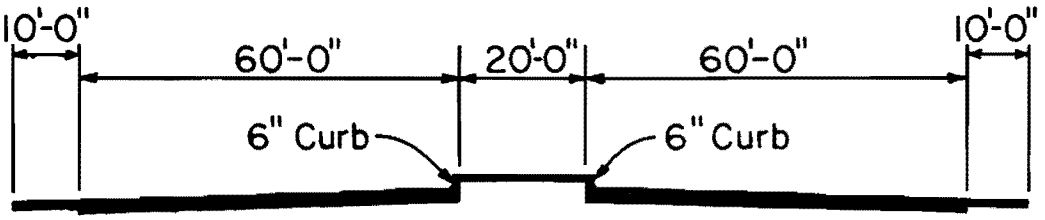
BEAUMONT



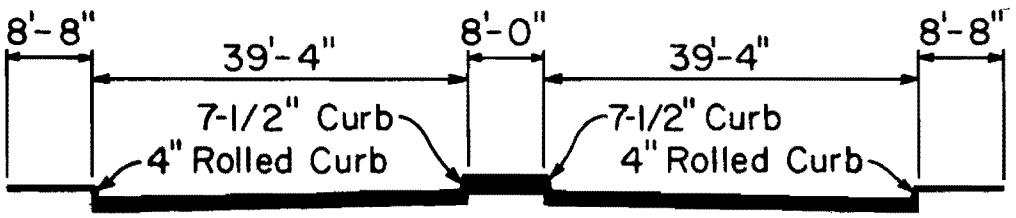
HOUSTON

LOCATION OF INDIVIDUAL FIVE MINUTE COUNT STATIONS IN EACH CITY

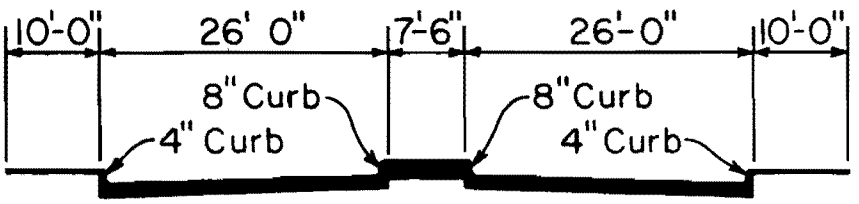
FIGURE 2.C



STATION 126 IN DALLAS ON STEMMONS FREEWAY NORTH OF WYCLIFF STREET



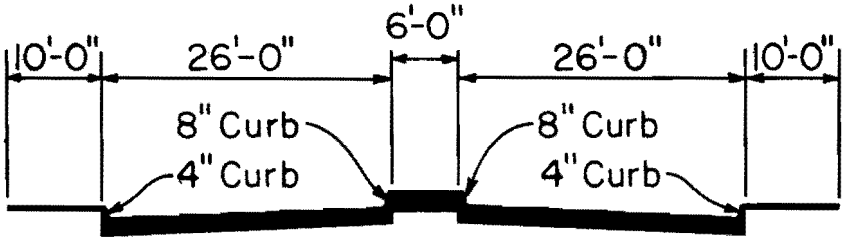
STATION 129 IN AUSTIN ON I.H. 35 EXPRESSWAY SOUTH OF 15TH ST.



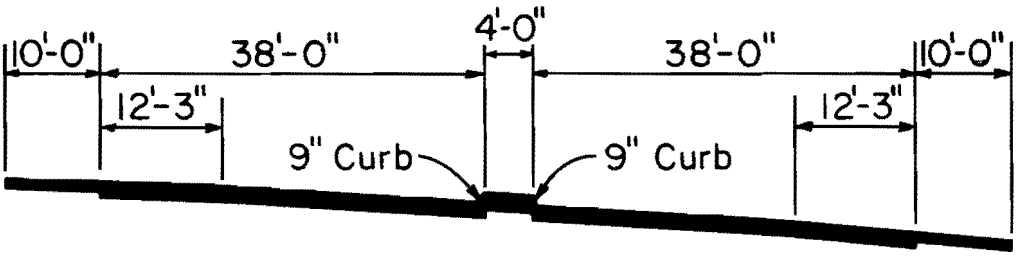
STATION 130 IN FORT WORTH ON EAST WEST FREEWAY MONTGOMERY STREET OVERPASS

FREEWAY CROSS SECTION AT EACH FIVE MINUTE COUNT STATION

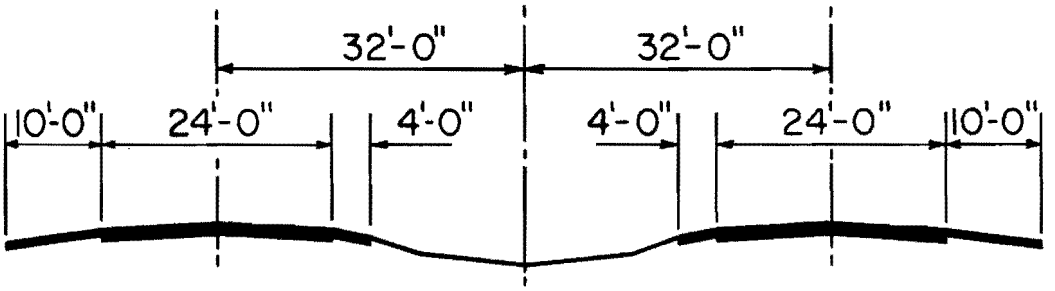
FIGURE 3. A



STATION 122 IN FORT WORTH ON LOOP 217, 1.2 MILES W. OF OLD GRANBURY RD.



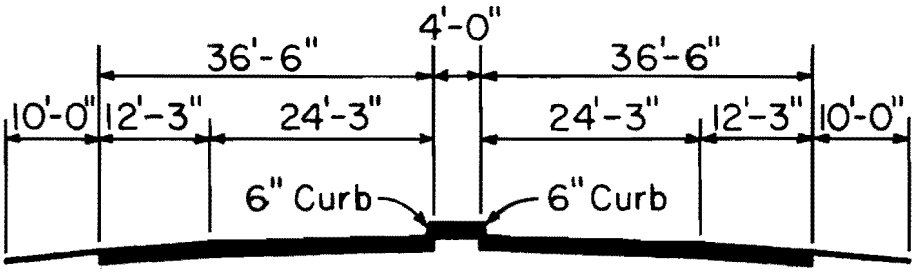
STATION 124 IN HOUSTON ON EAST WEST FREEWAY SOUTH OF BUFFALO BAYOU



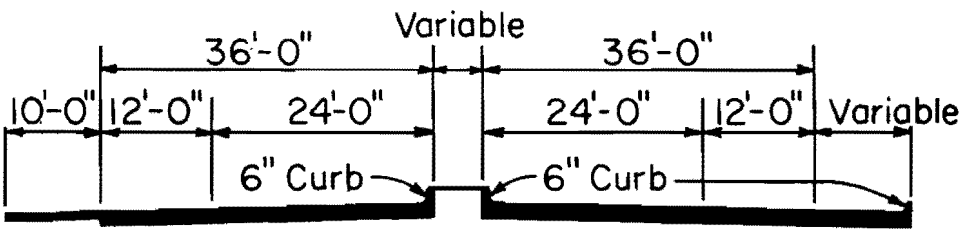
STATION 125 IN HOUSTON ON S.H. 73 1.4 MILES NORTHEAST FOUR CORNERS

FREEWAY CROSS SECTION AT EACH FIVE MINUTE COUNT STATION

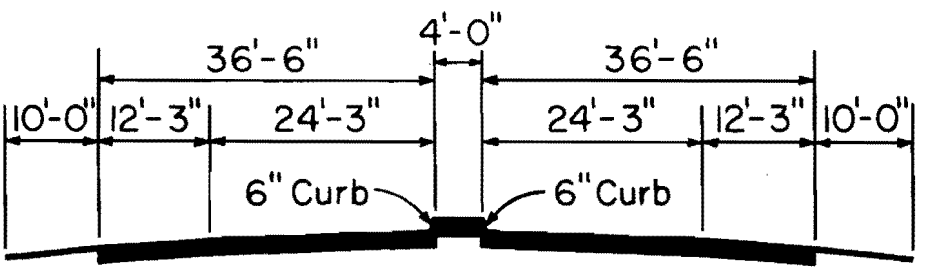
FIGURE 3. B



STATION 99 IN HOUSTON ON GULF FREEWAY AT WOODRIDGE STREET OVERPASS



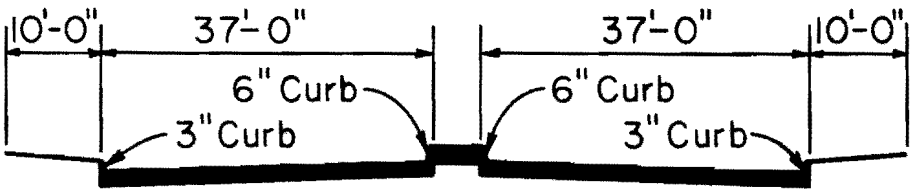
STATION 101 IN HOUSTON ON GULF FREEWAY SOUTH OF S.H. 225



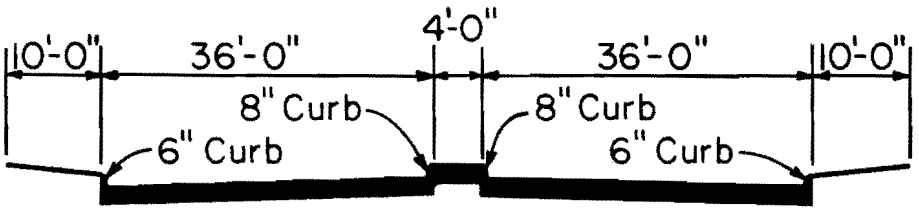
STATION 104 IN HOUSTON ON S.H. 225 EXPRESS-WAY BETWEEN BERKLEY ST. & DOVER ST.

FREEWAY CROSS SECTION AT EACH FIVE MINUTE COUNT STATION

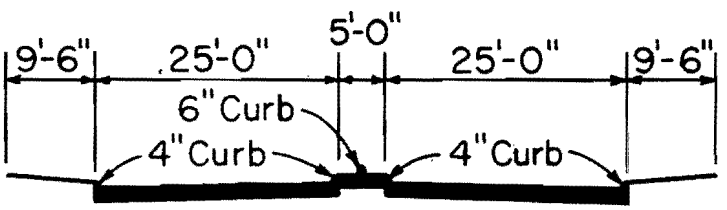
FIGURE 3. C



STATION 89 IN HOUSTON ON GULF FREEWAY NORTHEAST OF BRILEY ST.



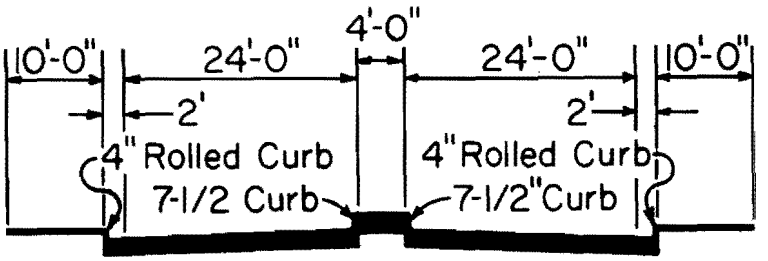
STATION 93 IN DALLAS ON CENTRAL EXPRESSWAY NORTH OF ROSS AVENUE



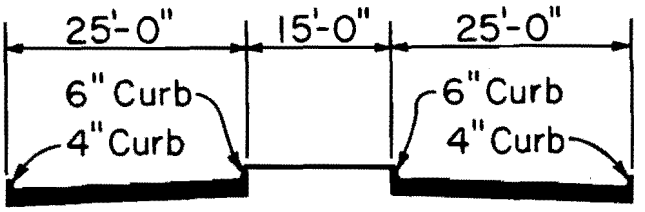
STATION 94 IN SAN ANTONIO ON I.H.10 NORTH OF COLORADO STREET:

