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# ANALYSIS OF SINGLE-VEHICLE RUN-OFF-THE-ROAD ACCIDENTS ON RURAL FOUR LANE OR MORE DIVIDED HIGHWAYS IN TEXAS

by

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Texas Department of Transportation

by the

DEPARTMENT OF CIVIL ENGINEERING
TEXAS TECH UNIVERSITY

MAY 1992

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## **SUMMARY**

The purpose of this study was to identify the single-vehicle run-off-the-road (SVROR) accident mitigation techniques that are currently in use in Texas, and to assist the Texas Department of Transportation (TxDOT) highway engineer in identifying areas that may be susceptible to SVROR accidents. Using the accident records from the TxDOT from 1983 to 1990 to identify factors common to rural, four lane or more divided highway SVROR accidents, a prediction model equation was developed. The prediction modelling was useful in identifying the primary factors involved in rural, four lane or more divided highway SVROR accidents.

A method of identifying locations susceptible to SVROR accidents was developed. Recommendations for selecting and using the different types of shoulder treatments with respect to different pavement surfaces and for the different climates were also made.

## IMPLEMENTATION STATEMENT

The evaluation of highway control sections for potential single-vehicle run-off-the-road (SVROR) accident locations may be performed using the tables and graphs located in the appendices of this report. If the data plots below the shaded region of the graph, there is likely no significant SVROR problem at that location. If the data plots in the shaded region, the area is experiencing a sufficiently high number of accidents to warrant concern and possibly the installation of some type of mitigation treatment. If the data plots above the shaded region, a problem with SVROR accidents probably exists and some type of mitigation technique is likely warranted. Recommended types of shoulder treatment mitigation for use on different shoulder pavement surfaces can be found in the recommendations section of the report.

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#### 1. INTRODUCTION

It seems that from the earliest awareness of the problem of single-vehicle run-off-the-road (SVROR) accidents, highway engineers have directed their attention toward doing two things to prevent or mitigate the SVROR accident: (1) make drivers aware of the imminent departure of their vehicle from the paved roadway and (2) reduce the danger to the vehicle and its occupants if it should actually leave the paved surface of the highway. In order to assess the state of the practice in SVROR accident mitigation, a thorough review of the technical literature was accomplished.

The earliest reported use of textured shoulders to alert drivers to the imminent departure from the paved roadway and prevent SVROR accidents was by the New Jersey Highway Authority in 1955 (Public Works, 1959). A strip of corrugated concrete was installed along the right edge of the Garden State Parkway which was shown to be successful in reducing SVROR accidents. However, despite their reported success in reducing SVROR accidents, the corrugations were covered when the parkway was resurfaced in 1965 and, apparently, were never reconstructed.

In a presentation made to the Automotive Engineering Congress in 1964 (sponsored by the Society of Automotive Engineers), K. A. Stonex was the first to publish comprehensive statistics on the extent of the SVROR problem (Stonex, 1964). Stonex noted that between 1952 and 1962, 42 percent of all highway accident fatalities were the result of single-vehicle accidents and 81 percent of these single-vehicle accidents were categorized as "noncollision" accidents. Although Stonex's presentation was mostly directed toward improvements in vehicle safety design, he did point out the need for changes in highway cross-

section geometry and the removal of obstacles adjacent to the traveled way in order to reduce the probability of injury or death to the vehicle's occupants.

The Illinois Department of Transportation (DOT) experimented with Portland cement concrete shoulders during 1965-67. Experimental PCC shoulders with 4- to 6-ft wide groups of 1-in. deep corrugations at 60 to 100 ft intervals were constructed and observed. After a 5-year study period, Illinois DOT concluded that the effectiveness of the "rumble strips" did not deteriorate with time and recommended that such strips would be "useful as a countermeasure for single-vehicle ROR accidents." Unfortunately, there is nothing in the technical literature that reported if Illinois actually began widely using "rumble strips" and their effectiveness in reducing the number or severity of SVROR accidents.

At the same time Illinois began to experiment with textured shoulder treatments, California also began to use textured shoulders. In 1965, the California Department of Transportation (CALTRANS) and the Federal Highway Administration (FHWA) co-sponsored a comprehensive study dealing with the psychophysiological factors that affect the SVROR problem and the effect of three different types of textured shoulder treatments on the psychophysiological factors (O'Hanlon and Kelley, 1974). The three types of shoulder treatments considered in the study were: (1) parallel raised strips of rock aggregate set in a bituminous binder, known as the "rib treatment;" (2) parallel arrays of raised circular pavement markers, known as the "marker treatment;" and (3) parallel slots cut into the asphalt pavement shoulder surface, known as the "groove treatment." This study showed the following significant findings:

- 1. Drowsiness played a major role in SVROR accidents.
- 2. Drowsy drivers tended to drift off the road to the right more often than to the left.

- 3. The typical departure angle when drowsy drivers drifted off the road was approximately 3 degrees.
- 4. Of the three shoulder treatments used in the study, the raised shoulder treatment ("rib treatment") produced the greatest driver arousal.
- 5. Even the most effective shoulder treatment for arousing the drowsy driver only produced an arousal effect that lasted but approximately 5 minutes.
- 6. Controlled access freeways produced the greatest fatigue while noncontrolled access, 2-lane curvilinear roadways resulted in less driver fatigue.
- 7. Any shoulder treatments should be placed as close to the right driving lane as possible.
- 8. Shoulder treatments should be applied for distances of 10 to 20 miles over sections with a high incidence of SVROR accidents.

Finally, Huelke and Gikas (1967) showed that clearing the roadside of obstacles, improved roadside embankment slopes, and better ditch designs reduced the number of SVROR accidents even if they did not reduce the number of departures from the roadway. Their studies showed that in 80 percent of the accidents studied, the vehicle struck an object within 27 ft of the edge of the roadway after departing the right traveled lane.

The Pennsylvania Department of Transportation (PENNDOT) installed corrugated rumble strips in several locations in 1971 and monitored the success of the installations in reducing SVROR accidents for a 10-year period. Because the raised corrugations were damaged and marred during snow removal operations as well as collected debris at other times, the effectiveness of the strips to arouse drivers was questioned and the strips were removed in 1981. However, the strips were reinstalled just one year later and apparently are still in operation but the extent of their use, i.e., widespread or localized, is not available from the technical literature.

Other state transportation agencies continued to experiment with shoulder treatments. The Idaho Transportation Department, Division of Highways, used randomly spaced, intermittent full width strips of chip seal on an 8-mile long section of I-15 in 1972 and reported that a "marked reduction" in SVROR accidents was noted following the placement of the chip seals. Arizona followed in 1973 with a study of the effectiveness of several shoulder treatments installed on I-8 and I-10. The Arizona study showed that shoulder "grooving" was the most effective treatment, experiencing reductions of up to 80 percent in the number of SVROR accidents along the grooved sections.

Thirty years after the first shoulder treatment effort (Garden State Parkway in New Jersey), Ligon et al. (1985) analyzed data from 10 sites in several states and reported that treated shoulder sections showed a significant decrease in SVROR accidents (while untreated "control" sections actually showed a slight increase in accidents over the same study period). Ligon et al. reported two other significant findings: (1) when the accident data was normalized by ADT data, the sections revealed similar accident reduction results, and (2) little difference, statistically, was found between narrow and wide, and continuously and intermittently treated sections. The significance of the work of Ligon et al. is that some treatment is better than no treatment.

Although edgelines painted along the outside edge of the outside driving lane had been found to increase accident safety from the standpoint of assisting the driver to locate the edge of the roadway, particularly at night, apparently the application of wide edgelines to mitigation of SVROR accidents was not studied until 1990 (Lum and Hughes). Although the Lum and Hughes study recommended using wide edgelines as an "appropriate safety improvement," other studies have not considered painted edgelines to be significant in preventing SVROR accidents. A painted edgeline will certainly not arouse a

drowsy driver as the vehicle passes over the edgeline in departing the roadway. Hall (1987), in an earlier report, had concluded that edgelines did not provide an effective countermeasure to SVROR accidents. Hall's report, however, was challenged by Ward, who cited six additional reports (Moses, 1986; Ohio DOT, 1986, USDOT, 1985; Beke, 1985; Kelly, 1985, and Nedas, 1985) where edgelines had been reported as being beneficial to driver safety through a reduction of the number of accidents, injuries, and fatalities occurring in SVROR accidents.

Thus, it is apparent that the SVROR accident problem has been one of concern for more than 35 years. Numerous attempts to reduce or mitigate the SVROR accident problem have been made and studied. Although the evidence contained in the technical literature is that shoulder treatments of some sort are more effective than no treatment, the evidence is inconclusive as to *which* shoulder treatment is *most* effective. In addition, the technical literature does not produce a method whereby it can be determined if a SVROR problem exists; i.e., at what point should special efforts be taken to mitigate SVROR accidents.

#### 2. PROBLEM STATEMENT

### 2.1. DISCUSSION OF THE PROBLEM

The problem of SVROR accidents has been formally studied to some extent at the Federal level and numerous ideas have been tried out by several state highway agencies to prevent SVROR accidents. These ideas include raised treatments, depressed treatments, and asphalt surface treatments for shoulders. However, the problem is still one of serious extent. The Odessa District, for example, experienced ten SVROR fatalities during 1989 in an approximately 20-

mile length of I-10 despite efforts to provide road surface features designed to alert the inattentive driver or arouse the drowsy or chemically-affected driver. Although jiggle bars, pavement grooves and ridges, and surface treatments have been used in numerous locations throughout Texas, there appears to be no study available that provides guidance with respect to how to determine locations requiring special attention or treatment, the effectiveness of one method with respect to others, and no method of evaluating the success of treated sections after the treatment. Additionally, little formal guidance is available regarding cost and/or difficulty of maintaining treated sections.

## 2.2. STUDY OBJECTIVES

The two principal objectives of this study were: (1) to determine the scope or extent of the SVROR problem in Texas and (2) to evaluate the mitigation solutions being tried in Texas. The study was limited to rural 4-lane (or more) divided highways. Specifically, the study had the following four subobjectives:

- 1. To develop a method or procedure for assessing or evaluating candidate SVROR mitigation sections.
- 2. To determine the extent or scope of the SVROR accident prevention efforts in Texas.
- 3. To evaluate the success rate of SVROR mitigation techniques, methods, or procedures that have been employed in Texas.
- 4. To provide recommendations and guidelines for identifying rural 4-lane divided highway sections warranting SVROR mitigation attention and recommendations for which type or types of SVROR mitigation techniques should be employed.

## 3. PERIOD STUDIED

At the initiation of the study, it was known that some mitigation methods or techniques had been installed prior to the start of the study. Information on the technique locations (number, type of technique, and date of installation) was not known at the study initiation but it was believed that the majority of the installations had been installed within the three years preceding the start of the study. The method to be employed to evaluate the degree of success of a mitigation technique was to compare the "before installation" accident rates to the "after installation" accident rates. Thus, the 4-year period immediately preceding the study (1987-1990) was assumed to be sufficient to capture virtually all of the mitigation installations. It was also believed that at least a 3-year period preceding the year of installation was necessary to provide sufficient data to properly evaluate the success of any mitigation installation. Thus, accident data for the 8-year period 1983-1990 was used in the analysis accomplished in this study. At the outset it was recognized that two significant events had occurred that might influence the data: passage of the mandatory seat belt use law in 1985 and increasing the lawful speed limit on rural interstate highways from 55 mph to 65 mph in 1987.

## 4. DATA

The data that was used in this study was taken from the TxDOT accident record files for the years 1983-1990. The data was sorted to obtain the records for SVROR accidents that occurred on rural highways as defined by the Federal Aid Designation on the accident tapes. Since the study was limited to only divided, multiple lane, rural highways, the data was sorted to eliminate all but

Primary (rural), Secondary, (rural), and Interstate (rural) routes; data listed in the accident tapes by codes "00" [non-Federal Aid (rural)], "03" (not listed), and "blank" (No Travelway) were not considered in the study.

The records included information about (1) where the accidents occurred, (2) natural light conditions, (3) weather and road conditions, (4) time of accident, (5) type of highway on which the accident occurred, (6) roadway description (e.g., curved, steep grade, lighted/unlighted, number of lanes, bridges, etc.), (7) contributing factors, (8) injuries, (9) fatalities, and (10) average daily traffic (ADT) counts. The data was sorted into two primary categories: (1) interstate route accidents and (2) non-interstate route accidents. These two subgroups were created for each year with the accidents sorted by county and control section. The control section is a TxDOT reference to locate a specific section of highway alignment. The accidents, injuries, and fatalities were subsequently divided by the ADT (in terms of per thousand vehicles) for each control section to normalize the data. (Employing the ADT data in terms of per thousand vehicles produced ratio values in the form of whole numbers with decimal fractions instead of only decimal fractions to 4 or 5 places.) The normalization of the data by the ADT was necessary to evaluate the accident data on a common basis on each length or section of highway. The data for some of the accident factors was normalized in the same manner after a regression analysis was performed using the JMP statistical analysis software package.

The reader should note that control sections are not all the same length. However, the analysis was accomplished on the basis of control sections because it was believed that future analysis of accident rates or patterns would be more meaningful as well as more convenient if accident data over a specific control section were analyzed over a specific period rather than over some other length unit, a mile, for example.

The JMP program is a statistical computer package from the well-known SAS Institute, Inc. The program was used to perform multivariable regressions and correlations on the sorted accident record data. The sorted accident record information was used to (1) determine the most statistically significant variables in the SVROR accidents and (2) create an equation using the most significant variables to predict the occurrence of SVROR accidents.

## 5. PREDICTION MODEL

Several series of preliminary multivariable regressions and correlations were performed on the approximately 50,000 SVROR accidents occurring over the 1983-1990 study period to determine the variables most likely to correspond to SVROR accidents and to further determine which of these variables were statistically the most important. The preliminary studies considered accidents, injuries, and fatalities as separate dependent variables. As a result of these preliminary studies, the following six factors were determined to be the most important independent variables: (1) clear days, (2) straight roads, (3) flat roads, (4) daylight hours, (5) roads with no physical defects, and (6) dry roads.

Correlation coefficients are statistical measurements of how well prediction formulas represent or "fit" the data used to develop the equations. The measurement most commonly used to evaluate the "accuracy" of prediction equations is the "r-squared" correlation coefficient. An r<sup>2</sup> value of 1.00 means that the equation exactly represents the data and an r<sup>2</sup> value of 0.00 means that there is no correlation at all. Thus, r<sup>2</sup> values approaching 1.00 mean that the prediction equation is very good in predicting the value of the dependent variable

if the independent variables represented in the equation fall within the bounds of the data used to develop the equation.

The equations developed through the multivariant regression analysis of the data had excellent correlation coefficients for predicting the total number of accidents and injuries resulting from these accidents using the 8 years of accident data. These equations are presented in Appendix C. The r<sup>2</sup> values for the accident and injury prediction equations were 0.99 for each equation. The r<sup>2</sup> value for the fatality equation was much less--0.76--which was not surprising considering the much higher variability in fatality data. All equations, tables of variables, and other regression results are included in Appendix C.

An important step in evaluating a regression-developed prediction equation is that of testing the equation to see if it reliably reproduces the data used to develop it. Several series of such tests were performed on each equation and each series showed the equations to be very accurate in reproducing the number accidents, injuries, and fatalities that had been recorded during the 8-year study period. A simple method of visually showing the degree of correlation between the predicted value and the measured value is to compare the two numbers graphically. The closer the point resulting from plotting the predicted number as a function of the recorded value falls near a 45° line passing through the origin (using the same scale on both axes), the better is the correlation. Such a test of the prediction equations was made and, as implied by the high r² values, the graphical comparisons showed the equations to be very good. These graphs are also contained in Appendix C.

A second important step in evaluating a regression-developed prediction equation is to test the equation with data not included in the data set used to develop the equation. However, it is important that the test be conducted with data that falls within the bounds of the data set used in creating the prediction

model. It was at this point that it was realized that the regression equations, although able to accurately provide predicted numbers of accidents, injuries, and fatalities over the 8-year period used in the study, were impractical for predicting the future. The reason that they would not be successful in predicting future numbers of accidents, injuries, or fatalities is that the input values for the independent variables (clear days, straight roads, etc.) are unknown. Stated differently, if the number of clear day accidents, straight road accidents, flat grade accidents, daylight hour accidents, dry road accidents, and accidents on roads with no physical defects is known, which are the input values required by the prediction equations, then the number of accidents is already known and there is no need for a prediction equation.

It is realized that these prediction equations can be used to assess the reliability of the latest data, i.e., using the past year's accident variable data with the prediction equation to compare the prediction values to the recorded values. The value of performing this operation is to see if the most recent recorded data appreciably deviates from the long-term expectations. Another way of stating this type of assessment is to compare what happened to what should have happened on the average. If this comparison shows the most recent data to appreciably deviate from the historical records, then something may have happened to influence the most recent data. This sort of a comparison appeared to have merit so a series of regressions were performed on selected sections of highway by type of highway. (In some instances, the quantity of data was so limited that the regressions were accomplished on the entire length of highway in a given county instead of on the shorter length of a specific control section.)

Representative regression equations developed from individual control section or county-length accident data are also reported in Appendix C. These equations were less accurate than the equations developed from the much larger

data base provided by the state-wide accident data. Correlations between the predicted values and the recorded values were much lower (poorer correlation). The reason for the poorer correlations was the increased variability in the data. An extreme example illustrates this problem: a less populated western county may experience only two to four fatalities per year attributed to SVROR accidents. A single accident claiming six lives can sufficiently distort the prediction equation that it might never provide very accurate prediction values. Thus, it was concluded that attempts to develop an equation that can succinctly provide a means of measuring the SVROR problem severity was probably impractical for most applications and another, simpler method should be sought.

## 6. PROBLEM INDICATOR

Realizing that whatever evaluative method results from this study is most likely to be used by engineers at the District or Resident level, the goal was to produce something that could be employed easily--either in an algebraic type equation (like the regression equations) or in graphical form. If the final method to be recommended was to be graphical in nature, then data used to employ the graph had to be easily obtained and easily manipulated (i.e., simple calculations or ratios). It was also recognized that whatever form the method took that it would have to operate state-wide on the same plane. Thus, the following considerations were applied:

1. Accident data had to be normalized in some form so that common comparisons could be made.

- Accident data or accident rates had to be locally compared to avoid the influence of exceptionally small or low accident totals or, conversely, large or high accident totals.
- 3. Despite the requirement to make comparisons "locally," there existed at the same time a need to make a statewide comparison to assess the problem globally.

Consequently, the following method was developed to assess the SVROR problem. The result is a graphical comparison of the accident data and is termed the "Problem Indicator." Because of the difference in controlled access between interstate routes and non-interstate routes, separate indicator data was developed for each type of route.

- The first step in developing the Problem Indicator (abbreviated as PI) is to develop a statewide mean of normalized accident, injury, and fatality data.
   Specific instructions for doing this are contained in Appendix D.
- 2. The second step is to calculate local normalized accident, injury, and fatality data. This can be done on a basis of a single control section, multiple consecutive control sections, or a county-length-of-highway basis (but each year's values must be calculated in the same manner).
- 3. The third step is to unitize the data on the basis of the statewide mean, i.e., produce a nondimensional number between 0 and 1. The unitized data for each year is then plotted on a graph where the statewide mean and the statewide mean plus one standard deviation are also plotted.
- 4. The final step is to evaluate the graphical information. Based on guidance provided by a designated unit within TxDOT, each District or Residency can assess the degree of the SVROR problem by control section, several continuous control sections, or even on a county-by-county basis.

As an example of employing the PI method of evaluation, Fig. D.1 in Appendix D, shows the total number of accidents occurring in comparable length control sections in the Texas counties of Montgomery, Pecos, and Sutton. Simply comparing the gross accident data suggests that Montgomery County may have SVROR problems and Pecos and Sutton Counties may not have problems. After normalizing the data, as shown in Fig. D.2 (Appendix D), the plotted data suggests that perhaps Montgomery does not have SVROR problems since the Montgomery County normalized data is approximately that of the statewide SVROR data. The data in Fig. D.2 also suggests that Pecos and Sutton might have SVROR problems since the normalized data for each of those counties is significantly higher than the statewide data.

Two other comments are pertinent to Fig. D.2 and its evaluation. Although Montgomery County data plots around the statewide mean, the trend in the Montgomery County data is an increasing one over the 8-year period of the study. Thus, although Montgomery County may not be experiencing SVROR problems presently, the trend suggests that the degree of severity of the problem is increasing and that steps may be necessary in the near future to mitigate the problem. The second comment concerns the 1990 accident data for Pecos and Sutton Counties. The control sections used in this graph each received some form of shoulder treatment during late 1989 or early 1990. The 1990 normalized data shows a significant reduction in the SVROR accident data, suggesting that the shoulder treatments were successfully counteracting the SVROR problems that had previously been occurring in those control sections.

Thus, it appears that the PI method of analysis can provide a simple and straightforward method of evaluating the degree of severity of the SVROR problem. Employing the step-by-step procedure included in Appendix D a District or Resident engineering office can quickly evaluate the degree of the SVROR

problem on highway sections in its area or evaluate the degree of success a certain SVROR mitigation effort has experienced in reducing the SVROR problem.

#### 7. SHOULDER TREATMENT SURVEY

The first task undertaken in this study was to survey all of the TxDOT districts to determine the extent and type of shoulder treatment methods being employed in Texas to prevent SVROR accidents. The districts that reported using shoulder treatments were subsequently visited to observe and inspect the treatments and, in some cases, the installation of shoulder treatments, in order to evaluate the techniques firsthand. The response from the districts was quite helpful to the objectives of the study. At the outset of the study, it was expected that some shoulder treatments would be found that had been installed as early as 1985 to 1987. Thus, the subsequent influence of the treatment method could be evaluated through before and after accident statistics. But the treatment survey revealed that the oldest shoulder treatment was installed in 1988 and it was replaced with a different scheme in 1989. Other shoulder treatments reported to have been installed or planned to be installed within a year included the following locations: near Beaumont on I-10 and US-181, near Marshall on US-59, Sutton County on I-10, Pecos County on I-10, Callahan County on I-20, and along the entire length of I-27 in the Amarillo and Lubbock TxDOT Districts. Information provided by the districts about locations of SVROR accidents was useful in the beginning of the study in searching for problem areas.

## 7.1 SHOULDER TREATMENTS

Eight types of shoulder treatments were reported in the survey. A description of each treatment employed is reported below.

- 1. Jiggle Bars
- 2. Rumble Strips
- 3. Traffic Buttons
- 4. Indented Strips
- 5. Raised Asphaltic Strips
- 6. Concrete Corrugated Strips
- 7. Grooved Asphaltic Pavements
- 8. Coarse Aggregate Treatments
- 7.1.1. <u>Jiggle Bars</u>. Jiggle bars are 4-in. or 6-in. square ceramic tiles covered with plastic reflectors. They are closely spaced in a straight line to simulate a discontinuous "bar" extending across the width of the shoulder (Fig. E.1).
- 7.1.2. <u>Rumble Strips</u>. "Rumble strips" are so-named because of the "rumbling" sound created as a vehicle passes over them. As employed in SVROR shoulder treatments, the strips were made of fiberglass strips 12 in. long by 3 in. wide and were produced by Carsonite, Inc. (Fig. E.2).
- 7.1.3. <u>Traffic Buttons</u>. Traffic buttons are 4-in. diameter circular ceramic tiles covered with reflectorized paint (Fig. E.3).
- 7.1.4. <u>Indented Strips</u>. Constructed as continuous indentations 3/4 to 1 in. deep and 3 to 4 ft wide, indented strips were typically placed at 8-in. intervals in asphaltic concrete shoulders (Fig. E.7). The indentations are made by pipes or rods welded to the center of one steel drum on a smooth-wheeled roller. The closely spaced indentations make a loud "buzzing" noise as the vehicle's tires

contact the indentations. Fig. E-8 shows the roller used to make the indented strips near Baird in Callahan County on I-20.

- 7.1.5. <u>Raised Asphaltic Strips</u>. This treatment technique consists of raised strips of hot mix asphalt, usually placed and compacted by hand but sometimes compacted with a small smooth-wheeled roller, sometimes constructed using a template, to form a continuous strip across the shoulder. Fig. E.9 shows the placement of raised asphaltic strips near Beaumont, Texas on I-10.
- 7.1.6. Concrete Corrugated Panels. Constructed in concrete shoulders, all but one of the installations observed extended the full width of the shoulder (Figs. E.10 and E.11). The width of the corrugations was observed to vary from 1 to 6 ft and the distance from corrugation peak to corrugation peak varied from 3 to 12 in. Variations in the peak spacing corrugation depth have different effects on the level of sound and degree of vibration felt by the driver when the vehicle encounters the corrugations.
- 7.1.7. <u>Grooved Pavements</u>. "Grooved" shoulder pavements are constructed using a rotomill to produce an indentation approximately 1/2 to 1 in. deep on approximately 4- to 10-ft centers perpendicular to the edgeline (Fig. E-13).
- 7.1.8. <u>Coarse Aggregate Treatment</u>. This technique employs large aggregate in the surface treatment course applied to the shoulder pavement to create a rough surface which produces a different sound than the driving surface (Fig. E.14).

## 7.2. CONSTRUCTION METHODS

Through individual and group interviews with construction and maintenance engineers, a number of construction practices were presented and discussed.

The collective experiences have been consolidated and are presented by the type of shoulder treatment.

- 7.2.1. <u>Jiggle Bars</u>. Experience indicates that jiggle bars should be installed with a bituminous adhesive rather than epoxy. It has been found through experience that jiggle bar and traffic button tiles applied with epoxy adhere to the pavement surface neither as well nor as long as those applied with bituminous adhesives and soon become loosened and detached. When placed on the outside shoulder, the jiggle bar should be 86 in. in length (using eleven 6-in. square tiles spaced 2 in. apart). When placed on the inside shoulder, jiggle bars should not be less than 38 in. in length. Either placement should be oriented perpendicular to the edgeline. These bars have typically been placed at 40-ft to 100-ft intervals on the shoulders.
- 7.2.2. <u>Rumble Strips</u>. "Rumble strips" are installed in the same manner and spacing as jiggle bars. Experience has shown that the 3-in. x 12-in. fiberglass tiles manufactured by Carsonite, Inc., do not successfully remain installed regardless of the method of attaching the tiles to the pavement. Therefore, it is recommended that this product not be used to form "rumble strips."
- 7.2.3. <u>Traffic Buttons</u>. These devices should be installed in the same manner as jiggle bars; i.e., use bituminous adhesive rather than an epoxy. As with jiggle bars, 4-in. diameter traffic buttons should be spaced 6 in. on center and should be approximately 7 ft in total length on the outside shoulder and approximately 3 ft in total length when placed on the inside shoulder. Either placement may be oriented in one of two ways: perpendicular to the edgeline or at a 45-degree angle to the roadway alignment and placed in a simulated bar pattern with spacing similar to that employed for jiggle bars and rumble strips (Fig. E.4). A second method of employing traffic buttons (or jiggle bars) is to

install them parallel to or just outside the edgeline at 5-ft intervals (Figs. E.5 and E.6)

- 7.2.4. <u>Indented Strips</u>. The method of construction is described above; i.e., indentations are made in freshly placed HMAC by rods or bars welded to one of the wheels of a smooth-wheeled roller. The indentations, placed at 8-in. intervals perpendicular to the edgeline, are typically 3 to 4 ft long. The indentations typically begin between 1 to 2 ft from the edgeline.
- 7.2.5. Raised Asphaltic Strips. Early attempts at constructing raised asphaltic strips proved to be time consuming and demonstrated little longevity when constructed "free hand," i.e., placing HMAC by hand in strips and compacting by hand. Later attempts, which employed templates to ensure proper width, length, and alignment of the strips and which were compacted using small (e.g., 2.5-ton) smooth-wheeled rollers, have been found to be considerably more successful by the Beaumont district. The Beaumont Design typically employed a "group" of three strips approximately 7 ft in length perpendicular to the edgeline over a 5-ft interval.
- 7.2.6. Corrugated Concrete Panels. Constructed by pressing a corrugated mold or template into freshly screeded concrete, the design of the corrugations must consider the type and speed of the traffic expected to use the highway. Four 1-in. indentations over a 12-in. width have not proven to be very successful on I-27. Four corrugations over a 4-ft width were demonstrated to successfully produce a loud "buzzing" noise with noticeable vibration when encountered on I-10 near Beaumont at 55 mph, but the noise was significantly reduced and the vibration virtually unnoticeable at 70 mph. There does not appear to be any justification (e.g., drainage, debris collection considerations) for constructing the corrugations over the full width of the shoulder.

- 7.2.7. Grooved Pavements. This technique is constructed by using a rotomill to cut a wide groove in the shoulder pavement perpendicular to the highway alignment. This is a post-construction technique and produces 1/2- to 1-in. deep "grooves" in the shoulder equal to the width of the rotomill blades. Current installations have employed "groove" spacings of 4 to 10 ft. The closer spaced "grooves" have produced more noticeable noise and vibration.
- 7.2.8. Coarse Aggregate Treatment. This technique can be either a newor a post-construction method. The objective is to use the coarsest aggregate
  possible in order to produce a noticeable change in driving noise and vibration
  when the vehicle leaves the driving lane and enters the treated shoulder. An
  advantage of this method is that it can provide a maintenance improvement to
  older pavements that might need a seal coat while at the same time provide
  SVROR mitigation. Experience, however, has shown this method to be not as
  effective as some of the other SVROR mitigation methods.

With the exception of indented strips, continuous edgeline traffic buttons, and coarse aggregate surface treatments, the spacing between individual bars, strips, or groups of bars, strips, or corrugations has been determined by trial and error. If departure angle data in Ligon et al. (1985) is used, the spacing of individual treatment installations can be calculated as a function of length of the treatment (how far across the shoulder the installation extends) and the number of impacts desired for the vehicle to make with the installation. Using standard design axle widths for trucks and passenger vehicles (AASHTO, 1991) and the typical maximum value for the angle of departure from the driving lane, a design aid such as Fig. D.5, Appendix D, can be developed. In developing Fig. D.5, an "impact" was defined to occur when all of the tires on one side of the vehicle encountered the treatment installation. For example, the typical passenger car has two tires on each side. If only one tire were to encounter a treatment

installation, a drowsy driver might not react to a single "bump." However, if both tires encountered the treatment, the driver would experience a quick "bumpbump" and would be more likely to be aroused; if tires from both sides of the vehicle were to encounter the treatment installation prior to leaving the paved shoulder, the driver would experience a "bump-bump . . . bump-bump" noise and vibration which should distinguish the noise and vibration as not being normal and would be even more likely to arouse the driver than if only two tires encountered the installation. Thus, Fig. D.5 assumes two impacts (all tires on both sides of the vehicles encounter the installation) as the minimum design condition. Therefore, if the designer wanted each departing vehicle to experience at least four impacts before leaving the paved shoulder, and the length of the installation was to be 60 in., for example, the maximum spacing of the treatment installation would be approximately 30 ft. If a shorter length of installation was to be considered, say 36 in., then the spacing to achieve at least four impacts would be reduced to approximately 16 ft.

In designing and constructing a shoulder treatment, consideration must also be given to shoulder use by cyclists. The American Association of State Highway and Transportation Officials (AASHTO) has published guidelines for accommodating bicycles (AASHTO, 1991). AASHTO recommends that wide shoulders be used for accommodating bicycles in rural areas, and that the shoulders should have smooth paved surfaces and be well maintained. Pavement edgelines are to supplement surface texture in delineating the shoulder from the motor vehicle lanes. Shoulder widths should be a minimum of 4 ft when accommodating bicycle travel; and if motor vehicle speeds exceed 35 mph, or if the percentage of trucks, buses, and recreational vehicles is high, or if static obstructions exist at the right side, then additional width is desirable. Consideration of bicycles should be given when planning to implement shoulder

treatments, because the probability of the cyclists trying to avoid the shoulder treatment without adequate space on the shoulder places them in the motor vehicle lanes. This consideration probably limits the placement of most shoulder treatments on the inner 6 ft of major rural, divided, multi-lane highways.

## 7.3. COSTS

An attempt was made to assign construction and/or maintenance costs to each of the shoulder treatment methods that had been employed in Texas. However, it was found that costs for the various techniques or treatment methods were generally not available. Most shoulder treatments were included as subsidiary items in overall or more general construction/maintenance contracts. Material costs for jiggle bar tiles and traffic buttons are readily available, but invariably their cost of installation was buried in the overall bid for the construction or maintenance project. The price of an individual jiggle bar tile was found to vary from \$6.00 to \$7.00 and the price of an individual traffic button tile was between \$1.00 and \$1.10 (scope/scale of project affected quantities which, in turn, influenced prices).

## 7.4. MAINTENANCE

In choosing the specific shoulder treatments, the question of how much maintenance is necessary becomes an important consideration. The primary maintenance concerns are:

- Cleaning out depressed treatments.
- Replacing missing jiggle bar tiles, traffic buttons, and "rumble strip" strips.
- Reapplying shoulder treatments after sealcoats or overlays are installed on the shoulders.

 Replacing damaged or removed treatments subsequent to snowplow operations.

From interviews with TxDOT engineers, it was determined that the depressed treatments sometimes collected some amount of debris (sand, gravel, leaves, dirt, etc.). This observation was also made by the writers during field visits to some of the treated sections inspected during the period of the study. However, it was the collective opinion of all those interviewed that debris collection generally was small and debris collection was not a problem, even in the more shallow indentations. Wind from passing vehicles tended to blow the larger debris out of the indentations or corrugations while runoff from thunderstorms tended to flush the smaller debris materials from the indentations or corrugations. It was also noted that the indentations or corrugations did not have to extend the full width of the treated shoulder in order to achieve the cleansing action from rainfall runoff. Thus, for the depressed treatments considered in this study, frequent brooming or other cleaning activities are not likely to be a necessary maintenance task. Depressed treatments were found to be the preferred technique in those parts of the state where snow removal operations had to be conducted. In short, negligible maintenance actions are believed to be needed for depressed shoulder treatment techniques.

Once bituminous adhesive products were used to affix the traffic buttons and jiggle bars to the shoulder pavement, interviewees reported that very few tiles subsequently had to be replaced. Bituminous adhesive products were found to have no more success in keeping the Carsonite "rumble strip" strips affixed to the shoulder pavements than the epoxies that had been tried. Because of the fixity problem that has been experienced with this product, it is recommended that "rumble strips" constructed of this product not be considered as a SVROR mitigation technique. Use of buttons and bars poses maintenance problems in

regions having snow removal operations; the snowplows tend to peel the installed devices off the pavement, necessitating their replacement. Additionally, if HMAC shoulders are overlaid or are sealed, the tiles must be replaced. Although this latter problem is not strictly a maintenance problem, their replacement increases the complexity and cost of ordinary maintenance activities.

## 7.5. FIELD SITES

The shoulder treatment installation sites with the highest normalized number of accidents, as well as the sites with unusually high recorded numbers of accidents, were selected as field study sites for this study (Appendix F). On-site visits were made to a number of these locations to take photographs, observe driving conditions, and to evaluate what the respective sections had in common (Figs. F.1-F.3). Areas where shoulder treatments were being used were visited to discuss with the responsible TxDOT engineers the feasibility of implementing the different types of available shoulder treatments.

#### 8. RESULTS

Two approaches were developed to study the problem of SVROR accidents. The first approach used statistical methods to develop an equation to predict where SVROR accidents would most likely occur. The equation was developed by performing a series of linear regressions on the data. The second approach also used statistical methods, but they were used to indicate where problems with SVROR accidents currently exist.

Multivariable regressions and correlations were performed on a number of variables provided in the accident records. A total of 68 separate principal and secondary variables were available from the accident data. These variables are reported in Table C.1, Appendix C. The 68 variables were classified into six categories: weather conditions, road conditions, road surface conditions, the degree of curve, the alignment of the highway, and the time of day. The variables selected for the prediction model had the highest correlation values (and highest intuitive probability) of being a factor in the cause of SVROR accidents. After a thorough analysis, it was found that the variables that had the highest probability of affecting SVROR accidents were: clear days, roads with no defects, dry roads, straight roads, roads with no slope, and during daylight hours (Appendix C). Some combination of these six variables, combined with a smaller number of vehicles on the roadway, does not require the driver to remain as alert as would be required in an urban highway environment or under variable driving conditions. These factors were then regressed to predict how many accidents injuries, and fatalities would occur on a particular control section in the future. After analyzing the resulting equations, it became apparent that the solutions produced by the equations were trivial. When tested using previous data, the equations produced exceptionally accurate results. However, the equations could not predict numbers of accidents, injuries, or fatalities in future years because the data required by the equation is only available after an accident has occurred. In other words, if the data required for the independent variables in the prediction equations was known, the answer (number of accidents, injuries, or fatalities) was already known. Thus, it became apparent that the variables used in the equation were not truly independent. In fact, it became apparent that the accident data, although not random, was randomly generated and the generator was something that could be neither controlled nor predicted: the driver of the

vehicle. Thus, based on 8 years of accident data and some 50,000 accidents, the equations were useful only from the standpoint of analyzing the known data; they had limited practical application from a prediction standpoint.

Since a simple prediction equation could not be developed that would permit an analysis of the problem to be performed from the standpoint of comparing actual results to predicted results, the next best solution was to develop a trend analysis technique. The technique selected was to normalize all accident data on the basis of traffic volume and compare the historical normalized data to the statewide mean and the statewide mean plus one standard deviation. The resulting method, subsequently termed the problem indicator method, permits an analyst to draw one of two conclusions in a simple and straightforward manner: (1) if the section historical data plots below one standard deviation of the statewide mean, the section is experiencing an accident problem that is no worse than that being experienced by 68.26 percent of the sections in the state, (2) if the historical data plots outside one standard deviation, the accident problem is one that is worse than 68.26 percent of those being experienced state-wide. Obviously, other conclusions could be drawn from the data; e.g., if the plotted data plots in an essentially horizontal band, the SVROR accident problem being experienced on that section is essentially not changing (neither getting better nor getting worse); if the plotted data plots with a positive slope (increasing to the right), the accident problem shows a trend toward becoming worse; if the plotted data plots with a negative slope (decreasing to the right), the accident problem shows a trend toward improving.

The problem indicator method is demonstrated in Appendix D. Appendix G contains the problem indicator data for each control section in each county in Texas. The information in Appendix G will permit the SVROR problem in every section in the state to be evaluated using normalized data for the period 1983-

1990. Each section trend analysis can be easily updated annually if the latest year's accident and ADT data are available. Appendix H provides data plots for two arbitrarily selected control sections or county-length sections from each TxDOT district to further demonstrate the PI method and the use of the data contained in Appendix G.

### 9. CONCLUSIONS

The extent of SVROR accidents and the prevention shoulder treatments in Texas were inventoried in order to evaluate the effectiveness of the various methods, procedures, and techniques that are being employed. By utilizing a method of identifying areas with a high incidence of SVROR accidents, an assessment can be made to determine if prevention techniques are warranted. The prediction equations developed in this study were not useful as tools to predict the future. Because the particular location and time of any SVROR accident is essentially random, the independent variable data required to employ the prediction equations is not actually independent. Thus, it is concluded that other factors, such as driver actions or behavior, actually precipitate the SVROR accident. The presence of straight, flat, low vehicle volume highways and wide open spaces in Texas and other western states will not disappear in the near future; therefore, the implementation of shoulder treatment techniques intended to mitigate or reduce SVROR accidents is concluded to be the most likely indirect means of reducing the number of accidents, injuries, and fatalities currently associated with the SVROR accident--short of prohibiting human-operated vehicles from using these highways.

### 10. RECOMMENDATIONS

After consideration of the results that were obtained through the analysis of the SVROR problem and the conclusions that were drawn from these analyses, six recommendations are proposed.

- 1. Concrete corrugations have been found to have considerable promise, if the proper corrugation spacing and depth are employed. Based on field trials of the various corrugation schemes currently in place, the optimum corrugation spacing, depth and total width are not currently known; it has also been observed that the effectiveness of a corrugation installation is dependent on the speed of the vehicle encountering the installation. Thus, it is recommended that one or more organized studies be conducted to determine the proper corrugation design.
- "Rumble strips" constructed from fiberglass strips manufactured by Carsonite, Inc., should not be utilized in constructing shoulder treatments for SVROR mitigation.
- 3. Based on trial encounters made during the period of the study, depressed shoulder treatment techniques produced the greatest contact noise and vehicle vibration, particularly indented strips in HMAC shoulders and some concrete corrugation installations. Thus, in new construction situations when all other considerations are equal, it is recommended that one of these two methods be selected when SVROR mitigation techniques are warranted.
- 4. Because no shoulder treatment technique had been in place longer than one full year, it was not possible to draw any definitive conclusions regarding the effectiveness of shoulder treatments in reducing SVROR accidents nor to draw conclusions regarding the performance of one type of mitigation technique with respect to other techniques. Therefore, it is recommended that

SVROR accident data continue to be monitored, particularly at the field sites reported on in this study, for a period of at least three years.

- 5. Since installation as well as life cycle costs may be important considerations in the selection of shoulder treatment techniques, it is also recommended that the TxDOT request the Districts to specifically request in future construction and/or maintenance contracts involving shoulder treatments that cost information be provided by the bidder to permit such economic analyses to be made.
- 6. An alternative recommendation, which might be an alternative *in addition* to shoulder treatment techniques, is to construct additional road side rest areas along those sections identified as warranting shoulder treatment installations to provide an opportunity for drivers to stop and relieve or reduce the drowsiness that so often has been reported as accompanying or precipitating SVROR accidents.



**APPENDIX A:** 

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## **APPENDIX B:**

Single-Vehicle Run-off-the-Road Accident Data, 1983-1990

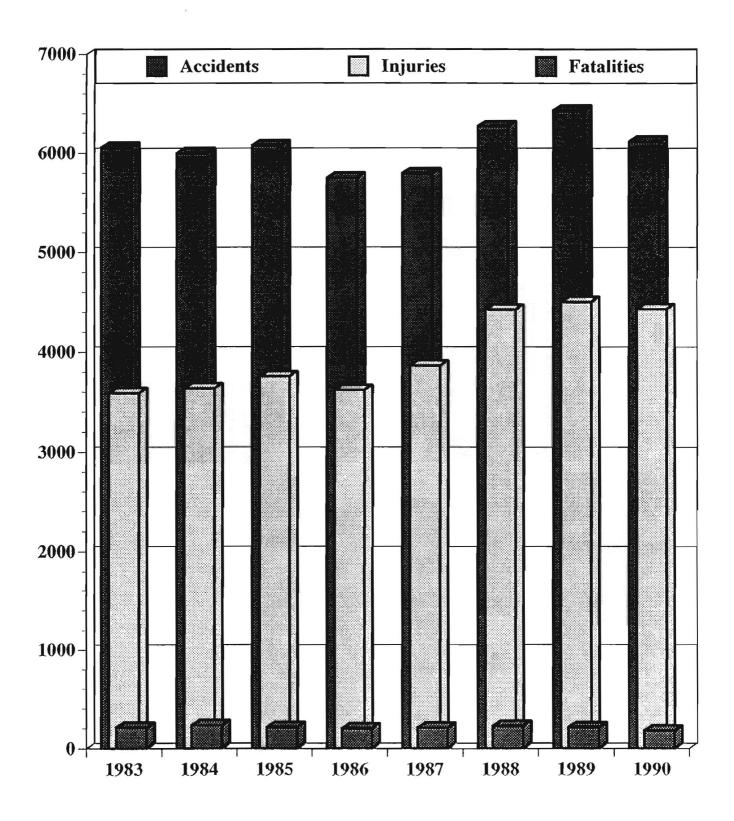


Fig. B.1. Sum of all accidents, injuries, and fatalities from single-vehicle run-off-the-road accidents in Texas from 1983 to 1990

# APPENDIX C: Regression Analysis

# Appendix C.1 - Accident Principal and Secondary Variables

Table C.1. Primary and Secondary Factors Investigated in Single-Vehicle Run-Off-Road Accidents in Texas

PRIMARY ACCIDENT VARIABLES	SECONDARY ACCIDENT VARIABLES	PRIMARY ACCIDENT VARIABLES	SECONDARY ACCIDENT VARIABLES
Curve	0 (No curve) 1 (0.1 to 1.9) 2 (2.0 to 3.9) 3 (4.0 to 5.9) 4 (6.0 to 7.9) 5 (8.0 to 9.9) 6 (10.0 to 11.9) 7 (12.0 to 13.9) 8 (14.0 to 15.9) 9 (16.0 to 17.9)	Object Struck	Jack-Knifed Hit Sign Hit Fence Hit Guardrail Hit Construction Barricade Hit Tree/Shrub Hit Culvert/Headwall Hit Divider Hit Side of Bridge Hit Delineator/Post
1st Harmful Event	Pedestrian Animal Fixed Object	Contributing Facto	rs No Room Passing Alcohol Safe Speed Safe Speed/Alcohol Unsafe Speed/Alcohol Unsafe Speed/Alcohol
Weather	Clear Raining Snowing Fog Sleeting	Other Factors	Lost Control/Skidded Inattention/Not Alert Construction Zone Unrelated Construction Related
Surface Condition	Dry Wet Snowy/Icy Icy	Light	Daylight Dawn Dark/Unlighted Dark/Lighted Dusk
Road Condition	No Defects Slick Surface Road Construction	Alignment	Straight/Level Straight/Grade Straight/Hillcrest Curve/Level Curve/Grade Curve/Hillcrest
Day of the Week		Month	

**Appendix C.2 - Distribution and Regression Results on the Principal SVROR Variables** 

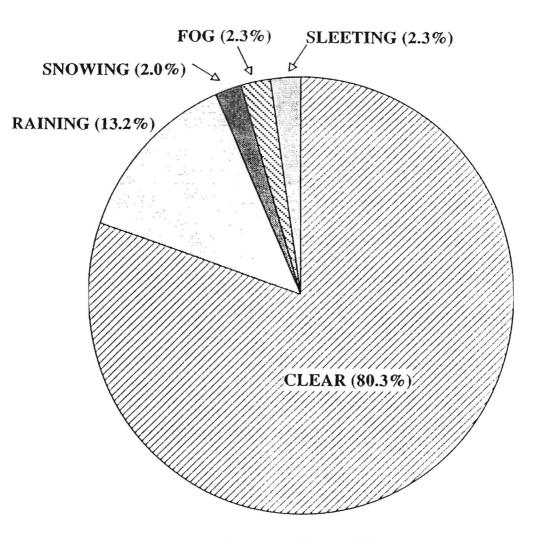


Fig. C.1. The weather conditions.

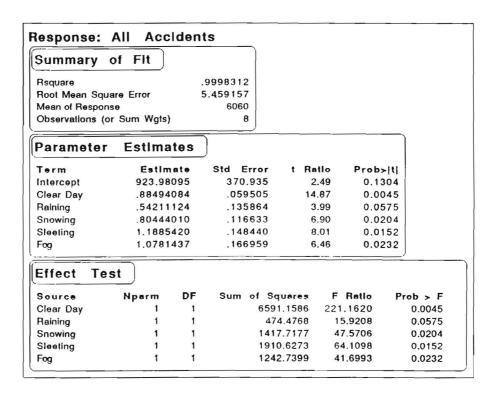


Table C.2. The Regression Results for the Weather Conditions.

### **ROAD CONSTRUCTION (7.2%)**

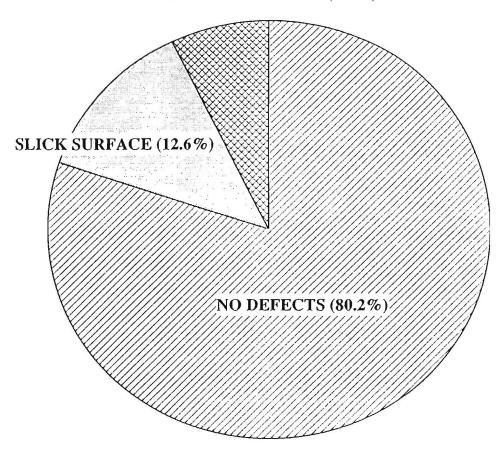


Fig. C.2. The road pavement conditions.

Summary of	f Flt							
Rsquare		.99	55409					
Root Mean Square	e Error	19.	84103					
Mean of Response			6060					
Observations (or	Sum Wgts)		8					
		$\overline{}$		-			- 10 11	$\overline{}$
Parameter	Estimate	S						
Term	Estin	ate	Std	Error	t	Ratio	Prob>	]1]
Intercept	590.57	611	21	8.606		2.70	0.054	40
	.91221	716	.04	5026		20.26	0.000	00
Slick Surface			0.0	8070		23.79	0.000	00
	.90577	373	.03	0010				
Slick Surface No Defects Road Const	.90577 .95221			9387		7.36	0.00	
No Defects Road Const	.95221					7.36	0.00	CONTRACTOR OF THE PARTY OF THE
No Defects Road Const  Effect Test	.95221		.12	29387	Square		0.00	CONTRACTOR OF THE PARTY OF THE
No Defects Road Const	.95221	188	.12	29387 of S		s F		18
No Defects Road Const  Effect Test Source	.95221	188	.12	29387 of 5	Square	s F	Ratio	Prob > F

Table C.3. The Regression Results for the Road Pavement Conditions.

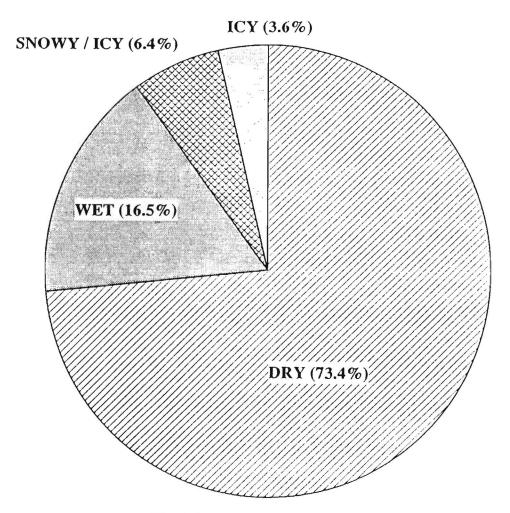


Fig. C.3. The road surface conditions.

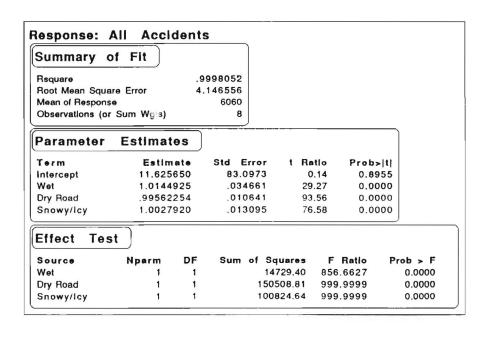


Table C.4. The Regression Results for the Road Surface Conditions.

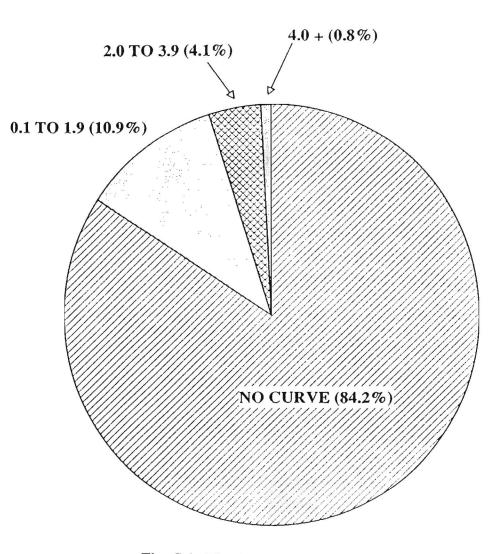


Fig. C.4. The degree of curve in the road.

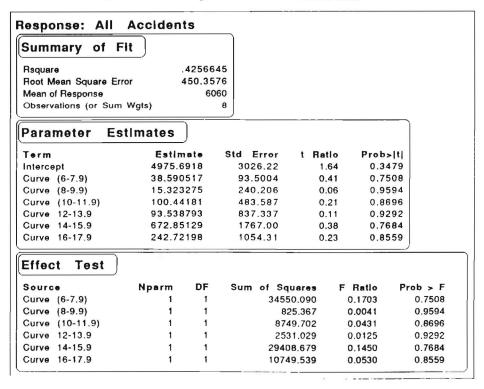


Table C.5. The Regression Results for the Degree of Curve in the Road.

Table C.5. The Regression Results for the Degree of Curve in the Road (Continued)

## Response: All Accidents

### Summary of Fit

Rsquare .9998557
Root Mean Square Error 5.047203
Mean of Response 6060
Observations (or Sum Wgts) 8

Parameter Estimates							
Term	Estimate	Std Error	t Ratio	Prob> t			
Intercept	17.759682	74.0829	0.24	0.8329			
No Curve	1.0008741	.012654	79.09	0.0002			
Curve 1(.1-1.9)	.97976509	.075165	13.03	0.0058			
Curve (2-3.9)	.97362645	.122931	7.92	0.0156			
Curve (4-5.9)	1.1645471	.330626	3.52	0.0720			
Curve (6-7.9)	1.2569537	1.11035	1.13	0.3751			

Effect Test					
Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
No Curve	1	1	159346.61	999.9999	0.0010
Curve 1(.1-1.9)	1	1	4328.22	169.9056	0.0058
Curve (2-3.9)	1	1	1597.94	62.7278	0.0156
Curve (4-5.9)	1	1	316.04	12.4062	0.0720
Curve (6-7.9)	1	1	32.65	1.2815	0.3751

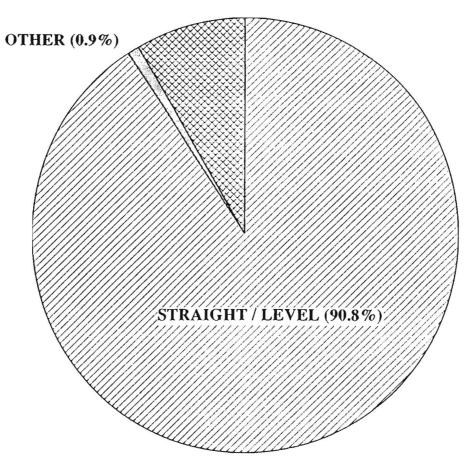


Fig. C.5. The alignment of the highway.

