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16. Abstract

Two interactive data-entry programs have been incorporated into the TEXAS Model for Intersection Traffic to produce the User-Friendly TEXAS Model. Now, a user, working through an alphanumeric terminal connected in an interactive time-sharing mode to a mainframe computer or through the keyboard of a microcomputer, can enter all the data needed for a simulation run in about 1/10 the time previously required. During simulation, the progress of each individually-characterized vehicle moving through a simulated intersection is recorded and subsequently displayed in real-time or in stop-action on a microcomputer-driven graphics screen. This animated graphics display allows the user to study the overall traffic performance at an intersection or to examine the behavior of any selected vehicle(s) in great detail. Tabular summary statistics are also produced for each simulation run if requested by the user. With the user-friendly version of the TEXAS Model that is described in this guide, alternative intersection designs and traffic-control schemes can be evaluated quickly and accurately in a timely and cost-effective manner.

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USER-FRIENDLY TEXAS MODEL - GUIDE TO DATA ENTRY

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Research Report Number 361-1F

User-Friendly TEXAS Model for Intersection Traffic

Research Project 3-18-84-361

conducted for

Texas
State Department of Highways and Public Transportation

in cooperation with
U. S. Department of Transportation
Federal Highway Administration

by the

Center for Transportation Research
Bureau of Engineering Research
The University of Texas at Austin

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PREFACE

Research Study Number 3-18-84-361, "User-Friendly TEXAS Model for Intersection Traffic", was a 2-year project conducted for the purpose of improving user accessibility to the sophisticated individual intersection traffic simulation model called the TEXAS Model that required extensive data coding prior to use. This overall purpose has been accomplished by adding two screen-prompted data-entry programs to the original computer simulation package. These data-entry programs have been written to be as nearly machine independent as possible. Documentation of these programs is presented on the screen of the computer devices that are used for data entry and in this first and final project report No. 3-18-84-361-1F entitled "User-Friendly TEXAS Model - Guide to Data Entry". The time needed for data entry is now only about 10 percent of that required previously.

A new feature for interpreting the output from the TEXAS Model has also been added to the package in the form of a microcomputer-driven animated graphics screen display of vehicles moving through an intersection in real-time or in a stop-action mode. This unique capability permits the user to define and evaluate a wide range of intersection design and traffic control alternatives by visual inspection of simulated traffic flow on a screen.

The TEXAS Model for Intersection Traffic continues to run on IBM and CDC mainframe computers in the original languages. The user-friendly version of the package includes additional data-entry programs written in FORTRAN 77 which allow the user to build compatable data files through alphanumeric terminals networked to the mainframe in an interactive time-sharing mode or through microcomputers networked to the mainframe. The data-entry programs described in this report have been implemented on the SDHPT's VAX-780/Intergraph network, on the University of Texas at Austin's CDC mainframe, and on the IBM PC-XT.

Conversion of the original TEXAS Model code to FORTRAN 77 and removal of the COLEASE language proved to be an unexpectedly difficult task. This conversion and the adaptations needed to run the model on the IBM PC-XT have now been accomplished.

The Safety and Maintenance Division, D-18T, and the Automation Division, D-19, of the State Department of Highways and Public Transportation through Blair Marsden and Al Kosik, respectively, have participated in all stages of the project work. Their timely and pertinent suggestions have been extremely helpful in adapting the simulation model to practical applications. Support of the Intergraph workstation by D-19 made the developments possible.

ABSTRACT

Two interactive data-entry programs have been incorporated into the TEXAS Model for Intersection Traffic to produce the User-Friendly TEXAS Model. Now, a user, working through an alphanumeric terminal connected in an interactive time-sharing mode to a mainframe computer or through the keyboard of a microcomputer, can enter all the data needed for a simulation run in about 1/10 the time previously required. During simulation, the progress of each individually-characterized vehicle moving through a simulated intersection is recorded and subsequently displayed in real-time or in stop-action on a microcomputer-driven graphics screen. This animated graphics display allows the user to study the overall traffic performance at an intersection or to examine the behavior of any selected vehicle(s) in great detail. Tabular summary statistics are also produced for each simulation run if requested by the user. With the user-friendly version of the TEXAS Model that is described in this guide, alternative intersection designs and traffic-control schemes can be evaluated quickly and accurately in a timely and cost-effective manner.

KEY WORDS: intersection traffic, TEXAS Model, user-friendly, simulation, 1/10 time, animated graphics, tabular summary

SUMMARY

The TEXAS Model for Intersection Traffic has been developed at the Center for Transportation Research at the University of Texas at Austin in coopeation with the State Department of Highways and Public Transportation and the Federal Highway Administration. Continuing improvement of this powerful traffic simulation package has recently resulted in the addition of a user-friendly data-entry process that is described in this report.

Two new interactive data-entry programs which greatly ease the task of preparing input data for the Geometry Processor (GEOPRO), the Driver-Vehicle Processor (DVPRO), and the Simulation Processor (SIMPRO), of the TEXAS Model, have been incorporated into the package. The user is now guided through the data-entry process by a series of prompts and is able to enter data through the keyboard of an alphanumeric terminal or a microcomputer, have the data displayed on the screen along with error reports, and request revisions to the data in a straightforward manner.

The need for calculating the coordinates of geometric features has been eliminated. Geometric data are entered in terms of readily-available geometric characteristics such as angles between leg centerlines, the number of inbound and outbound lanes on each intersection leg, and lane widths. Much of the tedious work previously required for specifying simulation and traffic signal control parameters to the model is accomplished automatically by the user-friendly data-entry programs.

The report lists and describes each data item that must be specified by the user of the TEXAS Model. The methods for entering these data and for saving, recalling, and revising data files is described in detail. A series of illustrative examples is also presented in the report.

A permanent library of 20 typical intersection geometric configurations is made available through a data-entry program. The user will often find that one of these intersection arrangements is very similar to the intersection of interest and that it may be used with only minor changes. The permanent library of intersection configurations is shown in hard copy in Appendix A of the report.

The user-friendly version of the model is remarkably more accessible to the user. Approximately 30 minutes are needed to set up and execute a simple run of the model using the new data-entry process. This is about 1/10 of the time previous required.

A unique graphics display feature has also been added to the package. The speed, position, and time relationship between every simulated driver-vehicle unit and the intersection geometry is displayed in real-time, or in stop-action, on a screen driven by a microcomputer. This animated display allows the user to study the overall peformance of traffic and traffic control at an intersection or to examine the behaivor of an individual driver-vehicle unit in great detail, if desired. Alternative solutions to intersection problems can be evaluated quickly and economically by this technique.

IMPLEMENTATION STATEMENT

A User-Friendly TEXAS Model has been developed, and it is recommended for implementation on the Texas State Department of Highways and Public Transportation's computer system. The interactive data-entry programs, written in FORTRAN 77, can utilize the VAX/Intergraph network for generating data files. The TEXAS Model can then utilize these data files when running on the VAX or on the Department's IBM mainframes. Data entry and execution of the TEXAS Model simulation programs can also be accomplished entirely on an IBM PC-XT, but the execution time is somewhat longer. With the user-friendly version of the TEXAS Model, data for a simulation run can be entered in less than half an hour. Graphical animation of the simulated traffic can then be displayed on a microcomputer for real-time observation of the results.

A further recommendation is that a series of schools or training sessions be given in order to demonstrate to SDHPT personnel the applicability of the User-Friendly TEXAS Model for solving many day-to-day and special intersection problems. The ease of use and immediate availability of results from this powerful engineering tool have been enhanced considerably by the developments accomplished under this study.

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THE USER-FRIENDLY TEXAS MODEL

The TEXAS Model for Intersection Traffic [Refs 1-3] is a powerful computer simulation tool which allows the user to evaluate in detail the complex interaction among individually-characterized driver-vehicle units as they operate in a defined intersection environment under a specified type of traffic control. An extensive amount of descriptive data must be input to the TEXAS Model in order to characterize a simulated geometry, traffic, and traffic control situation adequately. To aid the user in the data-input process, a series of data coding forms was developed several years ago. Use of these forms proved to be cumbersome at best, and coding errors occurred rather frequently. Some potential users of the TEXAS Model were discouraged by the amount of effort needed for data entry. The need for a more efficient means of communication between the user and the model was evident.

This guide describes the results of a major effort to make the TEXAS Model more user-friendly. In the user-friendly version of the model, actual data entry to the computer is accomplished by the user through the keyboard of an alphanumeric terminal. Two interactive data-entry programs guide the user in entering data via a series of prompts (questions and instructions) displayed on the screen of the terminal. The results of data entry can also be displayed on the screen and printed on a hard copy device.

Structure of the TEXAS Model for Intersection Traffic

The TEXAS Model for Intersection Traffic includes four data processors: GEOPRO (Geometry), DVPRO (Driver-Vehicle), SIMPRO (Simulation), and EMPRO (Emissions) for describing, respectively, the geometric configurations, the stochastically arriving traffic, the behavior of traffic in response to the applicable traffic controls, and the emissions generated by the traffic. The structural relationship among these data processors is shown in Fig 1.

GEOPRO defines the geometry of the intersection in the computer. It calculates vehicle paths along the approaches and within the intersection. The number of intersection legs, together with their associated number of lanes and lane widths, define the intersection size and the location of any special lanes. The azimuth for each leg and the associated coordinates define the shape of the intersection. The allowed directional movements of traffic on the inbound lanes and the allowed movements on outbound lanes define the directional use of the intersection.

DVPRO utilizes certain assigned characteristics for each class of driver and vehicle and generates attributes for each individual driver-vehicle unit; thus, each unit is characterized by inputs concerning driver class, vehicle class, desired speed, desired outbound intersection leg, and lateral inbound lane position. All these attributes are generated by a uniform probability distribution, except for the desired speed which is defined by a normal distribution. Each unit is sequentially ordered by queue-in time as defined by the input of a selected headway

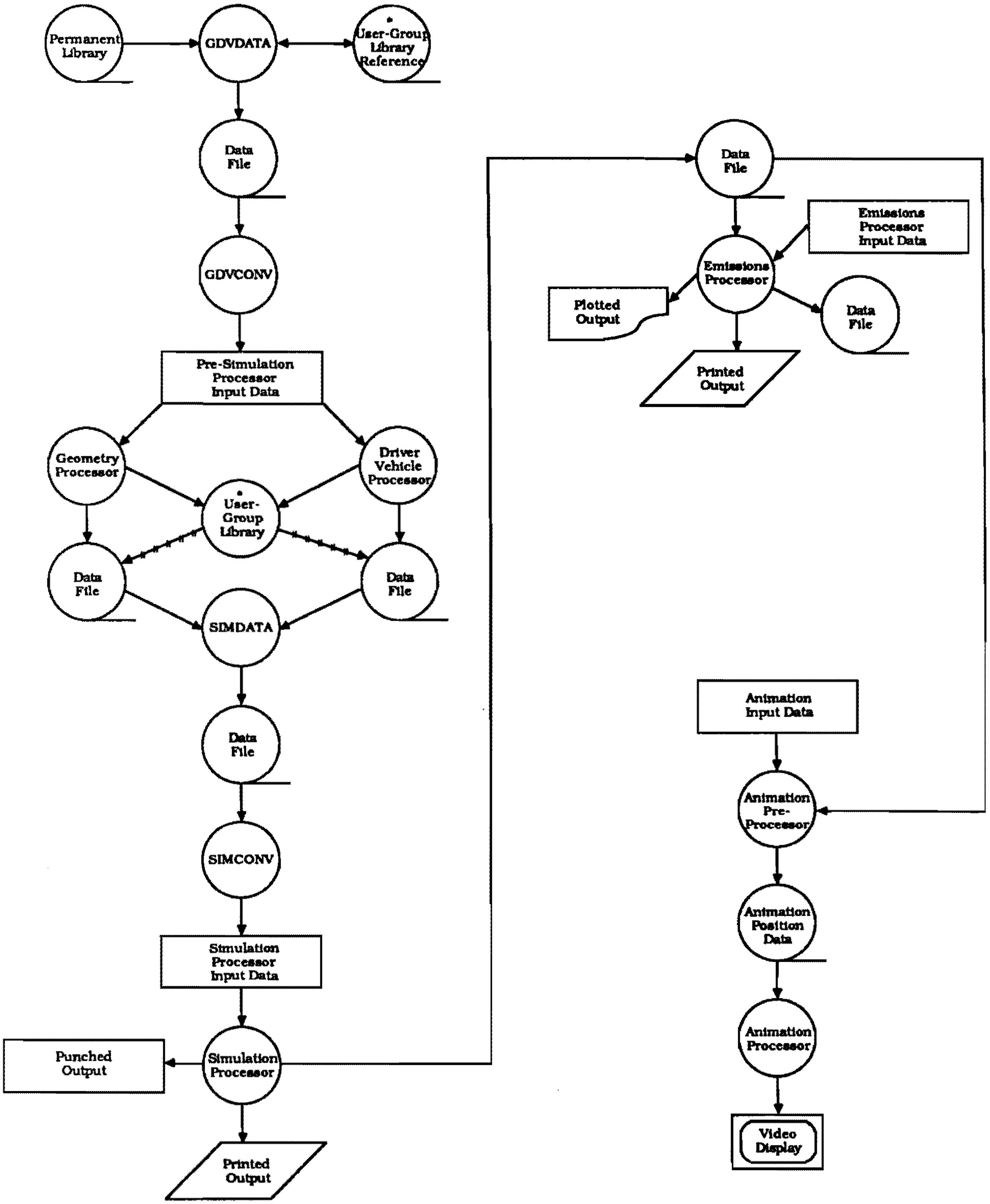


Figure 1. Flow chart of the structure of the User-Friendly TEXAS Model.

distribution. The total number of driver-vehicle units which must be generated by DVPRO is determined by the product of the input traffic volume, in vehicles per hour, and the minutes of time to be simulated.

SIMPRO simulates the traffic behavior of each unit according to the momentary surrounding conditions including any traffic control device indications which might be applicable. Upon entering the inbound approach lane, the entry velocity of each unit is set so that the vehicle will neither exceed a selected desired speed nor collide with the unit immediately ahead of it. If the unit ahead is accelerating, or is traveling at its desired speed, the entering unit will enter the approach at its own desired speed. If the unit ahead is decelerating, the speed of the entering unit is set to a value which is less than its own desired speed. If there is no leading unit on the inbound lane, the unit enters with its desired speed.

After entry, the unit is checked moment-by-moment within SIMPRO as to whether or not it is in a car-following situation. If it is not, the magnitude of required acceleration or deceleration which is appliable at any given instant is calculated by linear interpolation between extreme values which are set for each vehicle class with respect to the desired speed and to zero speed. Maximum required acceleration and deceleration occur at or near zero speed, and zero acceleration occurs at the maximum speed that each type of vehicle can attain. If the unit is in a car-following situation, the speed and acceleration of the unit interact with the speed and position of the unit ahead. Current and relative speeds and positions of all adjacent vehicles are thus utilized in determining the behavior of each driver-vehicle unit in the simulation model.

When car following or traffic control makes it necessary for a unit to accelerate or decelerate, the logic in SIMPRO provides for accelerating to the desired speed, accelerating to the speed of the unit ahead, decelerating to follow the unit ahead, or decelerating to the desired speed within the available distance.

As the unit proceeds along the inbound approach lane, the location and the status of traffic control devices are checked moment by moment. The indication of the traffic control devices will apply to the unit as soon as the unit comes into the influence area of the device.

If stop signs control the intersection, SIMPRO lists the units stopped before the sign according to their arrival times and then releases them in a first-arrived-first-served sequence. If there are simultaneous arrivals on adjacent intersection legs, the unit to the right gets priority for earliest release.

If pre-timed signals control, each unit responds to the signal indications which appear in a defined sequence and are of a specified duration for each phase. Each unit will attempt to go on a green indication after checking for intersection conflicts. If the unit is in the leading position and has cleared conflicts, the unit will enter the intersection. If a leading unit has stopped before the unit being examined, or if the leading unit is decelerating, the unit being examined will begin to stop. When the signal indication is red, each arriving unit will stop; however, a right-turn-on-red option is provided.

If control is by an actuated signal controller, the sequence and duration of each indication is selected in response to the information received by the controller from the detectors. The logic for driver response to signal indications is, of course, the same as that described for the pretimed signal. A detector actuation is defined by the time interval during which the front bumper of a unit has crossed the start of the detector but the rear bumper has not crossed the end of the detector. Actuations may cause the controller to continue the phase or allow the phase to change when a maximum time interval for that phase has elapsed or a sufficiently large gap occurs.

A unit is allowed to change into an adjacent lane if less delay can be expected. The geometric path of the lane-changing unit is a cosine curve. Each unit is processed incrementally in time from its entry onto the inbound lane to the end of the outbound lane. The length of each approach is specified. The instantaneous traffic behavior of each unit including speed, location, and time are written onto a tape by the TEXAS Model for subsequent use in the emission processor (EMPRO). Statistics about delays and queue lengths are also gathered by the TEXAS Model for evaluating the performance of trafifc at the intersection.

Delay statistics include the average of total delay and the average of stop delay incurred by each vehicle processed. Each delay is summarized by left-turn, right-turn, and straight movement and by the total of these three permitted directional movements on each inbound approach. Total delay is the difference between travel time for a vehicle through the system and the time it would have taken the vehicle at its desired speed. Stop delay is the time spent by a vehicle which has a velocity less than 3 feet/second. Delay statistics show the overall influence of the intersection environment on traffic passing through the intersection. Comparison of the delays experienced by traffic making various directional movements indicates the interaction among traffic flows on the intersecting streets. Queue-length statistics include average queue length and maximum queue length. Both are measured in units of vehicles, not feet. Average queue length and maximum queue length are the averages taken for each inbound lane over any selected time interval.

EMPRO, the emissions processor, incorporates models to predict the instantaneous vehicle emissions of Carbon Monoxide (CO), Hydrocarbons (HC), Oxides of Nitrogen (NO_x), and fuel flow (FF) for both light-duty vehicles and heavy-duty vehicles. EMPRO utilizes information from SIMPRO about the instantaneous speed and acceleration of each vehicle to compute instantaneous vehicle emissions and fuel consumption at points along the vehicle path.

Data Entry to the User-Friendly TEXAS Model

As shown in Fig 1, data that are required for running the TEXAS Model are entered by the user through two computer data-entry programs called GDVDATA (Geometry, Driver, Vehicle) and SIMDATA (Simulation). These are unique features of the user-friendly version of the model.

A new technique for entering the data that are needed for defining the geometric features of the intersection area in terms that are acceptable to the geometry processor (GEOPRO) of the TEXAS Model is incorporated into GDVDATA. Previously, the coordinates of all lines and circular arcs had to be calculated and coded individually, but the new technique uses a modular construction concept to build the intersection geometry from sets of properly configured and oriented lanes, legs, and curb returns. Now, all geometric features are specified by lengths and angles which, it is felt, can be more easily defined by the user than coordinates.

In addition to the geometric data needed by the model, the user must enter data to characterize the drivers and vehicles which make up the traffic stream passing through a simulated intersection. The data-entry program GDVDATA includes user aids for entering the data needed by the driver-vehicle processor (DVPRO) of the TEXAS Model.

For efficiency and for the convenience of the user, a permanent library, which contains 20 typical intersection configurations, has been created and stored within GDVDATA. Each of these intersection configurations, along with a defined traffic pattern, is described in detail in Appendix A of this guide. Instructions for using and modifying data files copied from the permanent library are given through prompts on the screen and in the section of this report entitled USING THE DATA-ENTRY PROGRAM GDVDATA. A user-group library is also provided to allow users to develop, store, index, and retrieve conveniently their own data files for modification or for repeated use without modification.

Data that are needed by the simulation processor, SIMPRO, are entered through the data-entry program called SIMDATA. This program pairs the entered data required by SIMPRO with data previously defined by using GDVDATA or with data contained in a permanent library file within GDVDATA. Use of SIMDATA is described in the section of this guide entitled CONCEPTS AND USE OF THE DATA-ENTRY PROGRAM SIMDATA and through prompts and instructions on the screen.

Animated Graphics Display of TEXAS Model Output

Output from the TEXAS Model includes the instantaneous speed, location, and time relationship for every simulated vehicle. These data are routinely written onto a tape for use by the emissions processor, EMPRO, or for other applications. The User-Friendly TEXAS Model provides a feature whereby this information can be displayed graphically in real-time, or in stop action, on a screen driven by an IBM PC-XT computer. Intersection geometry is extracted from the files created by GDVDATA and displayed on the screen, first. Then, the position of each simulated vehicle is represented on the screen by an outline of the vehicle, scaled to size and color coded according to performance capability, with respect to time.

With this animated graphics display the user can study the overall traffic performance at an intersection or examine in great detail the behavior of an individual vehicle in the traffic stream. This is a unique capability which permits the user to examine easily several alternative solutions to a problem by simulation without the time and expense of cut-and-try experimentation in the field. A wide range of conditions can be defined and evaluated visually on the screen as well as in the form of tabular listings that give summary statistics about traffic and signal-control performance.

Considerable refinement of this powerful engineering analysis tool is possible for its utilization in itnersection design and improvement. Each example run has immediately suggested other applications in situations that need the kind of detailed evalaution that can be accomplished. The current version demonstrates this potential.

CONCEPTS AND TERMINOLOGY USED IN THE DATA-ENTRY PROGRAM GDVDATA

The TEXAS Model utilizes two pre-processor packages to arrange the required data concerning intersection geometric features and driver-vehicle traffic characteristics into a format that is acceptable for use in the actual simulation process. The user must specify all geometric and traffic data that are needed by the model to describe accurately and completely the particular intersection situation which will be simulated in a given run of the program. Once the geometric and traffic features have been entered properly, they can be used repeatedly by the simulation processor without change. These data are entered in the user-friendly version of the TEXAS Model via a program called GDVDATA. This program utilizes a series of prompts on the screen to guide the user in entering all required geometric and traffic data.

Geometry Data

Experience has shown that the first-time user as well as the frequent user of the TEXAS Model must have a plan-view drawing or sketch of the intersection area that is to be simulated available for immediate reference before attempting to enter the geometric data required by the model for every specific run. Details shown on the plan should permit determination of dimensions to within one foot and angles to within one degree.

The concept of modular construction is used to configure a digital representation of the intersection geometric features which are to be simulated by the model. Terminology associated with intersection geometry as used in this guide is shown in Fig 2 and defined in Table 1 which follow. The arrangement of the various elements of intersection geometry and the descriptive data required by the TEXAS Model is also discussed below.

The LANE is the basic element that is used to form the geometry of an intersection. Each lane has a finite width and length, is oriented in a particular way with respect to the intersection center, and carries traffic either inbound toward the intersection or outbound away from the intersection. One or more parallel lanes form a LEG. Inbound lanes lie to the right-hand side of the leg centerline and outbound lanes to the left-hand side. Lanes on each leg are numbered starting with the inbound lane nearest the leg centerline as No. 1, the next adjacent inbound lane to the right-hand side as No. 2, etc. until all inbound lanes on the leg are numbered. Then, the next sequential number is given to the outbound lane nearest the leg centerline, and the numbering sequence is continued for each adjacent outbound lane until all lanes on the leg are numbered. A new sequence of numbers starting with 1 is used

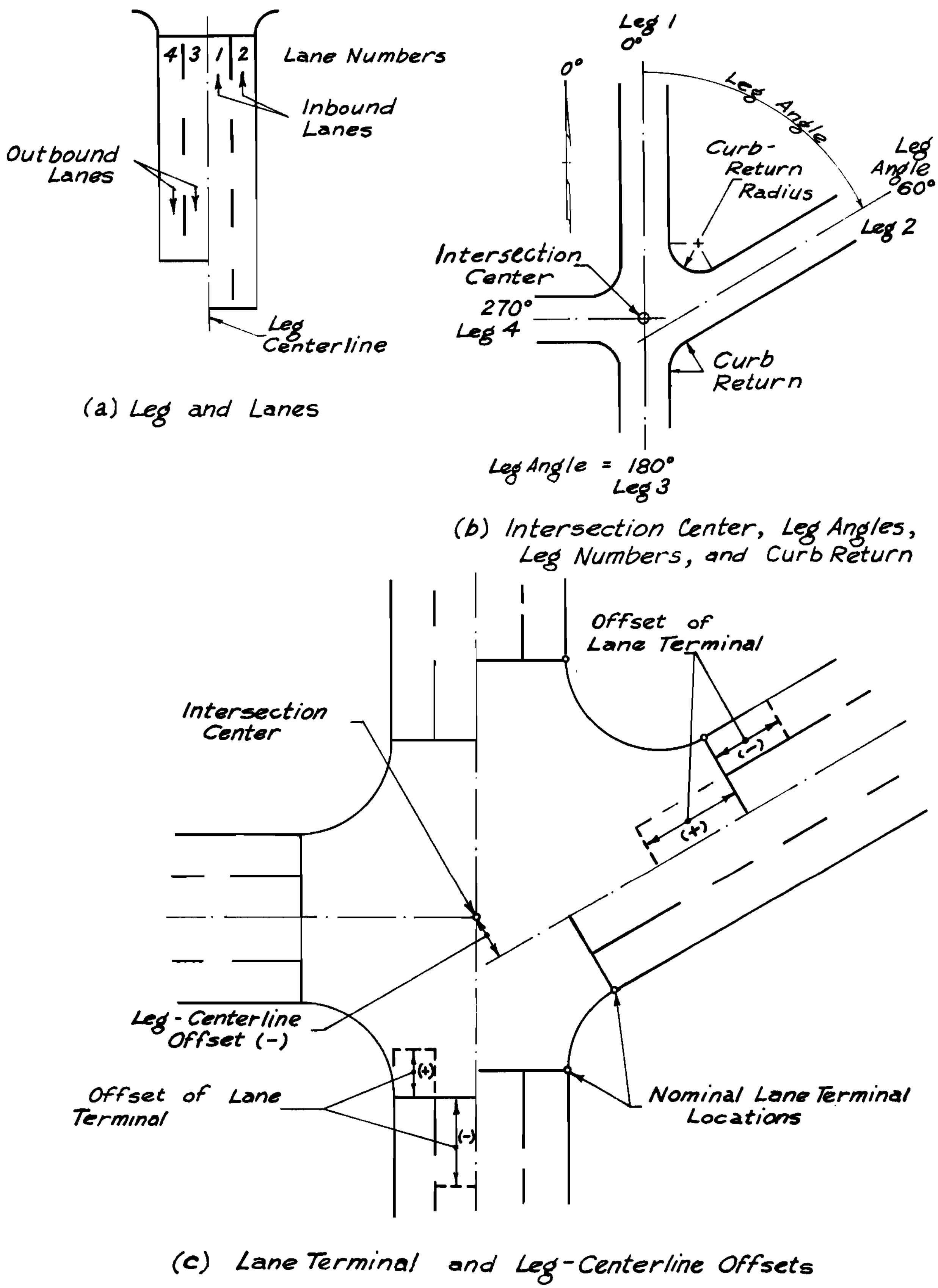


Figure 2. Elements of intersection geometry.

TABLE 1. DEFINITIONS

TERM	DEFINITION
1. LANE	An area of the traveled way designated for one-way use by vehicles entering or leaving an intersection. Each lane has a user-specified width and length and interfaces with the intersection at the lane terminal. Inbound lanes carry vehicles toward the intersection, and outbound lanes take vehicles away from the intersection.
2. LEG	A set of 1 to 12 lanes with no more than 6 inbound lanes and no more than 6 outbound lanes.
3. LEG CENTERLINE	An imaginary straight line that separates inbound lanes from outbound lanes on a leg. It need not be at the geometrical center of the leg. When looking toward the intersection, inbound lanes are on the right-hand side, and outbound lanes are on the left-hand side of the leg centerline. The leg centerline is equidistant between the edges of a median. On legs which carry only one-way traffic, the leg centerline is at the leftmost lane edge when viewed along the leg centerline in the direction of traffic movement.
4. MEDIAN	An area of a divided highway which separates inbound and outbound lanes and which is not designated for regular vehicular use.
5. LEG ANGLE	The angle, measured clockwise, from a 0-degree reference line (usually north or toward the top of a drawing) to the leg centerline. It may have any value from 0 through 359 degrees.
6. CURB RETURN	A circular arc which is tangent to the outermost edges of the lanes on two adjacent legs of an intersection. It defines the edge of the traveled way for vehicles using these lanes.

continued

TABLE 1. CONTINUED

TERM	DEFINITION
7. LANE TERMINAL	A real or imaginary straight line, perpendicular to the leg centerline, which designates the interface between a lane and the intersection. On each inbound lane, it locates the position where simulated vehicles will stop, if necessary, before entering the intersection. It is nominally located at the point of tangency of the curb return with the outside lane edge for all lanes on the same side of the leg centerline.
8. OFFSET OF LANE TERMINAL	The distance that the lane terminal is shifted along a lane from its nominal location. Positive values indicate movement toward the intersection center; negative values away.
9. INTERSECTION CENTER	A selected reference point in the intersection where two or more leg centerlines cross. The location of all leg centerlines is referred to this point by a user-defined leg angle and a leg-centerline offset.
10. INTERSECTION	The area into which the centerlines of 3 to 6 legs extend, and which is bounded by the lanes, medians, and curb returns of all legs.
11. LEG-CENTERLINE OFFSET	The perpendicular distance from the leg centerline to the intersection center. Positive values indicate that the leg centerline is to the right of the intersection center when looking along the centerline toward the intersection; negative values indicate that it is to the left.
12. TURNING MOVEMENT CODE	A set of letters that describe the type of movement made by a vehicle in the intersection while going from an inbound lane to an outbound lane(s). "U" (U-Turn), "L" (Left Turn), "S" (Straight Through), and "R" (Right Turn).

continued

TABLE 1. CONTINUED

TERM	DEFINITION
13. DATA FIELD	A single item of data that either specifies a numerical value (e.g., "4", "6.1", "-40") or is text (e.g., "YES", "MAIN STREET AT LAKE DRIVE").
14. DATA LINE	An ordered set of data fields, arranged in a specific way. Example of a data line with 5 fields: " 4 29 3.1 -3YES".
15. FILE	An ordered set of data lines.
16. DEFAULT VALUE	A pre-selected value which will be supplied by the program to fill a DATA FIELD for which the user has not specified a value.

to number the lanes on each succeeding leg. Legs are numbered beginning with No. 1 for the leg with the smallest leg angle, with successive leg numbers increasing in a clockwise direction.

The LEG CENTERLINE separates the inbound and outbound lanes directionally and provides a means for orienting the legs with respect to the intersection center. If a MEDIAN separates the inbound and outbound lanes, the leg centerline is coincident with the median centerline. The user specifies the width of the median. All leg centerlines intersect at least one other leg centerline in the INTERSECTION. A chosen point of crossing of two or more leg centerlines is called the INTERSECTION CENTER. Data entry will be facilitated if this point is chosen as the common point of intersection of the largest number of leg centerlines, but the program allows any point in the intersection where at least two leg centerlines cross to be called the intersection center. All leg centerlines are located with respect to the intersection center by the user's specification of a leg angle and a leg-centerline offset.

The LEG ANGLE is measured in a clockwise direction from a 0-degree reference line, which must pass through the intersection center, to each leg centerline. It may have any whole-degree value from 0 through 359 degrees. The LEG-CENTERLINE OFFSET is the perpendicular distance from a point on the leg centerline to the intersection center. This distance must be determined by the user from the plan-view drawings of the intersection. Positive values of offset indicate a leg-centerline location to the right of the intersection center, and negative values locate the leg centerline to the left when looking along the leg centerline toward the intersection.

A CURB RETURN is used to join the edges of the outermost lanes on adjacent legs of the intersection and to define the edge of the traveled way. The user specifies the radius of this circular arc which is tangent to two intersecting lane edges. A LANE TERMINAL, which defines the interfaces between each lane and the intersection, is nominally located by the program for all lanes on the same side of the leg centerline at the point of tangency of the curb return with the outside lane edge. The lane terminal may be shifted from this nominal location by the users entering a value of OFFSET OF LANE TERMINAL for each lane. A positive value for this offset shifts the lane terminal toward the intersection center, and negative value moves it away from the intersection. On each inbound lane, the lane terminal locates the position where simulated vehicles will stop, if necessary, before entering the intersection. In special cases when two adjacent lanes are parallel, or nearly parallel i.e., within + 20.05 degrees, the LANE TERMINALS for all lanes on the same side of the leg centerline are not located by the program at the nominal location described above. Rather, the program automatically locates them at a perpendicular distance equal to the curb-return radius from the lane terminals to the intersection center. This technique of locating the lane terminals can be used for other cases by entering a negative value for the curb-return radius. The program will utilize the absolute value of the negative curb-return radius to position the lane terminals with respect to the intersection center.

The geometry processor in the TEXAS Model automatically generates a geometric path through the intersection from the center of each inbound lane terminal to the center of each outbound lane terminal which can be accessed legally by a vehicle passing through the intersection. Each path is made up of segments of straight lines and circular arcs of maximum radius which will fit at the center of the lane terminals being connected. The user must specify a TURNING MOVEMENT CODE which describes the type of movement which will be made by a vehicle in the intersection as it uses one of the available paths. Prohibited movements from any lane may be simulated by omitting letters from the turning movement code. Permitted movements include: U-turn, U; left-turn, L; straight, S; and right-turn, R. The computer works with exact angles and dimensions; therefore, zones must be specified by a range of angles within which the destination of each simulated turning movement can fall. Provisions are made through the leg geometry data prompts for entering angles that define the U-TURN ZONE and the STRAIGHT ZONE. These angles are measured from the centerline of the leg on which the movement originates to the limiting angle within which the centerline of the leg where the movement has its destination may fall. The remaining zone on the right-hand side of the centerline of the leg from which the movement originates accommodates right-turn movements, and the remaining zone on the left-hand side handles left-turn movements. Figure 3 illustrates conceptually the four zones which may contain the centerlines of legs on which the respective turning movements have destinations. Default values for the zone angles are set in the program at 20 and 10 degrees, respectively, for straight movements and for U-turn movements.

A SPEED LIMIT is specified for inbound lanes and for outbound lanes on each leg. The range is from 10 to 80 mph, and default values in the program are 30 mph for both inbound and outbound lanes. Prompts permit the user to enter a separate, chosen value within this range for each set of inbound and each set of outbound lanes on each leg. Speed limit information is taken from the geometry processor in the actual simulation process and provided to each simulated driver on each intersection leg.

Partially-blocked lanes can be specified by the user. For example, channelization might block part of a lane to form a left-turn bay that would be much shorter than the other inbound lanes on a leg, or a bus stop might block the portion of either an inbound or an outbound lane nearest the lane terminal. Construction barricades or a loading zone might block part of the length of a lane somewhere between the lane terminal and the outer end of the lane while leaving lengths of the lane at both ends open for use. Prompts in the program allow the user to specify the USABLE LENGTH OF LANE at either or both ends of each inbound and outbound lanes on a leg. Simulated vehicles move into and out of the usable portions of partially-blocked lanes by executing lane-changing maneuvers to or from an adjacent lane along a half-wavelength cosine curve path. Figure 4 illustrates the three partially-blocked lane configurations that can be simulated and shows the dimensions which must be specified by the user.

Driver-Vehicle Data

The driver-vehicle processor in the TEXAS Model arranges all data that are needed by the model to characterize driver and vehicle behavior into a format that is suitable for use in the actual simulation process. The

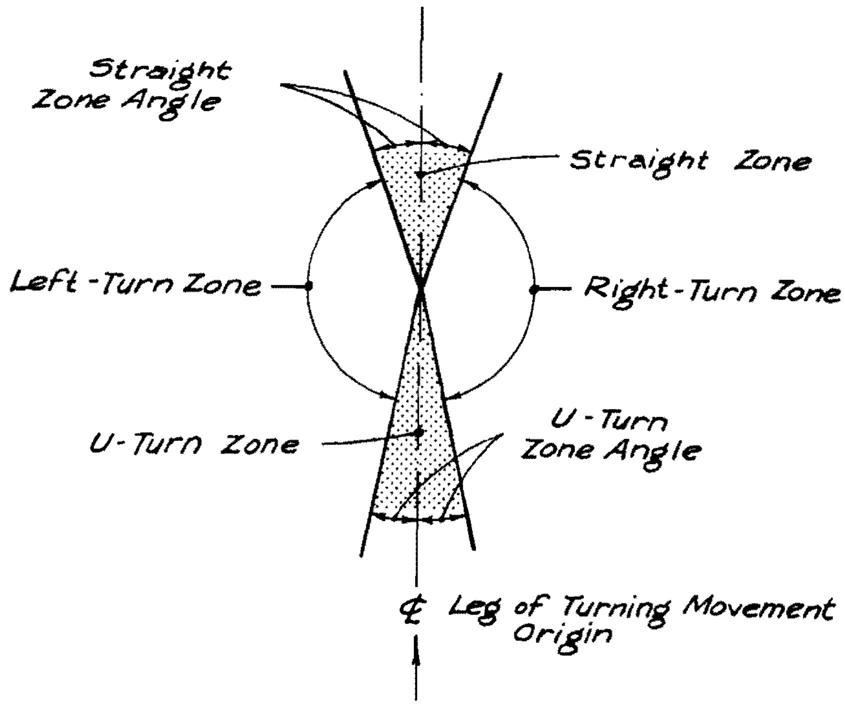


Figure 3. Turning movement zones.

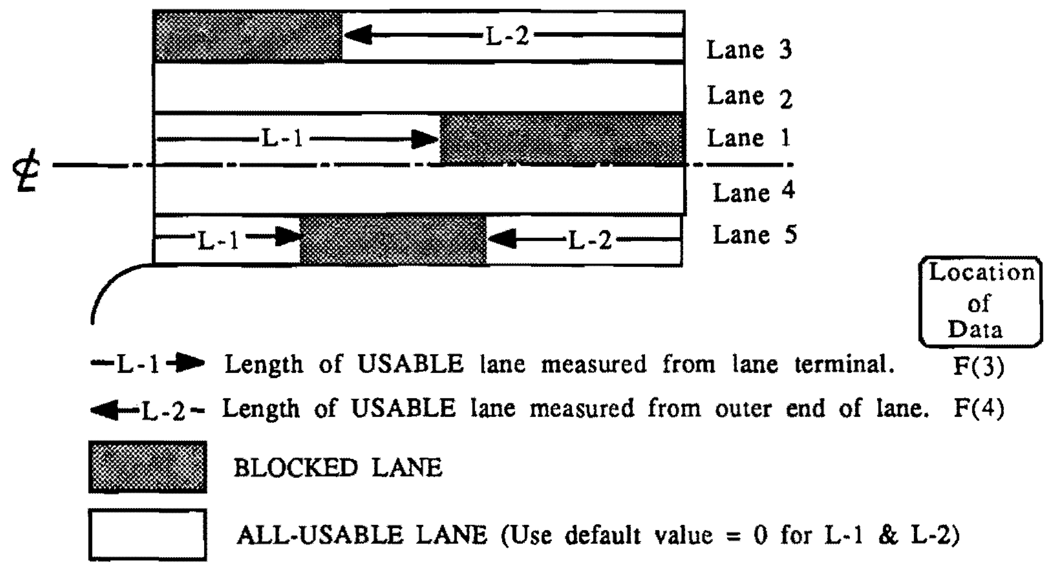


Figure 4. Partially-blocked lane configurations.

data which can be defined by the user for each run through the current version of the data-entry program is listed in Table 2 and discussed below.

MINIMUM HEADWAY is used in the simulation process to define the minimum time in seconds which will be allowed between the fronts of successive vehicles passing a point. A range from 1.0 to 3.0 seconds is permitted, and the default value is set in the program at 1.0 seconds.

The TEXAS Model allows up to 15 vehicle classes to be characterized by the user, but in the current version of GDVDATA, the NUMBER OF VEHICLE CLASSES is set to the default value of exactly 12 classes. In using this data-entry program, a value for all of these vehicle classes must be used in the traffic mix, but the proportions of each class may be changed by specifying percentage values for the MIX OF VEHICLE CLASSES IN INBOUND TRAFFIC in response to prompts in the program. The sum of the percentages for the 12 classes must equal 100 percent. The user may elect to use the default percentages which provide a preset mix of the 12 vehicle classes in the inbound traffic stream on each leg. These default values are shown in Table 2.

The NUMBER OF DRIVER CLASSES may range from 1 to 5 in the TEXAS Model, but the present GDVDATA program always uses three of these classes. The percentage of each driver class is automatically set to the default value that is embedded in the driver-vehicle processor. It is anticipated that GDVDATA will be modified at a later time to allow the user to enter the number of driver classes and specify the mix of driver classes in response to a series of prompts. The embedded default values (shown in Table 2) are thought to be representative of usual driver characteristics.

In order to simulate actual traffic behavior on inbound lanes of reasonable length, the PERCENT OF LEFT-TURNING VEHICLES ENTERING IN THE MEDIAN LANE and the PERCENT OF RIGHT-TURNING VEHICLES ENTERING IN THE CURB LANE must be specified by ther user. These percentages may range from 50 to 100 percent, and a default value has been set in the program at 80 percent for each of the respective lanes. Normally, a simulated vehicle will be able to make only one lane-change maneuver on the inbound leg. The user should therefore exercise good judgment in specifying reasonable percentages of turning movements in relation to the percentage of the total inbound traffic which will be entering the system in that lane.

The user must specify the lanewise distribution of traffic that enters the system on the available inbound lanes at the outer end of each leg. Prompts in the GDVDATA request PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE. The percent of traffic in each lane may range from 0 through 100 percent, but the sum must be 100 percent. Various default values are set in the permanent library files of GDVDATA for these percentages.