FREEWAY CROSS SECTION AT EACH FIVE MINUTE COUNT STATION

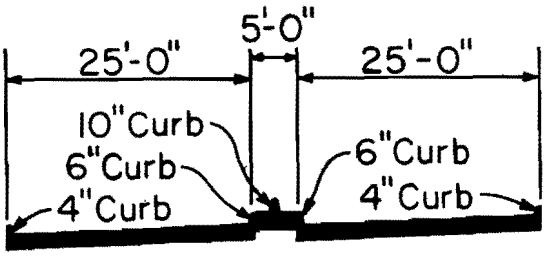
FIGURE 3. D



STATION 105 IN AUSTIN ON I.H. 35
EXPRESSWAY NORTH OF MANOR ROAD



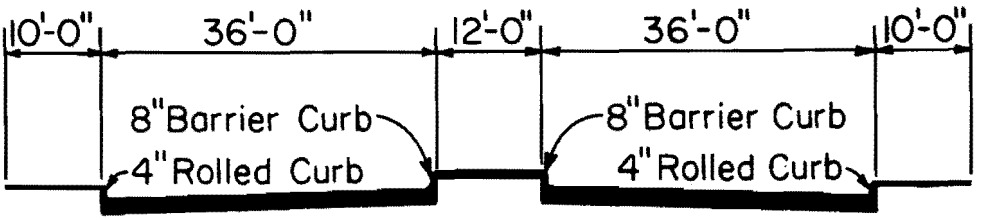
STATION 106 IN SAN ANTONIO ON U.S. 81
EXPRESSWAY SOUTH OF ALAMO STREET



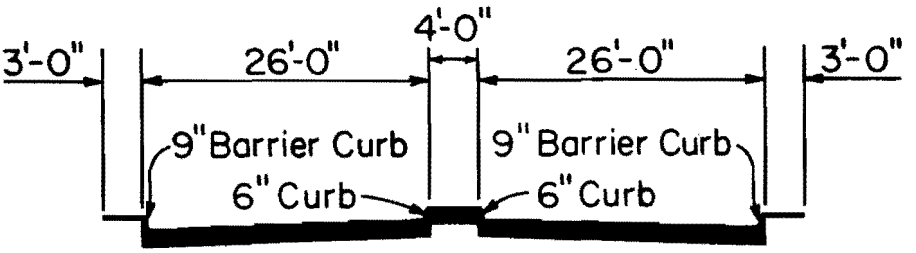
STATION 108 IN SAN ANTONIO ON U.S. 81
EXPRESSWAY W. OF NORTH ST. MARYS

FREEWAY CROSS SECTION AT EACH FIVE MINUTE COUNT STATION

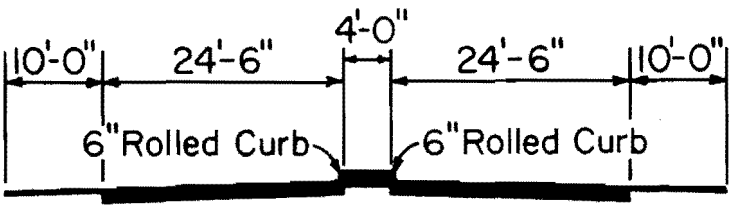
FIGURE 3. E



STATION 109 IN FORT WORTH ON U.S. 81
FREEWAY SOUTH OF BROADWAY STREET



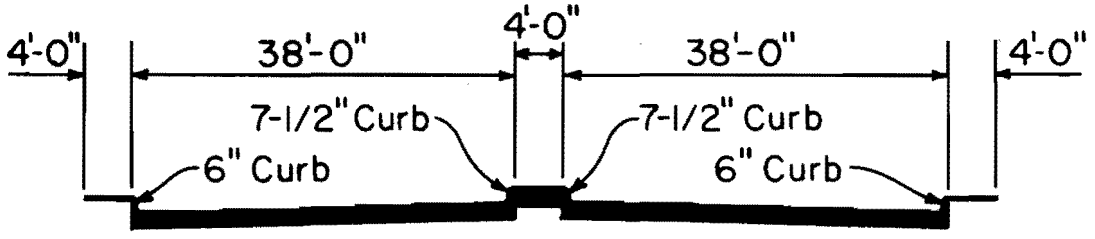
STATION 115 IN BEAUMONT ON U.S. 90
EAST END NECHES RIVER BRIDGE



STATION 117 IN BEAUMONT ON U.S. 90
BETWEEN 7TH. & 8TH. STREETS

FREEWAY CROSS SECTION AT EACH FIVE MINUTE COUNT STATION

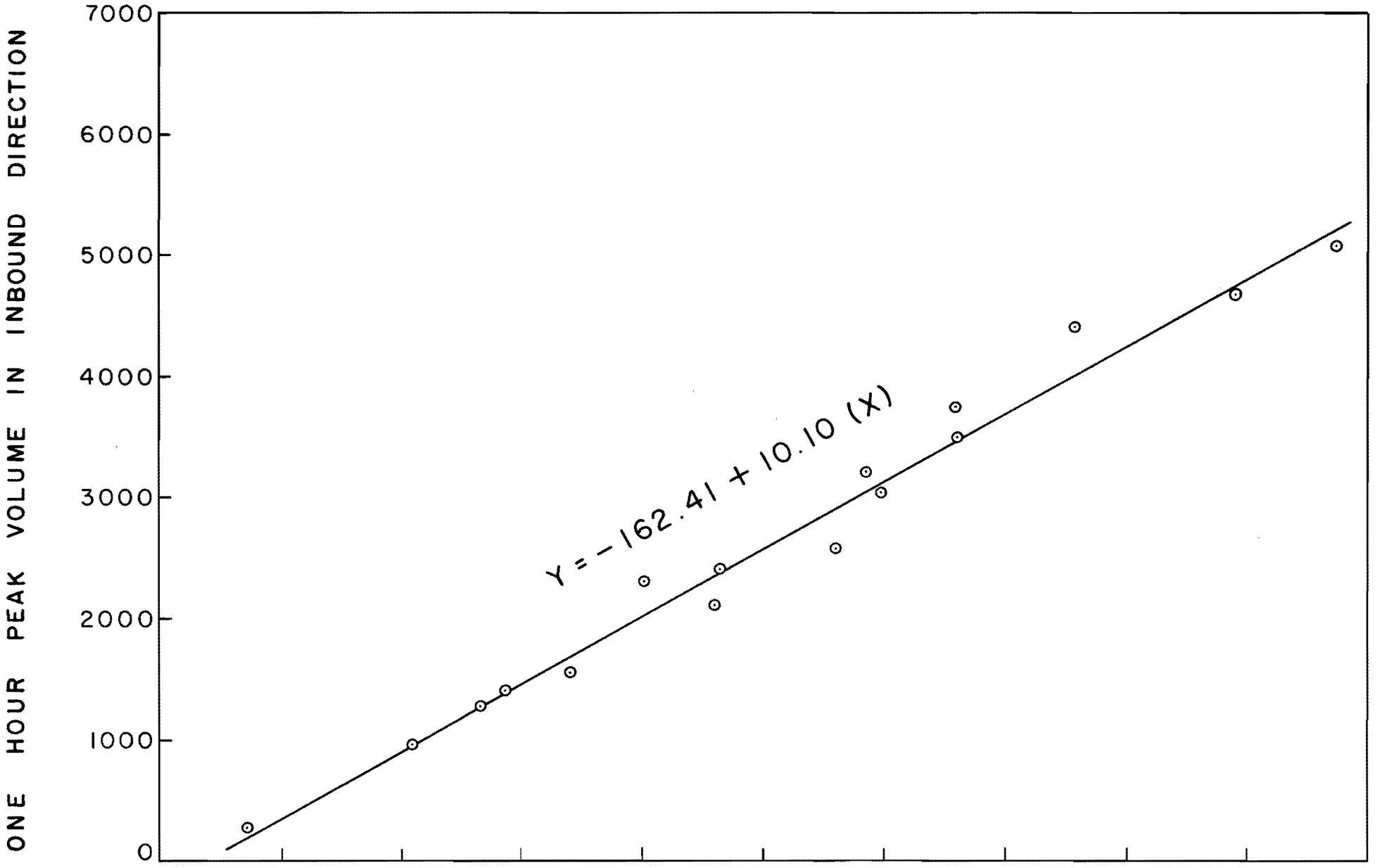
FIGURE 3. F



STATION 132 IN AUSTIN ON I.H. 35 EXPRESSWAY NORTH OF COLORADO RIVER BRIDGE

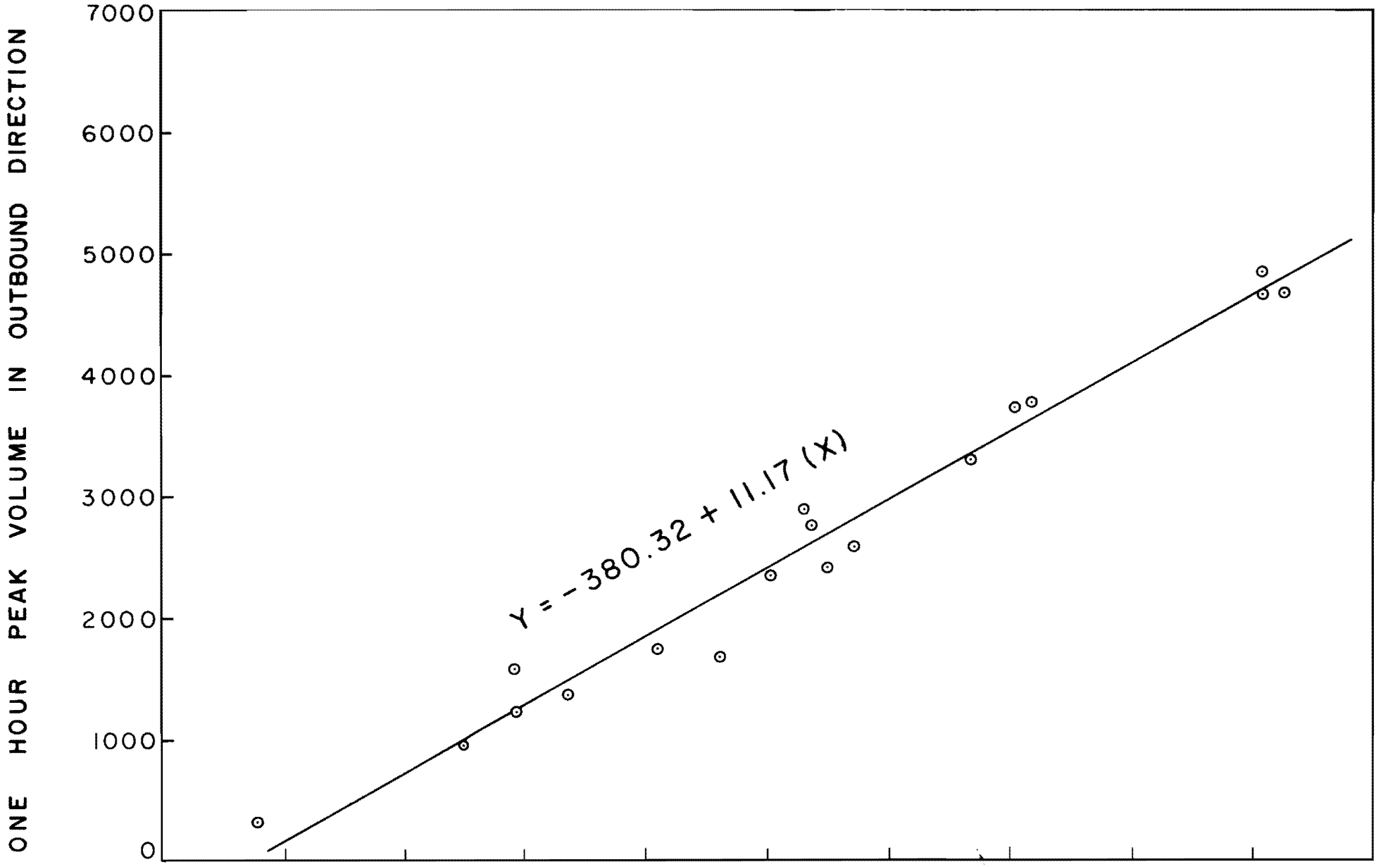
FREEWAY CROSS SECTION AT EACH FIVE MINUTE COUNT STATION

FIGURE 3. G



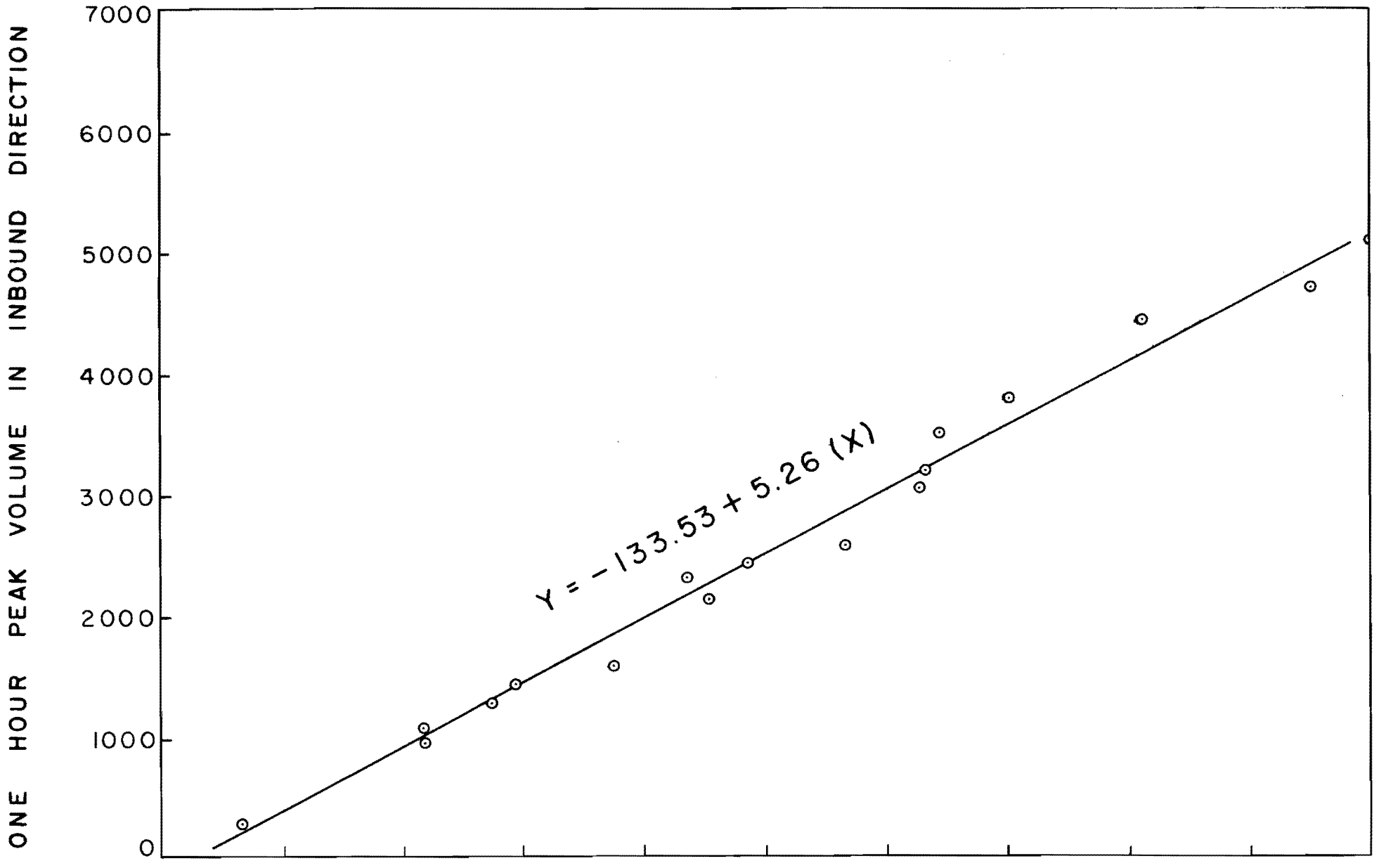
VOLUME CORRELATION BY DIRECTION

FIGURE 4.A



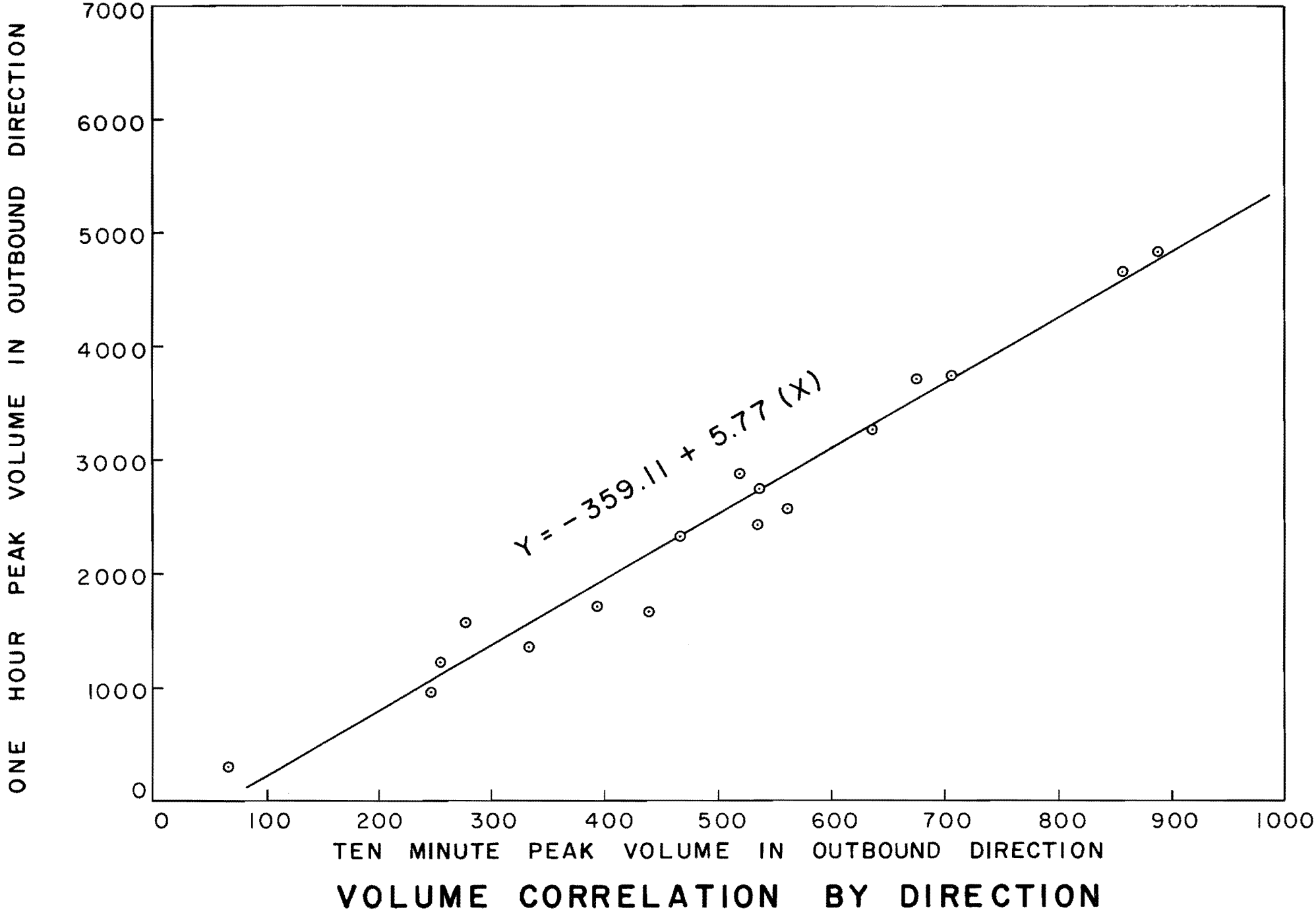