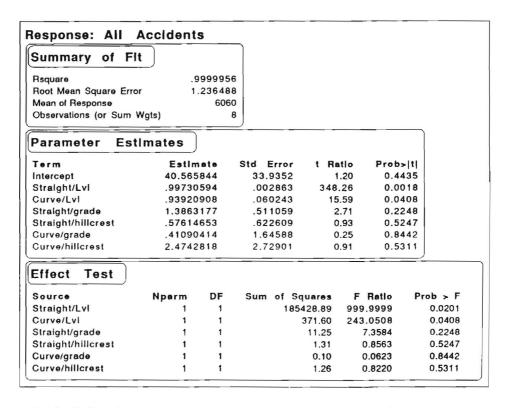


Table C.6. The Regression Results for the Highway Alignment

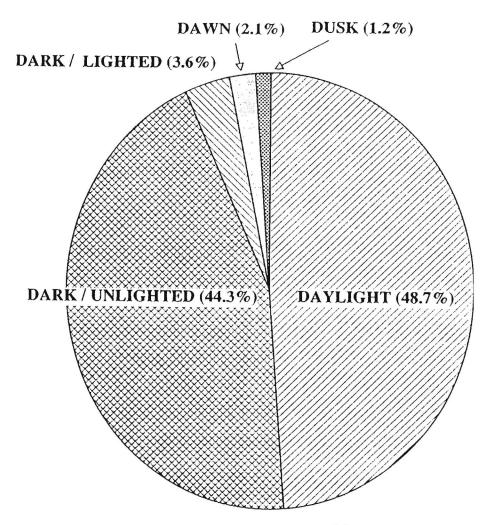


Fig. C.6. The light conditions.

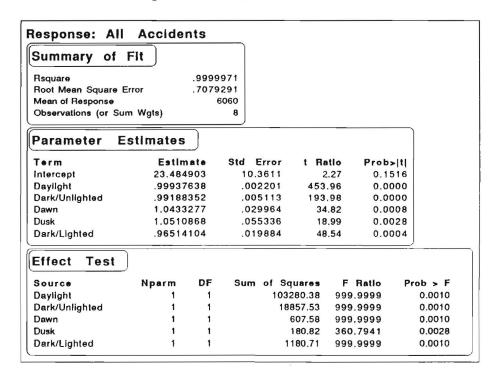
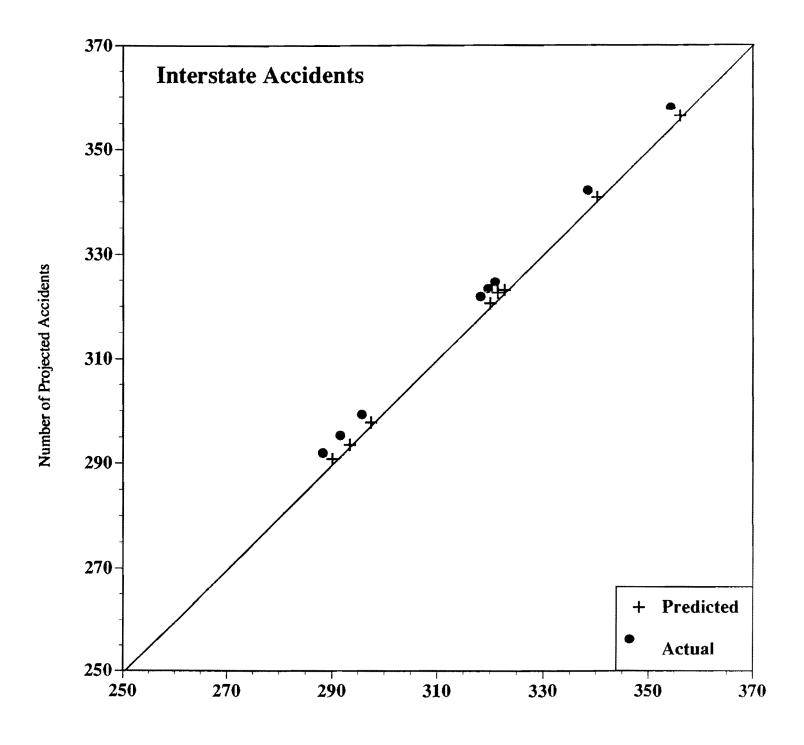


Table C.7. The Regression Results for the Light Conditions.



Actual Number of Accidents

Fig. C.7. Projected accident results vs. actual number of accidents.

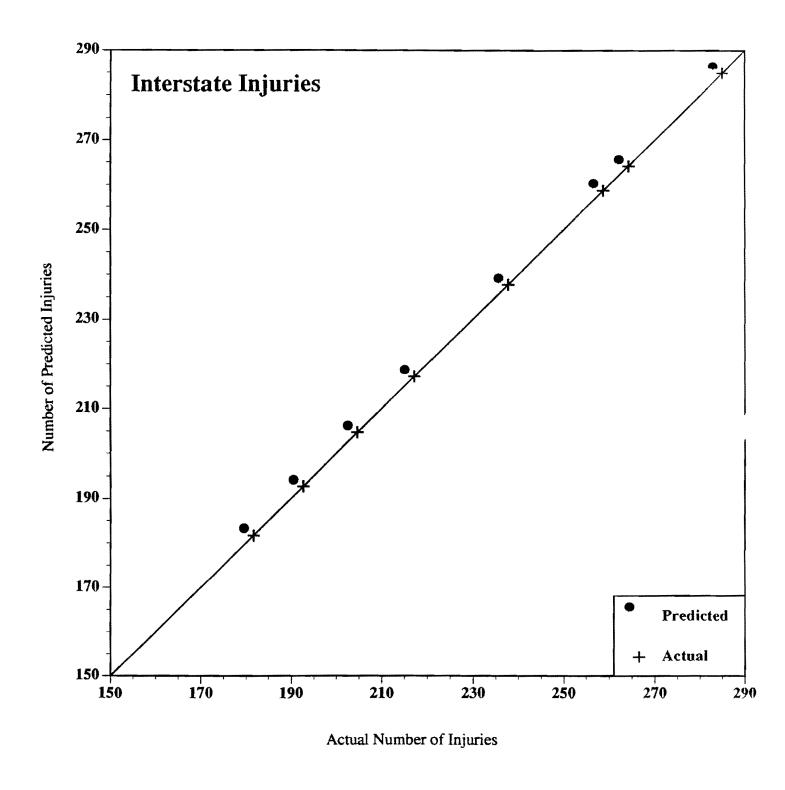


Fig. C.8. Predicted injury results vs. actual number of injuries.

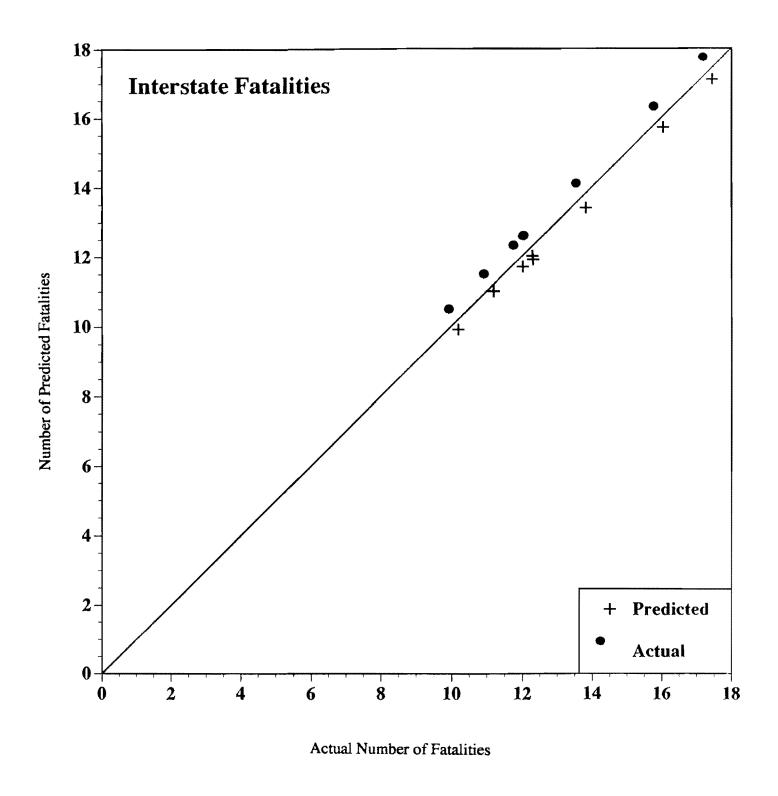


Fig. C.9. Predicted fatality results vs. actual number of fatalities.

Table C.8. Predicted Accident Results and the Acutal Number of Accidents

	Predicted Number of	Actual Number of		
County	Accidents	Accidents	Difference	
Atascosa	15	17	2	
Callahan	23	24	1	
Chambers	44	48	4	
Eastland	29	36	7	
Fayette	26	26	0	
Harrison	35	37	2	
Hays	32	30	2	
Hudspeth	18	18	0	
Hunt	41	40	1	
Live Oak	16	16	0	
Madison	41	41	0	
McLennan	13	13	0	
Montgomery	53	52	1	
Navarro	24	24	0	
Oldham	19	21	2	
Parker	23	22	1	
Peços	13	11	2	
Smith	46	46	0	
Sutton	13	16	3	
Swisher	6	6	0	
Webb	6	12	6	
Wheeler	11	11	0	
Wichita	3	3	0	

Table C.9. Predicted Injury Results and the Actual Number of Injuries

County	Predicted Number of Injuries	Actual Number of Injuries	Difference
County	muries	murres	Difference
Atascosa	11	10	1
Callahan	15	15	0
Chambers	28	22	6
Eastland	20	14	6
Fayette	19	12	7
Harrison	25	18	7
Hays	23	18	5
Hudspeth	14	11	3
Hunt	29	30	1
Live Oak	12	16	4
Madison	30	45	15
McLennan	9	11	2
Montgomery	36	38	2
Navarro	18	14	4
Oldham	14	20	6
Parker	17	18	1
Pecos	9	6	3
Smith	34	38	4
Sutton	10	14	4
Swisher	4	1	3
Webb	10	9	1
Wheeler	7	9	2
Wichita	1	4	3

Table C.10. Predicted Fatality Results and the Actual Number of Fatalities

County	Predicted Number of Fatalities	Actual Number of Fatalities	Difference
County	ratalities	ratalities	Dinerence
Atascosa	1	2	1
Callahan	1	0	1
Chambers	2	3	1
Eastland	1	1	0
Fayette	1	1	0
Harrison	1	5	4
Hays	1	1	0
Hudspeth	1	1	0
Hunt	1	0	1
Live Oak	1	1	0
Madison	1	3	2
McLennan	1	1	0
Montgomery	2	3	1
Navarro	1	1	0
Oldham	1	1	0
Parker	1	1	0
Pecos	1	1	0
Smith	2	3	1
Sutton	1	1	0
Swisher	0	0	0
Webb	0	0	0
Wheeler	0	0	0
Wichita	0	0	0

**Appendix C.3 - Regression Equations** 

The prediction model equations for accidents, injuries, and fatalities that resulted from the nonlinear multiple regressions were:

$$A = 0.0277 - 0.1025(DRC) + 0.151(ZPD) + 0.2966(DH) + 0.4915(CW) + 0.4495(NC)$$

$$I = -0.057 + 0.1432(DRC) + 0.2009(ZPD) + 0.2157(DH) + 0.2393(CW) + 0.2203(NC)$$

$$F = -0.0063 + 0.045(DRC) - 0.0058(ZPD) + 0.0157(DH) + 0.0183(CW) - 0.0081(NC)$$

A =the number of accidents

I = the number of injuries

F = the number of fatalities

DRC = dry road conditions

ZPD = no defects in the pavement

DH = daylight hours

CW = clear weather conditions

NC = no curve in the road

These equations calculate the number of accidents for each county or control section by year. The deviation between the actual number of accidents and the predicted number of accidents is so small that it is not statistically significant. These equations produced R-square values of 0.99, 0.99, and 0.76 for the accident, injury, and fatality prediction models respectively. The same is true of the results for the injuries and fatalities as shown in Figures C.7-C.9 and Tables C.8-C.10.

Another set of prediction equations was made using the statewide totals of the variables for each year, and resulted in the following:

$$A = 220.3 - 0.695(DRC) + 0.054(ZPD) - 0.195(DH) + 0.58(CW) - 0.132(NC) - 0.034(NI)$$

$$I = -6573 + 10.0(DRC) - 2.19(ZPD) + 4.16(DH) - 12.09(CW) + 1.81(NC) + 2.52(NI)$$

$$F = 307.9 - 0.391(DRC) + 0.054(ZPD) - 0.195(DH) + 0.58(CW) - 0.132(NC) - 0.034(NI)$$

A =the total number of accidents

I = the total number of injuries

F = the total number of fatalities

DRC = dry road conditions

ZPD = no defects in the pavement

DH = daylight hours

CW = clear weather conditions

NC = no curve in the road

NI = no incline in the road

These equations predicted the statewide totals, but could not be used on a county-by-county or control section basis to make predictions because the constants in each equation are so large that they overwhelm the much smaller numbers generated in a local area. The R-square values for the accident, injury and fatality equations are 0.97, 0.74, and 0.22 respectively.

# APPENDIX D: Problem Indicator Method

**Appendix D.1 - Procedure Demonstration** 

The calculated values for the 8-year period 1983-1990 for the problem indicator method can be found in Tables G.1-G.16 in Appendix G. Some graphical representations of a number of counties are shown in Appendix H. The normalization of the accident data used the following equations:

$$Y = (X / C) \times 1000$$

$$Z = Y / (Y_{avg+} \sigma_1)$$

Y =the factored number of accidents per ADT

X = the number of accidents per control section

C =the ADT value for the control section corresponding to X

Z =the normalized number of accidents

 $Y_{avg}$  = the average Y value for all control sections statewide during the 8-year period studied

 $\sigma_1$  = one standard deviation of  $Y_{avg}$ 

These results reflect the normalized number of accidents occurring in a selected control section. This shows that where the number of accidents is disproportionately high to the amount of traffic passing through a control section, that there may be a problem with SVROR accidents in that section. The mean of the normalized statewide accident totals on interstate routes is 1.44 accidents with a standard deviation of 1.22 accidents. These results indicate that the areas with a number above 2.66 should be rated as having a problem on the interstates. The mean of the normalized statewide accident totals on non-interstate 4-lane divided highways is 0.85 accidents with a standard deviation of 0.87 accidents. These results indicate that the areas with a number above 1.72 should be rated as having a problem on the non-interstate highways. The totals of the mean plus the standard deviation of 2.66 and 1.72 on the interstates and non-interstates, respectively, is

greater than or equal to almost 90 percent of all normalized accidents (87.2 percent for interstates and 88.7 percent for non-interstate highways) for the period studied.

Montgomery, Hudspeth, and Smith counties were selected because they had the highest total number of accidents. Pecos, Sutton, and Reeves counties were selected because a problem was believed to exist, because they had all of the conditions that are associated with the SVROR accident problem (long, straight, flat, open highways, little traffic, and lots of clear sunny days). In Figures D.1 and D.3 the total number of accidents are plotted, and in Figures D.2 and D.4 the normalized number of accidents are plotted. The figures show that the total normalized number of accidents is much higher in Pecos, Sutton and Reeves counties. Hudspeth county is located in the same area as Pecos and Reeves, but Interstates 10 and 20 merge in the western part of Reeves county, so the amount of traffic in Hudspeth is double that of Pecos and Reeves. A problem with SVROR accidents does exist in Hudspeth county, but may not be as severe as Pecos, Sutton, and Reeves counties. These results also show that in Pecos and Sutton counties that a reduction in the normalized accident data occurred in the year that shoulder treatments were installed to attempt to mitigate SVROR accidents. In Culberson county the problem diminished, most likely because the highway goes through mountains. The change in scenery, terrain, and road conditions (steeper grades, sharper curves, and shorter sight distances) increases the alertness of the driver and undoubtedly influences the number of SVROR accidents occurring in Culberson county.

The results of the problem indicator method confirmed the results of several previous studies in locating hazardous locations for SVROR accidents (Ligon, et al., 1985; Hall and Pendleton, 1990; USDOT, 1985). The common result is finding high accident rates on highways in remote areas with low ADT volumes.

The problem indicator compares each control section to the mean of all of the control sections of four-lane or more divided highways on the interstate and non-interstate

routes in Texas. The comparisons are split into two groups, interstates and non-interstates, to obtain a mean and standard deviation value. There are three regions on the graph when the data is plotted. (1) The first region contains numbers at or below the state mean; these sections probably have no SVROR problem. (2) The second region contains numbers between the state mean and the state mean plus one standard deviation; these areas are probably experiencing a sufficiently high number of accidents to warrant concern and possibly the installation of driver warning measures. (3) The final region contains numbers above the state mean plus one standard deviation; these sections warrant attention and probably could benefit from the installation of SVROR mitigation measures. The exact definition of *problem* cannot be given here, since it is relative to the conditions in the state of Texas each year. However, the number of accidents occurring at or below the state mean plus one standard deviation is almost 90 percent (87.2 percent for interstates and 88.7 percent for non-interstate highways) of the SVROR accidents reported from 1983 through 1990.

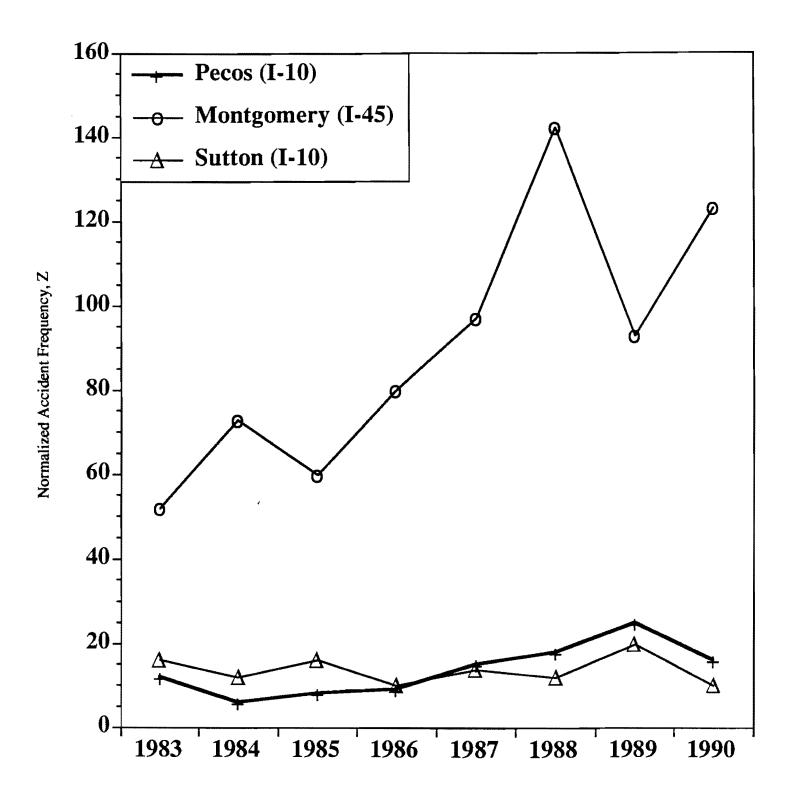


Fig. D.1. The total number of accidents in selected control sections (in Pecos, Sutton, and Montgomery Counties) from 1983 to 1990.

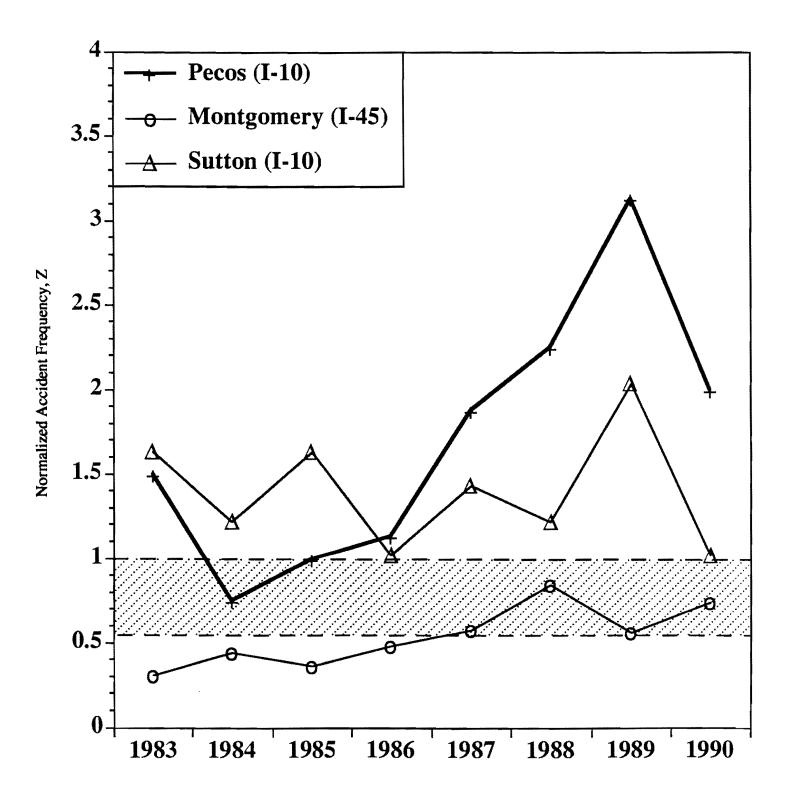


Fig. D.2. The normalized number of accidents in selected control sections (in Pecos, Sutton, and Montgomery counties) from 1983 to 1990).

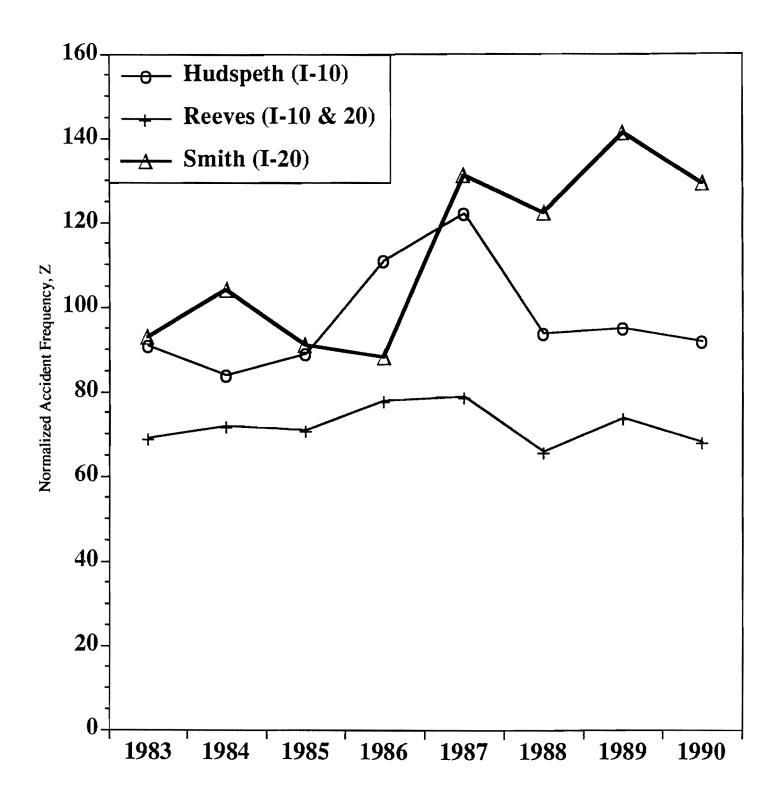


Fig. D.3. The total number of accidents in selected control sections (in Reeves, Smith and Hudspeth counties) from 1983 to 1990.

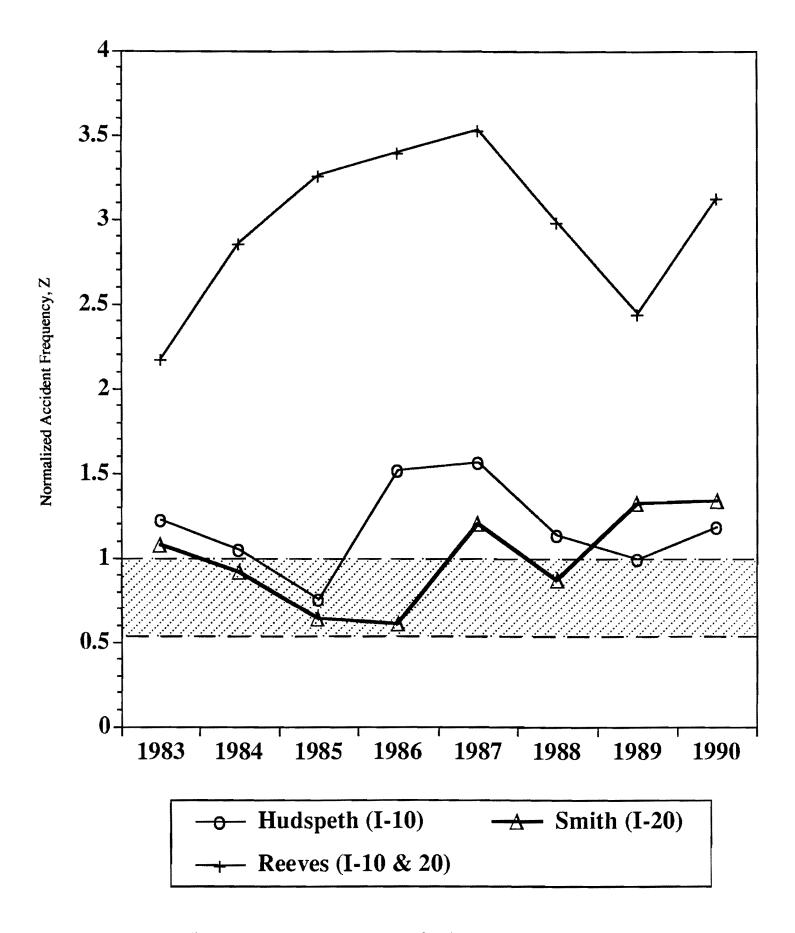


Fig. D.4. The normalized number of accidents in selected control sections (in Reeves, Smith and Hudspeth counties) from 1983 to 1990.

**Appendix D.2 - Treatment Spacing** 

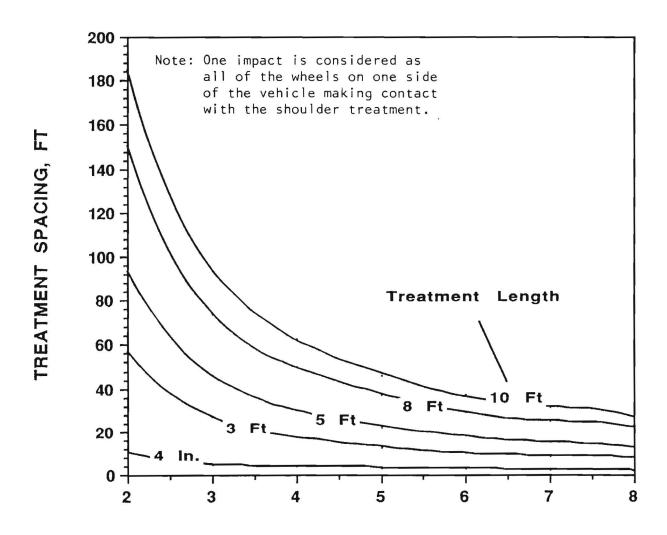


Fig. D.5. Recommended shoulder treatment spacings for different width of treatment across the paved shoulder.

## **APPENDIX E:**

Photographs of Surface Treatment Techniques and Methods



Fig. E.1. Example of a jiggle bar.

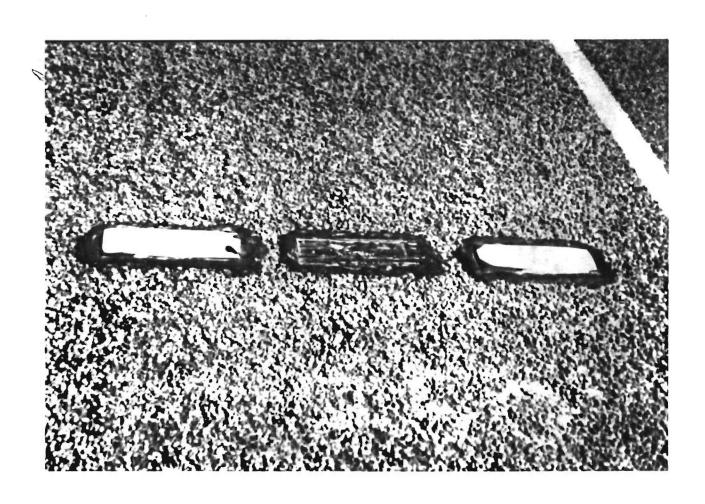


Fig. E.2. Example of rumble strips.

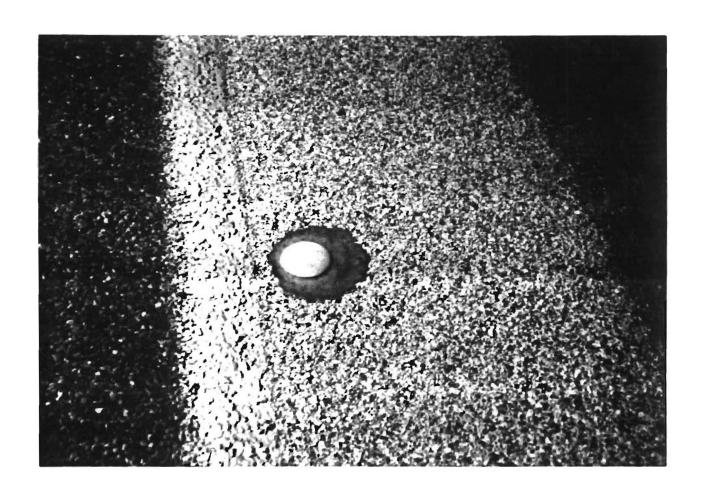


Fig. E.3. Example of a traffic button.

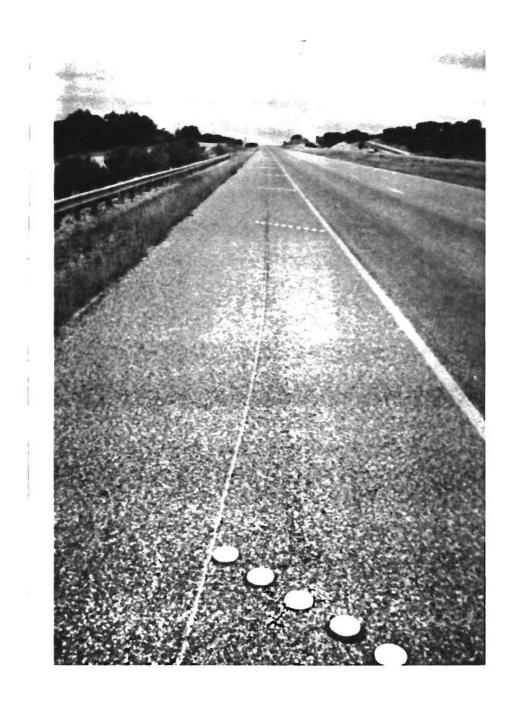


Fig. E.4. Example of traffic buttons in a bar pattern.

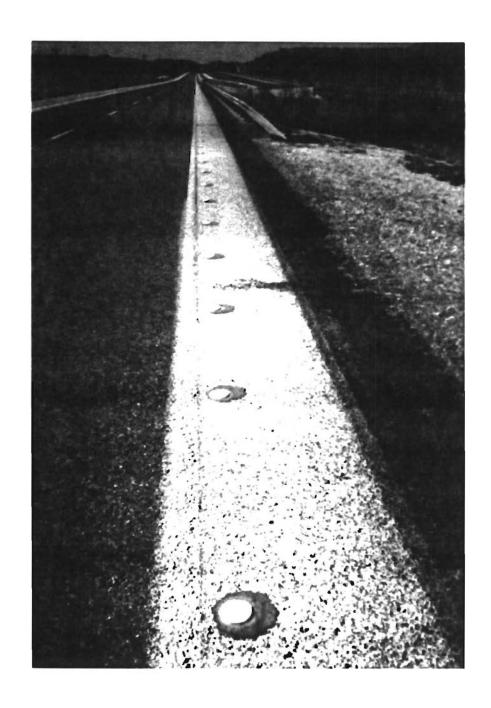


Fig. E.5. Example of a traffic button parallel to the edgeline.



Fig. E.6. Example of a jiggle bar tile parallel to the edgeline.



Fig. E.7. Example of indented strips near Marshall, Texas.



Fig. E.8. The modified roller used to make indented strips near Baird, Texas.

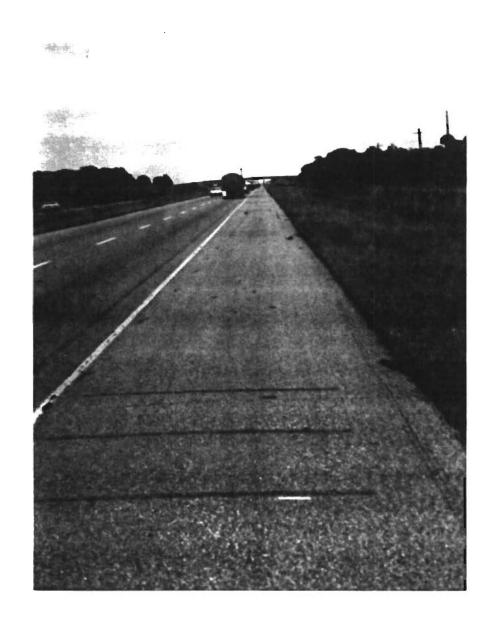


Fig. E.9. Example of raised asphaltic strips near Beaumont, Texas.



Fig. E.10. Example of concrete corrugated panels (full shoulder width).

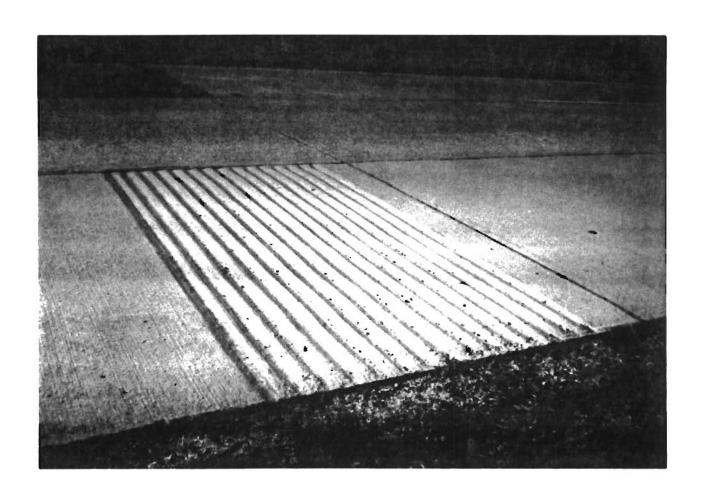


Fig. E.11. Example of concrete corrugated panels (full shoulder width).

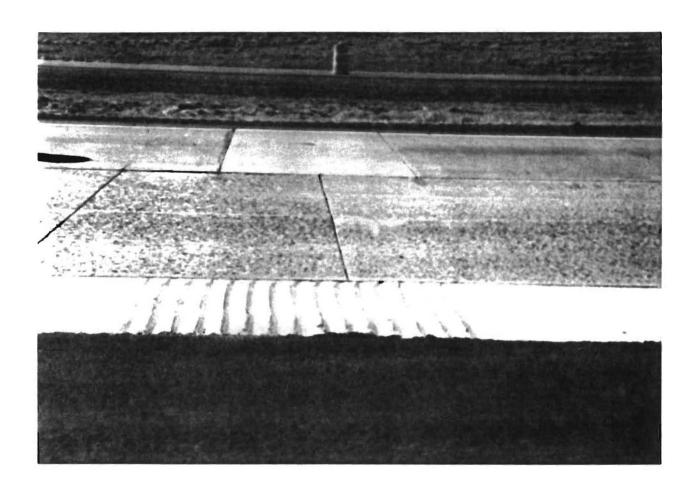


Fig. E.12. Example of concrete corrugated panels (partial shoulder width).

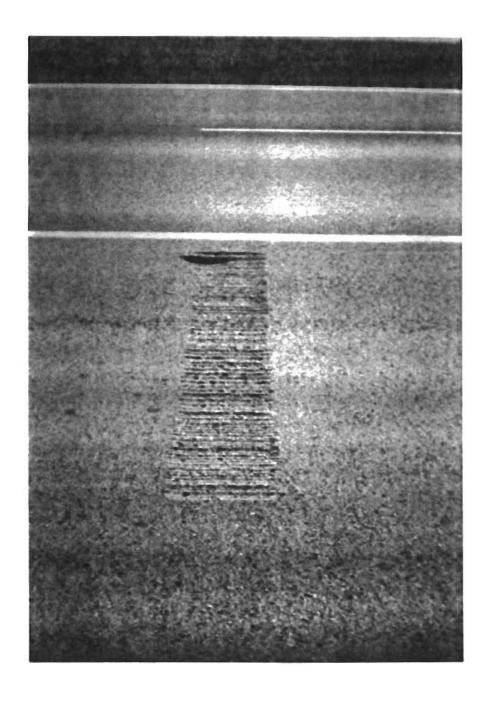


Fig. E.13. Example of grooved pavements.



Fig. E.14. Example of coarse aggregate surface treatment.

## APPENDIX F: Photographs of Selected Field Study Sites

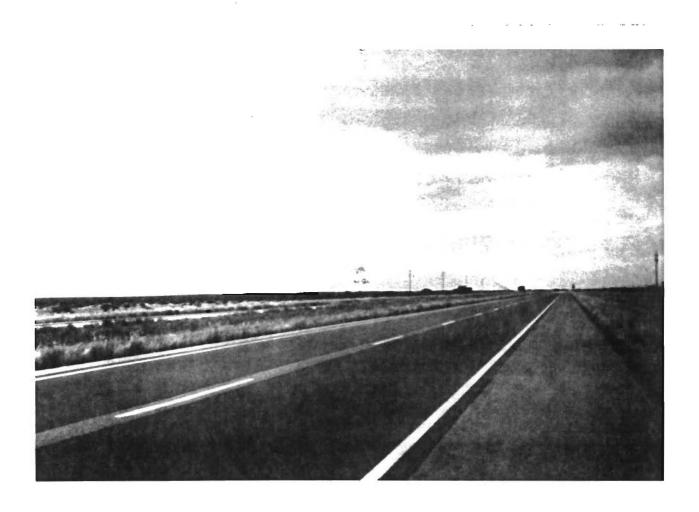


Fig. F.1. Photograph of I-20 in Ward County.



Fig. F.2. Photograph of I-20 in Harrison County.



Fig. F.3. Photograph of I-20 in Kaufman County.

## APPENDIX G:

Problem Indicator Results for All

Control Sections in Texas

For the Period 1983 - 1990

## Legend for Tables

Column Heading	Symbol	<u>Definition</u>
Highway Type:	1	U.S. Highway
	2	State Highway
	3	State Loop or Spur
	4	Park Road
	5	Farm or Ranch to Market
	6	U.S. Alternate
	7	State Alternate or Temporary Route
	8	Interstate Highway

Table G.1. Single-Vehicle Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1983)

County		Control	Control	Highway	Highway		Number	Mean	Normalized	
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Atascosa		17	4	8	35	0	0	1	10166	0.0
	7	73	5	8	37	10	2	17	8757	0.7
	7	73	6	8	37	0	0	3	8696	0.1
	7	73	10	8	37	11	2	17	8524	0.7
Austin		271	2	8	10	8	1	21	19710	0.4
	8	271	3	8	10	5	1	20	23216	0.3
Bell		15	4	8	35	13	0	20	26071	0.3
	14	15	6	8	35	3	0	10	22726	0.2
	14	15	7	8	35	19	1	25	20803	0.5
Bexar		17	2	8	35	0	0	1	15877	0.0
	15	17	3	8	35	3	1	8	13878	0.2
	15	72	7	8	10	5	2	9	19776	0.2
	15	72	8	8	10	3	1	5	33191	0.1
	15	73	8	8	37	2	0	6	54304	0.0
	15	73	9	8	37	4	0	8	9963	0.3
Bowie		610	5	8	30	5	0	10	12127	0.3
	19	610	6	8	30	10	0	21	17474	0.5
	19	610	7	8	30	6	0	11	26874	0.2
Caldwell	,	535	3	8	10	4	0	11	11677	0.4
Callahan		7	1	8	20	2	1	8	11812	0.3
	30	7	2	8	20	3	0	25	11807	0.8
	30	6	77	8	20	5	0	23	13854	0.6
Carson		275	2	8	40	6	0	9	8567	0.4
	33	275	3	8	40	6	0	12	8309	0.5
	33	275	4	8	40	8	0	20	8283	0.9
Chambers		739	1	8	10	6	0	8	22429	0.1
	36	508	2	8	10	25	0	39	26081	0.6
	36	508	3	8	10	11	1	20	22937	0.3
Colorado		271	1	8	10	25	4	34	19890	0.6
	45	535	8	8	10	24	0	23	14785	0.6
Comal		16	4	8	35	3	0	6	28979	0.1

Table G.1. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Comal		16	5	8	35	9	0	12	34065	0.1
Cooke		195	1	8	35	9	0	20	16732	0.4
	49	194	2	8	35	6	0	9	13234	0.3
Crockett		141	1	8	10	4	1	16	4187	1.4
	53	140	10	8	10	8	0	8	3233	0.9
	53	140	11	8	10	0	0	2	3239	0.2
	53	140	13	8	10	2	0	5	2923	0.6
Culberson		3	1	8	10	5	1	9	7150	0.5
	55	3	2	8	10	4	0	7	7151	0.4
	55	3	3	8	10	1	0	13	7043	0.7
	55	2	11	8	10	1	0	3	6778	0.2
Deaf Smith	1	90	1	8	40	4	0	2	7777	0.1
Denton		196	1	8	353	15	2	30	50017	0.2
	61	195	2	8	35	12	0	30	21496	0.5
	61	196	2	8	353	5	1	8	65065	0.0
	61	81	13	8	354	4	1	7	12217	0.2
Donley	,	275	6	8	40	0	0	2	8163	0.1
-	65	275	8	8	40	0	0	1	8337	0.0
	65	275	10	8	40	3	1	4	8317	0.2
Eastland		7	3	8	20	16	0	36	11697	1.2
	68	7	4	8	20	12	0	11	13081	0.3
	68	314	5	8	20	1	0	3	11537	0.1
	68	7	6	8	20	8	o	23	11340	0.8
Ector		4	6	8	20	1	0	3	8887	0.1
	69	4	7	8	20	34	2	38	10655	1.3
Ellis	-	92	3	8	45	7	0	17	23268	0.3
	71	442	3	8	353	5	0	12	29751	0.2
	71	48	4	8	353	16	3	26	19237	0.5
	71	92	4	8	45	9	2	20	21824	0.3
	71	92	5	8	45	6	1 1	16	21768	0.3
	71	48	8	8	353	31	3	47	14659	1.2

Table G.1. Continued

County		Control	ntrol Control	Highway	Highway	Number			Mean	Normalized	
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data	
El Paso		2121	1	8	10	9	0	13	21608	0.2	
	72	2121	4	8	10	20	1	15	12562	0.4	
	72	2121	5	8	10	19	2	17	8210	0.8	
Erath		314	4	8	20	6	0	4	11539	0.1	
Falls		15	3	8	35	1	0	1	24624	0.0	
Fayette		535	6	8	10	16	1	14	12451	0.4	
_	76	535	7	8	10	11	0	10	12850	0.3	
Fort Bend		271	5	8	10	12	0	7	54444	0.0	
Franklin		610	2	8	30	13	0	12	12910	0.3	
Freestone		675	1	8	45	45	1	43	15095	1.1	
	82	675	2	8	45	5	0	12	14487	0.3	
Frio		17	6	8	35	4	0	4	7202	0.2	
	83	17	7	8	35	4	0	4	5582	0.3	
Galveston		500	1	8	45	14	1	23	46953	0.2	
	85	500	4	8	45	0	1	5	36673	0.1	
Gillespie		142	13	8	10	4	0	3	4920	0.2	
Gonzales		535	4	8	10	11	0	15	12199	0.5	
	90	535	5	8	10	5	0	13	12423	0.4	
Gray	ı	275	5	8	40	5	0	8	8238	0.4	
	91	275	7	8	40	7	0	8	8178	0.4	
	91	275	11	8	40	6	0	9	8337	0.4	
Gregg		495	7	8	20	25	0	43	19002	0.9	
Guadalupe		535	1	8	10	1	0	9	14283	0.2	
	95	535	2	8	10	6	0	18	12045	0.6	
	95	25	3	8	10	6	0	11	16511	0.3	
	95	16	6	8	35	1	0	2	39602	0.0	
Hale		67	5	8	27	4	0	10	6968	0.5	
_	96	67	6	8	27	6	0	16	6769	0.9	
Harris		508	1	8	10	14	1	23	81244	0.1	
	102	271	6	8	10	17	0	17	65009	0.1	
Harrison		495	8	8	20	12	1	27	16762	0.6	

Table G.1. Continued

Count	y	Control	Control	Highway	Highway	Number			Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Harrison		495	9	8	20	5	0	10	15198	0.2
	103	495	10	8	20	14	0	31	15456	0.8
Hays		16	2	8	35	33	4	48	36443	0.5
	106	16	3	8	35	4	0	9	32085	0.1
Hill		14	7	8	35	3	1	15	24403	0.2
	110	48	9	8	353	1	0	4	14206	0.1
	110	14	23	8	354	4	0	4	10399	0.1
	110	14	24	8	35	2	0	4	23784	0.1
Hopkins		610	1	8	30	2	0	6	13202	0.2
•	113	10	2	8	30	4	0	10	15306	0.2
	113	9	9	8	30	6	1	9	15129	0.2
Howard		5	5	8	20	35	2	37	10101	1.4
	115	5	6	8	20	7	0	28	10339	1.0
Hudspeth		2	5	8	10	1	1	7	7960	0.3
•	116	2	6	8	10	24	1	26	7926	1.2
	116	2121	6	8	10	11	0	22	7893	1.0
,	116	2	7	8	10	10	0	10	7733	0.5
	116	2	8	8	10	9	0	12	6987	0.6
	116	2	9	8	10	3	0	5	6987	0.3
	116	2	10	8	10	4	3	9	7053	0.5
Hunt		9	13	8	30	18	0	44	20957	0.8
Jeff Davis	s [	3	4	8	10	12	0	11	6978	0.6
Jefferson	ł	739	2	8	10	21	0	34	27248	0.5
Johnson		14	3	8	354	39	1	47	17044	1.0
	127	14	4	8	354	8	1	19	11745	0.6
	127	14	22	8	354	6	0	7	10571	0.2
Kaufman		495	1	8	20	10	2	13	21944	0.2
	130	95	4	8	20	11	1	16	17132	0.4
Kendall		72	5	8	10	15	0	16	10001	0.6
-	131	72	6	8	10	8	1	12	11745	0.4
	131	142	15	8	10	1	0	1	7011	0.1

Table G.1. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kerr		142	2	8	10	3	0	5	4603	0.4
	133	142	12	8	10	1	0	2	4549	0.2
	133	142	14	8	10	30	4	30	6381	1.8
Kimble		142	1	8	10	14	2	26	5081	1.9
	134	141	8	8	10	2	0	5	3850	0.5
	134	141	9	8	10	1	0	3	4063	0.3
LaSalle		18	1	8	35	1	1	4	4319	0.3
	142	18	2	8	35	7	1	5	3920	0.5
	142	17	8	8	35	3	0	8	4654	0.6
Leon		675	3	8	45	15	1	23	15472	0.6
	145	675	4	8	45	9	0	14	16189	0.3
Live Oak		74	1	8	37	6	0	4	6171	0.2
	149	74	2	8	37	4	0	10	6805	0.6
	149	73	7	8	37	6	1	11	8948	0.5
Lubbock		67	7	8	27	4	1	16	8939	0.7
Madison		675	5	8	45	5	0	11	15900	0.3
Martin	, ]	5	4	8	20	16	4	25	10010	0.9
McLennan		15	1	8	35	15	0	20	38124	0.2
	161	15	2	8	35	5	0	14	24469	0.2
	161	14	8	8	35	12	1	26	25997	0.4
	161	14	9	8	35	6	0	16	32469	0.2
Medina		17	5	8	35	6	1	11	8825	0.5
Midland	Ì	5	14	8	20	9	0	23	15228	0.6
	165	5	15	8	20	11	0	26	10907	0.9
Mitchell	,	6	1	8	20	6	1	21	8824	0.9
	168	5	7	8	20	6	0	9	8577	0.4
	168	5	8	8	20	0	0	8	8705	0.3
Montgome	ry	110	4	8	45	38	3	52	62664	0.3
	170	675	8	8	45	25	4	30	36089	0.3
Morris		610	4	8	30	8	0	7	11841	0.2
Navarro		9 <b>3</b>	1	8	45	17	1	20	17822	0.4

Table G.1. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Navarro		166	1	8	45	0	1	6	16146	0.1
	175	92	6	8	45	13	1	20	18989	0.4
Nolan		6	2	8	20	12	0	28	11506	0.9
	177	6	3	8	20	18	1	33	13586	0.9
Oldham		90	2	8	40	18	2	19	7818	0.9
	180	90	3	8	40	20	1	21	7865	1.0
	180	90	4	8	40	11	0	18	8763	0.8
Orange		28	9	8	10	13	0	33	48350	0.3
	181	28	11	8	10	16	0	24	27152	0.3
	181	28	14	8	10	3	0	5	24122	0.1
Palo Pinto		314	2	8	20	1	0	6	12478	0.2
	182	314	3	8	20	2	0	8	12057	0.2
Parker		314	1	8	20	2	0	14	14201	0.4
	184	8	3	8	20	2	0	13	30989	0.2
	184	1068	5	8	30	1	0	1	27958	0.0
	184	314	7	8	20	3	0	9	18336	0.2
Pecos	,	140	1	8	10	6	1	13	3366	1.5
	186	140	2	8	10	13	2	12	3003	1.5
	186	140	3	8	10	3	1	11	2949	1.4
	186	140	4	8	10	7	0	9	2922	1.2
	186	140	5	8	10	1	1	5	2927	0.6
	186	140	6	8	10	6	0	8	2918	1.0
	186	441	7	8	10	6	1	11	2804	1.5
	186	441	8	8	10	4	0	2	3700	0.2
Potter		275	1	8	40	8	0	17	36428	0.2
	188	90	5	8	40	2	Ó	13	5295	0.9
Randall		168	9	8	27	11	0	27	23524	0.4
Reeves		3	5	8	20	5	Ō	8	4663	0.6
	195	441	5	8	10	4	0	13	2519	1.9
	195	3	6	8	20	13	0	18	4732	1.4
	195	441	6	8	10	1	ō	3	2568	0.4

Table G.1. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Reeves		3	7	8	20	13	0	11	5354	0.8
	195	441	9	8	10	11	1	16	2762	2.2
Rockwall		9	12	8	30	36	2	51	31620	0.6
San Patri	cio	74	3	8	37	3	0	5	8097	0.2
	205	74	4	8	37	1	0	2	10669	0.1
	205	74	5	8	37	16	0	27	12424	0.8
Smith		495	4	8	20	11	0	28	18864	0.6
	212	495	5	8	20	38	3	46	15977	1.1
	212	495	6	8	20	8	1	19	17669	0.4
Sutton		141	2	8	10	3	0	7	4065	0.6
	218	141	3	8	10	9	1	16	3693	1.6
	218	141	4	8	10	2	3	8	3594	0.8
	218	141	5	8	10	5	0	8	3686	0.8
	218	141	6	8	10	4	0	5	3671	0.5
	218	141	7	8	10	2	0	3	3667	0.3
Swisher		67	3	1	87	3	0	1	5986	0.1
Tarrant	,	81	12	8	354	7	0	13	14681	0.3
Taylor	ı	6	4	8	20	14	0	27	13743	0.7
•	221	6	5	8	20	4	0	4	15252	0.1
Titus		610	3	8	30	16	0	30	12451	0.9
Travis		15	10	8	35	7	1	15	53185	0.1
	227	15	13	8	35	1	0	1	98400	0.0
Van Zandi		495	2	8	20	44	1	53	20883	1.0
	234	495	3	8	20	11	1	24	18662	0.5
Walker		675	6	8	45	6	0	10	17377	0.2
	236	67 <u>5</u>	7	8	45	8	11	18	22363	0.3
Waller		271	4	8	10	8	0	21	26263	0.3
Ward		4	2	8	20	7	0	11	5409	0.8
	238	4	4	8	20	17	1	11	6646	0.6
Webb		18	3	8	35	9	1	5	4259	0.4
	240	18	4	8	35	5	1 1	9	4330	0.8

Table G.1. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Webb		18	5	8	35	6	0	8	5184	0.6
	240	18	6	8	35	11	0	4	16379	0.1
Wheeler		275	12	8	40	7	0	10	8491	0.4
	242	275	13	8	40	18	0	15	7816	0.7
Williamson		15	8	8	35	12	0	29	25876	0.4
	246	15	9	8	35	9	0	26	47921	0.2

Injuries

0

Number

Fatalities

0

**Accidents** 

3

Mean

**ADT** 

4532

Normalized

**Accident Data** 

0.38

Highway

Number

155

////do. 00//	- 1	020	1	i	, ,,,,,	V	l o	U	7002	0.00
Andrews		228	4	1	385	4	1	5	3846	0.76
	2	228	5	1	385	4	0	9	7850	0.67
Angelina		176	2	1	59	0	0	11	17181	0.37
	3	176	3	1	59	6	2	12	19583	0.36
	3	336	5	2	103	1	0	1	8942	0.07
Armstrong		42	3	1	287	3	0	4	6112	0.38
	6	42	4	1	287	10	1	9	6154	0.85
	6	42	5	1	287	7	1	10	5600	1.04
Atascosa		73	3	1	281	7	0	11	4491	1.42
	7	328	3	2	97	0	0	3	3039	0.57
Bailey		52	2	1	70	1	0	3	5761	0.30
	9	52	3	1	84	2	0	5	3587	0.81
	9	145	1	1	70	0	0	1	4870	0.12
Bastrop		114	6	1	290	4	0	2	6086	0.19
	11	265	3	2	71	4	0	4	12848	0.18
	11	265	4	2	21	5	0	7	16944	0.24
	11	472	1	2	21	3	0	4	3784	0.61
Bee		100	8	1	181	12	0	14	5629	1.45
	13	101	1	1	181	8	0	9	6461	0.81
Bell		185	1	1	190	1	0	2	7475	0.16
	14	231	3	1	190	2	1	2	28055	0.04
	14	231	4	1	190	5	0	12	15239	0.46
	14	320	1	1	190	1	0	1	12980	0.04
Bexar		24	7	1	90	0	0	5	12943	0.22
	15	73	2	1	281	5	1	6	5728	0.61
	15	73	12	1	181	0	0	1	10630	0.05
	15	100	2	1	181	2	0	6	9258	0.38
	15	143	1	1	87	5	0	10	11958	0.49
	15	143	2	1	87	4	0	4	6449	0.36
	1 5	253	4	1	281	10	0	12	28972	0.24

County

No.