A frequency distribution for the time headways between successive vehicles entering the simulated intersection system on the inbound lanes must be specified by the user. Table 3 gives the NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION which may be chosen by the user and also shows the PARAMETER FOR HEADWAY FREQUENCY DISTRIBUTION that must be specified by the user in response

TABLE 2. USER-SPECIFIED DRIVER-VEHICLE DATA (SDHPT)

DATA ITEM	FUNCTION	RANGE	DEFAULT VALUE
1. MINIMUM HEADWAY	Minimum time in seconds between the fronts of successive vehicles passing a point.	1.0-3.0 sec	1.0 sec
2. NUMBER OF VEHICLE CLASSES	Defines the number of classes of vehicles which will be in the simulated traffic mix. (The data-entry program presently provides only for a standard traffic mix with 10 classes.)	1-15	10
3. NUMBER OF DRIVER CLASSES	Defines the number of different driver types which will be included in the simulation. (The data-entry program presently provides only for a standard driver mix with 3 classes.)	1-5	3
4. PERCENT OF LEFT-TURNING VEHICLES ENTERING IN MEDIAN LANE	Allows user to place left-turning vehicles in an appropriate lateral position upon entering the simulated system.	50-100	80
5. PERCENT OF RIGHT-TURNING VEHICLES ENTERING IN CURB LANE	Allows user to place right-turning vehicles in an appropriate lateral position upon entering the simulated system.	50-100	80
6. PERCENT OF INBOUND TRAFFIC TO THIS LANE	Gives lanewise distribution of inbound vehicles entering the system. Sum of lane percentages on a leg must equal 100.	0-100	(varies)
7. DISTRIBUTION NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION	Allows user to select a descriptive frequency distribution for headways of vehicles entering the system.	see Table 2.2	SNEGEXP

(continued)

TABLE 2. CONTINUED

DATA ITEM	FUNCTION	RANGE	DEFAULT VALUE
8. TOTAL HOURLY VOLUME INBOUND ON LEG	Gives total inbound traffic volume on the leg in vehicles per hour.	0-4000 vph	200 vph/ inbound lane
9. PARAMETER FOR HEADWAY FREQUENCY DISTRIBUTION	Defines the character of the selected headway frequency distribution.	see Table 2.2	2 sec
10. MEAN SPEED OF VEHICLES ENTERING THE SYSTEM	Defines a mean speed for vehicles entering the inbound lanes in mph.	1-80 mph	29 mph
11. 85-PERCENTILE SPEED OF VEHICLES ENTERING THE SYSTEM	Defines the 85th-percentile speed of vehicles entering the inbound lanes in mph.	1-80 mph	31 mph
12. MIX OF VEHICLE CLASSES IN INBOUND TRAFFIC	Allows the user to set the percentage of vehicles of each class which make up the inbound traffic. (The data-entry program presently provides for 10 classes.) Sum of percentages must equal 100.	0-100	"No" (preset mix)
13. PERCENT OF INBOUND TRAFFIC TO LEG DESTINATIONS	User must specify the percentage of vehicles which enter the intersection from a given leg that have a destination on the outbound lanes of every leg, including the leg of entry (i.e., U-turns). Sum of percentages must equal 100.	0-100	(varies)

(continued)

TABLE 2. CONTINUED

PROGRAM-SUPPLIED (DEFAULT) VALUES FOR DRIVER AND VEHICLE CLASS DATA

VEHICLE CHARACTERISTIC \ VEHICLE TYPE	PASSENGER CARS				TRUCKS							
					Single-Unit				Tractor Semi-Trailer			
					Gasoline		Diesel		Gasoline		Diesel	
	Sports	Compact	Medium	Large	PL *	FL#	PL	FL	PL	FL	PL	FL
Class	1	2	3	4	5	6	7	8	9	10	11	12
Operating Characteristics Factor	115	90	100	110	85	80	80	75	70	65	75	70
Maximum Deceleration, ft/sec/sec	14	13	13	8	7	5	7	5	6	4	6	4
Maximum Acceleration, ft/sec/sec	14	8	9	11	7	6	6	5	4	3	5	4
Maximum Velocity, ft/sec	205	120	135	150	100	85	100	85	95	75	100	80
Minimum Turning Radius, ft	20	20	22	24	42	42	42	42	45	45	45	45
Length	14	15	16	18	32	32	32	32	60	60	60	60
Percentage in Traffic Stream, %	1.5	22.5	23.3	44.7	2.6	2.6	0.2	0.2	0.2	0.2	1.0	1.0

DRIVER				PERCENTAGE OF DRIVER CLASS IN EACH VEHICLE TYPE											
Type	Class	P-R Time	Factor												
Aggressive	1	0.5	110	50	30	35	25	40	40	40	40	40	40	40	40
Average	2	1.0	100	40	40	35	45	40	40	40	40	40	40	40	40
Slow	3	1.5	85	10	30	30	30	20	20	20	20	20	20	20	20

* Partially-Loaded Truck

Fully-Loaded Truck

TABLE 3. FREQUENCY DISTRIBUTIONS FOR HEADWAYS

Name of Distribution	Distribution Parameter
U N I F O R M	Standard Deviation
L O G N R M L	Standard Deviation
N E G E X P	-
S N E G E X P	Minimum Headway
G A M M A	$Mean^2$/Variance
E R L A N G	Integer Value of Parameter for Gamma (can be rounded up or down)
C O N S T A N	-

to a prompt in the GDVDATA. This parameter defines the shape of the frequency distribution. Default values in GDVDATA are a shifted negative exponential type frequency distribution (SNEGEXP) with a parameter of two seconds.

The TOTAL HOURLY VOLUME INBOUND ON LEG may range from 0 through 4,000 vehicles per hour (vph) and must be specified by the user. Default values in the permanent library files correspond to a volume of 200 vph in each inbound lane.

In order for each simulated vehicle to enter the system at an appropriate speed for the intersection situation, a MEAN SPEED OF VEHICLES ENTERING THE SYSTEM ON THIS LEG must be specified by the user. This mean speed may range from 1 to 80 mph. A default value of 28 mph is used in GDVDATA. An 85-PERCENTILE SPEED OF VEHICLES ENTERING THE SYSTEM ON THIS LEG must also be given to define the scatter of entry speeds about the mean. This speed should be higher than the mean speed and may range from 1 to 80 mph. The default value in GDVDATA is 31 mph.

Every vehicle that enters the simulated intersection system on the inbound lanes of a leg has a destination to the outbound lanes of some leg. The user must specify PERCENT OF INBOUND TRAFFIC TO LEG DESTINATIONS by defining the percentage of all entering traffic on the leg which has a destination on every leg in the system, including the leg from which the traffic entered. The percentage to a leg destination may range from 0 through 100 percent, but the sum of all specified percentages must equal 100 percent. Various default values have been set for each intersection type in the permanent library files.

Libraries

The geometric arrangements of many intersections of practical interest fall into a few basic patterns according to the number of legs and lanes, the leg angles, and size. Similarly, traffic patterns can be characterized by representative parameters such as volume, speed, and direction of travel.

For the convenience of the users of the TEXAS Model, a series of 20 typical geometric arrangements and traffic patterns have been configured and stored for use in GDVDATA. These files, which cannot be changed by the user, are called the PERMANENT LIBRARY. Each file in the permanent library contains all the geometric and traffic data that are needed for simulating the conditions described by the data in the file. Appendix A illustrates the contents of each file in the permanent library. A plot of the important geometric features of each intersection that can be generated from the data is shown along with a simplified, preconstructed diagram which can be displayed on the screen of an alphanumeric terminal. A listing of the alphanumeric data needed by the geometry processor and the driver-vehicle processor is also included in this appendix for each permanent library file. The user can study the appendix to determine whether or not one of the files in the permanent library contains data which define an intersection situation of interest. If one of the files describes the situation exactly and the user wants to utilize the data contained in the permanent library file without modification, prompts in GDVDATA will guide the user through this process.

If one of the files in the permanent library can be used after modification, prompts in GDVDATA will guide the user in making the desired changes. Once the decision has been made to change the data copied from a permanent library file, the user must also decide whether to use the modified data file only once and then automatically eradicate it or to save it for reuse at some later time.

A unique name must be assigned to any data file that is to be saved. Checks are built into GDVDATA to warn the user about possible file name duplication. Many computer systems automatically store named data files permanently, but some systems eradicate these files when the user logs off the system or the job ends. In order to assure that a named data file is saved, the user of GDVDATA must make certain that the named data files will be written to permanent storage on the computer system being used.

The USER-GROUP LIBRARY is a special feature of GDVDATA which provides convenient access to previously-used files that have been saved. This feature is particularly efficient when the same intersection geometry and traffic are to be used repeatedly in several simulation runs as it will not be necessary to rerun the geometry and driver vehicle processors each time. The user-group library consists of the names of up to 16 data files that have been (1) saved on a permanent file, and (2) entered into the user-group library. This library serves as a cross-reference, or an index, to data files which have been previously prepared and saved by users on the same computer system.

When a user of GDVDATA names a data file and requests that it be saved, the program will begin constructing a data file and attempt to add the name of the file to the user-group library. If there is space in the library, the name will be added immediately, and a confirmation message will be displayed on the screen. If the library is already full, prompts will state this fact, display the names of the 16 files currently contained in the library, and ask the user whether to (1) delete a name and replace it with the new file name, or (2) leave the library intact and save the named data file without adding it to the library. If the user choses to delete a file name from the user-group library, the name to be deleted must be indicated.

When the data in a file that is named in the user-group library is first processed by the geometry processor and/or the driver-vehicle processor, the output from these processors is written to permanent files and indexed to the related file name in the library. At any later time, a user can utilize the previously-constructed geometry and driver-vehicle processor output files simply by defining a file in the user-group library. Prompts in GDVDATA advise the user as to which processor output files are already available. The important function of the user-group library is to provide users with convenient access to previously-constructed geometry and driver-vehicle processor output files through a name that is listed in the library.

USING THE DATA-ENTRY PROGRAM GDVDATA

The purpose of the data-entry program, GDVDATA, is to make communication between the user and the TEXAS Model as easy as possible. In this section, the technique for using the program in an interactive mode through an alphanumeric terminal is described and illustrated with examples. The current version of the program takes information that is entered by the user via a terminal and converts it into a format which is suitable for input to the geometry processor (GEOPRO) and the driver-vehicle processor (DVPRO) of the TEXAS Model.

In utilizing GDVDATA, the user either manipulates data files which have been prepared previously and stored in the computer or creates new files. For convenience, sets of data files and lists of data file names, called libraries, have been incorporated into GDVDATA. These libraries are described in the previous section. Data files in the PERMANENT LIBRARY may be copied, but not changed, by the user. The names of the data files that are listed in the USER-GROUP LIBRARY provide a cross-reference, or an index, to data files which have been previously prepared and saved by users on the same computer system. This list of names, and the associated data files, can be changed by any GDVDATA user who is operating on the same computer system.

Notation Used in This Guide

The following symbols and characters are utilized in this guide.

☐ This symbol indicates that the user should press the specified key on the alphanumeric terminal keyboard. Use only uppercase characters.

[C/R] The RETURN or CARRIAGE-RETURN key. This may be the ENTER key on some keyboards.

[ ] The SPACE BAR or SPACE KEY. This key is used to enter a blank character.

[   ] This box is used in the examples contained in the guide to show data items that were entered by the user. They were entered by pressing, in sequence, the keys that correspond to each item in the box, and then pressing C/R .

Prompts

Communication between the program and the user is through prompts displayed by the program and through keyboard entries (also called keyins) made by the user. Program prompts may be in the form of questions or requests that require a user response, or they may be informative prompts that display information which is needed by the user. Other prompts report action that has been taken by the program.

The prompts which require user response can be considered in three distinct categories. First, there are prompts that advise the user about how a desired data file can be obtained. The second type of prompt requests that the user enter specific data for inclusion in the data file. The third type of prompt will include a display of data that are in the file and request that the displayed data be reviewed and, if desired, revised by the user.

Prompts are intended to provide sufficient guidance to enable the user to respond in a manner that will result in successful communication with the program. If the prompts, which are displayed in abbreviated form, are not understood, the user can press

[H] [E] [L] [P] [C/R]

to request the program to display any additional information related to the prompt that is available. The "HELP" keyin is sometimes useful to redisplay information that has been displaced from the display screen.

Notation Used in Prompts

The following symbols and characters appear in the prompts on the screen and in hard copy.

(1) SQUARE BRACKETS, [ ], indicate default values.

(2) ANGLE BRACKETS, < >, indicate constraints on data.

(3) BRACES, { }, indicate optional elements.

(4) DOUBLE QUOTES, " ", appear in prompts to identify the exact information that currently exists in a file, e.g., ID = "4X4" means that the identification name for the subject file is 4X4.

(5) PERIODS, ..., when included in a data specification prompt, a string of periods indicates that the preceding element may be repeated one or more times. The number of periods in the string has no meaning.

(6) A QUESTION MARK, ?, indicates that the user can always respond to the prompt by pressing [Y] [C/R] for yes, or [N] [C/R] for no.

Retrieving, Revising, Saving, and Building Files

A file which is needed for input to the geometry processor (GEOPRO) and/or the driver-vehicle processor (DVPRO) may be obtained in one of several ways. Thre different situations, or cases, can exist under which a user might want to utilize GDVDATA to prepare such input. These cases are described below along with possible alternative actions that the user might desire to take.

Case 1. Use a File From the Permanent Library (see Appendix A)

(1) Action 1a. Choose a file from the permanent library and use the file as is.

(2) Action 1b. Copy a file from the permanent library, revise it, name the revised file, add the name to the USER-GROUP LIBRARY and save the new file for future use.

(3) Action 1c. Copy a file from the permanent library, revise it, use it once, and eradicate it.

Case 2. Use a File Which Has Been Previously Prepared, Named, and Saved

(1) Action 2a. Use a previously-prepared file as is. If this data file is named in the user-group library and has already been processed by GEOPRO and/or DVPRO, output from these processors will also be on file. Availability of these output files will be made known to the user by prompts.

(2) Action 2b. Revise the previously-prepared data file and use the revised file. The name of the file will remain the same, but the data in the file will be permanently changed by the revision and cross-references in the user-group library will be corrected.

(3) Action 2c. Copy a previously-prepared data file, revise the copied data, name the revised file, add the name of the revised file to the user-group library, and save the new file for future use. The original data file will remain intact.

(4) Action 2d. Copy a previously-prepared data file, revise the copied data file, use the revised data file once, and eradicate it.

Case 3. Build a New File By Keying In Data Through the Terminal

(1) Action 3a. Name the newly-built file, add its name to those already listed in the user-group library, and save the file for future use.

(2) Action 3b. Use the newly-built file only once and eradicate it.

The process of using GDVDATA interactively to deal with these various situations is illustrated in the following series of examples.

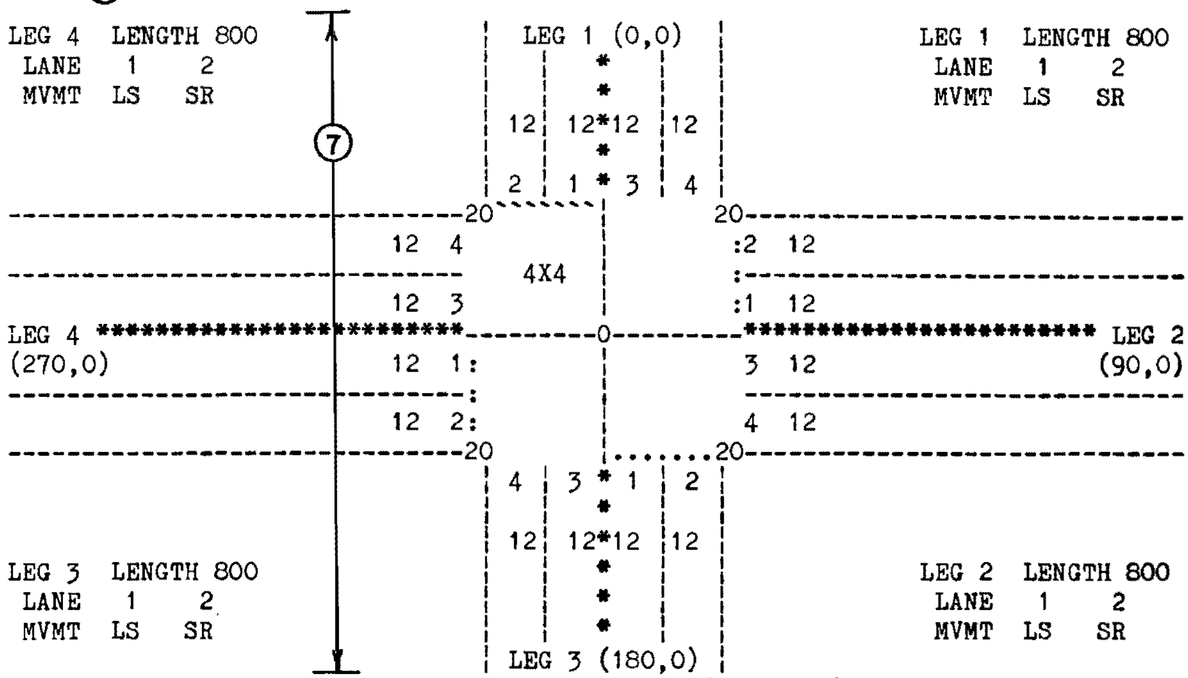
Examples

The first-time user of GDVDATA is encouraged to first read the preceding sections of the GUIDE and then actually go through the steps outlined below to exercise the program for a CASE 1 situation, as previously defined. This will familiarize the user with the terminology and notation which appear in the GUIDE and in the prompts on the screen. Other examples follow the same basic format.

Case 1, Action 1a. Using a data file from the PERMANENT LIBRARY without change. The information which will appear on the screen while executing this example is shown in Fig 5.

To select a file from the permanent library and use it unchanged, first log onto the computer and start the program. The log-on procedure depends on the type of computer being used. If you are not familiar with this

```
(1)   (2)
$ GDVDATA
GEOMETRY & DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.
DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY ?-(3)
YES -(4)
KEYIN A PERMANENT LIBRARY FILE ID:-(5)
4X4 -(6)
```




```
DO YOU WANT TO USE THIS PERMANENT LIBRARY FILE (ID="4X4") ?
YES -(8)
DO YOU WANT TO COPY AND REVISE THIS FILE FROM THE PERMANENT LIBRARY ?
NO
INPUT DATA FOR GEOMETRY & DRIVER-VEHICLE PROCESSORS ARE NOW ON:
    "QSA2:[055100.TEXAS]GDV4X4.DAT;1" -(9)
GEOMETRY AND DRIVER-VEHICLE DATA FOR TEXAS MODEL HAS BEEN DEFINED.
```

NOTES:

(1) Prompt from computer. May be different for your computer.

(2) User entry to start the geometry and driver-vehicle data-entry program. Every user entry (keyin) is ended by pressing [C/R] .

(3) Program prompt. Any prompt that ends with a question mark can be answered by pressing [Y] [E] [S] [C/R] or [N] [O] [C/R] . Entry of [Y] [E] [S] [C/R] can be shortened to [Y] [C/R] and entry of [N] [O] [C/R] can be shortened to [N] [C/R] . (continued)

Figure 5. **Example of CASE 1, Action 1a - Choosing a file from the permanent library and using it without revisions.**

NOTES (continued):

④ For display of a list of permanent library file ID's, press [H] [E] [L] [P] [C/R] .

⑤ Prompt for library file ID.

⑥ User response.

⑦ Sketch of selected permanent library file intersection geometry. See Appendix A.

⑧ Press [N] [O] [C/R] to receive prompt ⑤ again and enter a different ID.

⑨ This is the name of the file that holds data for the library file with an ID of "4X4".

Figure 5. Continued.

procedure, ask the System Manager of the site for assistance or see the manual for your computer. The program name is "GDVDATA". To start the program, press

[G] [D] [V] [D] [A] [T] [A] [C/R] .

NOTE: Some computers may require that a prefix such as

[R] [U] [N] [ ]

precede the program name. The program will display:

GEOMETRY AND DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.

DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY?

Press [Y] [E] [S] [C/R] . The program will display:

KEYIN A PERMANENT LIBRARY FILE ID:

The 20 permanent library files are described in Appendix A. The identification name, ID, of the data file for a symmetric, 4-leg intersection with 2 inbound and 2 outbound lanes on each leg is "4X4". To use this file, press

[4] [X] [4] [C/R] .

The program will display a sketch showing the geometry of the selected intersection followed by:

DO YOU WANT TO USE THIS PERMANENT LIBRARY FILE (ID="4X4")?

Press [Y] [E] [S] [C/R] . The program will display:

DO YOU WANT TO COPY AND REVISE THIS FILE FROM THE PERMANENT LIBRARY?

Press [N] [O] [C/R] . The program will display:

INPUT DATA FOR GEOMETRY AND DRIVER-VEHICLE PROCESSORS ARE NOW ON "GDV4X4"

This indicates to the user that the required geometry and driver-vehicle input data have been stored on the indicated file. **NOTE:** The file-naming convention depends on the computer being used; therefore, the file name might be somewhat different than shown. No matter what computer is used, the name of each file in the permanent library will contain "GDV", followed by the 3-character identification, ID, that is in the permanent library file.

If GEOPRO and/or DVPRO have already been run using file "GDV4X4", their output may already be saved. If so, this will be reported here by an appropriate message. The program will display:

TEXAS MODEL GEOMETRY AND DRIVER-VEHICLE DATA HAVE BEEN DEFINED.

This message indicates that the data-entry program GDVDATA has ended.

Five more examples are presented in Appendix B. These examples show the flow of the data-entry process and illustrate various features of GDVDATA.

Keying in Data Fields Requested by Prompts

The data-entry program GDVDATA provides the user with prompts for entering data into a series of data fields which are later encoded automatically by the program into a group of data lines that are needed by the geometry and driver-vehicle processors of the TEXAS Model. The prompt-requested data are entered sequentially in a free-field format through the keyboard. During keyboard data entry, all data fields must be separated by commas. If data for a prompt-requested field are not specified by the user, values will be set automatically by the program to the appropriate default value. Also, keying in an empty field (i.e., pressing [,] [,]) causes the field to be set to the default value. Keying in a blank field (i.e., pressing , [ ] ,) will cause the field to be left blank. For example, pressing

[,] [8] [0] [,][ ][,] [,] [3] [,] [2] [C/R]

will set Field 1 to the default value (the first comma denotes the end of the first field), set Field 2 to 80, leave Field 3 blank, set Field 4 to the default value, set Field 5 to 3, and set Field 6 to 2. All other fields (if any) requested by the prompt will be set to the respective default values.

One of three formats is used for entering prompt-requested data into each field. Specifications for these field formats are described below.

(1) AX - The letter A designates the type of field as alphanumeric. Data entered into this type of field can include any conventional alphanumeric character (i.e., A-Z and 0-9) and any other character that is defined in the character set of the host computer. The number which appears at location X gives the maximum number of characters which can be accommodated in the alphanumeric data field. After data entry and pressing [C/R] , the data will be left-justified and any blank spaces will be filled automatically.

(2) IX - The letter I designates the type of field as integer. Only integer values (i.e., 0-9) can be used. A minus sign may precede the integers to indicate negative numbers. It is not necessary to enter + signs. The number which appears at location X in this format gives the maximum number of characters, including signs which may be used in the data field. The entered data will be right-justified after pressing [C/R] . If more than X characters are entered, only the rightmost of those entered will be used.

(3) FX.Y - The letter F designates the type of field as floating point, thereby indicating that entered data can include integers (i.e., 0-9) and an optional decimal point. A minus sign may proceed the number to designate negative values, but the + sign need not be entered. The number which appears at location X in the prompt shows the maximum number of characters, including the decimal point and the minus sign, which can be used in the field, and the number which appears at location Y gives the number of characters which will be used to the right of the decimal point after rounding. The rounded data will be entered and right-justified automatically after pressing [C/R] .

Figure 6 shows an example of the information which will be displayed as the program prompts the user to enter INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA. This prompt is displayed as part of the sequence of building a file by keying in data. Items (1) through (6) will be displayed, then the program will wait for the user response,(7). By pressing the sequence of keys shown at(7), followed by pressing [C/R] the user will specify an ERLANG headway frequency distribution, an hourly volume of inbound vehicles of 400 vph, an ERLANG distribution parameter of 3, a mean speed of 29.0 mph, an 85-percentile speed of 34.3 mph and a standard mix of vehicle classes in the inbound traffic.

Figure 7 shows a description of the data fields that are contained in each of the data lines required to complete a data file. This information is included in the prompts as needed. Keying in

[H] [E] [L] [P] [C/R]

will permit the user to redisplay the information at any time.

Keying in Data Specifications

In lieu of using data in a library file for intersection geometry, the user may enter the required data via the keyboard. To relieve the user of part of the tedious and repetitions task of keying in every data item that is required for defining the geometry of each leg and lane, the data-entry program allows the user to describe a desired leg or lane arrangement simply by specifying the values for only those data items which are different from the built-in

```
(1) INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA:
    F(1) - NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION:
           "CONSTAN", "ERLANG", "GAMMA", "LOGNRML", "NEGEXP","SNEGEXP" OR "UNIFORM"
           MAY BE ABBREVIATED TO THE FIRST CHARACTER. (3)                (4)
    F(2) - TOTAL HOURLY VOLUME ON LEG, VPH. <0 TO 4000> [200 PER INBOUND LANE]
    F(3) - PARAMETER FOR HEADWAY FREQUENCY DISTRIBUTION:
              CONSTANT - NONE.
(2)           ERLANG - INTEGER VALUE (ROUNDED) FOR MEAN**2/VARIANCE.<GREATER THAN 1>
              GAMMA - MEAN**2/VARIANCE. <GREATER THAN 1>
              LOGNORMAL - STANDARD DEVIATION.
              NEGATIVE EXPONENTIAL - NONE.
              SHIFTED NEGATIVE EXPONENTIAL - MINIMUM HEADWAY IN SECONDS. <LESS THAN
                                             OR EQUAL MEAN HEADWAY>
              UNIFORM - STANDARD DEVIATION
    F(4),F(5)- MEAN,85 PERCENTILE SPEED OF ENTERING VEHICLES, MPH.<10 TO 80>[29,31]
    F(6) - TRAFFIC MIX DATA TO FOLLOW ? <"YES" OR "NO">  ["NO"]
    F(7) - SEED FOR RANDOM NUMBERS (0 FOR AUTO. SELECTION).  <0 TO 99999> [0]
    EDIT EXAMPLE: "F(4)=28,32" CHANGES FIELD 4 TO "28.0" AND FIELD 5 TO "32.0"
    KEYIN "HELP" FOR ADDITIONAL ASSISTANCE

(5) KEYIN INBOUND HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1            (6)
    1 TO 7 FIELDS, SEPARATED BY COMMAS.  DATA FORMAT: (A7,I5,F6.2,F5.1,F5.1,A3,I5)
    ERLANG,400,3,29,34.28  (7)

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA:

(8)  DATA FIELDS:  ERLANG    400    3.00  29.0   34.3 NO      0
    FIELD NUMBERS: \..1../ \.2./ \..3./ \.4./ \ .5./ \6/ \.7./ (9)
```

NOTES:

1. Data to be entered.
2. Date field numbers and descriptions for each field.
3. Expected range for data is shown in <angle brackets>.
4. Default values are shown in [square brackets].
5. Prompt requesting user to keyin data.
6. Specifications for data field formats.

(continued)

Figure 6. Example of prompts and keying in requested data.

NOTES:

(7) User keyin. To make the keyin, press the keys that correspond to each character in the [BOX], from left to right. End the keyin by pressing [C/R].

(8) Data fields as automatically encoded according to format specifications (6). From the user keyin (7), "ERLANG" was left justified into field 1 per spec. A7, "400" was right justified into field 2 per spec. I5, "3" was placed into field 3 with 2 digits to the right of the decimal point per spec. F6.2, "29" was placed in field 4 with 1 digit to the right of the decimal point per spec. F51, "34.28" was rounded to have 1 digit to the right of the decimal point and placed in fild 5 per spec. F5.1 and the default of "NO" was left justified into field 6 per spec. A3 and the default of "0" for field 7 per spec. I5.

(9) Data field numbers with field delimiters. For example: "_ _1_ _/" shows that the size of field 1 is 7 characters, per spec. A7.

Figure 6. Continued.

TITLE TEXT (UP TO 79 ALPHANUMERIC CHARACTERS)

PARAMETER-OPTION DATA:
F(1) - TOTAL NUMBER OF LEGS. <3 TO 6> [4]
F(2) - TOTAL (STARTUP + SIMULATION) TIME IN MINUTES. <12 TO 70> [20]
F(3) - MINIMUM HEADWAY IN SECONDS. <1.0 TO 3.0> [1.0]
F(4) - NUMBER OF VEHICLE CLASSES. <12> [12]
F(5) - NUMBER OF DRIVER CLASSES. <3> [3]
F(6) - PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE.<50 TO 100>[80]
F(7) - PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. <50 TO 100>[80]

CURB RETURN RADII:
EACH FIELD - CURB RETURN RADIUS BETWEEN OUTERMOST INBOUND LANE AND THE ADJACENT (COUNTERCLOCKWISE) LEG. <INTEGER, 0 TO 200> [20]

LEG GEOMETRY DATA:
F(1) - LEG NUMBER. WILL BE RESET TO THE NUMBER OF THE LEG BEING PROCESSED.
F(2) - LEG ANGLE. POSITIVE IS CLOCKWISE FROM NORTH = 0 (ZERO) DEGREES. <0 TO 359, IN INCREASING ORDER> [EQUAL ANGLES]
F(3) - LENGTH OF INBOUND LANES. <600 TO 1000> [800]
F(4) - LENGTH OF OUTBOUND LANES. [250] (SUGGEST 250 FOR LOW TRAFFIC VOLUME, 400 FOR HIGH VOLUME. FOR EMISSIONS, MUST BE SAME AS INBOUND LANE LENGTH)
F(5) - NUMBER OF INBOUND LANES. <0 TO 6> [2]
F(6) - NUMBER OF OUTBOUND LANES. <0 TO 6> [2]
F(7) - SPEED LIMIT ON INBOUND LANES IN MPH. <10 TO 80> [30]
F(8) - SPEED LIMIT ON OUTBOUND LANES IN MPH. <10 TO 80> [30]
F(9) - LEG CENTERLINE OFFSET FROM INTERSECTION CENTER. POSITIVE IS TO THE RIGHT WHEN FACING IN DIRECTION OF INBOUND TRAFFIC. <-200 TO 200> [0]
F(10) - MEDIAN WIDTH, WILL BE CENTERED ON INT. CL. <0 TO 100> [0]
F(11) - LIMITING ANGLE FOR STRAIGHT MOVEMENT. <0 TO 45 DEGREES> [20]
F(12) - LIMITING ANGLE FOR U-TURN. <0 TO 45 DEGREES> [10]

LANE DATA:
F(1) - WIDTH OF LANE. <8 TO 15> [12]
F(2) - MOVEMENT CODE. ANY OF"U"(U-TURN),"L"(LEFT),"S"(STRAIGHT) AND "R"(RIGHT).
F(3) - LENGTH OF USABLE LANE FROM LANE TERMINAL. [0, FOR OPEN LANE]
F(4) - LENGTH OF USABLE LANE FROM OUTER END. [0, FOR OPEN LANE]
F(5) - OFFSET OF LANE TERMINAL. POS. IS TOWARD INTERSECTION. <-200 TO 100> [0]
F(6) - PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE. <0 TO 100, SUM FOR LEG = 100, 0 FOR LANE NOT USABLE AT OUTER END

(continued)

Figure 7. Description of data fields as displayed in prompts by GDVDATA.

```
INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA:
F(1) - NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION:
       "CONSTAN", "ERLANG", "GAMMA", "LOGNRML", "NEGEXP","SNEGEXP" OR "UNIFORM"
       MAY BE ABBREVIATED TO THE FIRST CHARACTER.
F(2) - TOTAL HOURLY VOLUME ON LEG, VPH. <0 TO 4000> [200 PER INBOUND LANE]
F(3) - PARAMETER FOR HEADWAY FREQUENCY DISTRIBUTION:
         CONSTANT - NONE.
         ERLANG - INTEGER VALUE (ROUNDED) FOR MEAN**2/VARIANCE.<GREATER THAN 1>
         GAMMA - MEAN**2/VARIANCE. <GREATER THAN 1>
         LOGNORMAL - STANDARD DEVIATION.
         NEGATIVE EXPONENTIAL - NONE.
         SHIFTED NEGATIVE EXPONENTIAL - MINIMUM HEADWAY IN SECONDS. <LESS THAN
                                        OR EQUAL MEAN HEADWAY>
         UNIFORM - STANDARD DEVIATION
F(4),F(5)- MEAN,85 PERCENTILE SPEED OF ENTERING VEHICLES, MPH.<10 TO 80>[29,31]
F(6) - TRAFFIC MIX DATA TO FOLLOW ? <"YES" OR "NO">  ["NO"]
F(7) - SEED FOR RANDOM NUMBERS (0 FOR AUTO. SELECTION).  <0 TO 99999> [0]


MIX (PERCENTAGES) OF VEHICLE CLASSES IN INBOUND TRAFFIC:
EACH FIELD - PERCENT OF INBOUND VEHICLES IN THE SPECIFIED (BY FIELD NUMBER)
             VEHICLE CLASS.  <0 TO 100 AND SUM = 100>


OUTBOUND TRAFFIC DESTINATION DATA:
EACH FIELD - PERCENT OF VEHICLES FROM THE LEG UNDER CONSIDERATION WITH A
             DESTINATION ON THE SPECIFIED LEG.  FIELD NUMBERS AND DESTINATION
             LEG NUMBERS ARE THE SAME. <0 TO 100 AND SUM = 100>
```

Figure 7. Continued.

configuration. A prompt in the program will request LEG SPECS and display the format for the number of inbound lanes, the number of outbound lanes, the existence of an exclusive left-turn lane, the length of the exclusive left-turn lane, the leg angle, and the leg centerline offset. Keying in

[H] [E] [L] [P] [C/R]

will bring up a description of the items on the display. Only the number of inbound lanes and the number of outbound lanes must be included in the specification. Each of the other four items is optional, as the program will set them to a default value if not included. By placing data from the specification in the appropriate data fields and using default values for all other fields, data lines that describe the geometry of a leg and the associated lanes are completed by GDVDATA. These data lines will then be displayed for the user to review and, if desired, revise.

When prompted to enter leg or lane specifications, the user may choose to enter individual data fields instead of the specifications. This can be indicated to the program by pressing

[D] [A] [T] [A] [=] [,]

followed by data fields as described previously, e.g. pressing

[D] [A] [T] [A] [=] [,] [2] [7] [0] [,] [,] [,] [3] [,] [2] [C/R]

will describe a leg with a leg angle of 270, 3 inbound lanes, 2 outbound lanes, and default values for all other fields in the leg-geometry data line. The data line will then be displayed for the user to review and possibly revise.

After the leg data have been accepted by the user, the program will prompt for the appropriate number of lane specifications. If the user chooses to enter lane data fields instead of lane specifications, the "DATA=...." keyin may be used. As usual, the data will be displayed for the user to review and possibly revise.

The form of the leg and lane specifications is shown in Fig 8. Similar information will be displayed if the user presses

[H] [E] [L] [P] [C/R]

in response to a prompt to enter a lane or leg specification.

```
LEG SPECIFICATION  [n*]Ia[L[b]]Oc[([ang][,off])]
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITTED.
   SEPARATE MULTIPLE SPECIFICATIONS WITH A COMMA.
   SUBSTITUTE NUMERIC VALUES FOR LOWERCASE ITEMS, AS DESCRIBED BELOW.
n - DUPLICATION FACTOR, USE FOR n ADJACENT IDENTICAL LEGS.
a - THE NUMBER OF INBOUND LANES. <0 TO 6> [2]
L - SPECIFIES THAT INBOUND LANE 1 IS AN EXCLUSIVE LEFT TURN LANE.
b - LENGTH OF LEFT TURN LANE, USE ONLY IF LEFT TURN LANE IS SHORTER THAN LEG.
c - THE NUMBER OF OUTBOUND LANES. <0 TO 6> [2]
ang - LEG ANGLE, USE ONLY IF ANGLES BETWEEN LEGS ARE NOT EQUAL.<0 TO 359>
      ang IS POSITIVE CLOCKWISE FROM NORTH = 0.
off - LEG CENTERLINE OFFSET, USE IF CL DOESN'T PASS THROUGH INTERSECTION CNTR.
      off IS POSITIVE TO RIGHT WHEN FACING IN THE DIRECTION OF INBOUND TRAFFIC.
EXAMPLES:
   "I3O2" - LEG WITH 3 INBOUND AND 2 OUTBOUND LANES,DEFAULTS FOR ALL OTHER DATA
   "I3L95O2" - AS ABOVE, EXCEPT LANE 1 IS EXCLUSIVE LEFT TURN LANE, LENGTH = 95
   "I2O3(85,6)" - LEG WITH 2 INBOUND AND 3 OUTBOUND LANES, LEG ANGLE = 85,
                  LEG CENTERLINE OFFSET = 6 AND DEFAULTS FOR ALL OTHER DATA
   "4*I3O2" - 4 SEQUENTIAL LEGS, EACH AS IN FIRST EXAMPLE


LANE SPECIFICATION: [n*][w][a][b]
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITTED.
   SEPARATE MULTIPLE SPECIFICATIONS WITH COMMAS.
   SUBSTITUTE NUMERIC VALUES OR CHARACTERS FOR LOWERCASE ITEMS,DESCRIBED BELOW.
n - DUPLICATION FACTOR, USE FOR n SEQUENTIAL IDENTICAL LANES.
w - LANE WIDTH.  [12]
a - ONE OF "U", "L,, "R" OR "-".
    "U" - U-TURNS ARE ALLOWED FROM/TO THIS LANE.
    "L" - INDICATES AN EXCLUSIVE LEFT TURN LANE.
    "R" - INDICATES AN EXCLUSIVE RIGHT TURN LANE.
    "-" - USE TO SEPARATE w and b WHEN "U", "L" OR "R" ISN'T APPLICABLE.
b - LANE LENGTH, USE ONLY IF LANE IS SHORTER THAN LEG.
      (TRAFFIC CAN'T ENTER ON A SHORTER LANE)
EXAMPLES:
   "10" - LANE WITH A WIDTH OF 10 AND DEFAULTS FOR ALL OTHER DATA
   "3*10" - THREE LANES, AS ABOVE
   "9L120" - A 9 FOOT WIDE EXCLUSIVE LEFT TURN LANE WITH USEABLE LENGTH OF 120
```

Figure 8. Leg and lane specifications.

Editing Data Fields

Data that have been entered as part of a file may be edited by entering an edit request in response to a prompt. This prompt will be displayed in two different ways. First, when the user is keying in data for a new file,the prompt will be displayed after each data line has been entered. This will permit the user to immediately review and, if desired, revise the data. Second, when the user is revising data from an existing file, each line of data will be displayed in the same sequence in which it was originally entered, and the user will be prompted to either edit the data or accept it unchanged.

There are four distinct forms of edit requests: 1) the text-edit request, 2) the data-field edit request, 3) the lane-data edit request, and 4) the specific-data edit request. The text-edit request is useful for editing title text and permits substitution, deletion, and insertion of characters in the title. The lane-data edit request and the specific-data edit requests allow editing of lane data-fields. The data-field edit request permits editing of data in all other types of data lines.

Figure 9 shows the form of each of the four edit requests. Similar information will be displayed in response to an entry of

[H] [E] [L] [P] [C/R]

whenever a data line is displayed for user review and revision. This displayed information will aid the user in entering edit requests.

CONCEPTS AND USE OF THE DATA-ENTRY PROGRAM SIMDATA

The simulation processor, SIMPRO, in the TEXAS Model utilizes the output from two pre-simulation data processors, GEOPRO and DVPRO, to define the geometric features of the intersection and the operational characteristics of each simulated driver-vehicle unit respectively (see Fig 1). In the user-friendly version of the TEXAS Model, the user communicates with the model concerning these parameters via the data-entry program called GDVDATA as described in the previous sections of this report. Another data-entry program, SIMDATA, is also provided to aid the user in defining the additional simulation and traffic-control parameters that are needed by SIMPRO. A series of prompt and instructions are utilized in SIMDATA, as in GDVDATA, to guide the user through this remaining part of the data-entry process. Hard copies of the screen displays [illegible] DATA [illegible] contained in Appendix C.

SIMULATION PARAMETERS

The prompts issued by SIMDATA follow closely the order in which they would be coded in an original SIMPRO input "deck", or card image file. The first items requested by SIMDATA are basic simulation

```
TEXT EDIT REQUEST: T(i[,[j][,k]])=text
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITTED.
i - COLUMN NUMBER OF THE FIRST CHARACTER TO BE REPLACED. [1]
j - COLUMN NUMBER OF THE LAST CHARACTER TO BE REPLACED.  MUST BE EQUAL TO OR
    GREATER THAN i.  [i].
k - NUMBER OF CHARACTERS OF text TO SUBSTITUTE FOR THE TEXT CURRENTLY IN
    COLUMNS i THROUGH j.  [THE NUMBER OF CHARACTERS IN text]
text - TEXT TO SUBSTITUTE FOR THE TEXT CURRENTLY IN COLUMNS i THROUGH j.
"T(3)"     EDITS "ABCDE" TO "ABDE"       "T(3,4)=X"   EDITS "ABCDE" TO "ABXE"
"T(3,4)"   EDITS "ABCDE" TO "ABE"        "T(3,4,2)=X" EDITS "ABCDE" TO "ABX E"
"T(3)=X"   EDITS "ABCDE" TO "ABXDE"      "T(2,3)=XYZ" EDITS "ABCDE" TO "AXYZDE"
"T(3)=XY"  EDITS "ABCDE" TO "ABXYDE"


DATA FIELD EDIT REQUEST: F[(i)]=[n*]fi[,...]
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITED.
i - THE NUMBER OF THE FIRST FIELD TO BE EDITED.<INTEGER, 1 TO NO. OF FIELDS>[1]
n - DUPLICATION FACTOR.  USE FOR n SEQUENTIAL IDENTICAL FIELDS.
fi - DATA TO REPLACE DATA THAT IS CURRENTLY IN THE FIRST FIELD TO BE EDITED.
     ADDITIONAL REPLACEMENT DATA FIELDS MAY FOLLOW, SEPARATED BY COMMAS.
     USE MULTIPLE COMMAS TO SKIP FIELDS, FOR EXAMPLE: "F(2)=6,,,4" WILL CHANGE
     FIELD 2 TO "6" AND FIELD 5 TO "4" AND LEAVE ALL OTHER FIELDS UNCHANGED.


LANE DATA FIELD EDIT REQUEST: L(i[,j])= fj[,fj+1,...]
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITTED.
i - THE NUMBER OF THE LANE FOR WHICH DATA IS TO BE EDITED.
j - THE NUMBER OF THE FIRST FIELD TO BE EDITED.  MUST BE AN INTEGER FROM 1 TO
    THE NUMBER OF FIELDS.  [1]
fj - DATA TO REPLACE DATA THAT IS CURRENTLY IN THE FIRST FIELD TO BE EDITED.
     ADDITIONAL REPLACEMENT DATA FIELDS MAY FOLLOW fj, SEPARATED BY COMMAS.
     USE MULTIPLE COMMAS TO SKIP FIELDS, FOR EXAMPLE: "L(3,2)=ULS,,,20" WILL
     CHANGE (FOR LANE 3) FIELD 2 TO "ULS" AND FIELD 5 TO "20" AND LEAVE ALL
     OTHER FIELDS UNCHANGED.


SPECIFIC DATA EDIT REQUEST: sp[(i)]=spi[,spi+1,...]
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITTED.
sp - ONE OF "WIDTH", "MOVE" ("MVMT"), "OFFSET" ("OFF") OR "PERCENT" ("PER"),
     USED TO EDIT LANE WIDTHS (FIELD 1), MOVEMENT CODES(FIELD 2), LANE TERMINAL
     OFFSETS (FIELD 5) AND PERCENT OF ENTERING TRAFFIC IN LANES (FIELD 6).
i - LANE NUMBER OF THE FIRST SPECIFIC DATA FIELD TO BE EDITED. [1]
spi - DATA TO REPLACE DATA THAT IS CURRENTLY IN THE FIRST FIELD TO BE EDITED.
EXAMPLES: "MOVE=ULS" CHANGES THE MOVEMENT CODE FOR LANE 1 (INBOUND 1) TO "ULS".
"WIDTH(2)=10,2*9" CHANGES THE LANE WIDTH FOR LANE 2 TO "10" AND CHANGES WIDTHS
FOR LANES 3 AND 4 TO "9".
```

Figure 9. Four forms of data edit requests.

parameters: the length of start-up and simulation time, the time increment or "DT" for the simulation, output listing options, and parameters for car following, conflict checking, queuing, and delay statistics. These items are described in detail below.

Start-Up and Simulation Time

Prior to data entry with SIMDATA, GDVDATA will have been used to specify a total time for the TEXAS Model run. This time is further divided into start-up time and simulation time in SIMDATA.