VOLUME CORRELATION BY DIRECTION

FIGURE 4.B



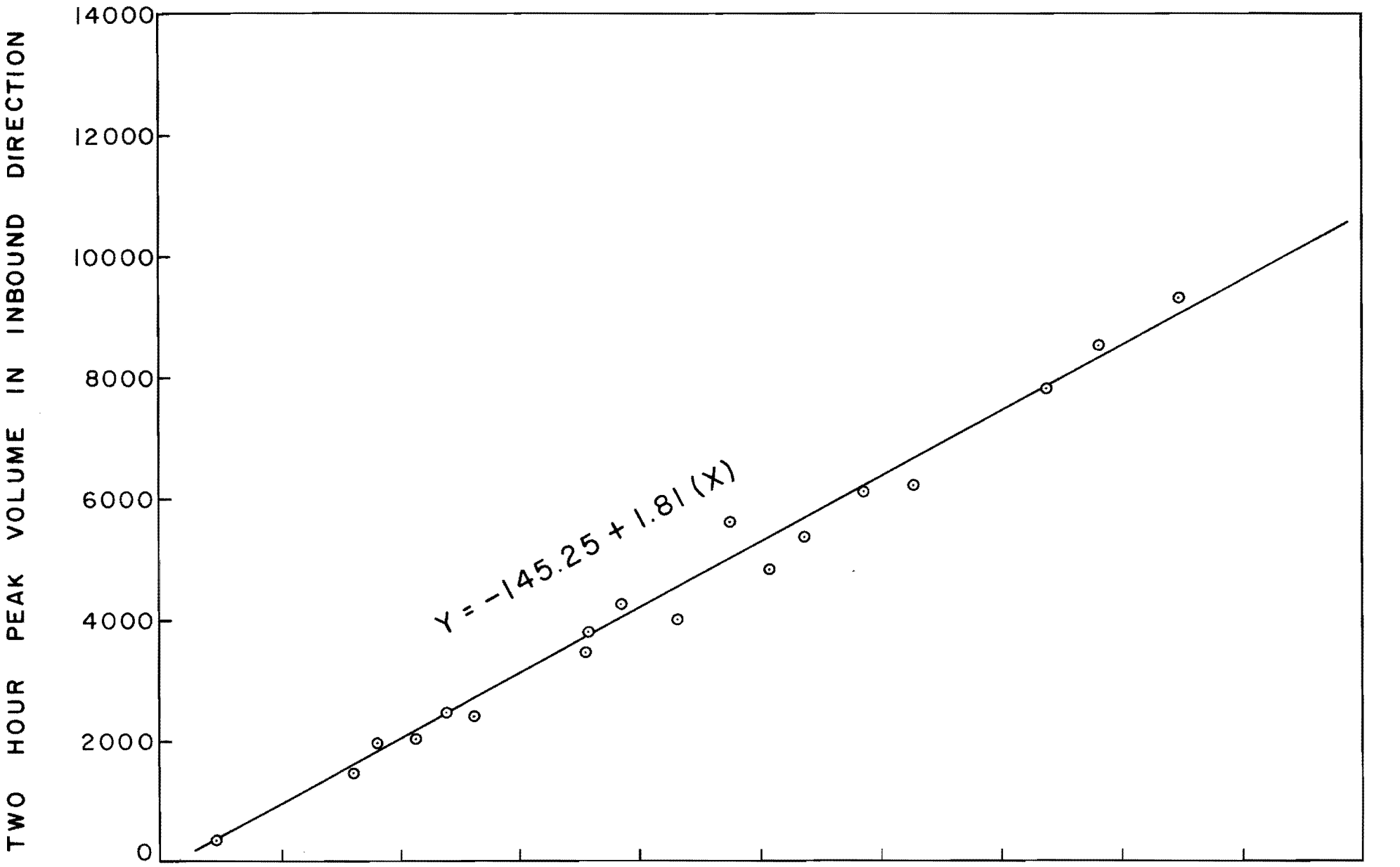
VOLUME CORRELATION BY DIRECTION

FIGURE 4.C



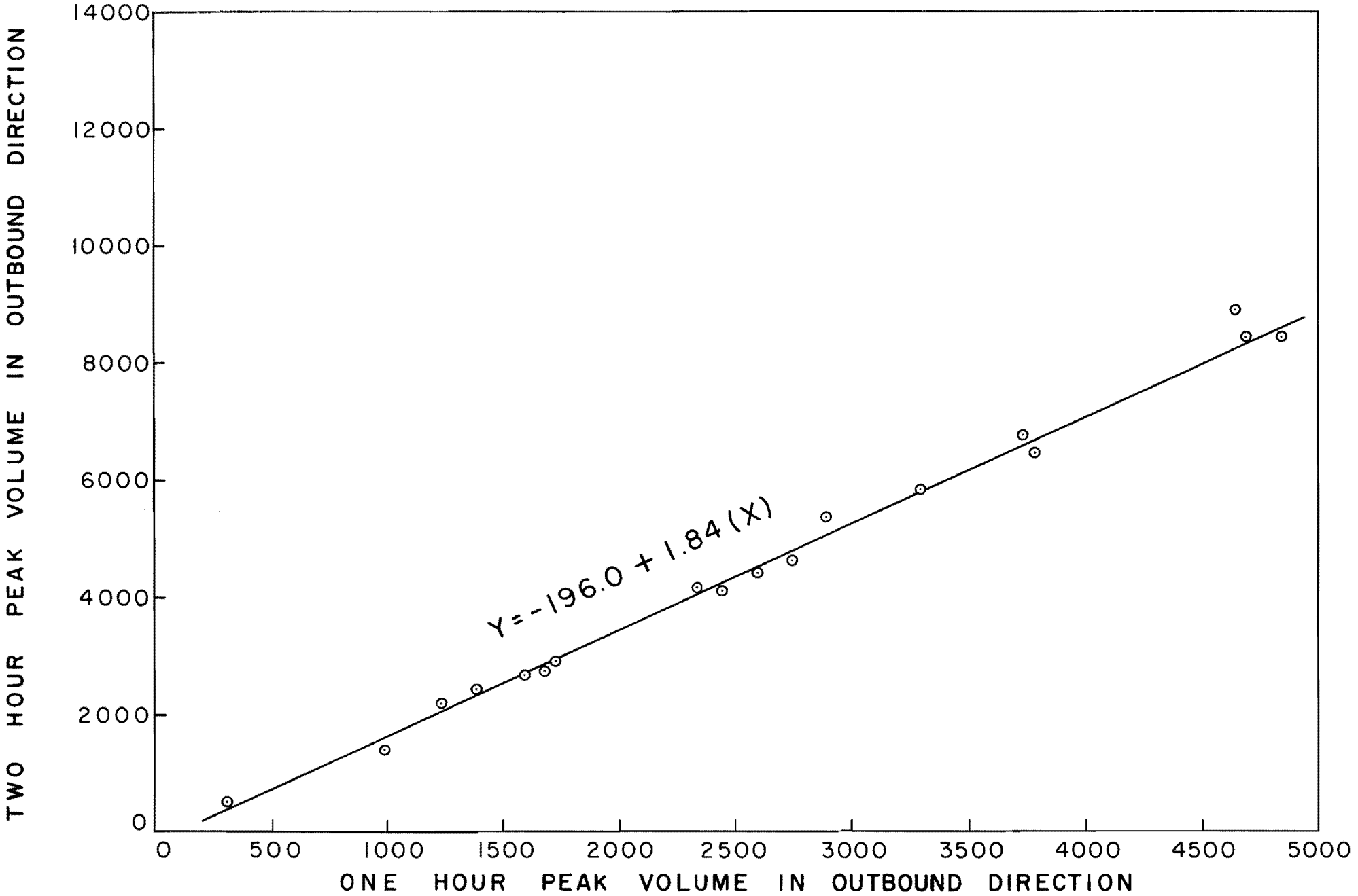
VOLUME CORRELATION BY DIRECTION

FIGURE 4.D



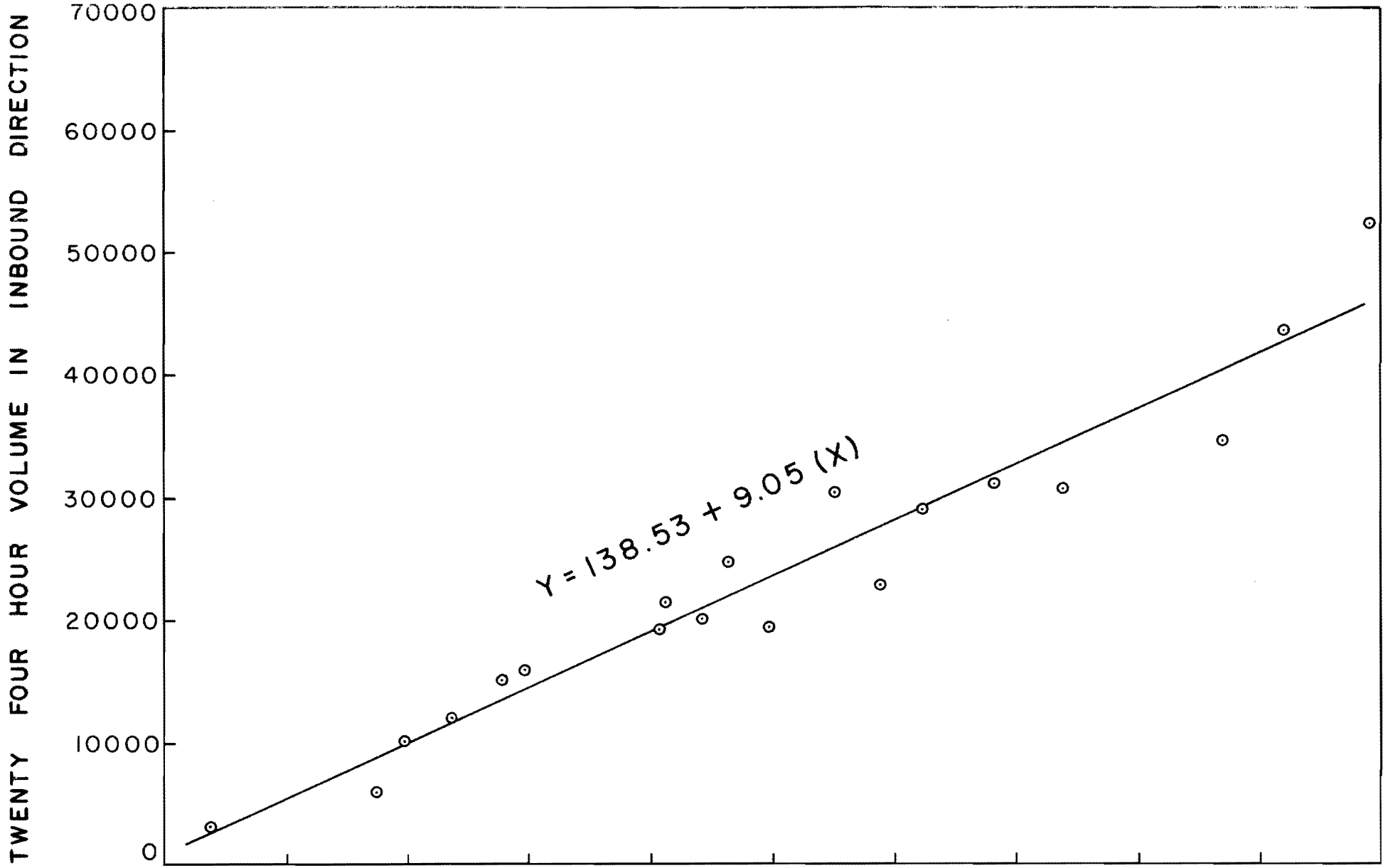
VOLUME CORRELATION BY DIRECTION

FIGURE 4.E



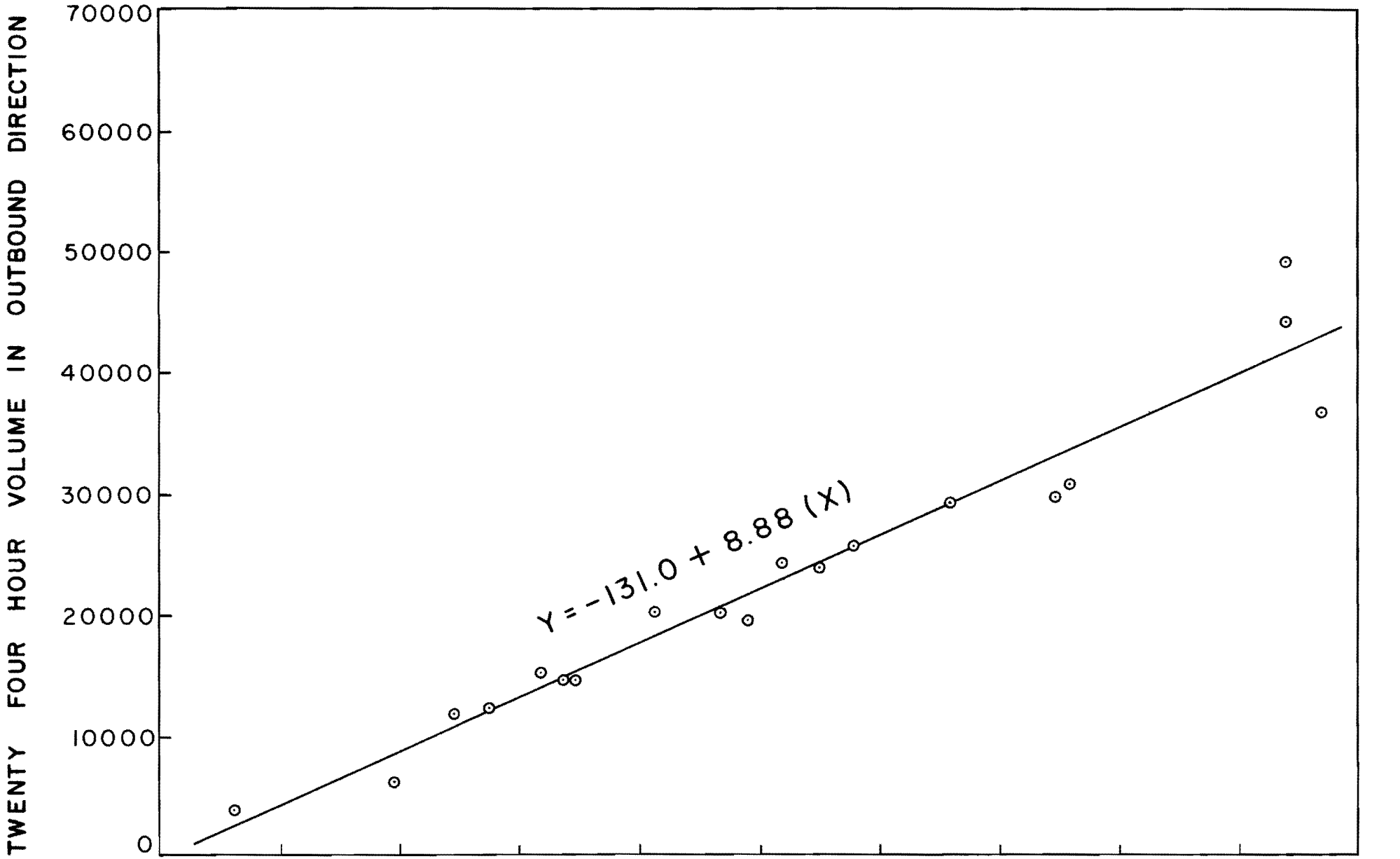
VOLUME CORRELATION BY DIRECTION

FIGURE 4.F



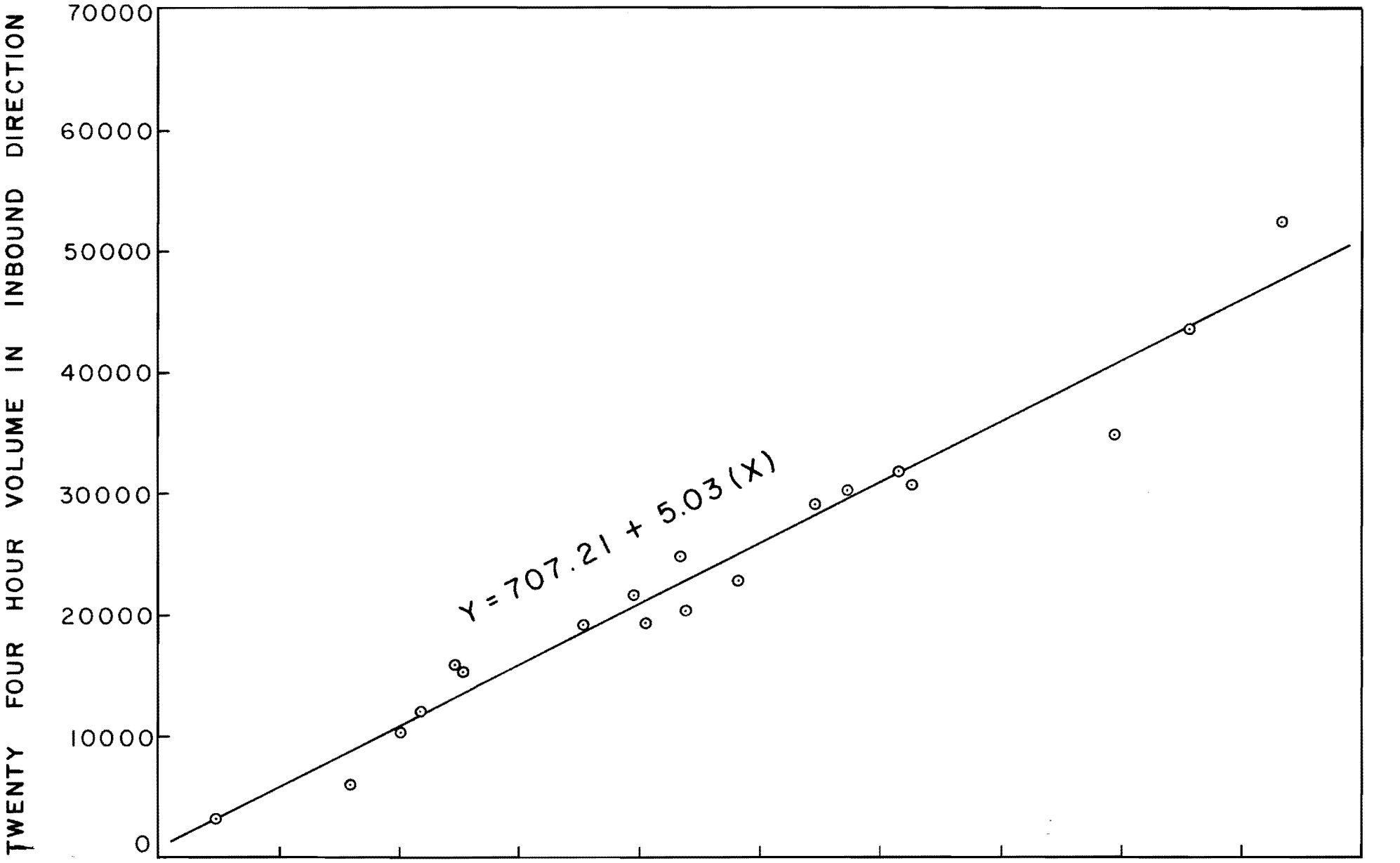
VOLUME CORRELATION BY DIRECTION

FIGURE 4.G



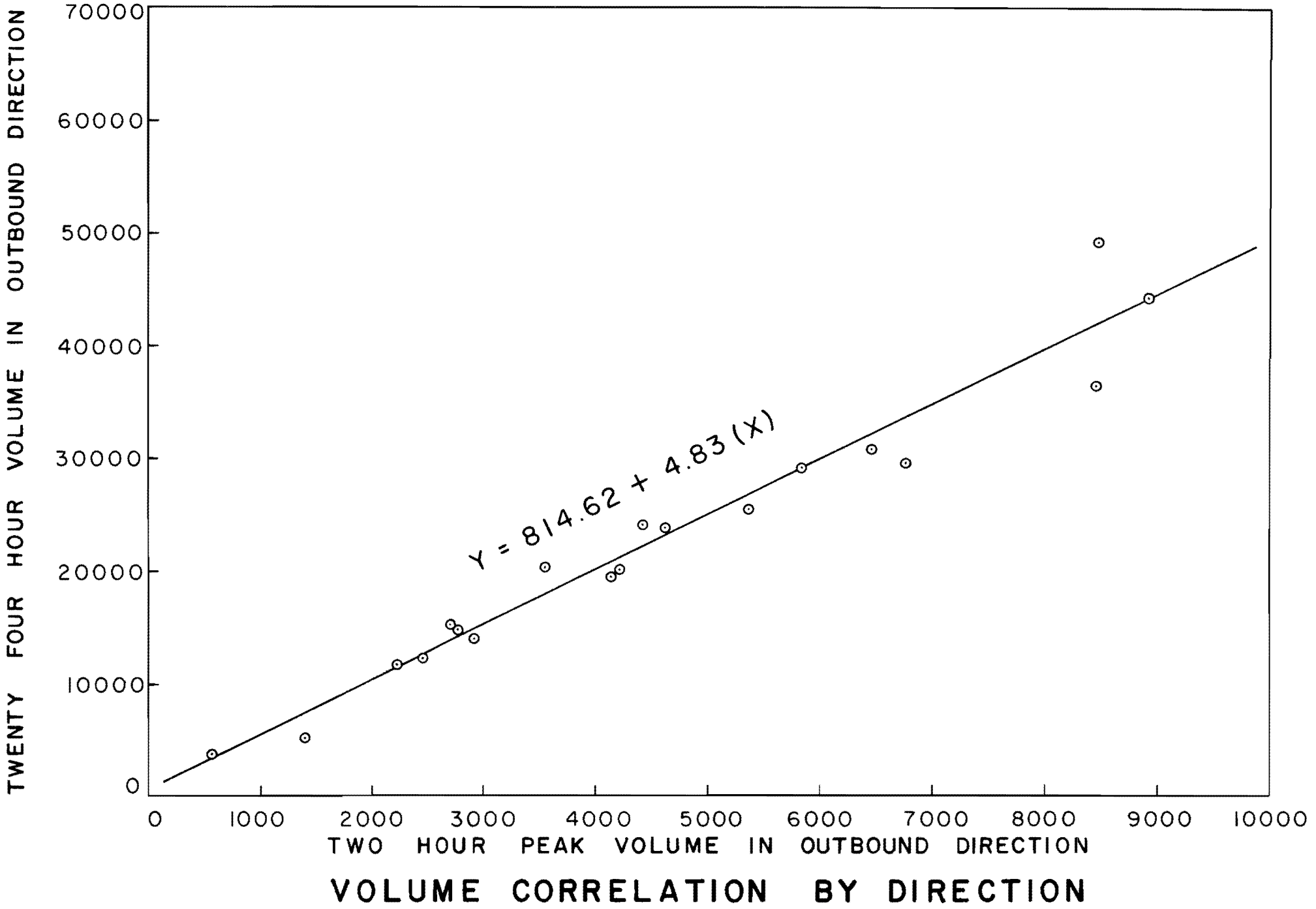
VOLUME CORRELATION BY DIRECTION

FIGURE 4.H



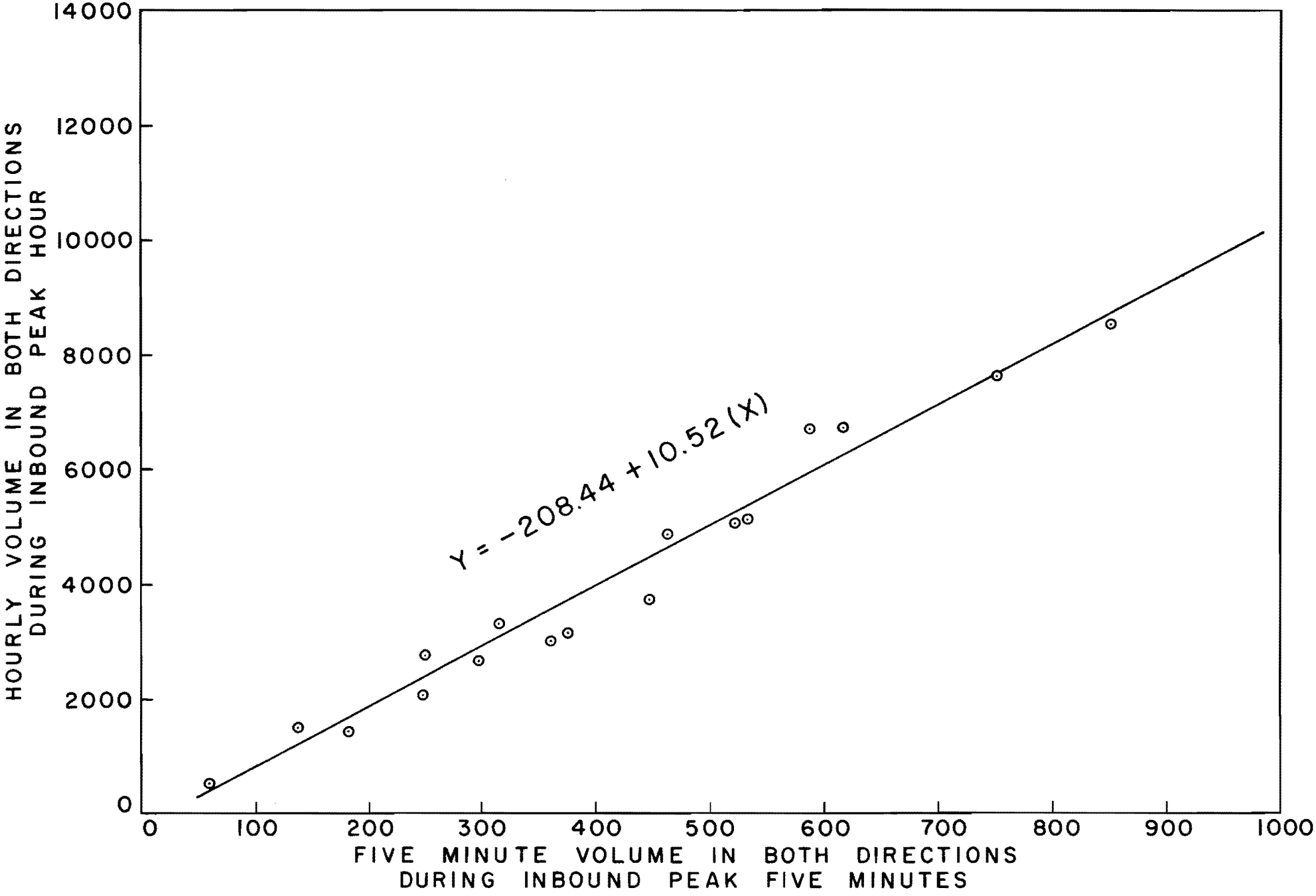
VOLUME CORRELATION BY DIRECTION

FIGURE 4.I



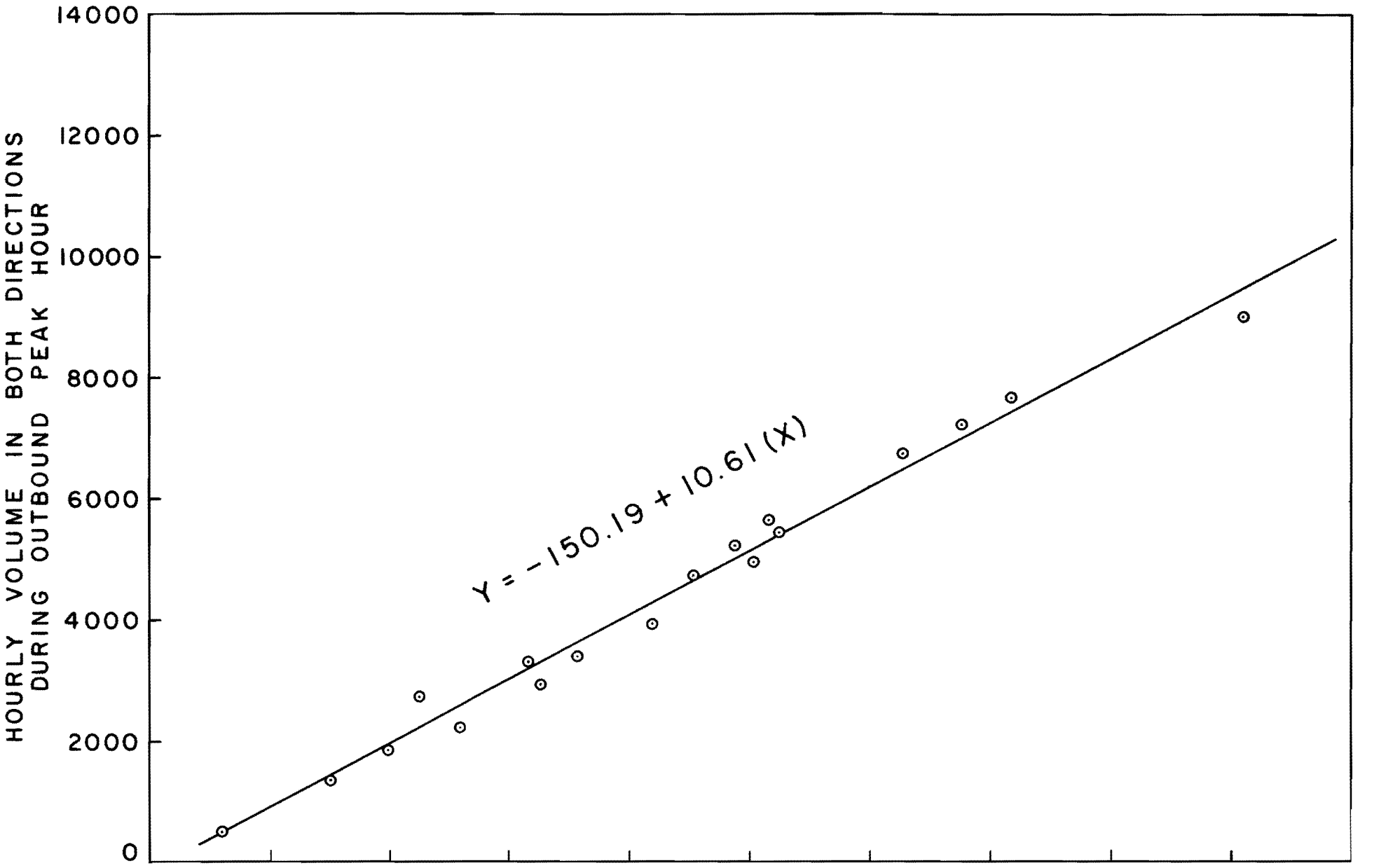
VOLUME CORRELATION BY DIRECTION

FIGURE 4.J



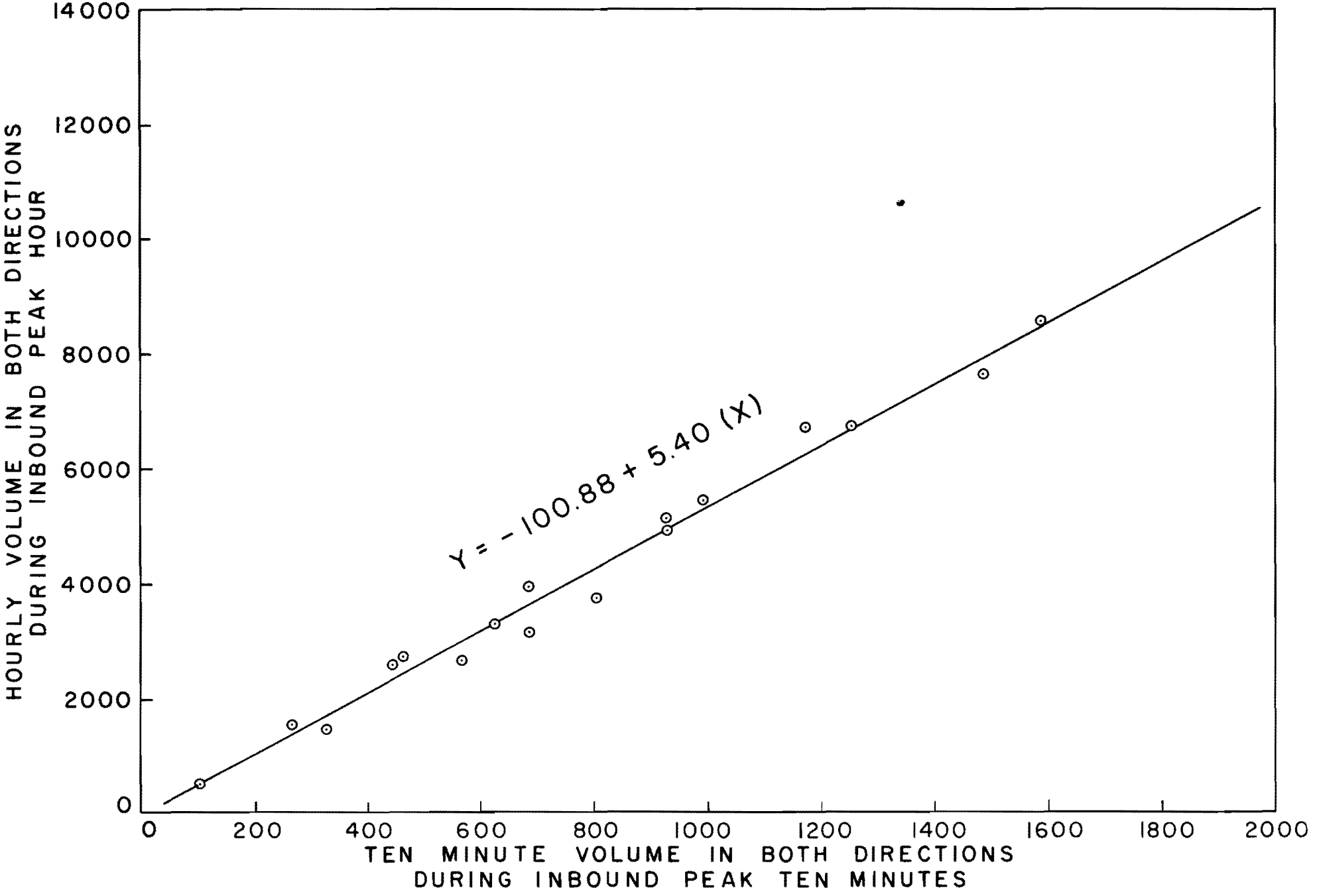
TOTAL VOLUME CORRELATION

FIGURE 5.A



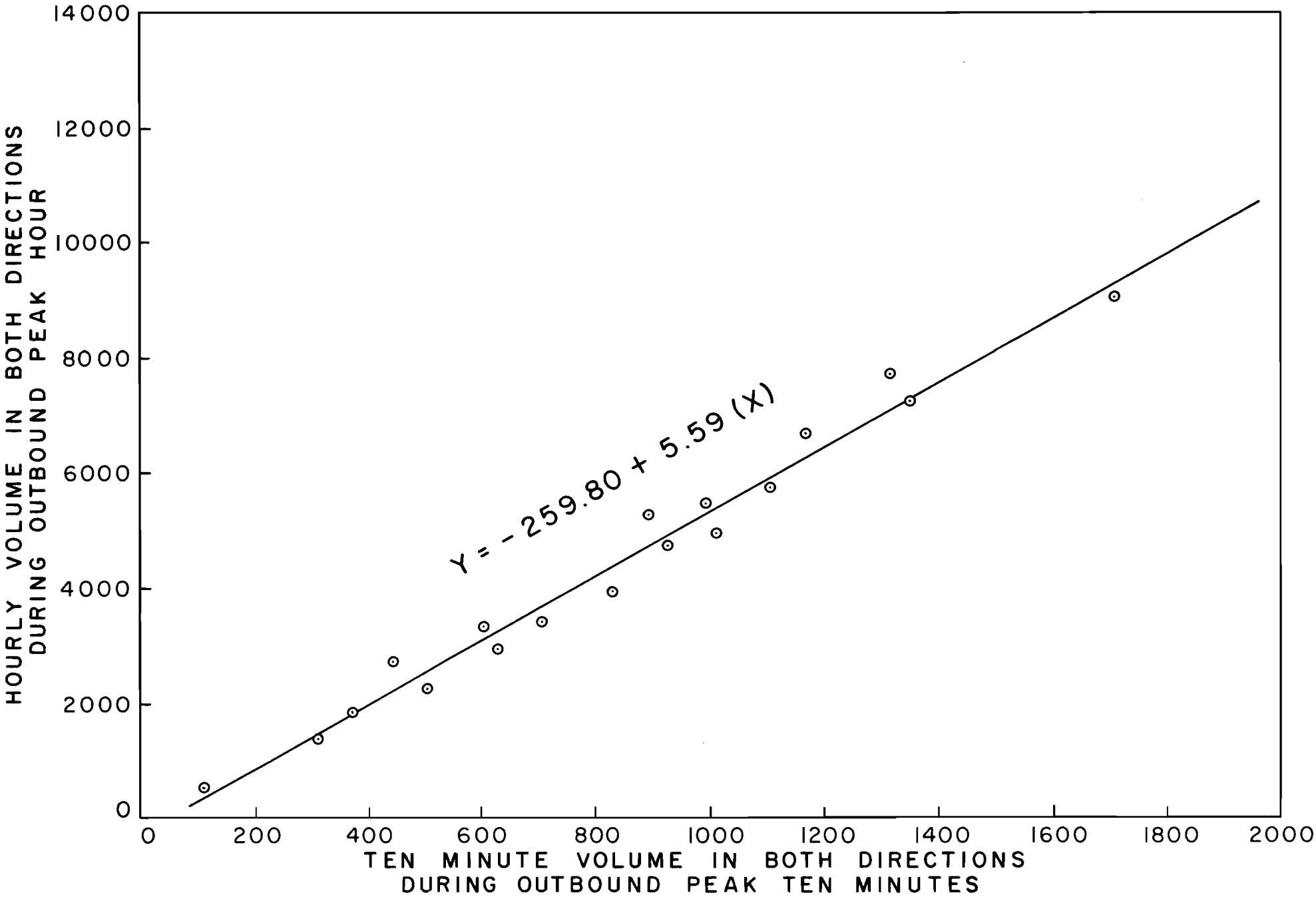
TOTAL VOLUME CORRELATION

FIGURE 5.B



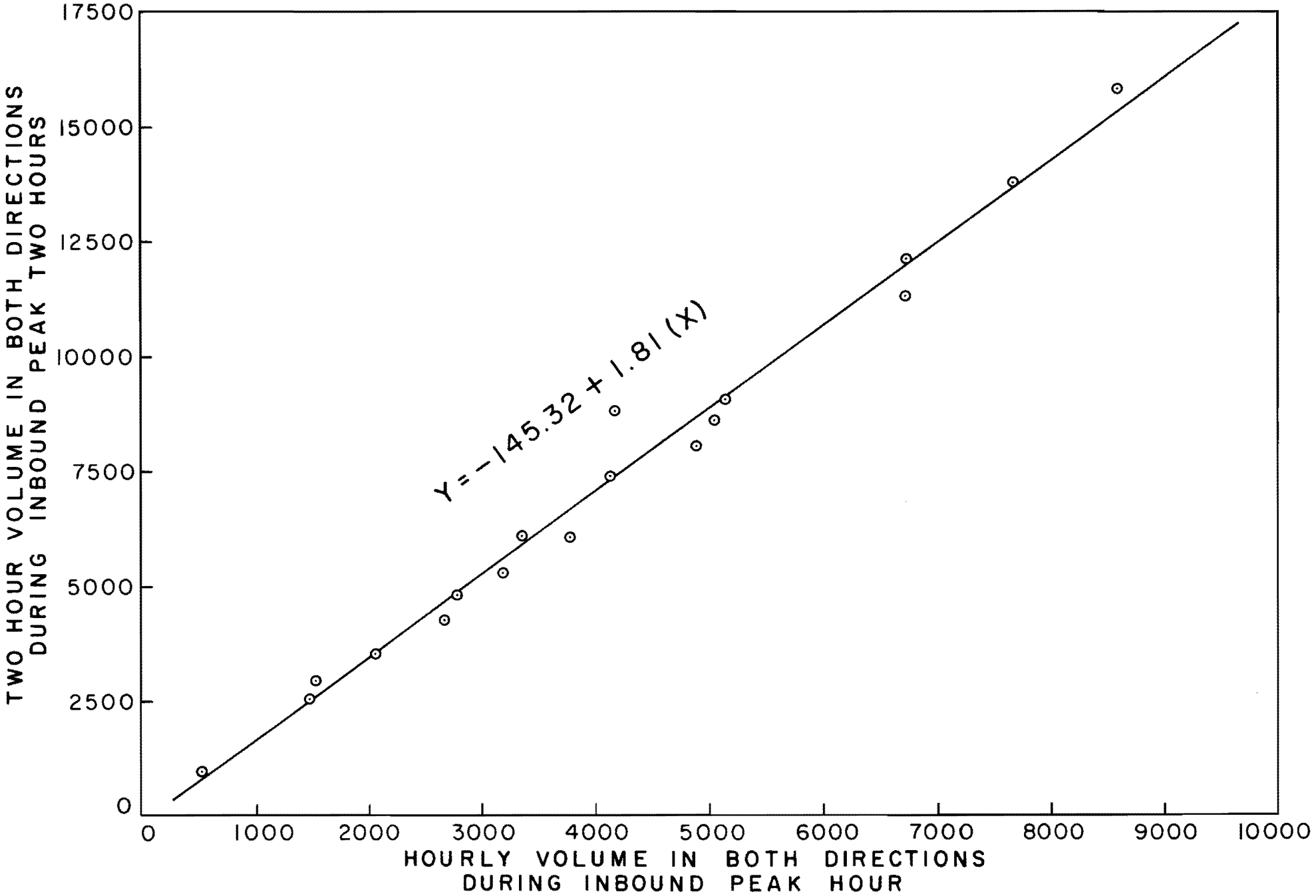
TOTAL VOLUME CORRELATION

FIGURE 5.C



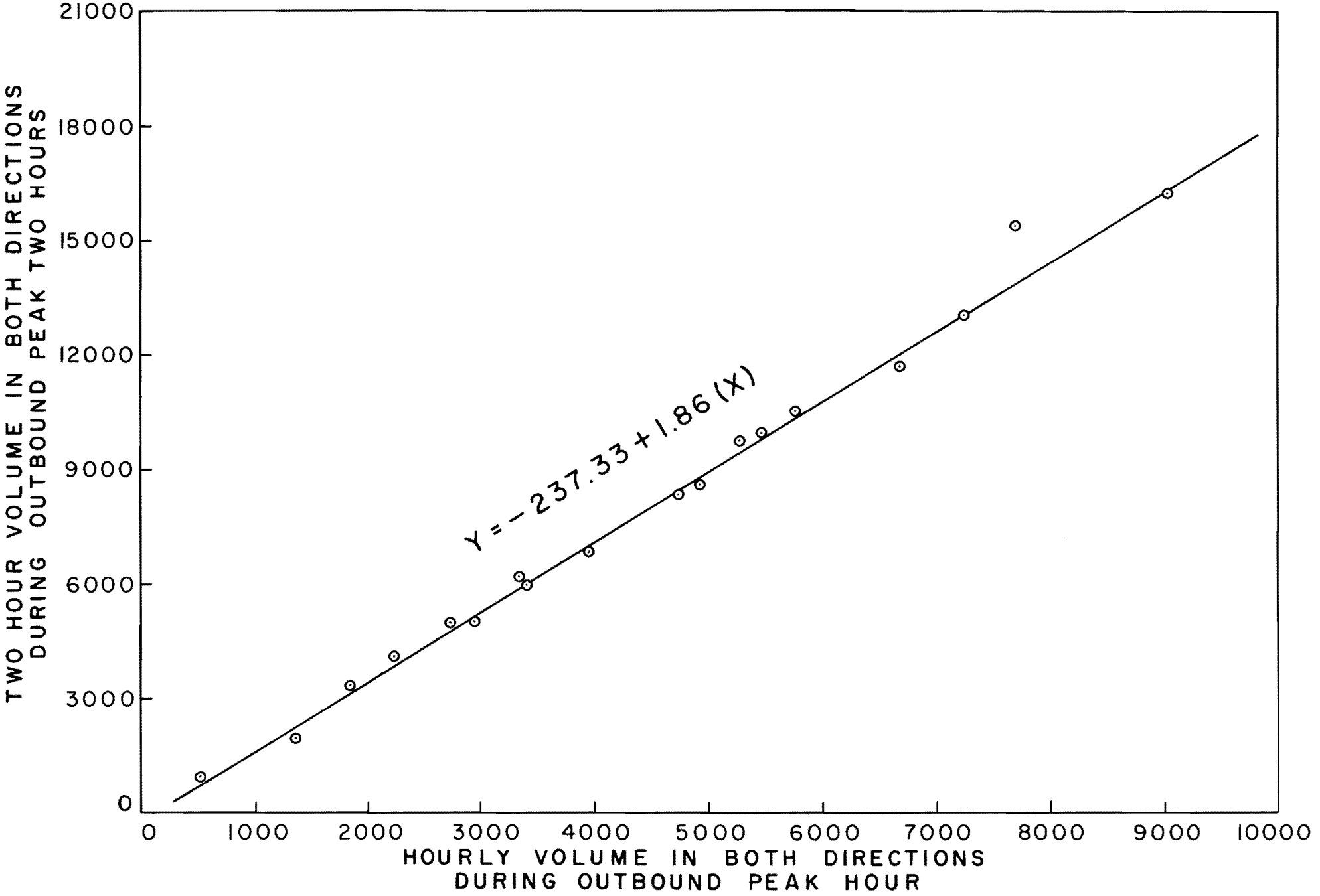
TOTAL VOLUME CORRELATION

FIGURE 5.D



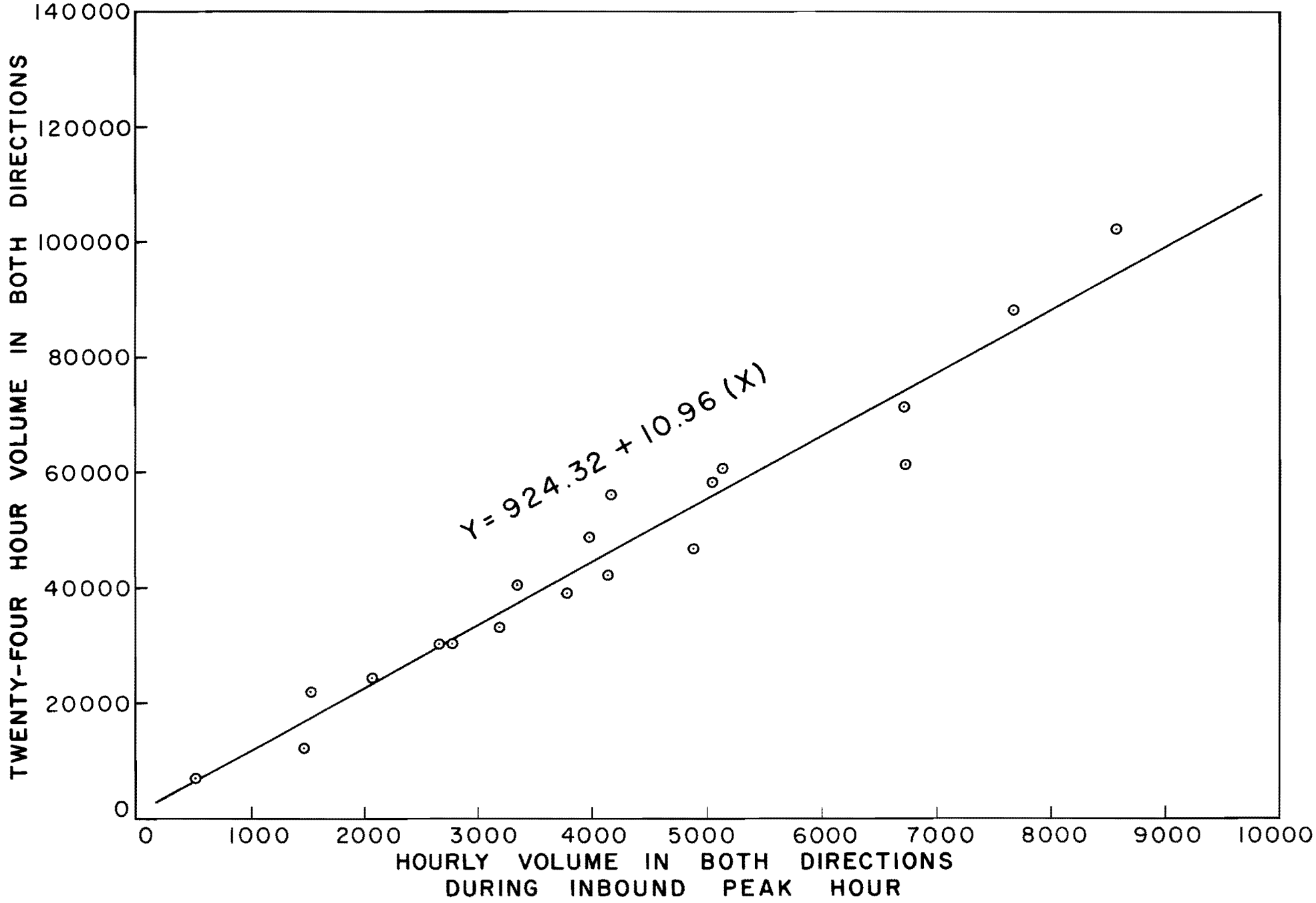
TOTAL VOLUME CORRELATION

FIGURE 5.E