Name

Anderson

Control

Number

520

Control

Section

8

Highway

Type

Table G.2. Continued

Count	1	Control	Control	Highway	Highway		Number		Mean	Normalized
Count				Highway		• • · · · · · · · · · ·	·	Assidanta		•
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Bexar	_	291	9	2	16	4	1	9	3690	1.42
	15	291	10	2	16	1	0	3	24339	0.07
	15	613	1	2	16	0	0	11	8094	0.07
Blanco.	ļ	113	5	1	281	2	0	6	5280	0.66
	16	253	1	11	281	11	0	5	4544	0.64
Bowie	Ì	60	2	2	8	1	0	1	6973	0.08
	19	217	1	1	59	1	0	6	9421	0.37
Brazoria		111	7	2	288	2	0	3	16508	0.11
	20	111	8	2	288	7	0	13	19344	0.39
	20	111	9	2	288	1	0	2	10008	0.12
	20	178	2	2	35	1	1	4	15185	0.15
	20	178	3	2	35	5	1	13	15659	0.48
	20	598	2	2	288	3	0	15	13536	0.64
	20	598	3	2	288	2	0	2	7866	0.15
Brazos		50	2	2	6	1	0	3	9358	0.19
	21	116	4	2	21	2	0	4	8856	0.26
Brewster	)	21	3	1	90	4	0	1	580	1.00
Brown		54	6	1	67	5	0	5	7437	0.39
	125	79	1	1	67	4	0	6	5334	0.65
Burnet		252	2	1	281	0	0	2	6258	0.19
Calhoun		179	10	2	35	1	0	2	8199	0.14
Cameron		39	7	1	77	1	0	8	20543	0.23
	31	39	8	1	77	27	Ö	17	11240	0.88
	31	39	19	1	83	7	0	13	26234	0.29
	31	327	8	1 1	77	0	4	6	11240	0.31
	31	331	2	2	100	0	o	1	18964	0.03
	31	331	4	4	100	0	0	3	14229	0.12
Carson		169	3	1	60	4	0	9	5415	0.97
	33	169	4	1	60	1	ō	5	4418	0.66
	33	169	5	1 1	60	3	ō	10	4855	1.20
Cass		218	3	1	59	1	1	2	12356	0.09

Table G.2. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cass		218	4	1	59	2	0	2	9687	0.12
Chambers		368	1	2	124	4	0	4	9618	0.24
	36	508	3	2	73	О	0	2	4980	0.23
Cherokee		199	1	1	69	9	0	12	10236	0.68
	37	199	2	1	69	2	0	8	6714	0.69
Childress		42	12	1	287	7	0	12	6896	1.01
	38	43	1	1	287	13	1	14	7802	1.04
Clay		44	2	1	82	17	0	26	13330	1.13
•	39	224	1	1	287	6	1	13	9652	0.78
	39	224	2	1	287	14	1	23	9690	1.38
Coleman		78	5	1	67	0	0	1	1260	0.46
Collin		47	6	1	75	18	0	30	58153	0.30
	43	47	14	1	75	19	0	29	21329	0.79
	43	135	4	1	380	0	0	2	5340	0.22
	43	364	4	2	121	0	0	1	7580	0.08
Colorado		266	2	2	71	7	0	8	5349	0.87
Comal	,	253	3	1	281	6	0	9	5706	0.92
Comanche		79	2	1	67	2	0	6	6517	0.54
Cooke	1	44	7	1	82	7	0	3	4741	0.37
	49	44	8	1	82	5	0	9	8784	0.60
	49	45	1	1	82	5	0	13	12682	0.60
Coryell		231	2	1	190	3	0	5	22466	0.13
Crane		229	2	1	385	5	Ö	6	4194	0.83
Crosby	]	131	3	1	82	1	0	1	3743	0.16
	54	131	3	1	62	2	0	3	4402	0.40
	54	131	5	1	82	3	0	4	1930	1.20
Culberson		233	1	1	62	3	0	4	1435	1.62
Dawson		68	4	1	87	6	1	11	5620	1.14
	58	68	5	1	87	5	0	4	3388	0.69
Deaf Smitl	n	168	7	1	60	1	0	8	6174	0.75
Delta	İ	136	3	2	24	1	0	1	2627	0.22

Table G.2. Continued

County	<del>,                                    </del>	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT_	Accident Data
Dickens		131	6	1	82	1	0	3	1648	1.06
	63	132	1	1	82	2	o	3	1416	1.23
	63	132	2	1	82	1	o	4	1261	1.84
Dimmit		37	8	1	83	0	2	2	1693	0.69
Donley		42	6	1	287	3	2	9	7833	0.67
	65	42	7	1	287	1	0	6	6603	0.53
	65	42	8	1	287	3	0	6	6025	0.58
Kenedy		327	2	1	77	10	0	5	5410	0.54
	66	327	3	1	77	6	2	4	5110	0.46
Eastland		7	4	1	80	2	0	8	4452	1.04
Ector		5	1	1	80	2	1	3	14190	0.12
	69	228	6	1	385	4	0	10	12396	0.47
	69	463	7	2	302	1	0	1 1	2275	0.26
ļ	69	572	1	2	302	7	0	9	8235	0.64
Ellis		48	5	1	77	0	0	1	1205	0.48
	71	172	5	1	287	6	0	12	7754	0.90
	71	260	2	1	67	1	0	5	9110	0.32
	71	261	1	1	67	10	1	17	1116 <u>1</u>	0.89
El Paso	1	374	2	1	62	3	0	2	19317	0.06
	72	2552	1	3	375	4	1	4	5482	0.42
Falls		49	3	2	6	0	0	3	3834	0.45
Fayette		266	1	2	71	4	0	3	6947	0.25
Fisher		318	2	2	92	1	0	1	2840	0.20
Floyd		145	6	1	70	2	0	3	2256	0.77
Fort Bend	'	27	8	6	90	6	0	14	19399	0.42
	<b>.</b> 80	27	12	1	59	36	1	32	39295	0.47
	80	89	9	1	59	3	0	10	16516	0.35
Freestone		57	7	1	84	0	0	1	4670	0.12
Gaines		228	2	1	62	2	0	3	4427	0.39
	84	228	3	1	385	5	0	6	5891	0.59
	84	294	1 1	1 1	62	8	0	5	4479	0.65

Table G.2. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Garza		53	4	1	84	20	1	27	6549	2.40
	86	53	5	1	84	9	0	20	5925	1.96
	86	53	6	1	84	3	0	7	5346	0.76
	86	297	7	1	380	0	0	1	2455	0.24
Gray		169	6	1	60	0	0	1	5949	0.10
	91	275	11	1	66	6	1	26	8337	1.81
Grayson		45	18	1	82	5	0	13	6814	1.11
	92	45	19	1	82	2	0	3	6745	0.26
	92	47	1	1	69	2	0	5	14407	0.20
	92	47	13	1	75	3	0	11	15149	0.42
Gregg		138	1	1	259	4	0	21	16067	0.76
	93	377	1	2	135	4	0	3	7168	0.24
	93	392	3	1	259	0	0	1	9342	0.06
Grimes		50	3	2	6	6	0	17	7209	1.37
Guadalupe		366	3	2	123	0	0	2	3870	0.30
Hale		67	4	1	87	7	l o	7	7216	0.56
	96	67	5	1	87	6	0	7	6968	0.58
	96	67	9	3	445	2	0	2	1625	0.72
Hall	1	42	9	1	287	8	1	20	6023	1.93
Hardeman	1	43	2	1	287	6	0	9	7009	0.75
	100	43	4	1	287	3	0	9	7626	0.69
Hardin		65	5	1	96	4	0	7	16278	0.25
	101	65	6	1	69	2	0	6	29514	0.12
	101	200	9	1	69	0	0	3	9018	0.19
Harris		50	6	1	290	11	2	7	18154	0.22
	102	50	8	1	290	3	1	8	44831	0.10
Harrison		62	7	1	59	8	1	9	12051	0.43
	103	63	1	1	59	1	0	4	11602	0.20
	103	63	9	1	59	0	1	1	5200	0.11
	103	96	7	1	80	5	0	6	8603	0.41
	103	96	8	1	80	1 1	0	1	4686	0.12

Table G.2. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Harrison		96	9	1	80	0	0	3	9770	0.18
	103	2642	2	3	281	2	0	1	5273	0.11
Haskell		157	3	1	277	0	0	3	1901	0.92
	105	157	4	1	277	2	0	1	2969	0.20
Hemphill		30	6	1	60	2	0	5	5415	0.54
•	107	169	9	1	60	0	0	1	1415	0.41
Henderson		163	3	2	31	1	0	4	6668	0.35
	108	163	4	2	31	5	1	7	21120	0.19
	108	164	1	2	31	20	1	14	9668	0.84
	108	198	1	1	175	3	0	2	6383	0.18
Hidalgo		39	2	1	83	4	0	12	9753	0.72
	109	39	17	1	83	7	0	10	28991	0.20
	109	39	18	1	83	11	0	23	27923	0.48
	109	255	6	1	281	1	0	7	5385	0.76
	109	255	7	1	281	16	1	18	8276	1.26
	109	255	9	10	281	2	0	3	11661	0.15
•	109	255	11	3	113	1	3	2	9448	0.12
	109	342	1	2	107	5	1	11	9303	0.69
	109	342	2	2	107	1	1	4	6406	0.36
	109	528	1	2	107	3	0	8	6986	0.67
	109	1804	1	3	115	2	0	4	14809	0.16
HIII		14	6	1	81	0	0	1	1250	0.47
	110	14	6	1	77	1	1	4	3904	0.60
	110	48	6	1	77	0	0	1	1537	0.38
Hockley		52	6	1	84	0	0	1	5210	0.11
	111	130	4	2	114	7	1	11	6514	0.98
	111	380	2	1	62	3	0	4	6031	0.39
Hood		80	3	1	377	0	0	1	8340	0.07
	112	80	4	1	377	5	1	9	14631	0.36
Howard		68	7	1	87	1	1	2	2730	0.43
	115	6 <b>8</b>	8	1	87	2	1	3	<b>52</b> 50	0.33

Table G.2. Continued

Count	<b>у</b> _Т	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hunt		136	1	2	224	0	0	1	4832	0.12
	117	203	1	1	69	0	0	1	5030	0.12
Hutchinso	n	356	1	2	207	1	0	2	5120	0.23
	118	356	1	2	136	7	0	6	6535	0.53
	118	379	1	2	136	2	0	2	8192	0.14
	118	455	1	2	152	1	0	5	3738	0.78
Jack		249	6	1	281	0	0	2	4721	0.25
	120	249	7	1	281	5	0	9	6951	0.75
Jackson		89	3	1	59	4	0	11	13014	0.49
	121	89	4	1	59	5	1	13	10955	0.69
	121	89	5	1	59	3	0	7	11131	0.37
Jasper		64	8	1	96	1	0	1	7143	0.08
Jefferson		28	6	1	90	5	0	9	7609	0.69
Jim Wells		87	1	2	44	7	2	5	12969	0.22
	126	255	1	1	281	1	0	6	8805	0.40
Johnson		19	1	2	174	5	0	11	20681	0.31
·	127	260	1	1	67	3	0	4	7880	0.30
Jones		33	5	1	83	11	0	19	7869	1.40
	128	157	5	1	277	3	0	4	3143	0.74
Karnes		100	5	1	181	0	0	1	4437	0.13
	129	100	6	1	181	2	0	3	8024	0.22
	129	348	4	2	80	1	0	1	4975	0.12
Kaufman		95	3	1	80	24	0	31	36054	0.50
	130	95	4	1	80	6	0	8	17132	0.27
	130	95	5	1	80	4	0	15	11333	0.77
	130	173	3	2	34	1	0	1	6126	0.09
	130	197	3	1	175	8	0	11	15401	0.42
	130	197	4	1	175	6	1	12	12054	0.58
	130	197	8	2	243	1	0	1	4674	0.12
Kleberg		102	4	1	77	6	0	9	10655	0.49
_	137	327	1	1	77	0	0	2	5960	0.20

Table G.2. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Lamar		136	5	2	19	1	0	1	4812	0.12
	139	136	7	1	271	2	0	2	11894	0.10
	139	136	8	1	271	2	0	6	8134	0.43
	139	221	1	1	271	1	0	1	4515	0.13
Lamb		52	4	1	84	1	0	7	3674	1.11
	140	52	5	1	84	6	0	8	4310	1.08
Lampasas		251	5	1	183	0	0	1	6260	0.09
•	141	272	6	1	183	1	0	1	2800	0.21
Liberty		28	3	1	90	2	0	5	10548	0.28
	146	177	3	1	59	3	0	7	15074	0.27
	146	593	1	2	321	1	0	1	8306	0.07
Live Oak		254	1	1	281	21	0	19	7477	1.48
Lubbock		52	7	1	84	3	0	7	9050	0.45
	152	53	1	1	84	1	0	5	8849	0.33
	152	68	1	1	87	7	1	16	13574	0.69
	152	131	1	, 1	62	1	1	4	7833	0.30
•	152	131	2	1	62	3	0	5	5659	0.51
	152	380	1	1	62	12	1	13	11420	0.66
	152	380	14	3	193	0	0	1	2610	0.22
Lynn		53	3	1	84	1	0	2	5740	0.20
*	153	68	2	1	87	4	0	9	4486	1.17
	153	68	3	1	87	5	0	9	3685	1.42
Martin		5	16	1	80	1	1	2	2137	0.54
Matagorda		179	4	2	35	3	0	6	11302	0.31
_	158	179	6	2	35	0	0	4	5668	0.41
McCulloch		70	6	1	87	2	1	1	3900	0.15
McLennan	١	49	1	2	6	3	0	6	7959	0.44
	161	55	7	1	84	6	1	5	7631	0.38
	161	55	8	1	84	2	0	2	17491	0.07
	161	162	1	2	31	0	0	1	4520	0.13
	161	162	l 1	1 1	84	2	0	4	11896	0.20

Table G.2. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
McLennan		258	9	2	6	4	0	3	14692	0.12
Medina		24	6	1	90	4	0	6	8633	0.40
	163	291	8	2	16	1	0	3	2415	0.72
Midland		5	2	1	80	8	0	9	17090	0.31
	165	5	3	1	80	3	0	6	7383	0.47
Mitchell		53	11	1	84	0	0	2	5595	0.21
Montague		13	5	1	81	1	1	14	8279	0.98
	169	44	6	1	82	6	0	3	3292	0.53
	169	224	3	1	287	2	0	11	9552	0.67
Montgome	ry	177	5	1	59	9	0	27	32073	0.49
Moore		66	4	1	287	3	1	6	7188	0.49
	171	66	5	1	87	11	3	24	8940	1.56
Morris		222	3	2	11	0	0	1	4531	0.13
	172	392	1	1	259	2	0	1	7733	0.08
Nacogdoch	nes	176	1	1	59	10	0	9	17424	0.30
Navarro		92	13	1	75	0	0	2	7747	0.15
	175	163	1	2	31	0	0	3	8923	0.20
	175	163	2	2	31	2	1	9	6410	0.82
Nolan	ì	6	15	3	432	1	0	2	6817	0.17
	177	53	12	1	84	4	0	12	5537	1.26
Nueces		102	1	2	44	5	0	7	15854	0.26
	178	102	2	2	44	5	0	1	13768	0.04
<b>†</b>	178	102	2	1	77	9	3	5	11136	0.26
	178	102	3	1	77	1	0	7	11618	0.35
	178	102	11	3	428	1	0	2	5329	0.22
	178	373	2	2	44	11	0	10	9552	0.61
	178	373	3	2	44	9	0	3	6706	0.26
Palo Pinto	)	7	10	1	180	2	0	2	4582	0.25
Panola		63	3	1	59	3	1	5	6541	0.44
	183	63	4	1	59	1	0	1	7288	0.08
	183	63	5	1	59	1	0	1	7030	0.08

Table G.2. Continued

				_						,
Count	-	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Panola		63	10	1	59	0	0	2	5440	0.21
Parker		8	2	1	180	17	0	18	7847	1.33
	184	8	3	1	80	6	0	12	13984	0.50
	184	80	6	1	377	6	0	8	12285	0.38
Parmer		52	1	1	70	4	0	4	4298	0.54
Polk		176	4	1	59	5	2	13	14833	0.51
	187	176	5	1	59	26	1	47	13418	2.04
	187	177	1	1	59	10	0	26	15742	0.96
	187	213	3	1	190	3	0	6	8884	0.39
Potter		41	7	1	87	2	0	3	12282	0.14
	188	42	1	1	287	0	0	1	6020	0.10
	188	90	5	1	66	1	1	2	5295	0.22
	188	169	2	1	60	2	0	2	9214	0.13
	188	2635	1	3	335	1	0	2	5665	0.21
Randall		67	1	1	87	6	0	15	8879	0.98
	191	168	8	1	60	4	0	6	6215	0.56
,	191	168	9	1	60	4	0	5	18180	0.16
Refugio		371	3	1	77	5	0	9	9177	0.57
Robertson	1	49	8	1	190	6	1	5	9217	0.32
Runnels		34	5	1	83	1	0	1	2093	0.28
	200	158	1	1	67	4	1	11	4692	1.36
Rusk		138	2	1	259	8	0	7	8269	0.49
	201	138	3	1	259	0	1	3	7660	0.23
	201	138	4	1	259	1	0	5	6019	0.48
San Jacin	to	177	2	1	59	16	2	30	15881	1.10
San Patrio	cio	101	4	1	181	5	0	13	12948	0.58
	205	180	10	2	361	1	0	2	7650	0.15
	205	371	4	1	77	2	0	3	6993	0.25
	205	372	1	1	77	6	1	13	11480	0.66
Scurry		53	7	1	84	17	0	14	5464	1.49
•	208	53	8	1	84	10	1	8	5790	0.80

Table G.2. Continued

Cour	ıty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Scurry		53	9	1	84	9	0	14	5179	1.57
	208	53	10	1	84	2	0	4	5402	0.43
Shacklef	ord	11	5	1	180	1	0	1	4830	0.12
Shelby		63	6	1	59	1	0	2	7274	0.16
	210	175	2	1	59	0	0	1	6448	0.09
	210	175	4	1	59	1	0	2	6049	0.19
Smith		164	4	2	31	5	0	5	13236	0.22
	212	165	1	1	271	1	0	2	12778	0.09
	212	165	2	1	271	1	1	4	3988	0.58
	212	190	5	1	69	1	0	3	16030	0.11
	212	191	1	1	69	2	0	5	15434	0.19
	212	1790	2	3	323	1	0	2	16255	0.07
	212	2075	1	3	323	4	0	4	14757	0.16
Sterling		69	4	1	87	5	0	3	5422	0.32
Swisher		67	2	1	87	10	0	12	5856	1.19
	219	67	3	1	87	3	0	7	5986	0.68
Tarrant	,	13	10	3	496	2	0	4	11610	0.20
	220	14	15	1	81	5	0	10	13587	0.43
	220	80	7	1	377	4	0	7	16214	0.25
	220	172	9	1	287	7	0	9	16041	0.33
	220	353	3	2	114	5	0	5	31051	0.09
	220	747	4	5	157	1	0	2	25278	0.05
	220	1094	1	5	731	0	0	1	15525	0.04
Taylor		34	1	1	83	5	0	10	14636	0.40
Terry	'	227	7	1	62	9	0	12	7415	0.94
	223	228	1	1	62	2	0	4	5076	0.46
	223	380	3	1	62	1	0	4	5793	0.40
Tom Gree	en	69	6	1	87	4	0	5	4173	0.70
	226	69	7	1	87	7	0	18	10053	1.04
	226	70	2	1	87	3	1	6	8564	0.41
	226	77	8	3	306	3	0	3	8184	0.21

Table G.2. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Tom Green		158	2	1	67	3	0	7	5015	0.81
	226	159	1	1	277	3	0	2	3550	0.33
	226	264	6	1	277	0	i	1	2268	0.26
Travis		113	13	3	360	6	0	28	35111	0.46
	227	114	2	1	290	4	0	11	16026	0.40
	227	152	1	1	183	4	1	8	10227	0.45
	227	265	1	2	71	10	1	13	26232	0.29
	227	265	2	2	71	3	0	7	15025	0.27
Upshur		392	2	1	259	4	0	7	6373	0.64
Uvalde		23	5	1	90	4	0	1	2803	0.21
Val Verde		23	1	1	90	3	0	8	9865	0.47
	233	160	5	1	277	0	0	1	789	0.74
Van Zandt		95	6	1	80	4	0	4	6664	0.35
	234	95	7	1	80	0	0	1	4762	0.12
Victoria		88	4	1	59	0	0	2	12781	0.09
	235	88	5	3	175	11	0	13	8607	0.88
	235	89	1	1	59	7	0	10	14234	0.41
	235	371	1	1	77	0	0	8	7183	0.65
	235	432	2	5	404	3	0	13	10859	0.70
Waller		114	11	1	290	7	3	15	7586	1.15
Washingto	n	114	9	1	290	0	0	1	7281	0.08
	239	114	10	1	290	9	0	15	7982	1.09
	239	186	6	1	290	1	1	9	10442	0.50
	239	186	6	2	36	4	0	3	5050	0.35
Wharton	1	89	6	1	59	1	0	4	11781	0.20
	241	89	7	1	59	7	1	15	13091	0.67
	241	89	8	1	59	3	0	8	14141	0.33
	241	89	10	2	60	0	0	1 1	10423	0.06
	241	89	10	3	183	1	Ō	1	4450	0.13
Wichita		43	8	1	287	7	0	15	8738	1.00
	243	43	9	1	287	0	ol	2	12212	0.10

Table G.2. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Wichita		43	17	3	370	1	0	4	7249	0.32
	243	156	7	1	277	2	0	3	11596	0.15
Wilbarger		43	5	1	287	4	0	12	7628	0.91
	244	43	6	1	70	4	0	7	9082	0.45
	244	43	7	1	287	3	0	10	8749	0.66
Willacy		327	10	1	77	2	0	14	6735	1.21
Wilson		100	3	1	181	1	0	4	6995	0.33
	247	143	4	1	87	0	0	1	3024	0.19
Winkler		292	2	2	18	1	0	2	4331	0.27
Wise		13	6	1	81	9	0	10	11592	0.50
	249	13	7	1	81	9	0	13	7365	1.03
	249	13	8	1	81	22	0	41	14278	1.67
	249	352	2	2	114	2	0	2	8953	0.13
Wood		96	1	1	80	1	0	3	3504	0.50
	250	96	2	1	80	1	0	7	3292	1.24
Young		284	1	2	79	0	0	1	2507	0.23

Table G.3. Single-Vehicle Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1984)

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	injuries	Fatalities	Accidents	ADT	Accident Data
Atascosa		17	4	8	35	1	0	2	10166	0.07
	7	73	5	8	37	23	3	20	8757	0.86
	7	73	6	8	37	3	0	3	8696	0.13
	7	73	10	8	37	12	0	12	8524	0.53
Austin		271	2	8	10	8	0	11	19710	0.21
	8	271	3	8	10	5	1	11	23216	0.18
Bell		15	4	8	35	8	0	19	26071	0.27
	14	15	6	8	35	5	0	10	22726	0.17
	14	15	7	8	35	16	1	18	20803	0.33
Bexar		17	2	8	35	0	2	2	15877	0.05
	15	17	3	8	35	5	0	7	13878	0.19
	15	72	7	8	10	7	1	15	19776	0.29
	15	72	8	8	10	4	0	7	33191	0.08
	15	73	8	8	37	5	2	6	54304	0.04
	15	73	9	8	37	3	0	9	9963	0.34
Bowie		610	5	8	30	1	0	5	12127	0.16
	19	610	6	8	30	4	0	9	17474	0.19
	19	610	7	8	30	4	0	10	26874	0.14
Caldwell		535	3	8	10	3	0	8	11677	0.26
Callahan	1	7	1	8	20	8	0	13	11812	0.41
	30	7	2	8	20	6	0	13	11807	0.41
	30	6	7	8	20	15	0	21	13854	0.57
Carson		275	2	8	40	8	0	15	8567	0.66
	33	275	3	8	40	4	0	8	8309	0.36
	33	275	4	8	40	13	11	17	8283	0.77
Chambers		739	1	8	10	1	0	2	22429	0.03
	36	508	2	8	10	7	0	28	26081	0.40
	36	508	3	8	10	13	2	27	22937	0.44
Colorado		271	1	8	10	26	1	31	19890	0.59
	45	535	8	8	10	15	1	26	14785	0.66
Comal		16	4	8	35	5	1	6	28979	0.08

Table G.3. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Comal		16	5	8	35	3	2	9	34065	0.10
Cooke		195	1	8	35	25	1	44	16732	0.99
	49	194	2	8	35	1	0	4	13234	0.11
Crane		4	5	8	20	0	1	1	8320	0.05
Crockett		141	1	8	10	8	0	17	4187	1.53
	53	140	10	8	10	13	2	8	3233	0.93
	53	140	11	8	10	8	1	11	3239	1.28
	53	140	13	8	10	10	0	10	2923	1.29
Culberson		3	1	8	10	13	2	11	7150	0.58
	55	3	2	8	10	1	0	7	7151	0.37
	55	3	3	8	10	6	0	6	7043	0.32
	55	2	11	8	10	4	0	4	6778	0.22
Deaf Smith		90	1	8	40	0	0	1	7777	0.05
Denton		196	1	8	353	15	1	28	50017	0.21
	61	196	2	8	353	0	0	2	21496	0.03
	61	195	2	8	35	20	3	31	65065	0.18
,	61	8 1	13	8	354	3	1	7	12217	0.22
Donley		275	6	8	40	3	0	3	8163	0.14
	65	275	8	8	40	0	0	1	8337	0.05
	65	275	10	8	40	0	0	1	8317	0.05
Eastland		7	3	8	20	16	0	24	11697	0.77
	68	7	4	8	20	3	0	7	13081	0.20
	68	314	5	8	20	4	0	6	11537	0.20
	68	7	6	8	20	6	1	17	11340	0.56
Ector	,	4	6	8	20	10	0	10	8887	0.42
	69	4	7	8	20	16	2	26	10655	0.92
Ellis		442	3	8	353	12	2	17	29751	0.21
	71	92	3	8	45	17	1	15	23268	0.24
	71	48	4	8	353	20	1	17	19237	0.33
	71	92	4	8	45	24	1	27	21824	0.47
	71	92	5	8	45	1	0	7	21768	0.12

Table G.3. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT_	Accident Data
Ellis		48	8	8	353	13	0	19	14659	0.49
El Paso		2121	1	8	10	8	0	8	21608	0.14
	72	2121	4	8	10	29	2	27	12562	0.81
	72	2121	5	8	10	7	0	12	8210	0.55
Erath		314	4	8	20	6	0	6	11539	0.20
Falls	1	15	3	8	35	0	0	1	24624	0.02
Fayette		535	6	8	10	8	0	7	12451	0.21
•	76	535	7	8	10	11	2	16	12850	0.47
Fort Bend		271	5	8	10	1	0	3	54444	0.02
Franklin		610	2	8	30	20	0	27	12910	0.79
Freestone		675	1	8	45	23	4	30	15095	0.75
	82	675	2	8	45	16	0	14	14487	0.36
Frio		17	6	8	35	4	0	4	7202	0.21
	83	17	7	8	35	14	0	13	5582	0.88
Galveston		500	1	8	45	18	1	27	46953	0.22
	85	500	4	8	45	2	0	6	36673	0.06
Gillespie	,	142	13	8	10	1	0	4	4920	0.31
Gonzales		535	4	8	10	5	1	13	12199	0.40
	190	535	5	8	10	3	2	11	12423	0.33
Gray		275	5	8	40	1	0	6	8238	0.27
-	91	275	7	8	40	7	0	10	8178	0.46
	91	275	9	8	40	2	0	2	8227	0.09
	91	275	11	8	40	8	0	8	8337	0.36
Gregg		495	7	8	20	31	1	43	19002	0.85
Guadalupe	1	535	1	8	10	7	1	20	14283	0.53
	95	535	2	8	10	10	1	15	12045	0.47
	95	25	3	8	10	8	0	17	16511	0.39
	95	16	6	8	35	3	0	11	39602	0.10
Hale		67	4	8	27	5	Ŏ	11	7216	0.57
	96	67	5	8	27	3	0	12	6968	0.65
	96	67	6	8	27	10	0	21	6769	1.17

Table G.3. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalitles	Accidents	ADT	Accident Data
Harris		508	1	8	10	18	0	13	81244	0.06
	102	271	6	8	10	13	0	13	65009	0.08
Harrison		495	8	8	20	8	0	17	16762	0.38
	103	495	9	8	20	1	0	8	15198	0.20
	103	495	10	8	20	12	1	20	15456	0.49
Hays		16	2	8	35	32	0	45	36443	0.46
	106	16	3	8	35	14	0	15	32085	0.18
Hill		1 4	7	8	35	4	0	16	24403	0.25
	110	48	9	8	353	7	0	10	14206	0.26
	110	14	23	8	354	3	0	4	10399	0.14
	110	14	24	8	35	3	0	9	23784	0.14
Hopkins		610	1	8	30	1	0	9	13202	0.26
	113	10	2	8	30	10	0	9	15306	0.22
	113	9	9	8	30	14	0	22	15129	0.55
Howard		5	5	8	20	14	1	25	10101	0.93
	115	5	6	8	20	12	1	26	10339	0.95
Hudspeth	,	2	5	8	10	7	0	13	7960	0.61
	116	2121	6	8	10	13	1	20	7926	0.95
	116	2	6	8	10	17	0	22	7893	1.05
	116	2	7	8	10	6	0	10	7733	0.49
	116	2	8	8	10	9	0	7	6987	0.38
	116	2	9	8	10	13	2	8	6987	0.43
	116	2	10	8	10	5	0	3	7053	0.16
Hunt		9	13	8	30	47	2	83	20957	1.49
Jeff Davis	;	3	4	8	10	7	0	5	6978	0.27
Jefferson		739	2	8	10	12	1	24	27248	0.33
Johnson	'	14	3	8	354	15	1	26	17044	0.57
	127	14	4	8	354	9	0	17	11745	0.54
	127	14	22	8	354	8	0	10	10571	0.36
Kaufman		495	1	8	20	4	0	11	21944	0.19
Kendall		72	5	8	10	16	0	22	10001	0.83

Table G.3. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kendall		72	6	8	10	6	0	13	11745	0.42
	131	142	15	8	10	0	0	3	7011	0.16
Kerr		142	12	8	10	3	0	5	4549	0.41
·	133	142	14	8	10	7	0	20	6381	1.18
Kimble		142	1	8	10	18	3	25	5081	1.85
	134	141	8	8	10	0	0	1	3850	0.10
	134	141	9	8	10	2	1	6	4063	0.56
LaSalle		18	1	8	35	1	2	4	4319	0.35
	142	18	2	8	35	4	0	5	3920	0.48
	142	17	8	8	35	5	1	8	4654	0.65
Leon		675	3	8	45	18	2	29	15472	0.70
	145	675	4	8	45	30	1	37	16189	0.86
Live Oak		74	1	8	37	17	1	10	6171	0.61
	149	74	2	8	37	13	0	10	6805	0.55
	149	73	7	8	37	5	0	4	8948	0.17
Lubbock		67	7	8	27	3	1	7	8939	0.29
Madison	)	675	5	8	45	26	1	34	15900	0.80
Martin		5	4	8	20	10	0	19	10010	0.71
McLennan	1	15	1	8	35	8	1	21	38124	0.21
	161	15	2	8	35	4	0	9	24469	0.14
	161	14	8	8	35	11	1	19	25997	0.27
	161	14	9	8	35	4	0	10	32469	0.12
Medina		17	5	8	35	8	0	11	8825	0.47
Midland		5	14	8	20	18	1	26	15228	0.64
	165	5	15	8	20	16	1	29	10907	1.00
Mitchell	,	6	1	8	20	9	0	18	8824	0.77
	168	5	7	8	20	17	0	15	8577	0.66
	168	5	8	8	20	7	0	14	8705	0.60
Montgome	ry	110	4	8	45	31	2	73	62664	0.44
	170	675	8	8	45	11	1	27	36089	0.28
Morris		610	4	8	30	1	0	1	11841	0.03

Table G.3. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Navarro		166	1	8	45	2	0	3	17822	0.06
	175	93	1	8	45	15	2	20	16146	0.47
	175	92	6	8	45	13	2	32	18989	0.63
Nolan		6	2	8	20	17	1	27	11506	0.88
	177	6	3	8	20	25	2	37	13586	1.02
Oldham		90	2	8	40	17	2	29	7818	1.39
	180	90	3	8	40	23	0	28	7865	1.34
	180	90	4	8	40	6	1	13	8763	0.56
Orange		28	9	8	10	15	2	27	48350	0.21
	181	28	11	8	10	13	0	19	27152	0.26
	181	28	14	8	10	0	0	1	24122	0.02
Palo Pinto		314	2	8	20	3	1	11	12478	0.33
	182	314	3	8	20	9	0	15	12057	0.47
Parker		314	1	8	20	7	0	14	14201	0.37
	184	8	3	8	20	8	4	13	30989	0.16
	184	1068	5	8	30	0	0	1	27958	0.01
,	184	314	7	8	20	9	0	16	18336	0.33
Pecos		140	1	8	10	9	0	7	3366	0.78
	186	140	2	8	10	6	0	6	3003	0.75
	186	140	3	8	10	4	0	9	2949	1.15
	186	140	4	8	10	1	0	4	2922	0.51
	186	140	5	8	10	5	0	6	2927	0.77
	186	140	6	8	10	2	0	4	2918	0.52
	186	441	7	8	10	8	0	15	2804	2.01
	186	441	8	8	10	1	0	5	3700	0.51
Potter	,	275	1	8	40	9	1	17	36428	0.18
	188	90	5	8	40	6	3	14	5295	0.99
Randall		168	9	8	27	12	0	13	23524	0.21
Reeves		3	5	8	20	4	0	8	4663	0.64
	195	441	5	8	10	5	1	12	2519	1.79
	195	441	6	8	10	0	0	4	2568	0.59

Table G.3. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Reeves		3	6	8	20	12	0	13	4732	1.03
	195	3	7	8	20	7	0	14	5354	0.98
	195	441	9	8	10	11	2	21	2762	2.86
Rockwall		9	12	8	30	36	6	63	31620	0.75
San Patri	cio	74	3	8	37	3	0	9	8097	0.42
	205	74	4	8	37	8	0	6	10669	0.21
	205	74	5	8	37	10	0	13	12424	0.39
Smith		495	4	8	20	12	0	21	18864	0.42
	212	495	5	8	20	25	0	39	15977	0.92
	212	495	6	8	20	6	0	16	17669	0.34
Sutton		141	2	8	10	6	0	7	4065	0.65
	218	141	3	8	10	9	0	12	3693	1.22
	218	141	4	8	10	5	0	7	3594	0.73
	218	141	5	8	10	10	1	10	3686	1.02
	218	141	6	8	10	4	1	8	3671	0.82
	218	141	7	8	10	4	0	6	3667	0.62
Tarrant	,	81	12	8	354	3	1	8	14681	0.20
Taylor		6	4	8	20	12	0	21	13743	0.57
	221	6	5	8	20	1	0	4	15252	0.10
Titus		610	3	8	30	7	0	20	12451	0.60
Travis		16	1	8	35	0	0	2	43858	0.02
	227	15	10	8	35	14	0	16	53185	0.11
Van Zandt		495	2	8	20	11	1	27	20883	0.49
	234	495	3	8	20	16	0	25	18662	0.50
Waiker	,	675	6	8	45	12	0	18	17377	0.39
	236	675	7	8	45	34	2	47	22363	0.79
Waller	1	271	4	8	10	10	1	18	26263	0.26
Ward		4	2	8	20	18	1	17	5409	1.18
	238	4	4	8	20	12	0	14	6646	0.79
Webb		18	4	8	35	3	0	4	4330	0.35
	240	18	5	8	35	8	2	8	5184	0.58

Table G.3. Continued

County	Control	Control	Highway	Highway		Number		Mean	Normalized
Name No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Webb	18	6	8	35	3	2	3	16379	0.07
Wheeler	275	12	8	40	2	1	11	8491	0.49
24:	275	13	8	40	9	0	11	7816	0.53
Williamson	15	8	8	35	36	3	41	25876	0.60
240	15	9	8	35	18	0	50	47921	0.39

Table G.4. Single-Vehicle Non-Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1984)

County	<del>у Т</del>	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Anderson		520	8	2	155	0	0	2	4532	0.26
Andrews	1	228	4	1	385	0	0	3	3846	0.45
	2	228	5	1	385	5	0	16	7850	1.19
Angelina		176	2	1	59	1	1	9	17181	0.30
	3	176	3	1	59	12	0	13	19583	0.39
	3	199	4	1	69	0	0	3	8207	0.21
	3	336	5	2	103	0	0	1	8942	0.07
Armstrong	1	42	3	1	287	7	1	13	6112	1.24
]	6	42	4	1	287	6	1	8	6154	0.76
	6	42	5	1 _	287	3	0	3	5600	0.31
Atascosa		73	3	1	281	5	0	11	4491	1.42
	7	73	4	1	281	0	0	1	2480	0.23
Bailey		52	2	1	70	2	0	7	5761	0.71
	9	52	3	1	84	12	0	18	3587	2.92
Bastrop		114	6	1	290	1	0	2	6086	0.19
,	11	265	3	2	71	3	0	11	12848	0.50
	11	265	4	. 2	21	3	0	4	16944	0.14
	11	265	5	2	21	0	0	1	15980	0.04
	, 11	265	5	2	71	0	0	1	8811	0.07
	11	472	1	2	21	9	2	10	3784	1.54
Bee		100	8	1	181	9	0	7	5629	0.72
	13	101	1	1	181	5	1	6	6461	0.54
Bell		185	1	1	190	0	1	3	7475	0.23
	14	231	3	1	190	2	0	2	28055	0.04
	14	231	4	1	190	6	2	19	15239	0.72
	14	320	1	1	190	1	0	1	12980	0.04
Bexar	1	24	7	1	90	8	2	8	12943	0.36
	15	73	2	1	281	0	1	4	5728	0.41
	15	100	2	1	181	3	2	11	9258	0.69
	15	143	1	1	87	3	0	8	11958	0.39
	15	143	2	1	87	4	0	13	6449	1.17

Table G.4. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Bexar		253	4	1	281	5	1	14	28972	0.28
	15	291	9	2	16	5	0	8	3690	1.26
	15	291	10	2	16	3	0	4	24339	0.10
	15	613	1	2	16	4	2	10	8094	0.72
Blanco		113	5	1	281	3	0	7	5280	0.77
	16	253	1	1	281	0	0	2	4544	0.26
Bowie		217	1	1	59	0	0	3	9421	0.19
	19	218	1	1	59	3	0	5	13567	0.21
Brazoria		111	7	2	288	2	0	5	16508	0.18
	20	111	8	2	288	3	0	9	19344	0.27
	20	111	9	2	288	1	0	3	10008	0.17
	20	178	2	2	35	1	0	5	15185	0.19
	20	178	3	2	35	8	0	12	15659	0.45
	20	598	2	2	288	16	1	21	13536	0.90
	20	598	3	2	288	4	1	9	7866	0.67
Brazos		49	12	2	6	1	0	1	15812	0.04
	21	50	2	2	6	2	0	3	9358	0.19
	21	116	4	2	21	1	0	4	8856	0.26
Brown	1	54	6	1	67	4	0	5	7437	0.39
	25	79	1	1	67	5	1	9	5334	0.98
Burnet		252	2	1	281	1	0	3	6258	0.28
	28	29	3	1	90	1	0	2	8199	0.14
Calhoun		179	10	2	35	2	0	1	20543	0.03
Cameron		39	7	1	77	3	0	4	20543	0.11
	31	39	8	1	77	17	0	17	11240	0.88
	31	39	19	1	83	4	0	6	26234	0.13
	31	327	8	1	77	6	0	5	11240	0.26
	31	331	2	2	100	0	0	1	18964	0.03
	31	331	4	4	100	6	0	4	14229	0.16
Carson		42	2	1	287	0	0	1	6030	0.10
	33	169	3	1	60	2	1 0	2	5415	0.21

Table G.4. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Carson		169	4	1	60	1	0	3	4418	0.39
	33	169	5	1	60	3	0	6	4855	0.72
	33	169	14	1	66	o	0	1	474	1.23
Cass		218	3	1	59	2	0	4	12356	0.19
	34	218	4	1	59	3	0	2	9687	0.12
Chambers		367	1	2	124	1	0	1	6150	0.09
	36	368	1	2	124	1	0	2	9618	0.12
	36	508	3	2	73	1	0	3	4980	0.35
Cherokee		199	1	1	69	9	0	13	10236	0.74
	37	199	2	1	69	8	0	4	6714	0.35
Childress		42	12	1	287	10	1	11	6896	0.93
	38	43	1	1	287	3	0	5	7802	0.37
Clay		44	2	1	82	3	0	9	13330	0.39
-	39	44	3	1	82	0	0	1	5038	0.12
	39	224	1	1	287	17	2	23	9652	1.39
	39	224	2	1	287	20	0	22	9690	1.32
Collin	ì	47	6	1	75	18	2	39	58153	0.39
	43	47	14	1	75	18	0	23	21329	0.63
	143	135	4	1	380	0	0	2	5340	0.22
	43	364	4	2	121	1	0	1	7580	0.08
	43	549	3	3	399	0	0	1	5866	0.10
Collingsw	orth	31	4	1	82	1	0	1	2485	0.23
Colorado		266	2	2	71	4	Ô	9	5349	0.98
Comal		253	3	1	281	2	0	10	5706	1.02
Comanche		79	2	1	67	2	0	3	6517	0.27
Cooke	.	44	7	1	82	3	0	4	4741	0.49
	49	44	8	1	82	10	0	10	8784	0.66
	49	45	1	11	82	1	0	9	12682	0.41
Coryell		231	2	1	190	7	0	4	22466	0.10
Crane	l	229	2	1	385	11	1	16	4194	2.22
Crosby	l	131	3	1 1	62	3	1	6	4402	0.79

Table G.4. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Crosby		131	5	1	82	0	0	1	1930	0.30
Culberson		233	2	1	62	2	0	3	1435	1.22
Dawson	-	68	4	1	87	3	0	6	5620	0.62
	58	68	5	1	87	5	0	6	3388	1.03
Deaf Smit	h	168	5	1	60	0	1	3	5921	0.29
	59	168	7	1	60	2	0	7	6174	0.66
Delta		136	3	2	24	0	0	1	2627	0.22
	60	136	4	2	19	3	0	3	4175	0.42
DeWitt		269	5	6	77	1	0	1	1953	0.30
	63	131	6	1	82	1	0	2	1648	0.71
	63	132	1	1	82	1	0	1	1416	0.41
	63	132	2	1	82	1	0	1	1261	0.46
Dimmit		37	8	1	83	3	1	2	1693	0.69
Donley		42	6	1	287	3	0	8	7833	0.59
	65	42	7	1	287	3	0	12	6603	1.06
	65	42	8	1	287	5	1	4	6025	0.39
Kenedy	3	327	2	1	77	2	0	3	5410	0.32
-	66	327	3	1	77	2	0	5	5110	0.57
Eastland	Į	7	4	1	80	0	0	1	4452	0.13
Ector		5	1	1	80	1	0	4	14190	0.16
	69	228	6	1	385	5	0	7	12396	0.33
	69	572	1	2	302	2	1	12	8235	0.85
	69	2224	1	3	338	2	O	2	5862	0.20
Ellis		172	5	1	287	5	0	8	7754	0.60
	71	172	7	1	287	1	0	2	6924	0.17
	71	260	2	1	67	3	0	4	9110	0.26
	71	261	1	1	67	5	1	8	11161	0.42
El Paso		374	2	1	62	5	0	4	19317	0.12
	72	2552	1	3	375	5	0	6	5482	0.64
Fayette		265	7	2	71	1	0	4	6140	0.38
	76	266	1	2	71	5	l 0	8	6947	0.67

Table G.4. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Floyd		145	6	1	70	3	0	4	2256	1.03
	78	145	7	1	62	0	0	1	2429	0.24
	78	453	1	1	62	1	0	1	2068	0.28
Fort Bend		27	8	6	90	3	0	7	19399	0.21
	80	27	12	1	59	18	4	26	39295	0.38
	80	89	9	1	59	5	2	10	16516	0.35
Freestone		57	7	1	84	0	0	4	4670	0.50
Gaines		228	2	1	62	3	2	6	4427	0.79
	84	228	3	1	385	16	0	10	5891	0.99
	84	294	1	1	62	7	1	13	4479	1.69
Garza		53	4	1	84	7	0	19	6549	1.69
	86	53	5	1	84	9	0	14	5925	1.37
	86	53	6	1	84	5	0	11	5346	1.20
Gray		169	6	1	60	0	0	1	5949	0.10
	91	275	11	1	66	2	0	6	8337	0.42
	91	455	3	2	152	0	0	1	6503	0.09
Grayson	)	45	18	1	82	4	0	13	6814	1.11
•	92	45	19	1	82	5	0	12	6745	1.03
	192	47	1	1	69	3	0	7	14407	0.28
	92	47	13	1	75	2	0	4	15149	0.15
Gregg		138	1	1	259	9	0	15	16067	0.54
	93	377	1	2	135	0	0	1	7168	0.08
Grimes		50	3	2	6	6	Ō	9	7209	0.73
	94	50	11	3	508	0	0	1	1375	0.42
Guadalupe		366	3	2	123	0	0	1	3870	0.15
Hale	,	67	5	1	87	7	0	12	6968	1.00
	96	67	9	3	445	1	0	1	1625	0.36
	96	145	5	1	70	0	0	1	5313	0.11
Hall		42	9	1	287	7	1	10	6023	0.97
Hardeman	1	43	2	1	287	7	0	7	7009	0.58
	100	43	4	1	287	0	0	6	7626	0.46

Table G.4. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hardin		65	5	1	96	2	0	2	16278	0.07
	101	200	9	1	69	0	1	3	9018	0.19
Harris		50	6	1	290	4	0	8	18154	0.26
	102	50	8	1	290	9	2	19	44831	0.25
Harrison		62	7	1	59	4	0	4	12051	0.19
	103	63	1	1	59	2	0	6	11602	0.30
	103	63	9	1	59	0	0	2	5200	0.22
	103	96	7	1	80	6	1	7	8603	0.47
	103	96	8	1	80	0	1	2	4686	0.25
	103	2642	2	3	281	1	0	2	5273	0.22
Haskell		157	3	1	277	3	1	4	1901	1.22
	105	157	4	1	277	1	0	3	2969	0.59
Hemphill		30	6	1	60	4	0	5	5415	0.54
•	107	169	9	1	60	0	0	1	1415	0.41
Henderson		163	3	2	31	0	0	2	6668	0.17
	108	163	4	2	31	3	0	5	21120	0.14
	108	164	1	2	31	0	0	2	9668	0.12
	108	164	2	2	31	0	1	4	7357	0.32
	108	164	3	2	31	4	0	6	8414	0.41
	108	198	1	1	175	4	0	3	6383	0.27
Hidalgo		39	2	1	83	8	2	10	9753	0.60
_	109	39	17	1	83	7	1	14	28991	0.28
	109	39	18	1	83	11	1	18	27923	0.37
	109	255	6	1	281	1	0	6	5385	0.65
	109	255	7	1	281	8	2	21	8276	1.48
	109	255	9	10	281	0	0	1	11661	0.05
	109	255	11	3	113	0	0	1	9448	0.06
	109	342	1	2	107	3	0	7	9303	0.44
	109	342	2	2	107	1	0	1	6406	0.09
	109	528	1	2	107	2	0	8	6986	0.67
Hill		14	7	1	77	4	0	3	5065	0.34

Table G.4. Continued

County	, 1	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hockley		52	6	1	84	3	0	1	5210	0.11
	111	130	4	2	114	6	0	5	6514	0.45
	111	380	2	1	62	2	0	14	6031	1.35
Hood		80	3	1	377	0	0	1	8340	0.07
	112	80	4	1	377	2	0	8	14631	0.32
Houston		109	3	1	287	0	1	4	3286	0.71
Howard		68	7	1	87	3	0	2	2730	0.43
	115	68	8	1	87	3	0	5	5250	0.55
Hunt		136	1	2	224	1	0	1	4832	0.12
Hutchinson	,	356	1	2	207	1	0	1	5030	0.12
	118	356	1	2	136	8	0	10	6535	0.89
	118	379	1	2	136	2	0	2	8192	0.14
	118	455	1	2	152	1	0	2	3738	0.31
Jack		249	7	1	281	0	0	2	6951	0.17
Jackson		89	3	1	59	1	1	10	13014	0.45
	121	89	4	1	59	6	0	9	10955	0.48
,	121	89	5	1	59	5	o	10	11131	0.52
Jasper		64	8	1	96	1	0	1	7143	0.08
•	122	244	3	1	190	0	0	2	8650	0.13
Jefferson		28	6	1	90	3	0	4	7609	0.31
	126	255	1	1	281	5	0	7	8805	0.46
Johnson		19	1	2	174	19	3	14	20681	0.39
	127	260	1	1	67	1	Ö	1	7880	0.07
Jones		33	5	1	83	14	1	1 6	7869	1.18
	128	157	5	1	277	2	0	4	3143	0.74
Karnes		100	5	1	181	0	0	3	4437	0.39
Kaufman		95	3	1	80	20	2	35	36054	0.56
	130	95	4	1	80	16	1	27	17132	0.92
	130	95	5	1	80	5	0	11	11333	0.56
	130	173	3	2	34	2	0	1	6126	0.09
	130	197	3	1	175	17	o	10	15401	0.38

Count	v	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kaufman		197	4	1	175	4	1	14	12054	0.68
	130	197	8	2	243	1	0	2	4674	0.25
	130	495	1	1	80	2	0	7	21836	0.19
Kleberg		102	4	1	77	9	0	11	10655	0.60
	137	327	1	1	77	0	0	1	5960	0.10
Lamar		136	5	2	19	0	0	1	4812	0.12
	139	136	7	1	271	1	0	2	11894	0.10
	139	136	8	1	271	3	0	6	8134	0.43
	139	221	1	1	271	0	0	1	4515	0.13
Lamb		52	4	1	84	8	0	12	3674	1.90
	140	52	5	1	84	2	0	16	4310	2.16
	140	227	2	1	385	1	0	1	1418	0.41
Lampasas		272	6	1	183	0	0	1	2800	0.21
	146	28	3	1	90	3	0	6	10548	0.33
	146	177	3	1	59	2	1	11	15074	0.42
	146	593	1	2	321	0	0	1	8306	0.07
Live Oak	,	254	1	1	281	8	0	14	7477	1.09
Lubbock	- [	52	7	1	84	11	0	18	9050	1.16
	152	53	1	1	84	4	0	6	8849	0.39
	152	68	1	1	87	5	0	14	13574	0.60
	152	130	5	2	114	4	0	3	14901	0.12
	152	131	1	1	62	4	0	7	7833	0.52
	152	131	2	1	62	1	0	1	5659	0.10
	152	380	1	1	62	15	0	16	11420	0.81
Lynn		53	3	1	84	2	0	5	5740	0.51
	153	68	2	1	87	6	2	13	4486	1.68
	153	68	3	1	87	5	0	14	3685	2.21
Martin		5	16	1	80	1	0	4	2137	1.09
Mason		71	4	1	87	0	0	1	2405	0.24
Matagorda		179	4	2	35	1	0	2	11302	0.10
	158	179	6	2	35	1	0	4	5668	0.41

Table G.4. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalitles	Accidents	ADT	Accident Data
McCulloch		70	6	1	87	0	0	2	3900	0.30
McLennan		49	1	2	6	3	0	5	7959	0.37
	161	55	7	1	84	2	0	5	7631	0.38
	161	55	8	1	84	2	0	2	17491	0.07
	161	162	1	2	31	0	0	1	4520	0.13
	161	162	1	1	84	1	0	4	11896	0.20
	161	258	9	2	6	4	О	6	14692	0.24
Medina		24	5	1	90	0	0	2	7927	0.15
	163	24	6	1	90	5	0	5	8633	0.34
	163	291	8	2	16	1	0	1	2415	0.24
Midland		5	2	1	80	1	1	5	17090	0.17
	165	5	3	1	80	4	0	6	7383	0.47
	165	463	2	2	158	0	0	1	6119	0.10
	165	2296	2	2	191	6	1	11	8888	0.72
Mitchell		53	11	1	84	0	0	1	5595	0.10
Montague		13	5	1	81	3	0	6	8279	0.42
	169	44	6	1	82	o	0	1	3292	0.18
	169	224	3	1	287	2	0	5	9552	0.30
Montgome		177	5	1	59	17	2	25	32073	0.45
Moore		66	4	1	287	5	0	6	7188	0.49
	171	66	5	1	87	13	0	20	8940	1.30
Morris		222	3	1	259	1	0	1	12120	0.05
	172	222	3	2	11	2	0	2	4531	0.26
	172	392	1	1	259	1	0	1	7733	0.08
Nacogdoch	es	176	1	1	59	6	0	12	17424	0.40
Navarro		92	13	1	75	1	0	1	7747	0.08
	175	163	1	2	31	4	0	9	8923	0.59
	175	163	2	2	31	2	0	8	6410	0.73
Nolan		53	12	1	84	3	0	8	5537	0.84
Nueces		102	1	2	44	5	0	8	15854	0.29
	178		2	1	77	5	1	7	13768	0.30