The start-up time is used to allow the model to achieve steady-state conditions before traffic statistics are taken from the model. A time of 5 minutes is suggested, and this is the default value supplied by the program.

To speed data entry, the simulation time will be automatically calculatled by SIMDATA as the length of run time entered in GDVDATA minus the start-up time. For example, if a 30-minute run is specified in GDVDATA, a 5 minute start-up time is entered in SIMDATA, a simulation-time value of 25 minutes will be supplied to SIMPRO by SIMDATA.

The run time specified to GDVDATA is used by the driver-vehicle preprocessor, DVPRO to generate a list of simulated driver-vehicle units and their headways. These driver-vehicle units and headways are suplied to SIMPRO for both start-up and actual simulation. Thus, if the start-up time specified is 5 minutes, and thes imulation time specified is 15 minutes, the list of driver-vehicle units and headways supplied by DVPRO must be at least 20 minutes long. SIMDATA ensures that the start-up and simulation times entered are compatible with the run time specified in GDVDATA.

Time Increment "DT" for the Simulation Process

The time increment for simulation, "DT', is the time step interval used in updating the status of each driver-vehicle unit in the simulation process. Although the default value of this parameter in SIMDATA is 0.5 second, an increment of 1.0 second will normally provide sufficient resolution for most signalized intersection studies. The longer time increment means that fewer calculations are required and that actual computation time needed for the simulation will be reduced.

Output Listing Options

The user can specify printing of statistical summaries of each inbound approach flow and individual turning movement, or can request output in an abbreviated, summary format. In addition, data files of individual vehicle information can be generated for further processing by the emissions analysis program, EMPRO, or for graphcis display on an IBM-PC.

These options can be selected by keying in "YES" or "NO" for the desired approach or turning-movement statistical summaries, and for abbreviated summary output format and the emissions analys/display tape. Default values set in SIMDATA are "YES" for the statistical summaries and "NO" for the abbreviated output and emissions tape.

Parameters for Car Following

Parameters for the car-following model used in the TEXAS Model can be modified by the user by changing the default values of lambda = 2.800, alpha = 4000, and mu = 0.800 which are supplied automatically by SIMDATA. The user is referred to Reference 1 for detailed discussion of the application of these parameters.

Conflict Checking

Lead and lag zones for the conflict checking procedure used by the TEXAS Model can be entered by the user via SIMDATA. Default values of 1.3 seconds lead and .5 seconds lag are provided by SIMDATA. The user is referred to Reference 1 for a detailed discussion of the application of these paramters.

Queueing

This parameter directs the TEXAS Model to assume that a vehicle is in a queue when it is closer than a given distance to the vehicle ahead or to the stop line and traveling less than 2 mph. The vehicle ahead must also be in a queue. A default value of 30 feet is suplied by SIMDATA for the given distance.

Special Delay Statistics

Special delay statistics for vehicles operating below a given speed can be collected and summarized separately in the output from the TEXAS Model. This parameter specifies the speed below which these special statistics are collected. The default value in SIMDATA is 10 miles per hour.

INTERSECTION AND LANE-CONTROL DATA

Intersection control data can be entered into SIMDATA for one of three different types of traffic control:

(1) Uncontrolled approaches.

(2) Stop or yield-controlled approaches.

(3) Signal-controlled approaches

Non-Signalized Control

In the TEXAS Model, it is possible to specify four different types of intersection control for unsignalized intersections. These types are:

(1) uncontrolled,

(2) yield,

(3) stop, less than all-way, and

(4) stop, all-way.

In addition, with each of these types of intersection control, it is possible to specify the type of traffic control for each lane of each approach. These choices are termed "lane control" in SIMDATA, and are allowable for various types of intersection control according to Table 4.

TABLE 4. LANE-CONTROL OPTIONS

For Type of Intersection Control	the following lane controls may be specified
Uncontrolled	Blocked* or Uncontrolled
Yield	Blocked*, Uncontrolled, or Yield
Less than All-way Stop	Blocked*, Uncontrolled, Yield, or Stop
All-way Stop	Blocked*, Yield or Stop

*"Blocked" lane control is specified in the entry process for GDVDATA and cannot be changed with SIMDATA. If "blocked" lane control has been previously specified with GDVDATA, SIMDATA will automatically provide "blocked" lane control in the proper lanes.

It can be seen that the variety of lane-control specifications that are available makes it possible to describe situations in which different types of lane-control exist on a single approach. For example, at an intersection where a separate right-turn lane is provided, "stop" control can be specified for the main traffic lanes, and "yield" control can be specified for the right-turn lane.

Signalized Control

Signalized control of an intersection is specified in much the same way as non-signalized control, with the type of "intersection control" entered for the whole intersection, and "lane control" entered for each lane of each approach. The possible types of control for a signalized intersection are:

(1) "Pretimed signal",
(2) "Semi-actual signal", and
(3) "Full-actuated signal".

For all these intersection control types, it is possible to specify lane control of any of the following types for each individual lane:

(1) "Blocked" (specified in GDVDATA entry),
(2) "Yield",
(3) "Signal without left or right-turn-on-red",
(4) "Signal with left-turn-on-red", and
(5) "Signal with right-turn-on-red".

As with the non-signalized case of an approach with a right-turn lane mentioned in the previous section , it is possible to specify a yield-controlled right-turn lane on a signalized approach. If the intention is to install yield control on a right-turn lane, the "yield" lane-control specification automatically supersedes a "right-turn-on-red" specification. In either case, entry of a "yield" or "right-turn-on-red" control should be made only on the extreme right-hand-lane of an approach (or in the far left lane of a one-way approach).

The specification of lane control should not be confused with the type of signal indication that is visible to each lane. The lane-control specification simply shows whether a sign or traffic signal controls movement on that lane, and whether turns on red are allowed. The actual signal indications that will be presented to each lane are entered in the section of SIMDATA called "Green Interval Sequence Data".

SIGNAL PHASING

In addition to the type of lane control, the signal phasing and associated signal indications must be specified through SIMDATA. The type of intersection control is established via the keyin of the intersection-control and lane-control data. SIMDATA then takes the proper action to prompt for data about phase sequences, signal indications, timing data, and for actuated signals, detector placement and connection. Definitions used in SIMDATA relative to signal phasing are shown in Table 5.

Controller and Traffic Phases

After lane-control data have been entered, SIMDATA prompts for the entry of phase-sequence data. Phase-sequence data are entered in the same way for both pretimed and actuated signals. Simulated controller operation for both pretimed and actuated types of intersection control is based on a "camstack" model that is analogous to the operation of a camstack in an electromechanical controller.

TABLE 5. DEFINITIONS FOR SIGNALIZATION

```
DEFINITIONS:
SIGNAL INDICATION - THE PRESENTATION OF TRAFFIC CONTROL INFORMATION BY THE
   ILLUMINATION OF A SIGNAL LENS WHEREBY THE MOVEMENT OF VEHICLES IN A LANE(S)
   IS CONTROLLED.
INTERVAL - THE PART OR PARTS OF THE SIGNAL CYCLE DURING WHICH SIGNAL
   INDICATIONS DO NOT CHANGE.
GREEN INTERVAL - AN INTERVAL DURING WHICH ONE OR MORE LANES IS GIVEN A SIGNAL
   INDICATION THAT PERMITS VEHICLES IN THE LANE(S) TO ENTER THE INTERSECTION.
YELLOW-CHANGE INTERVAL - THE INTERVAL DURING WHICH A YELLOW SIGNAL INDICATION
   FOLLOWING EACH TERMINATED GREEN SIGNAL INDICATION IS DISPLAYED.
RED-CLEARANCE INTERVAL - THE INTERVAL BEFORE THE NEXT GREEN INTERVAL AND
   FOLLOWING A YELLOW-CHANGE INTERVAL, DURING WHICH RED SIGNAL INDICATIONS ARE
   DISPLAYED TO TRAFFIC.
TRAFFIC PHASE - THE SERIES OF GREEN, YELLOW-CHANGE, AND RED-CLEARANCE INTERVALS
   IN A CYCLE THAT CONTROLS THE ENTRY OF CERTAIN SPECIFIED TRAFFIC MOVEMENTS
   INTO THE INTERSECTION. (DESIGNATED BY A NUMBER)
CONTROLLER PHASE - THE TIME DURING WHICH ONE OR MORE TRAFFIC PHASE(S) ARE IN
   EFFECT. (DESIGNATED BY A LETTER)
```

Controller phases are referred to by letters and consist of combinations of concurrent traffic phases. Traffic phases are designated by NEMA standard phase numbers and consist of intervals during which specified traffic movements may occur. Timing and detector data are input for controller phases, not traffic phases.

SIMDATA first prompts for the desired number of controller phases. This is the number of green intervals possible during the signal cycle. The number of phases can vary from 2 to 8.

Once the number of controller phases for an intersection has been set, it cannot be changed; a new SIMDATA data file must be entered from the beginning of the data-entry sequence for SIMDATA.

For each controller phase, SIMDATA then prompts for which traffic (NEMA) phase(s) should be green during that controller phase. Up to two traffic phases can be assigned to each controller phase, and a given traffic phase can be assigned more than once, to more than one controller phase. Once the controller phases have been defined, SIMDATA prompts for timing information.

The TEXAS Model simulates the operation of both pretimed and actuated signals in the same manner as a "camstack"-based electromechanical controller. However, controller phases can be skipped, and can "clear to" any other controller phase. In addition, certain controller phases can be specified as "minor movement" phases, and tied to the clearance of a particular parent phase in the manner of an electromechanical minor-movement controller. These features allow the TEXAS Model, when desired, to closely model the operation of a modern quad-left controller.

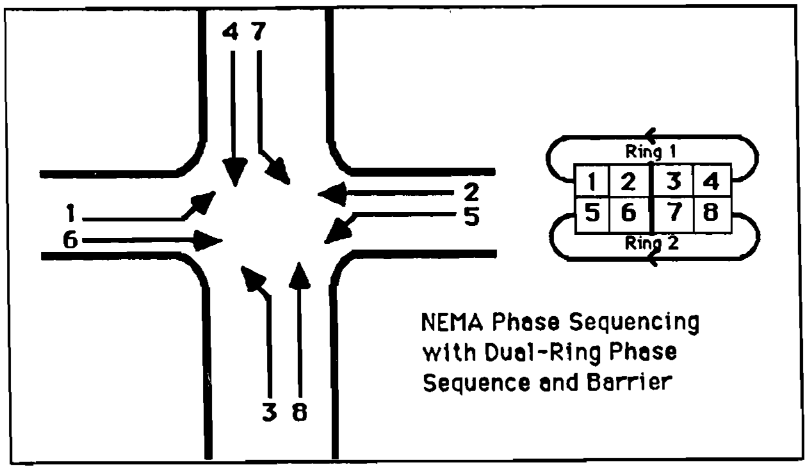


Figure 10. Traffic (NEMA) phases.

Simulating an Eight-Phase Controller

To model an eight-phase "quad-left" controller operating in a "leading left turn" manner on all approaches, the set of controller phases would be as follows:

Controller Phase	Traffic (NEMA) Phase
A	1 and 5
B	1 and 6
C	2 and 5
D	2 and 6
E	3 and 7
F	3 and 8
G	4 and 7
H	4 and 8

Any controller phase may clear to any other controller phase in any order. However, a priority must be set up so that certain controller phases are called in a logical order when more than one controller phase receives a call during its red. NEMA controllers function by always advancing forward in each ring; when a barrier is encountered, that ring waits for the other ring to catch up before both phases cross the barrier in synchronization. The TEXAS Model, which currently does not use the NEMA barrier/ring terminology, must always advance forward in the specified controller phase sequence, skipping phases as appropriate.

SIGNAL TIMING

Pretimed Signals

Timing data for pretimed signals can be entered in seconds, or as a percentage of a fixed cycle length. When entering data as a percent of cycle length, SIMDATA first prompts for a cycle length in seconds, then for percents for each of the green, yellow, and red intervals. SIMDATA checks to see whether the entered percents sum to 100.

Actuated Signals

The timing of actuated signals is prompted for by SIMDATA after the designation of controller phases has been completed. SIMDATA prompts for initial, vehicle, yellow-change, and all-red intervals, then prompts for the maximum extension allowable for each phase (this is not the NEMA standard "maximum" but rather the maximum extension allowed past the initial interval after a call has been registered on another controller phase). For a semi-actuated controller, SIMDATA uses controller Phase A for the unactuated phase and prompts for the minimum green interval on this phase. SIMDATA also prompts for "skip phase switch position", whether the phase is a minor movement, and whether the phase is a dual-left followed by two single lefts.

Green Interval Sequence Data

Once controller phasing and timing have been established, SIMDATA prompts for "green interval sequence data". This information, in the form of a table (see Table 5), gives the type of signal indication that will be presented to each lane for each controller phase. From the green interval sequence data, the timing data, and the controller phase assignment data, SIMDATA automatically builds the list of camstack card images that define the exact sequence of signal inervals.

The green interval sequence table lists, for each phase and each lane, which of the following green signal indications will be displayed to each lane during that phase:

(1) "C" - Circular green - all permitted movements may enter the intersection subject to appropriate conflict checking.

(2) "L" - Left green arrow - protected left turn.

(3) "S" - Straight green arrow - through movements only.

(4) "R" - Right green arrow - protected right turn.

Any of the above indications can appear together, except "LS" and "LR". All other (blank) entries in the table can be assumed to be red. SIMDATA automatically assigns unsignalized, sign-controlled, and blocked lanes the code "UN".

TABLE 6. GREEN INTERVAL SEQUENCE DATA

```
GREEN INTERVAL SEQUENCE DATA:
EACH FIELD -GREEN SIGNAL INDICATION FOR THE CONTROLLER PHASE AND LANE:
"C" - CIRCULAR GREEN. ALL PERMITTED MOVEMENTS MAY MOVE.
"L" - LEFT GREEN ARROW, PROTECTED LEFT TURN.
"S" - STRAIGHT GREEN ARROW.   "R" - RIGHT GREEN ARROW.
*** ANY TWO OF THE ABOVE MAY BE USED TOGETHER, EXCEPT "LS" OR "LR".
"UN" - UNSIGNALIZED, SIGN CONTROL OR BLOCKED LANE, PER LANE CONTROL DATA.
BLANK - IMPLIED RED.
*** "LC" IS LANE CONTROL DATA.   "MC" IS MOVEMENT CODE FROM GEOMETRY REF. DATA.

 LEG: /----1----\ /---2--\ /----3----\ /---4--\
LANE:  1  2  3  4  1  2  3  1  2  3  4  1  2  3
  MC: L  LS S  SR LS S  SR L  S  S  SR L  S  SR
  LC: SI SI SI RT SI SI RT SI SI SI RT SI SI RT
P(A): L  L                 L
 (B):                      L  C  C  C
 (C): L  LC C  C
 (D):    C  C  C              C  C  C
 (E):             C  C  C                C  C  C
 FLD: \1 \2 \3 \4 \5 \6 \7 \8 \9 10 11 12 13 14
```

SIMDATA automatically prepares major portions of the green interval table by assigning values based on the allowable movement codes from GDVDATA and the lane-control data entered previously. For example, if the movement code for the center lane of a three-lane approach is specified with a movement code of "S" and a lane-control code of "SI", SIMDATA supplies a green interval table entry of "C". If indicated by the controller phasing specifications, SIMDATA will supply "L" for each left-turn lane with a movement code of "L" and a lane-control code of "LT". Thus, modification of the green interval sequence table by the user is necessary only when special signal indications exist, such as green right-turn arrows and overlaps.

Yellow and all-red change intervals are supplied automatically by SIMDATA. The assignment of yellow and all-red phasing is based on change interval specifications in the Texas Manual of Uniform Traffic Control Devices.

Permissive Left-Turn Phases

Permissive left-turn phases are entered into SIMDATA by editing the green interval sequence data in such a manner that a "C" (circular green) signal indication appears to traffic in a left-turn lane (movement code = "MC").

Overlaps

Strictly speaking, overlaps are not handled in the TEXAS Model. However, by individually editing the green interval sequence data, and adding additional controller phases, operation of certain overlap phases can be simulated effectively.

CONTROLLER PHASE CLEAR-TO DATA

In a pretimed controller configuration, each controller phase will automatically clear to the next controller phase in the sequence; therefore, entry of controller phase clear-to data is unnecessary. In a semi-actuated controller, the same rule applies, but the actuated phases can be skipped in the phasing sequence.

In a full-actuated controller, any controller phase can clear to any other controller phase. If full-actuated control has been specified, for each controller phase, SIMDATA will prompt for a list of other controller phases that can be cleared to directly from that controller phase.

The TEXAS Model does not currently model a NEMA standard controller; phases can be skipped, but the order of phase sequence must remain constant. The TEXAS Model does not now model the operation of other NEMA functions such as hold or force off.

DETECTORS FOR ACTUATED SIGNALS

SIMDATA prompts for the number of vehicle detectors to be utilized. Up to 20 detectors can be specified; once the number of detectors has been set in SIMDATA, it can be increased but not decreased. In practice, however, detectors can be deleted as described in the section below, "Detector Connection".

For a typical quad-left controller with one detector for each through approach, and one detector for each left-turn pocket, eight detectors must be described. For easy reference, it is recommended that detectors be numbered accordingly to their corresponding traffic (NEMA) phase numbers.

Detector Location

This data item expresses the location, placement, and type of detection (presence or pulse) of each detector. The leg number, setback, length of loop, and type (presence/pulse) of detector is entered, along with a description of which lanes on the approach are covered by the detector (see Figure 11) for the nomenclature of detector placement used in SIMDATA.

Detector Connection

Once detectors have been located on the approaches, the detectors are assigned to call various controller phases. More than one detector may be assigned to call a single controller phase. Detectors are connected to a controller phase by using "And" or "Or" logic. In addition, including a minus sign ("-") in front of a detector number will cause a logical "Not" condition. For example, if the detector connection data line is filled in to say "OR 1 2" for a particular controller phase, that controller phase will be called when a call exists on either detector 1 or 2. Likewise, if "AND 6 - 7" is specified, the controller phase will be called only when detector 6, and not detector 7 are actuated. A detector may be connected to more than one controller phase; but "And" and "Or" connection logic cannot be mixed on input to the same controller phase.

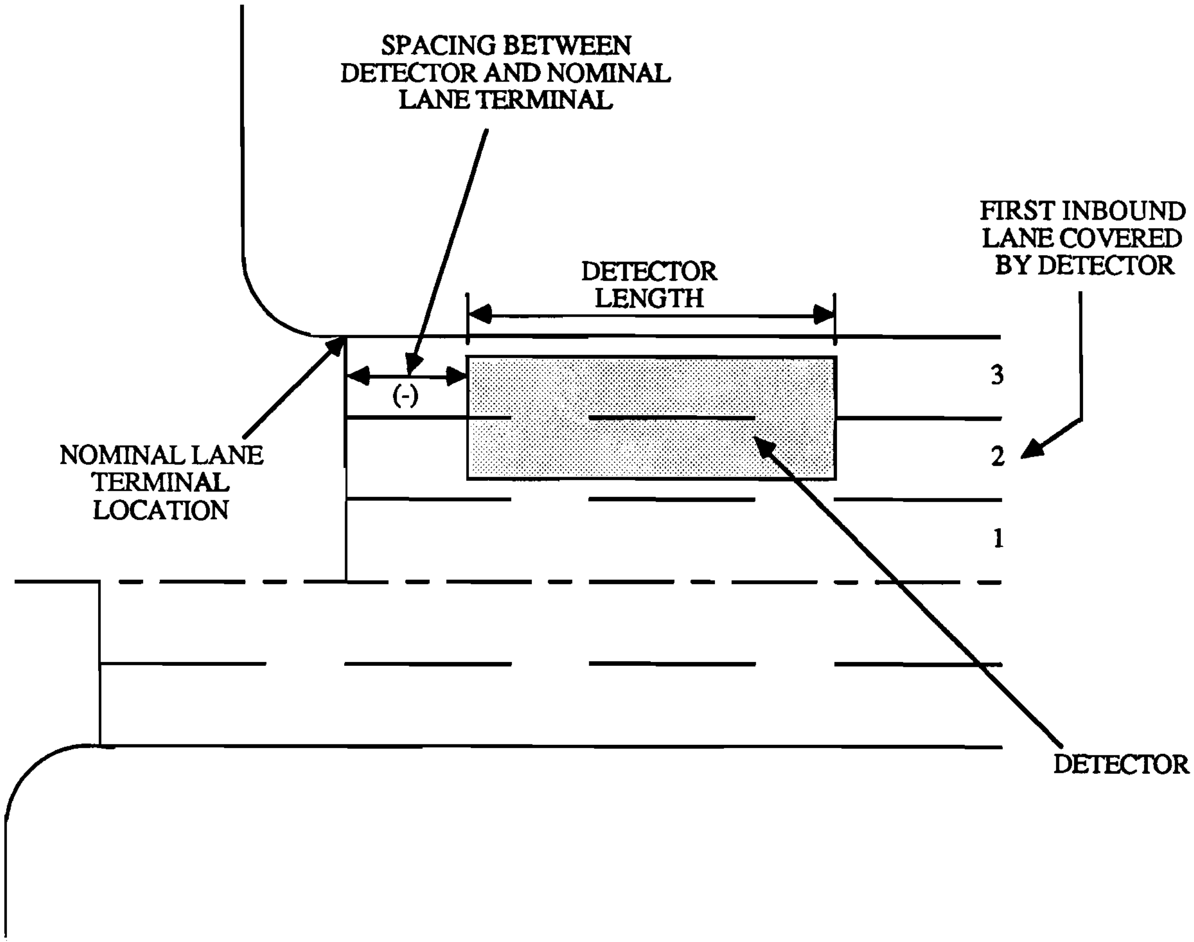


Figure 11. Nomenclature for detector placement.

Controller phases cannot be serviced in reverse order. For example, assuming each detector to be in pulse mode, if all detectors for phases H, E, D, and A, are actuated in that order, calls will be placed to controller phases A, D, E, and H, which will then be executed in that order starting with the phases after the phase currently in effect, regardless of the order in which calls were received.

Detectors can be effectively deleted by changing the detector type to "INACTIVE".

USING THE DATA-ENTRY PROGRAM SIMDATA

Use of the data-entry program, SIMDATA, has been designed to provide an easy means for entering the simulation and traffic control data that are needed by the TEXAS Model. Prompts and instructions in the program guide the user through each required step of data entry. This program automatically derives many of the logical connections and sequences for signal control that formerly made data entry excessively cumbersome. Entries are quite similar in form to those made with GDVDATA, and most are simpler.

REFERENCES

1. Lee, Clyde E., Thomas W. Rioux, and Charlie R. Copeland, "The TEXAS Model for Intersection Traffic - Development," Center for Transportation Research Report 184-1, Center for Transportation Research, the University of Texas at Austin, December 1977.

2. Lee, Clyde E., Thomas W. Rioux, Vivek S. Savur, and Charlie R. Copeland, "The TEXAS Model for Intersection Traffic - Programmer's Guide," Center for Transportation Research Report 184-2, Center for Transportation Research, the University of Texas at Austin, December 1977.

3. Lee, Clyde E., Glenn E. Grayson, Charlie R. Copeland, Jeff W. Miller, Thomas W. Rioux, and VIvek S. Savur, "The TEXAS Model for Intersection Traffic - User's Guide," Center for Transportation Research Report 184-3, Center for Transportation Research, the University of Texas at Austin, July 1977.

APPENDIX A

FILES IN THE PERMANENT LIBRARY

File ID	Description	Page	Index No.
3 x 2	Standard 3 x 2	53	1
3 x 3	Standard 3 x 3	59	2
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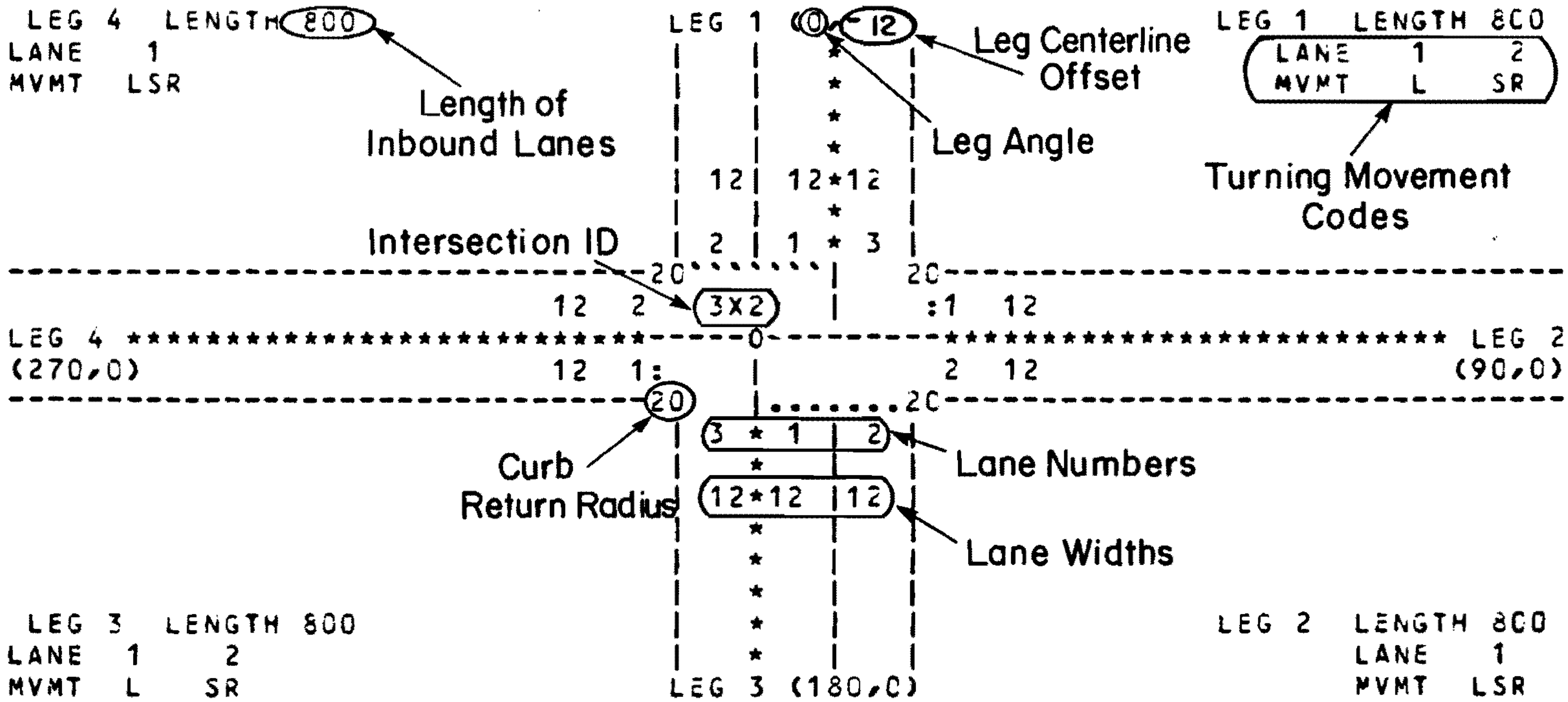
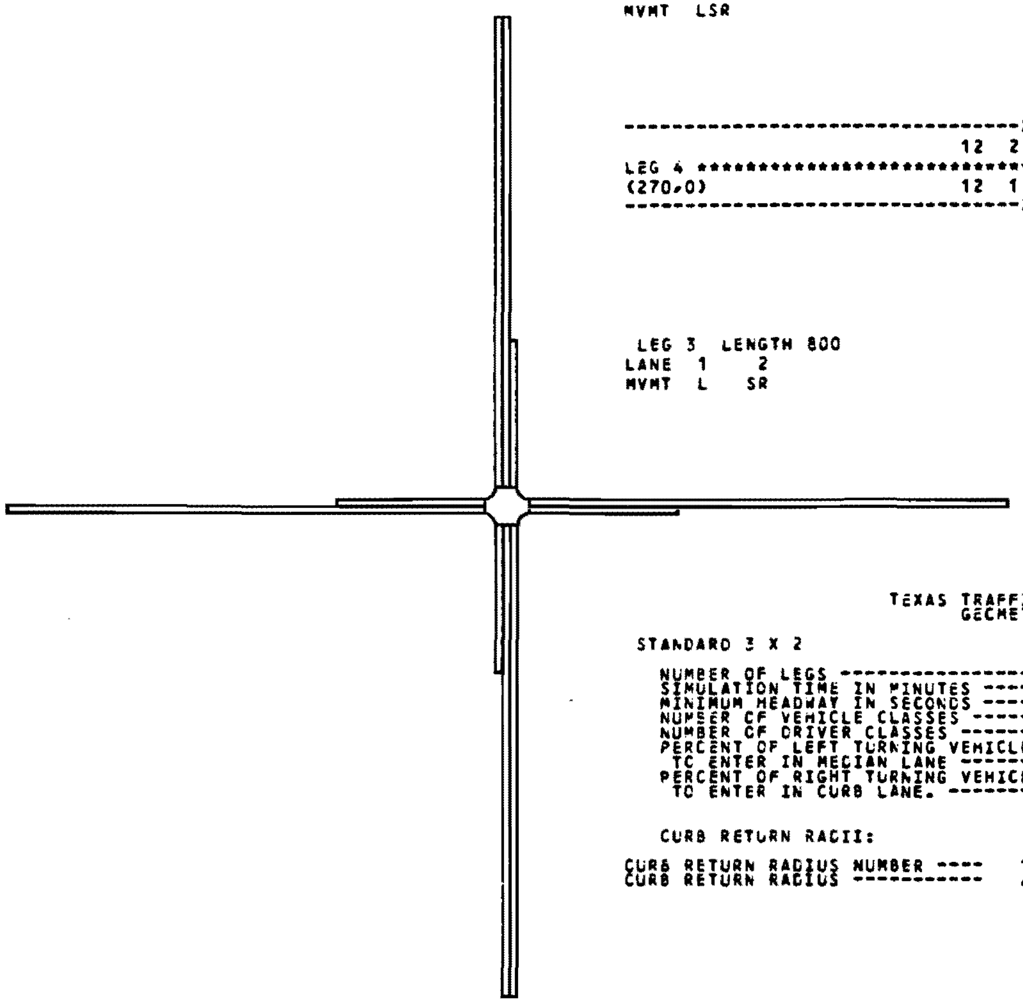
5 x 4	Standard 5 x 4	83	6
5 x 5	Standard 5 x 5	89	7
6 x 4	Standard 6 x 4	95	8
6 x 5	Standard 6 x 5	101	9
6 x 6	Standard 6 x 6	107	10
7 x 4	Standard 7 x 4	113	11
7 x 5	Standard 7 x 5	119	12
7 x 6	Standard 7 x 6	125	13
7 x 7	Standard 7 x 7	131	14
4 T 2	Standard 4 T 2	137	15
4 T 3	Standard 4 T 3	143	16
4 T 4	Standard 4 T 4	149	17
EX 1	Example 1*	155	18
EX 2	Example 2**	163	19
EX 3	Example 3***		20

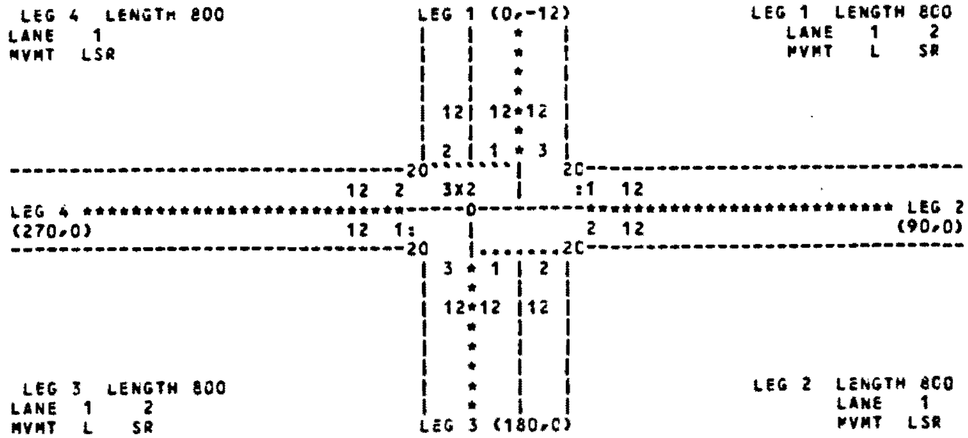
* Six-Points Intersection (6 legs with 4 lanes each)
** 35th and Jefferson, Austin, TX
***



Key for Sketches

STANDARD 3 X 2





TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 3 X 2

NUMBER OF LEGS ----------------------	4
SIMULATION TIME IN MINUTES ----------	20
MINIMUM HEADWAY IN SECONDS ----------	1.0
NUMBER OF VEHICLE CLASSES -----------	10
NUMBER OF DRIVER CLASSES ------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

STANDARD 3 X 2

   LEG 1 GEOMETRY DATA:

LEG ANGLE ---------------------------------     0
LENGTH OF INBOUND LANES -----------------     800
LENGTH OF OUTBOUND LANES ----------------     250
NUMBER OF INBOUND LANES -----------------       2
NUMBER OF OUTBOUND LANES ----------------       1
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET -------------------     -12
MEDIAN WIDTH ----------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN ---------------      10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER -------------------      1      2
(INBOUND LANE NUMBER) ---------      1      2
WIDTH OF LANE -----------------     12     12
MOVEMENT CODE -----------------      L     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0      0
 FROM OUTER END ---------------      0      0
OFFSET OF LANE TERMINAL -------      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------     48     52
                                MEDIAN   CLRB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 5)

LANE NUMBER -------------------      3
(OUTBOUND LANE NUMBER) --------      1
WIDTH OF LANE -----------------     12
MOVEMENT CODE -----------------    LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0
 FROM OUTER END ---------------      0
OFFSET OF LANE TERMINAL -------      0
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

STANDARD 3 X 2

   LEG 2 GEOMETRY DATA:

LEG ANGLE ---------------------------------    90
LENGTH OF INBOUND LANES -----------------     800
LENGTH OF OUTBOUND LANES ----------------     250
NUMBER OF INBOUND LANES -----------------       1
NUMBER OF OUTBOUND LANES ----------------       1
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET -------------------       0
MEDIAN WIDTH ----------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN ---------------      10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER -------------------      1
(INBOUND LANE NUMBER) ---------      1
WIDTH OF LANE -----------------     12
MOVEMENT CODE -----------------    LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0
 FROM OUTER END ---------------      0
OFFSET OF LANE TERMINAL -------      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------    100

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 6)

LANE NUMBER -------------------      2
(OUTBOUND LANE NUMBER) --------      1
WIDTH OF LANE -----------------     12
MOVEMENT CODE -----------------    LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0
 FROM OUTER END ---------------      0
OFFSET OF LANE TERMINAL -------      0
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

STANDARD 3 X 2

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     400
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    35.0
85-PERCENTILE SPEED, MPH ---------------    41.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------    1    2    3    4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---     0   33   33   34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

STANDARD 3 X 2

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     200
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ---------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------    1    2    3    4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    33    0   33   34
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 3 X 2

LEG 3 GEOMETRY DATA:

LEG ANGLE ----------------------------------	180
LENGTH OF INBOUND LANES ----------------	500
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	2
NUMBER OF OUTBOUND LANES ---------------	1
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 3:
(CONVERTED APPROACH 3)

LANE NUMBER ------------------	1	2
(INBOUND LANE NUMBER) --------	1	2
WIDTH OF LANE ----------------	12	12
MOVEMENT CODE ----------------	L	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
PERCENT OF INBOUND TRAFFIC		
TO ENTER IN THIS LANE -------	48	52
	MEDIAN	CLRB

LANE DATA FOR OUTBOUND LEG 3:
(CONVERTED APPROACH 7)

LANE NUMBER ------------------	3
(OUTBOUND LANE NUMBER) -------	1
WIDTH OF LANE ----------------	12
MOVEMENT CODE ----------------	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL ----------	0
FROM OUTER END --------------	0
OFFSET OF LANE TERMINAL ------	0

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 3 X 2

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	400
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER --------------------------	1	2	3	4
PERCENT OF LEG 3 INBOUND VEHICLES WITH DESTINATION ON LEG ---	33	33	0	34

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 3 X 2

LEG 4 GEOMETRY DATA:

LEG ANGLE ----------------------------------	270
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	1
NUMBER OF OUTBOUND LANES ---------------	1
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 4:
(CONVERTED APPROACH 4)

LANE NUMBER ------------------	1
(INBOUND LANE NUMBER) --------	1
WIDTH OF LANE ----------------	12
MOVEMENT CODE ----------------	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL ----------	0
FROM OUTER END --------------	0
OFFSET OF LANE TERMINAL ------	0
PERCENT OF INBOUND TRAFFIC	
TO ENTER IN THIS LANE -------	100

LANE DATA FOR OUTBOUND LEG 4:
(CONVERTED APPROACH 8)

LANE NUMBER ------------------	2
(OUTBOUND LANE NUMBER) -------	1
WIDTH OF LANE ----------------	12
MOVEMENT CODE ----------------	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL ----------	0
FROM OUTER END --------------	0
OFFSET OF LANE TERMINAL ------	0

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 3 X 2

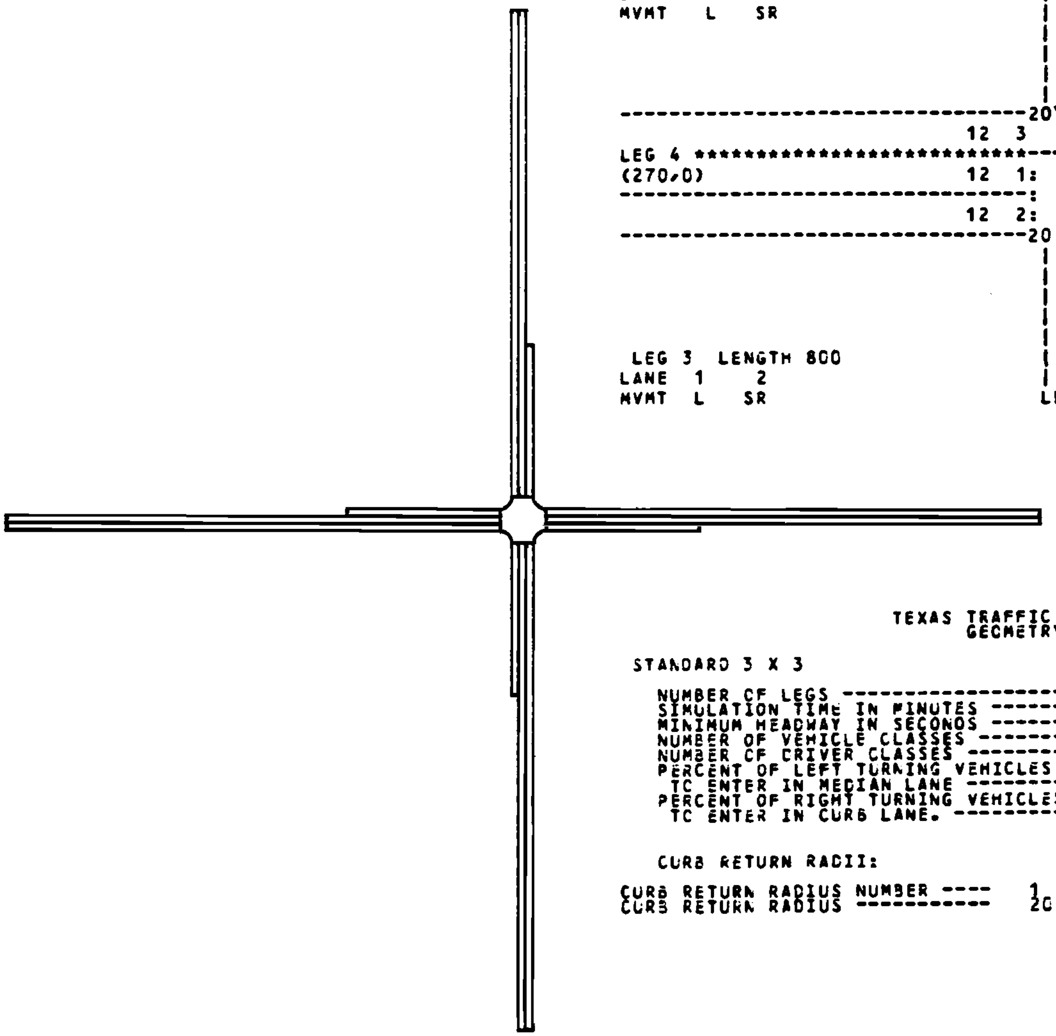
INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	200
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER --------------------------	1	2	3	4
PERCENT OF LEG 4 INBOUND VEHICLES WITH DESTINATION ON LEG ---	33	33	34	0