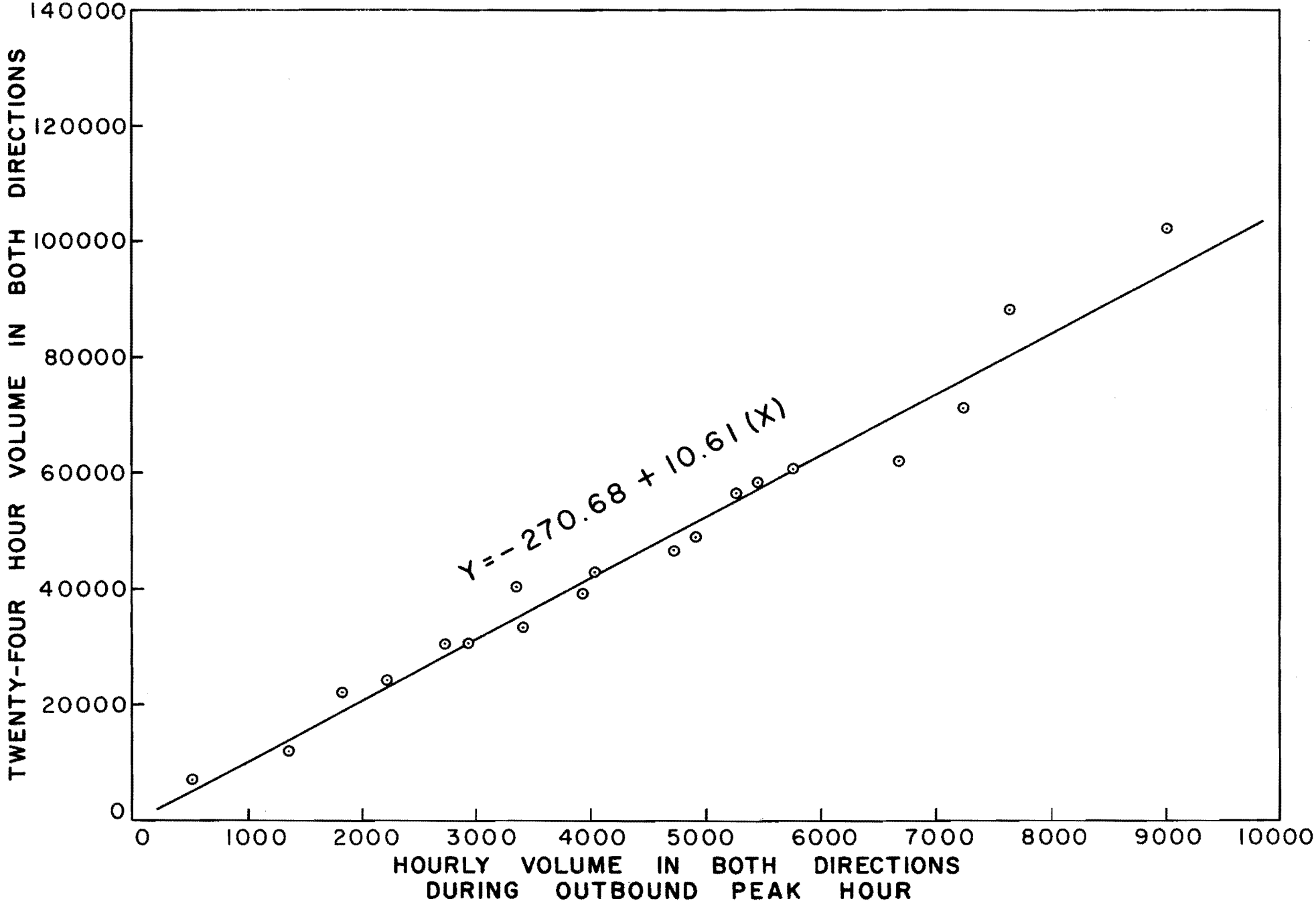
TOTAL VOLUME CORRELATION

FIGURE 5.F



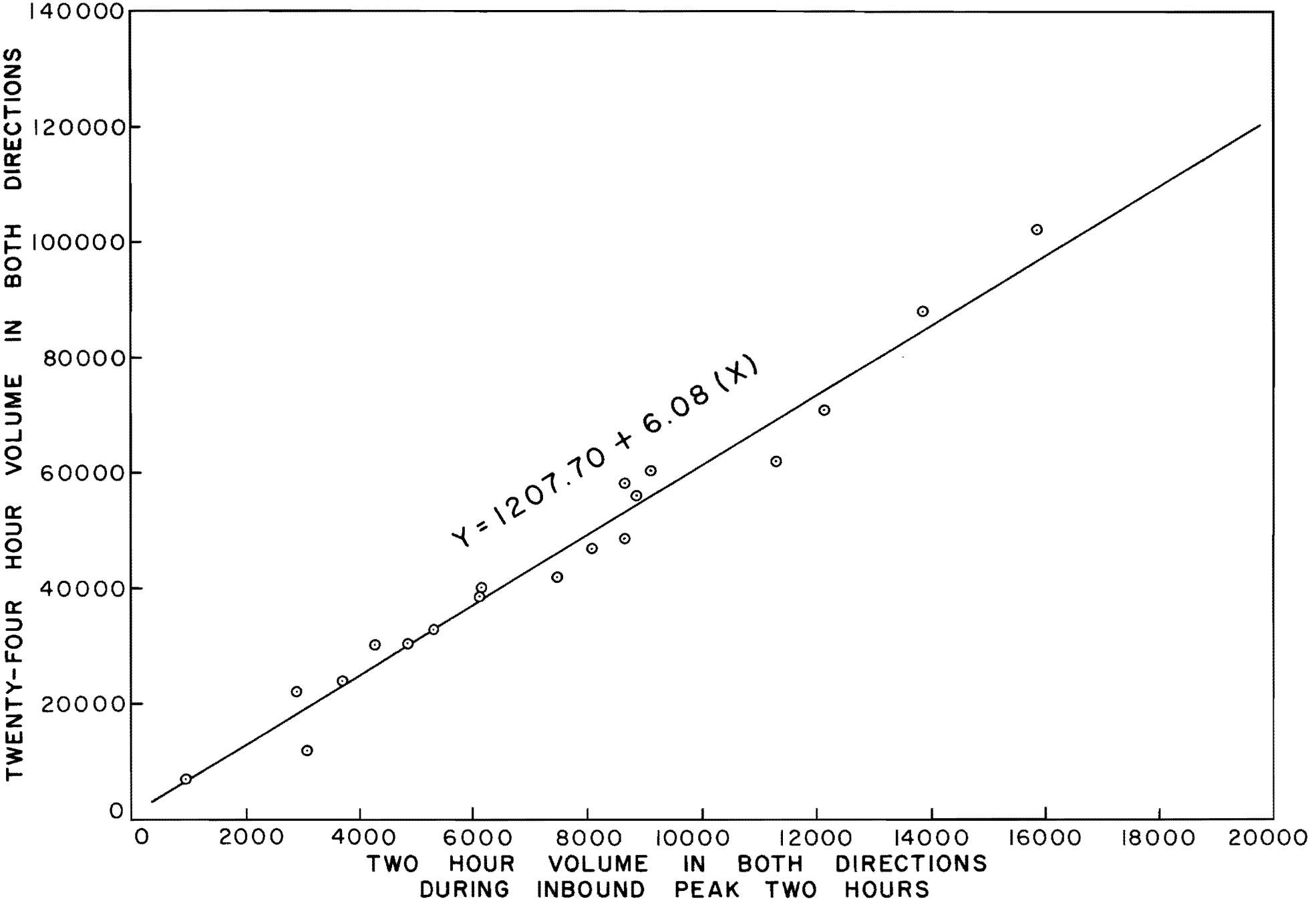
TOTAL VOLUME CORRELATION

FIGURE 5.G



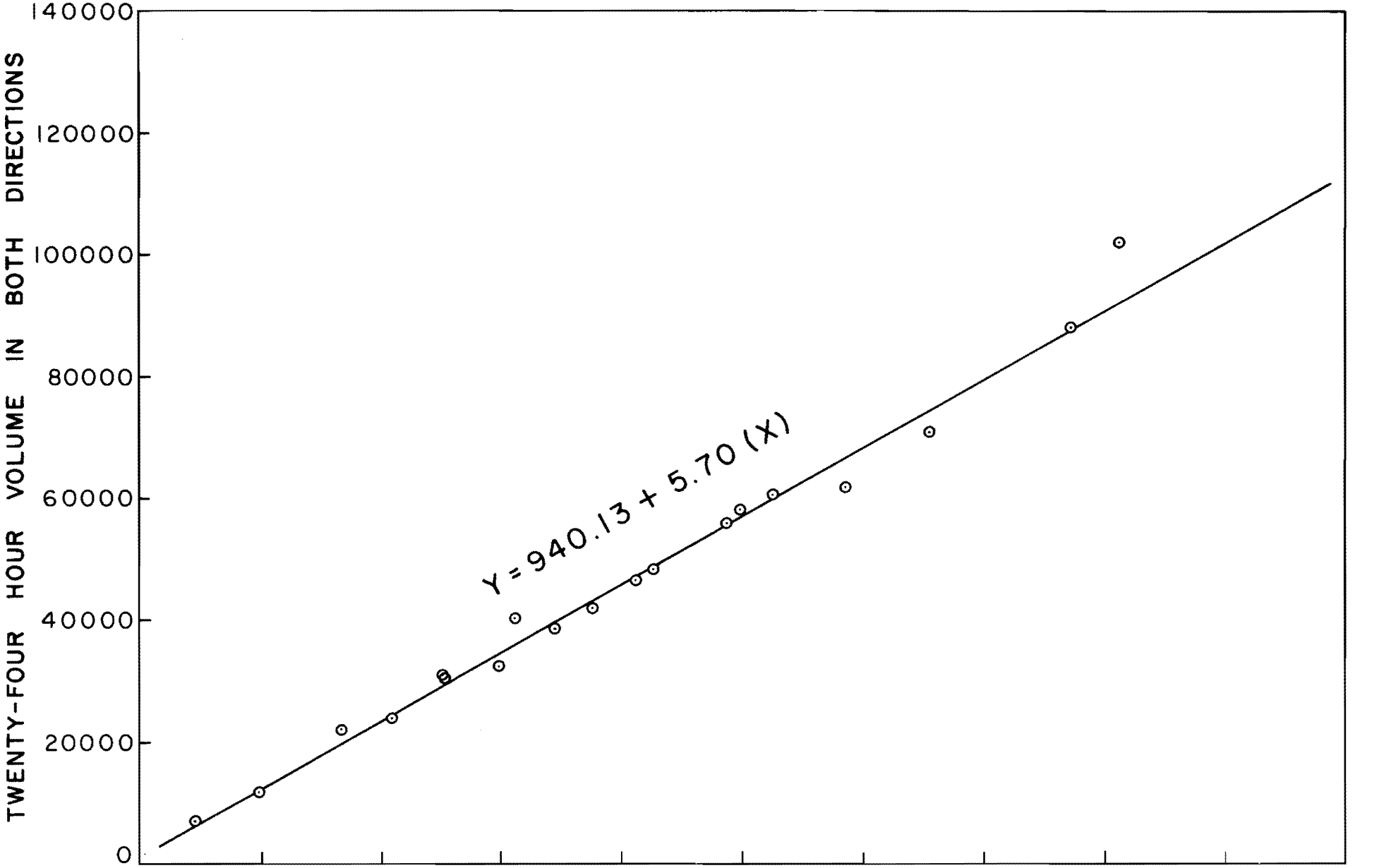
TOTAL VOLUME CORRELATION

FIGURE 5.H



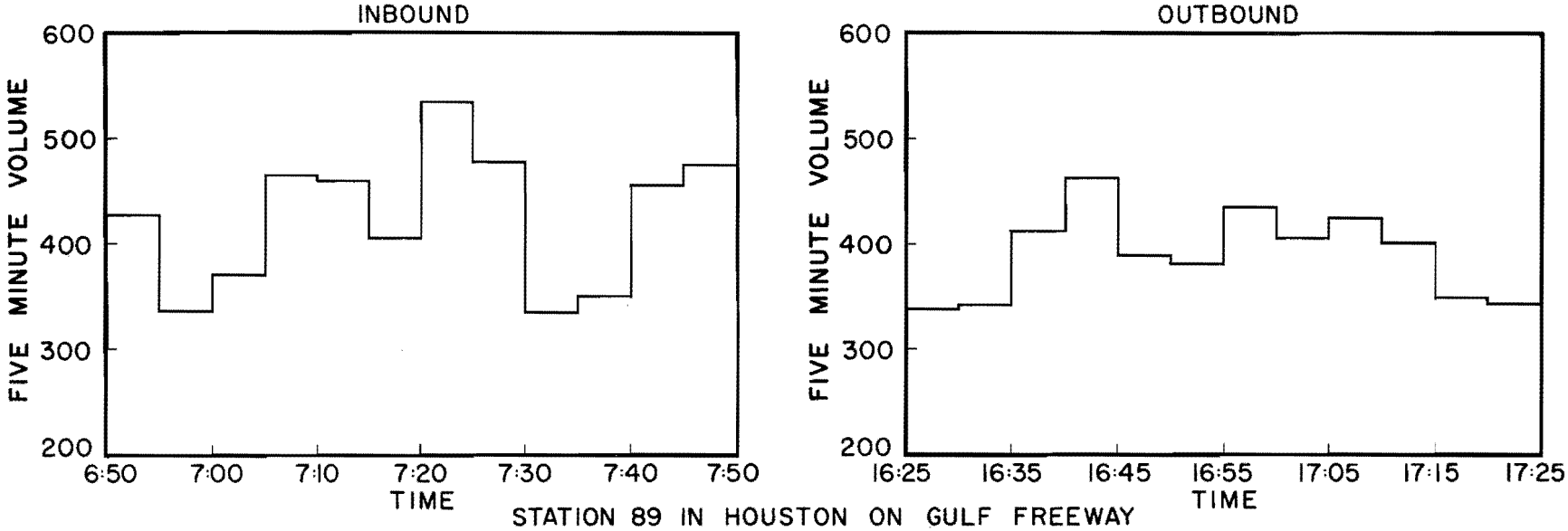
TOTAL VOLUME CORRELATION

FIGURE 5.I

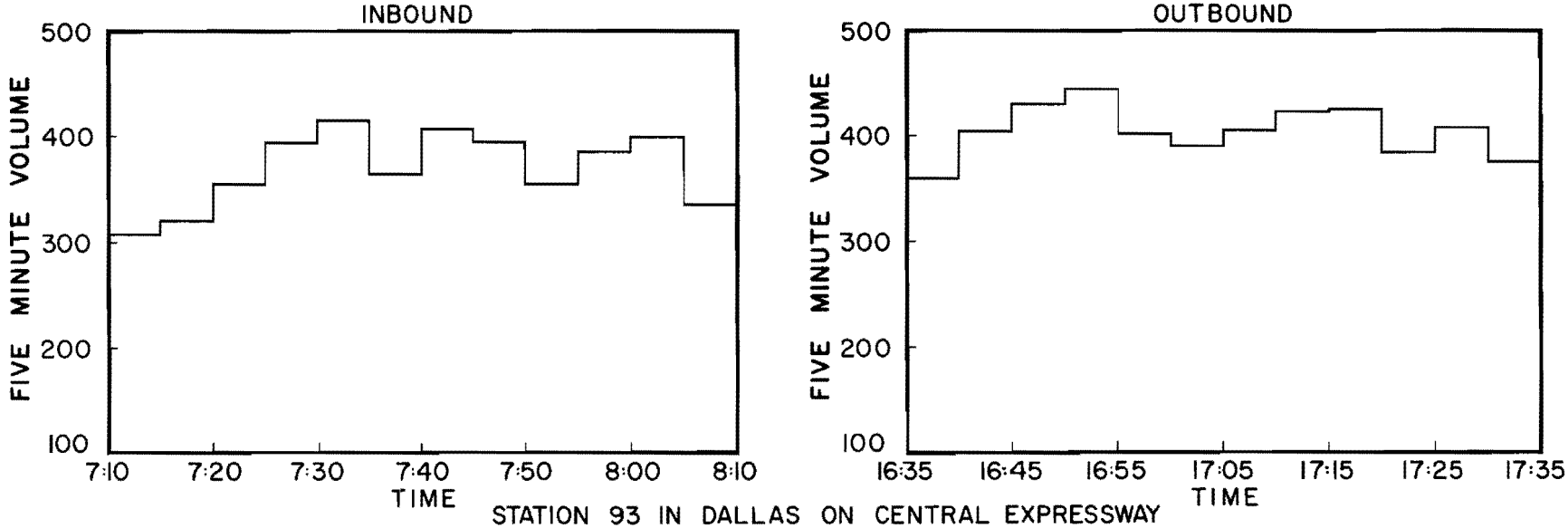


TOTAL VOLUME CORRELATION

FIGURE 5.J



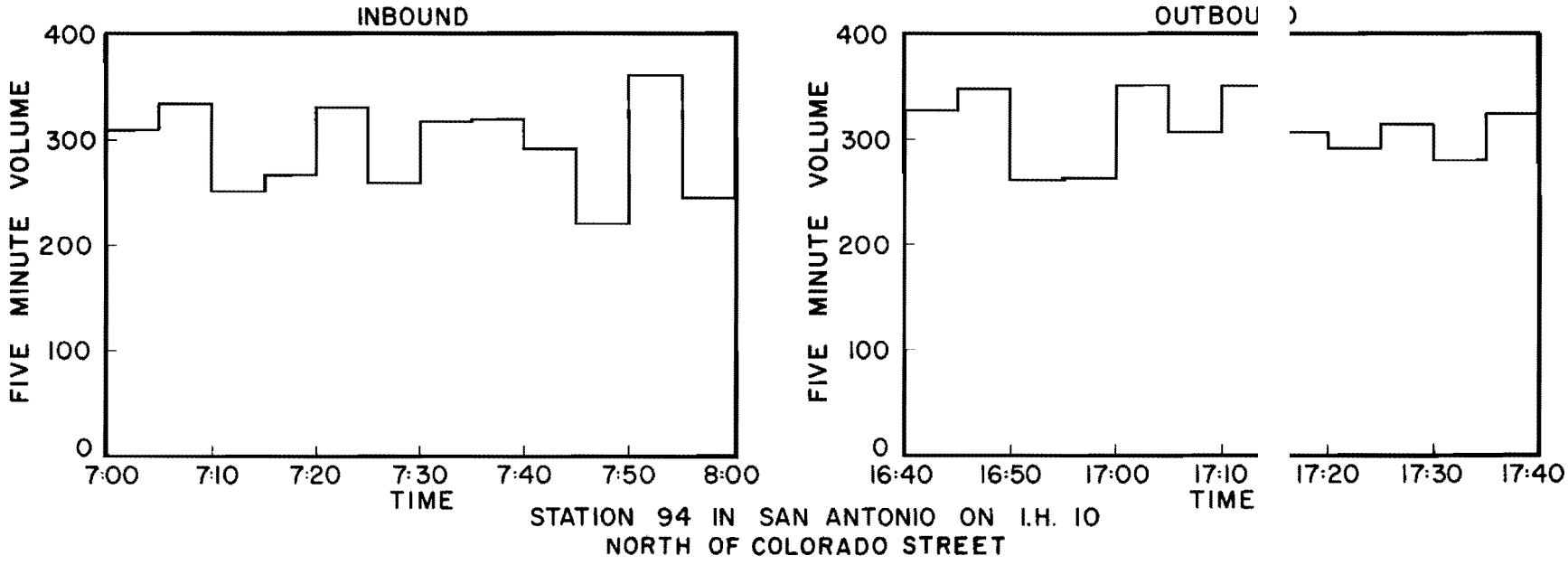
STATION 89 IN HOUSTON ON GULF FREEWAY
NORTHEAST OF BRILEY STREET



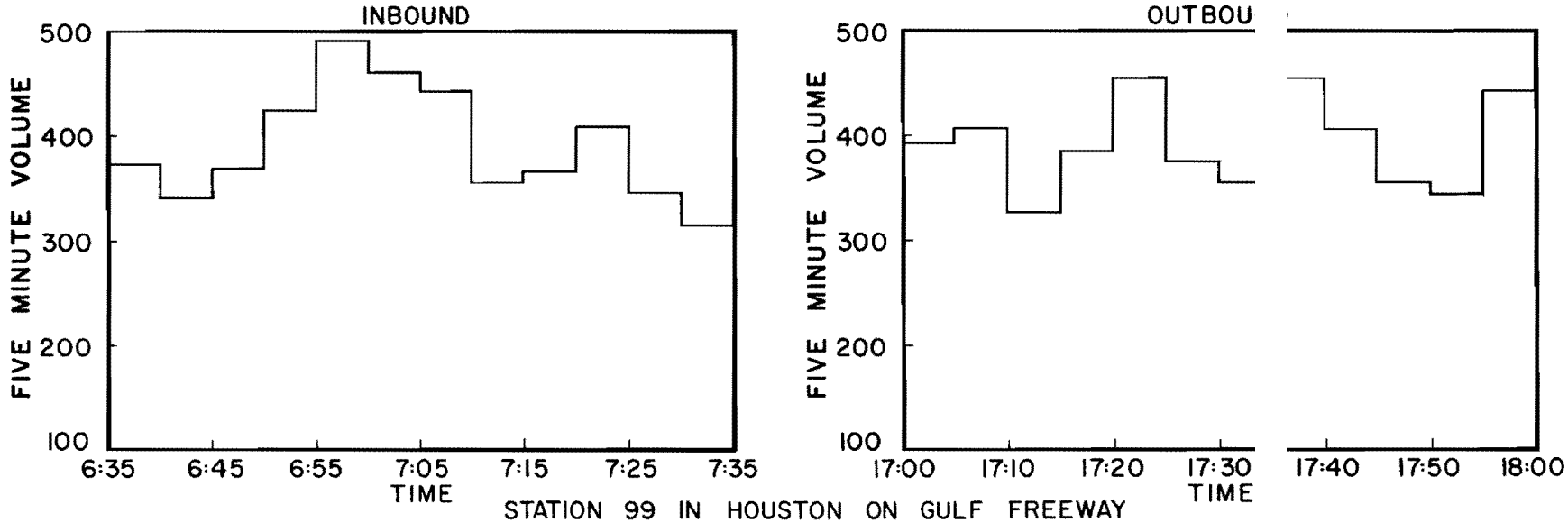
STATION 93 IN DALLAS ON CENTRAL EXPRESSWAY
NORTH OF ROSS AVENUE

FIVE MINUTE VOLUME DISTRIBUTION
WITHIN PEAK HOUR

FIGURE 6.A



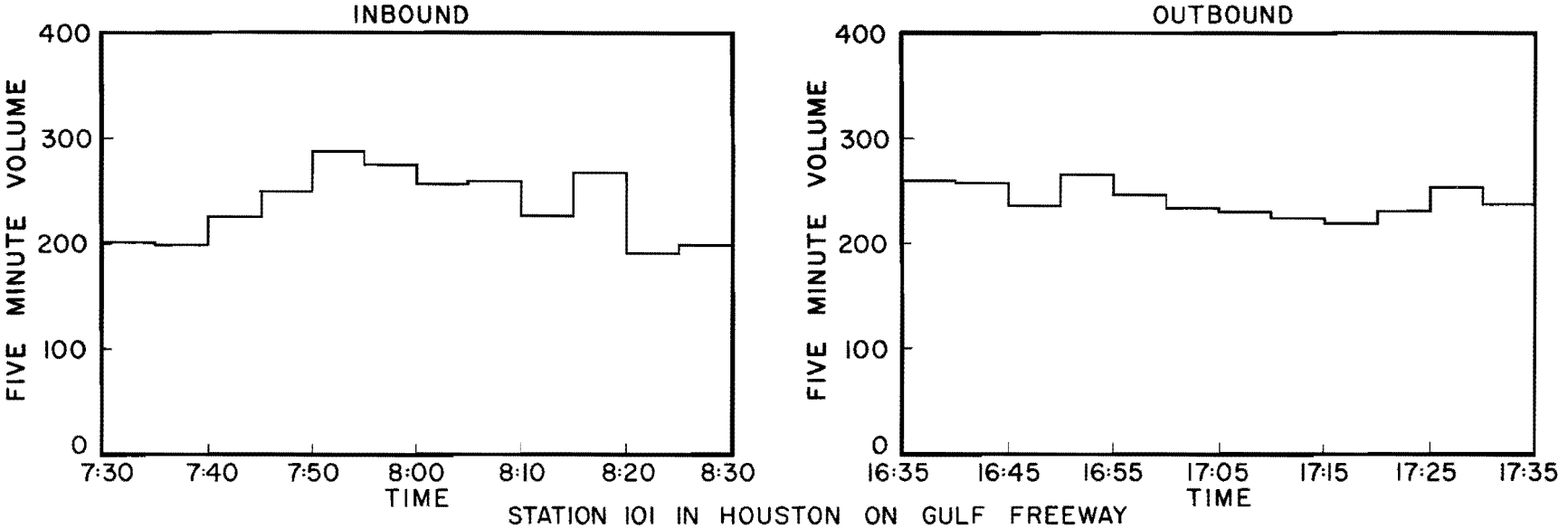
STATION 94 IN SAN ANTONIO ON I.H. 10
NORTH OF COLORADO STREET



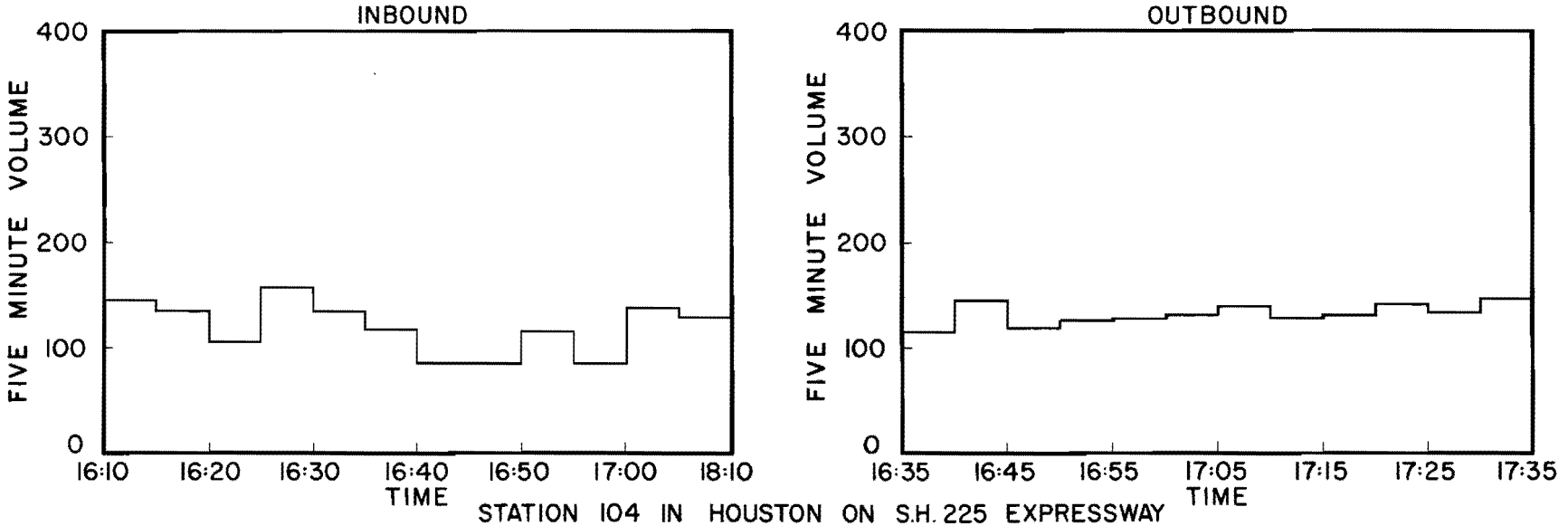
STATION 99 IN HOUSTON ON GULF FREEWAY
AT WOODRIDGE STREET OVERPASS

FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.B



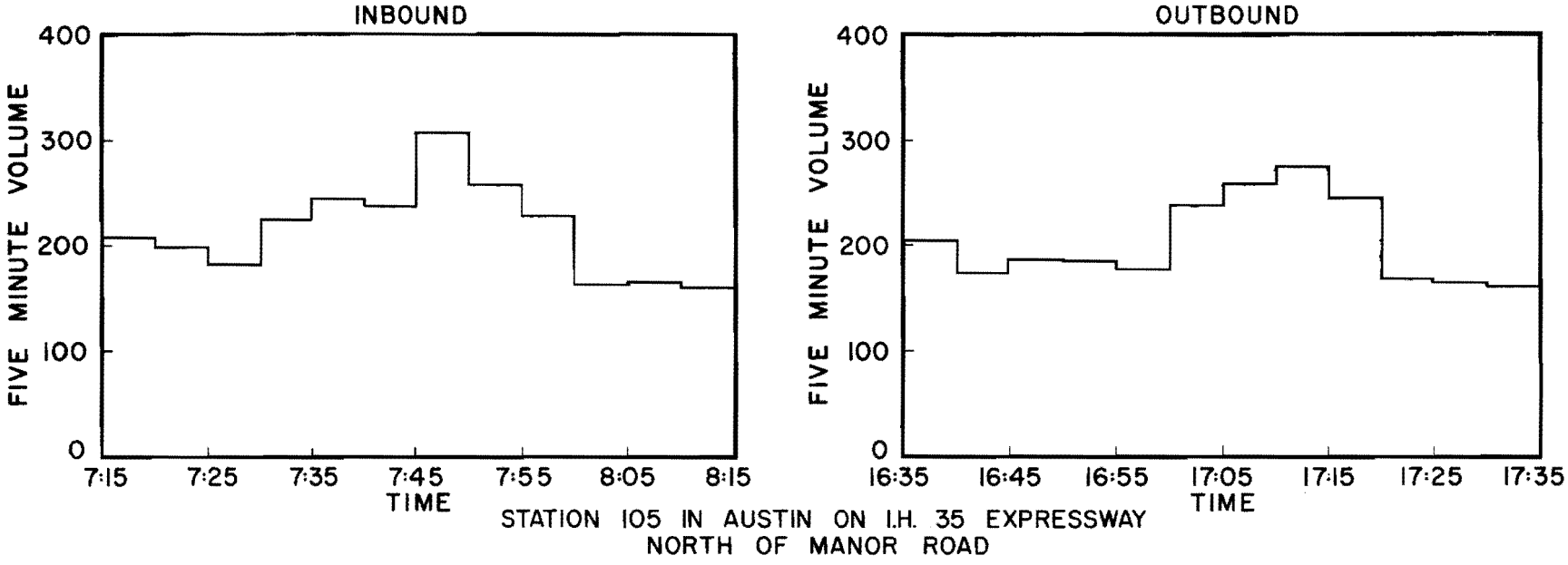
STATION 101 IN HOUSTON ON GULF FREEWAY
SOUTH OF STATE HIGHWAY 225



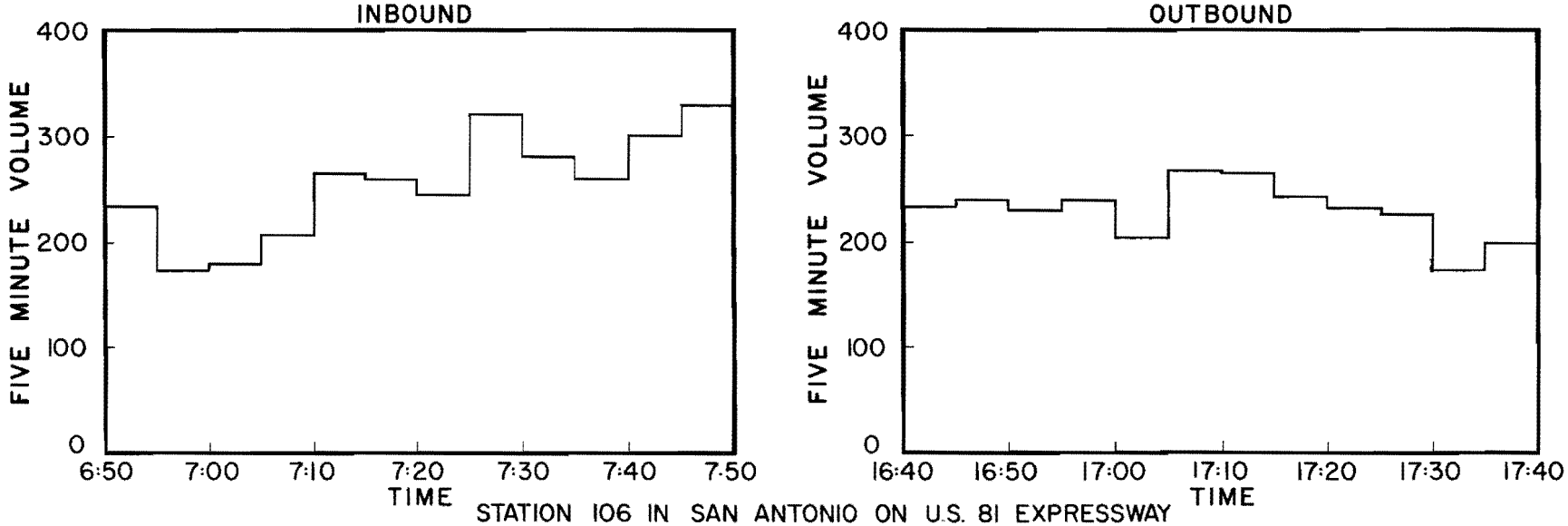
STATION 104 IN HOUSTON ON S.H. 225 EXPRESSWAY
BETWEEN BERKLEY ST. AND DOVER ST.

FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.C



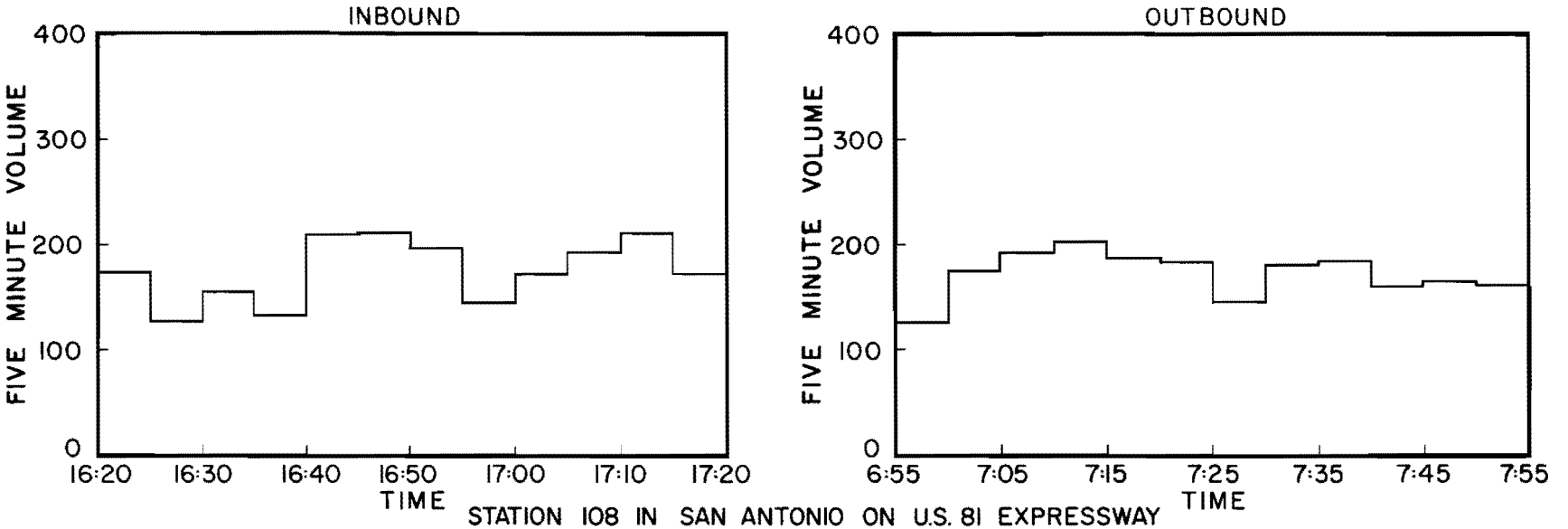
STATION 105 IN AUSTIN ON I.H. 35 EXPRESSWAY
NORTH OF MANOR ROAD



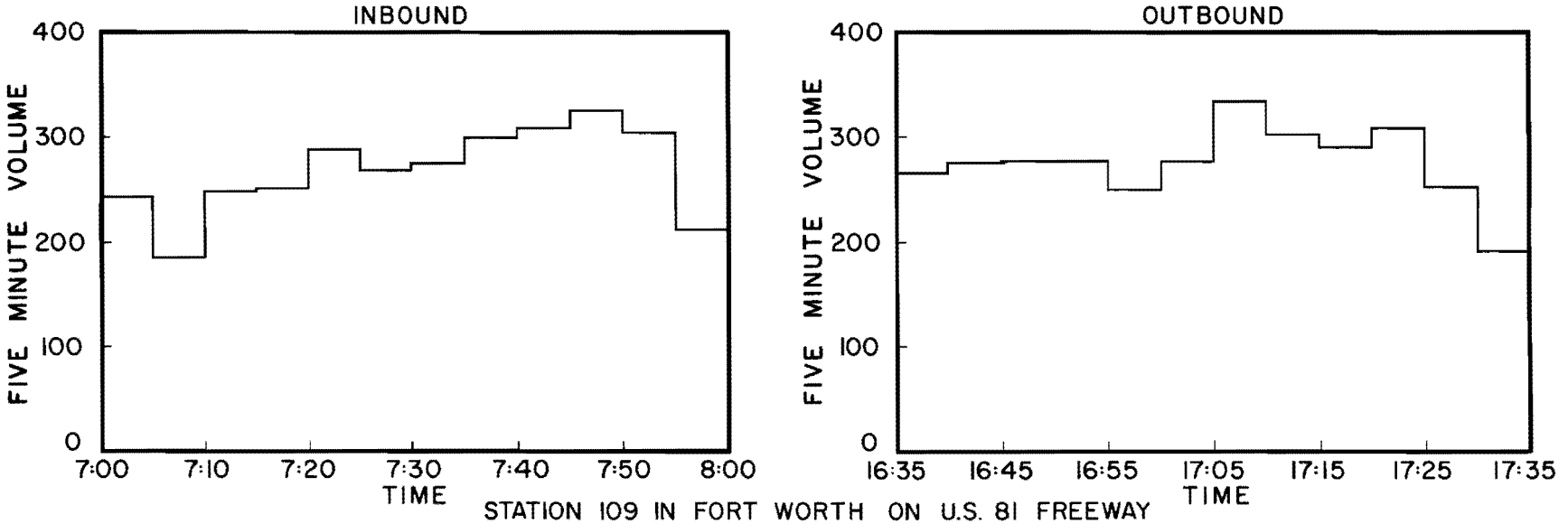
STATION 106 IN SAN ANTONIO ON U.S. 81 EXPRESSWAY
SOUTH OF ALAMO STREET

FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.D



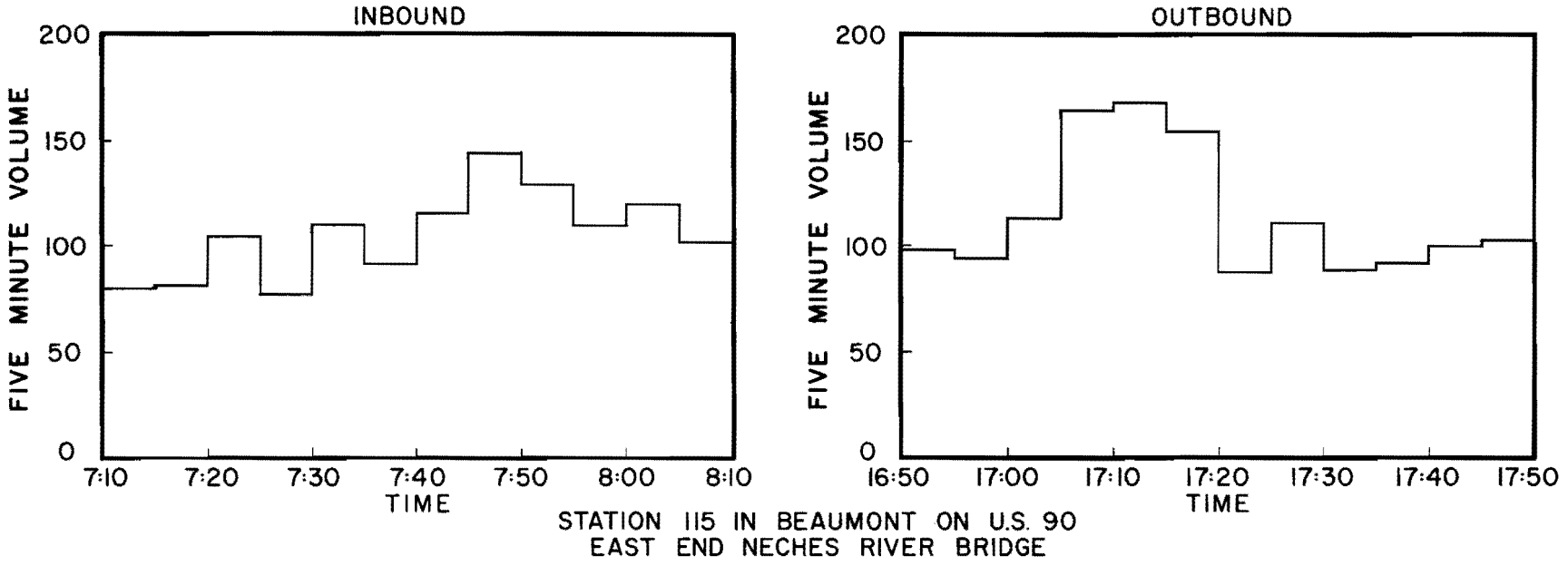
STATION 108 IN SAN ANTONIO ON U.S. 81 EXPRESSWAY
WEST OF NORTH SAINT MARY'S STREET



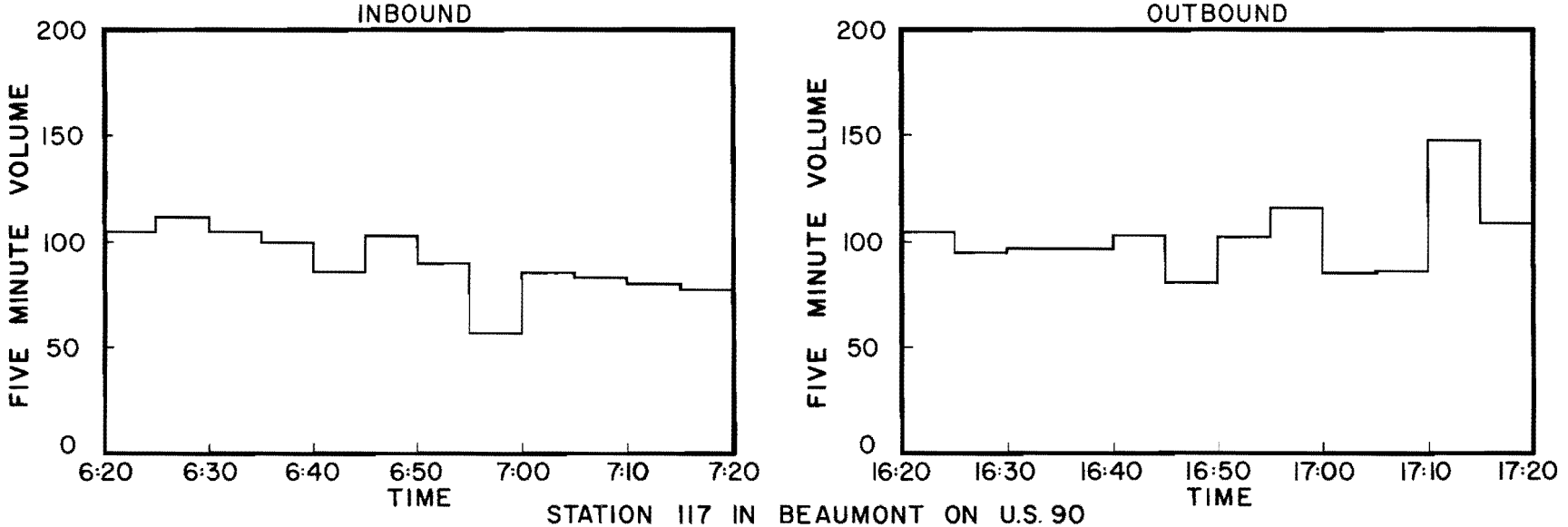
STATION 109 IN FORT WORTH ON U.S. 81 FREEWAY
SOUTH OF BROADWAY STREET

FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.E



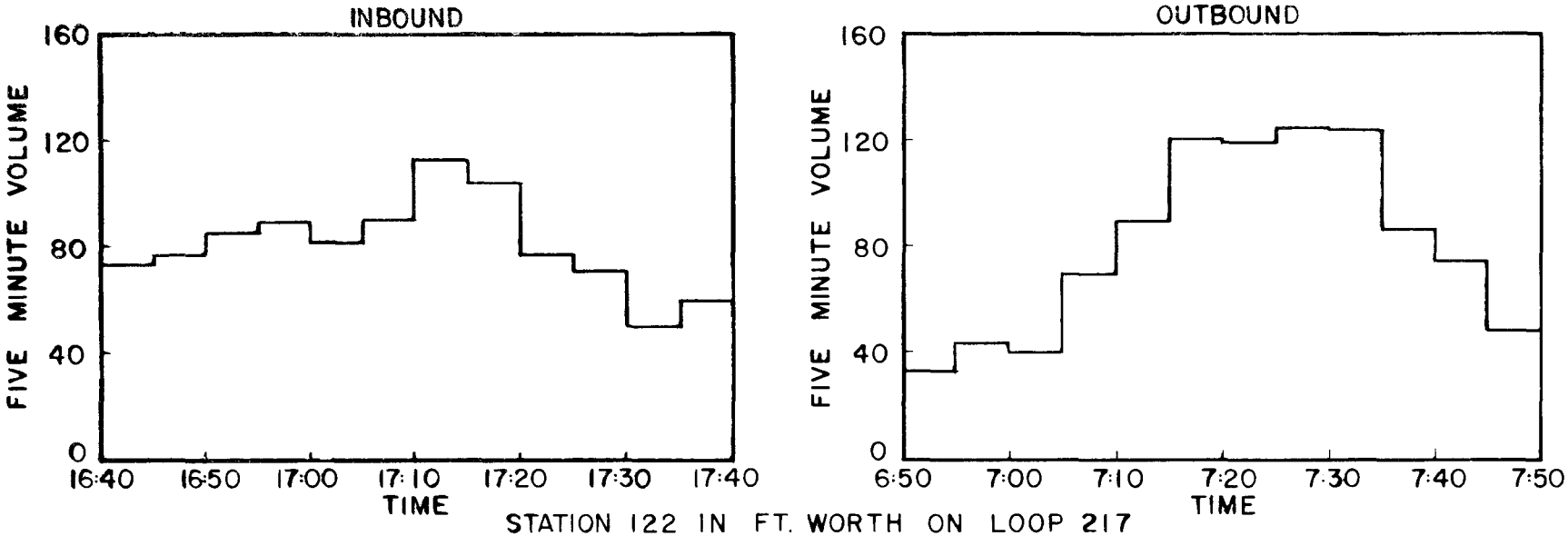
STATION 115 IN BEAUMONT ON U.S. 90
EAST END NECHES RIVER BRIDGE



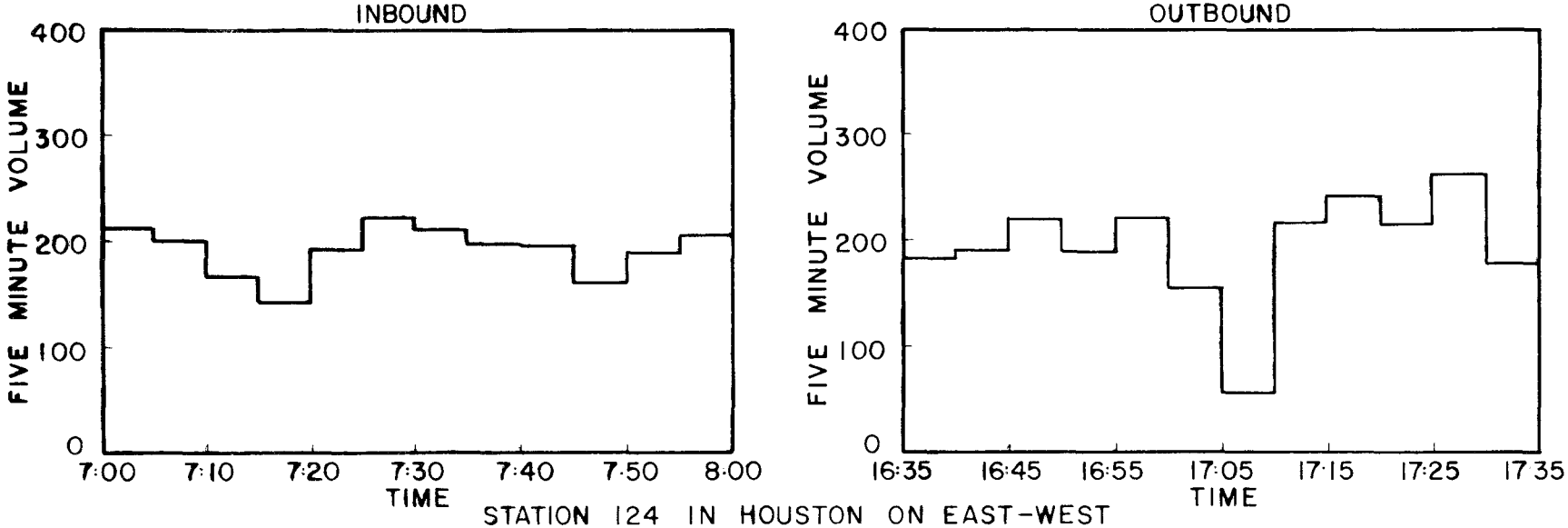
STATION 117 IN BEAUMONT ON U.S. 90
BETWEEN 7TH AND 8TH STREETS

FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.F



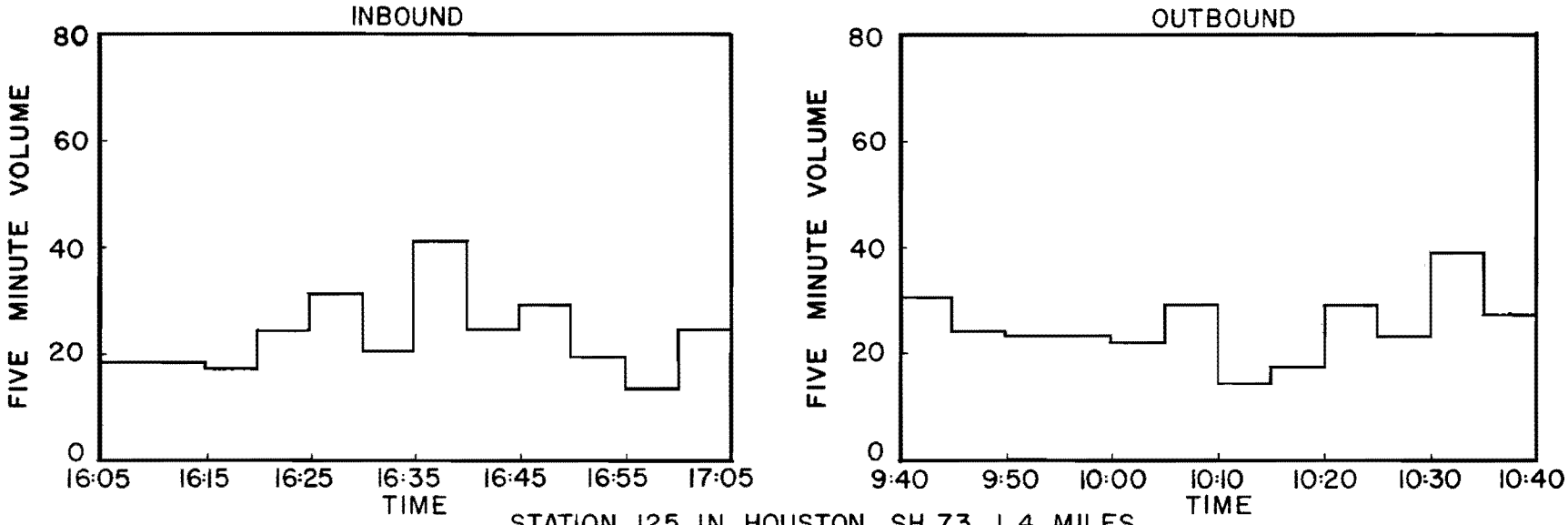
STATION 122 IN FT. WORTH ON LOOP 217
1.2 MILES WEST OF OLD GRANBURY RD.



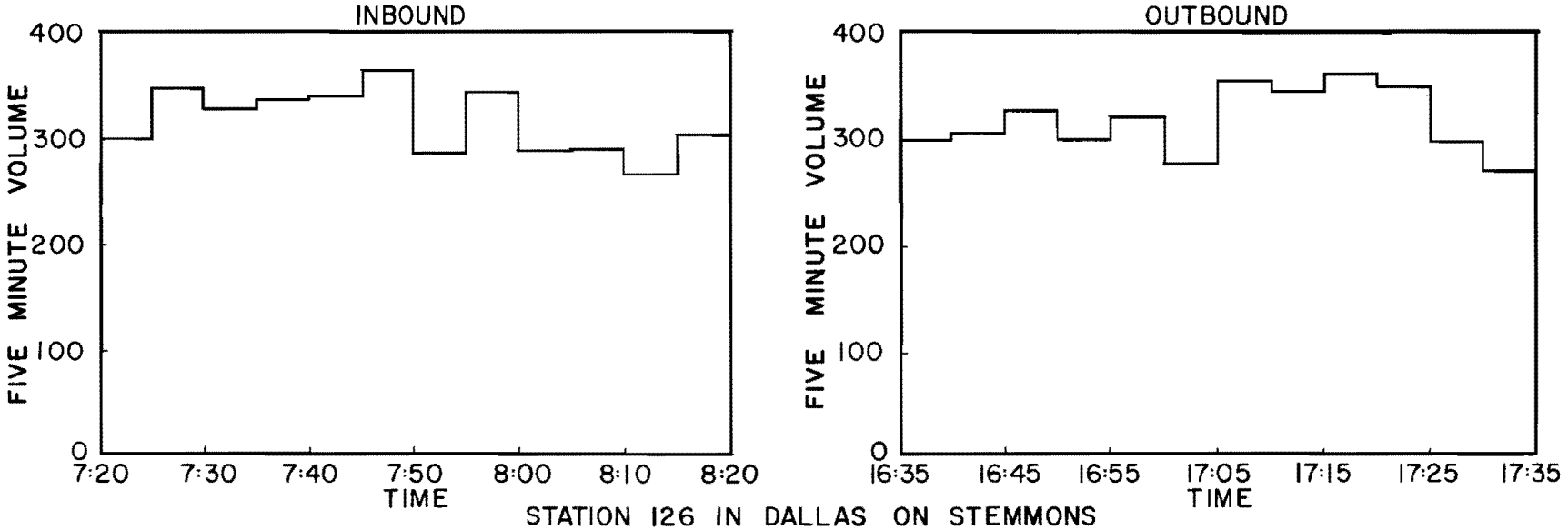
STATION 124 IN HOUSTON ON EAST-WEST
FREEWAY SOUTH OF BUFFALO BAYOU

FIVE MINUTE VOLUME DISTRIBUTION
WITHIN PEAK HOUR

FIGURE 6.G



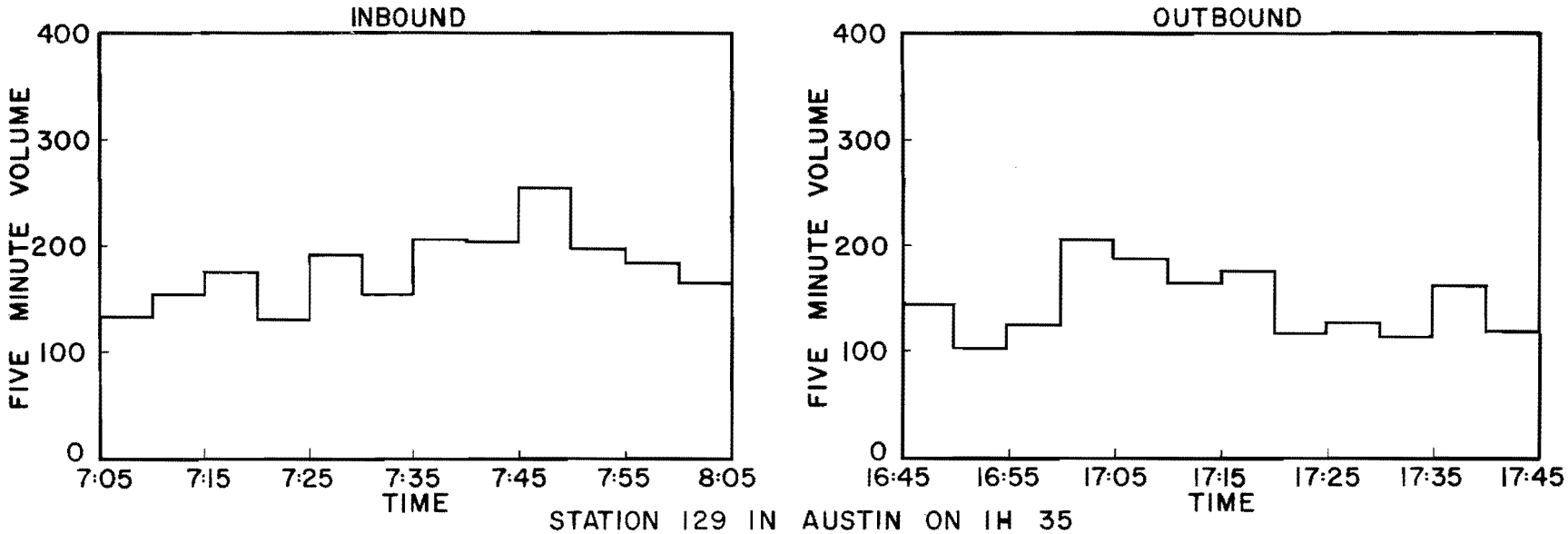
STATION 125 IN HOUSTON SH.73, 1.4 MILES NORTHEAST OF FOUR CORNERS



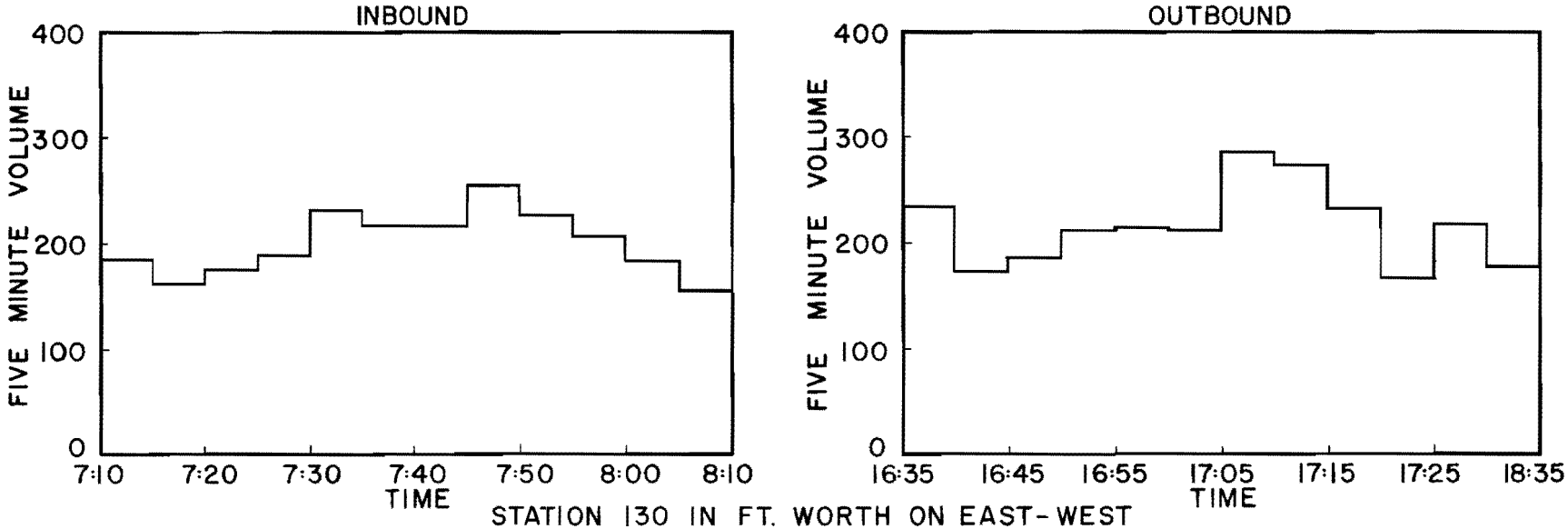
STATION 126 IN DALLAS ON STEMMONS FREEWAY NORTH OF WYCLIFF

FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.H



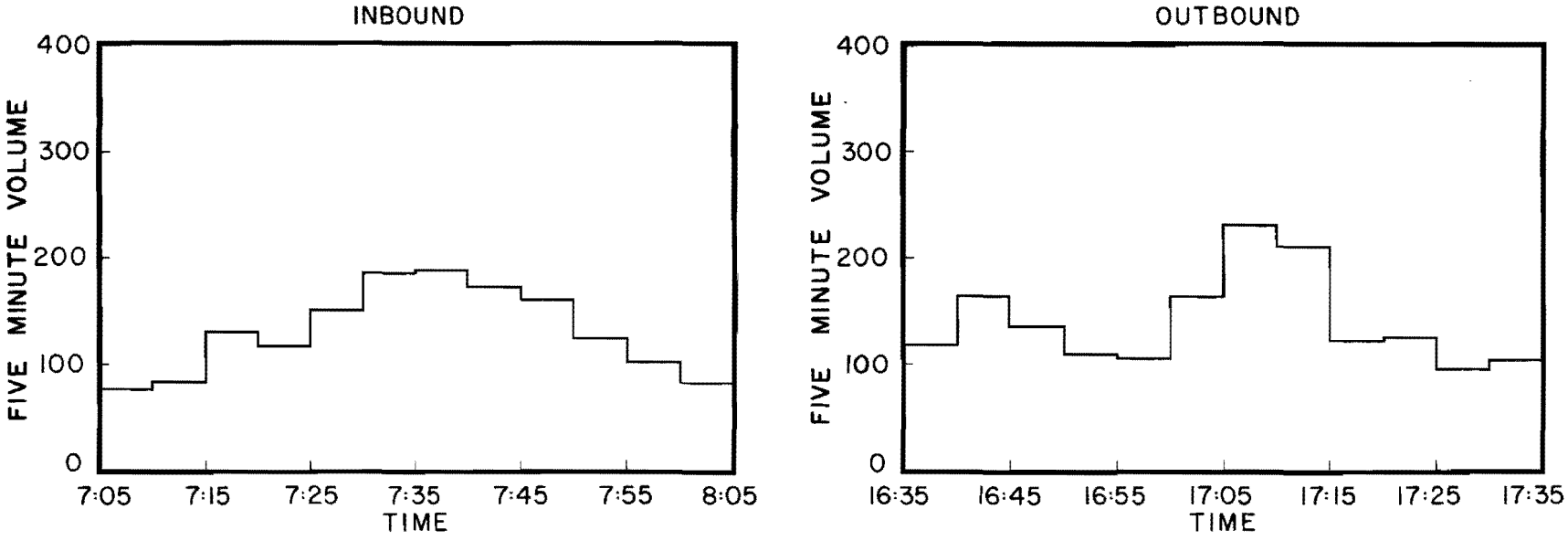
STATION 129 IN AUSTIN ON IH 35 EXPRESSWAY SOUTH OF 15 TH. ST.