Table G.4. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Nueces		102	3	1	77	8	0	8	11618	0.40
	178	373	2	2	44	5	1	6	9552	0.37
	178	373	3	2	44	1	0	2	6706	0.17
Palo Pinto		7	10	1	180	0	0	1	4582	0.13
	182	11	10	1	180	0	0	2	1094	1.06
Panola		63	3	1	59	4	0	6	6541	0.53
	183	63	4	1	59	1	0	3	7288	0.24
	183	63	10	1	59	1	0	4	5440	0.43
Parker		8	2	1	180	8	0	13	7847	0.96
	184	8	3	1	80	6	0	12	13984	0.50
	184	80	6	1	377	5	0	6	12285	0.28
	184	171	3	2	199	2	0	2	12415	0.09
Parmer		52	1	1	70	2	1	6	4298	0.81
Polk		176	4	1	59	7	1	13	14833	0.51
	187	176	5	1	59	17	3	31	13418	1.34
	187	176	6	3	90	2	0	2	5752	0.20
	187	177	1	1	59	17	1	26	15742	0.96
	187	213	3	1	190	7	1	5	8884	0.33
Potter	1	41	7	1	87	2	0	4	12282	0.19
	188	42	1	1	287	5	0	4	6020	0.39
	188	169	2	1	60	2	0	2	9214	0.13
	188	2635	1	3	335	5	0	8	5665	0.82
Randall		67	1	1	87	8	1	17	8879	1.11
	191	67	17	5	1541	2	0	1	518	1.12
	191	168	8	1	60	4	0	7	6215	0.65
	191	168	9	1	60	5	1	10	18180	0.32
Refugio		371	3	1	77	6	1	10	9177	0.63
Robertson		49	8	1	190	1	1	3	9217	0.19
Runnels	1	78	1	1	67	1	0	2	1840	0.63
	200	158	1	1	67	7	0	8	4692	0.99
Rusk		138	2	1	259	3	0	5	8269	0.35

Table G.4. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Rusk		138	3	1	259	1	0	4	7660	0.30
	201	138	4	1	259	1	0	1	6019	0.10
San Jacir	nto	177	2	1	59	16	2	29	15881	1.06
San Patri	icio	101	4	1	181	13	1	15	12948	0.67
	205	180	6	2	35	1	1	4	11661	0.20
	205	180	10	2	361	1	1	4	7650	0.30
	205	371	4	1	77	6	0	7	6993	0.58
	205	372	1	1	77	7	1	32	11480	1.62
Scurry		53	7	1	84	6	0	13	5464	1.38
	208	53	8	1	84	4	0	7	5790	0.70
	208	53	9	1	84	5	0	11	5179	1.23
	208	53	10	1	84	5	0	7	5402	0.75
Shacklefo	ord	11	5	1	180	2	0	2	4830	0.24
Shelby		63	6	1	59	0	0	1	7274	0.08
•	210	175	4	1	59	0	0	1	6049	0.10
Smith		95	8	1	80	0	0	1	3998	0.15
1	212	164	4	2	31	1	0	4	13236	0.18
	212	165	1	1	271	0	0	1	12778	0.05
	212	165	2	1	271	2	0	2	3988	0.29
	212	190	5	1	69	0	0	2	16030	0.07
	212	191	1	1	69	7	0	14	15434	0.53
	212	1790	2	3	323	2	0	2	16255	0.07
	212	2075	1	3	323	2	1	2	14757	0.08
Sterling		69	3	1	87	1	0	1	4469	0.13
	216	69	4	1	87	7	0	4	5422	0.43
Swisher	,	67	2	1	87	10	0	14	5856	1.39
	219	67	3	1	87	12	0	18	5986	1.75
Tarrant		13	10	3	496	1	0	4	11610	0.20
-	220	14	15	1	81	2	0	1	13587	0.04
	220	80	7	1	377	2	0	4	16214	0.14
	220	172	9	1	287	10	0	11	16041	0.40

Table G.4. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Tarrant		353	3	2	114	4	0	7	31051	0.13
	220	747	4	5	157	1	0	2	25278	0.05
	220	1094	1	5	731	0	0	1	15525	0.04
Terry		227	7	1	62	1	0	7	7415	0.55
	223	228	1	1	62	10	0	12	5076	1.37
	223	380	3	1	62	2	0	5	5793	0.50
Titus		248	1	1	271	0	0	1	13031	0.04
Tom Green	.	69	6	1	87	4	0	9	4173	1.25
	226	69	7	1	87	6	1	14	10053	0.81
	226	70	2	1	87	0	0	2	8564	0.14
	226	77	8	3	306	2	0	3	8184	0.21
	226	158	2	1	67	4	0	8	5015	0.93
Travis		113	13	3	360	8	1	24	35111	0.40
	227	114	2	1	290	11	0	25	16026	0.91
	227	152	1	1	183	6	0	12	10227	0.68
	227	265	. 1	2	71	9	1	14	26232	0.31
	227	265	2	2	71	2	0	3	15025	0.12
Upshur		392	2	1	259	2	0	2	6373	0.18
Uvalde	,	23	5	1	90	3	0	3	2803	0.62
Val Verde		22	10	1	90	2	O	1	12997	0.04
	233	23	1	1	90	2	0	4	9865	0.24
Van Zandt		95	6	1	80	3	0	4	6664	0.35
	234	95	7	1	80	3	2	5	4762	0.61
Victoria		88	4	1	59	0	0	1	12781	0.05
	235	88	5	3	175	4	1	9	8607	0.61
	235	89	1	1	59	9	1	11	14234	0.45
	235	371	1	1	77	1	0	1	7183	0.08
	235	432	2	5	404	7	О	14	10859	0.75
Ward		4	1	1	80	0	0	1	628	0.93
Washingto	n	114	9	1	290	1	0	3	7281	0.24
	239	114	10	1	290	5	0	10	7982	0.73

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Table G.4. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Washington	1	186	6	2	36	0	0	1	10442	0.06
	239	186	6	1	290	3	0	11	5050	1.27
Wharton		89	6	1	59	3	0	3	11781	0.15
	241	89	7	1	59	7	0	13	13091	0.58
	241	89	8	1	59	9	0	10	14141	0.41
Wichita		43	8		287	8	0	10	8738	0.67
	243	43	9	1	287	2	0	4	12212	0.19
	243	43	17	3	370	3	1	4	7249	0.32
	243	156	7	1	277	0	0	2	11596	0.10
Wilbarger		43	5	1	287	9	0	12	7628	0.91
	244	43	6	1	70	7	0	8	9082	0.51
	244	43	7	1	287	3	0	7	8749	0.47
Willacy		327	10	1	77	7	0	13	6735	1.12
Williamson		204	1	1	79	0	0	1	12369	0.05
Wilson		100	3	1	181	6	0	12	6995	1.00
Winkler		292	2	2	18	1	0	1	4331	0.13
Wise	)	13	7	1	81	4	0	14	7365	1.11
	249	13	8	1	81	14	1	31	14278	1.26
Wood	1	96	1	1	80	4	0	4	3504	0.66
	250	96	2	1	80	0	0	3	3292	0.53

Table G.5. Single-Vehicle Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1985)

Count	v	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Atascosa		73	5	8	37	10	0	11	8757	0.47
	7	73	6	8	37	2	0	4	8696	0.17
	7	73	10	8	37	6	0	11	8524	0.49
Austin		271	2	8	10	12	3	20	19710	0.38
	8	271	3	8	10	17	2	19	23216	0.31
Bell		15	4	8	35	20	2	20	26071	0.29
	14	15	6	8	35	12	1	12	22726	0.20
	14	15	7	8	35	19	0	23	20803	0.42
Bexar		17	2	8	35	6	0	2	15877	0.05
	15	17	3	8	35	7	0	20	13878	0.54
	15	72	7	8	10	8	1	13	19776	0.25
	15	72	8	8	10	10	0	16	33191	0.18
	15	73	9	8	37	7	0	14	9963	0.53
Bowie		610	5	8	30	12	1	17	12127	0.53
	19	610	6	8	30	5	1	20	17474	0.43
	19	610	7	8	30	4	0	6	26874	0.08
Caldwell	,	535	3	8	10	1	0	4	11677	0.13
Callahan		7	1	8	20	3	0	10	11812	0.32
	30	7	2	8	20	11	0	16	11807	0.51
	30	6	7	8	20	7	0	24	13854	0.65
Carson		275	2	8	40	5	0	8	8567	0.35
	33	275	3	8	40	8	0	13	8309	0.59
	33	275	4	8	40	2	0	7	8283	0.32
Chambers		739	1	8	10	1	0	6	22429	0.10
	36	508	2	8	10	34	2	47	26081	0.68
	36	508	3	8	10	15	0	22	22937	0.36
Colorado	1	271	1	8	10	22	2	37	19890	0.70
_	45	535	8	8	10	23	111	29	14785	0.74
Comal		16	4	8	35	6	0	11	28979	0.14
	46	16	5	8	35	8	11	16	34065	0.18
Cooke		195	1	8	35	18	0	26	16732	0.58

Table G.5. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cooke		194	2	8	35	8	0	4	13234	0.11
Crane		4	5	8	20	1	0	2	8320	0.09
Crockett		141	1	8	10	13	0	12	4187	1.08
	53	140	10	8	10	15	1	15	3233	1.74
,	53	140	11	8	10	2	0	4	3239	0.46
	53	140	13	8	10	12	2	9	2923	1.16
Culberson		3	1	8	10	3	1	5	7150	0.26
	55	3	2	8	10	4	0	5	7151	0.26
	55	3	3	8	10	9	0	15	7043	0.80
	55	2	11	8	10	3	1	7	6778	0.39
Deaf Smith	1	90	1	8	40	13	0	8	7777	0.39
Denton		196	1	8	353	15	0	22	50017	0.17
	61	196	2	8	353	4	0	13	21496	0.23
	61	195	2	8	35	25	0	45	65065	0.26
	61	81	13	8	354	9	0	13	12217	0.40
Donley		275	6	8	40	1	0	3	8163	0.14
	65	275	8	8	40	0	0	3	8337	0.14
	65	275	10	8	40	1	0	3	8317	0.14
Eastland	1	7	3	8	20	13	1	25	11697	0.80
	68	7	4	8	20	1	0	11	13081	0.32
	68	314	5	8	20	0	0	3	11537	0.10
	68	7	6	8	20	14	0	18	11340	0.60
Ector		4	6	8	20	6	0	4	8887	0.17
	69	4	7	8	20	19	3	35	10655	1.23
Ellis		442	3	8	353	8	3	14	29751	0.18
	71	92	3	8	45	10	1	15	23268	0.24
	71	48	4	8	353	4	2	13	19237	0.25
	71	92	4	8	45	8	0	13	21824	0.22
	71	92	5	8	45	5	0	8	21768	0.14
	71	48	8	8	353	17	0	21	14659	0.54
El Paso		2121	1	8	10	11	2	17	21608	0.30

Table G.5. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
El Paso		2121	4	8	10	19	1	27	12562	0.81
	72	2121	5	8	10	17	0	17	8210	0.78
Erath		314	4	8	20	1	1	2	11539	0.07
	74	15	3	8	35	0	0	1	24624	0.02
Fayette		535	6	8	10	2	0	8	12451	0.24
_	76	535	7	8	10	8	3	15	12850	0.44
Fort Bend		271	5	8	10	2	0	6	54444	0.04
	81	610	2	8	30	11	0	20	12910	0.58
Freestone		675	1	8	45	23	1	28	15095	0.70
	82	675	2	8	45	35	7	48	14487	1.25
Frio		17	6	8	35	7	3	15	7202	0.78
	83	17	7	8	35	7	0	10	5582	0.67
Galveston		500	1	8	45	15	1	32	46953	0.26
	85	500	4	8	45	1	0	1	36673	0.01
Gillespie		142	13	8	10	4	0	6	4920	0.46
Gonzales		535	4	8	10	8	0	12	12199	0.37
,	90	535	5	8	10	6	0	10	12423	0.30
Gray		275	5	8	40	5	0	3	8238	0.14
_	91	275	7	8	40	1	1	3	8178	0.14
	91	275	9	8	40	2	0	1	8227	0.05
	91	275	11	8	40	9	0	23	8337	1.04
Gregg		495	7	8	20	28	1	39	19002	0.77
Guadalupe		535	1	8	10	9	Ö	15	14283	0.39
•	95	535	2	8	10	9	1	15	12045	0.47
	95	25	3	8	10	6	0	13	16511	0.30
Hale		67	4	8	27	3	0	7	7216	0.36
	96	67	5	8	27	5	0	13	6968	0.70
	96	67	6	8	27	7	0	11	6769	0.61
Harris		508	1	8	10	5	0	11	81244	0.05
	102	271	6	8	10	3	0	9	65009	0.05
Harrison		495	8	8	20	19	2	33	16762	0.74

Table G.5. Continued

County	, — ]	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Harrison		495	9	8	20	2	0	8	15198	0.20
_ *	103	495	10	8	20	6	0	12	15456	0.29
Hays		16	2	8	35	27	2	40	36443	0.41
	106	16	3	8	35	6	0	6	32085	0.07
HIII		1 4	7	8	35	8	0	18	24403	0.28
	110	48	9	8	353	2	0	8	14206	0.21
	110	14	23	8	354	1	0	4	10399	0.14
	110	14	24	8	35	6	0	10	23784	0.16
Hopkins		610	1	8	30	12	1	11	13202	0.31
- F	113	10	2	8	30	2	0	6	15306	0.15
	113	9	9	8	30	1	1	11	15129	0.27
Howard		5	5	8	20	29	0	24	10101	0.89
	115	5	6	8	20	22	2	39	10339	1.42
Hudspeth		2	5	8	10	11	1	18	7960	0.85
	116	2	6	8	10	4	0	16	7926	0.76
	116	2121	6	8	10	21	0	15	7893	0.71
4	116	2	7	8	10	12	0	15	7733	0.73
	116	2	8	8	10	8	1	12	6987	0.65
	116	2	9	8	10	9	1	10	6987	0.54
	116	2	10	8	10	2	0	3	7053	0.16
Hunt		9	13	8	30	24	2	64	20957	1.15
Jeff Davis		3	4	8	10	8	0	16	6978	0.86
Jefferson		739	2	8	10	20	O	26	27248	0.36
Johnson		14	3	8	354	13	0	23	17044	0.51
	127	14	4	8	354	7	0	11	11745	0.35
	127	14	22	8	354	1	0	4	10571	0.14
Kaufman		495	1	8	20	9	3	18	21944	0.31
Kendall	1	72	5	8	10	25	O	32	10001	1.20
	131	72	6	8	10	7	1	17	11745	0.54
	131	142	15	8	10	1	0	1	7011	0.05
Kerr		142	2	8	10	4	0	4	4603	0.33

Table G.5. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kerr		142	12	8	10	2	3	3	4549	0.25
	133	142	14	8	10	16	0	34	6381	2.00
Kimble		142	1	8	10	19	2	25	5081	1.85
	134	141	8	8	10	3	0	4	3850	0.39
	134	141	9	8	10	1	0	5	4063	0.46
LaSalle		18	1	8	35	5	0	3	4319	0.26
	142	18	2	8	35	16	0	11	3920	1.05
	142	17	8	8	35	11	1	13	4654	1.05
Leon		675	3	8	45	14	1	18	15472	0.44
	145	675	4	8	45	22	0	33	16189	0.77
Live Oak		74	1	8	37	9	2	12	6171	0.73
	149	74	2	8	37	22	1	24	6805	1.33
	149	73	7	8	37	4	4	6	8948	0.25
Lubbock		67	7	8	27	5	0	11	8939	0.46
Madison		675	5	8	45	33	3	34	15900	0.80
Martin		5	4	8	20	5	0	20	10010	0.75
McLennan	,	15	1	8	35	8 -	0	15	38124	0.15
	161	15	2	8	35	5	0	7	24469	0.11
	161	14	8	8	35	15	1	15	25997	0.22
	161	14	9	8	35	0	0	"1	32469	0.01
Medina		17	5	8	35	5	1	13	8825	0.55
Midland		5	14	8	20	19	0	27	15228	0.67
	165	5	15	8	20	13	0	27	10907	0.93
Mitchell		6	1	8	20	12	0	22	8824	0.94
	168	5	7	8	20	11	0	10	8577	0.44
	168	5	8	8	20	7	0	6	8705	0.26
Montgome	ry	110	4	8	45	29	3	60	62664	0.36
	170	675	8	8	45	14	0	30	36089	0.31
Morris	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	610	4	8	30	2	0	3	11841	0.10
Navarro		93	1	8	45	2	0	11	17822	0.23
	175	166	1	8	45	2	0	5	16146	0.12

Table G.5. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Navarro		92	6	8	45	12	2	28	18989	0.55
Nolan		6	2	8	20	10	0	31	11506	1.01
	177	6	3	8	20	16	1	26	13586	0.72
Oldham		90	2	8	40	10	0	16	7818	0.77
	180	90	3	8	40	47	5	54	7865	2.58
	180	90	4	8	40	23	1	40	8763	1.72
Orange		28	9	8	10	11	1	22	48350	0.17
	181	28	11	8	10	.10	1	27	27152	0.37
	181	28	14	8	10	o	О	2	24122	0.03
Palo Pinto	)	314	2	8	20	7	1	17	12478	0.51
	182	314	3	8	20	8	0	8	12057	0.25
Parker		314	1	8	20	3	2	11	14201	0.29
	184	8	3	8	20	4	1	10	30989	0.12
	184	314	7	8	20	3	l о	9	18336	0.18
Pecos		140	1	8	10	13	0	7	3366	0.78
	186	140	2	8	10	2	0	8	3003	1.00
	186	140	3	8	10	11	0	11	2949	1.40
	186	140	4	8	10	3	0	7	2922	0.90
	186	140	5	8	10	2	0	11	2927	1.41
	186	140	6	8	10	3	0	3	2918	0.39
	186	441	7	8	10	13	1	11	2804	1.47
	186	441	8	8	10	2	0	6	3700	0.61
Potter		275	1	8	40	4	Ö	8	36428	0.08
	188	90	5	8	40	5	0	16	5295	1.14
Randall	~	168	9	8	27	12	0	19	23524	0.30
Reeves		3	5	8	20	2	0	7	4663	0.56
	195	441	5	8	10	14	1	10	2519	1.49
	195	441	6	8	10	2	0	6	4732	0.48
	195	3	6	8	20	16	2	12	2568	1.76
	195	3	7	8	20	4	0	12	5354	0.84
	195	441	9	8	10	11	2	24	2762	3.27

Table G.5. Continued

Count	У	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Rockwall		9	12	8	30	31	3	42	31620	0.50
San Patrio	io	74	3	8	37	5	1	7	8097	0.33
	205	74	4	8	37	7	0	4	10669	0.14
	205	74	5	8	37	11	0	24	12424	0.73
Smith		495	4	8	20	16	1	30	18864	0.60
	212	495	5	8	20	13	0	27	15977	0.64
ļ	212	495	6	8	20	6	1	9	17669	0.19
Sutton		141	2	8	10	8	0	13	4065	1.20
	218	141	3	8	10	14	1	16	3693	1.63
	218	141	4	8	10	6	0	10	3594	1.05
	218	141	5	8	10	0	1	10	3686	1.02
	218	141	6	8	10	1	1	2	3671	0.20
	218	141	7	8	10	7	1	10	3667	1.03
Swisher		67	3	8	27	1	0	2	5986	0.13
Tarrant		81	12	8	354	8	0	13	14681	0.33
Taylor		6	4	8	20	8	3	21	13743	0.57
,	221	6	5	8	20	1	0	5	15252	0.12
Titus		610	3	8	30	22	0	23	12451	0.69
Travis	1	16	1	8	35	1	0	2	43858	0.02
<u> </u>	227	15	10	8	35	6	1	12	53185	0.08
Van Zandt		495	2	8	20	22	1	35	20883	0.63
	234	495	3	8	20	25	0	32	18662	0.64
Walker		675	6	8	45	26	1	40	17377	0.87
	236	675	7	8	45	15	0	26	22363	0.44
Waller	1	271	4	8	10	16	1	18	26263	0.26
	238	4	2	8	20	11	0	29	5409	2.02
	238	4	4	8	20	20	1	20	6646	1.13
Webb		18	3	8	35	10	0	8	4259	0.71
	240	18	4	8	35	9	0	12	4330	1.04
	240	18	5	8	35	9	0	11	5184	0.80
	240	18	6	8	35	5	0	8	16379	0.18

Table G.5. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Wheeler		275	12	8	40	5	0	13	8491	0.58
	242	275	13	8	40	9	0	11	7816	0.53
Williamson	1	15	8	8	35	8	1	23	25876	0.33

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		42		

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Anderson		520	8	2	155	0	0	1	4532	0.13
Andrews		228	4	1	385	3	1	5	3846	0.76
	2	228	5	1	385	5	0	9	7850	0.67
Angelina		176	2	1	59	2	0	2	17181	0.07
	3	176	3	1	59	3	0	15	19583	0.45
	3	199	4	1	69	2	0	5	8207	0.35
Aransas		180	7	3	70	2	0	1	7883	0.07
Armstrong		42	3	1	287	4	0	9	6112	0.86
	6	42	4	1	287	12	1	16	6154	1.51
	6	42	5	1	287	7	0	5	5600	0.52
Atascosa		73	3	1	281	10	0	5	4491	0.65
	7	73	4	1	281	0	0	1	2480	0.23
	7	328	3	2	97	2	0	4	3039	0.77
	7	613	2	2	16	1	0	4	4354	0.53
Bailey		52	2	1	70	6	0	9	5761	0.91
•	9	52	3	1	84	6	0	18	3587	2.92
Bastrop	)	114	6	1	290	10	0	8	6086	0.76
	11	265	3	2	71	7	0	10	12848	0.45
	11	265	4	2	21	5	0	9	16944	0.31
	11	265	5	2	71	3	1	9	15980	0.33
	11	472	1	2	21	9	0	10	3784	1.54
Bee		100	8	1	181	5	0	8	5629	0.83
	13	101	1	1	181	3	0	4	6461	0.36
Bell		231	4	1	190	2	0	13	28055	0.27
Bexar	,	24	7	1	90	9	0	10	12943	0.45
	15	73	2	1	281	4	0	5	5728	0.51
	15	100	2	1	181	4	0	11	9258	0.69
	15	143	1	1	87	6	0	9	11958	0.44
	15	143	2	1	87	2	0	5	6449	0.45
	15	253	4	1	281	9	0	8	28972	0.16
	15	291	9	2	16	4	0	6	3690	0.95

Table G.6. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Bexar		291	10	2	16	1	1	2	24339	0.05
	15	613	1	2	16	4	1	14	8094	1.01
Blanco		113	5	1	281	0	0	1	5280	0.11
	16	253	1	1	281	0	0	1	4544	0.13
Bowie		217	1	1	59	1	0	1	9421	0.06
	19	218	1	1	59	9	0	9	13567	0.39
Brazoria		111	7	2	288	4	0	7	16508	0.25
	20	111	8	2	288	11	0	12	19344	0.36
	20	111	9	2	288	2	0	3	10008	0.17
	20	178	2	2	35	5	0	7	15185	0.27
	20	178	3	2	35	4	0	11	15659	0.41
	20	598	2	2	288	3	0	9	13536	0.39
	20	598	3	2	288	5	0	7	7866	0.52
Brazos		50	2	2	6	0	0	1	9358	0.06
	21	116	4	2	21	1	0	2	8856	0.13
Brown		54	6	1	67	5	0	3	7437	0.23
	25	79	1	1	67	2	0	5	5334	0.54
Burnet		252	2	1	281	2	0	3	6258	0.28
Cameron	1	39	7	1	77	2	0	5	20543	0.14
	31	39	8	1	77	11	0	17	11240	0.88
	31	39	12	3	448	1	0	2	14176	0.08
	31	39	19	1	83	2	1	8	26234	0.18
	31	220	5	2	48	1	0	1	18420	0.03
	31	327	8	1	77	3	0	7	11240	0.36
	31	331	2	2	100	2	0	1	18964	0.03
	31	331	4	4	100	2	0	5	14229	0.20
Carson	-	169	3	1	60	3	1	5	5415	0.54
	33	169	4	1	60	1	0	3	4418	0.39
	33	169	5	1	60	4	0	4	4855	0.48
	33	169	14	3	552	0	0	1	474	1.23
Cass		218	3	1	59	2	0	3	12356	0.14

Table G.6. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cass		218	4	1	59	1	1	4	9687	0.24
Chambers	l	367	1	2	124	1	0	1	6150	0.09
	36	508	3	2	73	0	0	2	4980	0.23
Cherokee		199	1	1	69	1	1	7	10236	0.40
	37	199	2	1	69	8	1	7	6714	0.61
Childress		31	5	1	62	0	0	1	1169	0.50
	38	42	12	1	287	9	0	20	6896	1.69
	38	43	1	1	287	0	0	1	7802	0.07
Clay		44	2	1	82	8	1	15	13330	0.65
	39	44	3	1	82	1	0	1	13330	0.04
}	39	224	1	1	287	6	1	13	9652	0.78
	39	224	2	1	287	4	0	10	9690	0.60
Coke		69	5	1	87	0	0	1	3610	0.16
Coleman	l	78	5	1	67	0	1	1	1260	0.46
Collin	I	47	6	1	75	17	0	31	58153	0.31
	43	47	14	1	75	16	0	23	21329	0.63
,	43	135	4	1	380	1	0	3	5340	0.33
	43	364	4	2	121	1	0	2	7580	0.15
	43	549	3	2	5	0	0	1	3510	0.17
	43	549	3	2	121	1	0	1	6440	0.09
	43	549	3	3	399	1	0	1	21329	0.03
Collingsw	orth	31	3	1	83	0	0	1	1335	0.44
	44	31	4	1	83	1	0	2	2485	0.47
Colorado		266	2	2	71	6	0	7	5349	0.76
Comal		253	3	1	281	10	0	13	5706	1.32
Comanche		79	2	1	67	3	0	6	6517	0.54
Cooke		44	7	1	82	3	0	7	4741	0.86
	49	44	8	1	82	7	1	8	8784	0.53
	49	45	1	1	82	9	1	13	12682	0.60
Coryell		231	2	1	190	2	1	8	22466	0.21
Crane		229	2	1	385	10	0	13	4194	1.80

Table G.6. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Crosby		131	3	1	62	11	0	13	4402	1.72
-	54	131	4	1	82	0	0	1	3854	0.15
	54	131	5	1	82	1	0	5	1930	1.51
Culberson		233	2	1	62	2	0	2	1435	0.81
Dawson		68	4	1	87	1	1	7	5620	0.72
	58	68	5	1	87	53	4	4	3388	0.69
Deaf Smith		168	5	1	60	1	0	2	5921	0.20
	59	168	7	1	60	3	0	5	6174	0.47
Dickens		131	6	1	82	2	1	1	1648	0.35
	63	132	1	1	82	3	0	3	1416	1.23
	63	132	2	1	82	1	0	1	1261	0.46
Dimmit		37	8	1	83	13	0	3	1693	1.03
Donley		42	6	1	287	5	0	8	7833	0.59
_	65	42	7	1	287	4	0	8	6603	0.70
	65	42	8	1	287	10	0	11	6025	1.06
Kenedy		327	2	1	77	4	0	4	5410	0.43
	66	327	3	1	77	2	0	5	5110	0.57
Eastland		7	4	1	80	2	0	4	4452	0.52
Ector	4	5	1	1	80	1	0	3	14190	0.12
	69	228	6	1	385	3	0	11	12396	0.52
	69	572	1	2	302	3	1	9	8235	0.64
Ellis		172	5	1	287	6	0	5	7754	0.37
	71	172	7	1	287	3	0	4	7754	0.30
	71	260	2	1	67	3	0	3	9110	0.19
	71	261	1	1	67	9	1	12	11161	0.63
	71	442	3	1	77	1	0	2	6960	0.17
El Paso		374	2	1	62	3	0	3	19317	0.09
	72	2552	1	3	375	5	0	5	5482	0.53
Fayette		265	7	2	71	1	0	2	6140	0.19
_	76	266	1	2	71	6	0	12	6947	1.00
Floyd		145	6	1	70	6	0	3	2256	0.77

Table G.6. Continued

County	<u>/</u> T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Floyd		145	7	1	62	0	0	1	2429	0.24
	78	453	_1	1	62	1	0	2	2068	0.56
Fort Bend		27	8	6	90	4	1	6	19399	0.18
	80	27	12	1	59	25	1	30	39295	0.44
	80	89	9	1	59	1	0	2	16516	0.07
Freestone		57	7	1	84	1	0	1	4670	0.12
	83	17	15	1	81	1	0	1	6440	0.09
Gaines		228	2	1	62	1	0	4	4427	0.53
	84	228	3	1	385	11	1	15	5891	1.48
	84	294	1 .	1	62	5	0	9	4479	1.17
Garza		53	4	1	84	15	0	29	6549	2.57
	86	53	5	1	84	2	1	7	5925	0.69
	86	53	6	1	84	7	0	9	5346	0.98
Gray		169	6	1	60	2	0	2	5949	0.20
Grayson	- [	45	18	1	82	1	0	7	6814	0.60
_	92	45	19	1	82	9	0	15	6745	1.29
	92	47	1	1	69	3	0	9	14407	0.36
	92	47	13	1	75	3	0	6	15149	0.23
	92	47	18	1	75	3	0	6	20331	0.17
	92	47	19	3	503	2	0	2	15967	0.07
	92	728	1	5	120	1	0	2	5583	0.21
Gregg		138	1	1	259	0	0	3	16067	0.11
	93	138	1	2	31	4	O	8	15166	0.31
	93	377	1	2	135	o	0	1	7168	0.08
	93	392	3	1	259	0	0	1	9342	0.06
Grimes	,	50	3	2	6	4	0	11	7209	0.89
	96	67	5	1	87	4	0	7	6968	0.58
	96	67	9	3	445	1	0	1	1625	0.36
Hail		42	9	1	287	14	0	6	6023	0.58
Hardeman		43	2	1	287	10	0	11	7009	0.91
	100	43	4	1 1	287	11	0	8	7626	0.61

Table G.6. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hardin		65	5	1	96	2	1	4	16278	0.14
	101	200	9	1	69	3	1	5	9018	0.32
Harris		50	6	1	290	6	0	9	18154	0.29
i.	102	50	8	1	290	5	0	10	44831	0.13
Harrison		62	7	1	59	6	0	11	12051	0.53
	103	63	1	1	59	1	0	5	11602	0.25
	103	63	9	1	59	0	0	1	5200	0.11
	103	96	7	1	80	6	0	7	8603	0.47
	103	96	8	1	80	0	0	1	4686	0.12
	103	2642	2	3	281	2	0	2	5273	0.22
Haskell		157	3	1	277	1	0	4	1901	1.22
	105	157	4	1	277	1	0	4	2969	0.78
Hendersor	1	163	3	2	31	0	0	2	6668	0.17
	108	163	4	2	31	4	0	8	21120	0.22
	108	164	1	2	31	2	0	1	9668	0.06
	108	164	2	2	31	1	0	6	7357	0.47
,	108	164	3	2	31	2	0	3	8414	0.21
	108	198	1	1	175	1	0	3	6383	0.27
Hidalgo	1	39	2	1	83	4	0	6	9753	0.36
	109	39	17	1	83	9	1	14	28991	0.28
	109	39	18	1	83	12	2	25	27923	0.52
	109	255	6	1	281	16	1	15	5385	1.62
	109	255	7	1	281	13	1	21	8276	1.48
	109	255	9	10	281	1	0	3	11661	0.15
	109	255	11	3	113	2	0	1	9448	0.06
	109	342	1	2	107	5	1	9	9303	0.56
	109	528	1	2	107	4	0	5	6986	0.42
HIII		14	7	1	77	0	0	1	5065	0.11
Hockley		52	6	1	84	7	1	10	5210	1.12
	111	130	4	2	114	2	0	10	6514	0.89
	111	380	2	1	62	2	0	10	6031	0.96

Table G.6. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatailties	Accidents	ADT	Accident Data
Hood		80	3	1	377	0	0	2	8340	0.14
	112	80	4	1	377	3	2	10	14631	0.40
Houston		109	3	1	287	3	0	4	3286	0.71
Howard	j	68	7	1	87	1	0	1	2730	0.21
	115	68	8	1	87	3	1	9	5250	1.00
Hutchinso	n	356	1	2	207	0	0	3	5120	0.34
	118	356	1	2	136	2	0	8	6535	0.71
	118	379	1	2	136	o	0	2	8192	0.14
	118	455	1	2	152	2	0	6	3738	0.93
Jack		249	6	1	281	0	0	3	4721	0.37
	120	249	7	1	281	1	0	7	6951	0.59
Jackson		89	3	1	59	9	1	17	13014	0.76
	121	89	4	1	59	9	0	15	10955	0.80
	121	89	5	1	59	3	0	5	11131	0.26
Jasper		64	8	1	96	1	0	3	7143	0.24
•	122	244	3	1	190	o	0	1	8650	0.07
Jefferson	,	28	6	1	90	3	1	9	7609	0.69
Jim Welis		86	11	2	359	3	2	5	9105	0.32
	126	87	1	2	44	2	0	4	12969	0.18
	126	255	1	1	281	3	0	5	8805	0.33
	126	373	4	2	44	3	1	3	6347	0.27
Johnson		19	1	2	174	10	2	16	20681	0.45
	127	260	1	1	67	o	0	1	7880	0.07
Jones		33	5	1	83	6	0	8	7869	0.59
Karnes	·	100	5	1	181	o	0	1	4437	0.13
	129	348	4	2	80	1	0	1	4975	0.12
Kaufman		95	3	1	80	16	1	27	36054	0.44
	130	95	4	1	80	7	o	18	17132	0.61
	130	95	5	1	80	8	0	8	11333	0.41
	130	173	3	2	34	2	0	1	6126	0.09
	130	197	3	1	175	5	1	11	15401	0.42

Table G.6. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kaufman		197	4	1	175	7	0	11	12054	0.53
	130	197	5	1	175	5	2	8	10547	0.44
	130	495	1	1	80	1	0	1	21836	0.03
Kinney		23	4	1	90	0	0	1	1945	0.30
Kleberg		102	4	1	77	13	1	18	10655	0.98
-	137	327	1	1	77	0	0	1	5960	0.10
Lamar		136	5	2	19	0	0	1	4812	0.12
	139	136	7	1	271	3	0	4	11894	0.20
	139	136	8	1	271	1	0	6	8134	0.43
Lamb		52	4	1	84	6	0	14	3674	2.22
	140	52	5	1	84	11	0	15	4310	2.02
Liberty		28	3	1	90	0	0	4	10548	0.22
_	146	177	3	1	59	3	0	13	15074	0.50
Live Oak		254	1	1	281	11	1	17	7477	1.32
Lubbock		52	7	1	84	7	1	11	9050	0.71
	152	53	1	1	84	0	0	7	8849	0.46
,	152	68	1	1	87	7	0	10	13574	0.43
	152	130	5	2	114	1	0	1	14901	0.04
	152	131	1	1	62	3	0	7	7833	0.52
	152	131	2	1	62	3	0	4	5659	0.41
	152	380	1	1	62	7	1	20	11420	1.02
Lynn		53	3	1	84	5	0	3	5740	0.30
	153	68	2	1	87	4	0	11	4486	1.43
	153	68	3	1	87	8	1	10	3685	1.58
Matagorda	1	179	4	2	35	1	0	3	11302	0.15
_	158	179	6	2	35	3	0	5	5668	0.51
McLennan		49	1	2	6	4	1	9	7959	0.66
	161	55	7	1	84	7	0	10	7631	0.76
	161	55	8	1	84	3	0	8	17491	0.27
	161	162	1	1	84	9	0	7	11896	0.34
	161	258	9	2	6	2	0	6	14692	0.24

Table G.6. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Medina		24	5	1	90	1	0	4	7927	0.29
	163	24	6	1	90	0	0	2	8633	0.13
	163	291	8	2	16	1	0	1	2415	0.24
Midland		5	2	1	80	6	0	7	17090	0.24
	165	5	3	1	80	2	0	2	7383	0.16
	165	1188	2	3	250	2	0	2	9589	0.12
	165	2296	2	2	191	16	2	16	8888	1.05
Montague		13	5	1	81	1	0	6	8279	0.42
	169	44	6	1	82	1	0	5	3292	0.88
	169	224	3	1	287	11	0	14	9552	0.85
Montgome	ery	177	5	1	59	18	.0	21	32073	0.38
Moore		66	4	1	287	2	0	4	7188	0.32
	171	66	5	1	87	9	1	11	8940	0.72
Morris		222	3	2	11	0	0	1	4531	0.13
Nacogdoci	hes	176	1	1	59	4	0	10	17424	0.33
	174	2560	11	1	59	_1	0	2	13365	0.09
Navarro		92	13	1 .	75	0	0	1	7747	0.08
	175	163	1	2	31	4	.1	10	8923	0.65
	175	163	2	2	31	3	0	6	6410	0.54
Nolan		53	12	1	84	4	0	7	5537	0.74
Nueces		102	2	1	77	1	0	5	11136	0.26
	178	102	2	2	44	2	0	2	13768	0.08
	178	102	3	1	77	11	0	16	11618	0.80
	178	102	11	3	428	1	0	2	5329	0.22
	178	373	2	2	44	4	0	7	9552	0.43
	178	373	3	2	44	5	0	5	6706	0.43
Palo Pinto	o	7	10	1	180	0	0	1	4582	0.13
	182	11	10	1	180	2	0	3	1094	1.59
Panola		63	3	1	59	4	0	7	6541	0.62
	183	63	4	1	59	1	0	1	7288	0.08
	183	63	10	1	59	4	O	5	5440	0.53

Table G.6. Continued

County	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Parker		8	2	1	180	11	0	17	7847	1.26
	184	8	3	1	80	2	o	4	13984	0.17
	184	80	6	1	377	9	1	11	12285	0.52
	184	171	3	2	199	1	0	2	12415	0.09
Parmer -		52	1	1	70	2	0	1	4298	0.14
Polk		176	4	1	59	11	2	12	14833	0.47
	187	176	5	1	59	18	0	30	13418	1.30
	187	176	6	3	90	o	0	2	5752	0.20
	187	177	1	1	59	8	0	21	15742	0.78
	187	213	3	1	190	2	o	8	8884	0.52
Potter		41	5	1	87	11	2	19	6620	1.67
	188	41	7	1	87	1	0	4	12282	0.19
	188	42	1	1	287	1	0	1	6020	0.10
	188	169	2	1	60	2	0	2	9214	0.13
	188	2635	1 ,	3	335	0	0	1	5665	0.10
Randall		67	1	1	87	3	1	9	8879	0.59
	191	67	17	5 .	1541	0	0	1	518	1.12
	191	168	8	1	60	3	0	3	6215	0.28
	191	168	9	1	60	2	0	8	18180	0.26
Refugio		371	3	1	77	2	0	6	9177	0.38
Robertson		49	8	1	190	1	Ö	2	9217	0.13
	198	205	1	1	79	1	0	1	5685	0.10
Runnels		34	5	1	83	0	0	1	2093	0.28
	200	34	5	1 1	67	0	0	1	4393	0.13
	200	158	1	1	67	6	0	7	4692	0.87
Rusk		138	2	1	259	7	1	7	8269	0.49
	201	138	3	1 1	259	2	0	5	7660	0.38
	201	138	4	1 1	259	7	0	8	6019	0.77
	201	138	5	1	259	0	1	1	5674	0.10
San Jacint	to	177	2	1	59	17	1	31	15881	1.13
	205	87	4	2	359	2	O	1	3865	0.15

Table G.6. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
San Jacir	nto	101	4	1	181	7	0	9	12948	0.40
	205	180	6	2	35	1	0	8	11661	0.40
	205	180	10	2	361	2	Ò	6	7650	0.46
	205	371	4	1	77	2	0	3	6993	0.25
,	205	372	1	1	77	3	0	21	11480	1.06
Scurry		53	7	1	84	1	0	4	5464	0.43
	208	53	8	1	84	9	1	14	5790	1.41
	208	53	9	1	84	6	3	11	5179	1.23
	208	53	10	1	84	2	Ö	4	5402	0.43
Shacklefo	ord	11	5	1	180	1	0	1	4830	0.12
Shelby		175	4	1	59	1	0	2	6049	0.19
Smith	1	164	4	2	31	4	0	5	13236	0.22
	212	165	1	1	271	5	0	4	12778	0.18
	212	165	2	1	271	2	O	3	3988	0.44
	212	190	5	1	69	1	0	1	16030	0.04
	212	191	1	1	69	1	0	10	15434	0.38
	212	1790	2	3	323	0	0	1	16255	0.04
	212	2075	1	3	323	0	0	1	14757	0.04
Sterling		69	4	1	87	1	0	2	5422	0.21
Swisher	l	67	2	1	87	7	0	11	5856	1.09
	219	67	3	1	87	8	0	12	5986	1.17
Tarrant		13	10	3	496	2	0	5	11610	0.25
	220	14	15	1	81	1	Ö	7	13587	0.30
	220	80	7	1	377	2	O	6	16214	0.22
	220	172	9	1	287	0	0	1	16041	0.04
	220	353	3	2	114	4	0	4	31051	0.07
Taylor		34	1	1	83	3	0	9	14636	0.36
Terry	l	227	7	1	62	8	0	12	7415	0.94
	223	228	1	1	62	7	0	8	5076	0.92
	223	380	3	1	62	0	0	3	5793	0.30
Titus		248	1	1	271	0	0	1	13031	0.04

Table G.6. Continued

Count	y l	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Titus		69	6	1	87	9	0	7	4173	0.98
	226	69	7	1	87	3	j	12	10053	0.69
	226	70	2	1	87	4	O	4	8564	0.27
	226	77	8	3	306	6	0	6	8184	0.43
,	226	158	2	1	67	4	O	4	5015	0.46
Travis		113	13	3	360	10	1	25	35111	0.41
	227	114	2	1	290	9	0	10	16026	0.36
	227	265	1	2	71	3	0	9	10227	0.51
	227	265	2	2	71	4	1	10	26232	0.22
Upshur		392	2	1	259	4	0	5	15025	0.19
Val Verde		22	10	1	90	1	Ö	1	6373	0.09
	233	23	1	1	90	6	0	6	9865	0.35
Van Zandt		95	6	1	80	3	0	6	6664	0.52
	234	95	7	1	80	6	o	7	4762	0.85
Victoria		88	4	1	59	0	0	2	12781	0.09
	235	88	5	3	175	4	0	9	8607	0.61
	235	89	1	1 .	59	7	0	6	14234	0.25
	235	371	1	1	77	6	0	3	7183	0.24
	235	432	2	5	404	8	0	22	10859	1.18
Waller		114	11	1	290	7	1	10	7586	0.77
Ward		4	1	1	80	0	0	1	628	0.93
Washingto	n	114	9	1	290	0	0	1	7281	0.08
	239	114	10	1	290	9	Ò	12	7982	0.87
	239	186	6	1	290	6	Ô	8	10442	0.45
Wharton		89	6	1	59	10	1	11	11781	0.54
	241	89	7	1	59	4	0	20	13091	0.89
	241	89	8	1	59	6	0	12	14141	0.49
	241	89	10	3	183	0	0	2	4450	0.26
Wichita		43	8	1	287	6	0	12	8738	0.80
	243	43	9	1	287	1	0	3	12212	0.14
	243	43	17	з .	370	1	Ö	3	7249	0.24

Table G.6. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Wilbarger		43	5	1	287	2	0	6	7628	0.46
	244	43	6	1	70	3	0	8	9082	0.51
	244	43	7	1	287	3	Ö	11	8749	0.73
Willacy		327	10	1	77	7	0	14	6735	1.21
	247	100	3	1	181	8	0	13	6995	1.08
	247	143	4	1	87	0	0	3	3024	0.58
Wise		13	6	1	81	4	0	8	11592	0.40
	249	13	7	1	81	17	1	30	7365	2.37
	249	13	8	1	81	32	1	42	14278	1.71
	249	352	2	2	114	1	0	1	8953	0.06
Wood		96	1	1	80	1	0	3	3504	0.50
	250	96	2	1	80	1	0	2	3292	0.35

Table G.7. Single-Vehicle Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1986)

Count	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Atascosa		17	4	8	35	0	Ò	1	10166	0.04
	7	73	5	8	37	16	0	17	8757	0.73
	7	73	6	8	37	3	1	6	8696	0.26
	7	73	10	8	37	20	0	24	8524	1.06
Austin		271	2	8	10	17	0	23	19710	0.44
·	8	271	- 3	8	10	7	1	11	23216	0.18
Bell		15	4	8	35	13	1	30	26071	0.43
	14	15	6	8	35	4	1 1	9	22726	0.15
	14	15	7	8	35	13	1	18	20803	0.33
Bexar		17	2	8	35	2	0	1	15877	0.02
•	15	17	3	8	35	10	2	17	13878	0.46
	15	72	7	8	10	6	0	13	19776	0.25
	15	72	8	8	10	4	0	8	33191	0.09
	15	73	9	8	37	7	0	14	9963	0.53
Bowie		610	5	8	30	7	0	12	12127	0.37
	19	610	6	8	30	5	1	10	17474	0.22
	19	610	7	8	30	3	0	5	26874	0.07
Caldwell		535	3	8	10	4	0	5	11677	0.16
Callahan		7	1	8	20	9	1	12	11812	0.38
	30	7	2	8	20	16	1	16	11807	0.51
	30	6	7	8	20	13	2	17	13854	0.46
Carson		275	2	8	40	4	0	11	8567	0.48
	33	275	3	8	40	5	1	9	8309	0.41
	33	275	4	8	40	6	0	16	8283	0.73
Chambers		739	1	8	10	4	0	6	22429	0.10
	36	508	2	8	10	27	4	43	26081	0.62
	36	508	3	8	10	40	0	19	22937	0.31
Colorado		271	1	8	10	17	0	22	19890	0.42
	45	<b>5</b> 35	8	8	10	19	0	15	14785	0.38
Comal		16	4	8	35	4	0	9	28979	0.12
	46	16	5	8	35	3	o	7	34065	0.08

Table G.7. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cooke		195	1	8	35	13	1	19	16732	0.43
	49	194	2	8	35	5	1	7	13234	0.20
Crockett		141	1	8	10	8	0	11	4187	0.99
	53	140	10	8	10	15	0	13	3233	1.51
	53	140	11	8	10	1	1	2	3239	0.23
	53	140	13	8	10	6	0	9	2923	1.16
Culberson		3	1	8	10	4	0	9	7150	0.47
	55	3	2	8	10	26	0	17	7151	0.89
	55	3	3	8	10	17	1	19	7043	1.01
	55	2	11	8	10	6	0	7	6778	0.39
Deaf Smith	1	90	1	8	40	3	0	5	7777	0.24
Denton	1	196	1	8	353	13	0	28	50017	0.21
	61	196	2	8	353	0	0	2	21496	0.03
	61	195	2	8	35	14	1	34	65065	0.20
	61	81	13	8	354	3	0	3	12217	0.09
Donley		275	6	8	40	2	0	3	8163	0.14
Eastland	l	7	3	8	20	13	1	27	11697	0.87
	68	7	4	8	20	4	1	10	13081	0.29
	68	314	5	8	20	0	1	3	11537	0.10
	68	7	6	8	20	4	Ť	18	11340	0.60
Ector		4	6	8	20	9	0	10	8887	0.42
	69	4	7	8	20	16	1	31	10655	1.09
Ellis		92	3	8	45	7	1	16	23268	0.26
	71	442	3	8	353	7	1	7	29751	0.09
	71	48	4	8	353	5	0	5	19237	0.10
	71	92	4	8	45	12	0	23	21824	0.40
	71	9 <b>2</b>	5	8	45	3	0	14	21768	0.24
	71	48	8	8	353	15	0	15	14659	0.38
El Paso		2121	1	8	10	18	0	25	21608	0.43
	72	2121	4	8	10	13	2	20	12562	0.60
	72	2121	5	8	10	12	1	17	8210	0.78

Table G.7. Continued

Count	y I	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Erath		314	4	8	20	2	0	4	11539	0.13
Falls		15	3	8	35	1	O	3	24624	0.05
Fayette		53 <b>5</b>	6	8	10	7	Ö	9	12451	0.27
	76	535	7	8	10	2	0	6	12850	0.18
Franklin		610	2	8	30	9	1	10	12910	0.29
Freestone		675	1	8	45	16	1	19	15095	0.47
	82	675	2	8	45	20	4	36	14487	0.93
Frio		17	6	8	35	8	1	11	7202	0.57
	83	17	7	8	35	10	0	12	5582	0.81
Galveston		500	4	8	45	10	0	11	36673	0.11
Gillespie		142	13	8	10	2	0	3	4920	0.23
Gonzales		535	4	8	10	19	0	18	12199	0.55
	90	535	5	8	10	7	1	8	12423	0.24
Gray		275	5	8	40	3	0	5	8238	0.23
	91	275	7	8	40	2	Ö	5	8178	0.23
	91	275	11	8	40	9	0	11	8337	0.50
Gregg		495	7	8	20	45	0	48	19002	0.95
Guadalupe		535	1	8	10	10	0	13	14283	0.34
	95	535	2	8	10	3	Ö	13	12045	0.41
	95	25	3	8	10	2	0	7	16511	0.16
	95	16	6	8	35	1	0	1	39602	0.01
Hale		67	4	8	27	3	0	8	7216	0.42
	96	67	5	8	27	2	Ö	6	6968	0.32
	96	67	6	8	27	8	1	10	6769	0.56
Harris		508	1	8	10	7	0	6	81244	0.03
Harrison		49 <b>5</b>	8	8	20	12	0	21	16762	0.47
	103	495	9	8	20	1	0	4	15198	0.10
	103	495	10	8	20	6	0	21	15456	0.51
Hays		16	2	8	35	26	1	39	36443	0.40
	106	16	3	8	35	5	0	3	32085	0.04
Hill		14	7	8	35	6	1	19	24403	0.29

Count	У	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hill		48	9	8	35 <b>3</b>	6	0	11	14206	0.29
	110	14	23	8	354	4	Ò	5	10399	0.18
	110	14	24	8	35	0	Ö	8	23784	0.13
Hopkins		610	1	8	30	9	0	11	13202	0.31
	113	10	2	8	30	9	1	14	15306	0.34
	113	9	9	8	30	15	2	25	15129	0.62
Howard		5	5	8	20	17	1	24	10101	0.89
	115	5	6	8	20	9	2	21	10339	0.76
Hudspeth		2	5	8	10	8	0	11	7960	0.52
	116	2121	6	8	10	12	Ö	17	7926	0.81
	116	2	6	8	10	17	2	32	7893	1.52
	116	2	7	8	10	7	0	13	7733	0.63
	116	2	8	8	10	11	1	17	6987	0.91
	116	2	9	8	10	16	O	11	6987	0.59
	116	2	10	8	10	5	0	10	7053	0.53
Hunt		9	13	8	30	13	2	35	20957	0.63
Jeff Davis	;	3	4	8 .	10	7	0	15	6978	0.81
Jefferson		739	2	8	10	6	0	10	27248	0.14
Johnson	[	14	3	8	354	26	.1	35	17044	0.77
	127	14	4	8	354	5	2	16	11745	0.51
	127	14	22	8	354	3	0	2	10571	0.07
Kaufman		495	1	8	20	18	0	22	21944	0.38
Kendall		72	5	8	10	6	O	21	10001	0.79
	131	72	6	8	10	11	O	19	11745	0.61
	131	142	15	8	10	2	0	2	7011	0.11
Kerr		142	2	8	10	4	Ö	10	4603	0.82
	133	142	12	8	10	2	O	5	4549	0.41
	1 <b>3</b> 3	142	14	8	10	8	0	27	6381	1.59
Kimble		142	1	8	10	16	0	18	5081	1.33
	134	141	8	8	10	5	0	5	3850	0.49
	134	141	9	8	10	5	0	5	4063	0.46