STANDARD 3 X 3



```
 LEG 4  LENGTH 800                LEG 1 (0,-12)                LEG 1  LENGTH 800
LANE    1    2                    |   |   *   |                   LANE   1    2
MVMT    L    SR                   |   |   *   |                   MVMT   L    SR
                                  |   |   *   |
                                  | 12| 12*12 |
                                  |   |   *   |
                                  | 2 | 1 * 3 |
---------------------------------20'.......|   20------------------------------
                        12  3   3X3        |    :2  12
LEG 4 ***************************------0---+    :------------------------------
(270,0)                 12  1:      |           :1  12
-----------------------------:      |---------************************** LEG 2
                        12  2:      |            3  12               (90,-12)
-----------------------------20     |.........20------------------------------
                              | 3 * 1 | 2 |
                              |   *   |   |
                              | 12*12 |12 |
                              |   *   |   |
                              |   *   |   |
 LEG 3  LENGTH 800            |   *   |   |                LEG 2  LENGTH 800
LANE   1    2                 |   *   |   |                   LANE   1    2
MVMT   L    SR                LEG 3 (180,0)                   MVMT   L    SR
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 3 X 3

NUMBER OF LEGS -----------------------	4
SIMULATION TIME IN MINUTES ----------	20
MINIMUM HEADWAY IN SECONDS ----------	1.0
NUMBER OF VEHICLE CLASSES -----------	10
NUMBER OF DRIVER CLASSES ------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS ------------	20	20	20	20

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA
STANDARD 3 X 3

   LEG 1 GEOMETRY DATA:

LEG ANGLE --------------------------------      0
LENGTH OF INBOUND LANES ----------------      800
LENGTH OF OUTBOUND LANES ---------------      250
NUMBER OF INBOUND LANES ----------------        2
NUMBER OF OUTBOUND LANES ---------------        1
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET ------------------      -12
MEDIAN WIDTH ---------------------------        0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN --------------       10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER -------------------     1       2
(INBOUND LANE NUMBER) ---------     1       2
WIDTH OF LANE -----------------    12      12
MOVEMENT CODE -----------------     L      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------     0       0
 FROM OUTER END ---------------     0       0
OFFSET OF LANE TERMINAL -------     0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------    48      52
                               MEDIAN    CURB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 5)

LANE NUMBER -------------------     3
(OUTBOUND LANE NUMBER) --------     1
WIDTH OF LANE -----------------    12
MOVEMENT CODE -----------------   LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------     0
 FROM OUTER END ---------------     0
OFFSET OF LANE TERMINAL -------     0
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA
STANDARD 3 X 3

   LEG 2 GEOMETRY DATA:

LEG ANGLE --------------------------------     90
LENGTH OF INBOUND LANES ----------------      800
LENGTH OF OUTBOUND LANES ---------------      250
NUMBER OF INBOUND LANES ----------------        2
NUMBER OF OUTBOUND LANES ---------------        1
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET ------------------      -12
MEDIAN WIDTH ---------------------------        0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN --------------       10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER -------------------     1       2
(INBOUND LANE NUMBER) ---------     1       2
WIDTH OF LANE -----------------    12      12
MOVEMENT CODE -----------------     L      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------     0       0
 FROM OUTER END ---------------     0       0
OFFSET OF LANE TERMINAL -------     0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------    48      52
                               MEDIAN    CURB

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 6)

LANE NUMBER -------------------     3
(OUTBOUND LANE NUMBER) --------     1
WIDTH OF LANE -----------------    12
MOVEMENT CODE -----------------   LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------     0
 FROM OUTER END ---------------     0
OFFSET OF LANE TERMINAL -------     0
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA
STANDARD 3 X 3

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER -------------------------------   1   2   3   4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---        0  33  33  34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA
STANDARD 3 X 3

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER -------------------------------   1   2   3   4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---       33   0  33  34
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 3 X 3

LEG 3 GEOMETRY DATA:

LEG ANGLE ------------------------------	180
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	2
NUMBER OF OUTBOUND LANES ---------------	1
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 3:
(CONVERTED APPROACH 3)

LANE NUMBER -------------------	1	2
(INBOUND LANE NUMBER) ---------	1	2
WIDTH OF LANE -----------------	12	12
MOVEMENT CODE -----------------	L	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
PERCENT OF INBOUND TRAFFIC		
TO ENTER IN THIS LANE -------	48	52
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 3:
(CONVERTED APPROACH 7)

LANE NUMBER -------------------	3
(OUTBOUND LANE NUMBER) --------	1
WIDTH OF LANE -----------------	12
MOVEMENT CODE -----------------	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL ----------	0
FROM OUTER END --------------	0
OFFSET OF LANE TERMINAL ------	0

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 3 X 3

LEG 4 GEOMETRY DATA:

LEG ANGLE ------------------------------	270
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	2
NUMBER OF OUTBOUND LANES ---------------	1
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 4:
(CONVERTED APPROACH 4)

LANE NUMBER -------------------	1	2
(INBOUND LANE NUMBER) ---------	1	2
WIDTH OF LANE -----------------	12	12
MOVEMENT CODE -----------------	L	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
PERCENT OF INBOUND TRAFFIC		
TO ENTER IN THIS LANE -------	48	52
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 4:
(CONVERTED APPROACH 8)

LANE NUMBER -------------------	3
(OUTBOUND LANE NUMBER) --------	1
WIDTH OF LANE -----------------	12
MOVEMENT CODE -----------------	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL ----------	0
FROM OUTER END --------------	0
OFFSET OF LANE TERMINAL ------	0

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 3 X 3

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	400
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ---------------------------	1	2	3	4
PERCENT OF LEG 3 INBOUND				
VEHICLES WITH DESTINATION ON LEG ---	33	33	0	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 3 X 3

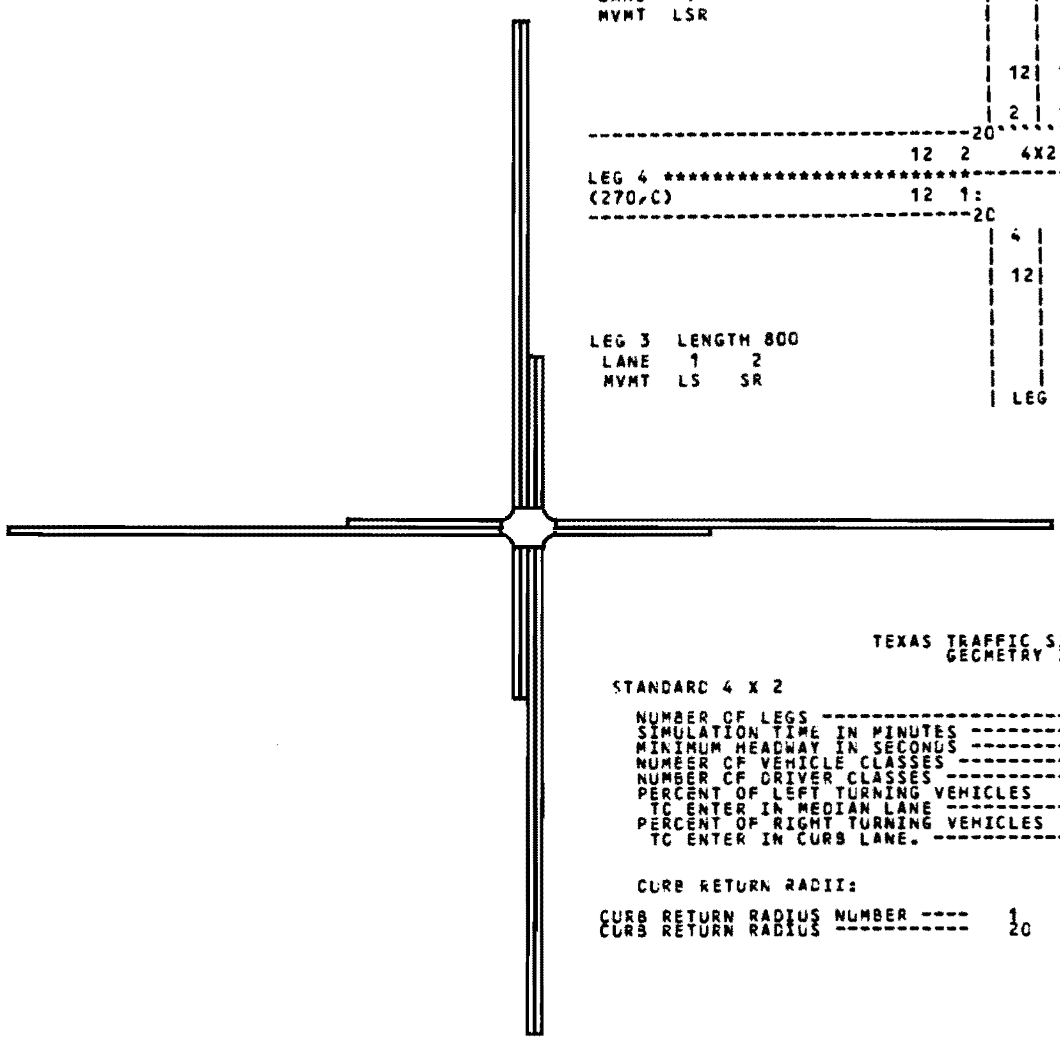
INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	400
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER ---------------------------	1	2	3	4
PERCENT OF LEG 4 INBOUND				
VEHICLES WITH DESTINATION ON LEG ---	33	33	34	0

STANDARD 4 X 2



```
LEG 4  LENGTH 800                |  LEG 1 (0,0)  |               LEG 1  LENGTH 800
 LANE   1                        |    |   *   |  |                LANE   1     2
 MVMT  LSR                       |    |   *   |  |                MVMT  LS    SR
                                 |    |   *   |  |
                                 |    |   *   |  |
                                 | 12 | 12*12 |12 |
                                 |    |   *   |  |
                                 | 2  | 1 * 3 | 4 |
--------------------------------20.........|      20-------------------------------
                        12  2     4X2      |       :1  12
LEG 4 **************************-----------0-----------************************ LEG 2
(270,0)                 12  1:             |         2  12                   (90,0)
--------------------------------20         |.......20-------------------------------
                                 | 4  | 3 * 1 | 2 |
                                 |    |   *   |  |
                                 | 12 | 12*12 |12 |
                                 |    |   *   |  |
                                 |    |   *   |  |
LEG 3  LENGTH 800                |    |   *   |  |               LEG 2  LENGTH 800
 LANE   1     2                  |    |   *   |  |                LANE   1
 MVMT  LS    SR                  |    |   *   |  |                MVMT  LSR
                                 | LEG 3 (180,0) |
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 4 X 2

NUMBER OF LEGS ----------------------	4
SIMULATION TIME IN MINUTES ----------	20
MINIMUM HEADWAY IN SECONDS ----------	1.0
NUMBER OF VEHICLE CLASSES -----------	10
NUMBER OF DRIVER CLASSES ------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

```
                TEXAS TRAFFIC SIMULATION PACKAGE
                    GEOMETRY INPUT DATA
STANDARD 4 X 2

  LEG 1 GEOMETRY DATA:

LEG ANGLE ------------------------------     0
LENGTH OF INBOUND LANES ----------------   800
LENGTH OF OUTBOUND LANES ---------------   250
NUMBER OF INBOUND LANES ----------------     2
NUMBER OF OUTBOUND LANES ---------------     2
SPEED LIMIT ON INBOUND LANES IN MPH ----    30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---    30
LEG CENTERLINE OFFSET ------------------     0
MEDIAN WIDTH ---------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---    20
LIMITING ANGLE FOR U-TURN --------------    10

  LANE DATA FOR INBOUND LEG 1:
   (CONVERTED APPROACH 1)

LANE NUMBER -------------------      1      2
(INBOUND LANE NUMBER) ---------      1      2
WIDTH OF LANE -----------------     12     12
MOVEMENT CODE -----------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0      0
 FROM OUTER END ---------------      0      0
OFFSET OF LANE TERMINAL -------      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------     48     52
                               MEDIAN   CURB

  LANE DATA FOR OUTBOUND LEG 1:
   (CONVERTED APPROACH 5)

LANE NUMBER -------------------      3      4
(OUTBOUND LANE NUMBER) --------      1      2
WIDTH OF LANE -----------------     12     12
MOVEMENT CODE -----------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0      0
 FROM OUTER END ---------------      0      0
OFFSET OF LANE TERMINAL -------      0      0
                               MEDIAN   CURB
```

```
                TEXAS TRAFFIC SIMULATION PACKAGE
                    GEOMETRY INPUT DATA
STANDARD 4 X 2

  LEG 2 GEOMETRY DATA:

LEG ANGLE ------------------------------    90
LENGTH OF INBOUND LANES ----------------   800
LENGTH OF OUTBOUND LANES ---------------   250
NUMBER OF INBOUND LANES ----------------     1
NUMBER OF OUTBOUND LANES ---------------     1
SPEED LIMIT ON INBOUND LANES IN MPH ----    30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---    30
LEG CENTERLINE OFFSET ------------------     0
MEDIAN WIDTH ---------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---    20
LIMITING ANGLE FOR U-TURN --------------    10

  LANE DATA FOR INBOUND LEG 2:
   (CONVERTED APPROACH 2)

LANE NUMBER -------------------      1
(INBOUND LANE NUMBER) ---------      1
WIDTH OF LANE -----------------     12
MOVEMENT CODE -----------------    LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0
 FROM OUTER END ---------------      0
OFFSET OF LANE TERMINAL -------      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------    100

  LANE DATA FOR OUTBOUND LEG 2:
   (CONVERTED APPROACH 6)

LANE NUMBER -------------------      2
(OUTBOUND LANE NUMBER) --------      1
WIDTH OF LANE -----------------     12
MOVEMENT CODE -----------------    LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0
 FROM OUTER END ---------------      0
OFFSET OF LANE TERMINAL -------      0
```

```
                TEXAS TRAFFIC SIMULATION PACKAGE
                  DRIVER-VEHICLE INPUT DATA
STANDARD 4 X 2

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     400
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    25.0
85-PERCENTILE SPEED, MPH ---------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------   1   2   3   4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    0  33  33  34
```

```
                TEXAS TRAFFIC SIMULATION PACKAGE
                  DRIVER-VEHICLE INPUT DATA
STANDARD 4 X 2

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     200
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    25.0
85-PERCENTILE SPEED, MPH ---------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------   1   2   3   4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   33   0  33  34
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 4 X 2

LEG 3 GEOMETRY DATA:

LEG ANGLE ----------------------------------	180
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	2
NUMBER OF OUTBOUND LANES ---------------	2
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 3:
(CONVERTED APPROACH 3)

LANE NUMBER ------------------	1	2
(INBOUND LANE NUMBER) --------	1	2
WIDTH OF LANE ----------------	12	12
MOVEMENT CODE ----------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
PERCENT OF INBOUND TRAFFIC		
TO ENTER IN THIS LANE -------	48	52
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 3:
(CONVERTED APPROACH 7)

LANE NUMBER ------------------	3	4
(OUTBOUND LANE NUMBER) -------	1	2
WIDTH OF LANE ----------------	12	12
MOVEMENT CODE ----------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 4 X 2

LEG 4 GEOMETRY DATA:

LEG ANGLE ----------------------------------	270
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	1
NUMBER OF OUTBOUND LANES ---------------	1
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 4:
(CONVERTED APPROACH 4)

LANE NUMBER ------------------	1
(INBOUND LANE NUMBER) --------	1
WIDTH OF LANE ----------------	12
MOVEMENT CODE ----------------	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL ----------	0
FROM OUTER END --------------	0
OFFSET OF LANE TERMINAL ------	0
PERCENT OF INBOUND TRAFFIC	
TO ENTER IN THIS LANE -------	100

LANE DATA FOR OUTBOUND LEG 4:
(CONVERTED APPROACH 8)

LANE NUMBER ------------------	2
(OUTBOUND LANE NUMBER) -------	1
WIDTH OF LANE ----------------	12
MOVEMENT CODE ----------------	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL ----------	0
FROM OUTER END --------------	0
OFFSET OF LANE TERMINAL ------	0

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 4 X 2

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	400
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	[illegible]
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ---------------------------	1	2	3	4
PERCENT OF LEG 3 INBOUND				
VEHICLES WITH DESTINATION ON LEG ---	33	33	0	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 4 X 2

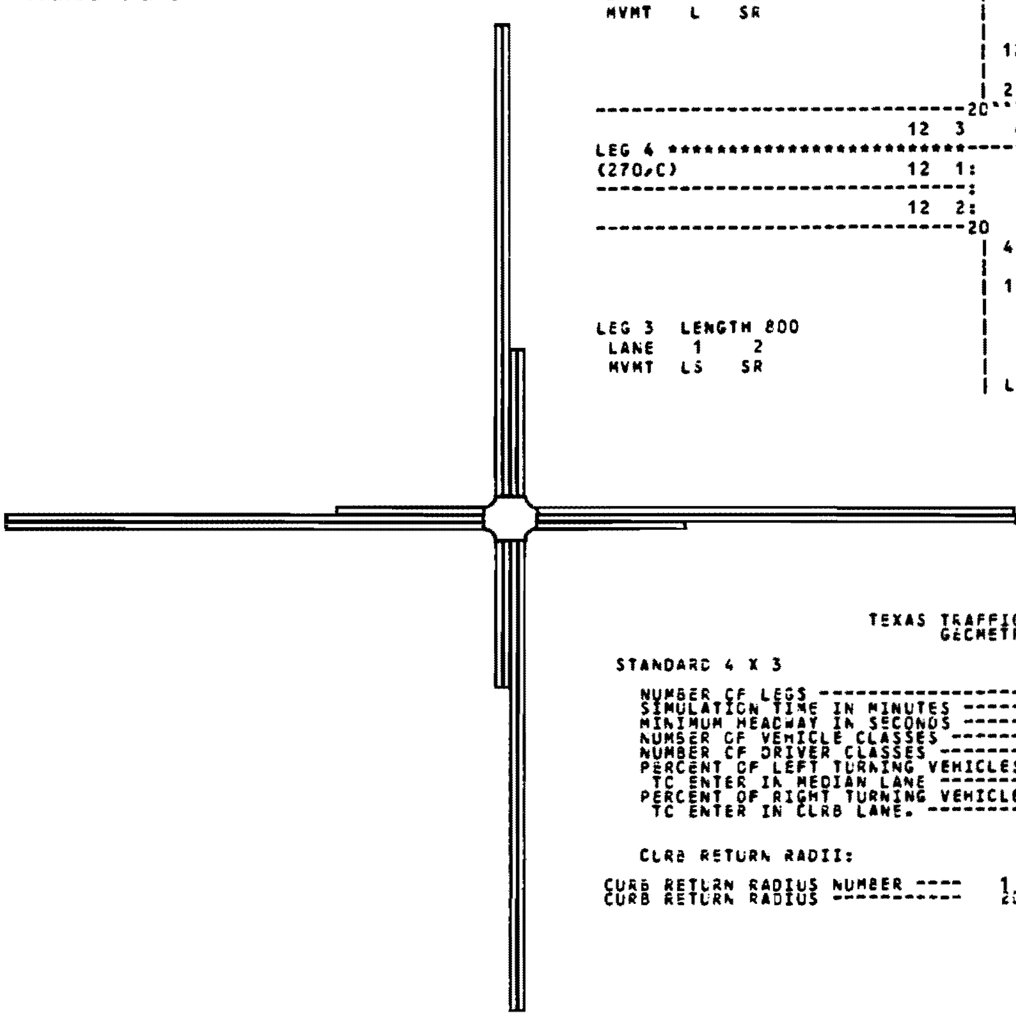
INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	200
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	25.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER ---------------------------	1	2	3	4
PERCENT OF LEG 4 INBOUND				
VEHICLES WITH DESTINATION ON LEG ---	33	33	34	0

STANDARD 4 X 3



```
LEG 4  LENGTH 800                       LEG 1 (0,0)   |                   LEG 1  LENGTH 800
 LANE   1    2                     |    |    *    |   |                    LANE   1    2
 MVMT   L    SR                    |    |    *    |   |                    MVMT   LS   SR
                                   |    |    *    |   |
                                   | 12 | 12*12   |12 |
                                   |    |    *    |   |
                                   | 2  | 1  * 3  | 4 |
-----------------------------------20.......|         20------------------------------
                         12  3      4X3     |          :2  12
LEG 4 ****************************----------0          :------------------------------
(270,0)                  12  1:             |          :1  12
-----------------------------:              +----------*************************** LEG 2
                         12  2:             |            3  12                (90,-12)
-----------------------------20             |.........20------------------------------
                               | 4  | 3  * 1  | 2 |
                               |    |    *    |   |
                               | 12 | 12*12   |12 |
                               |    |    *    |   |
LEG 3  LENGTH 800              |    |    *    |   |                   LEG 2  LENGTH 800
 LANE   1    2                 |    |    *    |   |                    LANE   1    2
 MVMT   LS   SR                |    |    *    |   |                    MVMT   L    SR
                               | LEG 3 (180,0)    |
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 4 X 3

NUMBER OF LEGS ----------------------	4
SIMULATION TIME IN MINUTES -----------	20
MINIMUM HEADWAY IN SECONDS -----------	1.0
NUMBER OF VEHICLE CLASSES ------------	10
NUMBER OF DRIVER CLASSES -------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. -------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

```
                 TEXAS TRAFFIC SIMULATION PACKAGE
                       GEOMETRY INPUT DATA

STANDARD 4 X 3

  LEG 1 GEOMETRY DATA:

LEG ANGLE -------------------------------------      0
LENGTH OF INBOUND LANES ----------------------     800
LENGTH OF OUTBOUND LANES ---------------------     250
NUMBER OF INBOUND LANES ----------------------       2
NUMBER OF OUTBOUND LANES ---------------------       2
SPEED LIMIT ON INBOUND LANES IN MPH ----            30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---            30
LEG CENTERLINE OFFSET -------------------            0
MEDIAN WIDTH -----------------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---            20
LIMITING ANGLE FOR U-TURN ---------------           10

  LANE DATA FOR INBOUND LEG 1:
   (CONVERTED APPROACH 1)

LANE NUMBER -------------------         1       2
(INBOUND LANE NUMBER) ---------         1       2
WIDTH OF LANE -----------------        12      12
MOVEMENT CODE -----------------        LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------         0       0
 FROM OUTER END ---------------         0       0
OFFSET OF LANE TERMINAL ------          0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------         48      52
                                   MEDIAN    CURB

  LANE DATA FOR OUTBOUND LEG 1:
   (CONVERTED APPROACH 5)

LANE NUMBER -------------------         3       4
(OUTBOUND LANE NUMBER) --------         1       2
WIDTH OF LANE -----------------        12      12
MOVEMENT CODE -----------------        LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------         0       0
 FROM OUTER END ---------------         0       0
OFFSET OF LANE TERMINAL ------          0       0
                                   MEDIAN    CURB
```

```
                 TEXAS TRAFFIC SIMULATION PACKAGE
                       GEOMETRY INPUT DATA

STANDARD 4 X 3

  LEG 2 GEOMETRY DATA:

LEG ANGLE -------------------------------------     90
LENGTH OF INBOUND LANES ----------------------     800
LENGTH OF OUTBOUND LANES ---------------------     250
NUMBER OF INBOUND LANES ----------------------       2
NUMBER OF OUTBOUND LANES ---------------------       1
SPEED LIMIT ON INBOUND LANES IN MPH ----            30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---            30
LEG CENTERLINE OFFSET -------------------          -12
MEDIAN WIDTH -----------------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---            20
LIMITING ANGLE FOR U-TURN ---------------           10

  LANE DATA FOR INBOUND LEG 2:
   (CONVERTED APPROACH 2)

LANE NUMBER -------------------         1       2
(INBOUND LANE NUMBER) ---------         1       2
WIDTH OF LANE -----------------        12      12
MOVEMENT CODE -----------------         L      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------         0       0
 FROM OUTER END ---------------         0       0
OFFSET OF LANE TERMINAL ------          0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------         48      52
                                   MEDIAN    CURB

  LANE DATA FOR OUTBOUND LEG 2:
   (CONVERTED APPROACH 6)

LANE NUMBER -------------------         3
(OUTBOUND LANE NUMBER) --------         1
WIDTH OF LANE -----------------        12
MOVEMENT CODE -----------------       LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------         0
 FROM OUTER END ---------------         0
OFFSET OF LANE TERMINAL ------          0
```

```
                 TEXAS TRAFFIC SIMULATION PACKAGE
                   DRIVER-VEHICLE INPUT DATA

STANDARD 4 X 3

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION ---------  SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   0  33  33  34
```

```
                 TEXAS TRAFFIC SIMULATION PACKAGE
                   DRIVER-VEHICLE INPUT DATA

STANDARD 4 X 3

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION ---------  SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33   0  33  34
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 4 X 3

LEG 3 GEOMETRY DATA:

LEG ANGLE	180
LENGTH OF INBOUND LANES	800
LENGTH OF OUTBOUND LANES	250
NUMBER OF INBOUND LANES	2
NUMBER OF OUTBOUND LANES	2
SPEED LIMIT ON INBOUND LANES IN MPH	30
SPEED LIMIT ON OUTBOUND LANES IN MPH	30
LEG CENTERLINE OFFSET	0
MEDIAN WIDTH	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT	20
LIMITING ANGLE FOR U-TURN	10

LANE DATA FOR INBOUND LEG 3:
(CONVERTED APPROACH 3)

LANE NUMBER	1	2
(INBOUND LANE NUMBER)	1	2
WIDTH OF LANE	12	12
MOVEMENT CODE	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL	0	0
FROM OUTER END	0	0
OFFSET OF LANE TERMINAL	0	0
PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE	48	52
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 3:
(CONVERTED APPROACH 7)

LANE NUMBER	3	4
(OUTBOUND LANE NUMBER)	1	2
WIDTH OF LANE	12	12
MOVEMENT CODE	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL	0	0
FROM OUTER END	0	0
OFFSET OF LANE TERMINAL	0	0
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 4 X 3

LEG 4 GEOMETRY DATA:

LEG ANGLE	270
LENGTH OF INBOUND LANES	800
LENGTH OF OUTBOUND LANES	250
NUMBER OF INBOUND LANES	2
NUMBER OF OUTBOUND LANES	1
SPEED LIMIT ON INBOUND LANES IN MPH	30
SPEED LIMIT ON OUTBOUND LANES IN MPH	30
LEG CENTERLINE OFFSET	0
MEDIAN WIDTH	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT	20
LIMITING ANGLE FOR U-TURN	10

LANE DATA FOR INBOUND LEG 4:
(CONVERTED APPROACH 4)

LANE NUMBER	1	2
(INBOUND LANE NUMBER)	1	2
WIDTH OF LANE	12	12
MOVEMENT CODE	L	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL	0	0
FROM OUTER END	0	0
OFFSET OF LANE TERMINAL	0	0
PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE	48	52
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 4:
(CONVERTED APPROACH 8)

LANE NUMBER	3
(OUTBOUND LANE NUMBER)	1
WIDTH OF LANE	12
MOVEMENT CODE	LSR
LENGTH OF UNBLOCKED LANE	
FROM LANE TERMINAL	0
FROM OUTER END	0
OFFSET OF LANE TERMINAL	0

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 4 X 3

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION	SNEGEXP
TOTAL HOURLY VOLUME ON LEG	400
PARAMETER FOR DISTRIBUTION	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH	28.0
85-PERCENTILE SPEED, MPH	31.0
TRAFFIC MIX DATA TO FOLLOW ?	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER	1	2	3	4
PERCENT OF LEG 3 INBOUND VEHICLES WITH DESTINATION ON LEG	33	33	0	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 4 X 3

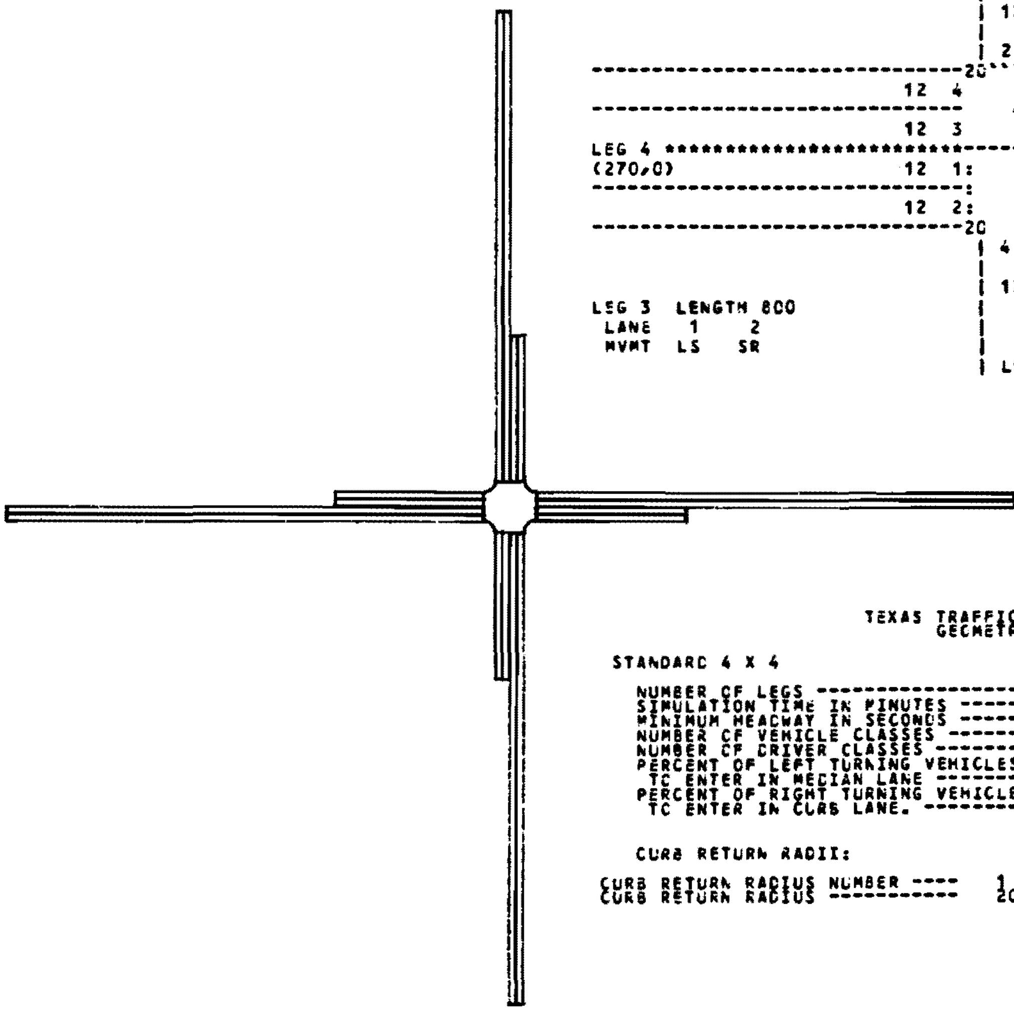
INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION	SNEGEXP
TOTAL HOURLY VOLUME ON LEG	400
PARAMETER FOR DISTRIBUTION	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH	28.0
85-PERCENTILE SPEED, MPH	31.0
TRAFFIC MIX DATA TO FOLLOW ?	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER	1	2	3	4
PERCENT OF LEG 4 INBOUND VEHICLES WITH DESTINATION ON LEG	33	33	34	0

STANDARD 4 X 4



```
LEG 4  LENGTH 800              |  LEG 1 (0,0)  |              LEG 1  LENGTH 800
 LANE   1     2                |    |   *   |  |               LANE   1     2
 MVMT  LS    SR                |    |   *   |  |               MVMT  LS    SR
                               | 12|  12*12 |12 |
                               |    |   *   |  |
                               | 2  | 1 * 3 | 4 |
-------------------------------20.......|      20-------------------------------
                        12  4           |      :2  12
---------------------------------  4X4  |      :-------------------------------
                        12  3           |      :1  12
LEG 4 *************************---------0---------************************ LEG 2
(270,0)                 12  1:          |       3  12                    (90,0)
-----------------------------:          |       -------------------------------
                        12  2:          |       4  12
-------------------------------20       |.......20-------------------------------
                               | 4  | 3 * 1 | 2 |
                               |    |   *   |  |
                               | 12|  12*12 |12 |
LEG 3  LENGTH 800              |    |   *   |  |              LEG 2  LENGTH 800
 LANE   1     2                |    |   *   |  |               LANE   1     2
 MVMT  LS    SR                |    |   *   |  |               MVMT  LS    SR
                               | LEG 3 (180,0) |
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

```
STANDARD 4 X 4

   NUMBER OF LEGS -----------------------        4
   SIMULATION TIME IN MINUTES -----------       20
   MINIMUM HEADWAY IN SECONDS -----------      1.0
   NUMBER OF VEHICLE CLASSES ------------       10
   NUMBER OF DRIVER CLASSES -------------        3
   PERCENT OF LEFT TURNING VEHICLES
    TO ENTER IN MEDIAN LANE -------------       80
   PERCENT OF RIGHT TURNING VEHICLES
    TO ENTER IN CURB LANE. --------------       80

   CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----    1      2      3      4
CURB RETURN RADIUS -----------   20     20     20     20
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                        GEOMETRY INPUT DATA

 STANDARD 4 X 4

   LEG 1 GEOMETRY DATA:

LEG ANGLE ---------------------------------        0
LENGTH OF INBOUND LANES ------------------       800
LENGTH OF OUTBOUND LANES -----------------       250
NUMBER OF INBOUND LANES ------------------         2
NUMBER OF OUTBOUND LANES -----------------         2
SPEED LIMIT ON INBOUND LANES IN MPH ----          30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---          30
LEG CENTERLINE OFFSET --------------------         0
MEDIAN WIDTH -----------------------------         0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---          20
LIMITING ANGLE FOR U-TURN ----------------        10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER ---------------------         1       2
(INBOUND LANE NUMBER) -----------         1       2
WIDTH OF LANE -------------------        12      12
MOVEMENT CODE -------------------        LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -------------         0       0
 FROM OUTER END -----------------         0       0
OFFSET OF LANE TERMINAL ---------         0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE ----------        48      52
                                     MEDIAN    CURB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 5)

LANE NUMBER ---------------------         3       4
(OUTBOUND LANE NUMBER) ----------         1       2
WIDTH OF LANE -------------------        12      12
MOVEMENT CODE -------------------        LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -------------         0       0
 FROM OUTER END -----------------         0       0
OFFSET OF LANE TERMINAL ---------         0       0
                                     MEDIAN    CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                        GEOMETRY INPUT DATA

 STANDARD 4 X 4

   LEG 2 GEOMETRY DATA:

LEG ANGLE ---------------------------------       90
LENGTH OF INBOUND LANES ------------------       800
LENGTH OF OUTBOUND LANES -----------------       250
NUMBER OF INBOUND LANES ------------------         2
NUMBER OF OUTBOUND LANES -----------------         2
SPEED LIMIT ON INBOUND LANES IN MPH ----          30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---          30
LEG CENTERLINE OFFSET --------------------         0
MEDIAN WIDTH -----------------------------         0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---          20
LIMITING ANGLE FOR U-TURN ----------------        10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER ---------------------         1       2
(INBOUND LANE NUMBER) -----------         1       2
WIDTH OF LANE -------------------        12      12
MOVEMENT CODE -------------------        LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -------------         0       0
 FROM OUTER END -----------------         0       0
OFFSET OF LANE TERMINAL ---------         0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE ----------        48      52
                                     MEDIAN    CURB

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 6)

LANE NUMBER ---------------------         3       4
(OUTBOUND LANE NUMBER) ----------         1       2
WIDTH OF LANE -------------------        12      12
MOVEMENT CODE -------------------        LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -------------         0       0
 FROM OUTER END -----------------         0       0
OFFSET OF LANE TERMINAL ---------         0       0
                                     MEDIAN    CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

 STANDARD 4 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------    1   2   3   4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---     0  33  33  34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

 STANDARD 4 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------    1   2   3   4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    33   0  33  34
```

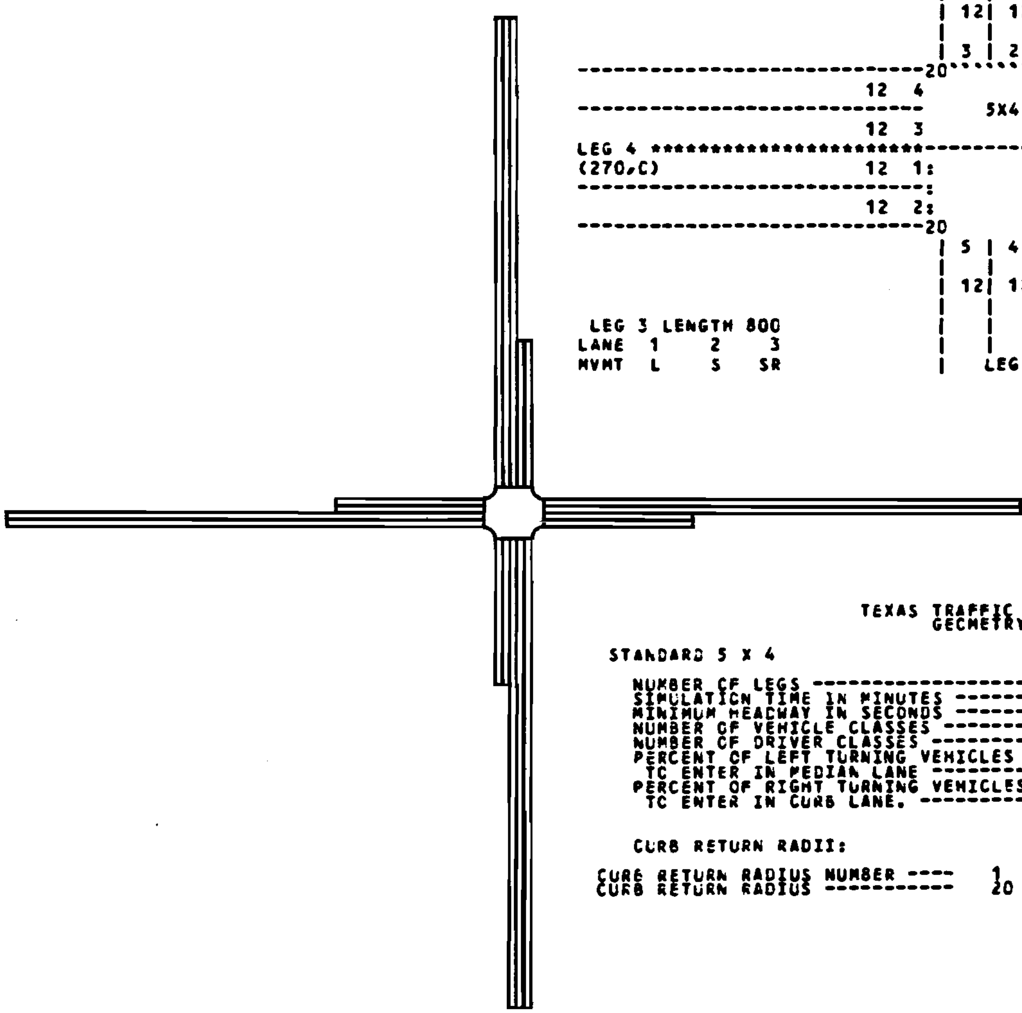
```
                       TEXAS TRAFFIC SIMULATION PACKAGE
                           GEOMETRY INPUT DATA

  STANDARD 4 X 4

    LEG 3 GEOMETRY DATA:

 LEG ANGLE ---------------------------------   180
 LENGTH OF INBOUND LANES ----------------      800
 LENGTH OF OUTBOUND LANES ---------------      250
 NUMBER OF INBOUND LANES ----------------        2
 NUMBER OF OUTBOUND LANES ---------------        2
 SPEED LIMIT ON INBOUND LANES IN MPH ----       30
 SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
 LEG CENTERLINE OFFSET ------------------        0
 MEDIAN WIDTH ---------------------------        0
 LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
 LIMITING ANGLE FOR U-TURN --------------       10

    LANE DATA FOR INBOUND LEG 3:
      (CONVERTED APPROACH 3)

 LANE NUMBER ------------------     1      2
 (INBOUND LANE NUMBER) --------     1      2
 WIDTH OF LANE ----------------    12     12
 MOVEMENT CODE ----------------    LS     SR
 LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL ---------     0      0
   FROM OUTER END -------------     0      0
 OFFSET OF LANE TERMINAL ------     0      0
 PERCENT OF INBOUND TRAFFIC
   TO ENTER IN THIS LANE ------    48     52
                               MEDIAN   CURB

    LANE DATA FOR OUTBOUND LEG 3:
      (CONVERTED APPROACH 7)

 LANE NUMBER ------------------     3      4
 (OUTBOUND LANE NUMBER) -------     1      2
 WIDTH OF LANE ----------------    12     12
 MOVEMENT CODE ----------------    LS     SR
 LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL ---------     0      0
   FROM OUTER END -------------     0      0
 OFFSET OF LANE TERMINAL ------     0      0
                               MEDIAN   CURB
```

```
                       TEXAS TRAFFIC SIMULATION PACKAGE
                           GEOMETRY INPUT DATA

  STANDARD 4 X 4

    LEG 4 GEOMETRY DATA:

 LEG ANGLE ---------------------------------   270
 LENGTH OF INBOUND LANES ----------------      800
 LENGTH OF OUTBOUND LANES ---------------      250
 NUMBER OF INBOUND LANES ----------------        2
 NUMBER OF OUTBOUND LANES ---------------        2
 SPEED LIMIT ON INBOUND LANES IN MPH ----       30
 SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
 LEG CENTERLINE OFFSET ------------------        0
 MEDIAN WIDTH ---------------------------        0
 LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
 LIMITING ANGLE FOR U-TURN --------------       10

    LANE DATA FOR INBOUND LEG 4:
      (CONVERTED APPROACH 4)

 LANE NUMBER ------------------     1      2
 (INBOUND LANE NUMBER) --------     1      2
 WIDTH OF LANE ----------------    12     12
 MOVEMENT CODE ----------------    LS     SR
 LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL ---------     0      0
   FROM OUTER END -------------     0      0
 OFFSET OF LANE TERMINAL ------     0      0
 PERCENT OF INBOUND TRAFFIC
   TO ENTER IN THIS LANE ------    48     52
                               MEDIAN   CURB

    LANE DATA FOR OUTBOUND LEG 4:
      (CONVERTED APPROACH 8)

 LANE NUMBER ------------------     3      4
 (OUTBOUND LANE NUMBER) -------     1      2
 WIDTH OF LANE ----------------    12     12
 MOVEMENT CODE ----------------    LS     SR
 LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL ---------     0      0
   FROM OUTER END -------------     0      0
 OFFSET OF LANE TERMINAL ------     0      0
                               MEDIAN   CURB
```

```
                       TEXAS TRAFFIC SIMULATION PACKAGE
                          DRIVER-VEHICLE INPUT DATA

  STANDARD 4 X 4

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

 NAME FOR INBOUND TRAFFIC
   HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
 TOTAL HOURLY VOLUME ON LEG -------------      400
 PARAMETER FOR DISTRIBUTION -------------     2.00
 MEAN SPEED OF ENTERING VEHICLES, MPH ---     26.0
 85-PERCENTILE SPEED, MPH ---------------     31.0
 TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

 LEG NUMBER --------------------------    1    2    3    4
 PERCENT OF LEG 3 INBOUND
   VEHICLES WITH DESTINATION ON LEG ---  33   33    0   34
```

```
                       TEXAS TRAFFIC SIMULATION PACKAGE
                          DRIVER-VEHICLE INPUT DATA

  STANDARD 4 X 4

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

 NAME FOR INBOUND TRAFFIC
   HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
 TOTAL HOURLY VOLUME ON LEG -------------      400
 PARAMETER FOR DISTRIBUTION -------------     2.00
 MEAN SPEED OF ENTERING VEHICLES, MPH ---     26.0
 85-PERCENTILE SPEED, MPH ---------------     31.0
 TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

 LEG NUMBER --------------------------    1    2    3    4
 PERCENT OF LEG 4 INBOUND
   VEHICLES WITH DESTINATION ON LEG ---  33   33   34    0
```

STANDARD 5 X 4



```
LEG 4  LENGTH 800                    |    LEG 1 (0,-12)    |              LEG 1  LENGTH 600
 LANE   1    2                       |    |    |    *    | |             LANE   1    2    3
 MVMT  LS   SR                       |    |    |    *    | |             MVMT   L    S   SR
                                     | 12| 12| 12*12 |12 |
                                     |    |    |    *    | |
                                     | 3  | 2  | 1 * 4 | 5 |
-----------------------------------20...........:         20-----------------------------------
                            12  4               |         :2  12
-----------------------------------    5X4      |         :-----------------------------------
                            12  3               |         :1  12
LEG 4 ***************************----------0---------------*************************** LEG 2
(270,0)                     12  1:          |               3  12                     (90,0)
---------------------------------:          |               -----------------------------------
                            12  2:          |               4  12
-----------------------------------20       |...........20-----------------------------------
                                     | 5  | 4 * 1 | 2  | 3 |
                                     |    |    *    |    | |
                                     | 12| 12*12 |12 |12 |
                                     |    |    *    |    | |
 LEG 3 LENGTH 800                    |    |    *    |    | |              LEG 2  LENGTH 800
LANE   1     2     3                 |    |    *    |    | |               LANE   1    2
MVMT   L     S    SR                 |    LEG 3 (180,0)    |               MVMT  LS   SR
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 5 X 4

```
NUMBER OF LEGS ------------------------     4
SIMULATION TIME IN MINUTES -----------     20
MINIMUM HEADWAY IN SECONDS ----------     1.0
NUMBER OF VEHICLE CLASSES ------------     10
NUMBER OF DRIVER CLASSES -------------      3
PERCENT OF LEFT TURNING VEHICLES
  TO ENTER IN MEDIAN LANE -------------    80
PERCENT OF RIGHT TURNING VEHICLES
  TO ENTER IN CURB LANE. --------------    80
```

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

```
                      TEXAS TRAFFIC SIMULATION PACKAGE
                           GEOMETRY INPUT DATA

 STANDARD 5 X 4

   LEG 1 GEOMETRY DATA:

LEG ANGLE -------------------------------       0
LENGTH OF INBOUND LANES ----------------      800
LENGTH OF OUTBOUND LANES ---------------      250
NUMBER OF INBOUND LANES ----------------        3
NUMBER OF OUTBOUND LANES ---------------        2
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET ------------------      -12
MEDIAN WIDTH ---------------------------        0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN --------------       10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER -----------------      1      2      3
(INBOUND LANE NUMBER) --------     1      2      3
WIDTH OF LANE ---------------     12     12     12
MOVEMENT CODE ---------------      L      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    32     35     33
                              MEDIAN          CURB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 5)

LANE NUMBER -----------------      4      5
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ---------------     12     12
MOVEMENT CODE ---------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                      TEXAS TRAFFIC SIMULATION PACKAGE
                           GEOMETRY INPUT DATA

 STANDARD 5 X 4

   LEG 2 GEOMETRY DATA:

LEG ANGLE -------------------------------      90
LENGTH OF INBOUND LANES ----------------      800
LENGTH OF OUTBOUND LANES ---------------      250
NUMBER OF INBOUND LANES ----------------        2
NUMBER OF OUTBOUND LANES ---------------        2
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET ------------------        0
MEDIAN WIDTH ---------------------------        0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN --------------       10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER -----------------      1      2
(INBOUND LANE NUMBER) --------     1      2
WIDTH OF LANE ---------------     12     12
MOVEMENT CODE ---------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    48     52
                              MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 6)

LANE NUMBER -----------------      3      4
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ---------------     12     12
MOVEMENT CODE ---------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                      TEXAS TRAFFIC SIMULATION PACKAGE
                         DRIVER-VEHICLE INPUT DATA

 STANDARD 5 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      600
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER -------------------------    1    2    3    4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   0   33   33   34
```

```
                      TEXAS TRAFFIC SIMULATION PACKAGE
                         DRIVER-VEHICLE INPUT DATA

 STANDARD 5 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER -------------------------    1    2    3    4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33    0   33   34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA
STANDARD 5 X 4

   LEG 3 GEOMETRY DATA:

LEG ANGLE ------------------------------------  180
LENGTH OF INBOUND LANES ----------------------  800
LENGTH OF OUTBOUND LANES ---------------------  250
NUMBER OF INBOUND LANES ----------------------    3
NUMBER OF OUTBOUND LANES ---------------------    2
SPEED LIMIT ON INBOUND LANES IN MPH ----------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---------   30
LEG CENTERLINE OFFSET ------------------------    0
MEDIAN WIDTH ---------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---------   20
LIMITING ANGLE FOR U-TURN --------------------   10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER ----------------------       1       2       3
(INBOUND LANE NUMBER) ------------       1       2       3
WIDTH OF LANE --------------------      12      12      12
MOVEMENT CODE --------------------       L       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL --------------       0       0       0
 FROM OUTER END ------------------       0       0       0
OFFSET OF LANE TERMINAL ----------       0       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -----------      32      35      33
                                    MEDIAN            CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 7)

LANE NUMBER ----------------------       4       5
(OUTBOUND LANE NUMBER) -----------       1       2
WIDTH OF LANE --------------------      12      12
MOVEMENT CODE --------------------      LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL --------------       0       0
 FROM OUTER END ------------------       0       0
OFFSET OF LANE TERMINAL ----------       0       0
                                    MEDIAN    CURB
```

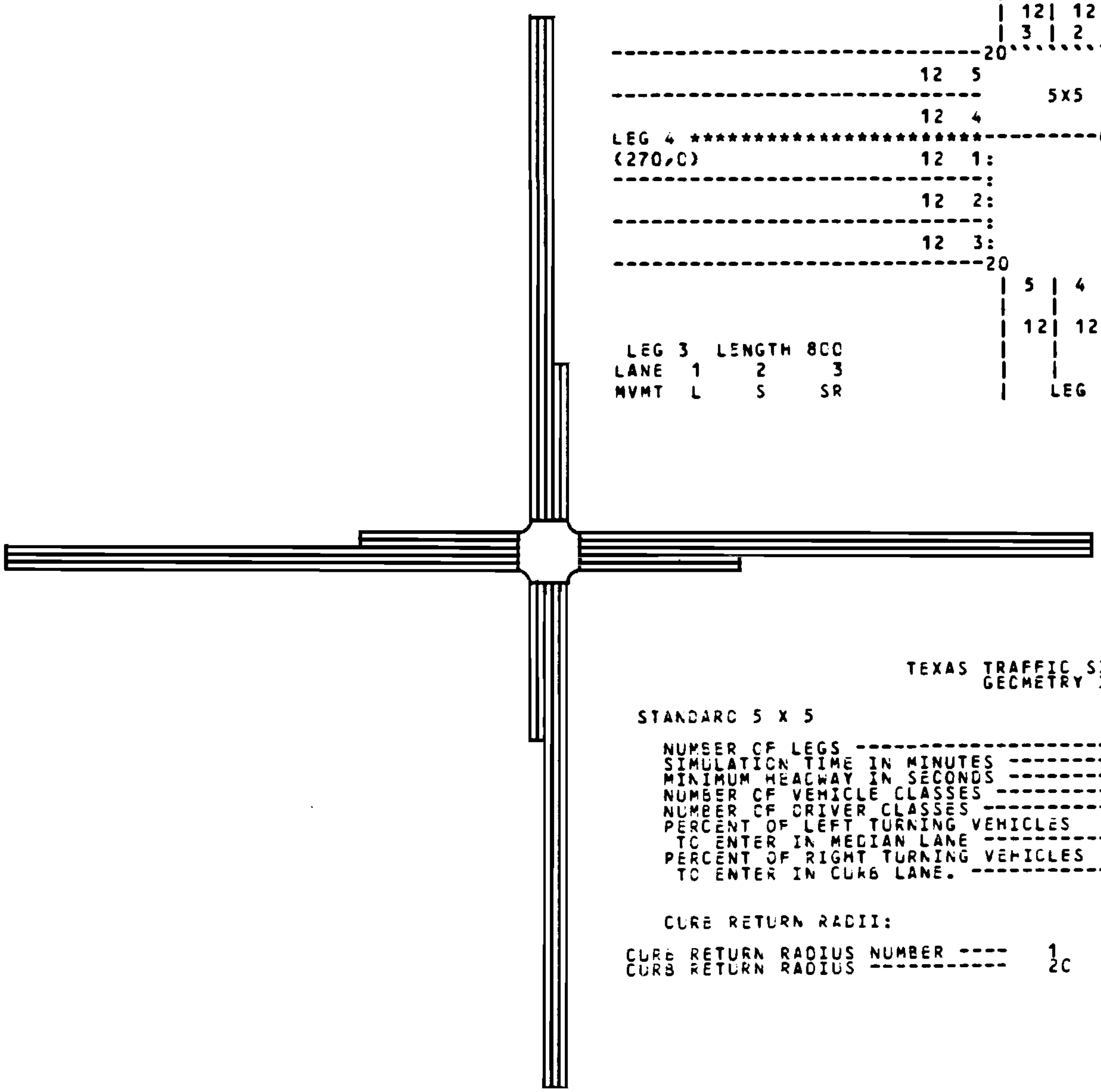
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA
STANDARD 5 X 4

   LEG 4 GEOMETRY DATA:

LEG ANGLE ------------------------------------  270
LENGTH OF INBOUND LANES ----------------------  800
LENGTH OF OUTBOUND LANES ---------------------  250
NUMBER OF INBOUND LANES ----------------------    2
NUMBER OF OUTBOUND LANES ---------------------    2
SPEED LIMIT ON INBOUND LANES IN MPH ----------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---------   30
LEG CENTERLINE OFFSET ------------------------    0
MEDIAN WIDTH ---------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---------   20
LIMITING ANGLE FOR U-TURN --------------------   10

   LANE DATA FOR INBOUND LEG 4:
    (CONVERTED APPROACH 4)

LANE NUMBER ----------------------       1       2
(INBOUND LANE NUMBER) ------------       1       2
WIDTH OF LANE --------------------      12      12
MOVEMENT CODE --------------------      LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL --------------       0       0
 FROM OUTER END ------------------       0       0
OFFSET OF LANE TERMINAL ----------       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -----------      48      52
                                    MEDIAN    CURB

   LANE DATA FOR OUTBOUND LEG 4:
    (CONVERTED APPROACH 8)

LANE NUMBER ----------------------       3       4
(OUTBOUND LANE NUMBER) -----------       1       2
WIDTH OF LANE --------------------      12      12
MOVEMENT CODE --------------------      LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL --------------       0       0
 FROM OUTER END ------------------       0       0
OFFSET OF LANE TERMINAL ----------       0       0
                                    MEDIAN    CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA
STANDARD 5 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION ---------  SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------      600
PARAMETER FOR DISTRIBUTION --------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----     28.0
85-PERCENTILE SPEED, MPH ----------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER -----------------------------    1    2    3    4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---     33   33    0   34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA
STANDARD 5 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION ---------  SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------      400
PARAMETER FOR DISTRIBUTION --------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----     28.0
85-PERCENTILE SPEED, MPH ----------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER -----------------------------    1    2    3    4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---     33   33   34    0
```

STANDARD 5 X 5

```
 LEG 4  LENGTH 800               |   LEG 1 (0,-12)    |          LEG 1  LENGTH 800
LANE    1     2     3            |   |    |    *    | |         LANE    1     2     3
MVMT    L     S     SR           |   |    |    *    | |         MVMT    L     S     SR
                                 | 12| 12| 12*12 |12 |
                                 | 3 | 2 | 1 * 4 | 5 |
-----------------------------20...........|      20------------------------------
                     12  5                |       :3  12
-----------------------------       5X5   |       :------------------------------
                     12  4                |       :2  12
LEG 4 ***********************--------0----        :------------------------------
(270,0)              12  1:          |            :1  12
-----------------------------:       |---------------********************* LEG 2
                     12  2:          |             4  12                (90,-12)
-----------------------------:       |            -------------------------------
                     12  3:          |             5  12
-----------------------------20      |..........2C-------------------------------
                             | 5 | 4 * 1 | 2 | 3 |
                             |   |   *   |   |   |
                             | 12| 12*12 |12 |12 |
 LEG 3  LENGTH 800           |   |   *   |   |   |         LEG 2  LENGTH 800
LANE    1     2     3        |   |   *   |   |   |        LANE    1     2     3
MVMT    L     S     SR       |   LEG 3 (180,0)   |        MVMT    L     S     SR
```



TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 5 X 5

NUMBER OF LEGS -------------------------	4
SIMULATION TIME IN MINUTES -----------	20
MINIMUM HEADWAY IN SECONDS -----------	1.0
NUMBER OF VEHICLE CLASSES ------------	10
NUMBER OF DRIVER CLASSES -------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE -------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. -------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA

STANDARD 5 X 5

   LEG 1 GEOMETRY DATA:

LEG ANGLE -----------------------------------      0
LENGTH OF INBOUND LANES ----------------------    800
LENGTH OF OUTBOUND LANES ---------------------    250
NUMBER OF INBOUND LANES ----------------------      3
NUMBER OF OUTBOUND LANES ---------------------      2
SPEED LIMIT ON INBOUND LANES IN MPH ----           30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---           30
LEG CENTERLINE OFFSET ------------------          -12
MEDIAN WIDTH ---------------------------            0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---           20
LIMITING ANGLE FOR U-TURN --------------           10

   LANE DATA FOR INBOUND LEG 1:
     (CONVERTED APPROACH 1)

LANE NUMBER ------------------          1        2        3
(INBOUND LANE NUMBER) --------          1        2        3
WIDTH OF LANE ----------------         12       12       12
MOVEMENT CODE ----------------          L        S       SR
LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ---------          0        0        0
  FROM OUTER END -------------          0        0        0
OFFSET OF LANE TERMINAL ------          0        0        0
PERCENT OF INBOUND TRAFFIC
  TO ENTER IN THIS LANE ------         32       35       33
                                   MEDIAN              CURB

   LANE DATA FOR OUTBOUND LEG 1:
     (CONVERTED APPROACH 5)

LANE NUMBER ------------------          4        5
(OUTBOUND LANE NUMBER) -------          1        2
WIDTH OF LANE ----------------         12       12
MOVEMENT CODE ----------------         LS       SR
LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ---------          0        0
  FROM OUTER END -------------          0        0
OFFSET OF LANE TERMINAL ------          0        0
                                   MEDIAN     CURB
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA

STANDARD 5 X 5

   LEG 2 GEOMETRY DATA:

LEG ANGLE -----------------------------------     90
LENGTH OF INBOUND LANES ----------------------    800
LENGTH OF OUTBOUND LANES ---------------------    250
NUMBER OF INBOUND LANES ----------------------      3
NUMBER OF OUTBOUND LANES ---------------------      2
SPEED LIMIT ON INBOUND LANES IN MPH ----           30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---           30
LEG CENTERLINE OFFSET ------------------          -12
MEDIAN WIDTH ---------------------------            0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---           20
LIMITING ANGLE FOR U-TURN --------------           10

   LANE DATA FOR INBOUND LEG 2:
     (CONVERTED APPROACH 2)

LANE NUMBER ------------------          1        2        3
(INBOUND LANE NUMBER) --------          1        2        3
WIDTH OF LANE ----------------         12       12       12
MOVEMENT CODE ----------------          L        S       SR
LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ---------          0        0        0
  FROM OUTER END -------------          0        0        0
OFFSET OF LANE TERMINAL ------          0        0        0
PERCENT OF INBOUND TRAFFIC
  TO ENTER IN THIS LANE ------         32       35       33
                                   MEDIAN              CURB

   LANE DATA FOR OUTBOUND LEG 2:
     (CONVERTED APPROACH 6)

LANE NUMBER ------------------          4        5
(OUTBOUND LANE NUMBER) -------          1        2
WIDTH OF LANE ----------------         12       12
MOVEMENT CODE ----------------         LS       SR
LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ---------          0        0
  FROM OUTER END -------------          0        0
OFFSET OF LANE TERMINAL ------          0        0
                                   MEDIAN     CURB
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 5 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
  HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------       600
PARAMETER FOR DISTRIBUTION -------------      2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---      28.0
85-PERCENTILE SPEED, MPH ---------------      31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------        NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------    1    2    3    4
PERCENT OF LEG 1 INBOUND
  VEHICLES WITH DESTINATION ON LEG ---    0   33   33   34
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 5 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
  HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------       600
PARAMETER FOR DISTRIBUTION -------------      2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---      28.0
85-PERCENTILE SPEED, MPH ---------------      31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------        NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------    1    2    3    4
PERCENT OF LEG 2 INBOUND
  VEHICLES WITH DESTINATION ON LEG ---   33    0   33   34
```

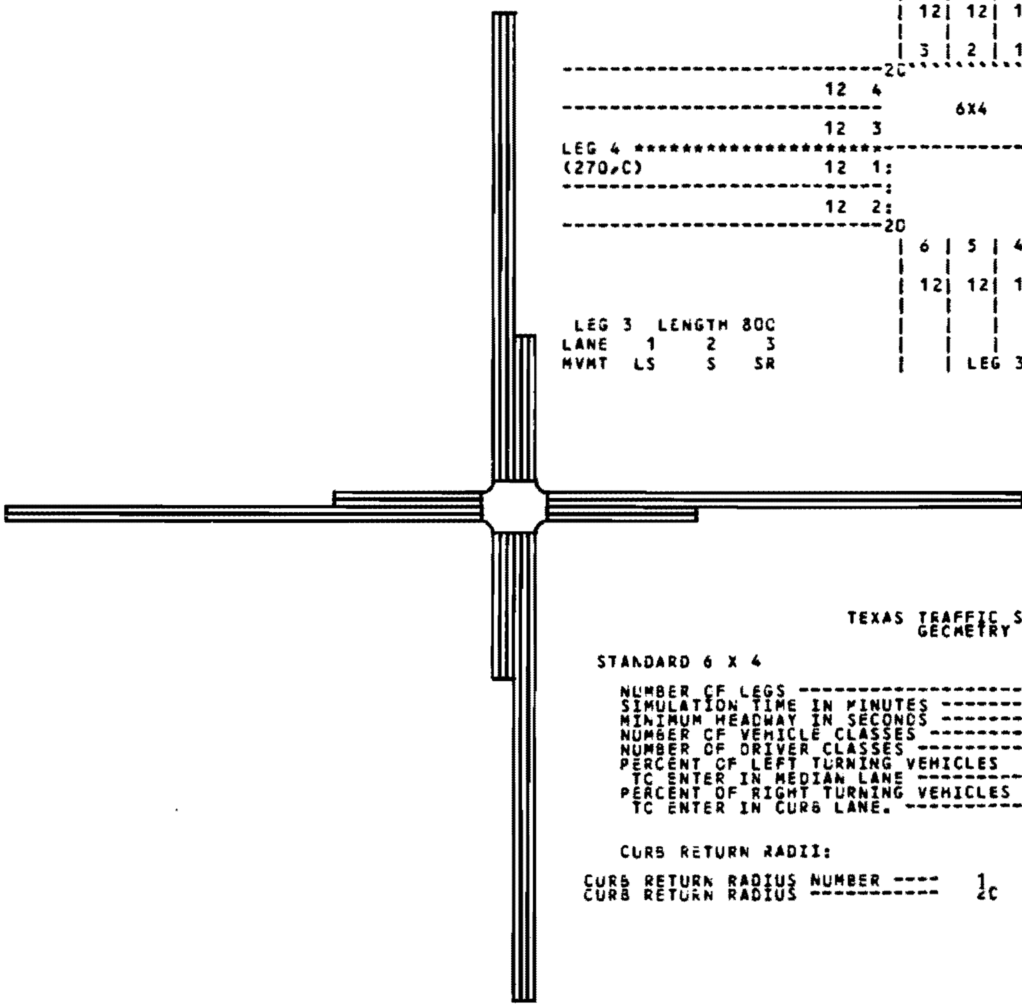
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

 STANDARD 5 X 5

   LEG 3 GEOMETRY DATA:

LEG ANGLE ---------------------------------  180
LENGTH OF INBOUND LANES ------------------   800
LENGTH OF OUTBOUND LANES -----------------   250
NUMBER OF INBOUND LANES ------------------     3
NUMBER OF OUTBOUND LANES -----------------     2
SPEED LIMIT ON INBOUND LANES IN MPH ----      30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---      30
LEG CENTERLINE OFFSET --------------------     0
MEDIAN WIDTH -----------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---      20
LIMITING ANGLE FOR U-TURN ----------------    10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER ------------------     1      2      3
(INBOUND LANE NUMBER) --------     1      2      3
WIDTH OF LANE ----------------    12     12     12
MOVEMENT CODE ----------------     L      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    32     35     33
                              MEDIAN          CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 7)

LANE NUMBER ------------------     4      5
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ----------------    12     12
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

 STANDARD 5 X 5

   LEG 4 GEOMETRY DATA:

LEG ANGLE ---------------------------------  270
LENGTH OF INBOUND LANES ------------------   800
LENGTH OF OUTBOUND LANES -----------------   250
NUMBER OF INBOUND LANES ------------------     3
NUMBER OF OUTBOUND LANES -----------------     2
SPEED LIMIT ON INBOUND LANES IN MPH ----      30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---      30
LEG CENTERLINE OFFSET --------------------     0
MEDIAN WIDTH -----------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---      20
LIMITING ANGLE FOR U-TURN ----------------    10

   LANE DATA FOR INBOUND LEG 4:
    (CONVERTED APPROACH 4)

LANE NUMBER ------------------     1      2      3
(INBOUND LANE NUMBER) --------     1      2      3
WIDTH OF LANE ----------------    12     12     12
MOVEMENT CODE ----------------     L      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    32     35     33
                              MEDIAN          CURB

   LANE DATA FOR OUTBOUND LEG 4:
    (CONVERTED APPROACH 8)

LANE NUMBER ------------------     4      5
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ----------------    12     12
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

 STANDARD 5 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      600
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER --------------------------   1    2    3    4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33   33    0   34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

 STANDARD 5 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      600
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER --------------------------   1    2    3    4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33   33   34    C
```

STANDARD 6 X 4



```
LEG 4  LENGTH 800              |    |  LEG 1 (0,C)   |    |            LEG 1  LENGTH 800
 LANE   1    2                 |    |    |   *   |   |    |           LANE   1    2    3
 MVMT  LS   SR                 |    |    |   *   |   |    |           MVMT  LS    S   SR
                               | 12| 12| 12*12 |12 |12 |
                               |    |    |   *   |   |    |
                               | 3 | 2 | 1 * 4 | 5 | 6 |
--------------------------2C'''''''''''|               2C-------------------------
                12  4                   |               :2  12
-------------------------     6X4      |               :-------------------------
                12  3                   |               :1  12
LEG 4 ********************-------------C---------------******************** LEG 2
(270,C)         12  1:                  |               3  12              (90,-12)
---------------------------:            |               -------------------------
                12  2:                  |               4  12
--------------------------2C            |...........2C-------------------------
                               | 6 | 5 | 4 * 1 | 2 | 3 |
                               |    |    |   *   |   |    |
                               | 12| 12| 12*12 |12 |12 |
                               |    |    |   *   |   |    |
 LEG 3  LENGTH 800             |    |    |   *   |   |    |            LEG 2  LENGTH 800
LANE   1     2    3            |    |    |   *   |   |    |             LANE   1    2
MVMT  LS     S   SR            |    | LEG 3 (180,C) |    |             MVMT  LS   SR
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 6 X 4

```
NUMBER OF LEGS ------------------------        4
SIMULATION TIME IN MINUTES -----------        20
MINIMUM HEADWAY IN SECONDS -----------       1.0
NUMBER OF VEHICLE CLASSES ------------        10
NUMBER OF DRIVER CLASSES -------------         3
PERCENT OF LEFT TURNING VEHICLES
 TO ENTER IN MEDIAN LANE -------------        80
PERCENT OF RIGHT TURNING VEHICLES
 TO ENTER IN CURB LANE. --------------        80
```

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA

STANDARD 6 X 4

   LEG 1 GEOMETRY DATA:

LEG ANGLE ---------------------------------     0
LENGTH OF INBOUND LANES ----------------     800
LENGTH OF OUTBOUND LANES ---------------     250
NUMBER OF INBOUND LANES ----------------       3
NUMBER OF OUTBOUND LANES ---------------       3
SPEED LIMIT ON INBOUND LANES IN MPH ----      30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---      30
LEG CENTERLINE OFFSET ------------------       0
MEDIAN WIDTH ---------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---      20
LIMITING ANGLE FOR U-TURN --------------      10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER ------------------     1      2      3
(INBOUND LANE NUMBER) --------     1      2      3
WIDTH OF LANE ----------------    12     12     12
MOVEMENT CODE ----------------    LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    32     35     33
                              MEDIAN          CURB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 5)

LANE NUMBER ------------------     4      5      6
(OUTBOUND LANE NUMBER) -------     1      2      3
WIDTH OF LANE ----------------    12     12     12
MOVEMENT CODE ----------------    LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
                              MEDIAN          CURB
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA

STANDARD 6 X 4

   LEG 2 GEOMETRY DATA:

LEG ANGLE ---------------------------------    90
LENGTH OF INBOUND LANES ----------------     800
LENGTH OF OUTBOUND LANES ---------------     250
NUMBER OF INBOUND LANES ----------------       2
NUMBER OF OUTBOUND LANES ---------------       2
SPEED LIMIT ON INBOUND LANES IN MPH ----      30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---      30
LEG CENTERLINE OFFSET ------------------       0
MEDIAN WIDTH ---------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---      20
LIMITING ANGLE FOR U-TURN --------------      10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER ------------------     1      2
(INBOUND LANE NUMBER) --------     1      2
WIDTH OF LANE ----------------    12     12
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    48     52
                              MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 6)

LANE NUMBER ------------------     3      4
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ----------------    12     12
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      600
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------   1    2    3    4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    0   33   33   34
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      400
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------   1    2    3    4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   33    0   33   34
```

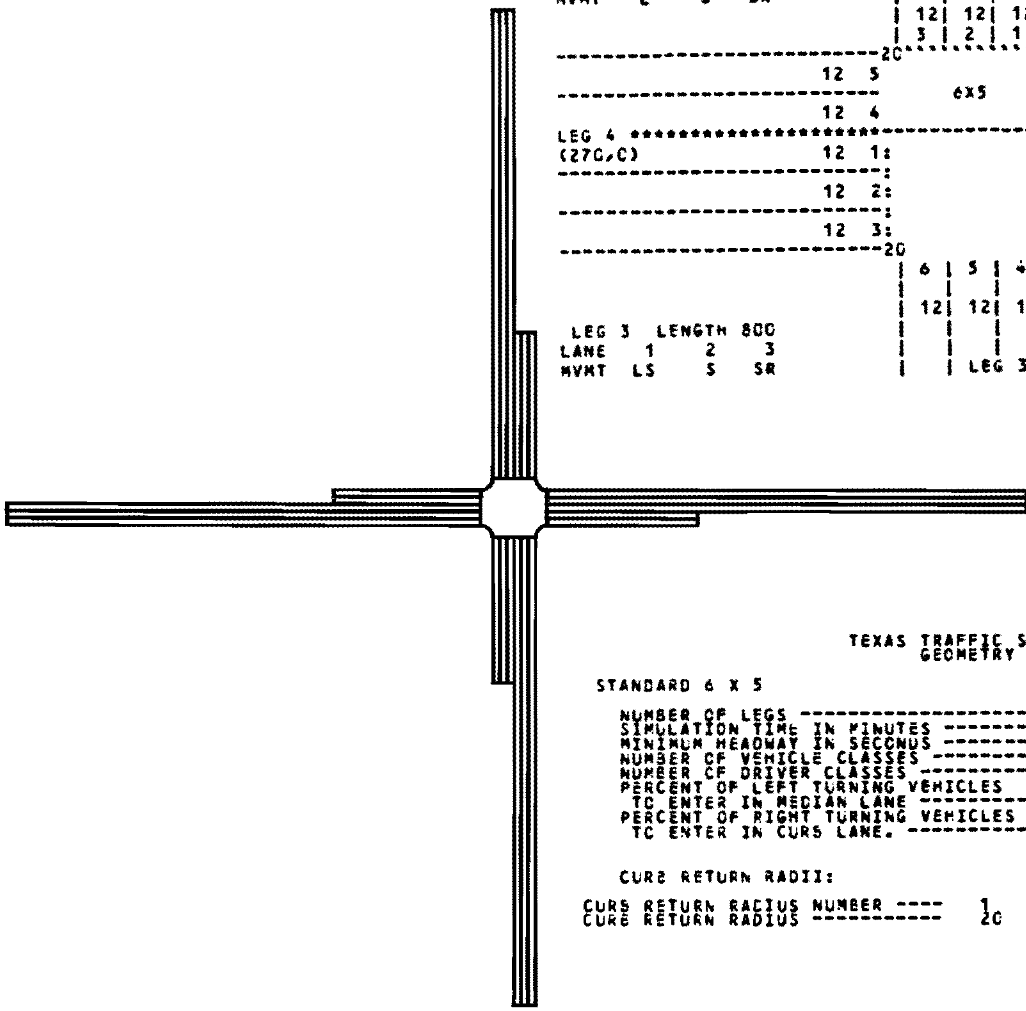
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                        GEOMETRY INPUT DATA

 STANDARD 6 X 4

    LEG 3 GEOMETRY DATA:

LEG ANGLE ---------------------------------  180
LENGTH OF INBOUND LANES ------------------  800
LENGTH OF OUTBOUND LANES -----------------  250
NUMBER OF INBOUND LANES ------------------    3
NUMBER OF OUTBOUND LANES -----------------    3
SPEED LIMIT ON INBOUND LANES IN MPH ----   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---   30
LEG CENTERLINE OFFSET --------------------    0
MEDIAN WIDTH ------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---   20
LIMITING ANGLE FOR U-TURN ---------------   10

    LANE DATA FOR INBOUND LEG 3:
     (CONVERTED APPROACH 3)

LANE NUMBER ------------------        1      2      3
(INBOUND LANE NUMBER) --------        1      2      3
WIDTH OF LANE ----------------       12     12     12
MOVEMENT CODE ----------------       LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0      0      0
 FROM OUTER END --------------        0      0      0
OFFSET OF LANE TERMINAL ------        0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------       32     35     33
                                 MEDIAN          CURB

    LANE DATA FOR OUTBOUND LEG 3:
     (CONVERTED APPROACH 7)

LANE NUMBER ------------------        4      5      6
(OUTBOUND LANE NUMBER) -------        1      2      3
WIDTH OF LANE ----------------       12     12     12
MOVEMENT CODE ----------------       LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0      0      0
 FROM OUTER END --------------        0      0      0
OFFSET OF LANE TERMINAL ------        0      0      0
                                 MEDIAN          CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                        GEOMETRY INPUT DATA

 STANDARD 6 X 4

    LEG 4 GEOMETRY DATA:

LEG ANGLE ---------------------------------  270
LENGTH OF INBOUND LANES ------------------  800
LENGTH OF OUTBOUND LANES -----------------  250
NUMBER OF INBOUND LANES ------------------    2
NUMBER OF OUTBOUND LANES -----------------    2
SPEED LIMIT ON INBOUND LANES IN MPH ----   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---   30
LEG CENTERLINE OFFSET --------------------    0
MEDIAN WIDTH ------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---   20
LIMITING ANGLE FOR U-TURN ---------------   10

    LANE DATA FOR INBOUND LEG 4:
     (CONVERTED APPROACH 4)

LANE NUMBER ------------------        1      2
(INBOUND LANE NUMBER) --------        1      2
WIDTH OF LANE ----------------       12     12
MOVEMENT CODE ----------------       LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0      0
 FROM OUTER END --------------        0      0
OFFSET OF LANE TERMINAL ------        0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------       48     52
                                 MEDIAN   CURB

    LANE DATA FOR OUTBOUND LEG 4:
     (CONVERTED APPROACH 8)

LANE NUMBER ------------------        3      4
(OUTBOUND LANE NUMBER) -------        1      2
WIDTH OF LANE ----------------       12     12
MOVEMENT CODE ----------------       LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0      0
 FROM OUTER END --------------        0      0
OFFSET OF LANE TERMINAL ------        0      0
                                 MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

 STANDARD 6 X 4

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     600
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ----------------------------   1   2   3   4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33   0  34
```

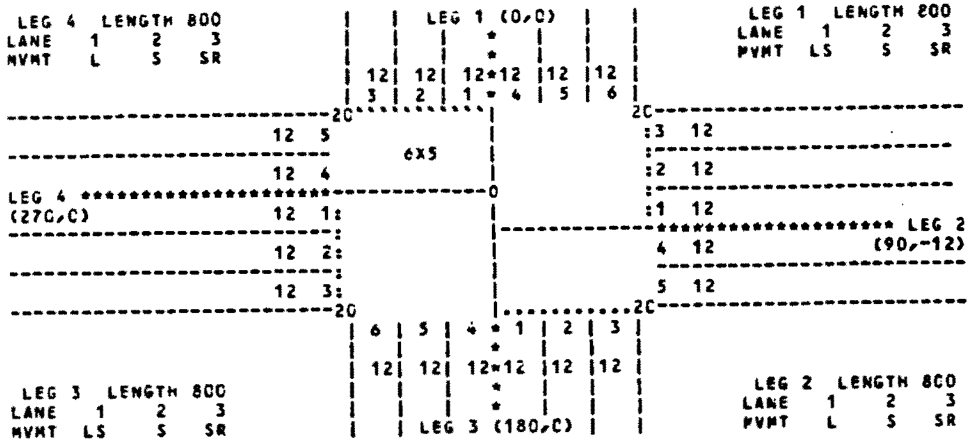
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

 STANDARD 6 X 4

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     400
PARAMETER FOR DISTRIBUTION --------------   [illegible]
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER ----------------------------   1   2   3   4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33  34   0
```

STANDARD 6 X 5



LEG 4 LENGTH 800
LANE 1 2 3
MVMT L S SR

LEG 1 LENGTH 800
LANE 1 2 3
MVMT LS S SR



LEG 3 LENGTH 800
LANE 1 2 3
MVMT LS S SR

LEG 2 LENGTH 800
LANE 1 2 3
MVMT L S SR

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 6 X 5

NUMBER OF LEGS ----------------------	4
SIMULATION TIME IN MINUTES ----------	20
MINIMUM HEADWAY IN SECONDS ----------	1.0
NUMBER OF VEHICLE CLASSES -----------	10
NUMBER OF DRIVER CLASSES ------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 6 X 5

LEG 1 GEOMETRY DATA:

LEG ANGLE	0
LENGTH OF INBOUND LANES	800
LENGTH OF OUTBOUND LANES	250
NUMBER OF INBOUND LANES	3
NUMBER OF OUTBOUND LANES	3
SPEED LIMIT ON INBOUND LANES IN MPH	30
SPEED LIMIT ON OUTBOUND LANES IN MPH	30
LEG CENTERLINE OFFSET	0
MEDIAN WIDTH	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT	20
LIMITING ANGLE FOR U-TURN	10

LANE DATA FOR INBOUND LEG 1:
(CONVERTED APPROACH 1)

LANE NUMBER	1	2	3
(INBOUND LANE NUMBER)	1	2	3
WIDTH OF LANE	12	12	12
MOVEMENT CODE	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL	0	0	0
FROM OUTER END	0	0	0
OFFSET OF LANE TERMINAL	0	0	0
PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE	32	35	33
	MEDIAN		CURB

LANE DATA FOR OUTBOUND LEG 1:
(CONVERTED APPROACH 5)

LANE NUMBER	4	5	6
(OUTBOUND LANE NUMBER)	1	2	3
WIDTH OF LANE	12	12	12
MOVEMENT CODE	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL	0	0	0
FROM OUTER END	0	0	0
OFFSET OF LANE TERMINAL	0	0	0
	MEDIAN		CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 6 X 5

LEG 2 GEOMETRY DATA:

LEG ANGLE	90
LENGTH OF INBOUND LANES	800
LENGTH OF OUTBOUND LANES	250
NUMBER OF INBOUND LANES	3
NUMBER OF OUTBOUND LANES	2
SPEED LIMIT ON INBOUND LANES IN MPH	30
SPEED LIMIT ON OUTBOUND LANES IN MPH	30
LEG CENTERLINE OFFSET	-12
MEDIAN WIDTH	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT	20
LIMITING ANGLE FOR U-TURN	10

LANE DATA FOR INBOUND LEG 2:
(CONVERTED APPROACH 2)

LANE NUMBER	1	2	3
(INBOUND LANE NUMBER)	1	2	3
WIDTH OF LANE	12	12	12
MOVEMENT CODE	L	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL	0	0	0
FROM OUTER END	0	0	0
OFFSET OF LANE TERMINAL	0	0	0
PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE	32	35	33
	MEDIAN		CURB

LANE DATA FOR OUTBOUND LEG 2:
(CONVERTED APPROACH 6)

LANE NUMBER	4	5
(OUTBOUND LANE NUMBER)	1	2
WIDTH OF LANE	12	12
MOVEMENT CODE	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL	0	0
FROM OUTER END	0	0
OFFSET OF LANE TERMINAL	0	0
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 5

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION	SNEGEXP
TOTAL HOURLY VOLUME ON LEG	600
PARAMETER FOR DISTRIBUTION	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH	28.0
85-PERCENTILE SPEED, MPH	31.0
TRAFFIC MIX DATA TO FOLLOW ?	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER	1	2	3	4
PERCENT OF LEG 1 INBOUND VEHICLES WITH DESTINATION ON LEG	0	33	33	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 5

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION	SNEGEXP
TOTAL HOURLY VOLUME ON LEG	600
PARAMETER FOR DISTRIBUTION	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH	28.0
85-PERCENTILE SPEED, MPH	31.0
TRAFFIC MIX DATA TO FOLLOW ?	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER	1	2	3	4
PERCENT OF LEG 2 INBOUND VEHICLES WITH DESTINATION ON LEG	33	0	33	34

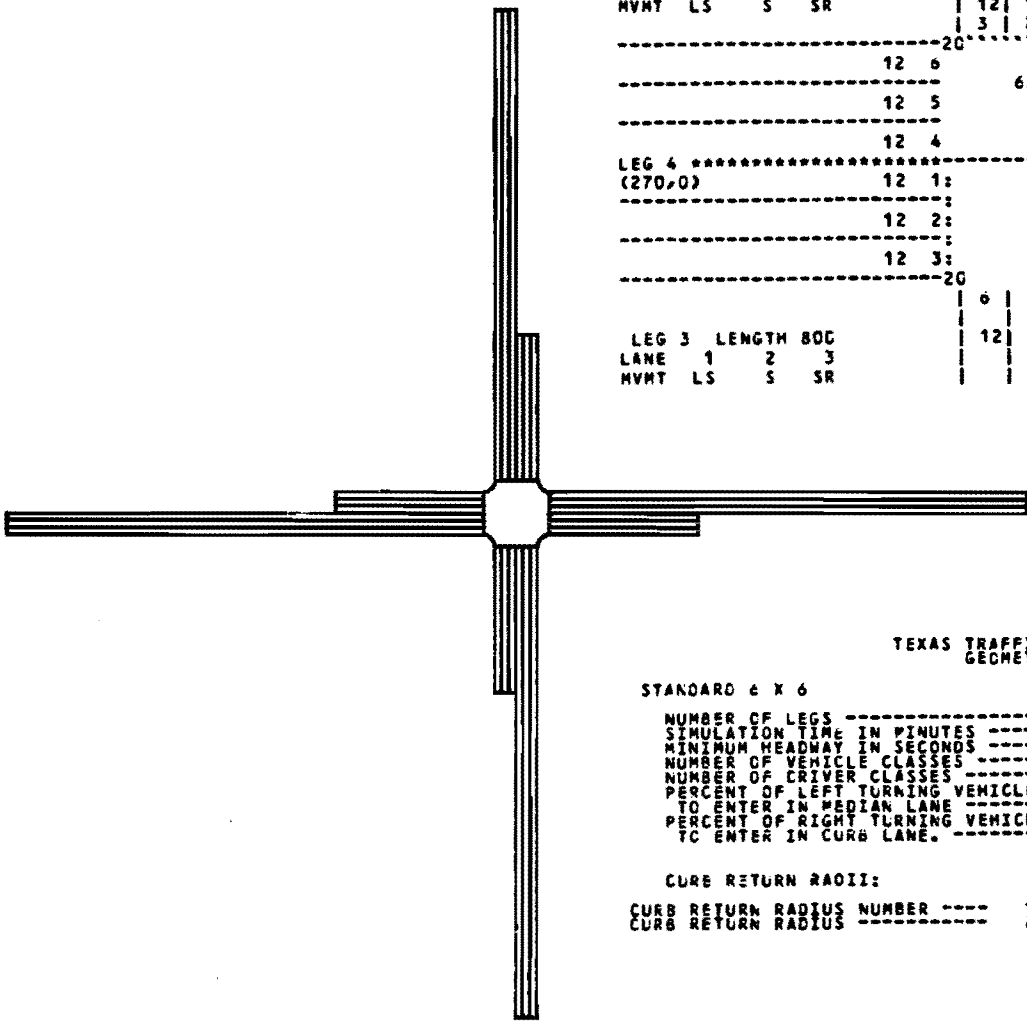
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

 STANDARD 6 X 5

   LEG 3 GEOMETRY DATA:

LEG ANGLE ---------------------------------   180
LENGTH OF INBOUND LANES ----------------   800
LENGTH OF OUTBOUND LANES ---------------   250
NUMBER OF INBOUND LANES ----------------     3
NUMBER OF OUTBOUND LANES ---------------     3
SPEED LIMIT ON INBOUND LANES IN MPH ----    30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---    30
LEG CENTERLINE OFFSET ------------------     0
MEDIAN WIDTH ---------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---    20
LIMITING ANGLE FOR U-TURN --------------    10

   LANE DATA FOR INBOUND LEG 3:
     (CONVERTED APPROACH 3)

LANE NUMBER ------------------      1      2      3
(INBOUND LANE NUMBER) --------      1      2      3
WIDTH OF LANE ----------------     12     12     12
MOVEMENT CODE ----------------     LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0      0
 FROM OUTER END --------------      0      0      0
OFFSET OF LANE TERMINAL ------      0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     32     35     33
                               MEDIAN          CURB

   LANE DATA FOR OUTBOUND LEG 3:
     (CONVERTED APPROACH 7)

LANE NUMBER ------------------      4      5      6
(OUTBOUND LANE NUMBER) -------      1      2      3
WIDTH OF LANE ----------------     12     12     12
MOVEMENT CODE ----------------     LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0      0
 FROM OUTER END --------------      0      0      0
OFFSET OF LANE TERMINAL ------      0      0      0
                               MEDIAN          CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

 STANDARD 6 X 5

   LEG 4 GEOMETRY DATA:

LEG ANGLE ---------------------------------   270
LENGTH OF INBOUND LANES ----------------   800
LENGTH OF OUTBOUND LANES ---------------   250
NUMBER OF INBOUND LANES ----------------     3
NUMBER OF OUTBOUND LANES ---------------     2
SPEED LIMIT ON INBOUND LANES IN MPH ----    30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---    30
LEG CENTERLINE OFFSET ------------------     0
MEDIAN WIDTH ---------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---    20
LIMITING ANGLE FOR U-TURN --------------    10

   LANE DATA FOR INBOUND LEG 4:
     (CONVERTED APPROACH 4)

LANE NUMBER ------------------      1      2      3
(INBOUND LANE NUMBER) --------      1      2      3
WIDTH OF LANE ----------------     12     12     12
MOVEMENT CODE ----------------      L      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0      0
 FROM OUTER END --------------      0      0      0
OFFSET OF LANE TERMINAL ------      0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     32     35     33
                               MEDIAN          CURB

   LANE DATA FOR OUTBOUND LEG 4:
     (CONVERTED APPROACH 8)

LANE NUMBER ------------------      4      5
(OUTBOUND LANE NUMBER) -------      1      2
WIDTH OF LANE ----------------     12     12
MOVEMENT CODE ----------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0
 FROM OUTER END --------------      0      0
OFFSET OF LANE TERMINAL ------      0      0
                               MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

 STANDARD 6 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     600
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ---------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33   0  34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

 STANDARD 6 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     600
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ---------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33  34   0
```

STANDARD 6 X 6



```
 LEG 4  LENGTH 800           |    |  LEG 1 (0,0)  |    |              LEG 1  LENGTH 800
LANE    1     2     3        |    |    |    *   |    |    |          LANE    1     2     3
MVMT   LS     S    SR        | 12| 12| 12*12 |12 |12 |          MVMT   LS     S    SR
                             | 3 | 2 | 1 * 4 | 5 | 6 |
----------------------------20'..........|           20-----------------------------
                      12  6              |           :3  12
----------------------------      6X6    |           :-----------------------------
                      12  5              |           :2  12
----------------------------             |           :-----------------------------
                      12  4              |           :1  12
LEG 4 ************************----------0-------------************************ LEG 2
(270,0)               12  1:             |            4  12                  (90,0)
----------------------------:            |            -----------------------------
                      12  2:             |            5  12
----------------------------:            |            -----------------------------
                      12  3:             |            6  12
----------------------------20           |...........20-----------------------------
                             | 6 | 5 | 4 * 1 | 2 | 3 |
                             |   |   |   *   |   |   |
 LEG 3  LENGTH 800           | 12| 12| 12*12 |12 |12 |            LEG 2  LENGTH 800
LANE    1     2     3        |   |   |   *   |   |   |           LANE    1     2     3
MVMT   LS     S    SR        |   | LEG 3 (180,0) |   |           MVMT   LS     S    SR
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 6 X 6