STATION 130 IN FT. WORTH ON EAST-WEST FREEWAY MONTGOMERY ST. OVERPASS

FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.I



FIVE MINUTE VOLUME DISTRIBUTION WITHIN PEAK HOUR

FIGURE 6.J

TABLE 1

Traffic Volumes And Facility Characteristics At The

1963 Texas 5-Minute Count Locations

City	1960 Population In Thousands	Count Stations Number	Capacity Data A.M. & P.M. **		Number of Lanes	Distance Count Station Is From CBD In Miles	A.M. Peak Hour Begins	P.M. Peak Hour Begins	% 5 Min. Peak Is of A.M. Peak Hour	% 5 Min. Peak Is of P.M. Peak Hour	*AM "F" Factor	*PM "F" Factor
Austin	187	105	-	-	4	3	7:15	16:35	11.9	11.3	1.43	1.35
Austin	187	129	-	-	6	3	7:05	16:45	11.9	11.8	1.42	1.43
Austin	187	132	-	-	6	3	7:05	16:35	11.9	13.7	1.43	1.64
Beaumont	119	115	-	-	4	2	7:10	16:50	11.3	12.2	1.35	1.46
Beaumont	119	117	-	-	4	2	6:20	16:20	10.3	12.0	1.24	1.45
San Antonio	642	94	+	+	4	2	7:00	16:40	10.3	9.4	1.24	1.13
San Antonio	642	106	+	-	4	2	6:50	16:40	10.8	9.8	1.29	1.17
San Antonio	642	108	-	-	4	2	7:10	16:30	10.1	11.1	1.20	1.33
Fort Worth	503	109	-	-	6	1	7:00	16:35	10.1	10.1	1.21	1.21
Fort Worth	503	122	-	-	4	6	6:55	16:55	11.8	12.8	1.41	1.53
Fort Worth	503	130	-	-	4	3	7:10	16:35	10.6	11.1	1.27	1.33
Dallas	932	93	+	+	6	1	7:10	16:35	9.4	9.2	1.13	1.10
Dallas	932	126	-	-	10	3	7:20	16:35	9.6	9.5	1.15	1.14
Houston	1,140	89	+	+	6	1	6:50	16:25	10.5	9.9	1.26	1.19
Houston	1,140	99	+	+	6	5	6:35	17:00	10.4	9.7	1.25	1.16
Houston	1,140	101	-	-	6	6	7:30	16:35	12.3	9.2	1.47	1.10
Houston	1,140	104	-	-	6	6	6:40	16:35	10.5	9.2	1.26	1.11
Houston	1,140	124	-	-	6	1	7:00	16:35	9.6	10.7	1.16	1.29
Houston	1,140	125	-	-	4	18	6:40	17:00	11.8	11.3	1.42	1.36

* "F" Factor determined as follows: $F = \frac{\text{Peak 5-Minute Volume} \times 12}{\text{Peak Hour Volume}}$

** A "+" indicates the peak hourly volume in the peak direction exceeds the practical capacity.
A "-" indicates the peak hourly volume in the peak direction is less than the practical capacity.

TABLE 2

Comparison of 5-Minute Count Volumes to Permanent Counter Volumes

Station	ADT For 1963 From Permanent Counter Data	24-Hour Volume Correlated From 5-Minute Count Data	Difference (Vehicles)	Difference (%)
89	96,818	102,052	5,234	5.4%
93	62,751	71,530	8,779	14.0%
94	56,026	60,902	4,876	8.7%
99*	85,682	88,078	2,396	2.8%
101	Not Available	56,265	———	———
104	Not Available	30,463	———	———
105	36,370	39,253	2,883	7.9%
106	44,627	46,905	2,278	5.1%
108	37,798	42,063	4,265	11.3%
109	54,807	58,328	3,521	6.4%
115	23,881	24,532	651	2.7%
117	19,129	22,111	2,982	15.6%
122	9,979	12,128	2,149	21.5%
124	40,666	40,485	-181	.4%
125 Rural	6,599	7,165	566	8.6%
126	56,527	61,847	5,320	9.4%
129	34,302	33,156	-1,146	3.3%

*1964 data

TABLE 2 (Continued)

Station	ADT For 1963 From Permanent Counter Data	24-Hour Volume Correlated From 5-Minute Count Data	Difference (Vehicles)	Difference (%)
130	46,506	48,948	2,442	5.3%
132	27,772	30,821	3,049	11.0%

TABLE 3

Statistical Results of Correlation of Short Time Counts to Long Time Counts

Figure Number	Coefficient of Determination	Coefficient of Correlation	Standard Error of Estimate
4.A	.980	.990	190
4.B	.971	.985	223
4.C	.985	.992	168
4.D	.972	.986	221
4.E	.984	.992	306
4.F	.993	.997	201
4.G	.934	.966	3105
4.H	.940	.969	2884
4.I	.960	.980	2408
4.J	.953	.976	2556
5.A	.974	.987	364
5.B	.983	.992	293
5.C	.984	.992	283
5.D	.977	.988	348
5.E	.985	.992	491
5.F	.991	.995	409
5.G	.950	.975	5310
5.H	.973	.986	3919

TABLE 3 (Continued)

Figure Number	Coefficient of Determination	Coefficient of Correlation	Standard Error of Estimate
5.I	.975	.987	3748
5.J	.984	.992	2961

TABLE 4

Average Values of Factors To Expand Short Time Counts To Long Time Counts For Directional Volumes

	Percent
5-minute peak is of peak hour:	
Inbound	9.9
Outbound	9.0
10-minute peak is of peak hour:	
Inbound	19.2
Outbound	17.3
Peak hour is of 2-hour peak:	
Inbound	55.2
Outbound	54.3
Peak hour is of 24-hour volume:	
Inbound	11.0
Outbound	11.3
2-hour peak is of 24-hour volume:	
Inbound	19.9
Outbound	20.7

TABLE 5

Average Values of Factors To Expand Short Time Counts To Long Time Counts For Volumes In Both Directions

	Percent
5-minute is of peak hour:	
Inbound	9.5
Outbound	9.4
10-minute is of peak hour:	
Inbound	18.5
Outbound	17.9
Peak hour is of 2-hour period:	
Inbound	55.2
Outbound	53.8
Peak hour is of 24-hour volume:	
Inbound	9.1
Outbound	9.4
2-hour peak is of 24-hour volume:	
Inbound	16.4
Outbound	17.5

APPENDIX 1

TRAFFIC VOLUME ANALYSIS

STATION 89 IN HOUSTON ON GULF FREEWAY NORTHEAST OF BRILEY STREET SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 20	534	317	851	62.75	1.01	1.08	.52	10.48	11.41	6.22	5.92
OUTBOUND	16 40	463	447	910	50.88	.88	.94	.45	9.09	9.89	5.40	5.13
INBOUND A.M.	7 20	534	317	851	62.75	1.01	1.08	.52	10.48	11.41	6.22	5.92
OUTBOUND A.M.	7 55	342	333	675	50.67	.65	.69	.34	6.71	7.31	3.99	3.79
INBOUND P.M.	16 40	447	463	910	49.12	.85	.91	.44	8.78	9.55	5.21	4.96
OUTBOUND P.M.	16 40	463	447	910	50.88	.88	.94	.45	9.09	9.89	5.40	5.13
TEN MINUTE PEAKS												
INBOUND	7 20	1012	576	1588	63.73	1.92	2.05	.99	19.87	21.62	11.80	11.22
OUTBOUND	16 35	875	831	1706	51.29	1.66	1.77	.86	17.18	18.70	10.20	9.70
INBOUND A.M.	7 20	1012	576	1588	63.73	1.92	2.05	.99	19.87	21.62	11.80	11.22
OUTBOUND A.M.	7 50	655	753	1408	46.52	1.24	1.33	.64	12.86	14.00	7.63	7.26
INBOUND P.M.	16 40	842	852	1694	49.70	1.60	1.71	.83	16.53	17.99	9.81	9.34
OUTBOUND P.M.	16 35	875	831	1706	51.29	1.66	1.77	.86	17.18	18.70	10.20	9.70
ONE HOUR PEAKS												
INBOUND	6 50	5094	3485	8579	59.38	9.67	10.32	4.99	100.00	108.85	59.38	56.49
OUTBOUND	16 25	4680	4337	9017	51.90	8.88	9.48	4.59	91.87	100.00	54.55	51.90
INBOUND A.M.	6 50	5094	3485	8579	59.38	9.67	10.32	4.99	100.00	108.85	59.38	56.49
OUTBOUND A.M.	7 5	3524	5088	8612	40.92	6.69	7.14	3.45	69.18	75.30	41.08	39.08
INBOUND P.M.	16 20	4378	4637	9015	48.56	8.31	8.87	4.29	85.94	93.55	51.03	48.55
OUTBOUND P.M.	16 25	4680	4337	9017	51.90	8.88	9.48	4.59	91.87	100.00	54.55	51.90
TWO HOUR PEAKS												
INBOUND	6 45	9324	6504	15828	58.91	17.69	18.89	9.14	183.04	199.23	108.68	103.40
OUTBOUND	16 0	8482	7755	16237	52.24	16.10	17.18	8.31	166.51	181.24	98.87	94.07
INBOUND A.M.	6 45	9324	6504	15828	58.91	17.69	18.89	9.14	183.04	199.23	108.68	103.40
OUTBOUND A.M.	6 35	6614	9166	15780	41.91	12.55	13.40	6.48	129.84	141.32	77.10	73.35
INBOUND P.M.	15 45	7903	8346	16249	48.64	15.00	16.01	7.74	155.14	168.87	92.12	87.65
OUTBOUND P.M.	16 0	8482	7755	16237	52.24	16.10	17.18	8.31	166.51	181.24	98.87	94.07
TOTAL DAILY VOLUMES												
INBOUND	0 0	52694	49358	102052	51.63	100.00	106.76	51.63	1034.43	1125.94	614.22	584.39
OUTBOUND	0 0	49358	52694	102052	48.37	93.67	100.00	48.37	968.94	1054.66	575.34	547.39
INBOUND A.M.	0 0	22711	19129	41840	54.28	43.10	46.01	22.25	445.84	485.28	264.73	251.87
OUTBOUND A.M.	0 0	19129	22711	41840	45.72	36.30	38.76	18.74	375.52	408.74	222.97	212.14
INBOUND P.M.	12 0	29983	30229	60212	49.80	56.90	60.75	29.38	588.59	640.66	349.49	332.52
OUTBOUND P.M.	12 0	30229	29983	60212	50.20	57.37	61.24	29.62	593.42	645.92	352.36	335.24

TOTAL TRAFFIC = 102052

TRAFFIC VOLUME ANALYSIS

STATION 93 IN DALLAS ON CENTRAL EXPRESSWAY NORTH OF ROSS AVENUE SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 30	416	173	589	70.63	1.19	1.14	.58	9.38	8.58	6.20	5.74
OUTBOUND	16 50	445	230	675	65.93	1.27	1.22	.62	10.03	9.18	6.63	6.14
INBOUND A.M.	7 30	416	173	589	70.63	1.19	1.14	.58	9.38	8.58	6.20	5.74
OUTBOUND A.M.	7 0	223	198	421	52.97	.64	.61	.31	5.03	4.60	3.32	3.08
INBOUND P.M.	16 55	252	402	654	38.53	.72	.69	.35	5.68	5.20	3.76	3.48
OUTBOUND P.M.	16 50	445	230	675	65.93	1.27	1.22	.62	10.03	9.18	6.63	6.14
TEN MINUTE PEAKS												
INBOUND	7 25	810	368	1178	68.76	2.32	2.21	1.13	18.26	16.71	12.07	11.18
OUTBOUND	16 45	875	475	1350	64.81	2.51	2.39	1.22	19.72	18.05	13.04	12.08
INBOUND A.M.	7 25	810	368	1178	68.76	2.32	2.21	1.13	18.26	16.71	12.07	11.18
OUTBOUND A.M.	6 55	424	431	855	49.59	1.21	1.16	.59	9.56	8.75	6.32	5.85
INBOUND P.M.	16 50	482	847	1329	36.27	1.38	1.32	.67	10.87	9.94	7.18	6.65
OUTBOUND P.M.	16 45	875	475	1350	64.81	2.51	2.39	1.22	19.72	18.05	13.04	12.08
ONE HOUR PEAKS												
INBOUND	7 10	4436	2274	6710	66.11	12.70	12.12	6.20	100.00	91.50	66.11	61.24
OUTBOUND	16 35	4848	2396	7244	66.92	13.88	13.25	6.78	109.29	100.00	72.25	66.92
INBOUND A.M.	7 10	4436	2274	6710	66.11	12.70	12.12	6.20	100.00	91.50	66.11	61.24
OUTBOUND A.M.	6 50	2372	3801	6173	38.43	6.79	6.48	3.32	53.47	48.93	35.35	32.74
INBOUND P.M.	16 10	2643	4293	6936	38.11	7.57	7.22	3.69	59.58	54.52	39.39	36.49
OUTBOUND P.M.	16 35	4848	2396	7244	66.92	13.88	13.25	6.78	109.29	100.00	72.25	66.92
TWO HOUR PEAKS												
INBOUND	7 10	7941	4219	12160	65.30	22.73	21.70	11.10	179.01	163.80	118.35	109.62
OUTBOUND	16 10	8467	4630	13097	64.65	24.24	23.13	11.84	190.87	174.65	126.18	116.88
INBOUND A.M.	7 10	7941	4219	12160	65.30	22.73	21.70	11.10	179.01	163.80	118.35	109.62
OUTBOUND A.M.	6 40	4414	7546	11960	36.91	12.64	12.06	6.17	99.50	91.05	65.78	60.93
INBOUND P.M.	15 45	4711	8076	12787	36.84	13.49	12.87	6.59	106.20	97.17	70.21	65.03
OUTBOUND P.M.	16 10	8467	4630	13097	64.65	24.24	23.13	11.84	190.87	174.65	126.18	116.88
TOTAL DAILY VOLUMES												
INBOUND	0 0	34929	36601	71530	48.83	100.00	95.43	48.83	787.40	720.48	520.55	482.18
OUTBOUND	0 0	36601	34929	71530	51.17	104.79	100.00	51.17	825.09	754.97	545.47	505.26
INBOUND A.M.	0 0	16824	12492	29316	57.39	48.17	45.97	23.52	379.26	347.03	250.73	232.25
OUTBOUND A.M.	0 0	12492	16824	29316	42.61	35.76	34.13	17.46	281.61	257.67	186.17	172.45
INBOUND P.M.	12 0	18105	24109	42214	42.89	51.83	49.47	25.31	408.14	373.45	269.82	249.93
OUTBOUND P.M.	12 0	24109	18105	42214	57.11	69.02	65.87	33.70	543.49	497.30	359.30	332.81

TOTAL TRAFFIC = 71530

TRAFFIC VOLUME ANALYSIS

STATION 94 IN SAN ANTONIO ON IH 10 NORTH OF COLORADO FOUR LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 50	362	172	534	67.79	1.16	1.21	.59	10.33	9.71	7.05	6.27
OUTBOUND	17 0	352	163	515	68.35	1.13	1.18	.58	10.04	9.44	6.85	6.09
INBOUND A.M.	7 50	362	172	534	67.79	1.16	1.21	.59	10.33	9.71	7.05	6.27
OUTBOUND A.M.	7 35	174	319	493	35.29	.56	.58	.29	4.96	4.67	3.39	3.01
INBOUND P.M.	16 45	220	348	568	38.73	.71	.74	.36	6.28	5.90	4.28	3.81
OUTBOUND P.M.	17 0	352	163	515	68.35	1.13	1.18	.58	10.04	9.44	6.85	6.09
TEN MINUTE PEAKS												
INBOUND	7 0	644	280	924	69.70	2.07	2.16	1.06	18.37	17.27	12.54	11.15
OUTBOUND	16 40	676	430	1106	61.12	2.17	2.27	1.11	19.29	18.13	13.16	11.70
INBOUND A.M.	7 0	644	280	924	69.70	2.07	2.16	1.06	18.37	17.27	12.54	11.15
OUTBOUND A.M.	7 30	313	636	949	32.98	1.01	1.05	.51	8.93	8.40	6.09	5.42
INBOUND P.M.	16 40	430	676	1106	38.88	1.38	1.44	.71	12.27	11.53	8.37	7.44
OUTBOUND P.M.	16 40	676	430	1106	61.12	2.17	2.27	1.11	19.29	18.13	13.16	11.70
ONE HOUR PEAKS												
INBOUND	7 0	3505	1632	5137	68.23	11.27	11.76	5.76	100.00	94.02	68.23	60.66
OUTBOUND	16 40	3728	2050	5778	64.52	11.99	12.51	6.12	106.36	100.00	72.57	64.52
INBOUND A.M.	7 0	3505	1632	5137	68.23	11.27	11.76	5.76	100.00	94.02	68.23	60.66
OUTBOUND A.M.	7 0	1632	3505	5137	31.77	5.25	5.48	2.68	46.56	43.78	31.77	28.25
INBOUND P.M.	16 15	2124	3367	5491	38.68	6.83	7.13	3.49	60.60	56.97	41.35	36.76
OUTBOUND P.M.	16 40	3728	2050	5778	64.52	11.99	12.51	6.12	106.36	100.00	72.57	64.52
TWO HOUR PEAKS												
INBOUND	6 40	6140	2938	9078	67.64	19.75	20.60	10.08	175.18	164.70	119.53	106.27
OUTBOUND	16 25	6788	3719	10507	64.60	21.83	22.77	11.15	193.67	182.08	132.14	117.48
INBOUND A.M.	6 40	6140	2938	9078	67.64	19.75	20.60	10.08	175.18	164.70	119.53	106.27
OUTBOUND A.M.	6 40	2938	6140	9078	32.36	9.45	9.86	4.82	83.82	78.81	57.19	50.85
INBOUND P.M.	16 5	3801	6740	10541	36.06	12.22	12.75	6.24	108.45	101.96	73.99	65.78
OUTBOUND P.M.	16 25	6788	3719	10507	64.60	21.83	22.77	11.15	193.67	182.08	132.14	117.48
TOTAL DAILY VOLUMES												
INBOUND	0 0	31096	29806	60902	51.06	100.00	104.33	51.06	887.19	834.12	605.33	538.18
OUTBOUND	0 0	29806	31096	60902	48.94	95.85	100.00	48.94	850.39	799.52	580.22	515.85
INBOUND A.M.	0 0	14371	8708	23079	62.27	46.21	48.22	23.60	410.01	385.49	279.75	248.72
OUTBOUND A.M.	0 0	8708	14371	23079	37.73	28.00	29.22	14.30	248.45	233.58	169.52	150.71
INBOUND P.M.	12 0	16725	21098	37823	44.22	53.79	56.11	27.46	477.18	448.63	325.58	289.46
OUTBOUND P.M.	12 0	21098	16725	37823	55.78	67.85	70.78	34.64	601.94	565.93	410.71	365.14

TOTAL TRAFFIC = 60902

TRAFFIC VOLUME ANALYSIS

STATION 99 IN HOUSTON ON GULF FREEWAY AT WOODRIDGE STREET OVERPASS SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA CPPCS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	6 55	490	267	757	64.73	1.12	1.10	.56	10.45	10.44	6.38	6.37
OUTBOUND	17 20	454	264	718	63.23	1.04	1.02	.52	9.68	9.67	5.91	5.90
INBOUND A.M.	6 55	490	267	757	64.73	1.12	1.10	.56	10.45	10.44	6.38	6.37
OUTBOUND A.M.	7 15	304	366	670	45.37	.70	.69	.35	6.48	6.48	3.96	3.95
INBOUND P.M.	16 45	365	384	749	48.73	.84	.82	.41	7.78	7.78	4.76	4.74
OUTBOUND P.M.	17 20	454	264	718	63.23	1.04	1.02	.52	9.68	9.67	5.91	5.90
TEN MINUTE PEAKS												
INBOUND	6 55	950	534	1484	64.02	2.17	2.14	1.08	20.26	20.24	12.38	12.34
OUTBOUND	17 35	858	461	1319	65.05	1.96	1.93	.97	18.29	18.28	11.18	11.15
INBOUND A.M.	6 55	950	534	1484	64.02	2.17	2.14	1.08	20.26	20.24	12.38	12.34
OUTBOUND A.M.	7 15	569	774	1343	42.37	1.30	1.28	.65	12.13	12.12	7.41	7.39
INBOUND P.M.	16 40	726	801	1527	47.54	1.66	1.64	.82	15.48	15.47	9.46	9.43
OUTBOUND P.M.	17 35	858	461	1319	65.05	1.96	1.93	.97	18.29	18.28	11.18	11.15
ONE HOUR PEAKS												
INBOUND	6 35	4690	2986	7676	61.10	10.73	10.57	5.32	100.00	99.91	61.10	60.93
OUTBOUND	17 0	4694	3003	7697	60.98	10.74	10.58	5.33	100.09	100.00	61.15	60.98
INBOUND A.M.	6 35	4690	2986	7676	61.10	10.73	10.57	5.32	100.00	99.91	61.10	60.93
OUTBOUND A.M.	6 40	3008	4621	7629	39.43	6.88	6.78	3.42	64.14	64.08	39.19	39.08
INBOUND P.M.	16 25	3721	4504	8225	45.24	8.51	8.39	4.22	79.34	79.27	48.48	48.34
OUTBOUND P.M.	17 0	4694	3003	7697	60.98	10.74	10.58	5.33	100.09	100.00	61.15	60.98
TWO HOUR PEAKS												
INBOUND	6 25	8585	5282	13867	61.91	19.64	19.35	9.75	183.05	182.89	111.84	111.54
OUTBOUND	16 10	8916	6488	15404	57.88	20.40	20.09	10.12	190.11	189.94	116.15	115.84
INBOUND A.M.	6 25	8585	5282	13867	61.91	19.64	19.35	9.75	183.05	182.89	111.84	111.54
OUTBOUND A.M.	6 20	5318	8520	13838	38.43	12.17	11.99	6.04	113.39	113.29	69.28	69.09
INBOUND P.M.	15 35	6677	7808	14485	46.10	15.28	15.05	7.58	142.37	142.25	86.99	86.75
OUTBOUND P.M.	16 10	8916	6488	15404	57.88	20.40	20.09	10.12	190.11	189.94	116.15	115.84
TOTAL DAILY VOLUMES												
INBOUND	0 0	43708	44370	88078	49.62	100.00	98.51	49.62	931.94	931.15	569.41	567.86
OUTBOUND	0 0	44370	43708	88078	50.38	101.51	100.00	50.38	946.06	945.25	578.04	576.46
INBOUND A.M.	0 0	19340	15496	34836	55.52	44.25	43.59	21.96	412.37	412.02	251.95	251.27
OUTBOUND A.M.	0 0	15496	19340	34836	44.48	35.45	34.92	17.59	330.41	330.12	201.88	201.33
INBOUND P.M.	12 0	24368	28874	53242	45.77	55.75	54.92	27.67	519.57	519.13	317.46	316.59
OUTBOUND P.M.	12 0	28874	24368	53242	54.23	66.06	65.08	32.78	615.65	615.13	376.16	375.13

TOTAL TRAFFIC = 88078

TRAFFIC VOLUME ANALYSIS

STATION 161 IN HOUSTON ON GULF FREEWAY SOUTH OF SH 225 SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	6 50	350	205	555	63.06	1.15	1.36	.62	12.30	12.12	8.36	6.63
OUTBOUND	16 50	265	223	488	54.30	.87	1.03	.47	9.31	9.18	6.33	5.02
INBOUND A.M.	6 50	350	205	555	63.06	1.15	1.36	.62	12.30	12.12	8.36	6.63
OUTBOUND A.M.	6 50	205	350	555	36.94	.67	.80	.36	7.20	7.10	4.90	3.88
INBOUND P.M.	17 0	229	233	462	49.57	.75	.89	.41	8.05	7.93	5.47	4.34
OUTBOUND P.M.	16 50	265	223	488	54.30	.87	1.03	.47	9.31	9.18	6.33	5.02
TEN MINUTE PEAKS												
INBOUND	6 50	650	378	1028	63.23	2.13	2.52	1.16	22.84	22.51	15.53	12.32
OUTBOUND	16 35	518	378	896	57.81	1.70	2.01	.92	18.20	17.94	12.38	9.81
INBOUND A.M.	6 50	650	378	1028	63.23	2.13	2.52	1.16	22.84	22.51	15.53	12.32
OUTBOUND A.M.	6 50	378	650	1028	36.77	1.24	1.47	.67	13.28	13.09	9.03	7.16
INBOUND P.M.	16 55	456	480	936	48.72	1.49	1.77	.81	16.02	15.79	10.90	8.64
OUTBOUND P.M.	16 35	518	378	896	57.81	1.70	2.01	.92	18.20	17.94	12.38	9.81
ONE HOUR PEAKS												
INBOUND	7 30	2846	1339	4185	68.00	9.33	11.05	5.06	100.00	98.58	68.00	53.92
OUTBOUND	16 35	2887	2391	5278	54.70	9.46	11.21	5.13	101.44	100.00	68.98	54.70
INBOUND A.M.	7 30	2846	1339	4185	68.00	9.33	11.05	5.06	100.00	98.58	68.00	53.92
OUTBOUND A.M.	6 35	1869	2788	4657	40.13	6.13	7.25	3.32	65.67	64.74	44.66	35.41
INBOUND P.M.	16 25	2397	2755	5152	46.53	7.86	9.30	4.26	84.22	83.03	57.28	45.41
OUTBOUND P.M.	16 35	2887	2391	5278	54.70	9.46	11.21	5.13	101.44	100.00	68.98	54.70
TWO HOUR PEAKS												
INBOUND	6 30	5623	3201	8824	63.72	18.43	21.83	9.99	197.58	194.77	134.36	106.54
OUTBOUND	16 10	5380	4393	9773	55.05	17.64	20.88	9.56	189.04	186.35	128.55	101.93
INBOUND A.M.	6 30	5623	3201	8824	63.72	18.43	21.83	9.99	197.58	194.77	134.36	106.54
OUTBOUND A.M.	6 25	3222	5601	8823	36.52	10.56	12.51	5.73	113.21	111.60	76.99	61.05
INBOUND P.M.	16 10	4393	5380	9773	44.95	14.40	17.05	7.81	154.36	152.16	104.97	83.23
OUTBOUND P.M.	16 10	5380	4393	9773	55.05	17.64	20.88	9.56	189.04	186.35	128.55	101.93
TOTAL DAILY VOLUMES												
INBOUND	0 0	30503	25762	56265	54.21	100.00	118.40	54.21	1071.78	1056.56	728.86	577.93
OUTBOUND	0 0	25762	30503	56265	45.79	84.46	100.00	45.79	905.20	892.34	615.58	488.10
INBOUND A.M.	0 0	13472	9231	22703	59.34	44.17	52.29	23.94	473.37	466.64	321.91	255.25
OUTBOUND A.M.	0 0	9231	13472	22703	40.66	30.26	35.83	16.41	324.35	319.74	220.57	174.90
INBOUND P.M.	12 0	17031	16531	33562	50.74	55.83	66.11	30.27	598.42	589.92	406.95	322.68
OUTBOUND P.M.	12 0	16531	17031	33562	49.26	54.19	64.17	29.38	580.85	572.60	395.01	313.21

TOTAL TRAFFIC = 56265

TRAFFIC VOLUME ANALYSIS

STATION 104 IN HOUSTON ON SH 225 EXPRESSWAY BETWEEN BERKLEY DOVER ST SIX LANE

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	16 25	158	92	250	63.20	1.03	1.04	.52	11.01	10.00	5.67	5.77
OUTBOUND	17 30	146	78	224	65.18	.95	.96	.48	10.17	9.24	5.24	5.33
INBOUND A.M.	7 0	143	72	215	66.51	.94	.94	.47	9.97	9.05	5.13	5.22
OUTBOUND A.M.	7 25	120	110	230	52.17	.78	.79	.39	8.36	7.59	4.31	4.38
INBOUND P.M.	16 25	158	92	250	63.20	1.03	1.04	.52	11.01	10.00	5.67	5.77
OUTBOUND P.M.	17 30	146	78	224	65.18	.95	.96	.48	10.17	9.24	5.24	5.33
TEN MINUTE PEAKS												
INBOUND	16 25	293	167	460	63.70	1.92	1.93	.96	20.42	18.54	10.51	10.69
OUTBOUND	17 25	278	166	444	62.61	1.82	1.83	.91	19.37	17.59	9.97	10.15
INBOUND A.M.	7 0	268	191	459	58.39	1.75	1.77	.88	18.68	16.96	9.62	9.78
OUTBOUND A.M.	7 20	231	247	478	48.33	1.51	1.52	.76	16.10	14.62	8.29	8.43
INBOUND P.M.	16 25	293	167	460	63.70	1.92	1.93	.96	20.42	18.54	10.51	10.69
OUTBOUND P.M.	17 25	278	166	444	62.61	1.82	1.83	.91	19.37	17.59	9.97	10.15
ONE HOUR PEAKS												
INBOUND	16 10	1435	1352	2787	51.49	9.39	9.46	4.71	100.00	90.82	51.49	52.37
OUTBOUND	16 35	1580	1160	2740	57.66	10.33	10.41	5.19	110.10	100.00	56.69	57.66
INBOUND A.M.	6 40	1363	1211	2574	52.95	8.91	8.98	4.47	94.98	86.27	48.91	49.74
OUTBOUND A.M.	6 55	1235	1293	2528	48.85	8.08	8.14	4.05	86.06	78.16	44.31	45.07
INBOUND P.M.	16 10	1435	1352	2787	51.49	9.39	9.46	4.71	100.00	90.82	51.49	52.37
OUTBOUND P.M.	16 35	1580	1160	2740	57.66	10.33	10.41	5.19	110.10	100.00	56.69	57.66
TWO HOUR PEAKS												
INBOUND	15 10	2519	2285	4804	52.44	16.48	16.60	8.27	175.54	159.43	90.38	91.93
OUTBOUND	16 10	2718	2312	5030	54.04	17.78	17.91	8.92	189.41	172.03	97.52	99.20
INBOUND A.M.	6 25	2471	2184	4655	53.08	16.16	16.28	8.11	172.20	156.39	88.66	90.18
OUTBOUND A.M.	6 20	2189	2434	4623	47.35	14.32	14.43	7.19	152.54	138.54	78.54	79.89
INBOUND P.M.	15 10	2519	2285	4804	52.44	16.48	16.60	8.27	175.54	159.43	90.38	91.93
OUTBOUND P.M.	16 10	2718	2312	5030	54.04	17.78	17.91	8.92	189.41	172.03	97.52	99.20
TOTAL DAILY VOLUMES												
INBOUND	0 0	15289	15174	30463	50.19	100.00	100.76	50.19	1065.44	967.66	548.58	557.99
OUTBOUND	0 0	15174	15289	30463	49.81	99.25	100.00	49.81	1057.42	960.38	544.46	553.80
INBOUND A.M.	0 0	6245	5441	11686	53.44	40.85	41.16	20.50	435.19	395.25	224.08	227.92
OUTBOUND A.M.	0 0	5441	6245	11686	46.56	35.59	35.86	17.86	379.16	344.37	195.23	198.58
INBOUND P.M.	12 0	9044	9733	18777	48.17	59.15	59.60	29.69	630.24	572.41	324.51	330.07
OUTBOUND P.M.	12 0	9733	9044	18777	51.83	63.66	64.14	31.95	678.26	616.01	349.23	355.22