Table G.7. Continued

Name   No.   Number   Section   Type   Number   Injuries   Fatalities   Accidents   ACCIDENT   DISCIDING	Count	, 1	Control	Control	Highway	Highway		Number		Mean	Normalized
LaSalle		4				, ,	Injuries		Accidents		1
142		140.					<u> </u>				
142	Lasane	142		· ·	1	1	i .				1
Leon         675         3         8         45         10         2         23         15472         0.56           Live Oak         74         1         8         45         19         2         26         16189         0.60           Live Oak         74         1         8         37         12         0         11         6171         0.67           149         74         2         8         37         11         0         14         6805         0.77           149         73         7         8         27         8         0         11         8948         0.59           Lubbock         67         7         8         27         8         0         11         8948         0.59           Lubbock         675         5         8         45         29         4         42         15900         0.99           Martin         5         4         8         20         6         1         16         10010         0.60           McLennan         15         1         8         35         16         0         13         38124         0.13           McLe		1		1	1	4	1	4		_	i .
145   675   4	Loon	142				····				A.V. 11111111111111111111111111111111111	
Live Oak	Leon	145		}	1						i .
149	Livo Oak	143									
Lubbock         67         7         8         37         19         6         14         8948         0.59           Lubbock Madison         675         5         8         45         29         4         42         15900         0.99           Martin         5         4         8         20         6         1         16         10010         0.60           McLennan         15         1         8         35         16         0         13         38124         0.13           161         15         2         8         35         7         0         16         24469         0.25           161         14         8         8         35         11         0         22         25997         0.32           Medina         17         5         8         35         10         1         7         8825         0.30           Midland         5         14         8         20         16         0         21         10907         0.72           Mitchell         5         15         8         20         16         0         21         10907         0.72	Live Oak	1/0				1	t .	i .			1
Lubbock         67         7         8         27         8         0         11         8939         0.46           Madison         675         5         8         45         29         4         42         15900         0.99           Martin         5         4         8         20         6         1         16         10010         0.60           McLennan         15         1         8         35         16         0         13         38124         0.13           161         15         2         8         35         16         0         13         38124         0.13           161         14         8         8         35         17         0         16         24469         0.25           161         14         9         8         35         1         1         2         32469         0.02           Medina         17         5         8         35         10         1         7         8825         0.30           Mitchell         5         15         8         20         11         0         18         15228         0.44           Mitchell						i	•	1 .			1
Madison         675         5         8         45         29         4         42         15900         0.99           Martin         5         4         8         20         6         1         16         10010         0.60           McLennan         15         1         8         35         16         0         13         38124         0.13           161         15         2         8         35         7         0         16         24469         0.25           161         14         8         8         35         11         0         22         25997         0.32           Medina         17         5         8         35         1         1         2         32469         0.02           Medina         17         5         8         35         10         1         7         8825         0.30           Midland         5         14         8         20         11         0         18         15228         0.44           Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitc	Lubbock	143									
Martin         5         4         8         20         6         1         16         10010         0.60           McLennan         15         1         8         35         16         0         13         38124         0.13           161         15         2         8         35         7         0         16         24469         0.25           161         14         8         8         35         11         0         22         25997         0.32           Medina         17         5         8         35         10         1         7         8825         0.30           Midland         5         14         8         20         11         0         18         15228         0.44           Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitchell         6         1         8         20         7         1         6         8577         0.26           Mitchell         5         8         8         20         7         1         6         8577         0.26           168				i .	1	i .			1		
McLennan         15         1         8         35         16         0         13         38124         0.13           161         15         2         8         35         7         0         16         24469         0.25           161         14         8         8         35         11         0         22         25997         0.32           Medina         17         5         8         35         1         1         2         32469         0.02           Midland         5         14         8         20         11         0         18         15228         0.44           Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitchell         6         1         8         20         7         1         6         8577         0.26           Mitchell         6         1         8         20         7         1         6         8577         0.26           Mitchell         6         1         8         20         7         1         6         8577         0.26           Mortager				1	1	1		1			
161				1		1	1				•
161         14         8         8         35         11         0         22         25997         0.32           Medina         17         5         8         35         1         1         2         32469         0.02           Medina         17         5         8         35         10         1         7         8825         0.30           Midland         5         14         8         20         11         0         18         15228         0.44           Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitchell         6         1         8         20         4         0         4         8824         0.17           168         5         7         8         20         7         1         6         8577         0.26           Montgomery         110         4         8         45         51         1         80         62664         0.48           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro	IIIOLO(IIIIGII	161				1		į.			1
Medina         17         5         8         35         1         1         2         32469         0.02           Medina         17         5         8         35         10         1         7         8825         0.30           Midland         5         14         8         20         11         0         18         15228         0.44           Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitchell         6         1         8         20         4         0         4         8824         0.17           168         5         7         8         20         7         1         6         8577         0.26           168         5         8         8         20         6         0         10         8705         0.43           Montgomery         110         4         8         45         51         1         80         62664         0.48           170         675         8         8         45         25         1         55         36089         0.57           Morris				1	ł	1	1	1			1
Medina         17         5         8         35         10         1         7         8825         0.30           Midland         5         14         8         20         11         0         18         15228         0.44           Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitchell         6         1         8         20         4         0         4         8824         0.17           168         5         7         8         20         7         1         6         8577         0.26           168         5         8         8         20         6         0         10         8705         0.43           Montgomery         110         4         8         45         51         1         80         62664         0.48           170         675         8         8         45         25         1         55         36089         0.57           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro <td></td> <td></td> <td></td> <td>l</td> <td>1</td> <td>1</td> <td>3</td> <td></td> <td></td> <td></td> <td>i e</td>				l	1	1	3				i e
Midland         5         14         8         20         11         0         18         15228         0.44           Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitchell         6         1         8         20         4         0         4         8824         0.17           168         5         7         8         20         7         1         6         8577         0.26           168         5         8         8         20         6         0         10         8705         0.43           Montgomery         110         4         8         45         51         1         80         62664         0.48           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         14         0         28         17822         0.59           175 <td>Medina</td> <td></td> <td></td> <td></td> <td>·</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td>	Medina				·			1			
Mitchell         5         15         8         20         16         0         21         10907         0.72           Mitchell         6         1         8         20         4         0         4         8824         0.17           168         5         7         8         20         7         1         6         8577         0.26           168         5         8         8         20         6         0         10         8705         0.43           Montgomery         110         4         8         45         51         1         80         62664         0.48           170         675         8         8         45         25         1         55         36089         0.57           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         7         0         21         18989         0.42           Nolan				i .	3	i .	1	0	18		
Mitchell         6         1         8         20         4         0         4         8824         0.17           168         5         7         8         20         7         1         6         8577         0.26           168         5         8         8         20         6         0         10         8705         0.43           Montgomery         110         4         8         45         51         1         80         62664         0.48           170         675         8         8         45         25         1         55         36089         0.57           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         14         0         28         17822         0.59           175         92         6         8         45         7         0         21         18989         0.42           Nolan				ŧ.	1	1	1	0	1	10907	0.72
168       5       7       8       20       7       1       6       8577       0.26         168       5       8       8       20       6       0       10       8705       0.43         Montgomery       110       4       8       45       51       1       80       62664       0.48         170       675       8       8       45       25       1       55       36089       0.57         Morris       610       4       8       30       7       1       4       11841       0.13         Navarro       93       1       8       45       10       2       13       16146       0.30         175       166       1       8       45       14       0       28       17822       0.59         175       92       6       8       45       7       0       21       18989       0.42         Nolan       6       2       8       20       15       0       19       11506       0.62         177       6       3       8       20       13       1       22       13586       0.61 <t< td=""><td></td><td></td><td></td><td>1</td><td>1</td><td>ŀ</td><td></td><td></td><td></td><td>8824</td><td>0.17</td></t<>				1	1	ŀ				8824	0.17
Montgomery         110         4         8         45         51         1         80         62664         0.43           Morris         610         4         8         45         25         1         55         36089         0.57           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         14         0         28         17822         0.59           175         92         6         8         45         7         0         21         18989         0.42           Nolan         6         2         8         20         15         0         19         11506         0.62           177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82		168	_			1		1	6	8577	0.26
Montgomery         110         4         8         45         51         1         80         62664         0.48           170         675         8         8         45         25         1         55         36089         0.57           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         14         0         28         17822         0.59           175         92         6         8         45         7         0         21         18989         0.42           Nolan         6         2         8         20         15         0         19         11506         0.62           177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82		1	-	i	l .	i .	6	O	10	8705	0.43
170         675         8         8         45         25         1         55         36089         0.57           Morris         610         4         8         30         7         1         4         11841         0.13           Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         14         0         28         17822         0.59           175         92         6         8         45         7         0         21         18989         0.42           Nolan         6         2         8         20         15         0         19         11506         0.62           177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82	Montaome								80	62664	0.48
Morris         610         4         8         30         7         1         4         11841         0.13           Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         14         0         28         17822         0.59           175         92         6         8         45         7         0         21         18989         0.42           Nolan         6         2         8         20         15         0         19         11506         0.62           177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82		- 1		1	Į.	1	1	1	55	36089	0.57
Navarro         93         1         8         45         10         2         13         16146         0.30           175         166         1         8         45         14         0         28         17822         0.59           175         92         6         8         45         7         0         21         18989         0.42           Nolan         6         2         8         20         15         0         19         11506         0.62           177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82	Morris							1		11841	0.13
175     166     1     8     45     14     0     28     17822     0.59       175     92     6     8     45     7     0     21     18989     0.42       Nolan     6     2     8     20     15     0     19     11506     0.62       177     6     3     8     20     13     1     22     13586     0.61       Oldham     90     2     8     40     13     3     17     7818     0.82				l	1	1	10	2	13	16146	0.30
175         92         6         8         45         7         0         21         18989         0.42           Nolan         6         2         8         20         15         0         19         11506         0.62           177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82		175		1		1			28	17822	0.59
Nolan         6         2         8         20         15         0         19         11506         0.62           177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82				6		1	1	0	21	189 <b>8</b> 9	0.42
177         6         3         8         20         13         1         22         13586         0.61           Oldham         90         2         8         40         13         3         17         7818         0.82	Nolan				<u> </u>		15	0	19	11506	0.62
Oldham         90         2         8         40         13         3         17         7818         0.82		177			į.	1	5	i .			1
	Oldham							3			0.82
180  90   3   8   40   11   0   24   7865   1.15		180		3	8	40	11	O	24	7865	1.15

Table G.7. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Oldham		90	4	8	40	14	4	20	8763	0.86
Orange		28	9	8	10	13	0	28	48350	0.22
	181	28	11	8	10	15	1	30	27152	0.42
	181	28	14	8	10	2	0	3	24122	0.05
Palo Pinto		314	2	8	20	8	0	10	12478	0.30
	182	314	3	8	20	5	0	12	12057	0.37
Parker		314	1	8	20	17	0	17	14201	0.45
	184	8	3	8	20	5	1	16	30989	0.19
Pecos		140	1	8	10	8	0	11	3366	1.23
	186	140	2	8	10	4	0	9	3003	1.13
·	186	140	3	8	10	8	Ω	11	2949	1.40
	186	140	4	8	10	6	0	8	2922	1.03
	186	140	5	8	10	13	1	10	2927	1.28
	186	140	6	8	10	1	o	10	2918	1.29
	186	441	7	8	10	8	1	10	2804	1.34
	186	441	8	8	10	3	0	4	3700	0.41
Potter		275	1	8 .	40	6	0	9	36428	0.09
	188	90	5	8	40	7	1	16	5295	1.14
Randall		168	9	8	27	10	0	21	23524	0.34
	191	67	17	8	27	2	0	2	4103	0.18
Reeves		3	5	8	20	3	Ö	6	4663	0.48
	195	441	5	8	10	4	0	9	2519	1.34
	195	441	6	8	10	1	O	4	2568	0.59
	195	3	6	8	20	18	0	25	4732	1.99
	195	3	7	8	20	2	0	9	5354	0.63
	195	441	9	88	10	24	0	25	2762	3.40
Rockwall		9	12	8	30	15	0	32	31620	0.38
San Patric	io	74	3	8	37	7	0	4	8097	0.19
	205	74	4	8	37	1	0	2	10669	0.07
	205	74	5	8	37	6	0	11	12424	0.33
Smith		495	4	8	20	15	1	23	18864	0.46

Table G.7. Continued

Count	y I	Control	Control	Highway	Highway	L.	Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Smith		495	5	8	20	18	1	26	15977	0.61
	212	495	6	8	20	24	1	15	17669	0.32
Sutton		141	2	8	10	8	0	15	4065	1.39
	218	141	3	8	10	4	0	10	3693	1.02
,	218	141	4	8	10	6	1	13	3594	1.36
	218	141	5	8	10	6	0	11	3686	1.12
	218	141	6	8	10	2	0	1 1	3671	0.10
	218	141	7	8	10	2	Ò	4	3667	0.41
Swisher		67	2	8	27	1	0	1	6049	0.06
	219	67	3	8	27	2	0	2	5986	0.13
Tarrant		81	12	8	354	5	0	9	14681	0.23
Taylor		6	4	8	20	25	1	24	13743	0.66
	221	6	5	8	20	3	1	4	15252	0.10
Titus		610	3	. 8	30	18	0	32	12451	0.97
Travis		16	1	8	35	1	0	2	43858	0.02
	227	15	10	8	35	4	0	5	53185	0.04
Van Zandt		495	2	8	20	19	0	33	20883	0.59
	234	495	3	8	20	18	0	36	18662	0.73
Walker		675	6	8	45	29	1	32	17377	0.69
	236	675	7	8	45	23	1	32	22363	0.54
Waller		271	4	8	10	24	0	26	26263	0.37
Ward		4	2	8	20	8	0	13	5409	0.90
	238	4	4	8	20	14	İ	15	6646	0.85
Webb		18	3	8	35	6	Ö	5	4259	0.44
	240	18	4	8	35	3	0	6	4330	0.52
	240	18	5	8	35	4	1 1	6	5184	0.44
	240	18	6	8	35	4	0	8	16379	0.18
Wheeler		275	12	8	40	7	0	18	8491	0.80
	242	275	13	8	40	10	0	11	7816	0.53
Wichita		156	7	8	44	1	0	5	11596	0.16
Williamso	n 📗	15	8	8	35	19	1	33	25876	0.48

County	<i>'</i>	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Anderson		520	8	2	155	0	0	1	4532	0.13
Andrews		2 <b>28</b>	4	1	385	4	1	10	3846	1.51
	2	228	5	11	385	3	0	11	7850	0.81
Angelina		176	2	1	59	6	1	10	17181	0.34
	3	176	3	1	59	5	0	12	19583	0.36
	3	199	4	1	69	0	0	2	8207	0.14
Aransas		180	7	3	70	1	0	1	7883	0.07
Armstrong		42	3	1	287	4	0	6	6112	0.57
	6	42	4	1	287	5	0	7	6154	0.66
	6	42	5	1	287	3	1	2	5600	0.21
Atascosa		73	3	1	281	3	0	9	4491	1.17
	7	73	4	1	281	0	0	3	2480	0.70
	7	613	2	2	16	5	1	5	4354	0.67
Bailey		52	2	1	70	4	0	7	5761	0.71
	9	52	3	1	84	2	0	5	3587	0.81
	9	145	11	1	70	2	0	2	4870	0.24
Bastrop		114	6	1	290	3	0	2	6086	0.19
	11	265	3	2	71	9	0	13	12848	0.59
	11	265	4	2	21	4	0	10	16944	0.34
	11	265	5	2	21	1	1	7	15980	0.25
	11	265	6	2	71	5	0	4	6595	0.35
	11	472	1	2	21	11	2	24	3784	3.69
Bee		100	8	1	181	3	0	9	5629	0.93
	13	101	1	1	181	3	0	3	6461	0.27
Bell		231	4	1	190	8	0	19	15239	0.72
Bexar		24	7	1	90	0	0	3	12943	0.13
	15	73	2	1	281	3	0	3	5728	0.30
	15	73	12	1	181	0	0	1	10630	0.05
	15	100	2	1	181	8	1	10	9258	0.63
	15	143	1	1	87	3	0	7	11958	0.34
	15	143	2	1	87	1	0	2	6449	0.18

Table G.8. Continued

Count	v	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT_	Accident Data
Bexar		253	4	1	281	3	0	9	28972	0.18
	15	291	9	2	16	3	Ö	6	3690	0.95
	15	291	10	2	16	1	Ò	4	24339	0.10
	15	613	1	2	16	5	O	8	8094	0.57
Blanco		113	5	1	281	7	0	9	5280	0.99
	16	253	1	1	281	1	0	2	4544	0.26
Bowie		218	1	1	59	6	0	7	13567	0.30
Brazoria		111	7	2	288	5	0	5	16508	0.18
	20	111	8	2	288	5	0	12	19344	0.36
	20	178	2	2	35	2	0	7	15185	0.27
'	20	178	3	2	35	3	0	9	15659	0.33
	20	188	6	2	36	2	0	2	8686	0.13
	20	598	2	2	288	6	0	8	13536	0.34
	20	598	3	2	288	4	0	9	7866	0.67
	20	598	4	2	288	0	0	1	50	11.63
Brazos		116	4	2	21	2	1	7	8856	0.46
Brown		54	6	1	67	4	0	4	7437	0.31
	25	79	1	1	67	1	0	4	5334	0.44
	25	128	1	1	377	0	0	2	9979	0.12
Burnet		252	2	1	281	1	0	1	6258	0.09
Calhoun		179	10	2	35	2	0	4	8199	0.28
Cameron		39	7	1	77	7	3	7	20543	0.20
	31	39	8	1	77	13	0	24	11240	1.24
	31	39	19	1	83	2	0	4	26234	0.09
	31	220	5	2	48	0	0	1	18420	0.03
	31	327	8	1	77	8	Ò	4	11240	0.21
	31	331	2	2	100	2	0	5	18964	0.15
	31	331	4	4	100	3	0	6	14229	0.25
Carson		42	2	1	287	0	0	1	6030	0.10
	33	169	3	1	60	1	0	2	5415	0.21
1	33	169	4	1 1	60	1	0	3	4418	0.39

Table G.8. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Carson		169	5	1	60	3	0	9	4855	1.08
	33	169	14	3	552	3	0	1	474	1.23
Cass		218	3	1	59	3	Ö	3	12356	0.14
	34	218	4	1	59	2	0	2	9687	0.12
Chambers		367	1	2	124	5	0	3	6150	0.28
	36	368	5	3	5	1	0	1	4531	0.13
	36	508	3	2	73	3	0	2	4980	0.23
Cherokee		199	1	1	69	3	1	9	10236	0.51
	37	199	2	1	69	_ 2	0	5	6714	0.43
Childress		42	12	1	287	3	0	12	6896	1.01
	38	43	11	1	287	8	0	7	7802	0.52
Clay		44	2	1	82	14	1	19	13330	0.83
	39	44	3	1	82	3	0	2	5038	0.23
	39	224	1	1	287	3	0	6	9652	0.36
	39	224	2	1	287	44	0	6	9690	0.36
Coleman		78	5	1	67	0	0	1	1260	0.46
Collin		47	6	1 .	75	0	0	1	58153	0.01
	43	47	14	1	75	6	0	15	21329	0.41
	43	135	4	1	380	0	0	1	5340	0.11
	43	549	3	3	399	0	Ö	4	5866	0.40
Collingsw	orth	31	4	1	83	0	0	1	2485	0.23
Colorado		266	2	2	71	3	0	7	5349	0.76
Comal		253	3	1	281	9	1	13	5706	1.32
Comanche		79	2	1	67	7	0	8	6517	0.71
Concho	l	70	3	1	87	0	0	2	3140	0.37
Cooke		44	7	1	82	5	0	6	4741	0.74
	49	44	8	1	82	1	0	2	8784	0.13
	49	45	1	11	82	5	0	8	12682	0.37
Coryell		231	2	1	190	11	0	12	22466	0.31
Crane		229	2	1	385	0	1	2	4194	0.28
Crosby	İ	131	3	1	62	0	0	1	4402	0.13

Table G.8. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Crosby		131	3	1	82	0	0	1	3743	0.16
•	54	131	4	1	82	1	0	2	3854	0.30
	54	131	5	1	82	2	0	2	1930	0.60
Culberson		233	2	1	62	3	0	5	1435	2.03
	58	68	4	1	87	4	Ö	12	5620	1.24
	58	68	5	1	87	6	0	8	3388	1.37
Deaf Smith		168	5	1	60	2	0	7	5921	0.69
	59	168	7	1	60	2	O	5	6174	0.47
Delta		136	3	2	24	0	0	1	2627	0.22
	60	136	4	2	19	4	0	2	4175	0.28
Dickens		131	6	1	82	0	0	1	1648	0.35
	63	132	1	1	82	2	1	3	1416	1.23
	63	132	2	1	82	0	0	1	1261	0.46
Dimmit		37	8	1	83	0	0	1	1693	0.34
Donley		42	6	1	287	0	0	2	7833	0.15
	65	42	7	1	287	4	0	12	6603	1.06
	65	42	8	1	287	6	1	4	6025	0.39
Kenedy		327	2	1	77	2	0	7	5410	0.75
-	66	327	3	1	77	0	0	3	5110	0.34
Eastland		7	4	1	80	0	0	1	4452	0.13
Ector		5	1	1	80	0	0	2	14190	0.08
	69	228	6	1	385	1	0	5	12396	0.23
	69	229	1	1	385	2	1	12	5746	1.21
	69	463	7	2	302	0	Ö	2	2275	0.51
	69	572	1	2	302	0	1	4	8235	0.28
	69	2224	1	3	338	0	Ö	1	5862	0.10
Ellis		48	5	1	77	2	0	1	1205	0.48
	71	172	5	1	287	5	0	9	7754	0.67
	71	172	7	1	287	4	0	3	6924	0.25
	71	172	8	1	287	0	0	1	7517	0.08
	71	260	2	1	67	2	o l	1	9110	0.06

Table G.8. Continued

County	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Ellis		261	1	1	67	16	3	17	11161	0.89
	71	442	3	1	77	3	o	3	6960	0.25
El Paso		2552	1	3	375	3	Ö	8	5482	0.85
Falls		49	3	2	6	2	O	3	3834	0.45
Fayette		26	2	1	90	1	0	1	3013	0.19
	76	265	7	2	71	2	0	3	6140	0.28
	76	266	1	2	71	0	1	7	6947	0.59
Floyd		145	6	1	70	2	2	10	2256	2.58
-	78	453	1	1	62	1	0	1	2068	0.28
Fort Bend		27	8	6	90	9	2	13	19399	0.39
	80	27	12	1	59	16	0	22	39295	0.33
	80	89	9	1	59	6	1	8	16516	0.28
Freestone		57	7	1	84	0	0	1	4670	0.12
Gaines		228	2	1	62	6	0	10	4427	1.31
	84	228	3	1	385	4	0	5	5891	0.49
	84	294	1	1	62	5	0	12	4479	1.56
Garza		53	4	1	84	2	0	11	6549	0.98
	86	53	5	1	84	6	0	13	5925	1.28
	86	53	6	1	84	5	0	11	5346	1.20
Gray		169	6	1	60	1	0	1	5949	0.10
	91	455	3	2	152	1	0	1	6503	0.09
Grayson		45	18	1	82	5	1	15	6814	1.28
-	92	45	19	1	82	4	Ò	9	6745	0.78
	92	47	1	1	69	11	1	16	14407	0.65
	92	47	13	1	75	6	0	6	15149	0.23
	92	47	18	1	75	6	Ö	14	20331	0.40
	92	47	19	3	503	4	Ó	3	15967	0.11
Gregg		138	1	1	259	4	0	4	16067	0.14
	93	138	1	2	31	11	2	16	15166	0.61
	93	377	1	2	135	О	0	1	7168	0.08
Grimes		50	3	2	6	3	0	9	7209	0.73

Table G.8. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Guadalupe		366	3	2	123	1	0	1	3870	0.15
•	96	67	9	3	445	2	0	4	1625	1.43
	96	145	5	1	70	1	O	1	5313	0.11
Hall		42	9	1	287	2	0	7	6023	0.68
Hamilton		251	2	1	281	1	0	1	1953	0.30
Hardeman		43	2	1	287	4	1	10	7009	0.83
	100	43	4	1	287	6	0	9	7626	0.69
Hardin		65	5	1	96	1	0	4	16278	0.14
	101	200	9	1	69	3	0	4	9018	0.26
Harris		50	6	1	290	9	0	6	18154	0.19
Harrison		62	7	1	59	0	.1	4	12051	0.19
	103	63	1	1	59	3	0	3	11602	0.15
	103	63	9	1	59	0	0	1	5200	0.11
	103	96	7	1	80	5	1	6	8603	0.41
	103	2642	2	3	281	1	0	2	5273	0.22
Haskell		157	3	1	277	2	0	3	1901	0.92
	105	157	4	1	277	1	1	5	2969	0.98
Hemphill	********	30	6	1	60	3	0	7	5415	0.75
Henderson		163	3	2	31	0	0	1	6668	0.09
	108	163	4	2	31	5	0	7	21120	0.19
	108	164	1	2	31	1	0	2	9668	0.12
	108	164	2	2	31	1	0	3	7357	0.24
	108	164	3	2	31	5	O	4	8414	0.28
	108	198	1	1	175	3	O	7	6383	0.64
Hidalgo		39	2	1	83	10	.1	19	9753	1.13
	109	39	17	1	83	17	1	21	28991	0.42
	109	39	18	1	83	10	2	18	27923	0.37
	109	255	6	1	281	0	0	3	5385	0.32
	109	255	7	1	281	18	1	22	8276	1.55
	109	255	9	10	281	3	0	3	11661	0.15
	109	255	11	3	113	1	Ö	1	9448	0.06

Table G.8. Continued

County		Control	Control	Highway	Highway	Number			Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hidalgo		342	1	2	107	16	1	17	9303	1.06
	109	621	1	2	336	О	0	1	15885	0.04
	109	1804	1	3	115	0	Ö	1	14809	0.04
Hill		14	6	1	81	1	Ö	1	1250	0.47
	110	14	7	1	77	1	0	2	5065	0.23
	110	48	6	1	77	0	0	1	1537	0.38
Hockley		52	6	1	84	2	0	3	5210	0.33
•	111	130	4	2	114	2	1	6	6514	0.54
	111	380	2	1	62	4	0	9	6031	0.87
Hood		80	4	1	377	3	0	6	8340	0.42
Howard		68	7	1	87	1	0	5	2730	1.06
Hutchinsor	1	356	1	2	207	0	0	1	5120	0.11
	118	356	1	2	136	4	0	9	6535	0.80
	118	379	1	2	136	7	0	3	8192	0.21
	118	455	1	2	152	0	1	3	3738	0.47
Jack		249	6	1	281	2	0	4	4721	0.49
	120	249	7	1 .	281	1	0	3	6951	0.25
Jackson		89	3	1	59	3	0	11	13014	0.49
	121	89	4	1	59	2	0	7	10955	0.37
	121	89	5	1	59	3	1	7	11131	0.37
Jasper		213	8	1	190	1	0	1	9938	0.06
	122	244	3	1	190	o	0	1	8650	0.07
Jefferson		28	6	1	90	6	0	3	7609	0.23
	124	508	4	2	73	o	O	1	15394	0.04
Jim Wells		86	11	2	359	3	0	8	9105	0.51
	126	87	1	2	44	1	Ö	7	12969	0.31
	126	255	1	1	281	11	Ó	11	8805	0.73
	126	255	2	1	281	2	0	6	8805	0.40
	126	373	4	2	44	3	1	4	6347	0.37
Johnson		19	1	2	174	6	0	8	20681	0.22
	127	260	1	1	67	3	Ö	6	7880	0.44

Table G.8. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Jones		33	5	1	83	14	0	19	7869	1.40
	128	157	5	1	277	5	O	4	3143	0.74
Karnes		100	5	1	181	2	Ö	2	4437	0.26
	129	100	6	1	181	l o	О	1	8024	0.07
Kaufman		95	3	1	80	32	2	51	36054	0.82
	130	95	4	1	80	6	0	16	17132	0.54
	130	95	5	1	80	6	0	5	11333	0.26
	130	197	3	1	175	11	O	10	15401	0.38
	130	197	4	1	175	12	0	12	12054	0.58
	130	197	5	1	175	6	0	9	10547	0.50
	130	197	8	2	243	2	0	1	4674	0.12
Kleberg		102	4	1	77	11	0	21	10655	1.15
	137	327	1	1	77	0	0	1	5960	0.10
Lamar		136	5	2	19	0	0	2	4812	0.24
	139	136	6	2	19	2	0	2	5826	0.20
	139	136	7	1	271	0	0	1	11894	0.05
	139	136	8	1 1	271	7	0	7	8134	0.50
Lamb		52	4	1	84	2	0	4	3674	0.63
	140	52	5	1	84	5	0	8	4310	1.08
	140	52	8	5	37	0	Ö	1	1973	0.29
Lampasas		251	5	1	281	1	0	1	6260	0.09
J	141	272	6	1	183	0	0	1	2800	0.21
Liberty		28	3	1	90	1	Ö	2	10548	0.11
_	146	177	3	1	59	8	Ö	21	15074	0.81
Live Oak		254	1	1	281	3	1	14	7477	1.09
Lubbock		52	7	1	84	5	0	9	9050	0.58
	152	53	1	1	84	5	0	11	8849	0.72
	152	68	1	1	87	2	Ó	4	13574	0.17
	152	131	1	1	62	0	0	4	7833	0.30
	152	380	1	1	62	12	1 1	22	11420	1.12
	152	380	14	3	193	2	l o l	1	2610	0.22

Table G.8. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Lynn		53	3	1	84	2	1	1	5740	0.10
	153	68	2	1	87	4	0	6	4486	0.78
	153	68	3	1	87	8	Ö	9	3685	1.42
Mason		71	4	1	87	1	0	2	2405	0.48
Matagorda	۱	179	4	2	35	3	0	3	11302	0.15
	158	179	6	2	35	2	0	3	5668	0.31
McCulloch		70	6	1	87	0	0	2	3900	0.30
McLennan	i	49	1	2	6	3	0	13	7959	0.95
	161	55	7	1	84	5	0	9	7631	0.69
	161	55	8	1	84	1	0	1	17491	0.03
· ·	161	162	1	1	84	4	0	7	11896	0.34
	161	258	9	2	6	4	0	5	14692	0.20
Medina		24	5	1	90	1	0	2	7927	0.15
	163	24	6	1	90	5	0	6	8633	0.40
	163	291	8	2	16	0	0	1	2415	0.24
Midland		5	2	1	80	1	0	4	17090	0.14
ĺ	165	5	3	1 .	80	2	0	2	7383	0.16
	165	2296	2	2	191	8	2	7	8888	0.46
Mitchell		53	11	1	84	1	0	2	5595	0.21
Montague		13	5	1	81	1	0	5	8279	0.35
	169	44	6	1	82	4	0	8	3292	1.41
	169	224	3	1	287	4	0	7	9552	0.43
Montgome	ry	177	5	1	59	9	1	22	32073	0.40
Moore	-	66	4	1	287	5	0	7	7188	0.57
	171	66	5	1	87	3	0	16	8940	1.04
Morris		222	3	1	259	0	Ö	1	12120	0.05
	172	222	3	2	11	0	0	2	4531	0.26
	172	392	1	1	259	0	0	1	7733	0.08
Nacogdoch	nes	176	1	1	59	0	0	6	17424	0.20
	174	2560	1	1	59	4	0	4	13365	0.17
Navarro		163	1	2	31	1	0	4	8923	0.26

Table G.8. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Navarro		163	2	2	31	0	0	5	6410	0.45
Nolan		53	12	1	84	9	Ö	14	5537	1.47
Nueces		102	1	2	44	1	Ö	3	15854	0.11
	178	102	2	1	77	1	1	5	11136	0.26
,	178	102	2	2	44	1	0	3	13768	0.13
	178	102	3	1	77	14	0	22	11618	1.10
	178	373	2	2	44	2	0	3	9552	0.18
	178	373	3	2	44	2	Ö	2	6706	0.17
Palo Pinto	,	11	10	1	180	1	0	1	1094	0.53
Panola		63	3	1	59	11	0	9	6541	0.80
	183	63	4	1	59	2	Q	2	7288	0.16
	183	63	10	1	59	2	0	1	5440	0.11
Parker		8	2	1	180	10	0	16	7847	1.19
	184	8	3	1	80	0	0	3	13984	0.12
	184	80	6	1	377	6	2	9	12285	0.43
	184	171	3	2	199	1	0	1	12415	0.05
Parmer		52	1	1	70	11	1	9	4298	1.22
Polk		176	4	1	59	8	4	17	14833	0.67
	187	176	5	1	59	22	2	27	13418	1.17
	187	176	6	3	90	О	0	2	5752	0.20
	187	177	1	1	59	30	1	35	15742	1.29
	187	213	3	1	190	1	1	5	8884	0.33
Potter		41	5	1	87	12	Ö	18	6620	1.58
	188	41	7	1	87	4	Ö	7	12282	0.33
	188	42	1	1	287	0	0	1	6020	0.10
	188	90	5	3	552	0	0	1	5295	0.11
	188	2635	1	3	335	3	0	3	5665	0.31
Rains		203	3	1	69	1	0	3	3190	0.55
Randall		67	1	1	87	11	0	160	8879	10.48
	191	168	8	1	60	4	0	7	6215	0.65
	191	168	9	1	60	15	i	16	18180	0.51

Table G.8. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Randall		2635	3	3	335	1	0	1	2360	0.25
Refugio	l	371	2	1	77	1	0	1	7657	0.08
	196	371	3	1	77	3	0	9	9177	0.57
Runnels		158	1	1	67	3	0	8	4692	0.99
Rusk	1	138	2	1	259	0	O	1	8269	0.07
	201	138	3	1	259	5	0	4	7660	0.30
	201	138	4	1	259	1	1	3	6019	0.29
San Jacin	to	138	5	1	259	2	0	6	5674	0.61
	204	177	2	1	59	27	1	35	15881	1.28
San Patrio	cio	101	4	1	181	2	1	7	12948	0.31
	205	180	6	2	35	3	0	7	11661	0.35
	205	180	10	2	361	0	0	2	7650	0.15
	205	371	4	1	77	2	0	4	6993	0.33
	205	372	1	1	77	7	0	19	11480	0.96
Scurry		53	7	1	84	3	1	6	5464	0.64
-	208	53	8	1	84	8	0	11	5790	1.10
	208	53	9	1	84	4	0	7	5179	0.79
	208	53	10	1	84	5	0	7	5402	0.75
Sheiby		175	2	1	59	0	0	1	6448	0.09
-	210	175	4	1	59	0	1	1	6049	0.10
Sherman		66	3	1	287	2	0	1	3561	0.16
Smith		164	4	2	31	2	0	4	13236	0.18
	212	165	1	1	271	o	0	1	12778	0.05
	212	165	2	1	271	5	0	6	3988	0.87
	212	190	5	1	69	4	0	3	16030	0.11
	212	191	1	1	69	5	Ö	7	15434	0.26
	212	1790	2	3	323	0	Ó	2	16255	0.07
	212	2075	1	3	323	0	0	1	14757	0.04
Sterling		69	3	1	87	0	0	1	4469	0.13
	216	69	4	1	87	1	0	2	5422	0.21
Swisher		67	2	1	87	8	2	15	5856	1.49

Table G.8. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Swisher		67	3	1	87	20	0	21	5986	2.04
Tarrant		13	10	3	496	3	0	4	11610	0.20
	220	14	15	1	81	1	1	9	13587	0.39
	220	80	7	1	377	1	0	2	16214	0.07
	220	353	3	2	114	3	0	11	31051	0.21
Taylor		34	1	1	83	2	0	4	14636	0.16
Terry		227	7	1	62	13	0	10	7415	0.78
-	223	228	11	1	62	2	0	10	5076	1.15
Tom Green		69	6	1	87	2	0	3	4173	0.42
	226	69	7	1	87	5	1	9	10053	0.52
·	226	70	2	, 1	87	7	0	6	8564	0.41
	226	77	8	3	306	2	0	7	8184	0.50
	226	158	2	1	67	5	0	6	5015	0.70
	226	264	7	3	306	0	0	2	4455	0.26
Travis		113	13	3	360	0	0	1	35111	0.02
	227	114	2	1	290	7	0	7	16026	0.25
	227	265	1	2	71	3	1	9	26232	0.20
	227	265	2	2	71	3	0	10	15025	0.39
Upshur		392	2	1	259	2	0	3	6373	0.27
Uvalde		23	5	1	90	3	0	2	2803	0.41
Val Verde		23	1	1	90	0	1	3	9865	0.18
Van Zandt		95	6	1	80	2	0	2	6664	0.17
	234	95	7	1	80	3	0	2	4762	0.24
Victoria		88	4	1	59	0	0	2	12781	0.09
	235	88	5	3	175	3	0	5	8607	0.34
	235	89	1	1	59	10	0	10	14234	0.41
	235	371	1	1	77	7	0	6	7183	0.49
	235	371	6	3	91	0	0	1	5860	0.10
	235	432	2	5	404	6	1	17	10859	0.91
Waller		114	11	1	290	7	0	10	7586	0.77
Ward		292	4	2	18	1 0	0	5	5471	0.53

Table G.8. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Washingto	n	114	10	1	290	8	0	5	7982	0.36
	239	186	6	1	290	3	0	9	10442	0.50
Wharton		89	6	1	59	3	9	8	11781	0.39
	241	89	7	1	59	16	1	24	13091	1.07
	241	89	8	1	59	9	0	16	14141	0.66
	241	89	10	3	183	0	0	1	4450	0.13
Wichita		43	8	1	287	4	0	12	8738	0.80
	243	43	9	1	287	2	0	6	12212	0.29
	243	43	17	3	370	5	0	4	7249	0.32
	243	44	1	1	82	0	0	1	21618	0.03
Wilbarger		43	5	1	287	8	0	6	7628	0.46
	244	43	6	1	70	3	0	8	9082	0.51
	244	43	7	1	287	3	0	9	8749	0.60
Willacy		327	10	1	77	4	0	7	6735	0.60
Wilson		100	3	1	181	9	0	13	6995	1.08
	247	143	4	1	87	3	0	3	3024	0.58
Winkler		292	2	2 .	18	2	0	2	4331	0.27
Wise	ļ	13	6	1	81	0	0	4	11592	0.20
	249	13	7	1	81	22	1	27	7365	2.13
	249	13	8	1	81	31	Ô	40	14278	1.63
Wood		96	1	1	80	1	0	4	3504	0.66
	250	96	2	11	80	0	0	2	3292	0.35

Table G.9. Single-Vehicle Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1987)

County	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Atascosa		17	4	8	35	0	0	2	10166	0.07
	7	73	5	8	37	25	О	23	8696	0.99
	7	73	6	8	37	5	0	9	8757	0.39
	7	73	10	8	37	7	1	19	8524	0.84
Austin		271	2	8	10	6	0	12	19710	0.23
·	8	271	3	8	10	16	3	21	23216	0.34
Bell		15	4	8	35	7	0	13	26071	0.19
	14	15	6	8	35	3	Ò	12	22726	0.20
	14	15	7	8	35	9	1	13	20803	0.23
Bexar		17	2	8	35	0	0	1	15877	0.02
•	15	17	3	8	35	1	1	4	13878	0.11
	15	25	2	8	10	14	0	6	42004	0.05
	15	72	7	8	10	3	2	10	19776	0.19
	15	73	8	8	37	0	0	1	54304	0.01
	15	73	9	8	37	8	1	8	9963	0.30
Bowie		610	5	8	30	2	0	7	12127	0.22
	19	610	6	8	30	13	0	21	26874	0.29
	19	610	7	8	30	4	0	8	17474	0.17
Caldwell		535	3	8	10	2	Ö	2	11677	0.06
Callahan		6	7	8	20	15	0	24	13854	0.65
	30	7	1	8	20	13	5	12	11807	0.38
	30	7	2	8	20	2	0	13	11812	0.41
Carson		275	2	8	40	11	0	15	8567	0.66
	33	275	3	8	40	5	0	11	8309	0.50
	33	275	4	8	40	6	0	8	8283	0.36
Chambers		508	2	8	10	16	1	35	26081	0.50
	36	508	3	8	10	14	3	24	22937	0.39
	36	739	1	8	10	2	Ó	3	22429	0.05
Colorado		271	1	8	10	26	1	35	19890	0.66
	45	535	8	8	10	10	0	24	14785	0.61
Comal		16	4	8	35	8	0	19	28979	0.25

Table G. 9. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Comal		16	5	8	35	5	0	9	34065	0.10
Cooke		194	2	8	35	4	1	9	13234	0.26
	49	195	1	8	35	20	Ö	13	16732	0.29
Crane		4	5	8	20	0	0	2	8320	0.09
Crockett		140	10	8	10	7	0	6	3233	0.70
	53	140	11	8	10	4	0	8	3239	0.93
	53	140	13	8	10	17	0	16	2923	2.06
	53	141	1	8	10	7	0	11	4187	0.99
Culberson		2	11	8	10	5	0	6	6778	0.33
	55	3	1	8	10	19	i	13	7150	0.68
·	55	3	2	8	10	13	0	9	7151	0.47
	55	3	3	8	10	11	0	21	7043	1.12
Deaf Smith	n	90	1	8	40	3	0	2	7777	0.10
Denton		81	13	8	354	0	1	9	12217	0.28
	61	195	2	8	35	27	0	44	65065	0.25
	61	196	1	8	353	33	3	45	50017	0.34
	61	196	2	8	353	0	0	1	21496	0.02
Donley		275	6	8	40	3	0	2	8163	0.09
-	65	275	8	8	40	1	0	2	8337	0.09
	65	275	10	8	40	4	O	4	8317	0.18
Eastland		7	3	8	20	14	i	36	11697	1.16
	68	7	4	8	20	10	0	18	13081	0.52
	68	7	6	8	20	11	Ò	24	11340	0.80
	68	314	5	8	20	2	0	2	11537	0.07
Ector		4	6	8	20	6	1	12	8887	0.51
	69	4	7	8	20	14	1	27	10655	0.95
Ellis		48	4	8	353	4	0	10	19237	0.20
	71	48	8	8	353	30	0	30	14659	0.77
	71	92	3	8	45	4	0	10	23268	0.16
	71	92	4	8	45	9	0	13	21824	0.22
	71	92	5	8	45	7	o	6	21768	0.10

Table G. 9. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Ellis		442	3	8	353	6	0	11	29751	0.14
El Paso		2121	1	8	10	12	O	15	21608	0.26
	72	2121	4	8	10	30	2	36	12562	1.08
	72	2121	5	8	10	15	1	17	8210	0.78
Erath		314	4	8	20	6	0	6	11539	0.20
Falls		15	3	8	35	1	0	5	24624	0.08
Fayette		535	6	8	10	3	0	4	12451	0.12
	76	535	7	8	10	16	0	22	12850	0.64
Fort Bend		271	5	8	10	5	0	8	54444	0.06
Franklin	ļ	610	2	8	30	2	0	9	12910	0.26
Freestone		675	1	8	45	11	0	12	15095	0.30
	82	675	2	8	45	39	4	27	14487	0.70
Frio		17	6	8	35	3	2	10	7202	0.52
	83	17	7	8	35	3	1	8	5582	0.54
Gillespie		142	13	8	10	7	0	4	4920	0.31
Gonzales		535	4	8	10	1	0	10	12199	0.31
	90	535	5	8	10	11	0	12	12423	0.36
Gray		275	5	8	40	4	0	7	8238	0.32
	91	275	7	8	40	3	0	4	8178	0.18
	91	275	9	8	40	0	0	4	8227	0.18
	91	275	11	8	40	14	3	33	8337	1.49
Gregg		495	7	8	20	15	1	27	19002	0.53
Guadalupe	-	25	3	8	10	2	0	6	16511	0.14
	95	535	1	8	10	5	0	8	14283	0.21
	95	535	2	8	10	2	0	11	12045	0.34
Hale		67	4	8	6	1		3	7216	0.16
	96	67	5	8	27	20	0	22	6968	1.19
	96	67	6	8	27	18	0	27	6769	1.50
Harris		508	1	8	10	5	1	8	81244	0.04
Harrison		495	8	8	20	23	0	33	16762	0.74
	103	495	9	8	20	6	O	7	15198	0.17

Table G. 9. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Harrison		495	10	8	20	19	1	27	15456	0.66
Hays	J	16	2	8	35	18	1	30	36443	0.31
-	106	16	3	8	35	3	0	8	32085	0.09
Hill		1 4	7	8	35	11	1	32	24403	0.49
,	110	14	23	8	354	13	Ö	18	10399	0.65
	110	14	24	8	35	4	0	7	23784	0.11
	110	48	9	8	353	3	1	11	14206	0.29
Hopkins		9	9	8	30	6	1	19	15129	0.47
-	113	10	2	8	30	12	1	10	15306	0.25
	113	610	1	8	30	8	0	10	13202	0.28
Howard		5	5	8	20	12	.1	23	10101	0.86
	115	5	6	8	20	14	0	27	10339	0.98
Hudspeth		2	5	8	10	11	2	12	7960	0.57
-	116	2	6	8	10	30	0	33	7893	1.57
	116	2	7	8	10	15	4	24	7733	1.17
	116	2	8	8	10	7	2	14	6987	0.75
	116	2	9	8	10	6	1	14	6987	0.75
	116	2	10	8	10	9	0	10	7053	0.53
	116	2121	6	8	10	16	2	15	7926	0.71
Hunt		9	13	8	30	21	2	32	20957	0.57
Jeff Davis	;	3	4	8	10	4	0	8	6978	0.43
Jefferson	l	739	2	8	10	11	1	13	27248	0.18
Johnson		14	3	8	354	26	2	48	17044	1.06
	127	14	4	8	354	18	2	24	11745	0.77
	127	14	22	_8	354	4	0	10	10571	0.36
Kaufman		495	1	8	20	37	0	13	21944	0.22
Kendall		72	5	8	10	19	4	21	10001	0.79
	131	72	6	8	10	15	1	26	11745	0.83
Kerr		142	2	8	10	10	0	9	4603	0.74
	133	142	12	8	10	5	0	7	4549	0.58
	133	142	14	8	10	12	1	26	6381	1.53

Table G. 9. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kimble		141	8	8	10	7	0	7	3850	0.68
	134	141	9	8	10	6	0	7	4063	0.65
	134	142	1	8	10	31	2	42	5081	3.11
LaSalle		17	8	8	35	10	Ì	7	4654	0.57
	142	18	1	8	35	4	0	2	4319	0.17
	142	18	2	8	35	10	0	8	3920	0.77
Leon		675	3	8	45	19	2	21	15472	0.51
	145	675	4	8	45	14	1_	19	16189	0.44
Live Oak		73	7	8	37	6	0	8	8948	0.34
	149	74	1	8	37	8	0	10	6171	0.61
	149	74	2	8	37	8	0	15	6805	0.83
Lubbock		67	7	8	27	6	0	7	8939	0.29
Madison		675	5	8	45	22	0	30	15900	0.71
Martin		5	4	8	20	. 15	1	22	10010	0.83
McLennan	1	14	8	8	35	11	1	13	25997	0.19
	161	14	9	8	35	1	0	2	32469	0.02
	161	15	1	8	35	2	0	8	38124	0.08
	161	15	2	8	35	2	0	7	24469	0.11
Medina		17	5	8	35	3	1	8	8825	0.34
Midland	l	5	14	8	20	13	0	14	15228	0.35
	165	5	15	8	20	12	3	13	10907	0.45
Mitchell		5	7	8	20	8	Ó	8	8577	0.35
	168	5	8	8	20	8	0	14	8705	0.60
	168	6	11	8	20	19	1	21	8824	0.89
Montgome	ry	110	4	8	45	66	1	97	62664	0.58
	170	675	8	8	45	25	2	46	36089	0.48
Morris		610	4	8	30	3	Ó	5	11841	0.16
Navarro		92	6	8	45	11	2	21	18989	0.42
	175	93	1	8	45	7	0	14	16146	0.33
	175	166	1	8	45	12	0	16	17822	0.34
Nolan		6	2	8	20	11	0	20	11506	0.65

Table G. 9. Continued

Count	y I	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Nolan		6	3	8	20	12	0	25	13586	0.69
Oldham		90	2	8	40	25	O	29	7818	1.39
	180	90	3	8	40	18	O	23	7865	1.10
	180	90	4	8	40	10	1	17	8763	0.73
Orange .		28	9	8	10	13	0	30	48350	0.23
	181	28	11	8	10	19	2	25	27152	0.35
	181	28	14	8	10	1	l 0	2	24122	0.03
Palo Pinte	0	314	2	8	20	3	Ö	7	12478	0.21
	182	314	3	8	20	8	0	7	12057	0.22
Parker		8	3	8	20	8	2	17	30989	0.21
,	184	314	1	8	20	8	0	17	14201	0.45
	184	314	7	8	20	3	0	8	18336	0.16
	184	1068	5	8	30	0	0	2	27958	0.03
Pecos		140	1	8	10	2	0	8	3366	0.89
	186	140	2	8	10	13	0	15	3003	1.88
	186	140	3	8	10	7	0	15	2949	1.91
	186	140	4	8	10	2	0	2	2922	0.26
	186	140	5	8	10	3	0	4	2927	0.51
	186	140	6	8	10	11	0	5	2918	0.64
	186	441	7	8	10	10	1	14	2804	1.88
	186	441	8	8	10	8	i	5	3700	0.51
Potter		90	5	8	40	9	D	17	36428	0.18
	188	275	1	8	40	0	0	1	5295	0.07
Randall		67	17	8	27	8	0	12	4103	1.10
	191	168	9	8	27	4	0	16	23524	0.26
Reeves		3	5	8	20	2	Ì	5	4663	0.40
	195	3	6	8	20	34	1	28	4732	2.22
	195	3	7	8	20	7	1	8	5354	0.56
	195	441	5	8	10	6	1	10	2519	1.49
	195	441	6	8	10	2	0	2	2568	0.29
	195	441	9	8	10	21	2	26	2762	3.54

Table G. 9. Continued

County	/ 1	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT_	Accident Data
Rockwall		9	12	8	30	7	0	12	31620	0.14
San Patrio	io	74	3	8	37	4	1	7	8097	0.33
	205	74	4	8	37	5	0	3	10669	0.11
	205	74	5	8	37	9	1	14	12424	0.42
Smith .		495	4	8	20	8	0	31	18864	0.62
	212	495	5	8	20	40	0	51	15977	1.20
	212	495	6	8	20	23	1	26	17669	0.55
Sutton		141	2	8	10	5	0	5	4065	0.46
	218	141	3	8	10	11	0	14	3693	1.43
	218	141	4	8	10	2	0	9	3594	0.94
-	218	141	5	8	10	8	2	6	3686	0.61
	218	141	6	8	10	6	0	7	3671	0.72
	218	141	7	8	10	11	0	7	3667	0.72
Swisher		67	2	8	27	1	0	6	6049	0.37
	219	67	3	8	27	7	0	5	5986	0.31
Tarrant		8	16	8	20	2	0	7	29439	0.09
	220	81	12	8	354	1	0	5	14681	0.13
Taylor		6	4	8	20	31	0	29	13743	0.79
Titus		6	5	8	20	0	Ö	4	15252	0.10
Travis		610	3	8	30	16	0	12	12451	0.36
	227	15	10	8	35	8	1	11	53185	0.08
	227	16	1	8	35	2	1	2	43858	0.02
Van Zandt		495	2	8	20	18	2	31	20883	0.56
	234	495	3	8	20	22	2	26	18662	0.52
Walker		675	6	8	45	14	3	22	17377	0.48
	236	675	7	8	45	23	1	28	22363	0.47
Waller		271	4	8	10	20	5	41	26263	0.59
Ward		4	2	8	20	19	Ó	27	5409	1.88
	238	4	4	8	20	28	1	23	6646	1.30
Webb		18	3	8	35	7	1	7	4259	0.96
	240	18	4	8	35	1 .	Ò	5	4330	0.43

Table G. 9. Continued

County	Т	Control	Control	Highway	Highway		Number		Mean	Normalized
Name No		Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Webb		18	5	8	35	3	0	8	5184	0.58
24	0	18	6	8	35	0	0	7	16379	0.16
Wheeler		275	12	8	40	17	0	37	8491	1.64
24	2	275	13	8	40	16	0	18	7816	0.87
Wichita		156	7	8	44	2	0	5	11596	0.16
Williamson		15	8	8	35	8	0	21	25876	0.31

Table G. 10. Single-Vehicle Non-Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1987)

Count	v T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Anderson		520	8	2	155	1	0	3	4532	0.38
Andrews	ļ	228	4	1	385	4	0	3	3846	0.45
1	2	228	5	1	385	6	0	7	7850	0.52
Angelina		176	2	1	59	3	0	7	17181	0.24
	3	176	3	1	59	4	1	9	19583	0.27
	3	199	4	1	6 <b>9</b>	1	0	3	8207	0.21
Aransas		180	7	3	70	1	0	2	7883	0.15
Archer		249	4	1	281	o	0	1	2323	0.25
Armstrong	a	42	3	1	287	6	2	9	6112	0.86
•	6	42	4	1	287	9	Ö	11	6154	1.04
	6	42	5	1	287	5	0	4	5600	0.42
Atascosa		73	3	1	281	4	0	5	4491	0.65
	7	73	4	1	281	1	0	2	2480	0.47
	7	613	2	2	16	7	1	11	4354	1.47
Bailey		52	2	1	70	1	0	3	5761	0.30
	9	52	3	1	84	0	0	4	3587	0.65
Bastrop		114	4	1	290	2	0	1	10317	0.06
-	11	114	6	1	290	1	0	1	6086	0.10
	11	265	3	2	71	6	1	8	12848	0.36
	11	265	4 -	2	21	3	0	6	16944	0.21
	11	265	5	2	21	1	0	2	15980	0.07
	11	265	5	2	71	4	0	8	8811	0.53
	11	265	6	2	71	3	0	4	6595	0.35
	11	472	1	2	21	8	1	16	3784	2.46
Bee		100	8	1	181	4	0	7	5629	0.72
	13	101	1	1	181	3	0	3	6461	0.27
Bell		231	4	1	190	4	0	8	15239	0.31
Bexar		73	2	1	281	4	0	4	5728	0.41
ł	15	73	12	1	181	2	0	2	10630	0.11
	15	100	2	1	181	2	0	2	9258	0.13
	15	143	1	1	87	0	0	1	11958	0.05

Table G.10. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Bexar		143	2	1	87	4	0	3	6449	0.27
	15	253	4	1	281	1	0	4	28972	0.08
	15	291	9	2	16	5	0	5	3690	0.79
	15	291	10	2	16	0	0	1	24339	0.02
	15	613	1	2	16	10	Ö	9	8094	0.65
Blanco		113	5	1	281	5	1	4	5280	0.44
Bowie		217	1	1	59	3	0	3	9421	0.19
	19	218	1	1	59	6	O	8	13567	0.34
Brazoria		111	7	2	227	5	1	8	16508	0.28
	20	111	8	2	227	2	0	8	19223	0.24
	20	111	8	2	288	2	0	3	19344	0.09
	20	111	9	2	227	0	0	1	10008	0.06
	20	598	2	2	288	14	1	11	13536	0.47
	20	598	3	2	288	0	0	4	7866	0.30
Brazos		50	2	2	6	0	1	1	9358	0.06
	21	116	4	2	21	6	0	6	8856	0.39
Brown		54	6	1 .	67	2	0	7	7437	0.55
	25	79	1	1	67	2	0	4	5334	0.44
	25	128	1	1	377	1	0	1	9979	0.06
Burnet		116	3	2	21	0	0	1	6606	0.09
Calhoun		29	3	1	90	0	0	1	8199	0.07
Cameron	ĺ	179	10	2	35	4	0	4	8199	0.28
	31	39	7	1	77	6	Ö	3	20543	0.08
	31	39	8	1	77	16	0	20	11240	1.03
	31	39	19	1	83	5	0	11	26234	0.24
	31	220	5	2	48	3	0	2	18420	0.06
	31	327	8	1	77	3	0	6	11240	0.31
	31	331	4	4	100	6	Ô	11	14229	0.45
Carson		42	2	1	287	0	0	1	6030	0.10
	33	169	3	1	60	2	0	4	5415	0.43
	33	169	4	1	60	2	Ö	5	4418	0.66

Table G.10. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Carson		169	5	1	60	5	0	7	4855	0.84
Chambers		368	1	2	124	0	0	1	9618	0.06
	36	508	3	2	73	0	0	1	4980	0.12
Cherokee		199	1	1	69	5	0	11	10236	0.62
	37	199	2	1	69	3	0	5	6714	0.43
Childress		42	12	1	287	12	4	14	6896	1.18
	38	43	1	1	287	5	0	7	7802	0.52
Clay		44	2	1	82	14	0	13	13330	0.57
1	39	44	3	1	82	0	0	2	5038	0.23
	39	224	1	1	287	8	0	16	9652	0.96
·	39	224	2	1	287	8	0	10	9690	0.60
Coke		69	5	1	87	4	0	2	3610	0.32
Coleman		78	5	! 1	67	0	0	1	1260	0.46
Collin		47	14	1	75	7	0	12	21329	0.33
	43	135	5	1	380	0	0	1	5590	0.10
	43	364	4	2	121	0	0	1	7580	0.08
	43	549	3	2	121	0	0	1	6440	0.09
	43	549	3	3	399	0	0	1	5866	0.10
Colorado		266	2	2	71	4	0	6	5349	0.65
Comal		253	3	1	281	6	1	8	5706	0.82
Comanche		79	2	1	67	1	0	2	6517	0.18
Concho		70	3	1	87	1	0	5	3140	0.93
Cooke		44	7	1	82	0	0	3	4741	0.37
	49	44	8	1	82	4	0	4	8784	0.26
	49	45	1	1	82	4	0	12	12682	0.55
Coryell		231	2	1	190	5	0	7	22466	0.18
-	50	251	3	1	281	0	O	11	1893	0.31
Crane		229	2	1	385	2	0	8	4194	1.11
Crosby		131	3	1	62	4	0	4	4402	0.53
	54	131	3	1	82	1	0	2	3743	0.31
	54	131	4	1	82	2	0	2	3854	0.30