NUMBER OF LEGS ------------------------	4
SIMULATION TIME IN MINUTES ----------	20
MINIMUM HEADWAY IN SECONDS ----------	1.0
NUMBER OF VEHICLE CLASSES -----------	10
NUMBER OF DRIVER CLASSES ------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 6 X 6

LEG 1 GEOMETRY DATA:

LEG ANGLE -------------------------------	0
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	3
NUMBER OF OUTBOUND LANES ---------------	3
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 1:
(CONVERTED APPROACH 1)

LANE NUMBER ------------------	1	2	3
(INBOUND LANE NUMBER) --------	1	2	3
WIDTH OF LANE ----------------	12	12	12
MOVEMENT CODE ----------------	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL ----------	0	0	0
FROM OUTER END --------------	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0
PERCENT OF INBOUND TRAFFIC			
TO ENTER IN THIS LANE --------	32	35	33
	MEDIAN		CURB

LANE DATA FOR OUTBOUND LEG 1:
(CONVERTED APPROACH 5)

LANE NUMBER ------------------	4	5	6
(OUTBOUND LANE NUMBER) -------	1	2	3
WIDTH OF LANE ----------------	12	12	12
MOVEMENT CODE ----------------	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL ----------	0	0	0
FROM OUTER END --------------	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0
	MEDIAN		CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 6 X 6

LEG 2 GEOMETRY DATA:

LEG ANGLE -------------------------------	90
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	3
NUMBER OF OUTBOUND LANES ---------------	3
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 2:
(CONVERTED APPROACH 2)

LANE NUMBER ------------------	1	2	3
(INBOUND LANE NUMBER) --------	1	2	3
WIDTH OF LANE ----------------	12	12	12
MOVEMENT CODE ----------------	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL ----------	0	0	0
FROM OUTER END --------------	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0
PERCENT OF INBOUND TRAFFIC			
TO ENTER IN THIS LANE --------	32	35	33
	MEDIAN		CURB

LANE DATA FOR OUTBOUND LEG 2:
(CONVERTED APPROACH 6)

LANE NUMBER ------------------	4	5	6
(OUTBOUND LANE NUMBER) -------	1	2	3
WIDTH OF LANE ----------------	12	12	12
MOVEMENT CODE ----------------	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL ----------	0	0	0
FROM OUTER END --------------	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0
	MEDIAN		CURB

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 6

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	600
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ----------------------------	1	2	3	4
PERCENT OF LEG 1 INBOUND VEHICLES WITH DESTINATION ON LEG ---	0	33	33	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 6

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	600
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ----------------------------	1	2	3	4
PERCENT OF LEG 2 INBOUND VEHICLES WITH DESTINATION ON LEG ---	33	0	33	34

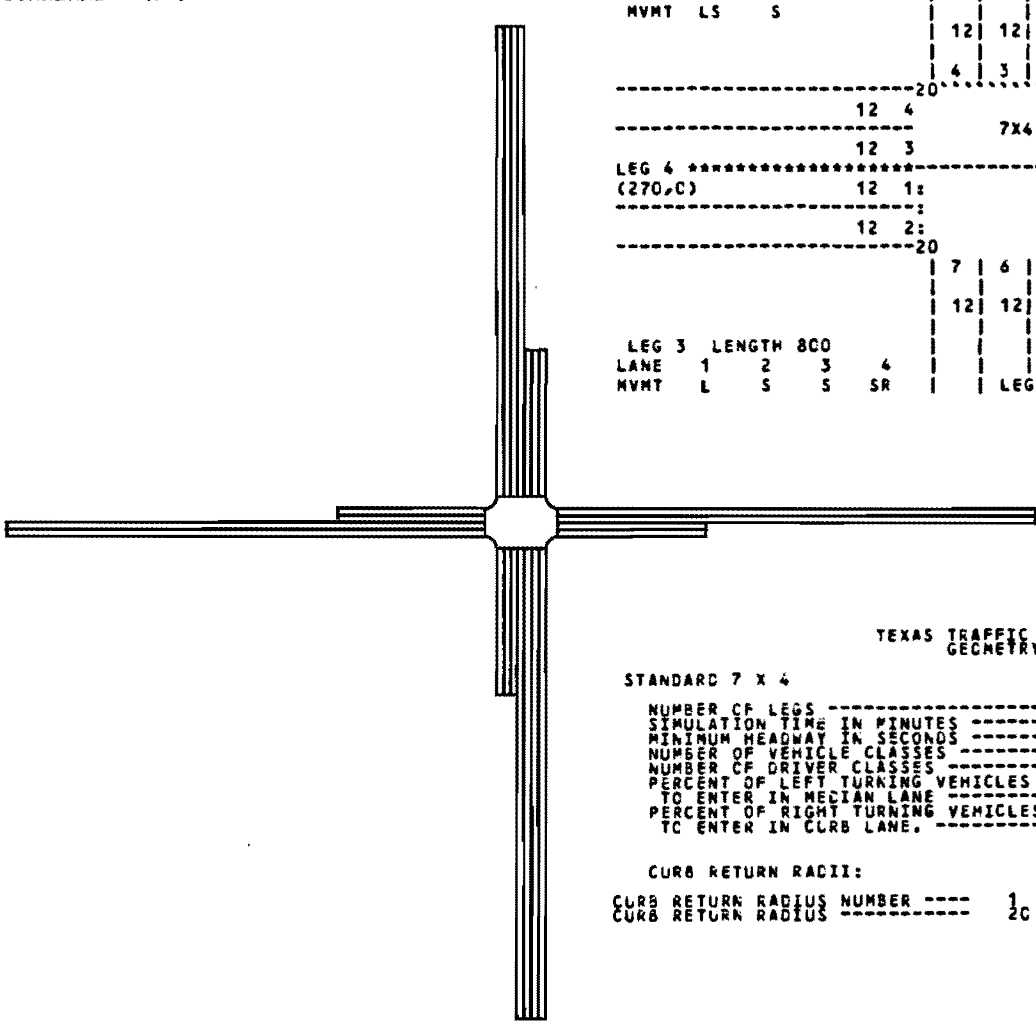
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

STANDARD 6 X 6

   LEG 3 GEOMETRY DATA:

LEG ANGLE ---------------------------------  180
LENGTH OF INBOUND LANES -----------------  800
LENGTH OF OUTBOUND LANES ----------------  250
NUMBER OF INBOUND LANES -----------------    3
NUMBER OF OUTBOUND LANES ----------------    3
SPEED LIMIT ON INBOUND LANES IN MPH ----   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---   30
LEG CENTERLINE OFFSET -------------------    0
MEDIAN WIDTH ----------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---   20
LIMITING ANGLE FOR U-TURN ---------------   10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER --------------------      1       2       3
(INBOUND LANE NUMBER) ---------       1       2       3
WIDTH OF LANE -----------------      12      12      12
MOVEMENT CODE -----------------      LS       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------       0       0       0
 FROM OUTER END ---------------       0       0       0
OFFSET OF LANE TERMINAL -------       0       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------      32      35      33
                                 MEDIAN            CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 7)

LANE NUMBER --------------------      4       5       6
(OUTBOUND LANE NUMBER) --------       1       2       3
WIDTH OF LANE -----------------      12      12      12
MOVEMENT CODE -----------------      LS       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------       0       0       0
 FROM OUTER END ---------------       0       0       0
OFFSET OF LANE TERMINAL -------       0       0       0
                                 MEDIAN            CURB
```

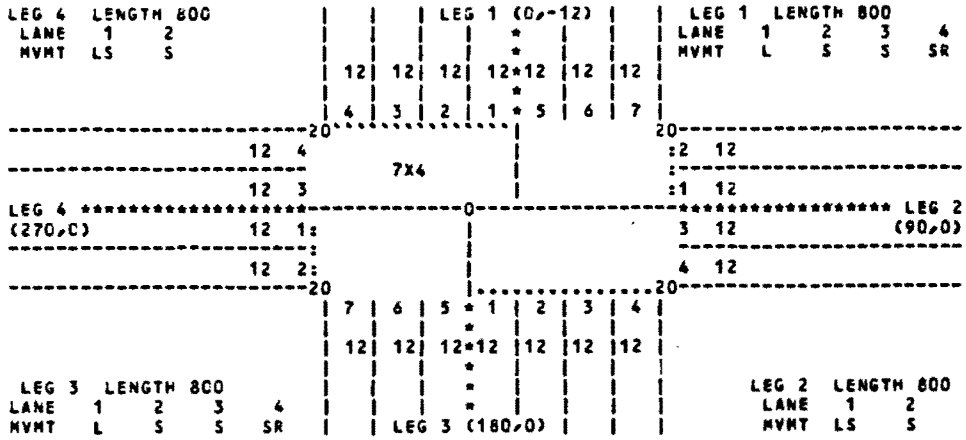
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

STANDARD 6 X 6

   LEG 4 GEOMETRY DATA:

LEG ANGLE ---------------------------------  270
LENGTH OF INBOUND LANES -----------------  800
LENGTH OF OUTBOUND LANES ----------------  250
NUMBER OF INBOUND LANES -----------------    3
NUMBER OF OUTBOUND LANES ----------------    3
SPEED LIMIT ON INBOUND LANES IN MPH ----   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---   30
LEG CENTERLINE OFFSET -------------------    0
MEDIAN WIDTH ----------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---   20
LIMITING ANGLE FOR U-TURN ---------------   10

   LANE DATA FOR INBOUND LEG 4:
    (CONVERTED APPROACH 4)

LANE NUMBER --------------------      1       2       3
(INBOUND LANE NUMBER) ---------       1       2       3
WIDTH OF LANE -----------------      12      12      12
MOVEMENT CODE -----------------      LS       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------       0       0       0
 FROM OUTER END ---------------       0       0       0
OFFSET OF LANE TERMINAL -------       0       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------      32      35      33
                                 MEDIAN            CURB

   LANE DATA FOR OUTBOUND LEG 4:
    (CONVERTED APPROACH 8)

LANE NUMBER --------------------      4       5       6
(OUTBOUND LANE NUMBER) --------       1       2       3
WIDTH OF LANE -----------------      12      12      12
MOVEMENT CODE -----------------      LS       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------       0       0       0
 FROM OUTER END ---------------       0       0       0
OFFSET OF LANE TERMINAL -------       0       0       0
                                 MEDIAN            CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 6

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     600
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ---------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ----------------------------    1    2    3    4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    33   33    0   34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

STANDARD 6 X 6

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     600
PARAMETER FOR DISTRIBUTION -------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ---------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER ----------------------------    1    2    3    4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    33   33   34    0
```

STANDARD 7 X 4





TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 7 X 4

NUMBER OF LEGS ------------------------	4
SIMULATION TIME IN MINUTES -----------	20
MINIMUM HEADWAY IN SECONDS ----------	1.0
NUMBER OF VEHICLE CLASSES ------------	10
NUMBER OF DRIVER CLASSES -------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	20	20	20	20

TEXAS TRAFFIC SIMULATION PACKAGE
GECMETRY INPUT DATA

STANDARD 7 X 4

LEG 1 GEOMETRY DATA:

LEG ANGLE ----------------------------------	0
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	4
NUMBER OF OUTBOUND LANES ---------------	3
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	-12
MEDIAN WIDTH ----------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 1:
(CONVERTED APPROACH 1)

LANE NUMBER ------------------	1	2	3	4
(INBOUND LANE NUMBER) --------	1	2	3	4
WIDTH OF LANE ----------------	12	12	12	12
MOVEMENT CODE ----------------	L	S	S	SR
LENGTH OF UNBLOCKED LANE				
FROM LANE TERMINAL ----------	0	0	0	0
FROM OUTER END --------------	0	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0	0
PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE --------	25	25	25	25
	MEDIAN			CURB

LANE DATA FOR OUTBOUND LEG 1:
(CONVERTED APPROACH 5)

LANE NUMBER ------------------	5	6	7
(OUTBOUND LANE NUMBER) -------	1	2	3
WIDTH OF LANE ----------------	12	12	12
MOVEMENT CODE ----------------	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL ----------	0	0	0
FROM OUTER END --------------	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0
	MEDIAN		CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GECMETRY INPUT DATA

STANDARD 7 X 4

LEG 2 GEOMETRY DATA:

LEG ANGLE ----------------------------------	90
LENGTH OF INBOUND LANES ----------------	800
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	2
NUMBER OF OUTBOUND LANES ---------------	2
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ----------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 2:
(CONVERTED APPROACH 2)

LANE NUMBER ------------------	1	2
(INBOUND LANE NUMBER) --------	1	2
WIDTH OF LANE ----------------	12	12
MOVEMENT CODE ----------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
PERCENT OF INBOUND TRAFFIC TO ENTER IN THIS LANE --------	48	52
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 2:
(CONVERTED APPROACH 6)

LANE NUMBER ------------------	3	4
(OUTBOUND LANE NUMBER) -------	1	2
WIDTH OF LANE ----------------	12	12
MOVEMENT CODE ----------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 4

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	800
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER --------------------------	1	2	3	4
PERCENT OF LEG 1 INBOUND VEHICLES WITH DESTINATION ON LEG ---	0	33	33	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 4

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	400
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER --------------------------	1	2	3	4
PERCENT OF LEG 2 INBOUND VEHICLES WITH DESTINATION ON LEG ---	33	0	33	34

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA
 STANDARD 7 X 4

   LEG 3 GEOMETRY DATA:

LEG ANGLE --------------------------------  180
LENGTH OF INBOUND LANES ------------------  800
LENGTH OF OUTBOUND LANES -----------------  250
NUMBER OF INBOUND LANES ------------------    4
NUMBER OF OUTBOUND LANES -----------------    3
SPEED LIMIT ON INBOUND LANES IN MPH ------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH -----   30
LEG CENTERLINE OFFSET --------------------    0
MEDIAN WIDTH -----------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT -----   20
LIMITING ANGLE FOR U-TURN ----------------   10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER ------------------       1      2      3      4
(INBOUND LANE NUMBER) --------       1      2      3      4
WIDTH OF LANE ----------------      12     12     12     12
MOVEMENT CODE ----------------       L      S      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0      0      0      0
 FROM OUTER END --------------       0      0      0      0
OFFSET OF LANE TERMINAL ------       0      0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------      25     25     25     25
                                MEDIAN                 CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 7)

LANE NUMBER ------------------       5      6      7
(OUTBOUND LANE NUMBER) -------       1      2      3
WIDTH OF LANE ----------------      12     12     12
MOVEMENT CODE ----------------      LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0      0      0
 FROM OUTER END --------------       0      0      0
OFFSET OF LANE TERMINAL ------       0      0      0
                                MEDIAN          CURB
```

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                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA
 STANDARD 7 X 4

   LEG 4 GEOMETRY DATA:

LEG ANGLE --------------------------------  270
LENGTH OF INBOUND LANES ------------------  800
LENGTH OF OUTBOUND LANES -----------------  250
NUMBER OF INBOUND LANES ------------------    2
NUMBER OF OUTBOUND LANES -----------------    2
SPEED LIMIT ON INBOUND LANES IN MPH ------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH -----   30
LEG CENTERLINE OFFSET --------------------    0
MEDIAN WIDTH -----------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT -----   20
LIMITING ANGLE FOR U-TURN ----------------   10

   LANE DATA FOR INBOUND LEG 4:
    (CONVERTED APPROACH 4)

LANE NUMBER ------------------       1      2
(INBOUND LANE NUMBER) --------       1      2
WIDTH OF LANE ----------------      12     12
MOVEMENT CODE ----------------      LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0      0
 FROM OUTER END --------------       0      0
OFFSET OF LANE TERMINAL ------       0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------      48     52
                                MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 4:
    (CONVERTED APPROACH 8)

LANE NUMBER ------------------       3      4
(OUTBOUND LANE NUMBER) -------       1      2
WIDTH OF LANE ----------------      12     12
MOVEMENT CODE ----------------      LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0      0
 FROM OUTER END --------------       0      0
OFFSET OF LANE TERMINAL ------       0      0
                                MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA
 STANDARD 7 X 4

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     600
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----    28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ---------------------------   1   2   3   4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33   0  34
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA
 STANDARD 7 X 4

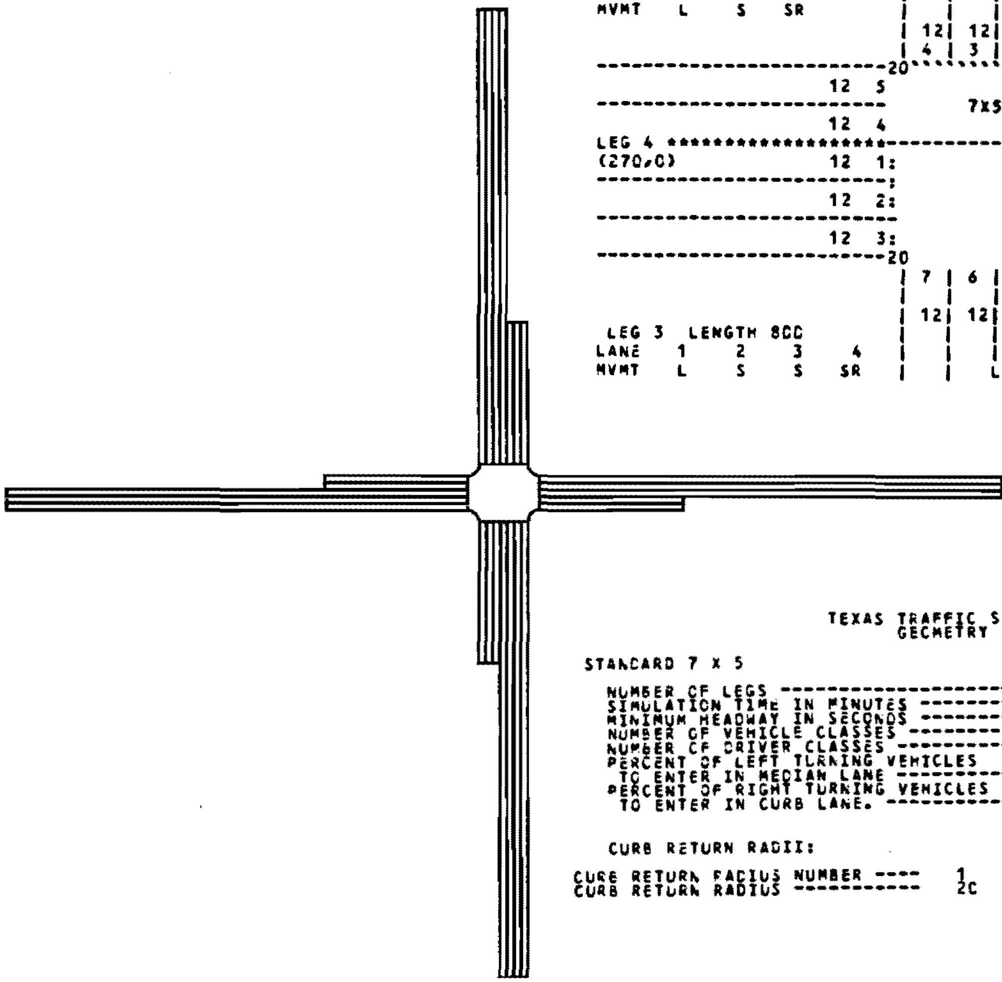
   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

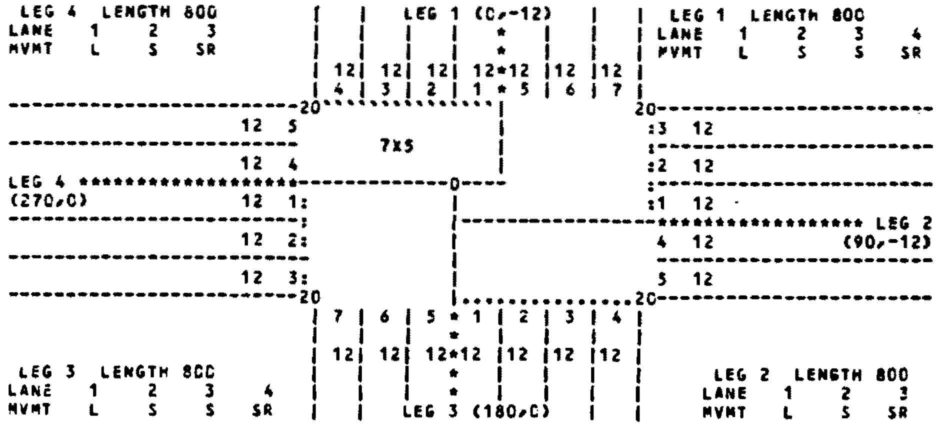
NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     400
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----    28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER ---------------------------   1   2   3   4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33  34   0
```

STANDARD 7 X 5





TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 7 X 5

NUMBER OF LEGS	4
SIMULATION TIME IN MINUTES	20
MINIMUM HEADWAY IN SECONDS	1.0
NUMBER OF VEHICLE CLASSES	10
NUMBER OF DRIVER CLASSES	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE	80
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE.	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER	1	2	3	4
CURB RETURN RADIUS	20	20	20	20

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 7 X 5

LEG 1 GEOMETRY DATA:

LEG ANGLE	0
LENGTH OF INBOUND LANES	800
LENGTH OF OUTBOUND LANES	250
NUMBER OF INBOUND LANES	4
NUMBER OF OUTBOUND LANES	3
SPEED LIMIT ON INBOUND LANES IN MPH	30
SPEED LIMIT ON OUTBOUND LANES IN MPH	30
LEG CENTERLINE OFFSET	-12
MEDIAN WIDTH	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT	20
LIMITING ANGLE FOR U-TURN	10

LANE DATA FOR INBOUND LEG 1:
(CONVERTED APPROACH 1)

LANE NUMBER	1	2	3	4
(INBOUND LANE NUMBER)	1	2	3	4
WIDTH OF LANE	12	12	12	12
MOVEMENT CODE	L	S	S	SR
LENGTH OF UNBLOCKED LANE				
FROM LANE TERMINAL	0	0	0	0
FROM OUTER END	0	0	0	0
OFFSET OF LANE TERMINAL	0	0	0	0
PERCENT OF INBOUND TRAFFIC				
TO ENTER IN THIS LANE	25	25	25	25
	MEDIAN			CURB

LANE DATA FOR OUTBOUND LEG 1:
(CONVERTED APPROACH 5)

LANE NUMBER	5	6	7
(OUTBOUND LANE NUMBER)	1	2	3
WIDTH OF LANE	12	12	12
MOVEMENT CODE	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL	0	0	0
FROM OUTER END	0	0	0
OFFSET OF LANE TERMINAL	0	0	0
	MEDIAN		CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 7 X 5

LEG 2 GEOMETRY DATA:

LEG ANGLE	90
LENGTH OF INBOUND LANES	800
LENGTH OF OUTBOUND LANES	250
NUMBER OF INBOUND LANES	3
NUMBER OF OUTBOUND LANES	2
SPEED LIMIT ON INBOUND LANES IN MPH	30
SPEED LIMIT ON OUTBOUND LANES IN MPH	30
LEG CENTERLINE OFFSET	-12
MEDIAN WIDTH	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT	20
LIMITING ANGLE FOR U-TURN	10

LANE DATA FOR INBOUND LEG 2:
(CONVERTED APPROACH 2)

LANE NUMBER	1	2	3
(INBOUND LANE NUMBER)	1	2	3
WIDTH OF LANE	12	12	12
MOVEMENT CODE	L	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL	0	0	0
FROM OUTER END	0	0	0
OFFSET OF LANE TERMINAL	0	0	0
PERCENT OF INBOUND TRAFFIC			
TO ENTER IN THIS LANE	32	35	33
	MEDIAN		CURB

LANE DATA FOR OUTBOUND LEG 2:
(CONVERTED APPROACH 6)

LANE NUMBER	4	5
(OUTBOUND LANE NUMBER)	1	2
WIDTH OF LANE	12	12
MOVEMENT CODE	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL	0	0
FROM OUTER END	0	0
OFFSET OF LANE TERMINAL	0	0
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 5

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION	SNEGEXP
TOTAL HOURLY VOLUME ON LEG	600
PARAMETER FOR DISTRIBUTION	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH	26.0
85-PERCENTILE SPEED, MPH	31.0
TRAFFIC MIX DATA TO FOLLOW ?	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER	1	2	3	4
PERCENT OF LEG 1 INBOUND VEHICLES WITH DESTINATION ON LEG	0	33	33	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 5

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION	SNEGEXP
TOTAL HOURLY VOLUME ON LEG	600
PARAMETER FOR DISTRIBUTION	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH	26.0
85-PERCENTILE SPEED, MPH	31.0
TRAFFIC MIX DATA TO FOLLOW ?	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER	1	2	3	4
PERCENT OF LEG 2 INBOUND VEHICLES WITH DESTINATION ON LEG	33	0	33	34

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                         TEXAS TRAFFIC SIMULATION PACKAGE
                               GEOMETRY INPUT DATA

STANDARD 7 X 5

   LEG 3 GEOMETRY DATA:

LEG ANGLE ---------------------------------  180
LENGTH OF INBOUND LANES -------------------  800
LENGTH OF OUTBOUND LANES ------------------  250
NUMBER OF INBOUND LANES -------------------    4
NUMBER OF OUTBOUND LANES ------------------    3
SPEED LIMIT ON INBOUND LANES IN MPH -------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ------   30
LEG CENTERLINE OFFSET ---------------------    0
MEDIAN WIDTH ------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ------   20
LIMITING ANGLE FOR U-TURN -----------------   10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER ------------------      1       2       3       4
(INBOUND LANE NUMBER) --------      1       2       3       4
WIDTH OF LANE ----------------     12      12      12      12
MOVEMENT CODE ----------------      L       S       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0       0       0       0
 FROM OUTER END --------------      0       0       0       0
OFFSET OF LANE TERMINAL ------      0       0       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     25      25      25      25
                               MEDIAN                   CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 7)

LANE NUMBER ------------------      5       6       7
(OUTBOUND LANE NUMBER) -------      1       2       3
WIDTH OF LANE ----------------     12      12      12
MOVEMENT CODE ----------------     LS       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0       0       0
 FROM OUTER END --------------      0       0       0
OFFSET OF LANE TERMINAL ------      0       0       0
                               MEDIAN           CURB
```

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                         TEXAS TRAFFIC SIMULATION PACKAGE
                               GEOMETRY INPUT DATA

STANDARD 7 X 5

   LEG 4 GEOMETRY DATA:

LEG ANGLE ---------------------------------  270
LENGTH OF INBOUND LANES -------------------  800
LENGTH OF OUTBOUND LANES ------------------  250
NUMBER OF INBOUND LANES -------------------    3
NUMBER OF OUTBOUND LANES ------------------    2
SPEED LIMIT ON INBOUND LANES IN MPH -------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ------   30
LEG CENTERLINE OFFSET ---------------------    0
MEDIAN WIDTH ------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ------   20
LIMITING ANGLE FOR U-TURN -----------------   10

   LANE DATA FOR INBOUND LEG 4:
    (CONVERTED APPROACH 4)

LANE NUMBER ------------------      1       2       3
(INBOUND LANE NUMBER) --------      1       2       3
WIDTH OF LANE ----------------     12      12      12
MOVEMENT CODE ----------------      L       S      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0       0       0
 FROM OUTER END --------------      0       0       0
OFFSET OF LANE TERMINAL ------      0       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     32      35      33
                               MEDIAN           CURB

   LANE DATA FOR OUTBOUND LEG 4:
    (CONVERTED APPROACH 8)

LANE NUMBER ------------------      4       5
(OUTBOUND LANE NUMBER) -------      1       2
WIDTH OF LANE ----------------     12      12
MOVEMENT CODE ----------------     LS      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0       0
 FROM OUTER END --------------      0       0
OFFSET OF LANE TERMINAL ------      0       0
                               MEDIAN   CURB
```

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                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     600
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----    26.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ------------------------------  1   2   3   4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ------- 33  33   0  34
```
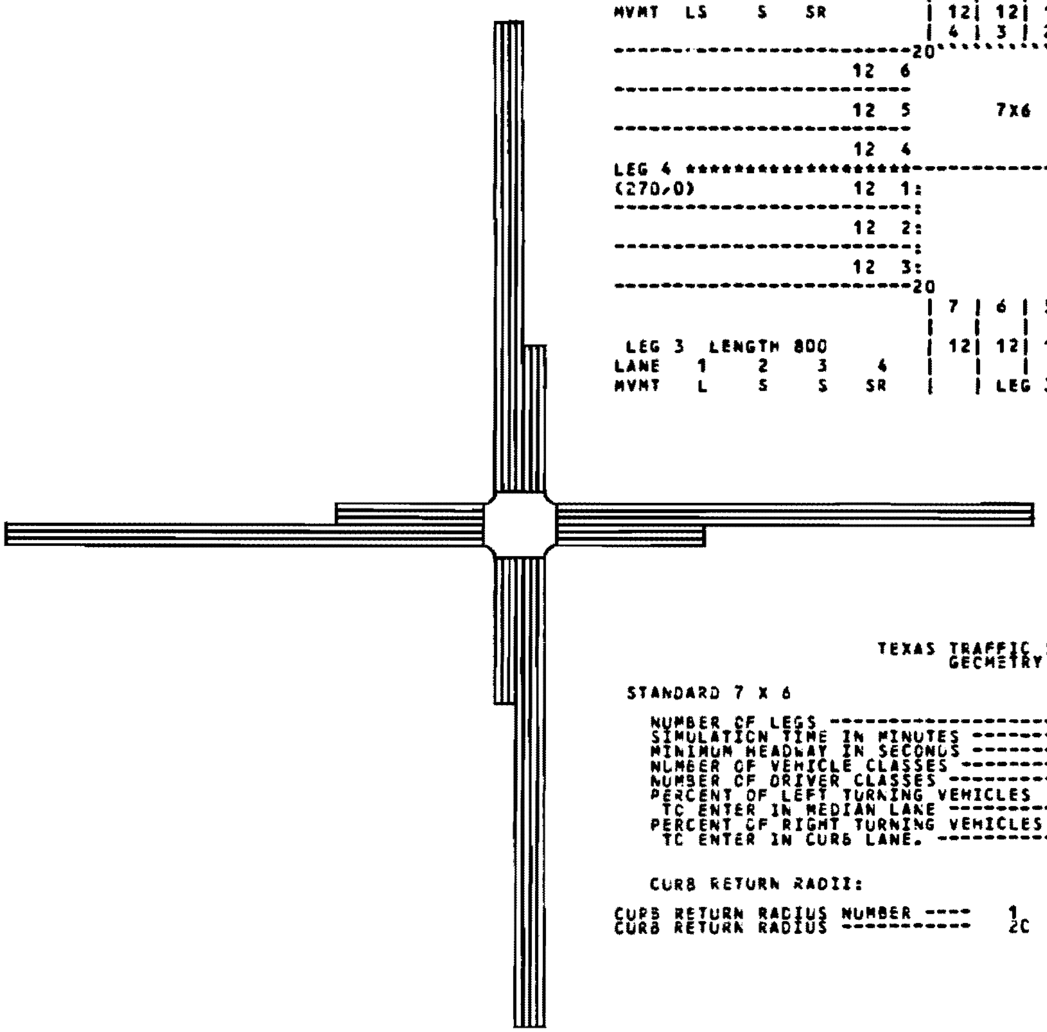
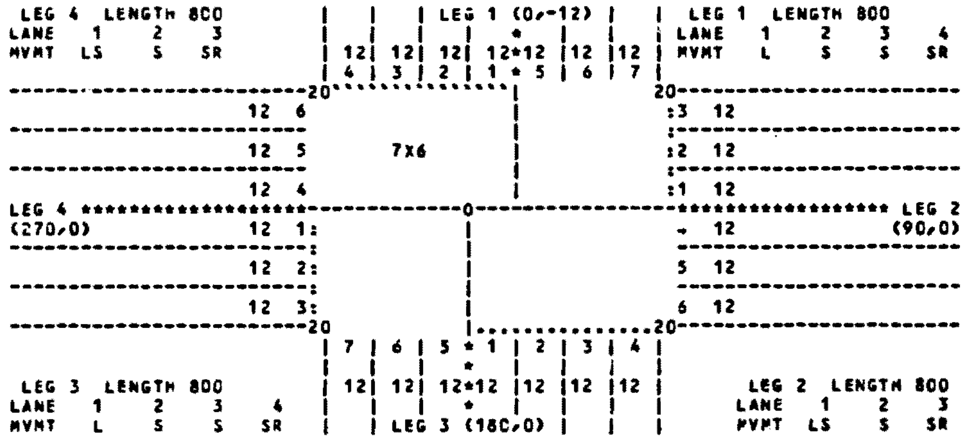

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 5

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     600
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----    26.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER ------------------------------  1   2   3   4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ------- 33  33  34   0
```

STANDARD 7 X 6





TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 7 X 6

```
   NUMBER OF LEGS -----------------------   4
   SIMULATION TIME IN MINUTES -----------   2C
   MINIMUM HEADWAY IN SECONDS -----------   1.0
   NUMBER OF VEHICLE CLASSES ------------   1C
   NUMBER OF DRIVER CLASSES -------------   3
   PERCENT OF LEFT TURNING VEHICLES
    TC ENTER IN MEDIAN LANE -------------   8C
   PERCENT OF RIGHT TURNING VEHICLES
    TC ENTER IN CURB LANE. --------------   8C

   CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----   1     2     3     4
CURB RETURN RADIUS -----------   2C    20    2C    20
```

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                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA
 STANDARD 7 X 6

    LEG 1 GEOMETRY DATA:

 LEG ANGLE -------------------------------------     0
 LENGTH OF INBOUND LANES ----------------------   800
 LENGTH OF OUTBOUND LANES ---------------------   250
 NUMBER OF INBOUND LANES ----------------------     4
 NUMBER OF OUTBOUND LANES ---------------------     3
 SPEED LIMIT ON INBOUND LANES IN MPH ----------    30
 SPEED LIMIT ON OUTBOUND LANES IN MPH ---------    30
 LEG CENTERLINE OFFSET ------------------------   -12
 MEDIAN WIDTH ---------------------------------     0
 LIMITING ANGLE FOR STRAIGHT MOVEMENT ---------    20
 LIMITING ANGLE FOR U-TURN --------------------    10

    LANE DATA FOR INBOUND LEG 1:
     (CONVERTED APPROACH 1)

 LANE NUMBER ------------------      1        2        3        4
 (INBOUND LANE NUMBER) --------      1        2        3        4
 WIDTH OF LANE ----------------     12       12       12       12
 MOVEMENT CODE ----------------      L        S        S       SR
 LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ----------      0        0        0        0
  FROM OUTER END --------------    800      800      800      800
 OFFSET OF LANE TERMINAL ------      0        0        0        0
 PERCENT OF INBOUND TRAFFIC
  TO ENTER IN THIS LANE -------     25       25       25       25
                                MEDIAN                       CURB

    LANE DATA FOR OUTBOUND LEG 1:
     (CONVERTED APPROACH 5)

 LANE NUMBER ------------------      5        6        7
 (OUTBOUND LANE NUMBER) -------      1        2        3
 WIDTH OF LANE ----------------     12       12       12
 MOVEMENT CODE ----------------     LS        S       SR
 LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ----------      0        0        0
  FROM OUTER END --------------    250      250      250
 OFFSET OF LANE TERMINAL ------      0        0        0
                                MEDIAN             CURB
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA
 STANDARD 7 X 6

    LEG 2 GEOMETRY DATA:

 LEG ANGLE -------------------------------------    90
 LENGTH OF INBOUND LANES ----------------------   800
 LENGTH OF OUTBOUND LANES ---------------------   250
 NUMBER OF INBOUND LANES ----------------------     3
 NUMBER OF OUTBOUND LANES ---------------------     3
 SPEED LIMIT ON INBOUND LANES IN MPH ----------    30
 SPEED LIMIT ON OUTBOUND LANES IN MPH ---------    30
 LEG CENTERLINE OFFSET ------------------------     0
 MEDIAN WIDTH ---------------------------------     0
 LIMITING ANGLE FOR STRAIGHT MOVEMENT ---------    20
 LIMITING ANGLE FOR U-TURN --------------------    10

    LANE DATA FOR INBOUND LEG 2:
     (CONVERTED APPROACH 2)

 LANE NUMBER ------------------      1        2        3
 (INBOUND LANE NUMBER) --------      1        2        3
 WIDTH OF LANE ----------------     12       12       12
 MOVEMENT CODE ----------------     LS        S       SR
 LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ----------      0        0        0
  FROM OUTER END --------------    800      800      800
 OFFSET OF LANE TERMINAL ------      0        0        0
 PERCENT OF INBOUND TRAFFIC
  TO ENTER IN THIS LANE -------     32       35       33
                                MEDIAN             CURB

    LANE DATA FOR OUTBOUND LEG 2:
     (CONVERTED APPROACH 6)

 LANE NUMBER ------------------      4        5        6
 (OUTBOUND LANE NUMBER) -------      1        2        3
 WIDTH OF LANE ----------------     12       12       12
 MOVEMENT CODE ----------------     LS        S       SR
 LENGTH OF UNBLOCKED LANE
  FROM LANE TERMINAL ----------      0        0        0
  FROM OUTER END --------------    250      250      250
 OFFSET OF LANE TERMINAL ------      0        0        0
                                MEDIAN             CURB
```

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                         TEXAS TRAFFIC SIMULATION PACKAGE
                           DRIVER-VEHICLE INPUT DATA
 STANDARD 7 X 6

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

 NAME FOR INBOUND TRAFFIC
  HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
 TOTAL HOURLY VOLUME ON LEG -------------      800
 PARAMETER FOR DISTRIBUTION -------------     2.00
 MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
 85-PERCENTILE SPEED, MPH ---------------     31.0
 TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

 LEG NUMBER ----------------------------   1   2   3   4
 PERCENT OF LEG 1 INBOUND
  VEHICLES WITH DESTINATION ON LEG ---     0  33  33  34
```

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                         TEXAS TRAFFIC SIMULATION PACKAGE
                           DRIVER-VEHICLE INPUT DATA
 STANDARD 7 X 6

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

 NAME FOR INBOUND TRAFFIC
  HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
 TOTAL HOURLY VOLUME ON LEG -------------      600
 PARAMETER FOR DISTRIBUTION -------------     2.00
 MEAN SPEED OF ENTERING VEHICLES, MPH ---     26.0
 85-PERCENTILE SPEED, MPH ---------------     31.0
 TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

 LEG NUMBER ----------------------------   1   2   3   4
 PERCENT OF LEG 2 INBOUND
  VEHICLES WITH DESTINATION ON LEG ---    33   0  33  34
```

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                 TEXAS TRAFFIC SIMULATION PACKAGE
                      GEOMETRY INPUT DATA
STANDARD 7 X 6

  LEG 3 GEOMETRY DATA:

LEG ANGLE -------------------------------  180
LENGTH OF INBOUND LANES -----------------  800
LENGTH OF OUTBOUND LANES ----------------  250
NUMBER OF INBOUND LANES -----------------    4
NUMBER OF OUTBOUND LANES ----------------    3
SPEED LIMIT ON INBOUND LANES IN MPH -----   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ----   30
LEG CENTERLINE OFFSET -------------------    0
MEDIAN WIDTH ----------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ----   20
LIMITING ANGLE FOR U-TURN ---------------   10

  LANE DATA FOR INBOUND LEG 3:
   (CONVERTED APPROACH 3)

LANE NUMBER ------------------     1      2      3      4
(INBOUND LANE NUMBER) --------     1      2      3      4
WIDTH OF LANE ----------------    12     12     12     12
MOVEMENT CODE ----------------     L      S      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0      0
 FROM OUTER END --------------     0      0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    25     25     25     25
                              MEDIAN                 CURB

  LANE DATA FOR OUTBOUND LEG 3:
   (CONVERTED APPROACH 7)

LANE NUMBER ------------------     5      6      7
(OUTBOUND LANE NUMBER) -------     1      2      3
WIDTH OF LANE ----------------    12     12     12
MOVEMENT CODE ----------------    LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
                              MEDIAN          CURB
```
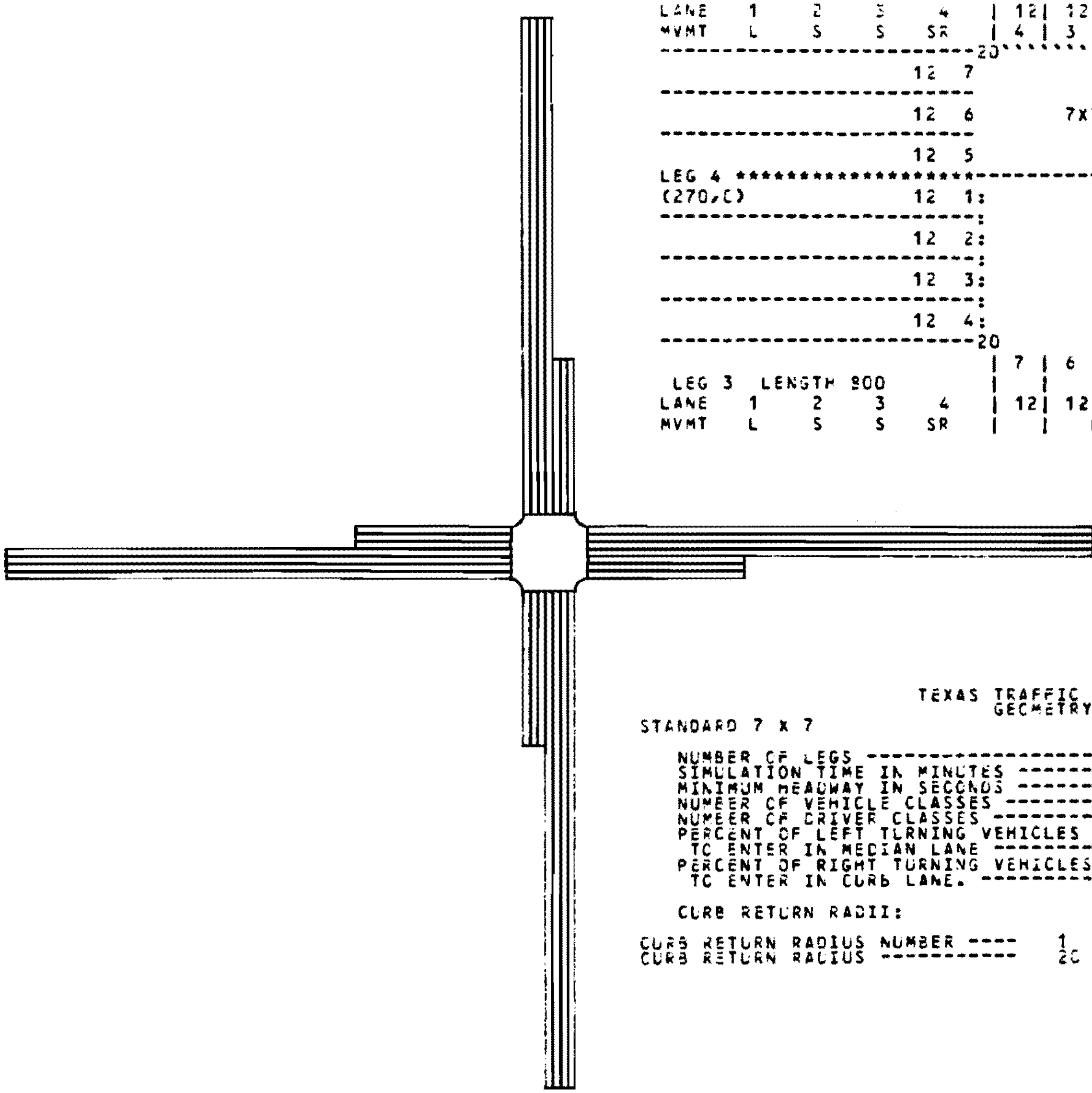

```
                 TEXAS TRAFFIC SIMULATION PACKAGE
                      GEOMETRY INPUT DATA
STANDARD 7 X 6

  LEG 4 GEOMETRY DATA:

LEG ANGLE -------------------------------  270
LENGTH OF INBOUND LANES -----------------  300
LENGTH OF OUTBOUND LANES ----------------  250
NUMBER OF INBOUND LANES -----------------    3
NUMBER OF OUTBOUND LANES ----------------    3
SPEED LIMIT ON INBOUND LANES IN MPH -----   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ----   30
LEG CENTERLINE OFFSET -------------------    0
MEDIAN WIDTH ----------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ----   20
LIMITING ANGLE FOR U-TURN ---------------   10

  LANE DATA FOR INBOUND LEG 4:
   (CONVERTED APPROACH 4)

LANE NUMBER ------------------     1      2      3
(INBOUND LANE NUMBER) --------     1      2      3
WIDTH OF LANE ----------------    12     12     12
MOVEMENT CODE ----------------    LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    32     35     33
                              MEDIAN          CURB

  LANE DATA FOR OUTBOUND LEG 4:
   (CONVERTED APPROACH 8)

LANE NUMBER ------------------     4      5      6
(OUTBOUND LANE NUMBER) -------     1      2      3
WIDTH OF LANE ----------------    12     12     12
MOVEMENT CODE ----------------    LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0      0
 FROM OUTER END --------------     0      0      0
OFFSET OF LANE TERMINAL ------     0      0      0
                              MEDIAN          CURB
```

```
                 TEXAS TRAFFIC SIMULATION PACKAGE
                   DRIVER-VEHICLE INPUT DATA
STANDARD 7 X 6

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     800
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----    28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ---------------------------  1   2   3   4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33   0  34
```

```
                 TEXAS TRAFFIC SIMULATION PACKAGE
                   DRIVER-VEHICLE INPUT DATA
STANDARD 7 X 6

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     600
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----   28.00
85-PERCENTILE SPEED, MPH ----------------   31.00
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER ---------------------------  1   2   3   4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  33  33  34   0
```