TOTAL TRAFFIC = 30463

TRAFFIC VOLUME ANALYSIS

STATION 105 IN AUSTIN ON IH 35 EXPRESSWAY NORTH OF MANOR ROAD FOUR LANES

		DATA				DAILY			HOURLY		VOLUME/ TOT VOL DURING PEAK HR	VOLUME/ TOT VOL DURING PEAK HR
	TIME (1)	VOLUME (2)	OPPOS. VOLUME (3)	TOTAL VOLUME (4)	SPLIT (5)	VOLUME/ TOTAL IN VOL (6)	VOLUME/ TOTAL OUT VOL (7)	VOLUME/ TOTAL VOLUME (8)	VOLUME/ PEAK HR IN (9)	VOLUME/ PEAK HR OUT (10)	IN (11)	OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	308	140	448	68.75	1.56	1.57	.78	11.91	12.61	8.12	7.79
OUTBOUND	17 10	275	142	417	65.95	1.40	1.41	.70	10.63	11.26	7.25	6.96
INBOUND A.M.	7 45	308	140	448	68.75	1.56	1.57	.78	11.91	12.61	8.12	7.79
OUTBOUND A.M.	11 55	155	116	271	57.20	.79	.79	.39	5.99	6.34	4.09	3.92
INBOUND P.M.	17 5	158	259	417	37.89	.80	.81	.40	6.11	6.47	4.17	4.00
OUTBOUND P.M.	17 10	275	142	417	65.95	1.40	1.41	.70	10.63	11.26	7.25	6.96
TEN MINUTE PEAKS												
INBOUND	7 45	567	234	801	70.79	2.88	2.90	1.44	21.92	23.21	14.95	14.35
OUTBOUND	17 5	534	300	834	64.03	2.71	2.73	1.36	20.64	21.86	14.08	13.51
INBOUND A.M.	7 45	567	234	801	70.79	2.88	2.90	1.44	21.92	23.21	14.95	14.35
OUTBOUND A.M.	7 40	274	547	821	33.37	1.39	1.40	.70	10.59	11.22	7.22	6.93
INBOUND P.M.	17 0	302	498	800	37.75	1.53	1.54	.77	11.67	12.36	7.96	7.64
OUTBOUND P.M.	17 5	534	300	834	64.03	2.71	2.73	1.36	20.64	21.86	14.08	13.51
ONE HOUR PEAKS												
INBOUND	7 15	2587	1206	3793	68.20	13.14	13.22	6.59	100.00	105.89	68.20	65.46
OUTBOUND	16 35	2443	1509	3952	61.82	12.41	12.48	6.22	94.43	100.00	64.41	61.82
INBOUND A.M.	7 15	2587	1206	3793	68.20	13.14	13.22	6.59	100.00	105.89	68.20	65.46
OUTBOUND A.M.	11 0	1250	1139	2389	52.32	6.35	6.39	3.18	48.32	51.17	32.96	31.63
INBOUND P.M.	16 20	1564	2330	3894	40.16	7.95	7.99	3.98	60.46	64.02	41.23	39.57
OUTBOUND P.M.	16 35	2443	1509	3952	61.82	12.41	12.48	6.22	94.43	100.00	64.41	61.82
TWO HOUR PEAKS												
INBOUND	6 50	4062	2075	6137	66.19	20.64	20.76	10.35	157.02	166.27	107.09	102.78
OUTBOUND	16 5	4146	2751	6897	60.11	21.06	21.18	10.56	160.26	169.71	109.31	104.91
INBOUND A.M.	6 50	4062	2075	6137	66.19	20.64	20.76	10.35	157.02	166.27	107.09	102.78
OUTBOUND A.M.	10 0	2285	2118	4403	51.90	11.61	11.68	5.82	88.33	93.53	60.24	57.82
INBOUND P.M.	15 45	2763	3946	6709	41.18	14.04	14.12	7.04	106.80	113.10	72.84	69.91
OUTBOUND P.M.	16 5	4146	2751	6897	60.11	21.06	21.18	10.56	160.26	169.71	109.31	104.91
TOTAL DAILY VOLUMES												
INBOUND	0 0	19682	19571	39253	50.14	100.00	100.57	50.14	760.80	805.65	518.90	498.03
OUTBOUND	0 0	19571	19682	39253	49.86	99.44	100.00	49.86	756.51	801.11	515.98	495.22
INBOUND A.M.	0 0	8718	6695	15413	56.56	44.29	44.55	22.21	336.99	356.86	229.84	220.60
OUTBOUND A.M.	0 0	6695	8718	15413	43.44	34.02	34.21	17.06	258.79	274.05	176.51	169.41
INBOUND P.M.	12 0	10964	12876	23840	45.99	55.71	56.02	27.93	423.81	448.79	289.06	277.43
OUTBOUND P.M.	12 0	12876	10964	23840	54.01	65.42	65.79	32.80	497.72	527.06	339.47	325.81

TOTAL TRAFFIC = 39253

TRAFFIC VOLUME ANALYSIS

STATION 106 IN SAN ANTONIO ON US 81 EXPRESSWAY SOUTH OF ALAMO ST FOUR LANES

		DATA				DAILY			HOURLY		VOLUME/ TOT VOL DURING PEAK HR	VOLUME/ TOT VOL DURING PEAK HR
	TIME (1)	VOLUME (2)	CPPOS. VOLUME (3)	TOTAL VOLUME (4)	SPLIT (5)	VOLUME/ TOTAL IN VOL (6)	VOLUME/ TOTAL OUT VOL (7)	VOLUME/ TOTAL VOLUME (8)	VOLUME/ PEAK HR IN (9)	VOLUME/ PEAK HR OUT (10)	IN (11)	OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	329	134	463	71.06	1.43	1.37	.70	10.79	11.97	6.72	6.94
OUTBOUND	17 5	268	183	451	59.42	1.17	1.12	.57	8.79	9.75	5.48	5.66
INBOUND A.M.	7 45	329	134	463	71.06	1.43	1.37	.70	10.79	11.97	6.72	6.94
OUTBOUND A.M.	7 30	190	280	470	40.43	.83	.79	.41	6.23	6.91	3.88	4.01
INBOUND P.M.	17 10	210	267	477	44.03	.92	.88	.45	6.89	7.64	4.29	4.43
OUTBOUND P.M.	17 5	268	183	451	59.42	1.17	1.12	.57	8.79	9.75	5.48	5.66
TEN MINUTE PEAKS												
INBOUND	7 40	629	301	930	67.63	2.74	2.62	1.34	20.64	22.89	12.85	13.28
OUTBOUND	17 5	535	393	928	57.65	2.33	2.23	1.14	17.55	19.47	10.93	11.29
INBOUND A.M.	7 40	629	301	930	67.63	2.74	2.62	1.34	20.64	22.89	12.85	13.28
OUTBOUND A.M.	7 25	363	600	963	37.69	1.58	1.51	.77	11.91	13.21	7.42	7.66
INBOUND P.M.	17 5	393	535	928	42.35	1.71	1.64	.84	12.89	14.30	8.03	8.29
OUTBOUND P.M.	17 5	535	393	928	57.65	2.33	2.23	1.14	17.55	19.47	10.93	11.29
ONE HOUR PEAKS												
INBOUND	6 50	3048	1846	4894	62.28	13.29	12.72	6.50	100.00	110.92	62.28	64.33
OUTBOUND	16 40	2748	1990	4738	58.00	11.98	11.47	5.86	90.16	100.00	56.15	58.00
INBOUND A.M.	6 50	3048	1846	4894	62.28	13.29	12.72	6.50	100.00	110.92	62.28	64.33
OUTBOUND A.M.	6 50	1846	3048	4894	37.72	8.05	7.70	3.94	60.56	67.18	37.72	38.96
INBOUND P.M.	16 30	2064	2712	4776	43.22	9.00	8.61	4.40	67.72	75.11	42.17	43.56
OUTBOUND P.M.	16 40	2748	1990	4738	58.00	11.98	11.47	5.86	90.16	100.00	56.15	58.00
TWO HOUR PEAKS												
INBOUND	6 25	4807	3220	8027	59.89	20.96	20.06	10.25	157.71	174.93	98.22	101.46
OUTBOUND	16 5	4638	3628	8266	56.11	20.22	19.35	9.89	152.17	168.78	94.77	97.89
INBOUND A.M.	6 25	4807	3220	8027	59.89	20.96	20.06	10.25	157.71	174.93	98.22	101.46
OUTBOUND A.M.	6 25	3220	4807	8027	40.11	14.04	13.44	6.86	105.64	117.18	65.79	67.96
INBOUND P.M.	15 35	3744	4416	8160	45.88	16.32	15.62	7.98	122.83	136.24	76.50	79.02
OUTBOUND P.M.	16 5	4638	3628	8266	56.11	20.22	19.35	9.89	152.17	168.78	94.77	97.89
TOTAL DAILY VOLUMES												
INBOUND	0 0	22938	23967	46905	48.90	100.00	95.71	48.90	752.56	834.72	468.70	484.13
OUTBOUND	0 0	23967	22938	46905	51.10	104.49	100.00	51.10	786.32	872.16	489.72	505.85
INBOUND A.M.	0 0	10021	8643	18664	53.69	43.69	41.81	21.36	328.77	364.67	204.76	211.50
OUTBOUND A.M.	0 0	8643	10021	18664	46.31	37.68	36.06	18.43	283.56	314.52	176.60	182.42
INBOUND P.M.	12 0	12917	15324	28241	45.74	56.31	53.89	27.54	423.79	470.05	263.94	272.63
OUTBOUND P.M.	12 0	15324	12917	28241	54.26	66.81	63.94	32.67	502.76	557.64	313.12	323.43

TOTAL TRAFFIC = 46905

TRAFFIC VOLUME ANALYSIS

STATION 108 IN SAN ANTONIO ON US 81 EXPRESSWAY N OF NORTH ST MARYS FOUR LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	16 10	223	126	349	63.90	1.02	1.10	.53	10.35	10.80	5.39	5.52
OUTBOUND	17 5	224	193	417	53.72	1.03	1.10	.53	10.39	10.85	5.41	5.54
INBOUND A.M.	7 50	210	161	371	56.60	.96	1.04	.50	9.74	10.17	5.07	5.20
OUTBOUND A.M.	7 10	203	175	378	53.70	.93	1.00	.48	9.42	9.84	4.91	5.02
INBOUND P.M.	16 10	223	126	349	63.90	1.02	1.10	.53	10.35	10.80	5.39	5.52
OUTBOUND P.M.	17 5	224	193	417	53.72	1.03	1.10	.53	10.39	10.85	5.41	5.54
TEN MINUTE PEAKS												
INBOUND	16 5	440	272	712	61.80	2.02	2.17	1.05	20.42	21.32	10.63	10.89
OUTBOUND	17 5	430	404	834	51.56	1.97	2.12	1.02	19.95	20.83	10.39	10.64
INBOUND A.M.	7 45	396	325	721	54.92	1.82	1.95	.94	18.38	19.19	9.57	9.80
OUTBOUND A.M.	7 5	395	309	704	56.11	1.81	1.95	.94	18.33	19.14	9.55	9.77
INBOUND P.M.	16 5	440	272	712	61.80	2.02	2.17	1.05	20.42	21.32	10.63	10.89
OUTBOUND P.M.	17 5	430	404	834	51.56	1.97	2.12	1.02	19.95	20.83	10.39	10.64
ONE HOUR PEAKS												
INBOUND	16 20	2155	1983	4138	52.08	9.89	10.62	5.12	100.00	104.41	52.08	53.33
OUTBOUND	6 55	2064	1977	4041	51.08	9.48	10.18	4.91	95.78	100.00	49.88	51.08
INBOUND A.M.	7 10	2087	1924	4011	52.03	9.58	10.29	4.96	96.84	101.11	50.43	51.65
OUTBOUND A.M.	6 55	2064	1977	4041	51.08	9.48	10.18	4.91	95.78	100.00	49.88	51.08
INBOUND P.M.	16 20	2155	1983	4138	52.08	9.89	10.62	5.12	100.00	104.41	52.08	53.33
OUTBOUND P.M.	16 30	2020	2148	4168	48.46	9.27	9.96	4.80	93.74	97.87	48.82	49.99
TWO HOUR PEAKS												
INBOUND	15 55	3963	3513	7476	53.01	18.20	19.54	9.42	183.90	192.01	95.77	98.07
OUTBOUND	15 50	3562	3957	7519	47.37	16.35	17.56	8.47	165.29	172.58	86.08	88.15
INBOUND A.M.	6 35	3579	3510	7089	50.49	16.43	17.65	8.51	166.08	173.40	86.49	88.57
OUTBOUND A.M.	6 30	3521	3530	7051	49.94	16.17	17.36	8.37	163.39	170.59	85.09	87.13
INBOUND P.M.	15 55	3963	3513	7476	53.01	18.20	19.54	9.42	183.90	192.01	95.77	98.07
OUTBOUND P.M.	15 50	3562	3957	7519	47.37	16.35	17.56	8.47	165.29	172.58	86.08	88.15
TOTAL DAILY VOLUMES												
INBOUND	0 0	21780	20283	42063	51.78	100.00	107.38	51.78	1010.67	1055.23	526.34	538.98
OUTBOUND	0 0	20283	21780	42063	48.22	93.13	100.00	48.22	941.21	982.70	490.16	501.93
INBOUND A.M.	0 0	8740	8389	17129	51.02	40.13	43.09	20.78	405.57	423.45	211.21	216.28
OUTBOUND A.M.	0 0	8389	8740	17129	48.98	38.52	41.36	19.94	389.28	406.44	202.73	207.60
INBOUND P.M.	12 0	13040	11894	24934	52.30	59.87	64.29	31.00	605.10	631.78	315.13	322.69
OUTBOUND P.M.	12 0	11894	13040	24934	47.70	54.61	58.64	28.28	551.93	576.26	287.43	294.33

TOTAL TRAFFIC = 42063

TRAFFIC VOLUME ANALYSIS

STATION 109 IN FORT WORTH ON US 81 FREEWAY SOUTH OF BROADWAY STREET SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	324	197	521	62.19	1.12	1.11	.56	10.12	9.83	6.42	5.93
OUTBOUND	17 5	333	191	524	63.55	1.15	1.14	.57	10.40	10.11	6.60	6.10
INBOUND A.M.	7 45	324	197	521	62.19	1.12	1.11	.56	10.12	9.83	6.42	5.93
OUTBOUND A.M.	7 30	209	274	483	43.27	.72	.71	.36	6.53	6.34	4.14	3.83
INBOUND P.M.	16 40	261	276	537	48.60	.90	.89	.45	8.15	7.92	5.17	4.78
OUTBOUND P.M.	17 5	333	191	524	63.55	1.15	1.14	.57	10.40	10.11	6.60	6.10
TEN MINUTE PEAKS												
INBOUND	7 40	632	361	993	63.65	2.18	2.16	1.08	19.73	19.18	12.52	11.57
OUTBOUND	17 5	635	357	992	64.01	2.19	2.17	1.09	19.83	19.27	12.58	11.62
INBOUND A.M.	7 40	632	361	993	63.65	2.18	2.16	1.08	19.73	19.18	12.52	11.57
OUTBOUND A.M.	7 45	389	628	1017	38.25	1.34	1.33	.67	12.14	11.81	7.71	7.12
INBOUND P.M.	16 35	465	542	1007	46.18	1.60	1.59	.80	14.52	14.11	9.21	8.51
OUTBOUND P.M.	17 5	635	357	992	64.01	2.19	2.17	1.09	19.83	19.27	12.58	11.62
ONE HOUR PEAKS												
INBOUND	7 0	3203	1845	5048	63.45	11.03	10.94	5.49	100.00	97.21	63.45	58.63
OUTBOUND	16 35	3295	2168	5463	60.31	11.34	11.25	5.65	102.87	100.00	65.27	60.31
INBOUND A.M.	7 0	3203	1845	5048	63.45	11.03	10.94	5.49	100.00	97.21	63.45	58.63
OUTBOUND A.M.	7 10	1846	3175	5021	36.77	6.36	6.30	3.16	57.63	56.02	36.57	33.79
INBOUND P.M.	16 10	2231	2908	5139	43.41	7.68	7.62	3.82	69.65	67.71	44.20	40.84
OUTBOUND P.M.	16 35	3295	2168	5463	60.31	11.34	11.25	5.65	102.87	100.00	65.27	60.31
TWO HOUR PEAKS												
INBOUND	6 30	5458	3208	8666	62.98	18.79	18.64	9.36	170.40	165.64	108.12	99.91
OUTBOUND	16 0	5841	4132	9973	58.57	20.11	19.95	10.01	182.36	177.27	115.71	106.92
INBOUND A.M.	6 30	5458	3208	8666	62.98	18.79	18.64	9.36	170.40	165.64	108.12	99.91
OUTBOUND A.M.	6 40	3236	5376	8612	37.58	11.14	11.05	5.55	101.03	98.21	64.10	59.23
INBOUND P.M.	15 30	4182	5480	9662	43.28	14.40	14.28	7.17	130.57	126.92	82.84	76.55
OUTBOUND P.M.	16 0	5841	4132	9973	58.57	20.11	19.95	10.01	182.36	177.27	115.71	106.92
TOTAL DAILY VOLUMES												
INBOUND	0 0	29045	29283	58328	49.80	100.00	99.19	49.80	906.81	881.49	575.38	531.67
OUTBOUND	0 0	29283	29045	58328	50.20	100.82	100.00	50.20	914.24	888.71	580.09	536.02
INBOUND A.M.	0 0	12774	10102	22876	55.84	43.98	43.62	21.90	398.81	387.68	253.05	233.83
OUTBOUND A.M.	0 0	10102	12774	22876	44.16	34.78	34.50	17.32	315.39	306.59	200.12	184.92
INBOUND P.M.	12 0	16271	19181	35452	45.90	56.02	55.56	27.90	507.99	493.81	322.33	297.84
OUTBOUND P.M.	12 0	19181	16271	35452	54.10	66.04	65.50	32.88	598.84	582.12	379.97	351.11

TOTAL TRAFFIC = 58328

TRAFFIC VOLUME ANALYSIS

STATION 115 IN BEAUMONT ON US 90 EAST END NECHES RIVER BRIDGE FOUR LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	144	104	248	58.06	1.18	1.17	.59	11.25	10.44	6.99	6.47
OUTBOUND	17 10	168	89	257	65.37	1.38	1.36	.68	13.13	12.18	8.16	7.55
INBOUND A.M.	7 45	144	104	248	58.06	1.18	1.17	.59	11.25	10.44	6.99	6.47
OUTBOUND A.M.	7 45	104	144	248	41.94	.85	.84	.42	8.13	7.54	5.05	4.67
INBOUND P.M.	13 50	95	52	147	64.63	.78	.77	.39	7.42	6.89	4.61	4.27
OUTBOUND P.M.	17 10	168	89	257	65.37	1.38	1.36	.68	13.13	12.18	8.16	7.55
TEN MINUTE PEAKS												
INBOUND	7 45	273	168	441	61.90	2.24	2.21	1.11	21.33	19.80	13.25	12.27
OUTBOUND	17 5	332	169	501	66.27	2.72	2.69	1.35	25.94	24.08	16.12	14.92
INBOUND A.M.	7 45	273	168	441	61.90	2.24	2.21	1.11	21.33	19.80	13.25	12.27
OUTBOUND A.M.	6 45	176	159	335	52.54	1.44	1.43	.72	13.75	12.76	8.54	7.91
INBOUND P.M.	13 45	179	111	290	61.72	1.47	1.45	.73	13.98	12.98	8.69	8.04
OUTBOUND P.M.	17 5	332	169	501	66.27	2.72	2.69	1.35	25.94	24.08	16.12	14.92
ONE HOUR PEAKS												
INBOUND	7 10	1280	780	2060	62.14	10.49	10.38	5.22	100.00	92.82	62.14	57.53
OUTBOUND	16 50	1379	846	2225	61.98	11.30	11.18	5.62	107.73	100.00	66.94	61.98
INBOUND A.M.	7 10	1280	780	2060	62.14	10.49	10.38	5.22	100.00	92.82	62.14	57.53
OUTBOUND A.M.	6 50	784	1123	1907	41.11	6.43	6.36	3.20	61.25	56.85	38.06	35.24
INBOUND P.M.	16 20	948	1363	2311	41.02	7.77	7.69	3.86	74.06	68.75	46.02	42.61
OUTBOUND P.M.	16 50	1379	846	2225	61.98	11.30	11.18	5.62	107.73	100.00	66.94	61.98
TWO HOUR PEAKS												
INBOUND	6 50	2172	1490	3662	59.31	17.80	17.62	8.85	169.69	157.51	105.44	97.62
OUTBOUND	16 0	2458	1735	4193	58.62	20.14	19.94	10.02	192.03	178.25	119.32	110.47
INBOUND A.M.	6 50	2172	1490	3662	59.31	17.80	17.62	8.85	169.69	157.51	105.44	97.62
OUTBOUND A.M.	6 45	1504	2163	3667	41.01	12.33	12.20	6.13	117.50	109.06	73.01	67.60
INBOUND P.M.	15 40	1760	2415	4175	42.16	14.42	14.27	7.17	137.50	127.63	85.44	79.10
OUTBOUND P.M.	16 0	2458	1735	4193	58.62	20.14	19.94	10.02	192.03	178.25	119.32	110.47
TOTAL DAILY VOLUMES												
INBOUND	0 0	12202	12330	24532	49.74	100.00	98.96	49.74	953.28	884.84	592.33	548.40
OUTBOUND	0 0	12330	12202	24532	50.26	101.05	100.00	50.26	963.28	894.13	598.54	554.16
INBOUND A.M.	0 0	5395	4700	10095	53.44	44.21	43.76	21.99	421.48	391.23	261.89	242.47
OUTBOUND A.M.	0 0	4700	5395	10095	46.56	38.52	38.12	19.16	367.19	340.83	228.16	211.24
INBOUND P.M.	12 0	6807	7630	14437	47.15	55.79	55.21	27.75	531.80	493.62	330.44	305.93
OUTBOUND P.M.	12 0	7630	6807	14437	52.85	62.53	61.88	31.10	596.09	553.30	370.39	342.92

TOTAL TRAFFIC = 24532

TRAFFIC VOLUME ANALYSIS

STATION 117 IN BEAUMONT ON US 90 BETWEEN 7TH AND 8TH STREETS FOUR LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	112	26	138	81.16	1.09	.95	.51	10.33	9.17	7.40	6.09
OUTBOUND	17 10	147	50	197	74.62	1.43	1.24	.66	13.56	12.03	9.71	7.99
INBOUND A.M.	7 45	112	26	138	81.16	1.09	.95	.51	10.33	9.17	7.40	6.09
OUTBOUND A.M.	11 45	85	41	126	67.46	.83	.72	.38	7.84	6.96	5.61	4.62
INBOUND P.M.	14 55	76	63	139	54.68	.74	.64	.34	7.01	6.22	5.02	4.13
OUTBOUND P.M.	17 10	147	50	197	74.62	1.43	1.24	.66	13.56	12.03	9.71	7.99
TEN MINUTE PEAKS												
INBOUND	6 25	217	46	263	82.51	2.11	1.83	.98	20.02	17.76	14.33	11.79
OUTBOUND	17 10	255	116	371	68.73	2.48	2.15	1.15	23.52	20.87	16.84	13.86
INBOUND A.M.	6 25	217	46	263	82.51	2.11	1.83	.98	20.02	17.76	14.33	11.79
OUTBOUND A.M.	11 40	138	71	209	66.03	1.34	1.17	.62	12.73	11.29	9.11	7.50
INBOUND P.M.	14 50	146	115	261	55.94	1.42	1.23	.66	13.47	11.95	9.64	7.93
OUTBOUND P.M.	17 10	255	116	371	68.73	2.48	2.15	1.15	23.52	20.87	16.84	13.86
ONE HOUR PEAKS												
INBOUND	6 20	1084	430	1514	71.60	10.55	9.16	4.90	100.00	88.71	71.60	58.91
OUTBOUND	16 20	1222	618	1840	66.41	11.89	10.33	5.53	112.73	100.00	80.71	66.41
INBOUND A.M.	6 20	1084	430	1514	71.60	10.55	9.16	4.90	100.00	88.71	71.60	58.91
OUTBOUND A.M.	10 50	711	526	1237	57.48	6.92	6.01	3.22	65.59	58.18	46.96	38.64
INBOUND P.M.	14 15	724	650	1374	52.69	7.04	6.12	3.27	66.79	59.25	47.82	39.35
OUTBOUND P.M.	16 20	1222	618	1840	66.41	11.89	10.33	5.53	112.73	100.00	80.71	66.41
TWO HOUR PEAKS												
INBOUND	6 0	2004	871	2875	69.70	19.50	16.94	9.06	184.87	163.99	132.36	108.91
OUTBOUND	16 20	2205	1128	3333	66.16	21.45	18.63	9.97	203.41	180.44	145.64	119.84
INBOUND A.M.	6 0	2004	871	2875	69.70	19.50	16.94	9.06	184.87	163.99	132.36	108.91
OUTBOUND A.M.	9 50	1327	1143	2470	53.72	12.91	11.21	6.00	122.42	108.59	87.65	72.12
INBOUND P.M.	14 20	1371	1522	2893	47.39	13.34	11.59	6.20	126.48	112.19	90.55	74.51
OUTBOUND P.M.	16 20	2205	1128	3333	66.16	21.45	18.63	9.97	203.41	180.44	145.64	119.84
TOTAL DAILY VOLUMES												
INBOUND	0 0	10278	11833	22111	46.48	100.00	86.86	46.48	948.15	841.08	678.86	558.59
OUTBOUND	0 0	11833	10278	22111	53.52	115.13	100.00	53.52	1091.61	968.33	781.57	643.10
INBOUND A.M.	0 0	4867	3910	8777	55.45	47.35	41.13	22.01	448.99	398.28	321.47	264.51
OUTBOUND A.M.	0 0	3910	4867	8777	44.55	38.04	33.04	17.68	360.70	319.97	258.26	212.50
INBOUND P.M.	12 0	5411	7923	13334	40.58	52.65	45.73	24.47	499.17	442.80	357.40	294.08
OUTBOUND P.M.	12 0	7923	5411	13334	59.42	77.09	66.96	35.83	730.90	648.36	523.32	430.60

TOTAL TRAFFIC = 22111

TRAFFIC VOLUME ANALYSIS

STATION 122 IN FORT WORTH ON LOOP 217 1.2 MILES N OF OLD GRANBURY RD FOUR LANE

	TIME (1)	DATA			SPLIT (5)	DAILY			HOURLY		VOLUME/ TOT VOL DURING PEAK HR	VOLUME/ TOT VOL DURING PEAK HR
		VOLUME (2)	OPPOS. VOLUME (3)	TOTAL VOLUME (4)		VOLUME/ TOTAL IN VOL (6)	VOLUME/ TOTAL OUT VOL (7)	VOLUME/ TOTAL VOLUME (8)	VOLUME/ PEAK HR IN (9)	VOLUME/ PEAK HR OUT (10)	IN (11)	OUT (12)
FIVE MINUTE PEAKS												
INBOUND	17 10	114	67	181	62.98	1.92	1.84	.94	11.78	11.75	7.79	8.39
OUTBOUND	7 30	124	25	149	83.22	2.09	2.00	1.02	12.81	12.78	8.48	9.12
INBOUND A.M.	0 35	58	2	60	96.67	.98	.94	.48	5.99	5.98	3.96	4.27
OUTBOUND A.M.	7 30	124	25	149	83.22	2.09	2.00	1.02	12.81	12.78	8.48	9.12
INBOUND P.M.	17 10	114	67	181	62.98	1.92	1.84	.94	11.78	11.75	7.79	8.39
OUTBOUND P.M.	17 10	67	114	181	37.02	1.13	1.08	.55	6.92	6.91	4.58	4.93
TEN MINUTE PEAKS												
INBOUND	17 10	218	109	327	66.67	3.67	3.52	1.80	22.52	22.47	14.90	16.04
OUTBOUND	7 25	248	64	312	79.49	4.18	4.01	2.04	25.62	25.57	16.95	18.25
INBOUND A.M.	0 30	99	4	103	96.12	1.67	1.60	.82	10.23	10.21	6.77	7.28
OUTBOUND A.M.	7 25	248	64	312	79.49	4.18	4.01	2.04	25.62	25.57	16.95	18.25
INBOUND P.M.	17 10	218	109	327	66.67	3.67	3.52	1.80	22.52	22.47	14.90	16.04
OUTBOUND P.M.	17 10	109	218	327	33.33	1.84	1.76	.90	11.26	11.24	7.45	8.02
ONE HOUR PEAKS												
INBOUND	16 40	968	495	1463	66.17	16.30	15.64	7.98	100.00	99.79	66.17	71.23
OUTBOUND	6 50	970	389	1359	71.38	16.34	15.67	8.00	100.21	100.00	66.30	71.38
INBOUND A.M.	6 55	404	964	1368	29.53	6.80	6.53	3.33	41.74	41.65	27.61	29.73
OUTBOUND A.M.	6 50	970	389	1359	71.38	16.34	15.67	8.00	100.21	100.00	66.30	71.38
INBOUND P.M.	16 40	968	495	1463	66.17	16.30	15.64	7.98	100.00	99.79	66.17	71.23
OUTBOUND P.M.	16 55	506	872	1378	36.72	8.52	8.17	4.17	52.27	52.16	34.59	37.23
TWO HOUR PEAKS												
INBOUND	15 55	1592	934	2526	63.02	26.81	25.71	13.13	164.46	164.12	108.82	117.14
OUTBOUND	6 5	1400	576	1976	70.85	23.58	22.61	11.54	144.63	144.33	95.69	103.02
INBOUND A.M.	6 55	642	1267	1909	33.63	10.81	10.37	5.29	66.32	66.19	43.88	47.24
OUTBOUND A.M.	6 5	1400	576	1976	70.85	23.58	22.61	11.54	144.63	144.33	95.69	103.02
INBOUND P.M.	15 55	1592	934	2526	63.02	26.81	25.71	13.13	164.46	164.12	108.82	117.14
OUTBOUND P.M.	16 5	935	1570	2505	37.33	15.75	15.10	7.71	96.59	96.39	63.91	68.80
TOTAL DAILY VOLUMES												
INBOUND	0 0	5937	6191	12128	48.95	100.00	95.90	48.95	613.33	612.06	405.81	436.87
OUTBOUND	0 0	6191	5937	12128	51.05	104.28	100.00	51.05	639.57	638.25	423.17	455.56
INBOUND A.M.	0 0	1736	2608	4344	39.96	29.24	28.04	14.31	179.34	178.97	118.66	127.74
OUTBOUND A.M.	0 0	2608	1736	4344	60.04	43.93	42.13	21.50	269.42	268.87	178.26	191.91
INBOUND P.M.	12 0	4201	3583	7784	53.97	70.76	67.86	34.64	433.99	433.09	287.15	309.12
OUTBOUND P.M.	12 0	3583	4201	7784	46.03	60.35	57.87	29.54	370.14	369.38	244.91	263.65