Table G.10. Continued

County		Control	Control	Highway	Highway	-	Number		Mean	Normalized
Name I	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Crosby		131	5	1	82	2	0	2	1930	0.60
Culberson		233	2	1	62	1	0	3	1435	1.22
Dawson		68	4	1	87	3	Ö	5	5620	0.52
	58	68	5	1	87	5	1	6	3388	1.03
Deaf Smith		168	5	1	60	1	1	2	5921	0.20
	59	168	7	1	60	1	0	5	6174	0.47
Delta		136	3	2	24	0	0	1	2627	0.22
	60	136	4	2	19	0	O	1	4175	0.14
DeWitt		269	5	6	77	0	0	2	1953	0.60
Dickens		131	6	1	82	1	0	1	1648	0.35
·	63	132	1	1	82	4	0	2	1416	0.82
Donley		42	6	1	287	1	0	7	7833	0.52
	65	42	7	1	287	6	0	15	6603	1.32
	65	42	8	1	287	13	0	9	6025	0.87
Kenedy		327	2	1	77	4	2	6	5410	0.64
	66	327	3	1	77	0	0	4	5110	0.46
Eastland		7	4	1 .	80	0	0	2	4452	0.26
Ector		5	1	1	80	3	0	4	14190	0.16
	69	228	6	1	385	1	Ō	2	12396	0.09
	69	229	1	1	385	9	0	10	5746	1.01
	69	463	7	2	302	1	Ö	1	2275	0.26
	69	572	1	2	302	1	1	4	8235	0.28
Ellis		172	5	1	287	5	0	7	7754	0.52
	71	260	2	1	67	2	Ö	6	9110	0.38
	71	261	1	1	67	4	0	13	11161	0.68
El Paso		374	2	1	62	2	0	4	19317	0.12
	72	2552	1	3	375	6	O	9	5482	0.95
Fayette		265	7	2	71	6	0	7	6140	0.66
-	76	266	1	2	71	5	0	6	6947	0.50
Floyd		145	6	1	70	2	0	6	2256	1.55
	78	145	7	1	62	1	0	4	2429	0.96

Table G.10. Continued

County	y I	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Floyd		453	1	1	62	1	0	3	2068	0.84
Fort Bend		27	8	6	90	7	0	13	19399	0.39
	80	27	12	1	59	21	1	18	39295	0.27
	80	89	9	1	59	16	0	12	16516	0.42
Freestone		57	7	1	84	2	0	1	4670	0.12
Gaines	İ	228	2	1	62	1	0	5	4427	0.66
	84	228	3	1	385	4	0	8	5891	0.79
	84	294	1	1	62	5	0	7	4479	0.91
Garza		53	4	1	84	7	0	9	6549	0.80
	86	53	5	1	84	20	0	21	5925	2.06
,	86	53	6	1	84	6	0	8	5346	0.87
Gray		169	6	1	60	0	0	1	5949	0.10
-	91	275	23	3	555	0	0	1	3256	0.18
Grayson		45	18	1	82	8	1	11	6814	0.94
-	92	45	19	1	82	2	Ò	2	6745	0.17
	92	47	1	1	69	7	1	16	14407	0.65
	92	47	13	1	75	3	1	11	15149	0.42
	92	47	18	1	75	2	0	2	15540	0.07
	92	47	19	3	503	1	o	1	15967	0.04
	92	728	1	5	120	1	0	3	5583	0.31
Gregg		138	1	2	31	6	0	19	15166	0.73
	93	138	1	1	259	0	0	1	16067	0.04
	93	377	1	2	135	0	Ò	1	7168	0.08
	93	392	3	1	259	0	o	1	9342	0.06
Grimes		50	3	2	6	12	1	15	7209	1.21
Guadalupe		25	10	5	78	0	1	1	5028	0.12
•	95	366	3	2	123	0	0	2	3870	0.30
Hale		67	9	3	445	1	0	2	1625	0.72
	96	145	5	1	70	0	0	1	5313	0.11
Hall		42	9	1	287	4	0	10	6023	0.97
Hardeman		43	2	1	2 <b>8</b> 7	1	o	14	7009	1.16

Table G.10. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hardeman		43	4	1	287	4	0	7	7 <b>6</b> 26	0.53
Hardin		65	5	1	96	1	0	1	16278	0.04
	101	200	9	1	69	5	Ö	9	9018	0.58
	101	200	10	1	69	0	0	1	13501	0.04
Harris		50	6	1	290	7	1	8	18154	0.26
Harrison		62	7	1	59	5	0	5	12051	0.24
	103	63	1	1	59	2	0	4	11602	0.20
	103	63	9	1	59	1	0	2	5200	0.22
	103	96	7	1	80	9	1	4	8603	0.27
	103	96	8	1	80	1	0	3	4686	0.37
	103	2642	2	3	281	2	0	2	5273	0.22
Haskell		157	3	1	277	1	0	6	1901	1.84
	105	157	4	1	277	1	0	4	2969	0.78
Hemphill		30	6	1	60	6	0	4	5415	0.43
	107	30	6	1	83	2	0	1	1640	0.35
	107	169	9	1	60	0	0	2	1415	0.82
Henderson		163	3	2	31	3	0	4	6668	0.35
	108	163	4	2	31	2	1	8	21120	0.22
	108	164	1	2	31	2	0	3	9668	0.18
	108	164	2	2	31	1	0	2	7357	0.16
	108	164	3	2	31	2	0	8	8414	0.55
	108	197	6	1	175	0	0	1	7619	0.08
Hidalgo		39	2	1	83	3	Ö	9	9753	0.54
<del>-</del>	109	39	17	1	83	2	Ö	5	28991	0.10
	109	39	18	1	83	11	1	14	27923	0.29
	109	255	6	1	281	2	0	6	5385	0.65
	109	255	7	1	281	14	1	19	8276	1.33
	109	255	9	10	281	3	0	3	11661	0.15
	109	342	1	2	107	4	0	9	9303	0.56
	109	342	2	2	107	1	0	1	6406	0.09
	109	528	1	2	107	5	Ö	8	6986	0.67

Table G.10. Continued

Count	v T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hidalgo		1804	1	3	115	0	Ó	1	14809	0.04
Hockley	1	52	6	1	84	2	0	3	5210	0.33
	111	130	4	2	114	1	Ö	5	6514	0.45
	111	380	2	_1	62	5	0	7	6031	0.67
Hood		80	4	1	377	9	0	9	14631	0.36
Houston		109	3	1	287	0	0	2	3286	0.35
Howard		68	7	1	87	8	0	7	2730	1.49
Hunt	İ	136	1	2	224	1	0	1	4832	0.12
Hutchinso	n	356	1	2	136	3	0	5	6535	0.44
	118	455	1	2	152	2	0	4	3738	0.62
Jack		249	6	1	281	0	0	1	4721	0.12
	120	249	7	1	281	2	0	4	6951	0.33
Jackson		89	3	1	59	5	0	11	13014	0.49
	121	89	4	1	59	8	0	12	10955	0.64
	121	89	5	1	59	7	0	5	11131	0.26
Jasper		64	8	1	96	1	1	2	7143	0.16
•	122	65	4	1	96	1	0	2	9684	0.12
	122	244	3	1	190	1	0	1	8650	0.07
Jefferson		28	6	1	90	2	0	2	7609	0.15
Jim Wells		86	11	2	359	1	0	1	9105	0.06
	126	87	1	2	44	9	0	10	12969	0.45
	126	255	1	1	281	6	0	9	8805	0.59
	126	255	2	1	281	1	Ö	2	8805	0.13
	126	373	4	2	44	2	0	5	6347	0.46
Johnson		19	1	2	174	9	0	11	20681	0.31
	127	172	10	1	287	1	0	1	9150	0.06
	127	26 <b>0</b>	1	1	67	0	0	4	7880	0.30
Jones		33	5	1	83	9	0	14	7869	1.03
	128	157	5	11	277	4	0	6	3143	1.11
Karnes		100	5	1	181	1	0	2	4437	0.26
	129	100	6	1	181	1	Ö	1	8024	0.07

Table G.10. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kaufman		95	3	1	80	31	2	38	36054	0.61
	130	95	4	1	80	4	2	15	17132	0.51
	130	95	5	1	80	7	0	9	11333	0.46
	130	173	3	2	34	1	0	1	6126	0.09
,	130	197	3	1	175	6	0	8	15401	0.30
	130	197	4	1	175	8	0	12	12054	0.58
	130	197	5	1	175	6	1	8	10547	0.44
	130	495	1	1	80	5	Ö	3	21836	0.08
Kleberg		102	4	1	77	13	0	14	10655	0.76
	137	327	1	1	77	0	0	1	5960	0.10
Lamar		136	5	2	19	2	0	4	4812	0.48
77	139	136	7	1	271	2	0	4	11894	0.20
	139	136	8	1	271	0	0	5	8134	0.36
	139	136	9	1	271	0	0	1	5940	0.10
Lamb		52	4	1	84	2	1	12	3674	1.90
	140	52	5	1	84	1	0	9	4310	1.21
	140	145	10	5	168	0	0	1	2870	0.20
Lampasas		272	6	1	183	0	0	1	2800	0.21
Liberty	İ	28	3	1	90	2	2	5	10548	0.28
	146	17 <b>7</b>	3	1	59	5	0	18	15074	0.69
Live Oak		254	1	1	281	11	0	10	7477	0.78
Lubbock		52	7	1	84	6	0	14	9050	0.90
	152	53	1	1	84	4	2	9	8849	0.59
	152	68	1	1	87	8	Ò	10	13574	0.43
	152	131	1	1	62	2	0	5	7833	0.37
	152	131	2	1	62	0	0	1	5659	0.10
	152	380	1	1	62	6	0	21	11420	1.07
Lynn		68	2	1	87	7	0	17	4486	2.20
	153	68	3	1	87	5	0	7	3685	1.10
Martin		5	16	1	80	1	0	1	2137	0.27
Mason		71	4	1	87	1	0	1	2405	0.24

Table G.10. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Matagorda		179	4	2	35	1	0	3	11302	0.15
	158	179	6	2	35	4	1	8	5668	0.82
McLennan		49	1	2	6	8	0	10	7959	0.73
	161	55	7	1	84	6	0	2	7631	0.15
	161	55	8	1	84	2	0	2	17491	0.07
	161	162	1	1	84	3	0	2	4520	0.26
	161	162	1	2	31	o	0	1	11896	0.05
	161	258	9	2	6	3	0	5	14692	0.20
Medina		24	5	1	90	5	0	6	7927	0.44
	163	24	6	1	90	5	1	9	8633	0.61
Midland		5	2	1	80	2	0	4	17090	0.14
	165	5	3	1	80	0	1	3	7383	0.24
	165	2296	2	2	191	2	0	6	8888	0.39
Mitchell		53	11	1	84	1	0	1	5595	0.10
Montague		13	5	1	81	9	1	14	8279	0.98
_	169	44	6	1	82	2	0	3	3292	0.53
	169	224	3	1	287	5	0	14	9552	0.85
Montgome	ry	177	5	1	59	18	3	38	32073	0.69
Moore	1	66	4	1	287	9	0	10	7188	0.81
	171	66	5	1	87	16	Ö	14	8940	0.91
Morris		222	3	1	259	1	0	2	12120	0.10
	172	222	3	2	11	0	0	2	4531	0.26
Nacogdoch	nes	176	1	1	59	7	Ò	14	17424	0.47
	174	2560	1	1	59	1	Ö	4	13365	0.17
Navarro		92	13	3	564	4	0	1	7747	0.08
	175	163	1	2	31	4	1	5	8923	0.33
	175	163	2	2	31	0	0	4	6410	0.36
Nolan		53	12	1	84	5	2	13	5537	1.37
Nueces		102	1	2	44	1	0	4	15854	0.15
	178	102	2	1	77	8	2	8	13768	0.34
	178	102	2	2	44	2	Ò	3	11136	0.16

Table G.10. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Nueces		102	3	1	7 <b>7</b>	2	0	10	11618	0.50
	178	373	2	2	44	11	1	7	9552	0.10
	178	373	3	2	44	2	0	5	6706	0.43
Panola		63	3	1	59	5	0	4	6541	0.36
	183	63	4	1	59	0	0	1	7288	0.08
	183	63	10	1	59	2	O	3	5440	0.32
Parker		8	2	1	180	7	2	13	7847	0.96
	184	8	3	1	80	2	0	3	13984	0.12
	184	80	6	1	377	6	0	4	12285	0.19
	184	171	3	2	199	1	0	2	12415	0.09
Parmer		52	1	1	70	1	0	4	4298	0.54
Polk		176	4	1	59	10	2	24	14833	0.94
	187	176	5	1	59	17	2	32	13418	1.39
	187	176	6	3	90	1	0	4	5752	0.40
	187	177	1	1	59	12	Ö	23	15742	0.85
	187	213	3	1	190	1	0	1	8884	0.07
Potter		41	5	1	87	24	0	23	6620	2.02
	188	41	7	1	87	6	1	7	12282	0.33
	188	42	1	1	287	3	O	3	6020	0.29
	188	90	5	3	552	1	o	1	5295	0.11
	188	169	2	1	60	2	O	2	9214	0.13
	188	2635	1	3	335	o	0	2	5665	0.21
Randall		67	1	1	87	1	Ö	1	8879	0.07
	191	168	8	1	60	9	o	5	6215	0.47
	191	168	9	1	60	2	О	6	18180	0.19
	191	2635	3	3	335	10	О	3	236 <b>0</b>	0.74
Refugio		371	2	1	77	0	0	1	7657	0.08
	196	371	3	1	77	3	0	11	9177	0.70
Runnels		34	5	1	83	1	0	2	2093	0.56
	200	34	5	1	67	0	0	5	4393	0.66
	200	78	1	1	67	1	0	1	1840	0.32

Table G.10. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Runnels		158	1	1	67	8	0	9	4692	1.12
Rusk	1	138	2	1	259	5	Ö	9	8269	0.63
<b>[</b>	201	138	3	1	259	0	0	3	7660	0.23
ļ	201	138	4	1	259	3	0	6	6019	0.58
	201	138	5	1	259	2	Ö	6	5674	0.61
San Jacii	nto	177	2	1	59	21	1	26	15881	0.95
San Patr	icio	101	3	1	181	0	0	1	8446	0.07
	205	101	4	1	181	7	0	7	12948	0.31
	205	180	6	2	35	7	0	8	11661	0.40
	205	180	10	2	361	0	O	1	7650	0.08
	205	371	4	1	77	2	O	4	6993	0.33
	205	372	1	1	77	2	0	14	11480	0.71
Scurry		53	7	1	84	9	0	7	5464	0.74
	208	53	8	1	84	8	0	5	5790	0.50
	208	53	9	1	84	8	0	10	5179	1.12
	208	53	10	1	84	0	0	4	5402	0.43
	208	53	17	3 .	401	0	0	1	2401	0.24
Shelby		175	2	1	59	0	0	1	6448	0.09
Sherman		66	3	1	287	7	0	18	3561	2.94
Smith		95	8	1	80	0	0	1	3998	0.15
	212	164	4	2	31	0	0	1	13236	0.04
	212	165	1	1	271	3	1	7	12778	0.32
	212	190	5	1	69	0	Ö	2	16030	0.07
	212	191	1	1	69	5	0	9	15434	0.34
	212	1790	2	3	323	0	0	1	16255	0.04
	212	2075	1	3	323	0	0	2	14757	0.08
Swisher		67	2	1	87	4	0	14	5856	1.39
	219	67	3	1	87	4	1	5	5986	0.49
Tarrant		13	10	3	496	1	0	1	11610	0.05
	220	14	15	1	81	5	0	9	13587	0.39
	220	80	7	1	377	5	1	6	16214	0.22

Table G.10. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Tarrant		172	9	1	287	2	0	1	16041	0.04
	220	353	3	2	114	6	0	12	31051	0.22
Taylor		34	1	1	83	5	0	7	14636	0.28
Terry		227	7	1	62	4	0	9	7415	0.71
,	223	228	1	1	62	14	Ö	17	5076	1.95
	223	380	3	1	62	1	0	3	5793	0.30
Titus		248	1	1	271	2	0	2	13031	0.09
Tom Greer	1	69	6	1	87	0	0	1	4173	0.14
	226	69	7	1	87	5	0	14	10053	0.81
	226	70	2	1	87	3	0	6	8564	0.41
	226	77	8	3	306	1	Q	4	8184	0.28
	226	158	2	1	67	5	0	7	5015	0.81
	226	159	1	1	277	1	0	1	<b>355</b> 0	0.16
	226	264	6	1	277	0	0	1	2268	0.26
	226	264	7	3	306	1	Ö	2	4455	0.26
Travis		114	2	1	290	0	0	1	16026	0.04
	227	265	1	2 ,	71	0	1	5	26232	0.11
	227	265	2	2	71	4	0	8	15025	0.31
Upshur		392	2	1	259	1	1	3	6373	0.27
Uvalde		23	5	1	90	1	0	1	2803	0.21
Val Verde	1	22	10	1	90	0	0	2	12997	0.09
	233	23	1	1	90	0	0	1	9865	0.06
Van Zandt		95	6	1	80	1	Ö	2	6664	0.17
	234	95	7	1	80	0	0	1	4762	0.12
Victoria		88	4	1	59	3	0	3	12781	0.14
	235	88	5	3	175	6	0	8	8607	0.54
	235	89	1	1	59	20	0	14	14234	0.57
	235	371	1	1	77	5	0	2	7183	0.16
	235	432	2	5	404	4	0	9	10859	0.48
Waller		50	4	2	6	4	0	6	6640	0.53
	237	114	11	1	290	3	1	8	7586	0.61

Table G.10. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Ward		4	1	1	80	0	1	2	628	1.85
	238	292	4	2	18	1	Ö	2	5471	0.21
Washingto	n	114	9	1	290	0	0	2	7281	0.16
	239	114	10	1	290	5	2	7	7982	0.51
•	239	186	6	1	290	5	1	10	10442	0.56
Wharton		8 9	6	1	59	8	0	11	11781	0.54
<u></u>	241	89	7	1	59	7	0	26	13091	1.15
	241	89	8	1	59	3	1	6	14141	0.25
	241	89	10	2	60	2	0	1	10423	0.06
Wheeler		275	19	3	556	0	Ò	1	1592	0.37
Wichita	-	43	8	1	287	9	Ö	10	8738	0.67
	243	43	9	1	287	0	0	3	12212	0.14
	243	43	17	3	370	3	0	1	7249	0.08
Wilbarger		43	5	1	287	11	0	11	7628	0.84
	244	43	6	1	70	7	1	14	9082	0.90
	244	43	7	1	287	1	0	3	8749	0.20
Willacy		327	10	1 .	77	4	1	7	6735	0.60
Wilson		100	3	1	181	8	1	12	6995	1.00
	247	100	4	1	181	0	0	1	5168	0.11
	247	143	4	1	87	2	0	3	3024	0.58
Winkler		292	2	2	18	6	Ö	2	4331	0.27
Wise		13	6	1	81	9	o l	10	11592	0.50
	249	13	7	1	81	6	Ó	15	7365	1.18
	249	13	8	1	81	47	2	2	14278	0.08
Wood		96	1	1	80	5	0	7	3504	1.16
	250	96	2	1	80	0	Ö	2	3292	ზ.35

Table G.11. Single-Vehicle Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1988)

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Atascosa		17	4	8	35	1	1	3	10166	0.11
	7	73	5	. 8	37	30	3	19	8696	0.82
	7	73	6	8	37	11	Ō	7	8757	0.30
	7	73	10	8	37	12	3	22	8524	0.97
Austin		271	2	8	10	21	0	21	19710	0.40
	8	271	3	8	10	13	0	23	23216	0.37
Bell		15	4	8	35	36	0	36	26071	0.52
	14	15	6	8	35	9	0	15	22726	0.25
	14	15	7	8	35	20	1	25	20803	0.45
Bexar		17	3	8	35	17	1	16	13878	0.43
·	15	25	2	8	10	2	0	5	42004	0.04
	15	72	7	8	10	4	0	8	19776	0.15
	15	73	9	8	37	12	0	11	9963	0.42
Bowie		610	5	8	30	16	0	17	12127	0.53
	19	610	6	8	30	10	3	17	17474	0.37
	19	610	7	8	30	5	0	12	26874	0.17
Caldwell		535	3	8	10	4	1	7	11677	0.23
Callahan		6	7	8	20	13	0	17	13854	0.46
	30	7	1	8	20	11	Ö	13	11812	0.41
	30	7	2	8	20	22	0	29	11807	0.92
Carson		275	2	8	40	12	2	12	8567	0.53
	33	275	3	8	40	12	0	18	8309	0.81
	33	275	4	8	40	5	0	10	8283	0.45
Chambers		508	2	8	10	26	1	32	26081	0.46
	36	508	3	8	10	7	4	14	22937	0.23
	36	739	1	8	10	5	0	3	22429	0.05
Colorado		271	1	8	10	20	0	25	19890	0.47
	45	535	8	8	10	29	0	39	14785	0.99
Comal		16	4	8	35	8	0	13	28979	0.17
	46	16	5	8	35	5	0	8	34065	0.09
Cooke		194	2	8	35	10	0	13	13234	0.37

Table G.11. Continued

County	I	Control	Control	Highway	Highway		Number		Mean	Normalized
	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cooke		195	1	8	35	22	0	34	16732	0.76
Crane		4	5	8	20	3	0	3	8320	0.14
Crockett		140	10	8	10	6	1	10	3233	1.16
	53	140	11	8	10	7	1	7	3239	0.81
	53	140	13	8	10	8	1	14	2923	1.80
	53	141	1	8	10	14	1	18	4187	1.62
Culberson		2	11	8	10	5	2	8	6778	0.44
	55	3	1	8	10	9	Ò	6	7150	0.32
	55	3	2	8	10	15	0	11	7151	0.58
ļ	55	3	3	8	10	7	0	10	7043	0.53
Deaf Smith		90	1	8	40	3	0	2	7777	0.10
Denton		81	13	8	354	3	1	13	12217	0.40
	61	195	2	8	35	24	2	41	65065	0.24
	61	196	1	8	353	32	2	51	50017	0.38
	61	196	2	8	353	0	0	5	21496	0.09
Donley		275	6	8	40	4	0	2	8163	0.09
	65	275	8	8	40	0	0	2	8337	0.09
	65	275	10	8	40	3	0	1	8317	0.05
Eastland		7	3	8	20	45	2	42	11697	1.35
	68	7	4	8	20	7	0	12	13081	0.34
	68	7	6	8	20	21	2	26	11340	0.86
	68	314	5	8	20	6	0	5	11537	0.16
Ector		4	6	8	20	3	0	7	8887	0.30
	69	4	7	8	20	8	Ó	22	10655	0.78
Ellis		48	4	8	353	7	0	11	19237	0.21
	71	48	8	8	353	30	2	38	14659	0.97
	71	92	3	8	45	11	Ó	18	23268	0.29
]	71	92	4	8	45	10	1	22	21824	0.38
	71	92	5	8	45	6	Ö	8	21768	0.14
	71	442	3	8	353	14	1	11	29751	0.14
El Paso		2121	1	8	10	26	3	23	21608	0.40

Table G.11. Continued

County	y l	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
El Paso		2121	4	8	10	26	0	28	12562	0.84
	72	2121	5	8	10	13	0	16	8210	0.73
Erath		314	4	8	20	4	0	7	11539	0.23
Falls		15	3	8	35	1	0	1	24624	0.02
Fayette		535	6	8	10	5	2	9	12451	0.27
-	76	535	7	8	10	6	1	15	12850	0.44
Fort Bend		271	5	8	10	0	0	3	54444	0.02
Franklin		610	2	8	30	19	Ö	24	12910	0.70
Freestone		675	1	8	45	13	0	16	15095	0.40
	82	675	2	8	45	33	2	35	14487	0.91
Frio		17	6	8	35	19	0	26	7202	1.36
	83	17	7	8	35	8	0	10	5582	0.67
Gillespie		142	13	8	10	6	0	5	4920	0.38
Gonzales		535	4	8	10	7	0	9	12199	0.28
	90	535	5	8	10	15	0	12	12423	0.36
Gray		275	5	8	40	8	1	5	8238	0.23
-	91	275	7	8	40	2	0	7	8178	0.32
	91	275	11	8	40	11	Ö	24	8337	1.08
Gregg		495	7	8	20	24	1	50	19002	0.99
Guadalupe		16	6	8	35	1	0	1	39602	0.01
,	95	25	3	8	10	3	Ö	6	16511	0.14
	95	535	1	8	10	2	1	8	14283	0.21
	95	535	2	8	10	15	3	14	12045	0.44
Hale		67	4	8	27	0	Ö	2	7216	0.10
	96	67	5	8	27	17	1	24	6968	1.29
	96	67	6	8	27	11	2	20	6769	1.11
Harris		508	1	8	10	16	Ö	16	81244	0.07
Harrison		495	8	8	20	26	2	42	16762	0.94
	103	495	9	8	20	6	Ö	9	15198	0.22
	103	495	10	8	20	14	1	23	15456	0.56
Hays		16	2	8	35	21	0	38	36443	0.39

Table G.11. Continued

County	v	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hays	_	16	3	8	35	7	0	7	32085	0.08
HIII		14	7	8	35	12	0	24	24403	0.37
	110	14	23	8	354	7	4	14	10399	0.51
	110	14	24	8	35	4	0	9	23784	0.14
	110	48	9	8	353	2	0	5	14206	0.13
Hopkins		9	9	8	30	15	0	11	15129	0.27
	113	10	2	8	30	10	0	12	15306	0.29
	113	610	1	8	30	10	0	5	13202	0.14
Howard		5	5	8	20	13	2	22	10101	0.82
	115	5	6	8	20	23	2	25	10339	0.91
Hudspeth		2	5	8	10	1	0	2	7960	0.09
•	116	2	6	8	10	29	5	24	7893	1.14
	116	2	7	8	10	7	1	12	7733	0.58
	116	2	8	8	10	17	0	14	6987	0.75
	116	2	9	8	10	10	1	9	6987	0.48
	116	2	10	8	10	6	0	9	7053	0.48
	116	2121	6	8	10	32	1	24	7926	1.14
Hunt		9	13	8	30	20	1	39	20957	0.70
Jeff Davis	.	3	4	8	10	6	1	12	6978	0.65
Jefferson	1	739	2	8	10	12	,1	15	27248	0.21
Johnson		14	3	8	354	10	0	25	17044	0.55
	127	14	4	8	354	12	2	15	11745	0.48
	127	14	22	8	354	10	0	10	10571	0.36
Kaufman		495	1	8	20	34	0	37	21944	0.63
Kendall		72	5	8	10	23	1	35	10001	1.32
	131	72	6	8	10	13	o	22	11745	0.70
	131	142	15	8	10	0	0	4	7011	0.21
Kerr		142	2	8	10	3	0	5	4603	0.41
	133	142	12	8	10	6	2	6	4549	0.50
	133	142	14	8	10	27	2	37	6381	2.18
Kimble		141	8	8	10	5	.1	6	3850	0.59

Table G.11. Continued

Count	$y^{-}$	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kimble		141	9	8	10	3	0	5	4063	0.46
	134	142	1 1	8	10	27	2	31	5081	2.29
LaSalle		17	8	8	35	9	0	10	4654	0.81
	142	18	1	8	35	4	l 0	6	4319	0.52
	142	18	2	8	35	15	0	11	3920	1.05
Leon		675	3	8	45	33	-1	32	15472	0.78
	145	675	4	8	45	13	0	16	16189	0.37
Live Oak		73	7	8	37	18	2	15	8948	0.63
	149	74	1	8	37	12	0	6	6171	0.37
	149	74	2	8	37	24	3	22	6805	1.22
Lubbock		67	7	8	27	4	0	13	8939	0.55
Madison		675	5	8	45	38	1	33	15900	0.78
Martin		5	4	8	20	17	1	23	10010	0.86
McLennan		14	8	8	35	24	3	40	25997	0.58
	161	14	9	8	35	3	l 0	1	32469	0.01
	161	15	1	8	35	3	l 0	10	38124	0.10
	161	15	2	8	35	9	1 1	9	24469	0.14
Medina		17	5	8	35	17	0	10	8825	0.43
Midland		5	14	8	20	4	0	17	15228	0.42
	165	5	15	8	20	10	0	20	10907	0.69
Mitchell		5	7	8	20	7	0	8	8577	0.35
	168	5	8	8	20	29	l o	30	8705	1.30
	168	6	1	8	20	17	O	23	8824	0.98
Montgome	ry	110	4	8	45	77	5	142	62664	0.85
	170	675	8	8	45	26	4	46	36089	0.48
Morris		610	4	8	30	14	1	9	11841	0.29
Navarro		92	6	8	45	22	Ö	38	18989	0.75
	175	93	1	8	45	14	1	24	16146	0.56
	175	166	1	8	45	12	0	7	17822	0.15
Nolan		6	2	8	20	14	2	24	11506	0.78
	177	6	3	8	20	18	0	38	13586	1.05

Table G.11. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Oldham	<u> </u>	90	2	8	40	16	0	17	7818	0.82
-	180	90	3	8	40	22	0	32	7865	1.53
	180	90	4	8	40	8	2	18	8763	0.77
Orange		28	9	8	10	14	0	32	48350	0.25
	181	28	11	8	10	6	1	14	27152	0.19
Palo Pint	0	314	2	8	20	5	0	12	12478	0.36
	182	314	3	8	20	10	0	12	12057	0.37
Parker		8	3	8	20	13	Ö	19	30989	0.23
	184	314	1	8	20	18	1	22	14201	0.58
	184	314	7	8	20	9	0	9	18336	0.18
·	184	1068	5	8	30	4	0	3	27958	0.04
Pecos		140	1	8	10	4	0	4	3366	0.45
	186	140	2	8	10	18	1	18	3003	2.25
	186	140	3	8	10	9	.1	14	2949	1.78
	186	140	4	8	10	0	0	6	2922	0.77
	186	140	5	8	10	1	0	6	2927	0.77
	186	140	6	8	10	6	3	8	2918	1.03
	186	441	7	8	10	10	0	11	2804	1.47
	186	441	8	8	10	1	Ö	4	3700	0.41
Potter		90	5	8	40	9	0	18	5295	1.28
	188	275	1	8	40	3	O	7	36428	0.07
Randall		67	17	8	27	12	0	15	4103	1.37
	191	168	9	8	27	22	2	24	23524	0.38
Reeves		3	5	8	20	3	0	3	4663	0.24
	195	3	6	8	20	12	3	20	4732	1.59
	195	3	7	8	20	11	O	11	5354	0.77
	195	441	5	8	10	8	O	5	2519	0.75
	195	441	6	8	10	7	1	5	2568	0.73
	195	441	9	8	10	16	3	22	2762	2.99
Rockwal		9	12	8	30	17	0	32	31620	0.38
San Patr	icio	74	3	8	37	6	0	5	8097	0.23

Table G.11. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
San Patrio	cio	74	4	8	37	1	0	4	10669	0.14
	205	74	5	8	37	7	2	14	12424	0.42
Smith		495	4	8	20	25	3	38	18864	0.76
	212	495	5	8	20	18	0	37	15977	0.87
	212	495	6	8	20	13	0	16	17669	0.34
Sutton		141	2	8	10	8	0	9	4065	0.83
	218	141	3	8	10	8	1	12	3693	1.22
	218	141	4	8	10	4	1	11	3594	1.15
	218	141	5	8	10	1	0	2	3686	0.20
	218	141	6	8	10	7	0	8	3671	0.82
·	218	141	7	8	10	3	1	5	3667	0.51
Swisher		67	2	8	27	15	0	13	6049	0.81
	219	67	3	8	27	5	2	6	5986	0.38
Tarrant		8	16	8	20	9	0	10	29439	0.13
İ	220	8 1	12	8	354	0	0	4	14681	0.10
Taylor		6	4	8	20	25	0	23	13743	0.63
	221	6	5	8	20	1	0	2	15252	0.05
Titus		610	3	8	30	19	0	24	12451	0.72
Travis		15	10	8	35	5	0	10	53185	0.07
	227	16	1	8	35	3	.0	4	43858	0.03
Van Zandt		495	2	8	20	20	0	26	20883	0.47
	234	495	3	8	20	18	2	38	18662	0.77
Walker		675	6	8	45	19	2	21	17377	0.45
	236	675	7	8	45	21	1	23	22363	0.39
Waller		271	4	8	10	24	0	44	26263	0.63
Ward		4	2	8	20	27	2	26	5409	1.81
	238	4	4	8	20	4	Ö	22	6646	1.24
Webb		18	3	8	35	4	0	6	4259	0.53
	240	18	4	8	35	8	O	5	4330	0.43
	240	18	5	8	35	5	0	8	5184	0.58
	240	18	6	8	35	3	0	4	16379	0.09

Table G.11. Continued

County		Control	Control	Highway	Highway	Number			Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Wheeler		275	12	8	40	13	1	28	8491	1.24
	242	275	13	8	40	7	2	12	7816	0.58
Wichita		156	7	8	44	4	0	3	11596	0.10
Williamson		15	8	8	35	29	0	23	25876	0.33

Table G.12. Single-Vehicle Non-Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1988)

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Anderson		520	8	2	155	1	0	4	4532	0.51
Andrews		228	4	1	385	1	0	3	3846	0.45
	2	228	5	1	385	5	0	6	7850	0.44
Angelina		176	2	1	59	3	2	14	17181	0.47
	3	176	3	1	59	2	0	7	19583	0.21
	3	199	4	1	69	2	0	2	8207	0.14
Armstrong		42	3	1	287	3	0	4	6112	0.38
	6	42	4	1	287	2	O	3	6154	0.28
	6	42	5	1	287	6	0	5	5600	0.52
Atascosa		73	3	1	281	0	0	3	4491	0.39
	7	73	4	1	281	5	0	2	2480	0.47
	7	328	3	2	97	1	0	2	3039	0.38
	7	613	2	2	16	6	1	7	4354	0.93
Bailey		52	2	1	70	3	0	8	5761	0.81
	9	52	3	1	84	1	0	2	3587	0.32
Bastrop		114	6	1	290	3	0	3	6086	0.29
	11	265	3	2	71	3	2	5	12848	0.23
	11	265	4	2	21	4	0	11	16944	0.38
	11	265	5	2	21	1	0	5	15980	0.18
	11	265	6	2	71	9	0	8	8811	0.53
	11	472	1	2	21	5	Ö	7	3784	1.08
Bee		100	8	1	181	2	1	4	5629	0.41
	13	101	1	1	181	1	0	3	6461	0.27
Bell		231	4	1	190	10	O	12	15239	0.46
Bexar		73	2	1	281	5	0	4	5728	0.41
	15	100	2	1	181	1	Ö	4	9258	0.25
	15	143	1	1	87	9	Ö	6	11958	0.29
	15	143	2	1	87	1	0	5	6449	0.45
	15	253	4	1	281	1	0	3	28972	0.06
	15	291	9	2	16	9	0	11	3690	1.73
	15	291	10	2	16	0	0	1	24339	0.02

Table G.12. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Bexar		613	1	2	16	5	0	6	8094	0.43
	15	2452	2	3	1604	4	0	7	16129	0.25
	15	2452	3	3	1604	1	1	2	11955	0.10
Blanco		113	5	1	281	1	0	2	5280	0.22
Bowie	ŀ	217	1	1	59	5	0	7	9421	0.43
Brazoria		111	7	2	227	4	0	8	16508	0.28
	20	111	8	2	227	1	0	4	19223	0.12
	20	111	8	2	288	3	Ö	6	19344	0.18
	20	188	6	2	36	1	0	1	8686	0.07
	20	598	2	2	288	8	0	25	13536	1.07
	20	598	3	2	288	3	0	6	7866	0.44
Brazos		116	4	2	21	7	0	9	8856	0.59
Brewster		21	3	1	90	1	0	2	580	2.00
Brown		54	6	1	67	2	0	8	7437	0.63
	25	79	1	1	67	1	1	5	5334	0.54
	25	128	1	111	377	0	00	11	9979	0.06
Burleson		186	4	2	36	0	0	1	5960	0.10
Burnet		252	2	1	281	0	0	2	6258	0.19
Calhoun	l	29	3	1	90	0	0	1	8199	0.07
Cameron		39	7	1	77	2	0	3	20543	0.08
	31	39	8	1	77	9	2	14	11240	0.72
	31	39	1,9	1	83	11	O	12	26234	0.27
	31	220	5	2	48	0	0	1	18420	0.03
	31	327	8	1	77	0	Ö	3	11240	0.16
	31	331	4	4	100	10	0	7	14229	0.29
Carson		169	3	1	60	2	0	6	5415	0.64
	33	169	4	1	60	6	0	9	4418	1.18
	33	169	5	_1	60	5	0	7	4855	0.84
Cass		218	3	1	59	1	Ö	3	12356	0.14
	34	218	4	1	59	3	0	2	9687	0.12
Chambers		368	1	2	124	3	0	3	9618	0.18

Table G.12. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Chambers		508	3	2	73	2	0	1	4980	0.12
Cherokee	ļ	199	1	1	69	11	2	14	10236	0.80
	37	199	2	1	69	2	0	5	6714	0.43
Childress		31	5	1	83	1	0	3	1456	1.20
	38	42	12	1	287	6	0	8	6896	0.67
	38	43	1	1	287	11	0	9	7802	0.67
Clay		44	2	1	82	17	0	19	13330	0.83
	39	224	1	1	287	14	Ö	20	9652	1.20
	39	224	2	1	287	1	0	4	9690	0.24
Coke		69	5	1	87	1	0	1	3610	0.16
Coleman	1	78	5	1	67	0	0	1	1260	0.46
Collin		47	14	1	75	18	3	32	21329	0.87
	43	135	5	1	380	1	0	1	5340	0.11
	43	364	4	2	121	1	0	2	7580	0.15
	43	549	3	3	399	0	1	2	5866	0.20
Collingsw	orth	31	3	1	83	1	0	1	1335	0.44
	44	31	4	1	83	0	0	1	2485	0.23
Colorado		266	2	2	71	10	0	15	5349	1.63
	46	253	3	1	281	10	o	14	5706	1.43
Comanche		79	2	1	67	2	0	5	6517	0.45
Cooke		44	7	1	82	4	Ö	4	4741	0.49
	49	44	8	1	82	o	0	2	8784	0.13
	49	45	1	1	82	3	Ö	8	12682	0.37
Coryell		231	2	1	190	2	0	2	22466	0.05
Crane		229	2	1	385	3	0	5	4194	0.69
Crosby		131	3	1	62	5	0	6	4402	0.79
•	54	131	4	1	82	2	0	2	3854	0.30
	54	131	5	1	82	4	0	2	1930	0.60
Culberson		233	2	1	62	1	0	1	1435	0.41
Dawson		68	4	1	87	7	0	12	5620	1.24
	58	68	5	1	87	3	O	9	3388	1.54

Table G.12. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Deaf Smith	1	168	7	1	60	2	0	9	6174	0.85
Deita		136	3	2	24	1	0	2	2627	0.44
Dickens		132	1	1	82	6	0	3	1416	1.23
	63	132	2	1	82	2	0	1	1261	0.46
Donley ·		42	6	1	287	9	0	18	7833	1.34
,	65	42	7	1	287	4	0	5	6603	0.44
	65	42	8	1	287	4	0	5	6025	0.48
Kenedy		327	2	1	77	5	O	7	5410	0.75
,	66	327	3	1	77	9	0	8	5110	0.91
	66	327	4	1	77	14	1	11	5110	1.25
	66	327	5	1	77	1	0	4	5251	0.44
Eastland		7	4	1	80	1	0	5	4452	0.65
Ector		5	1	1	80	2	0	5	14190	0.20
	69	228	6	1	385	2	0	5	12396	0.23
	69	229	1	1	385	2	0	6	5746	0.61
	69	463	7	2	302	1	0	1	2275	0.26
	69	572	1	2	302	0	0	4	8235	0.28
Ellis		48	5	1	77	1	0	2	1205	0.96
	71	172	5	1	287	4	0	4	7754	0.30
	71	172	7	1	287	0	0	1	6924	0.08
	71	172	8	1	287	1	O	7	7517	0.54
	71	261	1 1	1	67	8	0	12	11161	0.63
El Paso		374	2	1	62	1	0	2	19317	0.06
	72	2552	1	3	375	1	1	2	5482	0.21
Fayette		265	7	2	71	3	0	5	6140	0.47
	76	266	1	2	71	6	0	8	6947	0.67
Floyd		145	6	1	70	0	0	3	2256	0.77
Fort Bend		27	8	6	90	5	0	9	19399	0.27
	80	27	12	1	59	5	0	18	39295	0.27
	80	89	9	1	59	8	1	10	16516	0.35
Gaines		228	2	1	62	6	1	9	4427	1.18

Table G.12. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Gaines		228	3	1	385	4	0	6	5891	0.59
	84	294	1	1	62	14	2	10	4479	1.30
Garza		53	4	1	84	4	0	12	6549	1.07
	86	53	5	1	84	1	1	8	5925	0.79
	86	53	6	1	84	2	0	8	5346	0.87
Gray		169	6	1	60	4	0	7	5949	0.68
Grayson		45	18	1	82	7	0	18	6814	1.54
	92	45	19	1	82	3	1	4	6745	0.34
	92	47	1	1	69	3	0	5	14407	0.20
	92	47	13	1	75	5	0	11	15149	0.42
	92	47	18	1	75	7	0	16	15540	0.60
	92	47	19	3	503	4	0	4	15967	0.15
Gregg		138	1	1	259	0	0	1	16067	0.04
	93	138	1	2	31	3	0	10	15166	0.38
	93	377	1	2	135	0	0	2	7168	0.16
Grimes		50	3	2	6	4	0	15	7209	1.21
Guadalupe		366	3	2	123	3	0	3	3870	0.45
Hale	l	67	9	3	445	0	0	1	1625	0.36
	96	145	5	1	70	4	Ö	2	5313	0.22
Hall		42	9	1	287	3	0	14	6023	1.35
Hardeman	l	43	2	1	287	3	O	4	7009	0.33
	100	43	4	1	287	5	3	6	7626	0.46
Hardin		65	5	1	96	2	0	3	16278	0.11
	101	200	9	1	69	2	Ö	5	9018	0.32
Harris		50	6	1	290	8	0	15	18154	0.48
Harrison		62	7	1	59	1	0	6	12051	0.29
	103	63	1	1	59	3	Ö	6	11602	0.30
	103	63	9	1	59	3	0	5	5200	0.56
	103	96	7	1	80	2	Ö	4	8603	0.27
	103	96	8	1	80	0	0	2	4686	0.25
	103	2642	2	3	281	2	0	3	5273	0.33

Table G.12. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Haskell		157	3	1	277	0	1	1	1901	0.31
	105	157	4	1	277	1	0	5	2969	0.98
Hemphill		169	9	1	60	1	0	3	1415	1.23
Henderso	n	163	3	2	31	1	0	3	6668	0.26
	108	163	4	2	31	0	1	2	21120	0.06
	108	164	1	2	31	2	0	5	9668	0.30
	108	164	2	2	31	4	0	5	7357	0.40
	108	164	3	2	31	2	0	4	8414	0.28
	108	198	1	1	175	1	0	2	6383	0.18
Hidalgo		39	2	1	83	3	1	10	9753	0.60
	109	39	17	1	83	2	1	7	28991	0.14
	109	39	18	1	83	20	0	20	27923	0.42
	109	255	6	1	281	4	0	7	5385	0.76
	109	255	7	1	281	7	1	13	8276	0.91
	109	255	9	10	281	0	0	1	11661	0.05
	109	255	11	3	113	1	0	3	9448	0.18
	109	342	1	2	107	7	0	13	9303	0.81
	109	1804	1	3	115	0	<u>0</u>	1	14809	0.04
Hill		14	7	1	77	2	0	2	5065	0.23
Hockley		52	6	1	84	4	0	5	5210	0.56
-	111	130	4	2	114	5	0	8	6514	0.71
	111	380	2	1	62	5	0	7	6031	0.67
Hood		80	3	1	377	1	0	1	8340	0.07
	112	80	4	1	377	2	0	6	14631	0.24
Houston		109	3	1	287	3	0	3	3286	0.53
Howard	į	68	7	1	87	7	0	2	2730	0.43
	115	68	8	1	87	3	2	9	5250	1.00
Hunt		136	1	2	224	2	0	1	4832	0.12
	117	768	1	2	24	7	0	9	6772	0.77
Hutchinso	n	356	1	2	136	3	0	7	6535	0.62
Jack	I	249	7	1	281	5	0	7	6951	0.59

Table G.12. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Jackson		89	3	1	59	20	0	21	13014	0.94
	121	89	4	1	59	14	1	17	10955	0.90
	121	89	5	1	59	20	1	9	11131	0.47
Jasper		64	8	1	96	1	0	1	7143	0.08
	122	65	4	1	96	1	0	1	9684	0.06
Jefferson		28	6	1	90	5	0	8	7609	0.61
	124	508	4	2	73	4	0	2	15394	0.08
Jim Wells		86	11	2	359	7	0	4	9105	0.26
	126	87	1	2	44	5	0	6	12969	0.27
,	126	255	1	1	281	10	2	13	8805	0.86
·	126	255	2	1	281	5	1	8	8805	0.53
	126	373	4	2	44	5	0	4	6347	0.37
Johnson		19	1	2	174	5	0	15	20681	0.42
	127	172	10	1	287	1	o	1	9150	0.06
	127	260	1	1	67	5	0	7	7880	0.52
Jones		33	5	1	83	4	0	12	7869	0.89
	128	157	5	1	277	5	0	7	3143	1.29
Karnes		100	5	1	181	0	Ö	1	4437	0.13
Kaufman		95	3	1	80	42	5	48	36054	0.77
	130	95	4	1	80	5	0	14	17132	0.48
	130	95	5	1	80	8	0	10	11333	0.51
	130	197	3	1	175	5	0	9	15401	0.34
	130	197	4	1	175	7	2	15	12054	0.72
	130	197	5	1	175	3	Ö	5	10547	0.28
	130	197	8	2	243	0	0	2	4674	0.25
	130	495	1	3	557	0	0	1	21427	0.03
Kleberg		102	4	1	77	22	1	25	10655	1.36
Lamar		136	5	2	19	O	0	1	4812	0.12
	139	136	6	2	19	1	0	2	5826	0.20
	139	136	7	1	271	1	0	4	11894	0.20
	139	136	8	1	271	3	0	3	8134	0.21

Table G.12. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Lamb		52	4	1	84	5	0	9	3674	1.42
	140	52	5	1	84	2	0	7	4310	0.94
Lampasas		251	4	1	281	1	0	1	1549	0.38
	141	272	6	1	183	2	0	1	2800	0.21
Liberty		28	3	1	90	1	0	5	10548	0.28
	146	177	3	1	59	12	0	13	15074	0.50
Live Oak		254	1	1	281	5	0	9	7477	0.70
Lubbock	Ì	52	7	1	84	4	0	12	9050	0.77
	152	53	1	1	84	3	1	6	8849	0.39
	152	68	1	1	87	6	0	7	13574	0.30
	152	130	5	2	114	1	0	1	14901	0.04
	152	131	2	1	62	4	0	1	5659	0.10
	152	380	1	1	62	7	0	10	11420	0.51
Lynn		53	3	1	84	1	0	2	5740	0.20
,	153	68	2	1	87	20	1	20	4486	2.59
	153	68	3	1	87	8	0	14	3685	2.21
Martin		5	16	1	80	4	0	2	2137	0.54
Matagorda		179	4	2	35	5	0	3	11302	0.15
	158	179	6	2	35	1	0	7	5668	0.72
McCulloch		70	6	1	87	0	0	1	3900	0.15
McLennan		49	1	2	6	6	0	7	7959	0.51
	161	55	7	1	84	7	0	6	7631	0.46
	161	55	8	1	84	6	1	5	17491	0.17
	161	162	1	1	84	1	0	3	11896	0.15
	161	258	9	2	6	1	0	6	14692	0.24
Medina		24	5	1	90	5	0	7	7927	0.51
	163	24	6	1	90	7	1	8	8633	0.54
Midland		5	2	1	80	5	0	5	17090	0.17
	165	5	3	1	80	3	1	3	7383	0.24
	165	-	2	2	191	6	0	16	8888	1.05
Mitchell		53	11	1	84	1	0	1	5595	0.10

Table G.12. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Montague		13	5	1	81	10	0	9	8279	0.63
	169	44	6	1	82	1	0	7	3292	1.24
	169	224	3	1	287	4	0	8	9552	0.49
Montgomer	y	177	5	1	59	30	0	30	32073	0.54
Moore		66	4	1	287	12	0	15	7188	1.21
	171	66	5	1	87	22	0	23	8940	1.50
Morris		222	3	2	11	1	0	3	4531	0.38
	172	392	1	1	259	1	0	1	7733	0.08
Nacogdoche	es	175	7	3	495	0	0	1	7620	0.08
	174	175	8	3	495	1	0	1	15237	0.04
·	174	176	1	1	59	4	l 0	10	17424	0.33
	174	2560	1	1	59	1	0	6	13365	0.26
Navarro		92	13	3	564	2	0	2	7747	0.15
	175	163	1	2	31	1	0	3	8923	0.20
	175	163	2	2	31	4	0	6	6410	0.54
Nolan		6	15	3	432	1	0	1	6817	0.09
	177	53	12	1	84	5	0	11	5537	1.16
Nueces		102	1	2	44	0	0	3	15854	0.11
	178	102	2	2	44	0	0	1	13768	0.04
	178	102	2	1	77	11	0	9	11136	0.47
	178	102	3	1	77	6	0	10	11618	0.50
	178	102	11	3	428	3	0	1	5329	0.11
	178	373	1	1	77	0	0	1	14863	0.04
	178	373	2	2	44	12	2	11	9552	0.67
	178	373	3	2	44	1	0	3	6706	0.26
Palo Pinto		7	10	1	180	0	0	1	4582	0.13
Panola		63	3	1	59	1	Ö	2	6541	0.18
	183	63	4	1	59	0	0	1	7288	0.08
Parker		8	2	1	180	9	2	17	7847	1.26
	184	8	3	1	80	2	0	3	13984	0.12
	184	80	6	1 1	377	0	1 0	4	12285	0.19

Table G.12. Continued

Cou	nty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Parker		171	3	2	199	4	0	6	12415	0.28
Parmer	Ì	52	1	1	70	1	0	4	4298	0.54
Polk		176	4	1 1	59	11	1	16	14833	0.63
	187	176	5	1	59	28	2	40	13418	1.73
	187	176	6	3	90	1	0	2	5752	0.20
	187	177	1 1	1 1	59	10	1	23	15742	0.85
	187	213	3	l 1	190	7	1	9	8884	0.59
Potter		41	7	1	87	0	0	3	12282	0.14
	188	169	2	1 1	60	0	0	1	9214	0.06
	188	2635	1 1	3	335	2	0	4	5665	0.41
Rains		203	3	1	69	1	0	2	3190	0.36
Randali		67	1	1 1	87	4	0	6	8879	0.39
	191	168	8	1 1	60	12	0	8	6215	0.75
	191	168	9	1	60	4	0	5	18180	0.16
	191	2635	3	3	335	3	0	3	2360	0.74
Refugio		371	2	1	77	0	0	1	7657	0.08
	196	371	3	l i	77	14	0	11	9177	0.70
Runnels		34	5	1	67	0	0	1	2093	0.28
	200	78	1	l i	67	1 1	0	1	1840	0.32
	200	158	1	1 1	67	7	1	8	4692	0.99
Rusk		138	2	l 1	259	4	O	8	8269	0.56
	201	138	3	1 1	259	2	0	8	7660	0.61
	201	138	4	1 1	259	3	0	3	6019	0.29
	201	138	5	1 1	259	1 1	O	4	5674	0.41
San Jac		177	2	1	59	24	0	30	15881	1.10
San Pat	-	87	4	2	359	l o	Ö	1	3865	0.15
	205	101	3	l - 1	181	٥	Ö	1 1	8446	0.07
	205	101	4	l i	181	4	Ö	8	12948	0.36
	205	180	6	2	35	4	Ö	4	11661	0.20
	205	180	10	2	361	3	ő	6	7650	0.46
	205		4	1 1	77	2	Ö	9	6993	0.75

Table G.12. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
San Patri	cio	372	1	1	77	15	2	19	11480	0.96
Scurry		53	7	1	84	7	1	9	5464	0.96
-	208	53	8	1	84	3	0	4	5790	0.40
	208	53	9	1	84	5	0	8	5179	0.90
,	208	53	10	1	84	5	0	6	5402	0.65
Shacklefo	ord	11	5	1	180	1	0	1	4830	0.12
Shelby		175	4	1	59	0	0	1	6049	0.10
Sherman	ĺ	66	3	1	287	9	Ö	9	3561	1.47
Smith		164	4	2	31	1	0	4	13236	0.18
	212	165	1	1	271	1	0	3	12778	0.14
	212	165	2	1	271	3	0	7	3988	1.02
	212	190	5	1	69	1	0	2	16030	0.07
	212	191	1	1	69	3	0	10	15434	0.38
	212	1790	2	3	323	0	0	1	16255	0.04
	212	2075	1	3	323	2	0	3	14757	0.12
Sterling		69	3	1	87	0	0	1	4469	0.13
_	216	69	4	1	87	1	0	2	5422	0.21
Swisher		67	10	1	87	1	0	1	3983	0.15
	219	67	18	1 1	87	1	0	2	4836	0.24
Tarrant		13	10	3	496	0	0	1	11610	0.05
	220	14	15	1	81	5	Ö	8	13587	0.34
	220	80	7	1	377	4	0	8	16214	0.29
	220	353	3	2	114	3	0	10	31051	0.19
Taylor		34	1	1	83	1	O	3	14636	0.12
Terry		227	7	1	62	7	0	8	7415	0.63
	223	228	1	1	62	2	O	9	5076	1.03
	223	380	3	1	62	2	Ò	2	5793	0.20
Titus		248	1	1	271	0	0	1	13031	0.04
Tom Gree	n	69	6	1	87	3	0	9	4173	1.25
	226	69	7	1	87	13	0	19	10053	1.10
	226	70	2	1	87	3	0	9	8564	0.61