STANDARD 7 X 7

```
 LEG 4  LENGTH 800           |   |   LEG 1 (0,-12)    |    |  LEG 1  LENGTH 800
LANE   1     2     3     4   | 12| 12| 12| 12*12 |12 |12 | LANE   1     2     3     4
MVMT   L     S     S    SR   | 4 | 3 | 2 | 1 * 5 | 6 | 7 | MVMT   L     S     S    SR
-------------------------20.................|         20-------------------------
                   12  7                    |          :4  12
-------------------------                   |          :-------------------------
                   12  6        7X7         |          :3  12
-------------------------                   |          :-------------------------
                   12  5                    |          :2  12
LEG 4 ***************************--------------0----   :-------------------------
(270,0)            12  1:                  |           :1  12
-------------------------:                 |-----------*****************  LEG 2
                   12  2:                  |           5  12             (90,-12)
-------------------------:                 |           -------------------------
                   12  3:                  |           6  12
-------------------------:                 |           -------------------------
                   12  4:                  |           7  12
-------------------------20                |..........20-------------------------
                         | 7 | 6 | 5 * 1 | 2 | 3 | 4 |
 LEG 3  LENGTH 800       |   |   |   *   |   |   |   |  LEG 2  LENGTH 800
LANE   1     2     3     4   | 12| 12| 12*12 |12 |12 |12 | LANE   1     2     3     4
MVMT   L     S     S    SR   |   |   LEG 3 (180,0)    |    | MVMT   L     S     S    SR
```



```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                          GEOMETRY INPUT DATA
STANDARD 7 X 7

   NUMBER OF LEGS -------------------------    4
   SIMULATION TIME IN MINUTES ----------    20
   MINIMUM HEADWAY IN SECONDS ----------   1.0
   NUMBER OF VEHICLE CLASSES -----------    10
   NUMBER OF DRIVER CLASSES ------------     3
   PERCENT OF LEFT TURNING VEHICLES
     TO ENTER IN MEDIAN LANE -----------    80
   PERCENT OF RIGHT TURNING VEHICLES
     TO ENTER IN CURB LANE. ------------    80

   CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----    1      2      3      4
CURB RETURN RADIUS -----------   20     20     20     20
```

```
                     TEXAS TRAFFIC SIMULATION PACKAGE
                           GEOMETRY INPUT DATA
STANDARD 7 X 7

   LEG 1 GEOMETRY DATA:

LEG ANGLE ------------------------------------   0
LENGTH OF INBOUND LANES ----------------------  800
LENGTH OF OUTBOUND LANES ---------------------  250
NUMBER OF INBOUND LANES ----------------------    4
NUMBER OF OUTBOUND LANES ---------------------    3
SPEED LIMIT ON INBOUND LANES IN MPH ----------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---------   30
LEG CENTERLINE OFFSET ------------------------  -12
MEDIAN WIDTH ---------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---------   20
LIMITING ANGLE FOR U-TURN --------------------   10

   LANE DATA FOR INBOUND LEG 1:
     (CONVERTED APPROACH 1)

LANE NUMBER ------------------      1      2      3      4
(INBOUND LANE NUMBER) --------      1      2      3      4
WIDTH OF LANE ----------------     12     12     12     12
MOVEMENT CODE ----------------      L      S      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0      0      0
 FROM OUTER END --------------      0      0      0      0
OFFSET OF LANE TERMINAL ------      0      0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     25     25     25     25
                               MEDIAN                 CURB

   LANE DATA FOR OUTBOUND LEG 1:
     (CONVERTED APPROACH 5)

LANE NUMBER ------------------      5      6      7
(OUTBOUND LANE NUMBER) -------      1      2      3
WIDTH OF LANE ----------------     12     12     12
MOVEMENT CODE ----------------     LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0      0
 FROM OUTER END --------------      0      0      0
OFFSET OF LANE TERMINAL ------      0      0      0
                               MEDIAN          CURB
```

```
                     TEXAS TRAFFIC SIMULATION PACKAGE
                           GEOMETRY INPUT DATA
STANDARD 7 X 7

   LEG 2 GEOMETRY DATA:

LEG ANGLE ------------------------------------   90
LENGTH OF INBOUND LANES ----------------------  800
LENGTH OF OUTBOUND LANES ---------------------  250
NUMBER OF INBOUND LANES ----------------------    4
NUMBER OF OUTBOUND LANES ---------------------    3
SPEED LIMIT ON INBOUND LANES IN MPH ----------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---------   30
LEG CENTERLINE OFFSET ------------------------  -12
MEDIAN WIDTH ---------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---------   20
LIMITING ANGLE FOR U-TURN --------------------   10

   LANE DATA FOR INBOUND LEG 2:
     (CONVERTED APPROACH 2)

LANE NUMBER ------------------      1      2      3      4
(INBOUND LANE NUMBER) --------      1      2      3      4
WIDTH OF LANE ----------------     12     12     12     12
MOVEMENT CODE ----------------      L      S      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0      0      0
 FROM OUTER END --------------      0      0      0      0
OFFSET OF LANE TERMINAL ------      0      0      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     25     25     25     25
                               MEDIAN                 CURB

   LANE DATA FOR OUTBOUND LEG 2:
     (CONVERTED APPROACH 6)

LANE NUMBER ------------------      5      6      7
(OUTBOUND LANE NUMBER) -------      1      2      3
WIDTH OF LANE ----------------     12     12     12
MOVEMENT CODE ----------------     LS      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0      0
 FROM OUTER END --------------      0      0      0
OFFSET OF LANE TERMINAL ------      0      0      0
                               MEDIAN          CURB
```

```
                     TEXAS TRAFFIC SIMULATION PACKAGE
                         DRIVER-VEHICLE INPUT DATA
STANDARD 7 X 7

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      800
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DISTRIBUTION DATA FOR LEG 1:

LEG NUMBER ------------------------------------------   1    2    3    4
% OF LEG 1 INBOUND VEHICLES TO BE OUTBOUND ON LEG --    0   33   33   34
```

```
                     TEXAS TRAFFIC SIMULATION PACKAGE
                         DRIVER-VEHICLE INPUT DATA
STANDARD 7 X 7

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------      800
PARAMETER FOR DISTRIBUTION -------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DISTRIBUTION DATA FOR LEG 2:

LEG NUMBER ------------------------------------------   1    2    3    4
% OF LEG 2 INBOUND VEHICLES TO BE OUTBOUND ON LEG --   33    0   33   34
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 7 X 7

LEG 3 GEOMETRY DATA:

LEG ANGLE ----------------------------	180
LENGTH OF INBOUND LANES ---------------	800
LENGTH OF OUTBOUND LANES --------------	250
NUMBER OF INBOUND LANES ---------------	4
NUMBER OF OUTBOUND LANES --------------	3
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET -----------------	0
MEDIAN WIDTH --------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN -------------	10

LANE DATA FOR INBOUND LEG 3:
(CONVERTED APPROACH 3)

LANE NUMBER ------------------	1	2	3	4
(INBOUND LANE NUMBER) --------	1	2	3	4
WIDTH OF LANE ----------------	12	12	12	12
MOVEMENT CODE ----------------	L	S	S	SR
LENGTH OF UNBLOCKED LANE				
FROM LANE TERMINAL ----------	0	0	0	0
FROM OUTER END --------------	0	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0	0
PERCENT OF INBOUND TRAFFIC				
TO ENTER IN THIS LANE -------	25	25	25	25
	MEDIAN			CURB

LANE DATA FOR OUTBOUND LEG 3:
(CONVERTED APPROACH 7)

LANE NUMBER ------------------	5	6	7
(OUTBOUND LANE NUMBER) -------	1	2	3
WIDTH OF LANE ----------------	12	12	12
MOVEMENT CODE ----------------	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL ----------	0	0	0
FROM OUTER END --------------	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0
	MEDIAN		CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 7 X 7

LEG 4 GEOMETRY DATA:

LEG ANGLE ----------------------------	270
LENGTH OF INBOUND LANES ---------------	800
LENGTH OF OUTBOUND LANES --------------	250
NUMBER OF INBOUND LANES ---------------	4
NUMBER OF OUTBOUND LANES --------------	3
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET -----------------	0
MEDIAN WIDTH --------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN -------------	10

LANE DATA FOR INBOUND LEG 4:
(CONVERTED APPROACH 4)

LANE NUMBER ------------------	1	2	3	4
(INBOUND LANE NUMBER) --------	1	2	3	4
WIDTH OF LANE ----------------	12	12	12	12
MOVEMENT CODE ----------------	L	S	S	SR
LENGTH OF UNBLOCKED LANE				
FROM LANE TERMINAL ----------	0	0	0	0
FROM OUTER END --------------	0	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0	0
PERCENT OF INBOUND TRAFFIC				
TO ENTER IN THIS LANE -------	25	25	25	25
	MEDIAN			CURB

LANE DATA FOR OUTBOUND LEG 4:
(CONVERTED APPROACH 8)

LANE NUMBER ------------------	5	6	7
(OUTBOUND LANE NUMBER) -------	1	2	3
WIDTH OF LANE ----------------	12	12	12
MOVEMENT CODE ----------------	LS	S	SR
LENGTH OF UNBLOCKED LANE			
FROM LANE TERMINAL ----------	0	0	0
FROM OUTER END --------------	0	0	0
OFFSET OF LANE TERMINAL ------	0	0	0
	MEDIAN		CURB

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 7

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	300
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DISTRIBUTION DATA FOR LEG 3:

LEG NUMBER --	1	2	3	4
% OF LEG 3 INBOUND VEHICLES TO BE OUTBOUND ON LEG --	33	33	0	34

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 7 X 7

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

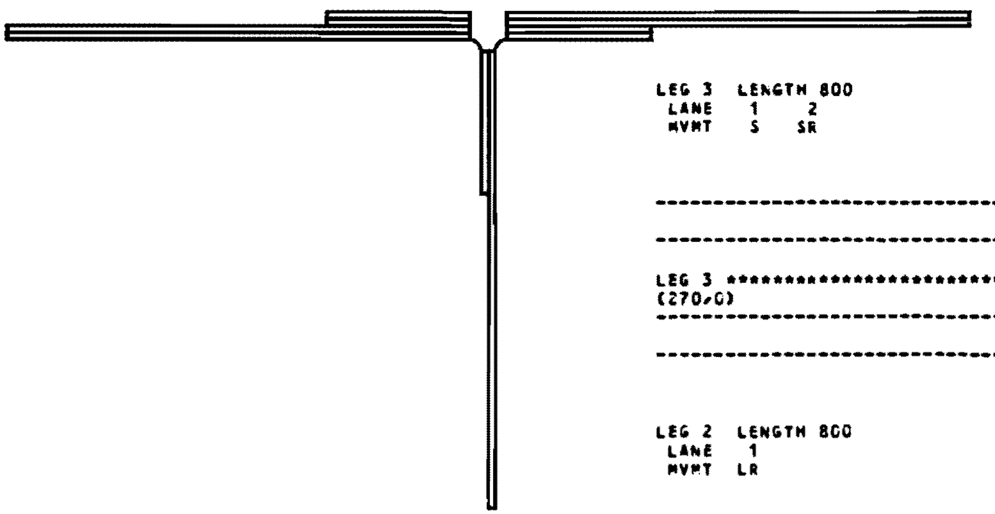
NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	800
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DISTRIBUTION DATA FOR LEG 4:

LEG NUMBER --	1	2	3	4
% OF LEG 4 INBOUND VEHICLES TO BE OUTBOUND ON LEG --	33	33	34	0

```
                        TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA

STANDARD 4 T 2

  NUMBER OF LEGS -----------------------      3
  SIMULATION TIME IN MINUTES -----------     20
  MINIMUM HEADWAY IN SECONDS -----------    1.0
  NUMBER OF VEHICLE CLASSES ------------     10
  NUMBER OF DRIVER CLASSES -------------      3
  PERCENT OF LEFT TURNING VEHICLES
   TO ENTER IN MEDIAN LANE -------------     80
  PERCENT OF RIGHT TURNING VEHICLES
   TO ENTER IN CURB LANE. --------------     80

  CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----   1      2      3
CURB RETURN RADIUS -----------  32     20     20
```

STANDARD 4 T 2



```
LEG 3  LENGTH 800
 LANE    1    2
 MVMT    S    SR
```

```
-----------------------------------|-32-|-32-|-----------------------------------
                              12  4     |     :2  12
--------------------------------- 4T2 |     :-----------------------------------
                              12  3     |     :1  12
LEG 3 ******************************-----0-----****************************** LEG 1
(270,0)                       12  1:    |      3  12                         (90,0)
----------------------------------:     |      -----------------------------------
                              12  2:    |      4  12
-----------------------------------20   |...20------------------------------------
                                    | 2 * 1 |
                                    |   *   |
                                    | 12*12 |
LEG 2  LENGTH 800                   |   *   |                   LEG 1  LENGTH 800
 LANE    1                          |   *   |                    LANE   1    2
 MVMT   LR                          |   *   |                    MVMT   LS   S
                                  LEG 2 (180,0)
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                          GEOMETRY INPUT DATA
STANDARD 4 T 2

   LEG 1 GEOMETRY DATA:

LEG ANGLE ------------------------------     90
LENGTH OF INBOUND LANES ----------------    800
LENGTH OF OUTBOUND LANES ---------------    250
NUMBER OF INBOUND LANES ----------------      2
NUMBER OF OUTBOUND LANES ---------------      2
SPEED LIMIT ON INBOUND LANES IN MPH ----     30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---     30
LEG CENTERLINE OFFSET ------------------      0
MEDIAN WIDTH ---------------------------      0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---     20
LIMITING ANGLE FOR U-TURN --------------     10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER -----------------     1      2
(INBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ---------------    12     12
MOVEMENT CODE ---------------    LS      S
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ---------     0      0
 FROM OUTER END -------------     0      0
OFFSET OF LANE TERMINAL -----     0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE ------    48     52
                             MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 4)

LANE NUMBER -----------------     3      4
(OUTBOUND LANE NUMBER) ------     1      2
WIDTH OF LANE ---------------    12     12
MOVEMENT CODE ---------------    SR     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ---------     0      0
 FROM OUTER END -------------     0      0
OFFSET OF LANE TERMINAL -----     0      0
                             MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                          GEOMETRY INPUT DATA
STANDARD 4 T 2

   LEG 2 GEOMETRY DATA:

LEG ANGLE ------------------------------    180
LENGTH OF INBOUND LANES ----------------    800
LENGTH OF OUTBOUND LANES ---------------    250
NUMBER OF INBOUND LANES ----------------      1
NUMBER OF OUTBOUND LANES ---------------      1
SPEED LIMIT ON INBOUND LANES IN MPH ----     30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---     30
LEG CENTERLINE OFFSET ------------------      0
MEDIAN WIDTH ---------------------------      0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---     20
LIMITING ANGLE FOR U-TURN --------------     10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER -----------------     1
(INBOUND LANE NUMBER) -------     1
WIDTH OF LANE ---------------    12
MOVEMENT CODE ---------------    LR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ---------     0
 FROM OUTER END -------------     0
OFFSET OF LANE TERMINAL -----     0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE ------   100

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 5)

LANE NUMBER -----------------     2
(OUTBOUND LANE NUMBER) ------     1
WIDTH OF LANE ---------------    12
MOVEMENT CODE ---------------    LR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ---------     0
 FROM OUTER END -------------     0
OFFSET OF LANE TERMINAL -----     0
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA
STANDARD 4 T 2

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     400
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER --------------------------     1    2    3
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---     0   50   50
```

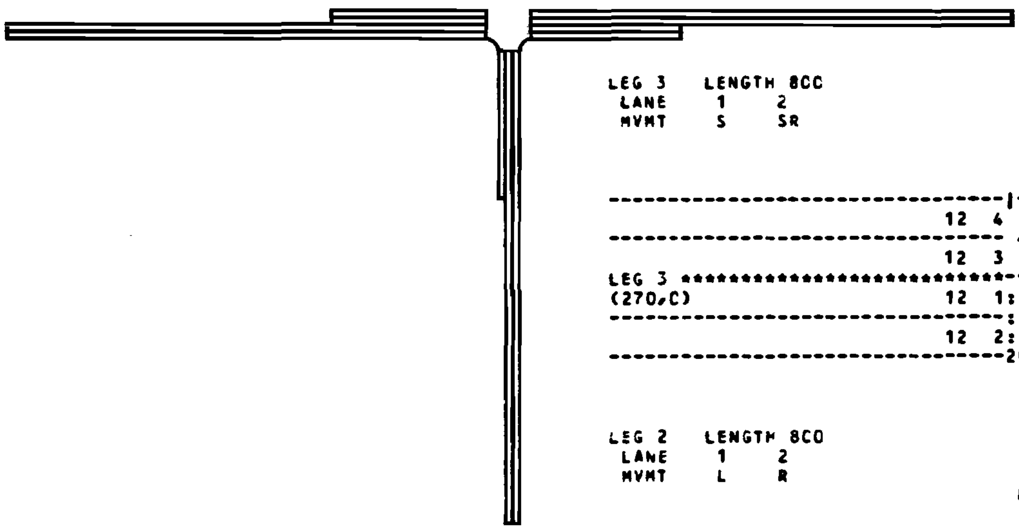
```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA
STANDARD 4 T 2

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     200
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ---------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER --------------------------     1    2    3
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    50    0   50
```

```
                              TEXAS TRAFFIC SIMULATION PACKAGE
                                   GEOMETRY INPUT DATA
 STANDARD 4 T 2

   LEG 3 GEOMETRY DATA:

LEG ANGLE --------------------------------  270
LENGTH OF INBOUND LANES -----------------  800
LENGTH OF OUTBOUND LANES ----------------  250
NUMBER OF INBOUND LANES -----------------    2
NUMBER OF OUTBOUND LANES ----------------    2
SPEED LIMIT ON INBOUND LANES IN MPH ----   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---   30
LEG CENTERLINE OFFSET -------------------    0
MEDIAN WIDTH ----------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---   20
LIMITING ANGLE FOR U-TURN ---------------   10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER -------------------      1      2
(INBOUND LANE NUMBER) ---------      1      2
WIDTH OF LANE -----------------     12     12
MOVEMENT CODE -----------------      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0      0
 FROM OUTER END ---------------      0      0
OFFSET OF LANE TERMINAL -------      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------     48     52
                                MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 6)

LANE NUMBER -------------------      3      4
(OUTBOUND LANE NUMBER) --------      1      2
WIDTH OF LANE -----------------     12     12
MOVEMENT CODE -----------------     LS     LS
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0      0
 FROM OUTER END ---------------      0      0
OFFSET OF LANE TERMINAL -------      0      0
                                MEDIAN   CURB
```

```
                              TEXAS TRAFFIC SIMULATION PACKAGE
                                  DRIVER-VEHICLE INPUT DATA
 STANDARD 4 T 2

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     400
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---    28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER -----------------------------  1   2   3
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  50  50   0
```

```
                    TEXAS TRAFFIC SIMULATICN PACKAGE
                         GEOMETRY INPUT DATA

STANDARD 4 T 3

   NUMBER OF LEGS ------------------------    3
   SIMULATION TIME IN MINUTES -----------    20
   MINIMUM HEADWAY IN SECONDS -----------   1.C
   NUMBER OF VEHICLE CLASSES ------------    1C
   NUMBER OF DRIVER CLASSES -------------     3
   PERCENT OF LEFT TURNING VEHICLES
    TC ENTER IN MEDIAN LANE -------------    8C
   PERCENT OF RIGHT TURNING VEHICLES
    TC ENTER IN CURB LANE. --------------    8C

   CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----   1     2     3
CURB RETURN RADIUS -----------  44    20    20
```

STANDARD 4 T 3



```
LEG 3   LENGTH 8CC
 LANE     1     2
 MVMT     S     SR


--------------------------------|-32-|---44---|---------------------------------
                         12  4       |        :2  12
---------------------------------4T3 |        :---------------------------------
                         12  3       |        :1  12
LEG 3 ***************************----0--------****************************** LEG 1
(270,C)                  12  1:      |         3  12                      (90,0)
------------------------------:      |         ---------------------------------
                         12  2:      |         4  12
------------------------------20     |........20--------------------------------
                              | 3  * 1  | 2  |
                              |    *    |    |
                              |  12*12  |12  |
LEG 2   LENGTH 8CO            |    *    |    |          LEG 1   LENGTH 800
 LANE     1     2             |    *    |    |           LANE     1     2
 MVMT     L     R             |    *    |    |           MVMT     LS    S
                              LEG 2 (180,C)
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA

STANDARD 4 T 3

   LEG 1 GEOMETRY DATA:

LEG ANGLE ---------------------------------    90
LENGTH OF INBOUND LANES -----------------     600
LENGTH OF OUTBOUND LANES ----------------     250
NUMBER OF INBOUND LANES -----------------       2
NUMBER OF OUTBOUND LANES ----------------       2
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET -------------------       0
MEDIAN WIDTH ----------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN ---------------      10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER ------------------        1       2
(INBOUND LANE NUMBER) --------        1       2
WIDTH OF LANE ----------------       12      12
MOVEMENT CODE ----------------       LS       S
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0       0
 FROM OUTER END --------------      600     600
OFFSET OF LANE TERMINAL ------        0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------       48      52
                                 MEDIAN    CURB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 4)

LANE NUMBER ------------------        3       4
(OUTBOUND LANE NUMBER) -------        1       2
WIDTH OF LANE ----------------       12      12
MOVEMENT CODE ----------------       SR      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0       0
 FROM OUTER END --------------      250     250
OFFSET OF LANE TERMINAL ------        0       0
                                 MEDIAN    CURB
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                              GEOMETRY INPUT DATA

STANDARD 4 T 3

   LEG 2 GEOMETRY DATA:

LEG ANGLE ---------------------------------   180
LENGTH OF INBOUND LANES -----------------     [illegible]
LENGTH OF OUTBOUND LANES ----------------     250
NUMBER OF INBOUND LANES -----------------       2
NUMBER OF OUTBOUND LANES ----------------       1
SPEED LIMIT ON INBOUND LANES IN MPH ----       30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---       30
LEG CENTERLINE OFFSET -------------------       0
MEDIAN WIDTH ----------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---       20
LIMITING ANGLE FOR U-TURN ---------------      10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER ------------------        1       2
(INBOUND LANE NUMBER) --------        1       2
WIDTH OF LANE ----------------       12      12
MOVEMENT CODE ----------------        L       R
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0       0
 FROM OUTER END --------------      600     600
OFFSET OF LANE TERMINAL ------        0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------       48      52
                                 MEDIAN    CURB

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 5)

LANE NUMBER ------------------        3
(OUTBOUND LANE NUMBER) -------        1
WIDTH OF LANE ----------------       12
MOVEMENT CODE ----------------       LR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------        0
 FROM OUTER END --------------      250
OFFSET OF LANE TERMINAL ------        0
```

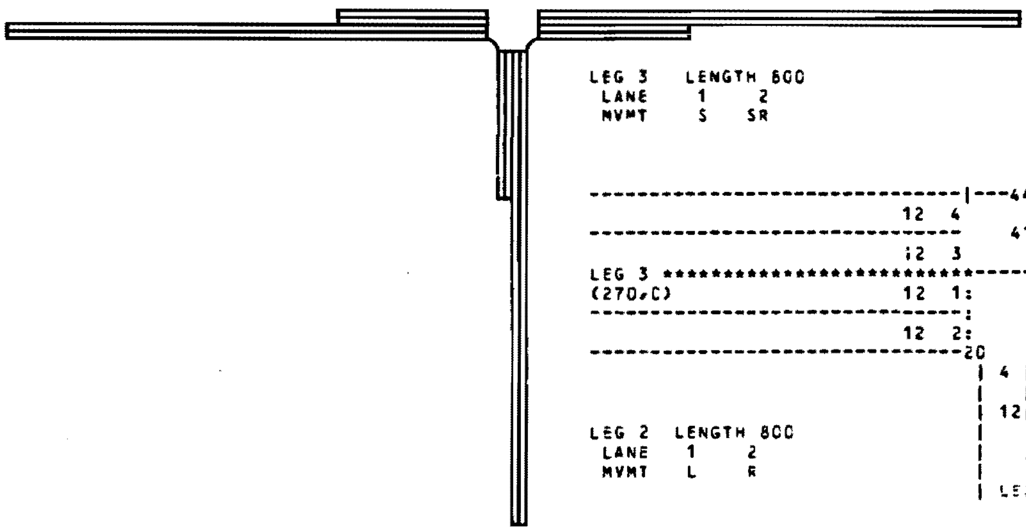
```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 4 T 3

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     400
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------   1   2   3
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   0  50  50
```

```
                         TEXAS TRAFFIC SIMULATION PACKAGE
                            DRIVER-VEHICLE INPUT DATA

STANDARD 4 T 3

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------     400
PARAMETER FOR DISTRIBUTION --------------    2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---     28.0
85-PERCENTILE SPEED, MPH ----------------    31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------   1   2   3
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  50   0  50
```

```
                              TEXAS TRAFFIC SIMULATION PACKAGE
                                   GEOMETRY INPUT DATA
 STANDARD 4 T 3

   LEG 3 GEOMETRY DATA:

LEG ANGLE ---------------------------------  270
LENGTH OF INBOUND LANES -------------------  800
LENGTH OF OUTBOUND LANES ------------------  250
NUMBER OF INBOUND LANES -------------------    2
NUMBER OF OUTBOUND LANES ------------------    2
SPEED LIMIT ON INBOUND LANES IN MPH -------   30
SPEED LIMIT ON OUTBOUND LANES IN MPH ------   30
LEG CENTERLINE OFFSET ---------------------    0
MEDIAN WIDTH ------------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ------   20
LIMITING ANGLE FOR U-TURN -----------------   10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER -------------------      1      2
(INBOUND LANE NUMBER) ---------      1      2
WIDTH OF LANE -----------------     12     12
MOVEMENT CODE -----------------      S     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0      0
 FROM OUTER END ---------------      0      0
OFFSET OF LANE TERMINAL -------      0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE --------     48     52
                                MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 6)

LANE NUMBER -------------------      3      4
(OUTBOUND LANE NUMBER) --------      1      2
WIDTH OF LANE -----------------     12     12
MOVEMENT CODE -----------------     LS     LS
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL -----------      0      0
 FROM OUTER END ---------------      0      0
OFFSET OF LANE TERMINAL -------     12     12
                                MEDIAN   CURB


                              TEXAS TRAFFIC SIMULATION PACKAGE
                                DRIVER-VEHICLE INPUT DATA
 STANDARD 4 T 3

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION ---------  SNEGEXP
TOTAL HOURLY VOLUME ON LEG --------------      400
PARAMETER FOR DISTRIBUTION --------------     2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ----     26.0
85-PERCENTILE SPEED, MPH ----------------     31.0
TRAFFIC MIX DATA TO FOLLOW ? ------------       NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ---------------------------   1    2    3
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   50   50    0
```

```
                         TEXAS TRAFFIC SIMULATICN PACKAGE
                               GECMETRY INPUT DATA

STANDARD 4 T 4

  NUMBER CF LEGS -----------------------    3
  SIMULATION TIME IN MINUTES -----------   2C
  MINIMUM HEACWAY IN SECONDS -----------  1.C
  NUMBER CF VEHICLE CLASSES ------------   1C
  NUMBER CF CRIVER CLASSES -------------    3
  PERCENT OF LEFT TURNING VEHICLES
   TC ENTER IN MECIAN LANE -------------   8C
  PERCENT OF RIGHT TURNING VEHICLES
   TC ENTER IN CURB LANE. --------------   6C

  CLRB RETURN RADII:

CURB RETURN RADIUS NUMBER ----   1      2      3
CURB RETURN RADIUS -----------  44     20     20
```

STANDARD 4 T 4



```
LEG 3   LENGTH 8CO
 LANE     1     2
 MVMT     S    SR


------------------------------|---44---|---44---|------------------------------
                        12  4                   :2  12
-----------------------------     4T4  |        :-----------------------------
                        ;2  3          |        :1  12
LEG 3 *************************--------0---------*********************** LEG 1
(270,C)                 12  1:         |         3  12                  (90,0)
------------------------------:        |         ------------------------------
                        12  2:         |         4  12
-----------------------------20        |........2C-----------------------------
                               | 4 | 3 * 1 | 2 |
                               |   |   *   |   |
                               | 12| 12*12 |12 |
LEG 2  LENGTH 8CO              |   |   *   |   |          LEG 1  LENGTH 8CC
 LANE    1     2               |   |   *   |   |           LANE   1     2
 MVMT    L     R               |   |   *   |   |           MVMT  LS     S
                               | LEG 2 (18C,C) |
```

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```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

STANDARD 4 T 4

  LEG 1 GEOMETRY DATA:

LEG ANGLE --------------------------------    90
LENGTH OF INBOUND LANES ----------------     800
LENGTH OF OUTBOUND LANES ---------------     250
NUMBER OF INBOUND LANES ----------------       2
NUMBER OF OUTBOUND LANES ---------------       2
SPEED LIMIT ON INBOUND LANES IN MPH ----      30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---      30
LEG CENTERLINE OFFSET ------------------       0
MEDIAN WIDTH ---------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---      20
LIMITING ANGLE FOR U-TURN --------------      10

  LANE DATA FOR INBOUND LEG 1:
   (CONVERTED APPROACH 1)

LANE NUMBER ------------------       1       2
(INBOUND LANE NUMBER) --------       1       2
WIDTH OF LANE ----------------      12      12
MOVEMENT CODE ----------------      LS       S
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0       0
 FROM OUTER END --------------       0       0
OFFSET OF LANE TERMINAL ------       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------      48      52
                                MEDIAN    CURB

  LANE DATA FOR OUTBOUND LEG 1:
   (CONVERTED APPROACH 4)

LANE NUMBER ------------------       3       4
(OUTBOUND LANE NUMBER) -------       1       2
WIDTH OF LANE ----------------      12      12
MOVEMENT CODE ----------------      SR      SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0       0
 FROM OUTER END --------------       0       0
OFFSET OF LANE TERMINAL ------       0       0
                                MEDIAN    CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

STANDARD 4 T 4

  LEG 2 GEOMETRY DATA:

LEG ANGLE --------------------------------   180
LENGTH OF INBOUND LANES ----------------     800
LENGTH OF OUTBOUND LANES ---------------     250
NUMBER OF INBOUND LANES ----------------       2
NUMBER OF OUTBOUND LANES ---------------       2
SPEED LIMIT ON INBOUND LANES IN MPH ----      30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---      30
LEG CENTERLINE OFFSET ------------------       0
MEDIAN WIDTH ---------------------------       0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---      20
LIMITING ANGLE FOR U-TURN --------------      10

  LANE DATA FOR INBOUND LEG 2:
   (CONVERTED APPROACH 2)

LANE NUMBER ------------------       1       2
(INBOUND LANE NUMBER) --------       1       2
WIDTH OF LANE ----------------      12      12
MOVEMENT CODE ----------------       L       R
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0       0
 FROM OUTER END --------------       0       0
OFFSET OF LANE TERMINAL ------       0       0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------      48      52
                                MEDIAN    CURB

  LANE DATA FOR OUTBOUND LEG 2:
   (CONVERTED APPROACH 5)

LANE NUMBER ------------------       3       4
(OUTBOUND LANE NUMBER) -------       1       2
WIDTH OF LANE ----------------      12      12
MOVEMENT CODE ----------------      LR      LR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------       0       0
 FROM OUTER END --------------       0       0
OFFSET OF LANE TERMINAL ------       0       0
                                MEDIAN    CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

STANDARD 4 T 4

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION ---------  SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------       400
PARAMETER FOR DISTRIBUTION -------------      2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---      26.0
85-PERCENTILE SPEED, MPH ---------------      31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------        NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------   1    2    3
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    0   50   50
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                      DRIVER-VEHICLE INPUT DATA

STANDARD 4 T 4

  INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION ---------  SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------       400
PARAMETER FOR DISTRIBUTION -------------      2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---      26.0
85-PERCENTILE SPEED, MPH ---------------      31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------        NO

  OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------   1    2    3
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   50    0   50
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

STANDARD 4 T 4

LEG 3 GEOMETRY DATA:

LEG ANGLE -------------------------------	270
LENGTH OF INBOUND LANES ----------------	300
LENGTH OF OUTBOUND LANES ---------------	250
NUMBER OF INBOUND LANES ----------------	2
NUMBER OF OUTBOUND LANES ---------------	2
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET ------------------	0
MEDIAN WIDTH ---------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN --------------	10

LANE DATA FOR INBOUND LEG 3:
(CONVERTED APPROACH 3)

LANE NUMBER ------------------	1	2
(INBOUND LANE NUMBER) --------	1	2
WIDTH OF LANE ----------------	12	12
MOVEMENT CODE ----------------	S	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
PERCENT OF INBOUND TRAFFIC		
TO ENTER IN THIS LANE -------	48	52
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 3:
(CONVERTED APPROACH 6)

LANE NUMBER ------------------	3	4
(OUTBOUND LANE NUMBER) -------	1	2
WIDTH OF LANE ----------------	12	12
MOVEMENT CODE ----------------	LS	LS
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

STANDARD 4 T 4

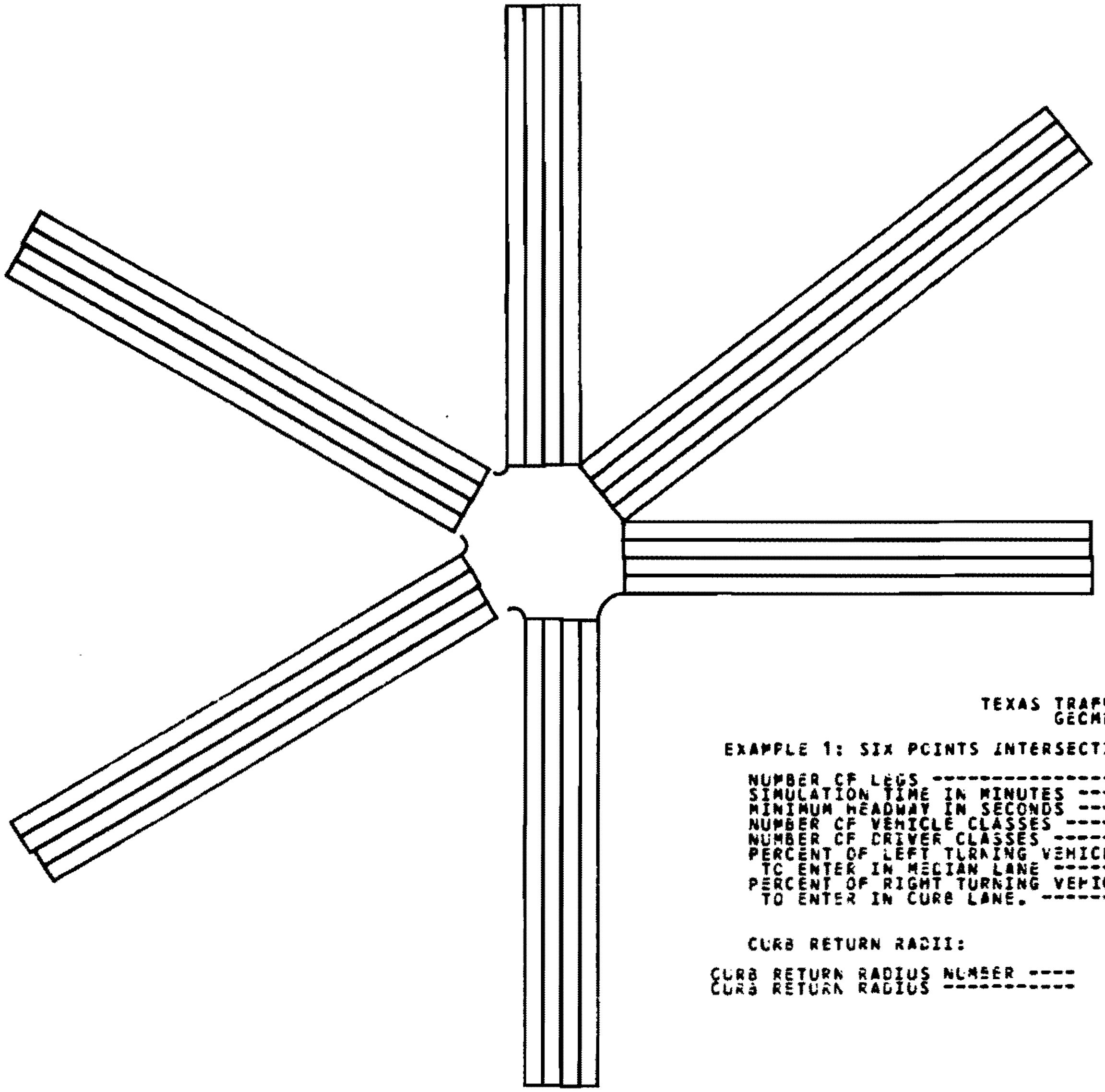
INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC	
HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	400
PARAMETER FOR DISTRIBUTION -------------	2.00
MEAN SPEED OF ENTERING VEHICLES, MPH ---	28.0
85-PERCENTILE SPEED, MPH ---------------	31.0
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER ---------------------------	1	2	3
PERCENT OF LEG 3 INBOUND			
VEHICLES WITH DESTINATION ON LEG ---	50	50	0

EXAMPLE 1. SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)



TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

NUMBER OF LEGS ----------------------	6
SIMULATION TIME IN MINUTES ----------	12
MINIMUM HEADWAY IN SECONDS ----------	1.1
NUMBER OF VEHICLE CLASSES -----------	10
NUMBER OF DRIVER CLASSES ------------	3
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	100
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	100

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4	5	6
CURB RETURN RADIUS -----------	7	0	0	22	9	9

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                          GEOMETRY INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

    LEG 1 GEOMETRY DATA:

LEG ANGLE --------------------------------     0
LENGTH OF INBOUND LANES ------------------   383
LENGTH OF OUTBOUND LANES -----------------   383
NUMBER OF INBOUND LANES ------------------     2
NUMBER OF OUTBOUND LANES -----------------     2
SPEED LIMIT ON INBOUND LANES IN MPH ------    30
SPEED LIMIT ON OUTBOUND LANES IN MPH -----    30
LEG CENTERLINE OFFSET --------------------    15
MEDIAN WIDTH -----------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT -----    20
LIMITING ANGLE FOR U-TURN ----------------    10

    LANE DATA FOR INBOUND LEG 1:
     (CONVERTED APPROACH 1)

LANE NUMBER ------------------     1      2
(INBOUND LANE NUMBER) --------     1      2
WIDTH OF LANE ----------------    15     15
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    45     55
                              MEDIAN   CURB

    LANE DATA FOR OUTBOUND LEG 1:
     (CONVERTED APPROACH 7)

LANE NUMBER ------------------     3      4
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ----------------    15     15
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                          GEOMETRY INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

    LEG 2 GEOMETRY DATA:

LEG ANGLE --------------------------------    52
LENGTH OF INBOUND LANES ------------------   486
LENGTH OF OUTBOUND LANES -----------------   486
NUMBER OF INBOUND LANES ------------------     2
NUMBER OF OUTBOUND LANES -----------------     2
SPEED LIMIT ON INBOUND LANES IN MPH ------    30
SPEED LIMIT ON OUTBOUND LANES IN MPH -----    30
LEG CENTERLINE OFFSET --------------------    22
MEDIAN WIDTH -----------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT -----    20
LIMITING ANGLE FOR U-TURN ----------------    10

    LANE DATA FOR INBOUND LEG 2:
     (CONVERTED APPROACH 2)

LANE NUMBER ------------------     1      2
(INBOUND LANE NUMBER) --------     1      2
WIDTH OF LANE ----------------    15     15
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    40     60
                              MEDIAN   CURB

    LANE DATA FOR OUTBOUND LEG 2:
     (CONVERTED APPROACH 8)

LANE NUMBER ------------------     3      4
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ----------------    15     15
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- LOGNRML
TOTAL HOURLY VOLUME ON LEG --------------     450
PARAMETER FOR DISTRIBUTION --------------    8.06
MEAN SPEED OF ENTERING VEHICLES, MPH ----    30.0
85-PERCENTILE SPEED, MPH ----------------    34.0
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER ---------------------------   1    2    3    4    5    6
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---    0    9    9   40   27   15
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

    INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- LOGNRML
TOTAL HOURLY VOLUME ON LEG --------------     725
PARAMETER FOR DISTRIBUTION --------------    4.73
MEAN SPEED OF ENTERING VEHICLES, MPH ----    19.0
85-PERCENTILE SPEED, MPH ----------------    25.7
TRAFFIC MIX DATA TO FOLLOW ? ------------      NO

    OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER ---------------------------   1    2    3    4    5    6
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   13    0    7    8   42   30
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

     LEG 3 GEOMETRY DATA:

  LEG ANGLE ---------------------------------  90
  LENGTH OF INBOUND LANES -----------------  383
  LENGTH OF OUTBOUND LANES ----------------  383
  NUMBER OF INBOUND LANES -----------------    2
  NUMBER OF OUTBOUND LANES ----------------    2
  SPEED LIMIT ON INBOUND LANES IN MPH ----    30
  SPEED LIMIT ON OUTBOUND LANES IN MPH ---    30
  LEG CENTERLINE OFFSET -------------------    0
  MEDIAN WIDTH ----------------------------    0
  LIMITING ANGLE FOR STRAIGHT MOVEMENT ---    30
  LIMITING ANGLE FOR U-TURN --------------    10

     LANE DATA FOR INBOUND LEG 3:
      (CONVERTED APPROACH 3)

  LANE NUMBER --------------------    1      2
  (INBOUND LANE NUMBER) ---------     1      2
  WIDTH OF LANE ------------------   15     15
  MOVEMENT CODE ------------------   LS     SR
  LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL -----------     0      0
   FROM OUTER END ---------------     0      0
  OFFSET OF LANE TERMINAL -------     0      0
  PERCENT OF INBOUND TRAFFIC
   TO ENTER IN THIS LANE --------    45     55
                                 MEDIAN   CURB

     LANE DATA FOR OUTBOUND LEG 3:
      (CONVERTED APPROACH 9)

  LANE NUMBER --------------------    3      4
  (OUTBOUND LANE NUMBER) --------     1      2
  WIDTH OF LANE ------------------   15     15
  MOVEMENT CODE ------------------   LS     SR
  LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL -----------     0      0
   FROM OUTER END ---------------     0      0
  OFFSET OF LANE TERMINAL -------     0      0
                                 MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

     LEG 4 GEOMETRY DATA:

  LEG ANGLE ---------------------------------  180
  LENGTH OF INBOUND LANES -----------------   388
  LENGTH OF OUTBOUND LANES ----------------   388
  NUMBER OF INBOUND LANES -----------------     2
  NUMBER OF OUTBOUND LANES ----------------     2
  SPEED LIMIT ON INBOUND LANES IN MPH ----     30
  SPEED LIMIT ON OUTBOUND LANES IN MPH ---     30
  LEG CENTERLINE OFFSET -------------------     0
  MEDIAN WIDTH ----------------------------     0
  LIMITING ANGLE FOR STRAIGHT MOVEMENT ---     20
  LIMITING ANGLE FOR U-TURN --------------     10

     LANE DATA FOR INBOUND LEG 4:
      (CONVERTED APPROACH 4)

  LANE NUMBER --------------------    1      2
  (INBOUND LANE NUMBER) ---------     1      2
  WIDTH OF LANE ------------------   15     15
  MOVEMENT CODE ------------------   LS     SR
  LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL -----------     0      0
   FROM OUTER END ---------------     0      0
  OFFSET OF LANE TERMINAL -------     0      0
  PERCENT OF INBOUND TRAFFIC
   TO ENTER IN THIS LANE --------    50     50
                                 MEDIAN   CURB

     LANE DATA FOR OUTBOUND LEG 4:
      (CONVERTED APPROACH 10)

  LANE NUMBER --------------------    3      4
  (OUTBOUND LANE NUMBER) --------     1      2
  WIDTH OF LANE ------------------   15     15
  MOVEMENT CODE ------------------   LS     SR
  LENGTH OF UNBLOCKED LANE
   FROM LANE TERMINAL -----------     0      0
   FROM OUTER END ---------------     0      0
  OFFSET OF LANE TERMINAL -------     0      0
                                 MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

     INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

  NAME FOR INBOUND TRAFFIC
   HEADWAY FREQUENCY DISTRIBUTION --------- LOGNRML
  TOTAL HOURLY VOLUME ON LEG --------------     470
  PARAMETER FOR DISTRIBUTION --------------    6.23
  MEAN SPEED OF ENTERING VEHICLES, MPH ---    17.0
  85-PERCENTILE SPEED, MPH ----------------    25.7
  TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

     OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

  LEG NUMBER ---------------------------   1   2   3   4   5   6
  PERCENT OF LEG 3 INBOUND
   VEHICLES WITH DESTINATION ON LEG ---  25  10   0  11   9  45
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

  EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

     INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

  NAME FOR INBOUND TRAFFIC
   HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
  TOTAL HOURLY VOLUME ON LEG --------------     550
  PARAMETER FOR DISTRIBUTION --------------    2.18
  MEAN SPEED OF ENTERING VEHICLES, MPH ---    25.0
  85-PERCENTILE SPEED, MPH ----------------    25.6
  TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

     OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

  LEG NUMBER ---------------------------   1   2   3   4   5   6
  PERCENT OF LEG 4 INBOUND
   VEHICLES WITH DESTINATION ON LEG ---  38  27  20   0   5  10
```