TOTAL TRAFFIC = 12128

TRAFFIC VOLUME ANALYSIS

STATION 124 IN HOUSTON ON EAST WEST FREEWAY SOUTH OF BUFFALO BAYOU SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 25	222	95	317	70.03	1.10	1.10	.55	9.63	9.50	6.64	6.67
OUTBOUND	17 25	251	64	315	79.68	1.24	1.24	.62	10.89	10.74	7.50	7.54
INBOUND A.M.	7 25	222	95	317	70.03	1.10	1.10	.55	9.63	9.50	6.64	6.67
OUTBOUND A.M.	8 5	110	213	323	34.06	.54	.54	.27	4.77	4.71	3.29	3.30
INBOUND P.M.	15 50	115	154	269	42.75	.57	.57	.28	4.99	4.92	3.44	3.45
OUTBOUND P.M.	17 25	251	64	315	79.68	1.24	1.24	.62	10.89	10.74	7.50	7.54
TEN MINUTE PEAKS												
INBOUND	7 25	433	179	612	70.75	2.14	2.14	1.07	18.79	18.54	12.94	13.01
OUTBOUND	17 20	467	138	605	77.19	2.31	2.30	1.15	20.26	19.99	13.96	14.03
INBOUND A.M.	7 25	433	179	612	70.75	2.14	2.14	1.07	18.79	18.54	12.94	13.01
OUTBOUND A.M.	8 5	204	326	530	38.49	1.01	1.01	.50	8.85	8.73	6.10	6.13
INBOUND P.M.	14 30	215	211	426	50.47	1.06	1.06	.53	9.33	9.20	6.43	6.46
OUTBOUND P.M.	17 20	467	138	605	77.19	2.31	2.30	1.15	20.26	19.99	13.96	14.03
ONE HOUR PEAKS												
INBOUND	7 0	2305	1040	3345	68.91	11.40	11.37	5.69	100.00	98.67	68.91	69.24
OUTBOUND	16 35	2336	993	3329	70.17	11.55	11.53	5.77	101.34	100.00	69.84	70.17
INBOUND A.M.	7 0	2305	1040	3345	68.91	11.40	11.37	5.69	100.00	98.67	68.91	69.24
OUTBOUND A.M.	7 15	1109	2236	3345	33.15	5.48	5.47	2.74	48.11	47.47	33.15	33.31
INBOUND P.M.	15 45	1156	1836	2992	38.64	5.72	5.70	2.86	50.15	49.49	34.56	34.73
OUTBOUND P.M.	16 35	2336	993	3329	70.17	11.55	11.53	5.77	101.34	100.00	69.84	70.17
TWO HOUR PEAKS												
INBOUND	6 10	4397	1736	6133	71.69	21.75	21.70	10.86	190.76	188.23	131.45	132.08
OUTBOUND	16 15	4207	2036	6243	67.39	20.81	20.76	10.39	182.52	180.09	125.77	126.37
INBOUND A.M.	6 10	4397	1736	6133	71.69	21.75	21.70	10.86	190.76	188.23	131.45	132.08
OUTBOUND A.M.	9 45	1995	2188	4183	47.69	9.87	9.84	4.93	86.55	85.40	59.64	59.93
INBOUND P.M.	14 30	2182	2969	5151	42.36	10.79	10.77	5.39	94.66	93.41	65.23	65.55
OUTBOUND P.M.	16 15	4207	2036	6243	67.39	20.81	20.76	10.39	182.52	180.09	125.77	126.37
TOTAL DAILY VOLUMES												
INBOUND	0 0	20220	20265	40485	49.94	100.00	99.78	49.94	877.22	865.58	604.48	607.39
OUTBOUND	0 0	20265	20220	40485	50.06	100.22	100.00	50.06	879.18	867.51	605.83	608.74
INBOUND A.M.	0 0	10384	6599	16983	61.14	51.36	51.24	25.65	450.50	444.52	310.43	311.93
OUTBOUND A.M.	0 0	6599	10384	16983	38.86	32.64	32.56	16.30	286.29	282.49	197.28	198.23
INBOUND P.M.	12 0	9836	13666	23502	41.85	48.64	48.54	24.30	426.72	421.06	294.05	295.46
OUTBOUND P.M.	12 0	13666	9836	23502	58.15	67.59	67.44	33.76	592.89	585.02	408.55	410.51

TOTAL TRAFFIC = 40485

TRAFFIC VOLUME ANALYSIS

STATION 125 IN HOUSTON ON SH 73 1.4 MILES NORTHEAST FOUR CORNERS FOUR LANES

		DATA				DAILY			HOURLY		VOLUME/ TOT VOL DURING PEAK HR	VOLUME/ TOT VOL DURING PEAK HR
	TIME (1)	VOLUME (2)	OPPOS. VOLUME (3)	TOTAL VOLUME (4)	SPLIT (5)	VOLUME/ TOTAL IN VOL (6)	VOLUME/ TOTAL OUT VOL (7)	VOLUME/ TOTAL VOLUME (8)	VOLUME/ PEAK HR IN (9)	VOLUME/ PEAK HR OUT (10)	IN (11)	OUT (12)
FIVE MINUTE PEAKS												
INBOUND	16 35	41	18	59	69.49	1.24	1.06	.57	14.75	13.67	7.96	8.13
OUTBOUND	10 30	39	20	59	66.10	1.18	1.01	.54	14.03	13.00	7.57	7.74
INBOUND A.M.	7 5	30	20	50	60.00	.91	.78	.42	10.79	10.00	5.83	5.95
OUTBOUND A.M.	10 30	39	20	59	66.10	1.18	1.01	.54	14.03	13.00	7.57	7.74
INBOUND P.M.	16 35	41	18	59	69.49	1.24	1.06	.57	14.75	13.67	7.96	8.13
OUTBOUND P.M.	14 15	29	19	48	60.42	.88	.75	.40	10.43	9.67	5.63	5.75
TEN MINUTE PEAKS												
INBOUND	16 35	65	36	101	64.36	1.97	1.68	.91	23.38	21.67	12.62	12.90
OUTBOUND	10 30	66	43	109	60.55	2.00	1.71	.92	23.74	22.00	12.82	13.10
INBOUND A.M.	7 5	55	54	109	50.46	1.67	1.42	.77	19.78	18.33	10.68	10.91
OUTBOUND A.M.	10 30	66	43	109	60.55	2.00	1.71	.92	23.74	22.00	12.82	13.10
INBOUND P.M.	16 35	65	36	101	64.36	1.97	1.68	.91	23.38	21.67	12.62	12.90
OUTBOUND P.M.	16 15	50	41	91	54.95	1.52	1.29	.70	17.99	16.67	9.71	9.92
ONE HOUR PEAKS												
INBOUND	16 5	278	237	515	53.98	8.43	7.19	3.88	100.00	92.67	53.98	55.16
OUTBOUND	9 40	300	204	504	59.52	9.10	7.76	4.19	107.91	100.00	58.25	59.52
INBOUND A.M.	6 40	254	271	525	48.38	7.70	6.57	3.55	91.37	84.67	49.32	50.40
OUTBOUND A.M.	9 40	300	204	504	59.52	9.10	7.76	4.19	107.91	100.00	58.25	59.52
INBOUND P.M.	16 5	278	237	515	53.98	8.43	7.19	3.88	100.00	92.67	53.98	55.16
OUTBOUND P.M.	17 0	256	196	452	56.64	7.76	6.62	3.57	92.09	85.33	49.71	50.79
TWO HOUR PEAKS												
INBOUND	15 5	489	454	943	51.86	14.83	12.64	6.82	175.90	163.00	94.95	97.02
OUTBOUND	9 10	556	358	914	60.83	16.86	14.37	7.76	200.00	185.33	107.96	110.32
INBOUND A.M.	6 15	439	476	915	47.98	13.32	11.35	6.13	157.91	146.33	85.24	87.10
OUTBOUND A.M.	9 10	556	358	914	60.83	16.86	14.37	7.76	200.00	185.33	107.96	110.32
INBOUND P.M.	15 5	489	454	943	51.86	14.83	12.64	6.82	175.90	163.00	94.95	97.02
OUTBOUND P.M.	16 0	495	462	957	51.72	15.01	12.80	6.91	178.06	165.00	96.12	98.21
TOTAL DAILY VOLUMES												
INBOUND	0 0	3297	3868	7165	46.02	100.00	85.24	46.02	1185.97	1099.00	640.19	654.17
OUTBOUND	0 0	3868	3297	7165	53.98	117.32	100.00	53.98	1391.37	1289.33	751.07	767.46
INBOUND A.M.	0 0	1377	1813	3190	43.17	41.77	35.60	19.22	495.32	459.00	267.38	273.21
OUTBOUND A.M.	0 0	1813	1377	3190	56.83	54.99	46.87	25.30	652.16	604.33	352.04	359.72
INBOUND P.M.	12 0	1920	2055	3975	48.30	58.23	49.64	26.80	690.65	640.00	372.82	380.95
OUTBOUND P.M.	12 0	2055	1920	3975	51.70	62.33	53.13	28.68	739.21	685.00	399.03	407.74

TOTAL TRAFFIC = 7165

TRAFFIC VOLUME ANALYSIS

STATION 126 IN DALLAS ON STEMMONS FREEWAY NORTH OF WYCLIFF TEN LANES

		DATA				DAILY			HOURLY		VOLUME/ TOT VOL DURING PEAK HR	VOLUME/ TOT VOL DURING PEAK HR
	TIME (1)	VOLUME (2)	CPPCS. VOLUME (3)	TOTAL VOLUME (4)	SPLIT (5)	VOLUME/ TOTAL IN VOL (6)	VOLUME/ TOTAL OUT VOL (7)	VOLUME/ TOTAL VOLUME (8)	VOLUME/ PEAK HR IN (9)	VOLUME/ PEAK HR OUT (10)	IN (11)	OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	361	256	617	58.51	1.17	1.17	.58	9.58	9.57	5.37	5.39
OUTBOUND	17 15	359	267	626	57.35	1.16	1.16	.58	9.52	9.52	5.34	5.36
INBOUND A.M.	7 45	361	256	617	58.51	1.17	1.17	.58	9.58	9.57	5.37	5.39
OUTBOUND A.M.	7 40	300	339	639	46.95	.97	.97	.49	7.96	7.95	4.47	4.48
INBOUND P.M.	16 35	350	295	645	54.26	1.13	1.13	.57	9.28	9.28	5.21	5.23
OUTBOUND P.M.	17 15	359	267	626	57.35	1.16	1.16	.58	9.52	9.52	5.34	5.36
TEN MINUTE PEAKS												
INBOUND	7 40	700	556	1256	55.73	2.27	2.26	1.13	18.57	18.56	10.42	10.46
OUTBOUND	17 15	705	464	1169	60.31	2.28	2.28	1.14	18.70	18.69	10.49	10.53
INBOUND A.M.	7 40	700	556	1256	55.73	2.27	2.26	1.13	18.57	18.56	10.42	10.46
OUTBOUND A.M.	7 35	589	673	1262	46.67	1.91	1.90	.95	15.62	15.62	8.77	8.80
INBOUND P.M.	16 35	635	598	1233	51.50	2.06	2.05	1.03	16.84	16.83	9.45	9.48
OUTBOUND P.M.	17 15	705	464	1169	60.31	2.28	2.28	1.14	18.70	18.69	10.49	10.53
ONE HOUR PEAKS												
INBOUND	7 20	3770	2948	6718	56.12	12.21	12.18	6.10	100.00	99.95	56.12	56.31
OUTBOUND	16 35	3772	2923	6695	56.34	12.21	12.18	6.10	100.05	100.00	56.15	56.34
INBOUND A.M.	7 20	3770	2948	6718	56.12	12.21	12.18	6.10	100.00	99.95	56.12	56.31
OUTBOUND A.M.	7 15	3007	3754	6761	44.48	9.74	9.71	4.86	79.76	79.72	44.76	44.91
INBOUND P.M.	16 20	2983	3580	6563	45.45	9.66	9.63	4.82	79.12	79.08	44.40	44.56
OUTBOUND P.M.	16 35	3772	2923	6695	56.34	12.21	12.18	6.10	100.05	100.00	56.15	56.34
TWO HOUR PEAKS												
INBOUND	6 50	6270	5039	11309	55.44	20.30	20.25	10.14	166.31	166.22	93.33	93.65
OUTBOUND	16 0	6483	5223	11706	55.38	20.99	20.94	10.48	171.96	171.87	96.50	96.83
INBOUND A.M.	6 50	6270	5039	11309	55.44	20.30	20.25	10.14	166.31	166.22	93.33	93.65
OUTBOUND A.M.	6 30	5276	6148	11424	46.18	17.08	17.04	8.53	139.95	139.87	78.54	78.81
INBOUND P.M.	15 35	5239	6130	11369	46.08	16.96	16.92	8.47	138.97	138.89	77.98	78.25
OUTBOUND P.M.	16 0	6483	5223	11706	55.38	20.99	20.94	10.48	171.96	171.87	96.50	96.83
TOTAL DAILY VOLUMES												
INBOUND	0 0	30886	30961	61847	49.94	100.00	99.76	49.94	819.26	818.82	459.75	461.33
OUTBOUND	0 0	30961	30886	61847	50.06	100.24	100.00	50.06	821.25	820.81	460.87	462.45
INBOUND A.M.	0 0	13904	12268	26172	53.13	45.02	44.91	22.48	368.81	368.61	206.97	207.68
OUTBOUND A.M.	0 0	12268	13904	26172	46.87	39.72	39.62	19.84	325.41	325.24	182.61	183.24
INBOUND P.M.	12 0	16982	18693	35675	47.60	54.98	54.85	27.46	450.45	450.21	252.78	253.65
OUTBOUND P.M.	12 0	18693	16982	35675	52.40	60.52	60.38	30.22	495.84	495.57	278.25	279.21

TOTAL TRAFFIC = 61847

TRAFFIC VOLUME ANALYSIS

STATION 129 IN AUSTIN ON IH 35 EXPRESSWAY SOUTH OF 15TH STREET SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	253	109	362	69.89	1.33	1.80	.76	11.85	14.60	7.92	7.44
OUTBOUND	17 0	205	152	357	57.42	1.07	1.46	.62	9.60	11.83	6.42	6.03
INBOUND A.M.	7 45	253	109	362	69.89	1.33	1.80	.76	11.85	14.60	7.92	7.44
OUTBOUND A.M.	7 40	122	201	323	37.77	.64	.87	.37	5.71	7.04	3.82	3.59
INBOUND P.M.	17 15	192	175	367	52.32	1.01	1.37	.58	8.99	11.08	6.01	5.65
OUTBOUND P.M.	17 0	205	152	357	57.42	1.07	1.46	.62	9.60	11.83	6.42	6.03
TEN MINUTE PEAKS												
INBOUND	7 40	454	231	685	66.28	2.38	3.23	1.37	21.26	26.20	14.21	13.35
OUTBOUND	17 0	392	316	708	55.37	2.05	2.79	1.18	18.36	22.62	12.27	11.53
INBOUND A.M.	7 40	454	231	685	66.28	2.38	3.23	1.37	21.26	26.20	14.21	13.35
OUTBOUND A.M.	7 35	237	407	644	36.80	1.24	1.69	.71	11.10	13.68	7.42	6.97
INBOUND P.M.	17 10	367	337	704	52.13	1.92	2.61	1.11	17.19	21.18	11.49	10.79
OUTBOUND P.M.	17 0	392	316	708	55.37	2.05	2.79	1.18	18.36	22.62	12.27	11.53
ONE HOUR PEAKS												
INBOUND	7 5	2135	1060	3195	66.82	11.18	15.18	6.44	100.00	123.20	66.82	62.78
OUTBOUND	16 45	1733	1668	3401	50.96	9.08	12.32	5.23	81.17	100.00	54.24	50.96
INBOUND A.M.	7 5	2135	1060	3195	66.82	11.18	15.18	6.44	100.00	123.20	66.82	62.78
OUTBOUND A.M.	7 5	1060	2135	3195	33.18	5.55	7.54	3.20	49.65	61.17	33.18	31.17
INBOUND P.M.	16 30	1807	1707	3514	51.42	9.46	12.85	5.45	84.64	104.27	56.56	53.13
OUTBOUND P.M.	16 45	1733	1668	3401	50.96	9.08	12.32	5.23	81.17	100.00	54.24	50.96
TWO HOUR PEAKS												
INBOUND	6 45	3533	1779	5312	66.51	18.50	25.12	10.66	165.48	203.87	110.58	103.88
OUTBOUND	16 0	2922	3077	5999	48.71	15.30	20.78	8.81	136.86	168.61	91.46	85.92
INBOUND A.M.	6 45	3533	1779	5312	66.51	18.50	25.12	10.66	165.48	203.87	110.58	103.88
OUTBOUND A.M.	7 10	1791	3414	5205	34.41	9.38	12.74	5.40	83.89	103.35	56.06	52.66
INBOUND P.M.	16 5	3106	2888	5994	51.82	16.27	22.09	9.37	145.48	179.23	97.21	91.33
OUTBOUND P.M.	16 0	2922	3077	5999	48.71	15.30	20.78	8.81	136.86	168.61	91.46	85.92
TOTAL DAILY VOLUMES												
INBOUND	0 0	19094	14062	33156	57.59	100.00	135.78	57.59	894.33	1101.79	597.62	561.42
OUTBOUND	0 0	14062	19094	33156	42.41	73.65	100.00	42.41	658.64	811.43	440.13	413.47
INBOUND A.M.	0 0	7783	5012	12795	60.83	40.76	55.35	23.47	364.54	449.11	243.60	228.84
OUTBOUND A.M.	0 0	5012	7783	12795	39.17	26.25	35.64	15.12	234.75	289.21	156.87	147.37
INBOUND P.M.	12 0	11311	9050	20361	55.55	59.24	80.44	34.11	529.79	652.68	354.02	332.58
OUTBOUND P.M.	12 0	9050	11311	20361	44.45	47.40	64.36	27.30	423.89	522.22	283.26	266.10

TOTAL TRAFFIC = 33156

TRAFFIC VOLUME ANALYSIS

STATION 130 IN FT WORTH ON EAST WEST FREEWAY MONTGOMERY ST OVERPASS FOUR LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 45	256	121	377	67.90	1.03	1.07	.52	10.60	9.90	6.42	5.22
OUTBOUND	17 5	286	215	501	57.09	1.15	1.19	.58	11.84	11.06	7.17	5.83
INBOUND A.M.	7 45	256	121	377	67.90	1.03	1.07	.52	10.60	9.90	6.42	5.22
OUTBOUND A.M.	7 35	193	219	412	46.84	.77	.80	.39	7.99	7.47	4.84	3.94
INBOUND P.M.	17 10	236	274	510	46.27	.95	.98	.48	9.77	9.13	5.91	4.81
OUTBOUND P.M.	17 5	286	215	501	57.09	1.15	1.19	.58	11.84	11.06	7.17	5.83
TEN MINUTE PEAKS												
INBOUND	7 45	484	198	682	70.97	1.94	2.01	.99	20.03	18.72	12.13	9.87
OUTBOUND	17 5	560	451	1011	55.39	2.25	2.33	1.14	23.18	21.66	14.04	11.42
INBOUND A.M.	7 45	484	198	682	70.97	1.94	2.01	.99	20.03	18.72	12.13	9.87
OUTBOUND A.M.	7 20	353	369	722	48.89	1.42	1.47	.72	14.61	13.66	8.85	7.20
INBOUND P.M.	17 5	451	560	1011	44.61	1.81	1.88	.92	18.67	17.45	11.30	9.20
OUTBOUND P.M.	17 5	560	451	1011	55.39	2.25	2.33	1.14	23.18	21.66	14.04	11.42
ONE HOUR PEAKS												
INBOUND	7 10	2416	1574	3990	60.55	9.69	10.06	4.94	100.00	93.46	60.55	49.29
OUTBOUND	16 35	2585	2317	4902	52.73	10.37	10.76	5.28	107.00	100.00	64.79	52.73
INBOUND A.M.	7 10	2416	1574	3990	60.55	9.69	10.06	4.94	100.00	93.46	60.55	49.29
OUTBOUND A.M.	7 5	1605	2395	4000	40.13	6.44	6.68	3.28	66.43	62.09	40.23	32.74
INBOUND P.M.	16 25	2367	2455	4822	49.09	9.50	9.85	4.84	97.97	91.57	59.32	48.29
OUTBOUND P.M.	16 35	2585	2317	4902	52.73	10.37	10.76	5.28	107.00	100.00	64.79	52.73
TWO HOUR PEAKS												
INBOUND	15 40	4339	4272	8611	50.39	17.41	18.06	8.86	179.59	167.85	108.75	88.51
OUTBOUND	16 5	4409	4103	8512	51.80	17.69	18.35	9.01	182.49	170.56	110.50	89.94
INBOUND A.M.	7 5	4035	2837	6872	58.72	16.19	16.80	8.24	167.01	156.09	101.13	82.31
OUTBOUND A.M.	7 5	2837	4035	6872	41.28	11.38	11.81	5.80	117.43	109.75	71.10	57.87
INBOUND P.M.	15 40	4339	4272	8611	50.39	17.41	18.06	8.86	179.59	167.85	108.75	88.51
OUTBOUND P.M.	16 5	4409	4103	8512	51.80	17.69	18.35	9.01	182.49	170.56	110.50	89.94
TOTAL DAILY VOLUMES												
INBOUND	0 0	24924	24024	48948	50.92	100.00	103.75	50.92	1031.62	964.18	624.66	508.45
OUTBOUND	0 0	24024	24924	48948	49.08	96.39	100.00	49.08	994.37	929.36	602.11	490.09
INBOUND A.M.	0 0	10074	8875	18949	53.16	40.42	41.93	20.58	416.97	389.71	252.48	205.51
OUTBOUND A.M.	0 0	8875	10074	18949	46.84	35.61	36.94	18.13	367.34	343.33	222.43	181.05
INBOUND P.M.	12 0	14850	15149	29999	49.50	59.58	61.81	30.34	614.65	574.47	372.18	302.94
OUTBOUND P.M.	12 0	15149	14850	29999	50.50	60.78	63.06	30.95	627.03	586.03	379.67	309.04

TOTAL TRAFFIC = 48948

TRAFFIC VOLUME ANALYSIS

STATION 132 IN AUSTIN ON IH 35 EXPRESSWAY NORTH OF COLORADO RIVER SIX LANES

	TIME (1)	DATA VOLUME (2)	DATA OPPOS. VOLUME (3)	DATA TOTAL VOLUME (4)	SPLIT (5)	DAILY VOLUME/ TOTAL IN VOL (6)	DAILY VOLUME/ TOTAL OUT VOL (7)	DAILY VOLUME/ TOTAL VOLUME (8)	HOURLY VOLUME/ PEAK HR IN (9)	HOURLY VOLUME/ PEAK HR OUT (10)	VOLUME/ TOT VOL DURING PEAK HR IN (11)	VOLUME/ TOT VOL DURING PEAK HR OUT (12)
FIVE MINUTE PEAKS												
INBOUND	7 35	188	102	290	64.83	1.18	1.26	.61	11.92	11.20	7.03	6.39
OUTBOUND	17 5	230	96	326	70.55	1.44	1.54	.75	14.58	13.70	8.60	7.82
INBOUND A.M.	7 35	188	102	290	64.83	1.18	1.26	.61	11.92	11.20	7.03	6.39
OUTBOUND A.M.	7 45	131	161	292	44.86	.82	.88	.43	8.31	7.80	4.90	4.45
INBOUND P.M.	16 35	149	118	267	55.81	.94	1.00	.48	9.45	8.87	5.57	5.07
OUTBOUND P.M.	17 5	230	96	326	70.55	1.44	1.54	.75	14.58	13.70	8.60	7.82
TEN MINUTE PEAKS												
INBOUND	7 30	374	189	563	66.43	2.35	2.51	1.21	23.72	22.28	13.99	12.72
OUTBOUND	17 5	440	192	632	69.62	2.76	2.96	1.43	27.90	26.21	16.46	14.96
INBOUND A.M.	7 30	374	189	563	66.43	2.35	2.51	1.21	23.72	22.28	13.99	12.72
OUTBOUND A.M.	7 45	248	286	534	46.44	1.56	1.67	.80	15.73	14.77	9.28	8.43
INBOUND P.M.	16 35	275	281	556	49.46	1.73	1.85	.89	17.44	16.38	10.29	9.35
OUTBOUND P.M.	17 5	440	192	632	69.62	2.76	2.96	1.43	27.90	26.21	16.46	14.96
ONE HOUR PEAKS												
INBOUND	7 5	1577	1096	2673	59.00	9.90	10.59	5.12	100.00	93.92	59.00	53.62
OUTBOUND	16 35	1679	1262	2941	57.09	10.54	11.28	5.45	106.47	100.00	62.81	57.09
INBOUND A.M.	7 5	1577	1096	2673	59.00	9.90	10.59	5.12	100.00	93.92	59.00	53.62
OUTBOUND A.M.	7 10	1107	1566	2673	41.41	6.95	7.44	3.59	70.20	65.93	41.41	37.64
INBOUND P.M.	16 30	1289	1677	2966	43.46	8.09	8.66	4.18	81.74	76.77	48.22	43.83
OUTBOUND P.M.	16 35	1679	1262	2941	57.09	10.54	11.28	5.45	106.47	100.00	62.81	57.09
TWO HOUR PEAKS												
INBOUND	6 50	2460	1792	4252	57.86	15.44	16.52	7.98	155.99	146.52	92.03	83.65
OUTBOUND	16 20	2794	2270	5064	55.17	17.53	18.77	9.07	177.17	166.41	104.53	95.00
INBOUND A.M.	6 50	2460	1792	4252	57.86	15.44	16.52	7.98	155.99	146.52	92.03	83.65
OUTBOUND A.M.	6 45	1822	2460	4282	42.55	11.43	12.24	5.91	115.54	108.52	68.16	61.95
INBOUND P.M.	16 15	2279	2772	5051	45.12	14.30	15.31	7.39	144.51	135.74	85.26	77.49
OUTBOUND P.M.	16 20	2794	2270	5064	55.17	17.53	18.77	9.07	177.17	166.41	104.53	95.00
TOTAL DAILY VOLUMES												
INBOUND	0 0	15934	14887	30821	51.70	100.00	107.03	51.70	1010.40	949.02	596.11	541.79
OUTBOUND	0 0	14887	15934	30821	48.30	93.43	100.00	48.30	944.01	886.66	556.94	506.19
INBOUND A.M.	0 0	6284	4993	11277	55.72	39.44	42.21	20.39	398.48	374.27	235.09	213.67
OUTBOUND A.M.	0 0	4993	6284	11277	44.28	31.34	33.54	16.20	316.61	297.38	186.79	169.77
INBOUND P.M.	12 0	9650	9894	19544	49.38	60.56	64.82	31.31	611.92	574.75	361.02	328.12
OUTBOUND P.M.	12 0	9894	9650	19544	50.62	62.09	66.46	32.10	627.39	589.28	370.15	336.42

TOTAL TRAFFIC = 30821