Table G.12. Continued

County	/	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Tom Green		77	8	3	306	1	0	3	8184	0.21
	226	158	2	1	67	. 5	0	7	5015	0.81
Travis		113	13	3	360	0	0	3	35111	0.05
	227	114	2	1	290	1	0	4	16026	0.15
,	227	265	1	2	71	2	0	3	26232	0.07
	227	265	2	2	71	0	0	2	15025	0.08
Upshur		392	2	1	259	1	0	2	6373	0.18
Uvalde		23	5	1	90	1	O	1	2803	0.21
Val Verde		23	1	1	90	2	0	2	9865	0.12
Van Zandt		95	6	1	80	4	0	5	6664	0.44
	234	95	7	1	80	1	0	4	4762	0.49
Victoria		88	4	1	59	0	0	1	12781	0.05
	235	88	5	3	175	11	0	7	8607	0.47
	235	89	1	1	59	11	0	14	14234	0.57
	235	144	2	1	87	0	0	1	4955	0.12
	235	371	1	1	77	8	1	8	7183	0.65
	235	432	2	5	404	7	0	8	10859	0.43
Waller		50	4	2	6	8	1	9	6640	0.79
	237	114	11	1	290	4	Ö	9	7586	0.69
Ward		292	4	2	18	0	0	1	5471	0.11
Washingto	n	114	9	1	290	1	Ö	2	7281	0.16
•	239	114	1.0	1	290	4	1	6	7982	0.44
	239	186	6	2	36	0	o	1	5050	0.12
	239	186	6	1	290	1	Ö	5	10442	0.28
Wharton		89	6	1	59	13	3	18	11781	0.89
	241	89	7	1	59	17	4	28	13091	1.24
	241	89	8	1	59	8	Ó	11	14141	0.45
Wichita		43	8	1	287	9	0	16	8738	1.06
_	243	43	9	1	287	5	ò	5	12212	0.24
	243	43	17	3	370	0	o l	2	7249	0.16
	243	44	1	1	82	0	o	1	21618	0.03

Table G.12. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Wilbarger		43	5	1	287	9	0	9	7628	0.69
	244	43	6	1	70	13	0	6	9082	0.38
	244	43	7	1	287	12	0	11	8749	0.73
Willacy		327	10	1	77	30	0	15	6735	1.29
Wilson		100	3	1	181	7	1	13	6995	1.08
	247	143	4	1	87	0	0	1	3024	0.19
Winkler		292	2	2	18	0	0	1	4331	0.13
Wise		13	6	1	81	9	0	12	11592	0.60
	249	13	7	1	81	6	0	19	7365	1.50
1 .	249	13	8	1	81	25	0	59	14278	2.40
Wood		96	1	1	80	4	0	5	3504	0.83
Young		284	1	2	79	1	0	1	2507	0.23

County	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	<b>Fatalities</b>	Accidents	ADT	Accident Data
Atascosa		17	4	8	35	0	0	1	10166	0.04
	7	73	5	8	37	27	1	24	8757	1.03
	7	73	6	8	37	7	0	15	8696	0.65
	7	73	10	8	37	27	2	33	8524	1.46
Austin		271	2	8	10	23	0	25	19710	0.48
	8	271	3	8	10	13	0	19	23216	0.31
Bell		15	4	8	35	21	0	32	26071	0.46
	14	15	6	8	35	9	0	16	22726	0.26
	14	15	7	8	35	16	0	18	20803	0.33
Bexar		17	2	8	35	0	1	1	15877	0.02
	15	25	2	8	10	0	1	2	42004	0.02
	15	17	3	8	35	6	2	11	13878	0.30
	15	72	7	8	10	18	0	15	19776	0.29
	15	73	9	8	37	4	0	4	9963	0.15
Bowie		610	5	8	30	12	0	13	12127	0.40
	19	610	6	8	30	18	1	24	17474	0.52
	19	610	7	8	30	3	0	7	26874	0.10
Caldwell		535	3	8	10	4	0	8	11677	0.26
Callahan		7	1	8	20	8	2	20	11812	0.64
	30	7	2	8	20	8	0	14	11807	0.45
	30	6	7	8	20	16	1	31	13854	0.84
Carson		275	2	8	40	4	Ö	11	8567	0.48
	33	275	3	8	40	14	0	8	8309	0.36
	33	275	4	8	40	2	0	7	8283	0.32
Chambers		739	1	8	10	5	0	6	22429	0.10
	36	508	2	8	10	33	2	44	26081	0.63
	36	508	3	.8	10	24	O	39	22937	0.64
Colorado		271	1	8	10	19	6	44	19890	0.83
	45	535_	8	8	10	19	11	28	14785	0.71
Comal		16	4	8	35	8	0	13	28979	0.17
	46	16	5	8	35	5	5	11	34065	0.12

Table G.13. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cooke		195	1	8	35	16	1	23	16732	0.52
	49	194	2	8	35	5	0	7	13234	0.20
Crane		4	5	8	20	0	O	1	8320	0.05
Crockett	ŀ	141	1	8	10	16	1	13	4187	1.17
	53	140	10	8	10	8	0	9	3233	1.05
	53	140	11	8	10	9	1	8	3239	0.93
	53	140	13	8	10	16	1	13	2923	1.67
Culberson		3	1	8	10	2	Ö	4	7150	0.21
	55	3	2	8	10	12	0	10	7151	0.53
	55	3	3	8	10	10	0	13	7043	0.69
	55	2	11	8	10	5	0	4	6778	0.22
Deaf Smith	•	90	1	8	40	1	0	4	7777	0.19
Denton		196	1	8	353	27	0	62	50017	0.47
	61	195	2	8	35	14	1	26	21496	0.45
	61	196	2	8	353	5	0	8	65065	0.05
	61	8 1	13	8	354	21	0	10	12217	0.31
Donley		275	6	8	40	0	0	2	8163	0.09
,	65	275	8	8	40	0	0	2	8337	0.09
Eastland		7	3	8	20	16	0	44	11697	1.41
	68	7	4	8	20	3	2	12	13081	0.34
	68	314	5	8	20	2	Ö	6	11537	0.20
	68	7	6	8	20	14	Ö	28	11340	0.93
Ector		4	6	8	20	17	0	12	8887	0.51
	69	4	7	8	20	21	2	20	10655	0.71
Ellis		92	3	8	45	6	0	15	29751	0.19
	71	442	3	8	353	8	Ö	17	23268	0.27
	71	48	4	8	353	13	Ö	15	19237	0.29
	71	92	4	8	45	22	0	25	21824	0.43
	71	92	5	8	45	3	1 1	5	21768	0.09
	71	48	8	8	353	21	0	24	14659	0.62
El Paso		2121	1	8	10	11	0	22	21608	0.38

Table G.13. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type_	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
El Paso		2121	4	8	10	11	4	23	12562	0.69
	72	2121	5	8	10	13	1	13	8210	0.60
Erath		314	4	8	20	5	0	8	11539	0.26
Falls		15	3	8	35	0	0	3	24624	0.05
Fayette		535	6	8	10	5	0	5	12451	0.15
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	76	535	7	8	10	7	2	12	12850	0.35
Fort Bend		271	5	8	10	2	0	7	54444	0.05
Franklin		610	2	8	30	7	0	15	12910	0.44
Freestone		675	1	8	45	15	0	14	15095	0.35
	82	675	2	8	45	32	0	26	14487	0.67
Frio		17	6	8	35	35	3	27	7202	1.41
	83	17	7	8	35	4	1	10	5582	0.67
Gillespie		142	13	8	10	1	1	1	4920	0.08
Gonzales		535	4	8	10	9	1	12	12199	0.37
	90	535	5	8	10	13	1	14	12423	0.42
Gray		275	5	8	40	3	0	3	8238	0.14
•	91	275	7	8	40	1	0	3	8178	0.14
	91	275	9	8	40	1	O	1	8227	0.05
	91	275	11	8	40	8	1	21	8337	0.95
Gregg		495	7	8	20	28	1	52	19002	1.03
Guadalupe		535	1	8	10	2	0	11	14283	0.29
	95	535	2	8	10	22	1	27	12045	0.84
	95	25	3	8	10	1	0	9	16511	0.20
Hale		67	4	8	27	7	1	7	7216	0.36
	96	67	5	8	27	12	1	13	6968	0.70
	96	67	6	8	27	10	0	10	6769	0.56
Harris		508	1	8	10	17	0	22	81244	0.10
Harrison		495	8	8	20	18	5	37	16762	0.83
	103	495	9	8	20	10	0	14	15198	0.35
	103	495	10	8	20	15	0	20	15456	0.49
Havs		16	2	8	35	32	3	38	36443	0.39

Table G.13. Continued

Count	v	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hays		16	3	8	35	9	0	1 1	32085	0.13
Hill		14	7	8	35	12	2	23	24403	0.35
	110	48	9	8	353	6	0	6	14206	0.16
	110	14	23	8	354	25	1	14	10399	0.51
	110	14	24	8	35	13	1	13	23784	0.21
Hopkins		610	1	8	30	2	0	8	13202	0.23
-	113	10	2	8	30	12	1	13	15306	0.32
	113	9	9	8	30	6	Ö	9	15129	0.22
Howard		5	5	8	20	15	0	22	10101	0.82
	115	5	6	8	20	15	2	28	10339	1.02
Hudspeth		2	5	8	10	7	0	12	7960	0.57
	116	2	6	8	10	16	2	21	7926	1.00
	116	2121	6	8	10	19	4	24	7893	1.14
	116	2	7	8	10	6	0	8	7733	0.39
	116	2	8	8	10	2	0	4	6987	0.22
	116	2	9	8	10	21	1	14	6987	0.75
	116	2	10	8	10	14	3	12	7053	0.64
Hunt		9	13	8	30	30	0	40	20957	0.72
Jeff Davis	s	3	4	8	10	4	0	9	6978	0.48
Jefferson		739	2	8	10	37	1	30	27248	0.41
Johnson		14	3	8	354	22	1	39	17044	0.86
	127	14	4	8	354	3	0	9	11745	0.29
	127	14	22	8	354	5	0	9	10571	0.32
Kaufman		495	1	8	20	15	0	20	21944	0.34
	130	95	14	8	20	7	0	8	18479	0.16
Kendali		72	5	8	10	29	1	40	10001	1.50
	131	72	6	8	10	11	1	20	11745	0.64
Kerr		142	2	8	10	5	0	3	4603	0.25
	133	142	12	8	10	3	0	6	4549	0.50
	133	142	14	8	10	24	1	29	6381	1.71
Kimble	1	142	1	8	10	27	1	34	5081	2.52

Table G.13. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kimble		141	8	8	10	11	1	9	3850	0.88
	134	141	9	8	10	12	0	6	4063	0.56
LaSalle		18	1	8	35	2	1	5	4319	0.44
	142	18	2	8	35	9	0	8	3920	0.77
,	142	17	8	8	35	35	1	20	4654	1.62
Leon		675	3	8	45	12	0	24	15472	0.58
	145	675	4	8	45	23	0	22	16189	0.51
Live Oak		74	1	8	37	14	О	17	6171	1.04
	149	74	2	8	37	14	0	15	6805	0.83
	149	73	7	8	37	19	1	19	8948	0.80
Lubbock		67	7	8	27	8	0	10	8939	0.42
Madison	1	675	5	8	45	45	3	41	15900	0.97
Martin		5	4	8	20	18	0	21	10010	0.79
McLennan		15	1	8	35	5	0	16	38124	0.16
	161	15	2	8	35	11	0	16	24469	0.25
	161	14	8	8	35	15	0	26	25997	0.38
	161	14	9	8	35	2	0	5	32469	0.06
Medina		17	5	8	35	6	0	20	8825	0.85
Midiand		5	14	8	20	7	Ö	10	15228	0.25
	165	5	15	8	20	12	0	19	10907	0.65
Mitchell		6	1	8	20	9	0	15	8824	0.64
	168	5	7	8	20	3	0	5	8577	0.22
	168	5	8	8	20	13	,O	15	8705	0.65
Montgome		110	4	8	45	55	3	93	62664	0.56
	170	675	8	8	45	26	0	35	36089	0.36
Morris		610	4	8	30	4	1	6	11841	0.19
Navarro		93	1	8	45	19	1	17	17822	0.36
	175	166	1	8	45	3	0	8	16146	0.19
	175	92	6	8	45	19	0	26	18989	0.51
Nolan		6	2	8	20	14	1	24	11506	0.78
	177	6	3	8	20	12	1	22	13586	0.61

Table G.13. Continued

Count	у	Control	Control	Highway	Highway	i	Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Oldham		90	2	8	40	17	0	22	7818	1.06
:	180	90	3	8	40	26	2	31	7865	1.48
	180	90	4	8	40	16	2	13	8763	0.56
Orange		28	9	8	10	9	1	25	48350	0.19
	181	28	11	8	10	12	0	13	27152	0.18
	181	28	14	8	10	0	0	1	24122	0.02
Palo Pinto	)	314	2	8	20	9	1	15	12478	0.45
	182	314	3	8	20	9	2	12	12057	0.37
Parker		314	1	8	20	11	0	16	14201	0.42
	184	8	3	8	20	19	0	26	30989	0.32
:	184	1068	5	8	30	4	1	4	27958	0.05
	184	314	7	8	20	12	0	13	18336	0.27
Pecos		140	1	8	10	9	1	18	3366	2.01
	186	140	2	8	10	18	0	25	3003	3.13
	186	140	3	8	10	5	0	13	2949	1.66
	186	140	4	8	10	3	1	10	2922	1.29
	186	140	5	8	10	5	1	9	2927	1.16
	186	140	6	8	10	8	5	11	2918	1.42
	186	441	7	8	10	23	2	21	2804	2.82
	186	441	8	8	10	5	0	5	3700	0.51
Potter		275	1	8	40	4	0	5	36428	0.05
	188	90	5	8	40	11	0	10	5295	0.71
Randall		168	9	8	27	9	0	15	23524	0.24
	191	67	17	8	27	6	0	11	4103	1.01
Reeves		3	5	8	20	2	2	4	4663	0.32
	195	441	5	8	10	15	0	18	2519	2.69
	195	3	6	8	20	20	0	19	2568	2.78
	195	441	6	8	10	8	0	5	4732	0.40
	195	3	7	8	20	6	1	10	5354	0.70
	195	441	9	8	10	9	11	18	2762	2.45
Rockwall		9	12	8	30	23	0	23	31620	0.27

Table G.13. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
San Patrio	cio	74	3	8	37	5	0	9	8097	0.42
	205	74	4	8	37	17	1	14	10669	0.49
	205	74	5	8	37	9	o	13	12424	0.39
Smith		495	4	8	20	24	0	40	18864	0.80
	212	495	5	8	20	37	1	56	15977	1.32
	212	495	6	8	20	16	1	17	17669	0.36
Sutton		141	2	8	10	14	1	13	4065	1.20
	218	141	3	8	10	13	O	20	3693	2.04
	218	141	4	8	10	5	2	11	3594	1.15
	218	141	5	8	10	9	1	11	3686	1.12
·	218	141	6	8	10	5	0	9	3671	0.92
	218	141	7	8	10	5	0	7	3667	0.72
Swisher		67	2	8	27	18	0	11	6049	0.68
	219	67	3	8	27	18	0	16	5986	1.00
Tarrant		81	12	8	354	0	0	3	14681	0.08
	220	8	16	8	20	1	0	2	29439	0.03
Taylor		6	4	8	20	16	0	16	13743	0.44
	221	6	5	8	20	6	0	8	15252	0.20
Titus		610	3	8	30	22	0	29	12451	0.88
Travis	l	16	1	8	35	2	0	6	43858	0.05
	227	15	10	8	35	4	2	29	53185	0.20
Van Zandt		495	2	8	20	19	0	36	20883	0.65
	234	495	3	8	20	22	.1	39	18662	0.79
Walker		675	6	8	45	22	O	23	17377	0.50
	236	675	7	8	45	44	2	34	22363	0.57
Waller		271	4	8	10	29	1	41	26263	0.59
Ward		4	2	8	20	28	Ö	21	5409	1.46
	238	4	4	8	20	16	0	23	6646	1.30
Webb		18	3	8	35	0	Ö	3	4259	0.26
	240	18	4	8	35	4	O	5	4330	0.43
	240	18	5	8	35	10	1	8	5184	0.58

Table G.13. Continued

County	I	Control	Control	Highway	Highway		Number		Mean	Normalized
Name No		Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Webb		18	6	8	35	6	0	5	16379	0.11
Wheeler	١	275	12	8	40	9	0	9	8491	0.40
24	2	275	13	8	40	7	0	6	7816	0.29
Wichita	Ī	156	7	8	44	4	0	3	11596	0.10
Williamson		15	8	8	35	24	1	39	25876	0.57

Table G.14. Single-Vehicle Non-Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1989)

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Anderson		520	8	2	155	1	0	6	4532	0.77
Andrews		228	4	1	385	3	0	5	3846	0.76
	2	228	5	1	385	10	0	8	7850	0.59
Angelina		176	2	1	59	5	Ó	13	17181	0.44
	3	176	3	1	59	8	0	14	19583	0.42
'	3	199	4	1	69	1	0	3	8207	0.21
Armstrong		42	3	1	287	4	0	7	6112	0.67
	6	42	4	1	287	3	0	9	6154	0.85
	6	42	5	1	287	2	0	2	5600	0.21
Atascosa		73	3	1	281	3	0	9	4491	1.17
	7	73	4	1	281	1	0	2	2480	0.47
	7	328	3	2	97	1	0	1	3039	0.19
	7	613	2	2	16	3	0	4	4354	0.53
Bailey		52	2	1	70	6	0	8	5761	0.81
	9	52	3	1	84	_3	0	2	3587	0.32
Bastrop	l	114	6	1	290	0	0	1	6086	0.10
	11	265	3	2	71	9	0	11	12848	0.50
	11	265	4	2	21	5	0	9	16944	0.31
	11	265	5	2	21	14	0	18	15980	0.65
	11	265	6	2	71	6	0	11	6595	0.97
	11	472	1	2	21	10	0	13	3784	2.00
Bee		100	8	1	181	9	2	10	5629	1.03
	13	101	11	1	181	0	0	3	6461	0.27
Bell		231	4	1	190	15	,O	24	15239	0.92
Bexar	-	24	7	1	90	3	0	4	12943	0.18
	15	73	2	1	281	2	.0	3	5728	0.30
	15	100	2	1	181	3	0	6	9258	0.38
	15	143	1	1	87	1	0	2	11958	0.10
	15	143	2	1	87	4	0	5	6449	0.45
	15	253	4	1	281	2	0	5	28972	0.10
	15	291	9	2	16	3	.0	5	3690	0.79

Table G.14. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Bexar		291	10	2	16	0	0	2	24339	0.05
	15	613	1	2	16	10	0	13	8094	0.93
	15	2452	2	3	1604	3	1	8	16129	0.29
Blanco		113	5	1	281	4	0	6	5280	0.66
Bowie		217	1	1	59	8	3	10	9421	0.62
Brazoria	1	111	7	2	227	2	0	8	16508	0.28
	20	111	8	2	288	3	0	6	19344	0.18
	20	111	8	2	227	6	O	4	19223	0.12
	20	188	6	2	36	2	0	2	8686	0.13
	20	598	2	2	288	20	0	28	13536	1.20
	20	598	3	2	288	5	1	12	7866	0.89
Brazos		50	2	2	6	0	0	1	9358	0.06
	21	116	4	2	21	0	0	5	8856	0.33
Brooks		255	5	1	281	3	0	3	5308	0.33
Brown		54	6	1	67	4	0	9	7437	0.70
	25	79	1	1	67	1	0	6	5334	0.65
	25	128	1	1	377	1	0	1	9979	0.06
Burleson		116	3	2	21	1	0	3	6606	0.26
	26	186	4	2	36	1	0	2	5960	0.20
Burnet		252	2	1	281	0	0	2	6258	0.19
Calhoun		179	10	2	35	1	0	3	8199	0.21
Cameron		39	7	1	77	9	0	7	20543	0.20
	31	39	8	] 1	77	6	4	9	11240	0.47
	31	39	12	3	448	1	O	2	14176	0.08
	31	39	19	1	83	11	0	12	26234	0.27
	31	327	8	1	77	3	Ö	3	11240	0.16
	31	331	2	2	100	10	0	15	18964	0.46
Carson		42	2	1	287	1	0	1	6030	0.10
	33	169	3	1	60	1	0	3	5415	0.32
	33		4	1	60	1	0	1	4418	0.13
	33	169	5	1 1	60	4	o	5	4855	0.60

Table G.14. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cass		218	3	1	59	2	0	1	12356	0.05
	34	218	4	1	59	3	0	2	9687	0.12
Chambers		368	1	2	124	3	0	2	9618	0.12
Cherokee		199	1	1	69	6	0	12	10236	0.68
	37	199	2	1	69	2	0	3	6714	0.26
Childress		42	12	1	287	11	0	10	6896	0.84
	38	43	1	1	287	1	0	6	7802	0.45
Clay		44	2	1	82	17	3	21	13330	0.92
<b></b> ,	39	44	3	1	82	1	0	1	5038	0.12
	39	224	1	1	287	15	2	18	9652	1.08
•	39	224	2	1	287	6	0	7	9690	0.42
Coke		69	5	1	87	0	0	1	3610	0.16
Collin		47	6	1	75	1	0	3	58153	0.03
	43	47	14	1	75	21	0	40	21329	1.09
	43	364	4	2	121	5	l 0	3	7580	0.23
	43	549	3	2	5	0	0	1	3510	0.17
	43	549	3	2	121	0	0	1	6440	0.09
Collingsw		31	3	1	83	0	0	2	1335	0.87
Colorado		266	2	2	71	10	0	13	5349	1.41
Comal		253	3	1	281	11	0	8	5706	0.82
Comanche		79	2	1	67	3	Ö	6	6517	0.54
Concho		70	3	1	87	6	O	3	3140	0.56
Cooke		44	7	1	82	2	0	3	4741	0.37
	49	44	8	1	82	1	0	2	8784	0.13
	49	45	1	1	82	2	0	3	12682	0.14
Coryell		231	2	1	190	14	0	16	22466	0.41
Crane		229	2	1	385	2	Ö	6	4194	0.83
Crosby		131	3	1	62	3	0	4	4402	0.53
	54	131	4	1	82	6	0	2	3854	0.30
	54	131	5	1	82	0	0	2	1930	0.60
Culberson		233	2	1	62	10	0	13	1435	5.27

Table G.14. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Dawson		68	4	1	87	9	1	8	5620	0.83
	58	68	5	1	87	4	o	6	3388	1.03
Deaf Smi	th	168	7	1	60	2	0	6	6174	0.57
Delta		136	3	2	24	1	0	4	2627	0.89
	60	136	4	2	19	1	0	1	4175	0.14
Denton		353	2	2	114	1	0	1	14340	0.04
Dickens		131	6	1	82	0	0	1	1648	0.35
	63	132	1	1	82	1	O	2	1416	0.82
	63	132	2	1	82	0	0	2	1261	0.92
Donley		42	6	1	287	14	0	13	7833	0.96
	65	42	7	1	287	12	0	6	6603	0.53
	65	42	8	1	287	6	2	7	6025	0.68
Kenedy		327	2	1	77	5	0	8	5410	0.86
	66	327	3	1	77	6	1	8	5110	0.91
	66	327	4	1	77	6	1	11	5110	1.25
	66	327	5	1	77	13	0	11	5251	1.22
Eastland		7	4	1	80	0	0	4	4452	0.52
Ector	l	5	1	1	80	0	0	2	14190	0.08
	69	228	6	1	385	0	0	1	12396	0.05
	69	229	1	1	385	4	0	7	5746	0.71
	69	572	1	2	302	1	0	5	8235	0.35
	69	2224	1	3	338	4	1	4	5862	0.40
Ellis	l	172	5	1	287	9	.1	11	7754	0.82
	71	172	7	1	287	0	1	3	6924	0.25
	71	172	8	1	287	3	0	3	7517	0.23
	71	260	2	1	67	1	O	1	9110	0.06
	71	261	1	1	67	13	0	14	11161	0.73
	71	442	3	1	77	0	0	2	6960	0.17
El Paso		2552	1	3	375	4	0	6	5482	0.64
Falls		49	3	2	6	1	O	1	3834	0.15
Fannin		45	20	1	82	1	0	1	???	#VALUE!

Table G.14. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Fayette		265	7	2	71	4	0	4	6140	0.38
	76	265	8	2	71	0	0	1	6367	0.09
	76	266	1	2	71	2	1	5	6947	0.42
Floyd		145	6	1	70	2	0	4	2256	1.03
	78	453	1	1	62	0	0	1	2068	0.28
Fort Bend		27	8	6	90	9	0	11	19399	0.33
	80	27	12	1	59	8	1	17	39295	0.25
	80	89	ı	1	59	7	i	12	16516	0.42
Freestone		57	9 7	1	84	2	0	2	4670	0.25
Frio		17	15	1	81	0	0	2	6440	0.18
Gaines		228	2	1	62	0	0	1	4427	0.13
	84	228	3	1	385	0	0	2	5891	0.20
	84	294	1	1	62	4	0	6	4479	0.78
Garza		53	4	1	84	2	0	11	6549	0.98
	86	53	5	1	84	11	1	17	5925	1.67
	86	53	6	1	84	11	0	13	5346	1.41
Grayson		45	18	1	82	4	0	12	6814	1.02
-	92	45	19	1	82	2	1	3	6745	0.26
	92	47	1	1	69	4	1	12	14407	0.48
	92	47	13	1	75	4	0	10	15149	0.38
	92	47	18	1	75	6	0	12	15540	0.45
	92	47	19	3	503	1	Ō	3	15967	0.11
Gregg		138	1	1	259	1	Ö	1	16067	0.04
	93	138	1	2	31	5	0	14	15166	0.54
	93	377	1	2	135	0	0	1	7168	0.08
	93	392	3	1	259	2	0	1	9342	0.06
Grimes		50	3	2	6	7	Ó	27	7209	2.18
Hale		67	9	3	445	3	0	3	1625	1.07
	96	145	5	1	70	1	0	1	5313	0.11
Hall		42	9	1	287	5	0	7	6023	0.68
Hardeman		43	2	1	287	11	1	10	7009	0.83

Table G.14. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hardeman		43	4	1	287	8	0	11	7626	0.84
Hardin	1	65	5	1	96	2	0	5	16278	0.18
	101	200	9	1	69	5	0	6	9018	0.39
	101	200	10	1	69	0	0	1	13501	0.04
Harris ·		50	6	1	290	12	0	10	18154	0.32
Harrison		62	7	1	59	11	0	16	12051	0.77
	103	63	1	1	59	2	0	3	11602	0.15
	103	63	9	1	59	2	o	2	5200	0.22
	103	96	7	1	80	3	0	5	8603	0.34
İ	103	2642	2	3	281	1 1	0	1	5273	0.11
Haskell		157	3	1	277	1	0	1	1901	0.31
	105	157	4	1	277	0	0	3	2969	0.59
Hemphill		30	6	1	60	5	0	3	5415	0.32
	107	169	9	1	60	0	0	1	1415	0.41
Henderson	1	163	3	2	31	1	0	2	6668	0.17
	108	163	4	2	31	4	0	8	21120	0.22
	108	164	1	2	31	5	1	9	9668	0.54
	108	198	1	1	175	1	О	2	6383	0.18
Hidalgo		39	2	1	83	7	1	14	9753	0.83
	109	39	17	1	83	13	1	13	28991	0.26
	109	39	18	1	83	15	1	15	27923	0.31
	109	255	6	1	281	11	1	5	5385	0.54
	109	255	7	1	281	16	1	26	8276	1.83
	109	255	9	10	281	2	0	3	11661	0.15
	109	342	1	2	107	7	0	13	9303	0.81
ļ	109	342	2	2	107	1	o	1	6406	0.09
	109	528	1	2	107	5	0	10	6986	0.83
	109	621	1	2	336	1	0	1	15885	0.04
	109	1804	1	3	115	0	0	1	14809	0.04
Hill		14	7	1	77	1	0	3	5065	0.34
	110	48	6	1	77	1	0	1	1537	0.38

Table G.14. Continued

Count	у	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hockley		52	6	1	84	5	0	7	5210	0.78
	111	130	4	2	114	0	0	2	6514	0.18
	111	380	2	1	62	1	0	4	6031	0.39
Hood		80	3	1	377	1	0	2	8340	0.14
	112	80	4	1	377	5	0	10	14631	0.40
Houston		109	3	1	287	7	0	8	3286	1.42
Howard		68	7	1	87	4	0	2	2730	0.43
	115	68	8	1	87	7	0	9	5250	1.00
Hunt		136	1	2	224	0	0	1	4832	0.12
Hutchinso	n	768	1	2	24	2	0	2	6772	0.17
	118	356	1	2	136	4	0	5	6535	0.44
	118	455	1	2	152	3	0	5	3738	0.78
Jack		249	6	1	281	2	0	1	4721	0.12
	120	249	7	1	281	1	0	3	6951	0.25
Jackson		89	3	1	59	13	1	17	13014	0.76
	121	89	4	1	59	9	0	11	10955	0.58
	121	89	5	1	59	9	0	9	11131	0.47
Jasper		65	4	1	96	3	0	2	9684	0.12
-	122	213	8	1	190	1	Ö	1	9938	0.06
Jefferson		28	6	1	90	2	0	7	7609	0.53
	124	508	4	2	73	0	Ö	2	15394	0.08
Jim Wells		86	1,1	2	359	3	0	4	9105	0.26
	126	87	1	2	44	3	0	3	12969	0.13
	126	255	1	1	281	12	1	16	8805	1.06
	126	255	2	1	281	13	1	14	8805	0.92
	126	373	4	2	44	5	o	2	6347	0.18
Johnson		19	1	2	174	10	Ö	11	20681	0.31
	127	172	10	1	287	1	0	2	9150	0.13
	127	260	1	1	67	0	Ö	1	7880	0.07
Jones		33	5	1	83	1	0	7	7869	0.52
	128	157	5	1 1	277	3	0	5	3143	0.92

Table G.14. Continued

County	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Kaufman		95	3	1	80	20	1	34	36054	0.55
	130	95	4	1	80	10	0	21	17132	0.71
	130	95	5	1	80	3	1	10	11333	0.51
	130	197	3	1	175	2	2	13	15401	0.49
	130	197	4	1	175	12	1	17	12054	0.82
	130	197	5	1	175	5	1	7	10547	0.39
	130	495	1	3	557	4	О	5	21427	0.14
Kinney		23	4	1	90	0	O	1	1945	0.30
Kleberg		102	4	1	77	22	2	32	10655	1.75
	137	327	1	1	77	3	0	3	5960	0.29
Lamar		136	5	2	19	8	0	10	4812	1.21
	139	136	7	1	271	1	0	2	11894	0.10
	139	136	8	1	271	3	0	12	8134	0.86
	139	136	9	1	271	0	0	1	5940	0.10
Lamb		52	4	1	84	6	0	8	3674	1,27
	140	52	5	1	84	0	1	3	4310	0.40
	140	145	3	1	70	1	0	1	2786	0.21
Lampasas		251	5	1	281	1	.0	1	6260	0.09
	141	272	6	1	183	0	О	1	2800	0.21
Liberty		28	3	1	90	2	0	2	10548	0.11
-	146	177	3	1	59	15	1	15	15074	0.58
Live Oak		254	1	1	281	6	0	12	7477	0.93
Llano		700	4	2	71	1	O	1	1870	0.31
Lubbock		52	7	1	84	6	1	7	9050	0.45
	152	53	1	1	84	6	0	8	8849	0.53
	152	68	1	1	87	4	O	6	13574	0.26
	152	131	1	1	62	3	O	9	7833	0.67
	152	131	2	1	62	1	0	3	5659	0.31
	152	380	1	1	62	10	o	13	11420	0.66
Lynn		53	3	1	84	1	0	3	5740	0.30
-	153	68	2	1	87	7	0	17	4486	2.20

Table G.14. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
	10.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Lynn		68	3	1	87	4	1	8	3685	1.26
Martin	l	5	16	1	80	3	0	2	2137	0.54
Mason		71	4	1	87	2	0	2	2405	0.48
Matagorda		179	4	2	35	0	1	2	11302	0.10
1	158	179	6	2	35	1	0	2	5668	0.21
McCulloch		70	6	1	87	0	0	2	3900	0.30
McLennan		49	1	2	6	7	0	8	7959	0.58
1	161	5 <b>5</b>	7	1	84	3	0	5	7631	0.38
1	161	55	8	1	84	3	0	3	17491	0.10
1	161	258	9	2	6	6	0	4	14692	0.16
Medina		24	5	1	90	3	0	5	7927	0.37
1	163	24	6	1	90	1	0	4	8633	0.27
Midland		5	2	1	80	7	0	3	17090	0.10
1	165	5	3	1	80	3	0	6	7383	0.47
1	165	2296	2	2	191	6	1	12	8888	0.78
Montague		13	5	1	81	6	0	8	8279	0.56
1	169	44	6	1	82	4	0	4	3292	0.71
1	169	224	3	1	287	7	Ö	5	9552	0.30
Montgomery		177	5	1	59	24	2	48	32073	0.87
Moore		66	4	1	287	6	0	14	7188	1.13
1	171	66	5	1	87	15	Ö	26	8940	1.69
Morris		222	3	2	11	1	0	2	4531	0.26
Nacogdoches	s	175	7	3	495	1	0	1	7620	0.08
1	174	175	8	3	495	0	0	1	15237	0.04
1	174	176	1	1	59	6	1	13	17424	0.43
1	174	2560	1	1	59	2	0	2	13365	0.09
Navarro		92	13	3	564	0	Ò	1	7747	0.08
1	175	163	1	2	31	4	0	5	8923	0.33
1	175	163	2	2	31	0	o	3	6410	0.27
Nolan		6	15	3	432	0	Ó	1	6817	0.09
1	177	53	12	1	84	13	0	19	5537	2.00

Table G.14. Continued

Coun	ity	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Nueces		102	1	2	44	2	0	3	15854	0.11
	178	102	2	1	77	1	0	6	11136	0.31
	178	102	2	2	44	1	0	1	13768	0.04
	178	102	3	1	77	14	0	17	11618	0.85
1	178	102	11	3	428	о	0	1	5329	0.11
	178	373	2	2	44	2	0	4	9552	0.24
	178	373	3	2	44	2	0	3	6706	0.26
Palo Pint	to	1 1	10	1	180	1	Ö	2	4582	0.25
Panola		63	3	1	59	3	0	4	6541	0.36
	183	63	4	1	59	0	0	2	7288	0.16
,	183	63	12	3	455	1	0	1	3608	0.16
Parker		8	2		180	8	0	25	7847	1.85
	184	8	3	1	80	2	0	5	13984	0.21
	184	80	6	1	377	6	0	9	12285	0.43
	184	171	3	2	199	1	0	5	12415	0.23
Parmer		52	1	1	70	3	1	6	4298	0.81
Polk	]	176	4	1	59	8	0	16	14833	0.63
	187	176	5	1	59	20	1	33	13418	1.43
	187	176	6	3	90	4	0	3	5752	0.30
	187	177	1	1	59	16	1	23	15742	0.85
	187	213	3	1	190	2	Ö	12	8884	0.79
Potter		41	7	1	87	1	0	3	12282	0.14
	188	42	1	1	287	5	O	2	6020	0.19
	188	90	5	3	552	1	0	1	5295	0.11
	188	169	2	1	60	1	0	1	9214	0.06
	188	2635	1	3	335	1	O	3	5665	0.31
Randall		67	1	1	87	2	Ö	2	8879	0.13
	191	168	8	1	60	1	1	6	6215	0.56
	191	168	9	1	60	1	0	6	18180	0.19
	191	2635	3	3	335	1	0	1	2360	0.25
Refugio		371	2	1	77	14	1	22	7657	1.67

Table G.14. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Refugio		371	3	1	77	8	0	13	9177	0.82
Runnels		158	1	1	67	9	0	10	4692	1.24
Rusk		138	2	1	259	7	0	6	8269	0.42
	201	138	3	1	259	1	0	2	7660	0.15
	201	138	4	1	259	2	1	6	6019	0.58
	201	138	5	1	259	1	0	3	5674	0.31
San Patri	icio	177	2	1	59	19	0	25	15881	0.92
	205	87	4	2	359	0	O	1	3865	0.15
	205	101	3	1	181	0	0	1	8446	0.07
	205	101	4	1	181	5	0	8	12948	0.36
	205	180	6	2	35	7	2	14	11661	0.70
	205	180	10	2	361	5	0	7	7650	0.53
	205	371	4	1	77	2	0	3	6993	0.25
	205	372	1	1	77	12	0	14	11480	0.71
Scurry		53	7	1	84	5	1	7	5464	0.74
	208	53	8	1	84	7	0	8	5790	0.80
	208	53	9	1	84	8	0	10	5179	1.12
	208	53	10	1	84	2	1	5	5402	0.54
Shacklefo	ord	11	5	1	180	0	0	3	4830	0.36
Shelby		63	6	1	59	1	0	1	7274	0.08
	210	175	4	1	59	0	0	1	6049	0.10
Sherman		66	3	1	287	2	1	4	3561	0.65
Smith		164	4	2	31	5	0	6	13236	0.26
	212	165	1	1	271	1	Ö	2	12778	0.09
	212	165	2	1	271	1	0	3	3988	0.44
	212	190	5	1	69	1	0	1	16030	0.04
	212	191	1	1	69	8	Ö	12	15434	0.45
	212	1790	2	3	323	0	0	1	16255	0.04
	212	2075	1	3	323	2	Ö	3	14757	0.12
Sterling		69	3	1	87	2	0	3	4469	0.39
	216		4	1	87	4	0	2	5422	0.21

Table G.14. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Swisher		67	10	1	87	2	0	1	3983	0.15
	219	67	18	1	87	0	0	6	4836	0.72
Tarrant		13	10	3	496	0	0	1	11610	0.05
	220	14	15	1	81	2	0	7	13587	0.30
	220	80	7	1	377	1	0	1	16214	0.04
	220	94	8	3	97	1	0	2	55000	0.02
	220	353	3	2	114	4	0	9	31051	0.17
Taylor		34	1	1	83	12	0	9	14636	0.36
Terry		227	7	1	62	4	1	4	7415	0.31
	223	228	1	1	62	2	0	5	5076	0.57
Titus		248	1	1	271	0	0	2	13031	0.09
Tom Green		69	6	1	87	l о	0	4	4173	0.56
	226	69	7	1	87	7	0	9	10053	0.52
	226	70	2	1	87	6	0	9	8564	0.61
	226	77	8	3	306	0	0	4	8184	0.28
	226	158	2	1	67	8	0	10	5015	1.16
	226	159	1	1	277	1	0	2	3550	0.33
Travis		265	1	2	71	4	.0	5	26232	0.11
	227	265	2	2	71	7	0	6	15025	0.23
Upshur		392	2	1	259	4	1	8	6373	0.73
Uvalde		23	5	1	90	2	O	1	2803	0.21
Van Zandt		95	6	1	80	2	0	6	6664	0.52
	234	95	7	1	80	1	o	3	4762	0.37
Victoria		88	4	1	59	0	0	1	12781	0.05
	235	88	5	3	175	6	0	12	8607	0.81
	235	89	1 1	1	59	14	o	12	14234	0.49
	235	144	2	1 1	87	2	l o	2	4955	0.23
	235	371	1 1	1 1	77	13	0	10	7183	0.81
	235	371	6	3	91	1	2	1	5860	0.10
	235	432	2	5	404	6	О	11	10859	0.59
Waller		50	4	2	6	0	0	4	6640	0.35

Table G.14. Continued

Count	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Waller		114	11	1	290	9	0	12	7586	0.92
Ward	ſ	292	4	2	18	0	1	2	5471	0.21
Washingto	on	114	10	1	290	8	0	12	7982	0.87
_	239	186	6	2	36	1	0	1	5050	0.12
	239	186	6	1	290	7	0	14	10442	0.78
Wharton		89	6	1	59	10	0	11	11781	0.54
	241	89	7	1	59	14	0	27	13091	1.20
	241	89	8	1	59	6	O	15	14141	0.62
	241	89	10	3	183	0	0	1	4450	0.13
Wichita		43	8	1	287	11	1	16	8738	1.06
	243	43	9	1	287	3	0	3	12212	0.14
	243	43	17	3	370	0	0	1	7249	0.08
Wilbarger	r	43	5	1	287	5	0	12	7628	0.91
	244	43	6	1	70	12	0	9	9082	0.58
	244	43	7	1	287	8	1	6	8749	0.40
Willacy		327	10	1	77	5	0	12	6735	1.04
Wilson		100	3	1	181	8	0	14	6995	1.16
İ	247	100	4	1	181	0	0	1	5168	0.11
ŀ	247	143	4	1	87	3	0	4	3024	0.77
Winkler		292	2	2	18	2	0	3	4331	0.40
Wise		13	6	1	81	8	Ö	11	11592	0.55
	249	13	7	1	81	14	1	24	7365	1.89
	249	13	8	1	81	18	o	39	14278	1.59
	249	134	7	1	380	4	0	7	7205	0.56
Wood		96	1	1	80	1	0	4	3504	0.66
	250	96	2	1	80	0	Ö	2	3292	0.35

Table G.15. Single-Vehicle Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1990)

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Atascosa		17	4	8	35	3	0	6	10166	0.22
	7	73	5	8	37	15	1	15	8696	0.65
	7	73	6	8	37	4	1	5	8757	0.21
	7	73	10	8	37	23	1	29	8524	1.28
Austin		271	2	8	10	19	0	17	19710	0.32
	8	271	3	8	10	10	0	16	23216	0.26
Bell		15	4	8	35	26	0	28	26071	0.40
	14	15	6	8	35	6	1	6	22726	0.10
	14	15	7	8	35	13	3	12	20803	0.22
Bexar		17	2	8	35	1	0	1	15877	0.02
•	15	25	2	8	10	2	1	4	42004	0.04
	15	17	3	8	35	11	0	9	13878	0.24
	15	72	7	8	10	11	0	14	19776	0.27
	15	73	9	8	37	16	0	11	9963	0.42
Bowie		610	5	8	30	20	1	28	12127	0.87
	19	610	6	8	30	12	1	16	17474	0.34
	19	610	7	8	30	16	0	15	26874	0.21
Callahan		7		8	20	8	1	18	11812	0.57
	30	7	2	8	20	11	0	25	11807	0.80
	30	6	7	8	20	7	0	15	13854	0.41
Carson		275	2	8	40	3	0	8	8567	0.35
	33	275	3	8	40	10	1	9	8309	0.41
	33	275	4	8	40	10	.0	11	8283	0.50
Chambers		739	1	8	10	7	0	10	22429	0.17
	36	508	2	8	10	25	1	43	26081	0.62
	36	508	3	8	10	22	3	48	22937	0.79
Colorado		271	1	8	10	29	1	52	19890	0.98
	45	535	8	8	10	25	0	38	14785	0.97
Comal		16	4	8	35	8	0	12	28979	0.16
	46	16	5	8	35	0	0	2	34065	0.02
Cooke		195	1	8	35	21	.0	22	16732	0.49

Table G.15. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name I	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cooke		194	2	8	35	15	0	7	13234	0.20
Crane	ı	4	5	8	20	1	0	1	8320	0.05
Crockett	l	141	1	8	10	11	1	12	4187	1.08
	53	140	10	8	10	16	1	14	3233	1.63
	53	140	11	8	10	1	1	7	3239	0.81
	53	140	13	8	10	17	2	12	2923	1.54
Culberson		3	1	8	10	5	0	4	7150	0.21
	55	3	2	8	10	3	0	2	7151	0.11
	55	3	3	8	10	12	3	13	7043	0.69
	55	2	11	8	10	4	0	2	6778	0.11
Deaf Smith		90	1	8	40	0	0	3	7777	0.15
Denton		196	1	8	353	17	0	34	50017	0.26
	61	196	2	8	353	1	0	9	21496	0.16
	61	195	2	8	35	11	0	13	65065	0.08
	61	81	13	8	354	8	0	18	12217	0.55
Donley		275	6	8	40	2	0	2	8163	0.09
	65	275	8	8	40	1	0	2	8337	0.09
Eastland		7	3	8	20	31	0	33	11697	1.06
1	68	7	4	8	20	3	0	8	13081	0.23
	68	314	5	8	20	5	0	6	11537	0.20
	68	7	6	8	20	25	0	31	11340	1.03
Ector		4	6	8	20	8	0	6	8887	0.25
	69	4	7	8	20	16	1	25	10655	0.88
Ellis		92	3	8	45	2	Ö	13	23268	0.21
	71	442	3	8	353	12	0	14	29751	0.18
Į	71	48	4	8	353	9	2	12	19237	0.23
	71	92	4	8	45	14	0	18	21824	0.31
	71	92	5	8	45	6	0	5	21768	0.09
	71	48	8	8	353	22	Ö	26	14659	0.67
El Paso		2121	1	8	10	8	1	13	21608	0.23
	72	2121	4	8	10	29	0	35	12562	1.05

Table G.15. Continued

County	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Erath		314	4	8	20	3	1	5	11539	0.16
Falls	1	15	3	8	35	2	0	2	24624	0.03
Fayette		535	6	8	10	7	0	9	12451	0.27
	76	535	7	8	10	12	1	26	12850	0.76
Franklin		610	2	8	30	17	0	24	12910	0.70
Freestone		675	1	8	45	28	3	29	15095	0.72
	82	675	2	8	45	31	2	27	14487	0.70
Frio		17	6	8	35	19	1	14	7202	0.73
	83	17	7	8	35	9	0	11	5582	0.74
Gillespie		142	13	8	10	12	0	7	4920	0.53
Gonzales		535	4	8	10	15	0	13	12199	0.40
	90	535	5	8	10	9	0	8	12423	0.24
Gray		275	5	8	40	2	0	5	8238	0.23
	91	275	7	8	40	1	0	2	8178	0.09
	91	275	9	8	40	1	0	1	8227	0.05
	91	275	11	8	40	16	0	29	8337	1.31
Gregg		495	7	8	20	27	2	58	19002	1.15
Guadalupe		535	1	8	10	2	0	6	14283	0.16
•	95	535	2	8	10	9	0	10	12045	0.31
	95	25	3	8	10	5	O	14	16511	0.32
Hale		67	4	8	27	2	1	5	7216	0.26
	96	67	5	8	27	2	0	10	6968	0.54
	96	67	6	8	27	15	1	20	6769	1.11
Harris		508	1	8	10	6	2	12	81244	0.06
Harrison		495	8	8	20	21	0	31	16762	0.70
	103	495	9	8	20	9	0	8	15198	0.20
	103	495	10	8	20	11	1	23	15456	0.56
Hays		16	2	8	35	24	1	56	36443	0.58
*	106	16	3	8	35	13	0	11	32085	0.13
HIII		14	7	8	35	17	0	31	24403	0.48
	110	48	9	8	353	17	l o	20	14206	0.53

Table G.15. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hill		14	23	8	354	9	0	16	10399	0.58
	110	14	24	8	35	9	0	19	23784	0.30
Hopkins		610	1	8	30	5	0	10	13202	0.28
	113	10	2	8	30	8	1	7	15306	0.17
	113	9	9	8	30	5	0	14	15129	0.35
Howard		5	5	8	20	17	0	16	10101	0.60
	115	5	6	8	20	10	0	13	10339	0.47
Hudspeth		2	5	8	10	15	1	12	7960	0.57
	116	2121	6	8	10	20	0	23	7926	1.09
	116	2	6	8	10	33	3	25	7893	1.19
	116	2	7	8	10	10	0	10	7733	0.49
	116	2	8	8	10	9	0	8	6987	0.43
	116	2	9	8	10	11	1	7	6987	0.38
	116	2	10	8	10	4	1	7	7053	0.37
Hunt		9	13	8	30	9	0	32	20957	0.57
Jeff Davis	s	3	4	8	10	2	0	7	6978	0.38
Jefferson		739	2	8	10	25	1	30	27248	0.41
Johnson		14	3	8	354	21	0	27	17044	0.60
	127	14	4	8	354	10	0	14	11745	0.45
	127	14	22	8	354	1	0	1	10571	0.04
Kaufman		495	1	8	20	19	0	26	21944	0.45
1	130	95	1,4	8	20	22	2	13	18479	0.26
Kendali		72	5	8	10	14	0	24	10001	0.90
	131	72	6	8	10	13	Ö	20	11745	0.64
	131	142	15	8	10	1	0	2	7011	0.11
Kerr		142	2	8	10	6	0	3	4603	0.25
	133	142	12	8	10	0	Ö	1	4549	0.08
	133	142	14	8	10	12	0	21	6381	1.24
Kimble		142	1	8	10	9	2	15	5081	1.11
	134	141	8	8	10	5	0	4	3850	0.39
	134	141	9	8	10	7	0	12	4063	1.11

Table G.15. Continued

Count	y I	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
LaSalle		18	1	8	35	11	0	11	4319	0.96
	142	18	2	8	35	17	2	14	3920	1.34
	142	17	8	8	35	40	0	18	4654	1.45
Leon		675	3	8	45	27	3	33	15472	0.80
	145	675	4	8	45	18	0	24	16189	0.56
Live Oak		74	1	8	37	16	1	16	6171	0.97
	149	74	2	8	37	15	0	13	6805	0.72
	149	73	7	8	37	18	2	21	8948	0.88
Lubbock		67	7	8	27	4	1	14	8939	0.59
Madison		675	5	8	45	58	0	45	15900	1.06
Martin		5	4	8	20	10	2	20	10010	0.75
McLennan		15	1	8	35	10	0	11	38124	0.11
	161	15	2	8	35	9	3	9	24469	0.14
	161	14	8	8	35	17	2	33	25997	0.48
Medina		17	5	8	35	7	0	19	8825	0.81
Midland		5	14	8	20	12	1	19	15228	0.47
	165	5	15	8	20	10	0	13	10907	0.45
Mitchell		6	1	8	20	8	0	11	8824	0.47
	168	5	7	8	20	7	0	8	8577	0.35
	168	5	8	8	20	10	0	19	8705	0.82
Montgome	ry	110	4	8	45	51	3	123	62664	0.74
_	170	675	8	8	45	32	2	49	36089	0.51
Morris		610	4	8	30	6	0	7	11841	0.22
Navarro		166	1	8	45	1	1	7	17822	0.15
	175	93	1	8	45	14	0	16	16146	0.37
	175	92	6	8	45	30	2	29	18989	0.57
Nolan		6	2	8	20	16	Ö	27	11506	0.88
	177	6	3	8	20	17	0	22	13586	0.61
Oldham		90	2	8	40	17	0	15	7818	0.72
	180	90	3	8	40	20	0	25	7865	1.19
	180	90	4	8	40	14	1	15	8763	0.64

Table G.15. Continued

County	, 1	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Orange		28	9	8	10	26	0	38	48350	0.30
	181	28	11	8	10	9	0	15	27152	0.21
Palo Pinto		314	2	8	20	4	0	8	12478	0.24
	182	314	3	8	20	11	0	8	12057	0.25
Parker		314	1	8	20	8	0	15	14201	0.40
	184	8	3	8	20	10	0	12	30989	0.15
	184	1068	5	8	30	1	0	2	27958	0.03
	184	314	7	8	20	5	0	12	18336	0.25
Pecos		140	1	8	10	13	0	10	3366	1.12
	186	140	2	8	10	14	0	16	3003	2.00
, i	186	140	3	8	10	13	0	13	2949	1.66
	186	140	4	8	10	3	0	5	2922	0.64
	186	140	5	8	10	10	0	13	2927	1.67
	186	140	6	8	10	7	.1	11	2918	1.42
	186	441	7	8	10	12	0	10	2804	1.34
	186	441	8	8	10	1	0	2	3700	0.20
Potter		275	1	8	40	3	1	11	36428	0.11
	188	90	5	8	40	10	0	14	5295	0.99
Randall		168	9	8	27	14	1	26	23524	0.42
	191	67	17	8	27	15	1	15	4103	1.37
Reeves		3	5	8	20	0	O	3	4663	0.24
	195	441	5	8	10	4	0	7	2519	1.04
	195	441	6	8	10	10	0	6	2568	0.88
	195	3	6	8	20	13	'1	20	4732	1.59
	195	3	7	8	20	3	0	9	5354	0.63
	195	441	9	8	10	14	1	23	2762	3.13
Rockwall		9	12	8	30	14	1	14	31620	0.17
San Patric	io	74	3	8	37	14	0	7	8097	0.33
	205	74	4	8	37	0	0	5	10669	0.18
	205	74	5	8	37	6	0	16	12424	0.48
Smith		495	4	8	20	23	0	38	18864	0.76

Table G.15. Continued

County	, 1	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Smith		495	5	8	20	46	2	57	15977	1.34
	212	495	6	8	20	13	0	19	17669	0.40
Sutton		141	2	8	10	4	0	9	4065	0.83
	218	141	3	8	10	1	0	10	3693	1.02
,	218	141	4	8	10	0	1	5	3594	0.52
	218	141	5	8	10	3	0	6	3686	0.61
	218	141	6	8	10	1	0	2	3671	0.20
	218	141	7	8	10	6	i	5	3667	0.51
Swisher		67	2	8	27	10	1	17	6049	1.06
	219	67	3	8	27	6	2	13	5986	0.82
Tarrant		8	16	8	20	4	0	3	29439	0.04
Taylor		6	4	8	20	16	0	16	13743	0.44
-	221	6	5	8	20	3	0	6	15252	0.15
	221	6	6	8	20	0	0	1	14296	0.03
Titus		610	3	8	30	21	2	30	12451	0.91
Travis		16	1	8	35	3	0	1	43858	0.01
	227	15	10	8	35	15	0	25	53185	0.18
Van Zandt		495	2	8	20	33	2	41	20883	0.74
	234	495	3	8	20	32	1	44	18662	0.89
Walker		675	6	8	45	9	1	17	17377	0.37
	236	675	7	8	45	26	2	25	22363	0.42
Waller		271	4	8	10	20	1	28	26263	0.40
Ward		4	2	8	20	18	0	20	5409	1.39
	238	4	4	8	20	17	4	18	6646	1.02
Webb		18	3	8	35	0	0	3	4259	0.26
	240	18	4	8	35	2	O	4	4330	0.35
	240	18	5	8	35	7	1	10	5184	0.73
	240	18	6	8	35	1	0	1	16379	0.02
Wheeler		275	12	8	40	14	0	16	8491	0.71
	242	275	13	8	40	12	0	14	7816	0.67
Wichita		156	7	8	44	6	0	8	11596	0.26