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

LEG 5 GEOMETRY DATA:

LEG ANGLE ----------------------------	239
LENGTH OF INBOUND LANES ---------------	439
LENGTH OF OUTBOUND LANES --------------	433
NUMBER OF INBOUND LANES ---------------	2
NUMBER OF OUTBOUND LANES --------------	2
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET -----------------	-15
MEDIAN WIDTH --------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	20
LIMITING ANGLE FOR U-TURN -------------	10

LANE DATA FOR INBOUND LEG 5:
(CONVERTED APPROACH 5)

LANE NUMBER -----------------	1	2
(INBOUND LANE NUMBER) --------	1	2
WIDTH OF LANE ---------------	15	15
MOVEMENT CODE ---------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	-12	-12
PERCENT OF INBOUND TRAFFIC		
TO ENTER IN THIS LANE -------	50	50
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 5:
(CONVERTED APPROACH 11)

LANE NUMBER -----------------	3	4
(OUTBOUND LANE NUMBER) -------	1	2
WIDTH OF LANE ---------------	15	15
MOVEMENT CODE ---------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	0	0
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

LEG 6 GEOMETRY DATA:

LEG ANGLE ----------------------------	300
LENGTH OF INBOUND LANES ---------------	433
LENGTH OF OUTBOUND LANES --------------	433
NUMBER OF INBOUND LANES ---------------	2
NUMBER OF OUTBOUND LANES --------------	2
SPEED LIMIT ON INBOUND LANES IN MPH ----	30
SPEED LIMIT ON OUTBOUND LANES IN MPH ---	30
LEG CENTERLINE OFFSET -----------------	-4
MEDIAN WIDTH --------------------------	0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---	30
LIMITING ANGLE FOR U-TURN -------------	10

LANE DATA FOR INBOUND LEG 6:
(CONVERTED APPROACH 6)

LANE NUMBER -----------------	1	2
(INBOUND LANE NUMBER) --------	1	2
WIDTH OF LANE ---------------	15	15
MOVEMENT CODE ---------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	-8	-8
PERCENT OF INBOUND TRAFFIC		
TO ENTER IN THIS LANE -------	50	50
	MEDIAN	CURB

LANE DATA FOR OUTBOUND LEG 6:
(CONVERTED APPROACH 12)

LANE NUMBER -----------------	3	4
(OUTBOUND LANE NUMBER) -------	1	2
WIDTH OF LANE ---------------	15	15
MOVEMENT CODE ---------------	LS	SR
LENGTH OF UNBLOCKED LANE		
FROM LANE TERMINAL ----------	0	0
FROM OUTER END --------------	0	0
OFFSET OF LANE TERMINAL ------	-6	-6
	MEDIAN	CURB

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 5:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION ---------	LOGNRML
TOTAL HOURLY VOLUME ON LEG -------------	575
PARAMETER FOR DISTRIBUTION -------------	4.99
MEAN SPEED OF ENTERING VEHICLES, MPH ---	23.9
85-PERCENTILE SPEED, MPH ---------------	28.6
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 5:

LEG NUMBER --------------------------	1	2	3	4	5	6
PERCENT OF LEG 5 INBOUND VEHICLES WITH DESTINATION ON LEG ---	7	45	25	12	0	11

TEXAS TRAFFIC SIMULATION PACKAGE
DRIVER-VEHICLE INPUT DATA

EXAMPLE 1: SIX POINTS INTERSECTION (6 LEGS WITH 4 LANES EACH)

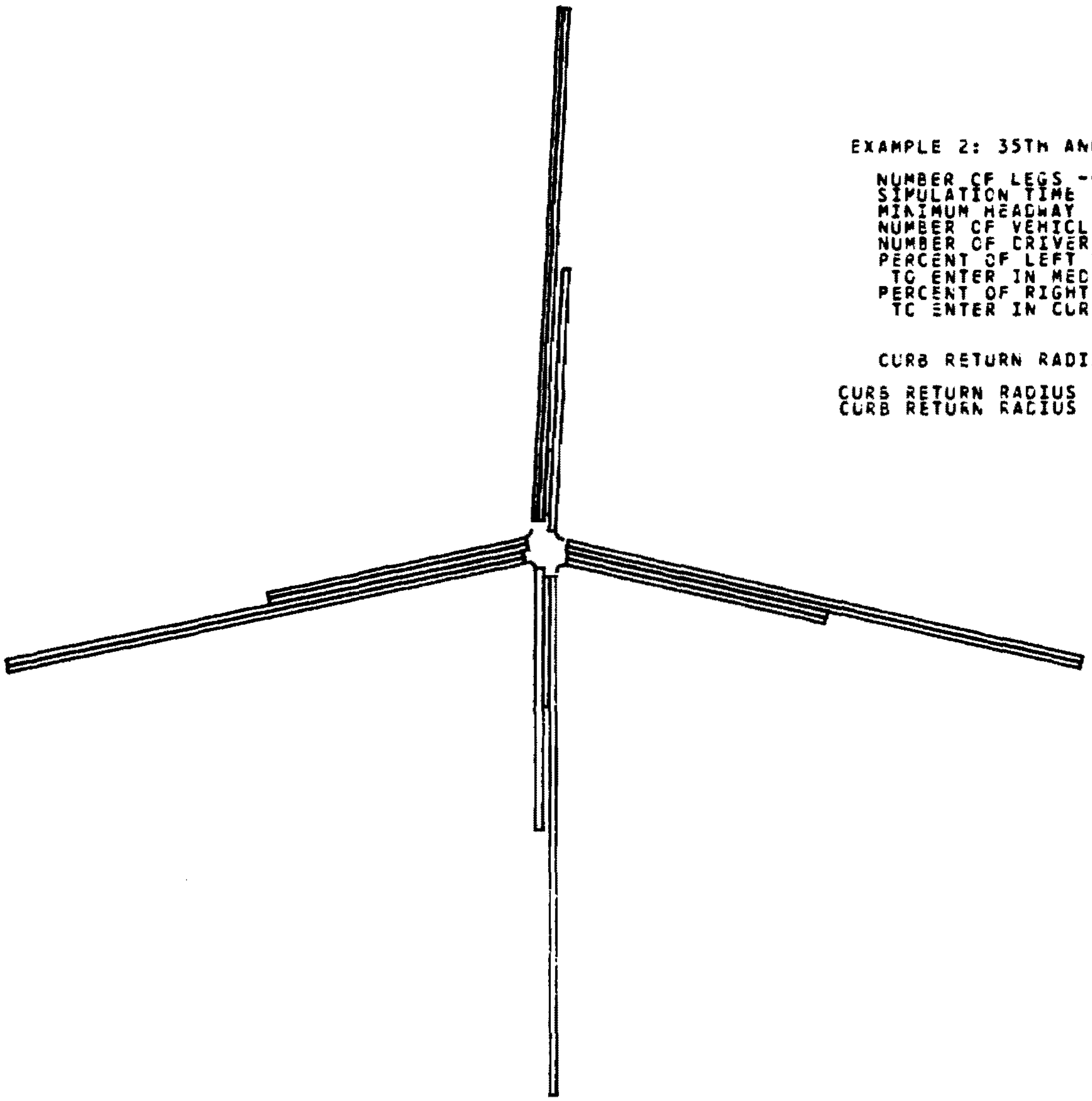
INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 6:

NAME FOR INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION ---------	SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------	500
PARAMETER FOR DISTRIBUTION -------------	2.18
MEAN SPEED OF ENTERING VEHICLES, MPH ---	24.5
85-PERCENTILE SPEED, MPH ---------------	27.4
TRAFFIC MIX DATA TO FOLLOW ? -----------	NO

OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 6:

LEG NUMBER --------------------------	1	2	3	4	5	6
PERCENT OF LEG 6 INBOUND VEHICLES WITH DESTINATION ON LEG ---	9	6	37	26	22	0

35TH AND JEFFERSON AUSTIN



TEXAS TRAFFIC SIMULATION PACKAGE
GEOMETRY INPUT DATA

EXAMPLE 2: 35TH AND JEFFERSON AUSTIN

NUMBER OF LEGS ----------------------	4
SIMULATION TIME IN MINUTES ----------	12
MINIMUM HEADWAY IN SECONDS ----------	1.0
NUMBER OF VEHICLE CLASSES -----------	10
NUMBER OF DRIVER CLASSES ------------	1
PERCENT OF LEFT TURNING VEHICLES TO ENTER IN MEDIAN LANE ------------	60
PERCENT OF RIGHT TURNING VEHICLES TO ENTER IN CURB LANE. ------------	80

CURB RETURN RADII:

CURB RETURN RADIUS NUMBER ----	1	2	3	4
CURB RETURN RADIUS -----------	12	13	10	9

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

EXAMPLE 2: 35TH AND JEFFERSON     AUSTIN

   LEG 1 GEOMETRY DATA:

LEG ANGLE -------------------------------    3
LENGTH OF INBOUND LANES ----------------   800
LENGTH OF OUTBOUND LANES ---------------   400
NUMBER OF INBOUND LANES ----------------     3
NUMBER OF OUTBOUND LANES ---------------     1
SPEED LIMIT ON INBOUND LANES IN MPH ----    35
SPEED LIMIT ON OUTBOUND LANES IN MPH ---    35
LEG CENTERLINE OFFSET ------------------    -8
MEDIAN WIDTH ---------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---    20
LIMITING ANGLE FOR U-TURN --------------    10

   LANE DATA FOR INBOUND LEG 1:
    (CONVERTED APPROACH 1)

LANE NUMBER ------------------      1      2      3
(INBOUND LANE NUMBER) --------      1      2      3
WIDTH OF LANE ----------------      9      9      8
MOVEMENT CODE ----------------      L      S      R
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------    100      0      0
 FROM OUTER END --------------      0      0      0
OFFSET OF LANE TERMINAL ------    -25    -15    -15
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------      0     55     45
                               MEDIAN          CURB

   LANE DATA FOR OUTBOUND LEG 1:
    (CONVERTED APPROACH 5)

LANE NUMBER ------------------      4
(OUTBOUND LANE NUMBER) -------      1
WIDTH OF LANE ----------------     11
MOVEMENT CODE ----------------    LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0
 FROM OUTER END --------------      0
OFFSET OF LANE TERMINAL ------      0
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                         GEOMETRY INPUT DATA

EXAMPLE 2: 35TH AND JEFFERSON     AUSTIN

   LEG 2 GEOMETRY DATA:

LEG ANGLE -------------------------------  103
LENGTH OF INBOUND LANES ----------------   800
LENGTH OF OUTBOUND LANES ---------------   400
NUMBER OF INBOUND LANES ----------------     2
NUMBER OF OUTBOUND LANES ---------------     2
SPEED LIMIT ON INBOUND LANES IN MPH ----    35
SPEED LIMIT ON OUTBOUND LANES IN MPH ---    35
LEG CENTERLINE OFFSET ------------------     0
MEDIAN WIDTH ---------------------------     0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---    25
LIMITING ANGLE FOR U-TURN --------------    10

   LANE DATA FOR INBOUND LEG 2:
    (CONVERTED APPROACH 2)

LANE NUMBER ------------------      1      2
(INBOUND LANE NUMBER) --------      1      2
WIDTH OF LANE ----------------      9      9
MOVEMENT CODE ----------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0
 FROM OUTER END --------------      0      0
OFFSET OF LANE TERMINAL ------     -8     -8
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     36     64
                               MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 2:
    (CONVERTED APPROACH 6)

LANE NUMBER ------------------      3      4
(OUTBOUND LANE NUMBER) -------      1      2
WIDTH OF LANE ----------------     10     10
MOVEMENT CODE ----------------     LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------      0      0
 FROM OUTER END --------------      0      0
OFFSET OF LANE TERMINAL ------      0      0
                               MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

EXAMPLE 2: 35TH AND JEFFERSON     AUSTIN

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 1:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- LOGNRML
TOTAL HOURLY VOLUME ON LEG -------------     500
PARAMETER FOR DISTRIBUTION -------------   11.06
MEAN SPEED OF ENTERING VEHICLES, MPH ---    19.0
85-PERCENTILE SPEED, MPH ---------------    25.7
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 1:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 1 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   0  18  71  11
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

EXAMPLE 2: 35TH AND JEFFERSON     AUSTIN

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 2:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- LOGNRML
TOTAL HOURLY VOLUME ON LEG -------------     600
PARAMETER FOR DISTRIBUTION -------------    4.99
MEAN SPEED OF ENTERING VEHICLES, MPH ---    23.9
85-PERCENTILE SPEED, MPH ---------------    28.6
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 2:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 2 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  13   0  17  70
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                          GEOMETRY INPUT DATA

 EXAMPLE 2: 35TH AND JEFFERSON    AUSTIN

   LEG 3 GEOMETRY DATA:

LEG ANGLE ------------------------------  180
LENGTH OF INBOUND LANES ----------------  500
LENGTH OF OUTBOUND LANES ---------------  400
NUMBER OF INBOUND LANES ----------------    2
NUMBER OF OUTBOUND LANES ---------------    1
SPEED LIMIT ON INBOUND LANES IN MPH ----   35
SPEED LIMIT ON OUTBOUND LANES IN MPH ---   35
LEG CENTERLINE OFFSET ------------------    0
MEDIAN WIDTH ---------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---   20
LIMITING ANGLE FOR U-TURN --------------   10

   LANE DATA FOR INBOUND LEG 3:
    (CONVERTED APPROACH 3)

LANE NUMBER ------------------     1      2
(INBOUND LANE NUMBER) --------     1      2
WIDTH OF LANE ----------------    10     10
MOVEMENT CODE ----------------     L     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------   200      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------    -7     -7
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------     0    100
                              MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 3:
    (CONVERTED APPROACH 7)

LANE NUMBER ------------------     3
(OUTBOUND LANE NUMBER) -------     1
WIDTH OF LANE ----------------    12
MOVEMENT CODE ----------------   LSR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0
 FROM OUTER END --------------     0
OFFSET OF LANE TERMINAL ------     0
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                          GEOMETRY INPUT DATA

 EXAMPLE 2: 35TH AND JEFFERSON    AUSTIN

   LEG 4 GEOMETRY DATA:

LEG ANGLE ------------------------------  258
LENGTH OF INBOUND LANES ----------------  500
LENGTH OF OUTBOUND LANES ---------------  400
NUMBER OF INBOUND LANES ----------------    2
NUMBER OF OUTBOUND LANES ---------------    2
SPEED LIMIT ON INBOUND LANES IN MPH ----   35
SPEED LIMIT ON OUTBOUND LANES IN MPH ---   35
LEG CENTERLINE OFFSET ------------------    0
MEDIAN WIDTH ---------------------------    0
LIMITING ANGLE FOR STRAIGHT MOVEMENT ---   25
LIMITING ANGLE FOR U-TURN --------------   10

   LANE DATA FOR INBOUND LEG 4:
    (CONVERTED APPROACH 4)

LANE NUMBER ------------------     1      2
(INBOUND LANE NUMBER) --------     1      2
WIDTH OF LANE ----------------    10      9
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------    -5     -5
PERCENT OF INBOUND TRAFFIC
 TO ENTER IN THIS LANE -------    41     59
                              MEDIAN   CURB

   LANE DATA FOR OUTBOUND LEG 4:
    (CONVERTED APPROACH 8)

LANE NUMBER ------------------     3      4
(OUTBOUND LANE NUMBER) -------     1      2
WIDTH OF LANE ----------------    10      9
MOVEMENT CODE ----------------    LS     SR
LENGTH OF UNBLOCKED LANE
 FROM LANE TERMINAL ----------     0      0
 FROM OUTER END --------------     0      0
OFFSET OF LANE TERMINAL ------     0      0
                              MEDIAN   CURB
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

 EXAMPLE 2: 35TH AND JEFFERSON    AUSTIN

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 3:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- LOGNRML
TOTAL HOURLY VOLUME ON LEG -------------     750
PARAMETER FOR DISTRIBUTION -------------    5.43
MEAN SPEED OF ENTERING VEHICLES, MPH ---    30.0
85-PERCENTILE SPEED, MPH ---------------    34.3
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 3:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 3 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---  63  21   0  16
```

```
                    TEXAS TRAFFIC SIMULATION PACKAGE
                       DRIVER-VEHICLE INPUT DATA

 EXAMPLE 2: 35TH AND JEFFERSON    AUSTIN

   INBOUND TRAFFIC HEADWAY FREQUENCY DISTRIBUTION DATA FOR LEG 4:

NAME FOR INBOUND TRAFFIC
 HEADWAY FREQUENCY DISTRIBUTION --------- SNEGEXP
TOTAL HOURLY VOLUME ON LEG -------------     550
PARAMETER FOR DISTRIBUTION -------------    1.16
MEAN SPEED OF ENTERING VEHICLES, MPH ---    33.6
85-PERCENTILE SPEED, MPH ---------------    38.7
TRAFFIC MIX DATA TO FOLLOW ? -----------      NO

   OUTBOUND TRAFFIC DESTINATION DATA FOR LEG 4:

LEG NUMBER --------------------------   1   2   3   4
PERCENT OF LEG 4 INBOUND
 VEHICLES WITH DESTINATION ON LEG ---   3  84  13   0
```

APPENDIX B.

EXAMPLES OF HOW TO USE THE DATA-ENTRY PROGRAM

CONTENTS

*See pp. 20 and 21 for descriptions of Cases and Actions.

```
$ GDVDATA
GEOMETRY & DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.
DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY ?
ID=6X6

 LEG 4  LENGTH 800          |    |  LEG 1 (0,0)  |    |         LEG 1  LENGTH 800
LANE   1    2    3          |    |     |   *   |   |    |        LANE   1    2    3
MVMT  LS    S    SR         | 12| 12| 12*12 |12 |12 |        MVMT  LS    S    SR
                            | 3 | 2 | 1 * 4 | 5 | 6 |
--------------------------20`````````````|           20--------------------------
                     12  6               |            :3  12
--------------------------       6X6     |            :--------------------------
                     12  5               |            :2  12
--------------------------               |            :--------------------------
                     12  4               |            :1  12
LEG 4 *********************-------------0-------------******************** LEG 2
(270,0)              12  1:              |             4  12            (90,-12)
--------------------------               |            --------------------------
                     12  2:              |             5  12
--------------------------:              |            --------------------------
                     12  3:              |             6  12
--------------------------20             |...........20--------------------------
                            | 6 | 5 | 4 * 1 | 2 | 3 |
                            |   |   |   *   |   |   |
 LEG 3  LENGTH 800          | 12| 12| 12*12 |12 |12 |         LEG 2  LENGTH 800
LANE   1    2    3          |   |   |   *   |   |   |        LANE   1    2    3
MVMT  LS    S    SR         |   | LEG 3 (180,0) |   |        MVMT  LS    S    SR
DO YOU WANT TO USE THIS PERMANENT LIBRARY FILE (ID="6X6") ?
Y
DO YOU WANT TO COPY AND REVISE THIS FILE FROM THE PERMANENT LIBRARY ?
Y -(1)
DO YOU WANT TO SAVE THE REVISED DATA ?
Y
KEYIN FILE NAME FOR NEW/REVISED DATA:
NEW6X6 -(2)
IS FILE NAME "QSA2:[055100]NEW6X6.DAT;1" OK ? -(3)
Y -(4)
FILE NAME "QSA2:[055100]NEW6X6.DAT;1" ADDED TO USER-GROUP LIBRARY
REVISED DATA FROM FILE "QSA2:[055100.TEXAS]GDV6X6.DAT;1"
WILL BE SAVED ON FILE "QSA2:[055100]NEW6X6.DAT;1"

                                    (5)

INPUT DATA FOR GEOMETRY & DRIVER-VEHICLE PROCESSORS ARE NOW ON:
    "QSA2:[055100]NEW6X6.DAT;1"
GEOMETRY & DRIVER-VEHICLE INPUT DATA LISTING ON "QSA2:[055100]FOR030.DAT;1"
GEOMETRY AND DRIVER-VEHICLE DATA FOR TEXAS MODEL HAS BEEN DEFINED.
```

Figure B.0. Example of CASE 1, Action 1b - Choosing a permanent library file, automatically copying it, making revisions and saving the revised data on a new file for future use.

(continued)

Figure B.0. Continued.

NOTES:

(1) This response indicates that the user wants to name, save and catalog the file that holds the revised data.

(2) Name for file of revised data.

(3) Prompt to show the complete file name to the user. File naming convention will vary, depending on the type of host computer. This example is from a Digital Equipment Co., VAX.

(4) Pressing [N] [C/R] here would cause the program to reprompt for a file name for the revised data, as on the line just before (2) .

(5) Review existing data and make changes as desired.

```
$ GDVDATA
GEOMETRY & DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.
DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY ?
ID=5X5 -(1)

 LEG 4  LENGTH 800          |  LEG 1 (0,-12)   |        LEG 1  LENGTH 800
LANE   1    2    3          |   |   |   *   |  |       LANE   1    2    3
MVMT   L    S    SR         |   |   |   *   |  |       MVMT   L    S    SR
                            | 12| 12| 12*12 |12|
                            | 3 | 2 | 1 * 4 | 5|
----------------------------20``````````|      20---------------------------
                      12  5             |      :3  12
--------------------------      5X5     |      :----------------------------
                      12  4             |      :2  12
LEG 4 *********************---------0----      :----------------------------
(270,0)               12  1:        |          :1  12
----------------------------:       |-------------********************** LEG 2
                      12  2:        |           4  12               (90,-12)
----------------------------:       |           ----------------------------
                      12  3:        |           5  12
----------------------------20      |..........20---------------------------
                            | 5 | 4 * 1 | 2 | 3|
                            |   |   *   |   |  |
                            | 12| 12*12 |12 |12|
 LEG 3  LENGTH 800          |   |   *   |   |  |        LEG 2  LENGTH 800
LANE  1    2    3           |   |   *   |   |  |       LANE   1    2    3
MVMT  L    S    SR          |  LEG 3 (180,0)   |       MVMT   L    S    SR
DO YOU WANT TO USE THIS PERMANENT LIBRARY FILE (ID="5X5") ?
Y
DO YOU WANT TO COPY AND REVISE THIS FILE FROM THE PERMANENT LIBRARY ?
Y
DO YOU WANT TO SAVE THE REVISED DATA ?
N -(2)
REVISED DATA FROM FILE "QSA2:[055100.TEXAS]GDV5X5.DAT;1"
WILL NOT BE SAVED
          (3)                                                        (4)
GEOMETRY & DRIVER-VEHICLE INPUT DATA LISTING ON "QSA2:[055100]FOR030.DAT;1"
GEOMETRY AND DRIVER-VEHICLE DATA FOR TEXAS MODEL HAS BEEN DEFINED.
```

Figure B.1. Example of CASE 1, Action 1c - Choosing a permanent library file, automatically copying it, making revisions and discarding the revised data after a single use.

(continued)

Figure B.1. Continued.

NOTES:

1. The prompt is a "shortcut" for asking to use a file from the library and then being prompted for the ID.
2. This response indicates that the user only wants to use the revised data once and not save it for future use.
3. Review existing data and make revisions as desired.
4. A listing of the revised data is on this file. To see the listing, send this file to a printer or display it on the terminal.

```
$ GDVDATA
GEOMETRY & DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.
DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY ?
N
DO YOU WANT TO USE AN EXISTING DATA FILE ?
Y
KEYIN AN EXISTING DATA FILE NAME:
NEW6X6
IS EXISTING DATA FILE NAME "QSA2:[055100]NEW6X6.DAT;1" OK ?
Y
DO YOU WANT TO REVISE THE EXISTING DATA ?
N
INPUT DATA FOR GEOMETRY & DRIVER-VEHICLE PROCESSORS ARE NOW ON:
    "QSA2:[055100]NEW6X6.DAT;1"
GEOMETRY AND DRIVER-VEHICLE DATA FOR TEXAS MODEL HAS BEEN DEFINED.
```

Figure B.2. Example of CASE 2, Action 2a - Using an existing file without revision.

```
$ [GDVDATA]
GEOMETRY & DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.
DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY ?
[FILE=NEW6X6] -(1)
IS EXISTING DATA FILE NAME "QSA2:[055100]NEW6X6.DAT;1" OK ?
Y
DO YOU WANT TO REVISE THE EXISTING DATA ?
[Y]
DO YOU WANT TO SAVE THE REVISED DATA ?
[FILE= ] -(2)
IS FILE NAME "QSA2:[055100]NEW6X6.DAT;1" OK ?
[Y]
FILE NAMED TO SAVE REVISED DATA IS THE FILE THAT CONTAINS THE EXISTING DATA
DO YOU WANT TO SAVE THE REVISED DATA ON THE EXISTING DATA FILE ? -(3)
[Y] -(4)
FILE NAME "QSA2:[055100]NEW6X6.DAT;1" ADDED TO USER-GROUP LIBRARY
DATA ON FILE "QSA2:[055100]NEW6X6.DAT;1" WILL BE REVISED


INPUT DATA FOR GEOMETRY & DRIVER-VEHICLE PROCESSORS ARE NOW ON:
    "QSA2:[055100]NEW6X6.DAT;1"
GEOMETRY & DRIVER-VEHICLE INPUT DATA LISTING ON "QSA2:[055100]FOR030.DAT;1"
GEOMETRY AND DRIVER-VEHICLE DATA FOR TEXAS MODEL HAS BEEN DEFINED.
```

Figure B.3. Example of CASE 2, Action 2b - Choosing an existing file and making revisions on the existing file.

NOTES:

(1) This is a "shortcut" to indicate the desire to use an existing file and also to enter the existing file name with a single keyin.

(2) Another "shortcut" to indicate the desire to name and save the file of revised data and with the same keyin, name the file to receive the revised data. The "empty" file name forces the program to use the file name referenced previously at (1) .

(3) Message to notify user that the revisions will be made directly to the existing file. This will write the revised data over the currently existing data permanently, making it impossible to recover the data as it was before revision.

(4) Pressing [N] [C/R] here will cause the program to re-prompt for the name of the file on which to save the revised.

(5) Review existing data and make changes as desired.

```
$ [GDVDATA]
GEOMETRY & DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.
DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY ?
[N]
DO YOU WANT TO USE AN EXISTING DATA FILE ?
[N]
DO YOU WANT TO KEYIN NEW DATA ?
[Y]
NEW DATA WILL BE ENTERED BY KEYIN
DO YOU WANT TO SAVE THE NEW DATA ?
[FILE=RRDATA]
IS FILE NAME "QSA2:[055100]RRDATA.DAT;1" OK ?
[Y]
FILE NAME "QSA2:[055100]RRDATA.DAT;1" ADDED TO USER-GROUP LIBRARY
KEYED IN DATA
WILL BE SAVED ON FILE "QSA2:[055100]RRDATA.DAT;1"
                              (1)
INPUT DATA FOR GEOMETRY & DRIVER-VEHICLE PROCESSORS ARE NOW ON:
    "QSA2:[055100]RRDATA.DAT;1"
GEOMETRY & DRIVER-VEHICLE INPUT DATA LISTING ON "QSA2:[055100]FOR030.DAT;1"
GEOMETRY AND DRIVER-VEHICLE DATA FOR TEXAS MODEL HAS BEEN DEFINED.
```

Figure B.4. Example of CASE 3, Action 3a - Keyed in data saved on a new file for future use.

NOTE:

(1) Key in data in response to prompts.

```
$ [GDVDATA]
GEOMETRY & DRIVER-VEHICLE INPUT DATA FOR TEXAS MODEL MUST BE DEFINED.
DO YOU WANT TO USE A FILE FROM THE PERMANENT LIBRARY ?
[KEY] -(1)
NEW DATA WILL BE ENTERED BY KEYIN
DO YOU WANT TO SAVE THE NEW DATA ?
[N]

                 (2)

GEOMETRY & DRIVER-VEHICLE INPUT DATA LISTING ON "QSA2:[055100]FOR030.DAT;1"
GEOMETRY AND DRIVER-VEHICLE DATA FOR TEXAS MODEL HAS BEEN DEFINED.
```

Figure B.5. Example of CASE 3, Action 3b - Keying in data and discarding the data after a single use.

NOTES:

(1) This is a "shortcut" to indicate that data is to be entered by keyin.

(2) Keyin data in response to prompts.

APPENDIX C

HARD COPIES OF SCREEN DISPLAYS FOR SIMDATA

...iption of data file is displayed in ... SIMDATA

```
SIMULATION PARAMETER-OPTION DATA:
F(1) - START-UP TIME IN MINUTES. (STATISTICS NOT GATHERED)  <2.0 TO 10.0> [5.0]
F(2) - SIMULATION TIME IN MINUTES.  <10.0 TO 60.0> [FROM G&D-V REF. FILE]
F(3) - TIME INCREMENT FOR SIMULATION, "DT". (SUGGEST 1.0 FOR SIGNAL,
       0.5 FOR NON-SIGNAL)  <0.50 TO 1.00> [0.50]
F(4) - TYPE OF INTERSECTION CONTROL: <"U", "Y", "ST", "A", "P", "SE" OR "F">
       "U" - UNCONTROLLED.
       "Y" - YIELD.
       "ST" - STOP, LESS THAN ALL WAY.
       "A" - ALL-WAY STOP.
       "P" - PRETIMED SIGNAL.
       "SE" - SEMI-ACTUATED SIGNAL.
       "F" - FULL-ACTUATED SIGNAL.
F(5) - STATISTICAL SUMMARY BY TURNING MOVEMENT ?  <"YES" OR "NO"> ["YES"]
F(6) - STATISTICAL SUMMARY BY INBOUND APPROACH ?  <"YES" OR "NO"> ["YES"]
F(7) - COMPRESSED OUTPUT OF STATISTICS ?  <"YES" OR "NO"> ["NO"]
F(8) - POLLUTION/DISPLAY TAPE ?  <"YES" OR "NO"> ["NO"]


SIMULATION PARAMETER-OPTION DATA 2:
F(1) - SPEED BELOW WHICH A SPECIAL DELAY STATISTIC IS COLLECTED. <0 TO 40> [10]
F(2) - MAXIMUM CLEAR DISTANCE FOR BEING IN A QUEUE.  <4 TO 40> [30]
F(3) - CAR FOLLOWING EQUATION PARAMETER LAMBDA.  <2.300 TO 4.000> [2.800]
F(4) - CAR FOLLOWING PARAMETER MU.  <0.600 TO 1.000> [0.800]
F(5) - CAR FOLLOWING PARAMETER ALPHA.  <0 TO 10000> [ 4000]
F(6) - TIME FOR LEAD ZONE USED IN CONFLICT CHECKING.  <0.50 TO 3.00> [1.30]
F(7) - TIME FOR LAG ZONE USED IN CONFLICT CHECKING.  <0.50 TO 3.00> [.50]


LANE CONTROL DATA:
EACH FIELD - TYPE OF CONTROL FOR THE INDICATED INBOUND LANE:
 "BL" - BLOCKED LANE. LANE ENDS BEFORE THE INTERSECTION.
 "UN" - UNCONTROLLED. <ONLY IF INTER. CONTROL = "NONE", "YIELD" OR "STOP">
 "YI" - YIELD SIGN. <NOT IF INTERSECTION CONTROL = "NONE">
 "ST" - STOP SIGN. <ONLY IF INTERSECTION CONTROL = "STOP" OR "ALL-WAY">
 "SI" - SIGNAL WITHOUT LEFT OR RIGHT TURN ON RED. <SIGNALIZED INTER. ONLY>
 "LT" - SIGNAL WITH LEFT TURN ON RED. <SIGNALIZED INTERSECTION ONLY>
 "RT" - SIGNAL WITH RIGHT TURN ON RED. <SIGNALIZED INTERSECTION ONLY>


PRETIMED SIGNAL TIMING DATA (SECONDS):
F(1) - GREEN INTERVAL.  <1.0 TO 99.0, SECONDS> [30.0]
F(2) - YELLOW-CHANGE INTERVAL.  <1.0 TO 9.0, SECONDS> [3.0]
F(3) - ALL RED-CLEARANCE INTERVAL.  <0.0 TO 9.0, SECONDS> [0.0]


PRETIMED SIGNAL TIMING DATA (PERCENT OF CYCLE):
F(1) - GREEN INTERVAL.  <1 TO 99, PERCENT OF CYCLE> [30]
F(2) - YELLOW-CHANGE INTERVAL.  <1 TO 9, PERCENT OF CYCLE> [5]
F(3) - ALL RED-CLEARANCE INTERVAL.  <0 TO 9, PERCENT OF CYCLE> [0]
```

Description of data fields displayed in prompts by SIMDATA (continuation)

```
SEMI-ACTUATED SIGNAL TIMING DATA FOR UNACTUATED CONTROLLER PHASE A:
F(1) - MINIMUM GREEN INTERVAL.  <1.0 TO 99.0, SECONDS> [30.0]
F(2) - YELLOW-CHANGE INTERVAL.  <1.0 TO 9.0, SECONDS> [3.0]
F(3) - ALL RED-CLEARANCE INTERVAL.  <0.0 TO 9.0, SECONDS> [0.0]

SEMI-ACTUATED SIGNAL TIMING DATA FOR ACTUATED CONTROLLER PHASES:
F(1) - INITIAL INTERVAL. <0.0 TO 99.0>[3.0]
F(2) - VEHICLE INTERVAL.  <"DT" TO 99.0> [2.0]
F(3) - YELLOW-CHANGE INTERVAL.  <1.0 TO 9.0> [3.0]
F(4) - ALL RED-CLEARANCE INTERVAL.  <0.0 TO 9.0> [0.0]
F(5) - MAXIMUM EXTENSION. <0.0 TO 99.0>  [30.0]
F(6) - SKIP PHASE SWITCH POSITION.  <"ON" OF "OFF"> ["OFF"]
F(7) - RECALL SWITCH POSITION.  <"ON" OR "OFF"> ["OFF"]
F(8) - MINOR MOVEMENT CONTROLLER ?  <"YES" OR "NO"> ["NO"]
F(9) - DUAL LEFTS TO BE FOLLOWED BY TWO SINGLE LEFTS !  <"YES" OR "NO"> ["NO"]

FULL ACTUATED SIGNAL TIMING DATA:
F(1) - INITIAL INTERVAL.  <"DT" TO 99.0> [3.0]
F(2) - VEHICLE INTERVAL. <"DT" TO 99.0> [2.0]
F(3) - YELLOW-CHANGE INTERVAL.  <1.0 TO 9.0> [3.0]
F(4) - ALL RED-CLEARANCE INTERVAL.  <0.0 TO 9.0> [0.0]
F(5) - MAXIMUM EXTENSION. <0.0 TO 99.0>  [30.0]
F(6) - SKIP PHASE SWITCH POSITION.  <"ON" OF "OFF"> ["OFF"]
F(7) - RECALL SWITCH POSITION.  <"ON" OR "OFF"> ["OFF"]
F(8) - MINOR MOVEMENT CONTROLLER ?  <"YES" OR "NO"> ["NO"]
F(9) - DUAL LEFTS TO BE FOLLOWED BY TWO SINGLE LEFTS ?  <"YES" OR "NO"> ["NO"]

GREEN INTERVAL SEQUENCE DATA:
EACH FIELD -GREEN SIGNAL INDICATION FOR THE CONTROLLER PHASE AND LANE:
"C" - CIRCULAR GREEN. ALL PERMITTED MOVEMENTS MAY MOVE.
"L" - LEFT GREEN ARROW, PROTECTED LEFT TURN.
"S" - STRAIGHT GREEN ARROW.   "R" - RIGHT GREEN ARROW.
*** ANY TWO OF THE ABOVE MAY BE USED TOGETHER, EXCEPT "LS" OR "LR".
"UN" - UNSIGNALIZED, SIGN CONTROL OR BLOCKED LANE, PER LANE CONTROL DATA.
BLANK - IMPLIED RED.

DATA FOR DETECTORS:
F(1) - LEG ON WHICH DETECTOR IS LOCATED.  <1 TO NUMBER OF LEGS> [1]
F(2) - FIRST INBOUND LANE COVERED BY DETECTOR. [1]
F(3) - NUMBER OF INBOUND LANES COVERED BY DETECTOR.  [1]
F(4) - SPACING BETWEEN DETECTOR AND NOMINAL LANE TERMINAL.  <-1000 TO 100> [0]
F(5) - DETECTOR LENGTH.  <1 TO 100> [60]
F(6)   TYPE OF DETECTOR.<"PU" (PULSE),"PR" (PRESENCE) OR "IN" (INACTIVE)>["PR
```

Description of data fields displayed in prompts by SIMDATA (continuation)

```
DETECTOR CONNECTION DATA:
F(1) - DETECTOR CONNECTION FOR THE CONTROLLER PHASE.  <"AND" OR "OR"> ["OR"]
F(2) AND GREATER - THE NUMBER OF A DETECTOR CONNECTED TO THE CONTROLLER PHASE.
                   NEGATIVE INDICATES A "NOT" CONNECTION. (USE "0" TO INDICATE
                   THAT NO DETECTOR IS CONNECTED) <+/- NUMBER OF DETECTORS (1)>

CONTROLLER PHASE "CLEAR TO" DATA:
EACH FIELD - THE LETTER OF A CONTROLLER PHASE THAT CAN BE "CLEARED TO" DIRECT.
             FROM THE INDICATED CONTROLLER PHASE. <PHASE LETTER, "A" THRU "Z"
```

Data edit requests for use in SIMDATA

```
PHASE DATA EDIT REQUEST: P[(i[,j])]=[n*]fij[,...]
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITTED.
i - THE LETTER OF THE CONTROLLER PHASE FOR WHICH DATA IS TO BE EDITED. [A]
j - THE NUMBER OF THE FIRST FIELD TO BE EDITED.<INTEGER, 1 TO NO. OF FIELDS>[1]
fij - DATA TO REPLACE DATA THAT IS CURRENTLY IN THE FIRST FIELD TO BE EDITED.
      ADDITIONAL REPLACEMENT DATA FIELDS MAY FOLLOW fij, SEPARATED BY COMMAS.
      USE MULTIPLE COMMAS TO SKIP FIELDS.
n - DUPLICATION FACTOR.  USE FOR n SEQUENTIAL IDENTICAL FIELDS.

DETECTOR DATA EDIT REQUEST: D[(i[,j])]=[n*]fij[,...]
   ITEMS BETWEEN BRACKETS ("[...]") ARE OPTIONAL AND MAY BE OMITTED.
i - THE NUMBER OF THE DETECTOR FOR WHICH DATA IS TO BE EDITED. [1]
j - THE NUMBER OF THE FIRST FIELD TO BE EDITED.<INTEGER, 1 TO NO. OF FIELDS>[1]
fij - DATA TO REPLACE DATA THAT IS CURRENTLY IN THE FIRST FIELD TO BE EDITED.
      ADDITIONAL REPLACEMENT DATA FIELDS MAY FOLLOW fij, SEPARATED BY COMMAS.
      USE MULTIPLE COMMAS TO SKIP FIELDS.
n - DUPLICATION FACTOR.  USE FOR n SEQUENTIAL IDENTICAL FIELDS.
```