Table G.15. Continued

County	Control	Control	Highway	Highway	Number Number			Mean	Normalized
Name No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Williamson	15	8	8	35	17	0	25	25876	0.36

Table G.16. Single-Vehicle Non-Interstate Accident Data with Totals and Normalized Numbers by County and Control Section (1990)

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	AÐT	Accident Data
Anderson		520	8	2	155	2	0	4	4532	0.51
Andrews		228	4	1	385	2	0	7	3846	1.06
	2	228	5	1	385	5	0	8	7850	0.59
Angelina		176	2	1	59	8	O	12	17181	0.41
	3	176	3	1	59	4	0	10	19583	0.30
	3	199	4	1	69	1	0	2	8207	0.14
Aransas		180	7	17	35	0	0	2	7883	0.15
Archer		249	4	1	281	6	0	3	2323	0.75
Armstrong	1	42	3	1	287	8	0	8	6112	0.76
	6	42	4	1	287	4	0	8	6154	0.76
٠	6	42	5	1	287	3	2	4	5600	0.42
Atascosa		73	3	1	281	6	0	4	4491	0.52
	7	328	3	2	97	0	0	1	3039	0.19
	7	613	2	2	16	5	0	9	4354	1.20
Bailey		52	2	1	70	3	0	5	5761	0.50
	9	52	3	1	84	7	O	5	3587	0.81
Bastrop		114	4	1	290	0	0	1	10317	0.06
_	11	114	6	1	290	2	0	1	6086	0.10
	11	265	3	2	71	12	.1	11	12848	0.50
	11	265	4	2	21	5	0	12	16944	0.41
	11	265	5	2	71	8	1	14	8811	0.92
	11	265	6	2	71	3	-1	5	6595	0.44
	11	472	1	2	21	6	0	12	3784	1.84
Bee		100	8	1	181	3	0	6	5629	0.62
	13	101	1	1	181	11	0	7	6461	0.63
Bell		231	4	1	190	13	2	20	15239	0.76
Bexar		24	7	1	90	1	0	4	12943	0.18
	15	73	2	1	281	4	2	7	5728	0.71
	15	73	12	1	181	0	0	1	10630	0.05
	15	100	2	1	181	2	O	4	9258	0.25
	15	143	1	1	87	0	0	1	11958	0.05

Table G.16. Continued

Count	v	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	AÐT	Accident Data
Bexar		143	2	1	87	0	0	1	6449	0.09
	15	253	4	1	281	4	0	6	28972	0.12
	15	291	9	2	16	7	0	9	3690	1.42
	15	291	10	2	16	1	0	3	24339	0.07
	15	613	1	2	16	4	0	6	8094	0.43
	15	2452	2	3	1604	6	0	7	16129	0.25
	15	2452	3	3	1604	1	0	2	11955	0.10
Blanco		113	5	1	281	1	0	2	5280	0.22
Bowie		217	1	1	59	12	0	5	9421	0.31
Brazoria		111	7	17	288	4	0	9	16508	0.32
	20	111	8	17	288	7	0	12	19344	0.36
	20	188	6	2	36	1	0	1	8686	0.07
	20	598	2	2	288	8	0	31	13536	1.33
	20	598	3	2	288	2	0	4	7866	0.30
	20	1524	1	2	288	0	0	1	19644	0.03
Brazos		50	2	2	6	0	0	2	9358	0.12
	21	116	4	2	21	1	0	4	8856	0.26
Brooks		255	5	1	281	4	0	5	5308	0.55
Brown		54	6	1	67	5	Ö	6	7437	0.47
	25	79	1	1	67	2	0	5	5334	0.54
	25	128	1	1	377	1	0	1	9979	0.06
Burleson		116	3	2	21	3	0	6	6606	0.53
	26	186	2	2	36	0	0	1	7920	0.07
	26	186	4	2	36	0	0	1	5960	0.10
Burnet		252	2	1	281	0	0	1	6258	0.09
Calhoun		179	10	2	35	1	Ö	2	8199	0.14
Cameron		39	7	1	77	5	İ	10	20543	0.28
	31	39	8	1	77	13	0	12	11240	0.62
	31	39	19	1	83	1	0	8	26234	0.18
	31	220	5	2	48	1	0	1	18420	0.03
1	31		8	1	77	4	0	4	11240	0.21

Table G.16. Continued

Count	y T	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Cameron		331	2	2	100	0	0	1	18964	0.03
	31	331	4	4	100	4	О	4	14229	0.16
Carson		42	2	1	287	2	0	1	6030	0.10
	33	169	3	1	60	o	0	2	5415	0.21
	33	169	4	1	60	4	0	2	4418	0.26
	33	169	5	1	60	1	0	2	4855	0.24
	33	275	21	15	40	2	0	1	984	0.59
Cass		218	3	1	59	1	2	3	12356	0.14
	34	218	4	1	59	2	0	2	9687	0.12
Chambers		368	1	2	124	1	0	1	9618	0.06
	36	508	3	2	73	1	0	2	4980	0.23
Cherokee		199	1	1	69	8	0	9	10236	0.51
	37	199	2	1	69	2	0	2	6714	0.17
Childress		42	12	1	287	1	0	3	6896	0.25
	38	43	1	1	287	2	0	6	7802	0.45
Clay		44	2	1	82	23	0	23	13330	1.00
	39	224	1	1	287	9	0	14	9652	0.84
	39	224	2	1	287	10	0	11	9690	0.66
Collin		47	6	1	75	2	0	3	58153	0.03
	43	47	14	1	75	6	0	15	21329	0.41
	43	135	4	1	380	0	O	4	5340	0.44
	43	135	5	1	380	0	0	1	5590	0.10
	43	549	3	2	121	1	0	2	6440	0.18
Colorado		266	2	2	71	6	0	4	5349	0.43
Comal		253	3	1	281	10	0	7	5706	0.71
Comanche		70	3	1	87	3	O	3	3140	0.56
Cooke		44	7	1	82	3	1	3	4741	0.37
	49	44	8	1	82	4	0	5	8784	0.33
	49	45	1	_ 1	82	2	0	3	12682	0.14
Coryell		231	2	1	190	10	0	11	22466	0.28
Crane		229	2	1	385	5	1	7	4194	0.97

Table G.16. Continued

Count	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Туре	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Crosby		131	3	1	62	1	0	6	4402	0.79
•	54	131	4	1	82	1	0	3	3854	0.45
	54	131	5	1	82	1	0	2	1930	0.60
Culberson		233	1	1	62	0	0	1	1435	0.41
Culberson	ı	233	2	1	62	1	0	3	1435	1.22
Dawson		68	4	1	87	0	0	3	5620	0.31
	58	68	5	1	87	3	0	7	3388	1.20
Deaf Smit	th	168	7	1	60	3	2	9	6174	0.85
Delta		136	3	2	24	0	0	2	2627	0.44
Dickens		131	6	1	82	2	0	4	1648	1.41
, i	63	132	1	1	82	1	0	1	1416	0.41
	63	132	2	1	82	1	0	2	1261	0.92
Donley		42	6	1	287	24	0	15	7833	1.11
	65	42	7	1	287	2	0	4	6603	0.35
	65	42	8	1	287	3	0	7	6025	0.68
Kenedy		327	2	1	77	13	0	7	5410	0.75
	66	327	3	1	77	17	0	10	5110	1.14
	66	327	4	1	77	21	0	9	5110	1.02
	66	327	5	1	77	9	1	8	5251	0.89
Eastland		7	4	1	80	5	2	11	4452	1.44
Ector		228	6	1	385	0	O	2	12396	0.09
	69	229	1	1	385	2	0	2	5746	0.20
	69	463	7	2	302	0	0	1	2275	0.26
	69	572	1	2	302	3	0	5	8235	0.35
Ellis		172	5	1	287	4	0	8	7754	0.60
	71	172	7	1	287	4	Ö	4	6924	0.34
	71	172	8	1	287	2	Ó	4	7517	0.31
	71	260	2	1	67	1	0	2	9110	0.13
	71	261	1	1	67	10	0	14	11161	0.73
El Paso		374	2	1	62	8	1	9	19317	0.27
	72	2552	1	3	375	4	1	5	5482	0.53

Table G.16. Continued

County	, [	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Falls		49	3	2	6	0	0	1	3834	0.15
Fayette		265	7	2	71	1	0	8	6140	0.76
	76	265	8	2	71	0	0	1	6367	0.09
	76	266	1	2	71	2	1	10	6947	0.84
Floyd		145	6	1	70	1	0	4	2256	1.03
	78	453	1	1	62	0	0	1	2068	0.28
Fort Bend		27	8	6	90	5	0	12	19399	0.36
	80	27	12	1	59	14	Ö	22	39295	0.33
	80	89	9	1	59	6	1	10	16516	0.35
Freestone		57	7	1	84	2	0	2	4670	0.25
Gaines		228	2	1	62	3	0	3	4427	0.39
	84	228	3	1	385	0	1	2	5891	0.20
	84	294	1	1	62	6	0	10	4479	1.30
Garza		53	4	1	84	13	0	9	6549	0.80
	86	53	5	1	84	4	0	9	5925	0.88
	86	53	6	1	84	1	0	3	5346	0.33
Gray		169	6	1	60	8	1	8	5949	0.78
Grayson		45	18	1	82	4	0	14	6814	1.19
	92	45	19	1	82	1	0	1	6745	0.09
	92	47	1	1	69	9	0	9	14407	0.36
	92	47	13	1	75	6	0	4	15149	0.15
	92	47	1,8	1	75	4	0	10	15540	0.37
	92	47	19	3	503	0	0	2	15967	0.07
	92	666	1	5	691	0	0	1	4320	0.13
	92	728	1	5	120	1	0	1	5583	0.10
Gregg		138	1	1	259	0	0	2	16067	0.07
	93	138	1	2	31 .	6	O	16	15166	0.61
	93	392	3	1	259	0	0	1	9342	0.06
Grimes		50	3	2	6	17	1	18	7209	1.45
Guadalupe		25	10	5	78	0	.1	1 1	5028	0.12
Hale		67	9	15	27	l o	0	1 1	1625	0.36

Table G.16. Continued

County	<i>,</i>	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hale		145	5	1	70	6	0	3	5313	0.33
Hall		42	9	1	287	4	0	6	6023	0.58
Hardeman		43	2	1	287	7	0	6	7009	0.50
	100	43	4	1	287	7	0	4	7626	0.30
Hardin ·		65	5	1	96	3	0	4	16278	0.14
	101	200	9	1	69	3	0	3	9018	0.19
	101	602	1	2	327	1	0	1	6163	0.09
Harris		50	6	1	290	14	Ö	16	18154	0.51
Harrison		62	7	1	59	5	0	10	12051	0.48
	103	63	1	1	59	3	1	4	11602	0.20
·	103	63	9	1	59	5	0	4	5200	0.45
	103	96	7	1	80	3	0	8	8603	0.54
	103	96	8	1	80	0	0	4	4686	0.50
	103	2642	2	3	281	0	0	1	5273	0.11
Haskell		157	3	1	277	3	0	3	1901	0.92
-	105	157	4	1	277	1	0	5	2969	0.98
Hemphill		169	9	1	60	0	0	1	1415	0.41
Henderson		163	3	2	31	2	0	3	6668	0.26
	108	163	4	2	31	8	1	9	21120	0.25
	108	164	1	2	31	4	0	3	9668	0.18
	108	164	2	2	31	5	0	5	7357	0.40
	108	197	6	1	175	0	0	1	7619	0.08
	108	198	1	1	175	4	0	3	6383	0.27
Hidalgo	71111	39	2	1	83	7	Ö	12	9753	0.72
	109	39	17	1	83	7	0	11	28991	0.22
	109	39	18	1	83	21	1	22	27923	0.46
	109	255	6	1	281	4	0	11	5385	1.19
	109	255	7	1	281	10	0	15	8276	1.05
	109	255	9	10	281	8	0	4	11661	0.20
	109		11	16	281	0	0	1	9448	0.06
	109		1	2	107	11	3	16	9303	1.00

Table G.16. Continued

County	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Hidalgo		342	2	2	107	2	0	2	6406	0.18
	109	528	1	2	107	3	0	4	6986	0.33
	109	1804	1	3	115	o	1	2	14809	0.08
Hill		1 4	7	1	77	0	0	1	5065	0.11
Hockley		52	6	1	84	6	0	7	5210	0.78
	111	130	4	2	114	2	o	2	6514	0.18
	111	380	2	1	62	1	0	2	6031	0.19
Hood		80	4	1	377	3	Ö	8	14631	0.32
Houston		109	3	1	287	1	0	2	3286	0.35
Howard		68	7	1	87	О	0	1	2730	0.21
	115	68	8	1	87	3	0	7	5250	0.78
Hunt		136	1	2	224	1	0	1	4832	0.12
	117	768	1	2	24	0	0	3	6772	0.26
Hutchinso	n	356	1	2	136	2	.0	5	6535	0.44
	118	455	1	2	152	1	О О	3	3738	0.47
Jack		249	6	1	281	0	0	1	4721	0.12
	120	249	7	1	281	1	O	2	6951	0.17
Jackson		89	3	1	59	5	0	9	13014	0.40
	121	89	4	1	59	13	O	13	10955	0.69
	121	89	5	1	59	8	.0	9	11131	0.47
Jasper		65	4	1	96	1	0	1	9684	0.06
Jefferson		28	6	1	90	5	3	9	7609	0.69
	124	306	3	2	87	1	O	1	14769	0.04
	124	508	4	2	73	2	0	1	15394	0.04
Jim Wells		86	11	2	359	7	0	7	9105	0.45
	126	87	1	2	44	6	O	5	12969	0.22
	126	255	1	1 1	281	6	Ö	8	8805	0.53
	126	255	2	1	281	4	0	6	8805	0.40
	126	373	4	2	44	3	0	5	6347	0.46
Johnson		19	1	2	174	6	0	- 6	20681	0.17
l	127	172	10	1 1	287	l o	0	1	9150	0.06

Table G.16. Continued

County	,	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Johnson		260	1	1	67	0	0	3	7880	0.22
Jones		33	5	1	83	10	0	14	7869	1.03
	128	157	5	1	277	14	0	7	3143	1.29
Karnes		100	5	1	181	0	0	1	4437	0.13
Kaufman		95	3	1	80	11	1	20	36054	0.32
	130	95	4	1	80	17	0	21	17132	0.71
	130	95	5	1	80	14	1	13	11333	0.67
	130	197	3	1	175	12	0	20	15401	0.76
	130	197	4	1	175	12	0	17	12054	0.82
	130	197	5	1	175	17	1	16	10547	0.88
•	130	197	8	2	243	2	0	2	4674	0.25
	130	495	1	3	557	0	0	1	21427	0.03
Kinney		23	4	1	90	1	0	1	1945	0.30
Kleberg		102	4	1	77	11	0	12	10655	0.65
Lamar		136	5	2	19	3	0	5	4812	0.60
	139	136	6	2	19	2	0	2	5826	0.20
	139	136	7	1	271	1	0	1	11894	0.05
	139	136	8	1	271	5	0	8	8134	0.57
	139	136	9	1	271	1	O	2	5940	0.20
Lamb		52	4	1	84	3	0	9	3674	1.42
	140		5	1	84	1	0	3	4310	0.40
Lampasas		251	4	1	281	0	1	1	1549	0.38
Liberty		28	3	1	90	6	0	12	10548	0.66
,	146	177	3	1	59	11	0	13	15074	0.50
Live Oak		254	1	1	281	5	0	7	7477	0.54
Lubbock		52	7	1	84	8	0	13	9050	0.84
	152	53	1	1	84	2	O	5	8849	0.33
	152	68	1	1	87	3	0	5	13574	0.21
	152	131	1	1	62	4	0	5	7833	0.37
	152	131	2	1	62	2	0	1	5659	0.10
	152	1	1	1 1	62	11	0	14	11420	0.71

Table G.16. Continued

County		Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Lubbock		380	15	3	327	1	0	3	5170	0.34
Lynn		53	3	1	84	6	0	15	5740	1.52
	153	68	2	1	87	7	1	11	4486	1.43
	153	68	3	1	87	8	0	5	3685	0.79
Martin		5	16	1	80	1	0	3	2137	0.82
Matagorda		179	4	2	35	0	0	3	11302	0.15
	158	179	6	2	35	5	0	5	5668	0.51
McCulloch		70	6	1	87	0	O	1	3900	0.15
McLennan		49	1	2	6	5	0	18	7959	1.31
	161	55	7	1	84	4	0	6	7631	0.46
	161	55	8	1	84	2	0	2	17491	0.07
	161	162	1	1	84	1	0	1	11896	0.05
	161	258	9	2	6	11	0	11	14692	0.44
Medina		24	5	1	90	2	0	4	7927	0.29
	163	24	6	1	90	4	1	7	8633	0.47
Midland		5	2	1	80	0	0	4	17090	0.14
	165	5	3	1	80	1	0	1	7383	0.08
	165	1188	2	3	250	1	0	2	9589	0.12
	165	2296	2	2	191	11	Ö	18	8888	1.18
Montague		13	5	1	81	7	0	6	8279	0.42
	169	44	6	1	82	2	Ö	1	3292	0.18
	169	224	3	1	287	6	Ö	8	9552	0.49
Montgomer	y	177	5	1	59	26	3	37	32073	0.67
Moore		66	4	1	287	12	1	12	7188	0.97
	171	66	5	1	87	12	0	25	8940	1.63
Morris		222	3	2	11	1	0	2	4531	0.26
Nacogdoche	es	175	7	16	59	o	o	1	7620	0.08
	174	175	8	16	59	o	0	1	15237	0.04
	174	176	1	1	59	7	Ó	16	17424	0.53
	174	2560	1	1	59	1	0	3	13365	0.13
Navarro		92	13	15	45	1	0	4	7747	0.30

Table G.16. Continued

Coun	tv	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Navarro		163	1	2	31	1	0	2	8923	0.13
	175	163	2	2	31	4	0	5	6410	0.45
Nolan		53	12	1	84	7	0	16	5537	1.68
Nueces		102	1	2	44	1	0	9	15854	0.33
	178	102	2	2	44	1	0	2	13768	0.08
	178	102	2	1	77	10	0	6	11136	0.31
	178	102	3	1	77	14	0	15	11618	0.75
	178	373	2	2	44	6	1	8	9552	0.49
	178	373	3	2	44	0	0	2	6706	0.17
Orange		306	2	2	73	1	0	2	19110	0.06
Palo Pint	。	11	10	1	180	2	0	1	1094	0.53
Panola		63	3	1	59	6	0	6	6541	0.53
	183	63	4	1	59	1	0	1	7288	0.08
Parker		8	2	1	180	9	0	16	7847	1.19
	184	8	3	1	80	7	0	5	13984	0.21
	184	80	6	1	377	5	0	7	12285	0.33
	184	171	3	2	199	1	0 _	2	12415	0.09
Parmer	,,,,,	52	1	1	70	2	1	6	4298	0.81
Polk		176	4	1	59	11	) o	14	14833	0.55
	187	176	5	1	59	24	1	31	13418	1.34
	187	176	6	16	59	0	0	2	5752	0.20
	187	177	1	1	59	17	1	25	15742	0.92
	187	213	3	1	190	4	0 _	12	8884	0.79
Potter		41	7	1	87	0	1	3	12282	0.14
	188	42	1	1	287	2	0	2	6020	0.19
	188	90	5	15	40	0	0	1	5295	0.11
	188	2635	1	3	335	6	0	6	5665	0.62
Rains		203	3	1	69	0	1	1	3190	0.18
Randall		67	1	1	87	1	0	3	8879	0.20
	191	168	8	1	60	4	0	9	6215	0.84
	191	168	9	1	60	5	0	9	18180	0.29

Table G.16. Continued

Count	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatallties	Accidents	ADT	Accident Data
Randall		2635	3	3	335	0	0	2	2360	0.49
Refugio		371	2	1	77	24	0	22	7657	1.67
	196	371	3	1	77	4	0	8	9177	0.51
Runnels		34	5	1	83	1	0	1	2093	0.28
	200	78	1	1	67	4	1	11	1840	3.48
Rusk		138	2	1	259	1	0	8	8269	0.56
	201	138	3	1	259	2	0	3	7660	0.23
	201	138	4	1	259	4	0	4	6019	0.39
	201	138	5	1	259	8	0	7	5674	0.72
San Jacir	ito	177	2	1	59	13	0	24	15881	0.88
San Patri	Iclo	74	12	3	459	1	0	1	3950	0.15
	205	87	4	2	359	1	0	1	3865	0.15
	205	101	3	1	181	1	0	2	8446	0.14
	205	101	4	1	181	8	٥	7	12948	0.31
	205	180	6	2	35	2	1	5	11661	0.25
	205	180	10	2	361	3	0	5	7650	0.38
	205	371	4	1	77	4	0	3	6993	0.25
	205	372	1	1	77	11	0	17	11480	0.86
Scurry		53	7	1	84	12	2	10	5464	1.06
	208	53	8	1	84	2	0	3	5790	0.30
	208	53	9	1	84	6	Ö	8	5179	0.90
	208	53	10	1	84	5	0	4	5402	0.43
Shelby		63	6	1	59	0	0	1	7274	0.08
	210	175	4	1	59	1	Ö	1	6049	0.10
Sherman		66	3	1	287	6	0	9	3561	1.47
Smith		164	4	2	31	4	O	7	13236	0.31
	212	165	1	1	271	0	Ö	1 1	12778	0.05
	212	165	2	1	271	1	0	4	3988	0.58
	212	190	5	1	69	1	Ö	2	16030	0.07
	212	191	1	1	69	7	0	5	15434	0.19
	212	1790	2	3	323	4	1	5	16255	0.18

Table G.16. Continued

Count	y	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Smith		2075	1	3	323	2	0	1	14757	0.04
Sterling		69	3	1	87	0	0	4	5422	0.43
Swisher		67	18	1	87	0	0	1	4836	0.12
Tarrant		13	10	16	287	2 *	0	2	11610	0.10
,	220	14	15	1	81	8	0	11	13587	0.47
	220	80	7	1	377	3	0	4	16214	0.14
	220	353	3	2	114	4	0	9	31051	0.17
Taylor		34	1	1	83	2	0	6	14636	0.24
Terry		227	7	1	62	5	0	7	7415	0.55
	223	228	1	1	62	3	0	6	5076	0.69
·	223	380	3	1	62	1	0	2	5793	0.20
Tom Gree	n	69	6	1	87	4	0	6	4173	0.84
	226	69	7	1	87	11	0	10	10053	0.58
	226	70	2	1	87	11	0	11	8564	0.75
	226	158	2	1	67	6	0	11	5015	1.28
	226	264	7	3	306	0	0	2	4455	0.26
Travis		113	13	3	360	1	0	2	35111	0.03
	227	114	2	1	290	3	0	6	16026	0.22
	227	265	1	2	71	1	0	7	26232	0.16
	227	265	2	2	71	3	1	9	15025	0.35
	227	3417	1	5	734	0	0	1	11100	0.05
Upshur		392	2	1	259	2	2	5	6373	0.46
Val Verde	,	22	10	1	90	1	o o	1	12997	0.04
	233	23	1	1	90	1	Ó	1	9865	0.06
Van Zandi		95	7	1	80	1	0	2	4762	0.24
Victoria		88	4	1	59	0	Ó	1	12781	0.05
	235	88	5	3	175	. 9	0	9	8607	0.61
	235	89	1	1	59	19	0	16	14234	0.65
	235	144	2	1	87	1	Ö	1	4955	0.12
	235	371	1 1	1	77	6	1	11	7183	0.89
	235	371	6	3	91	Ιo	0	1	5860	0.10

Table G.16. Continued

Coun	ty	Control	Control	Highway	Highway		Number		Mean	Normalized
Name	No.	Number	Section	Type	Number	Injuries	Fatalities	Accidents	ADT	Accident Data
Victoria		432	2	2	185	16	0	19	10859	1.02
Waller		50	4	2	6	5	0	10	6640	0.88
	237	114	11	1	290	6	0	13	7586	1.00
Ward		292	4	2	18	2	0	2	5471	0.21
Washingto	on	114	9	1	290	9	0	9	7281	0.72
	239	114	10	1	290	8	0	10	7982	0.73
	239	186	6	2	36	0	0	1	10442	0.06
	239	186	6	1	290	5	0	13	5050	1.50
Wharton		89	6	1	59	32	2	26	11781	1.28
	241	89	8	1	59	4	0	19	14141	0.78
	241	89	10	3	183	0	0	1	4450	0.13
Wichita		43	8	1	287	6	0	11	8738	0.73
	243	43	9	1	287	0	0	2	12212	0.10
	243	43	17	16	287	1	0	1	7249	0.08
Wilbarge	r	43	5	1	287	2	1	5	7628	0.38
	244	43	6	1	70	7	0	14	9082	0.90
	244	43	7	1	287	2	0	7	8749	0.47
Willacy		327	10	1	77	8	0	17	6735	1.47
Williamso	on	683	1	5	620	1	0	2	12931	0.09
	246	3417	2	5	734	0	0	2	???	#VALUE!
Wilson		100	3	1	181	2	0	8	6995	0.66
	247	100	4	1	181	3	0	1	5168	0.11
Winkler		292	2	2	18	0	0	1	4331	0.13
Wise		13	6	1	81	2	2	3	11592	0.15
	249	13	7	1	81	7	1	13	7365	1.03
	249	13	8	1	81	14	0	29	14278	1.18
	249	134	7	1	380	2	Ö	5	7205	0.40
	249	352	2	2	114	1	0	1	8953	0.06
Wood		96	1	1	80	6	0	7	3504	1.16
	250	96	2	1	80	2	0	1	3292	0.18

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## **APPENDIX H:**

Problem Indicator Plots for Two Arbitrarily Selected Control Sections/County-Length Sections from Each TxDOT District

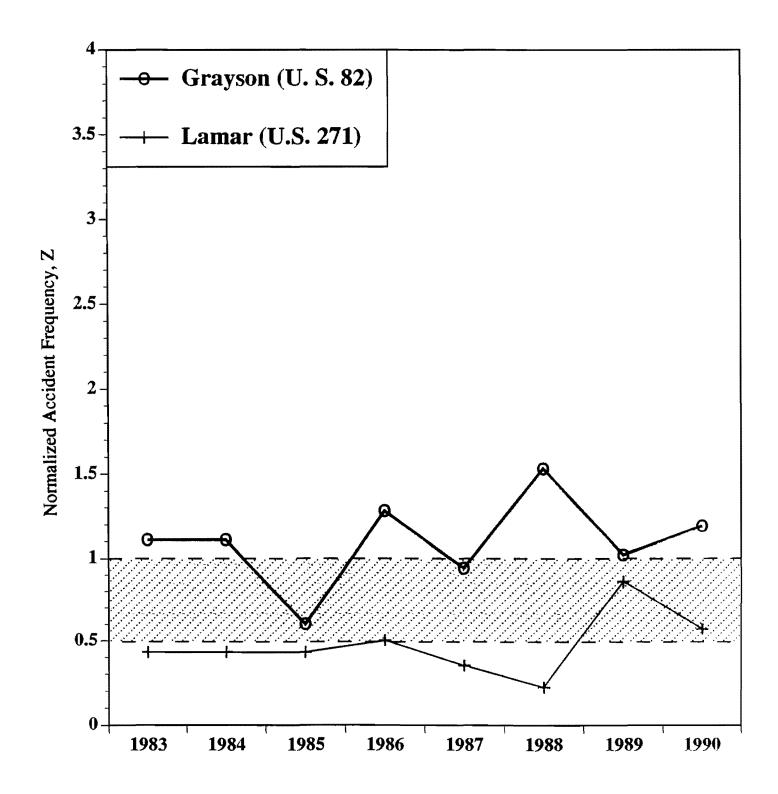


Fig. H.1. Normalized accident data for selected control sections in TxDOT District 1.

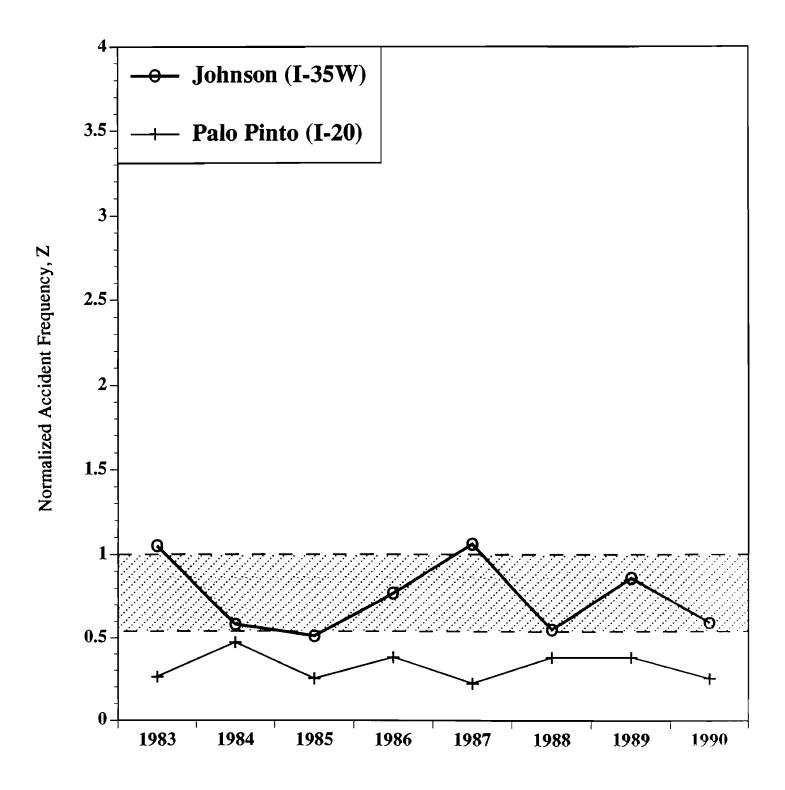


Fig. H.2. Normalized accident data for selected control sections in TxDOT District 2.

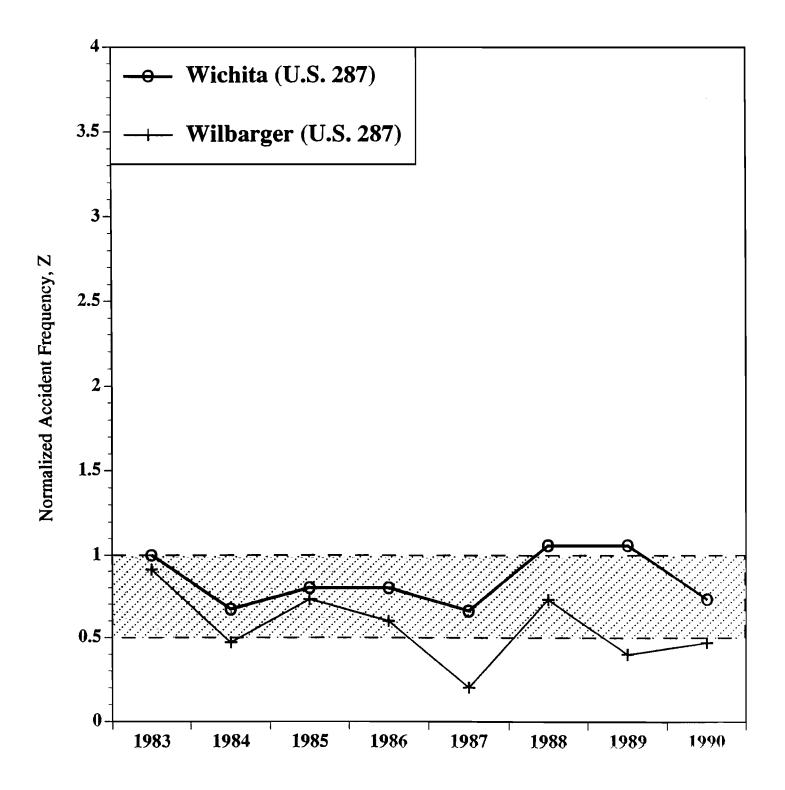


Fig. H.3. Normalized accident data for selected control sections in TxDOT District 3.

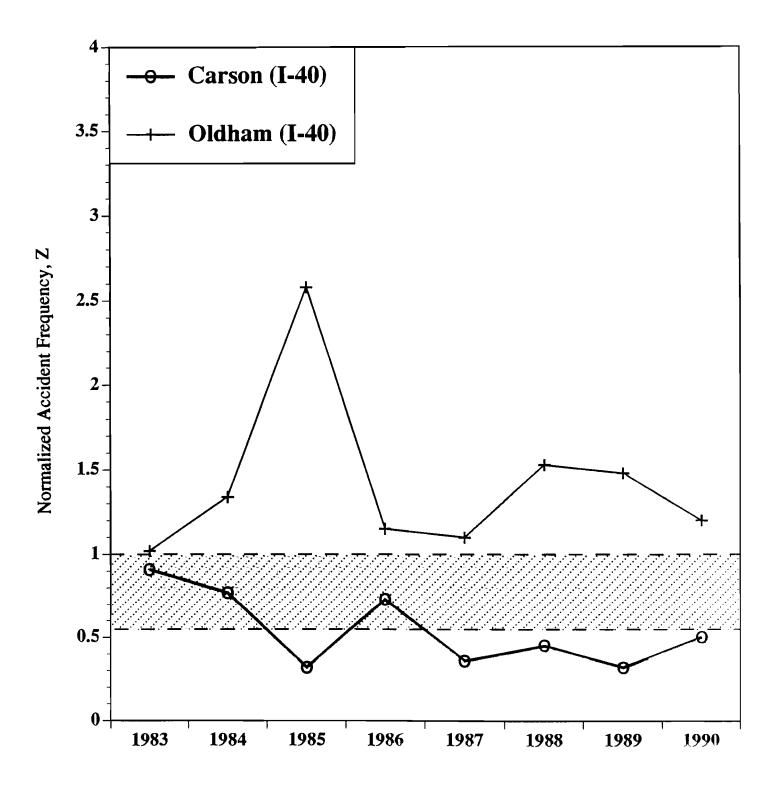


Fig. H.4. Normalized accident data for selected control sections in TxDOT District 4.

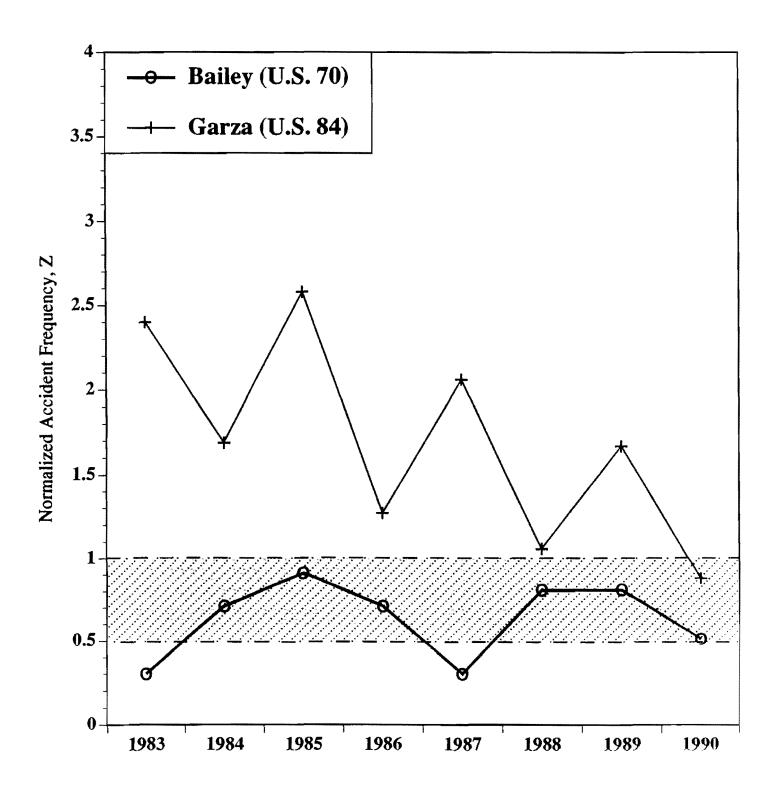


Fig. H.5. Normalized accident data for selected control sections in TxDOT District 5.

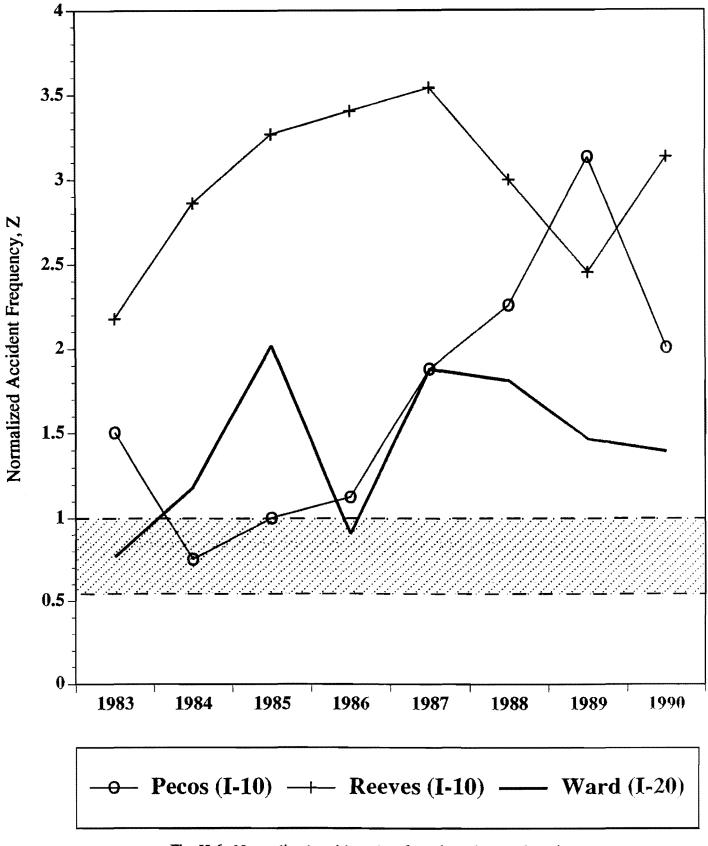


Fig. H.6. Normalized accident data for selected control sections in TxDOT District 6.

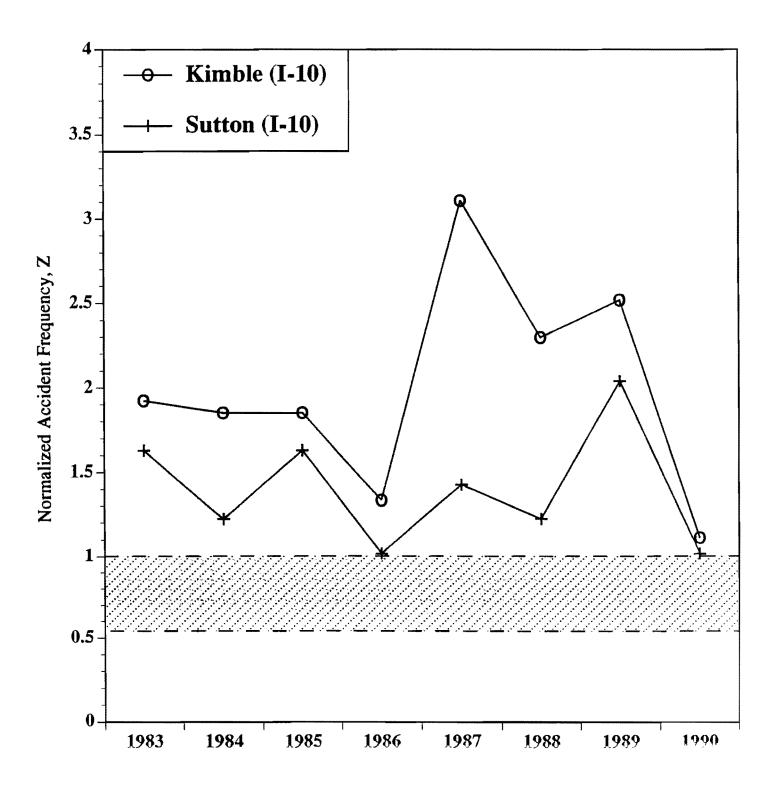


Fig. H.7. Normalized accident data for selected control sections in TxDOT District 7.

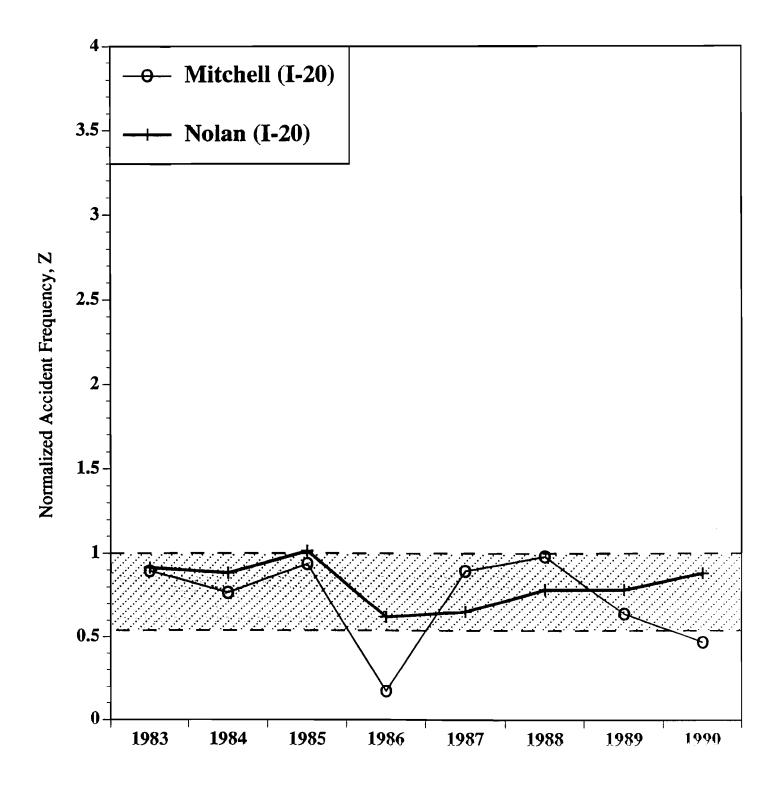


Fig. H.8. Normalized accident data for selected control sections in TxDOT District 8.

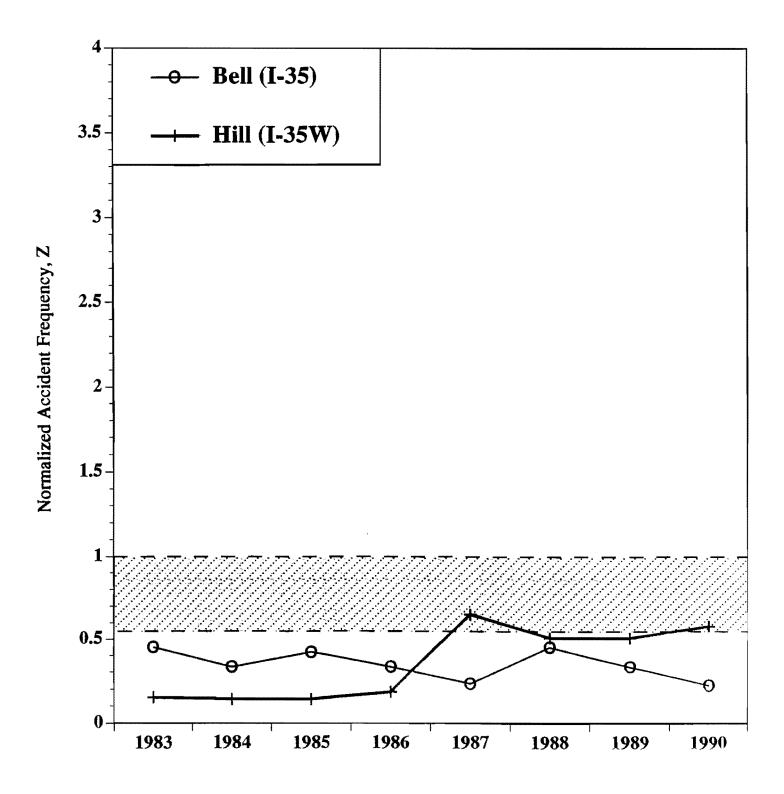


Fig. H.9. Normalized accident data for selected control sections in TxDOT District 9.

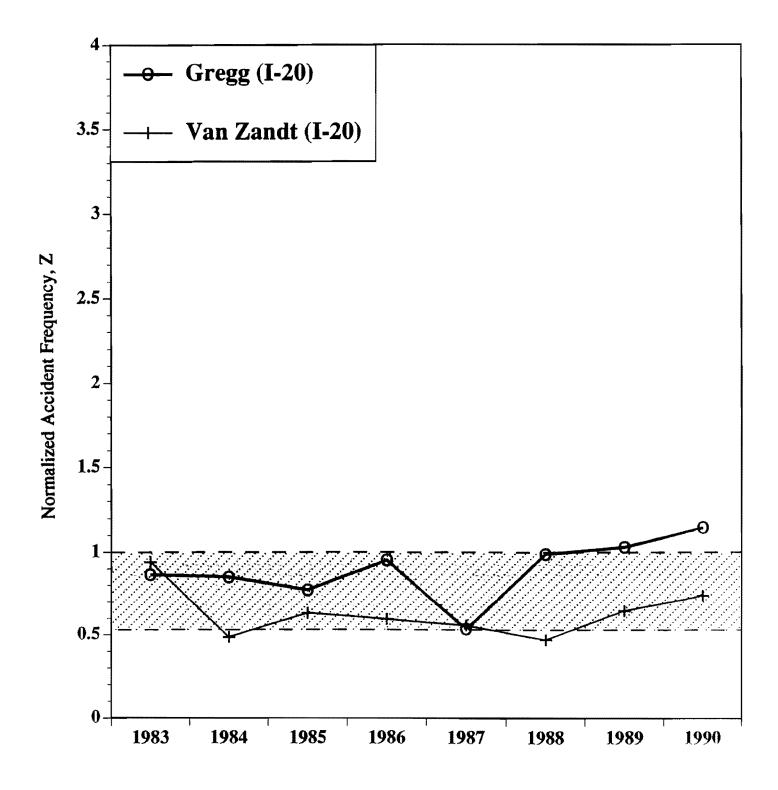


Fig. H.10. Normalized accident data for selected control sections in TxDOT District 10.

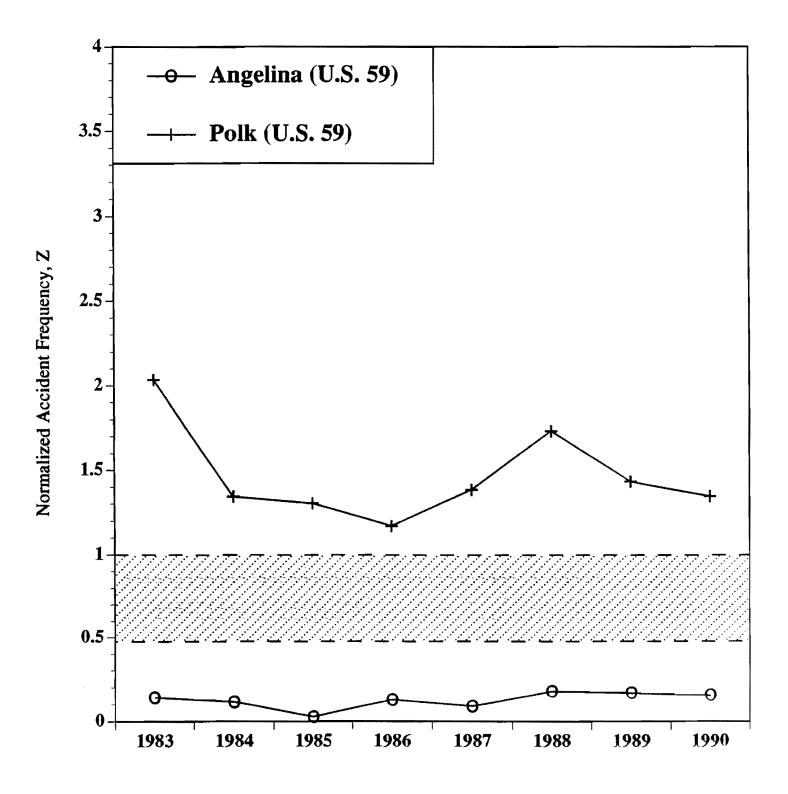


Fig. H.11. Normalized accident data for selected control sections in TxDOT District 11.

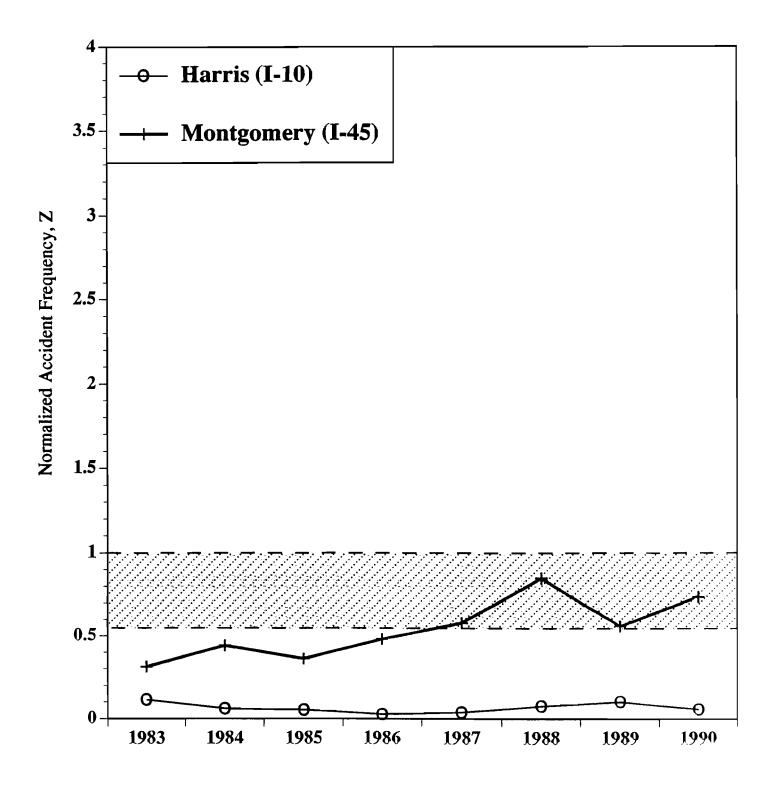


Fig. H.12. Normalized accident data for selected control sections in TxDOT District 12.

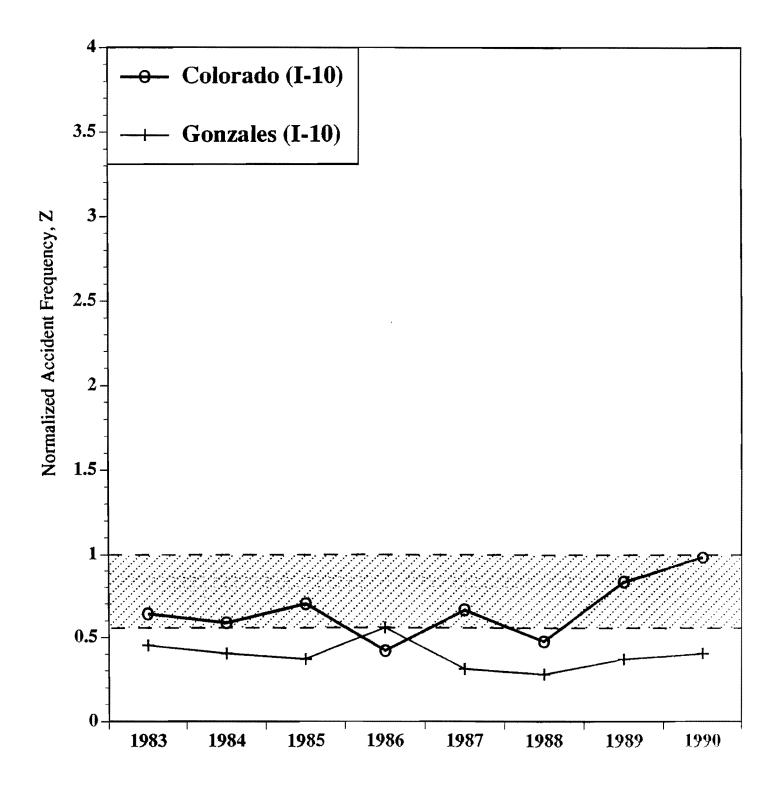


Fig. H.13. Normalized accident data for selected control sections in TxDOT District 13.

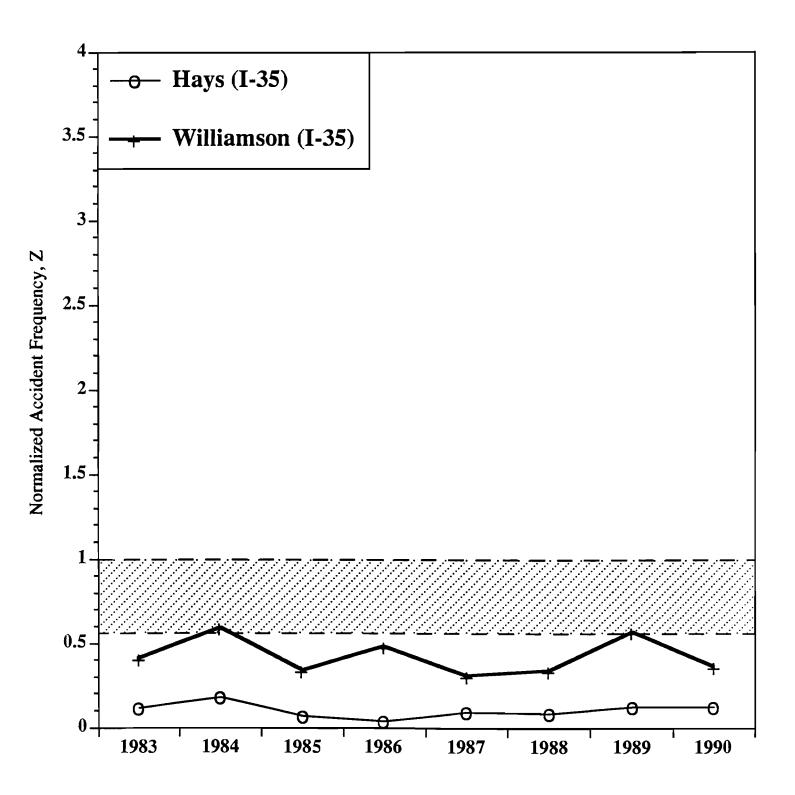


Fig. H.14. Normalized accident data for selected control sections in TxDOT District 14.

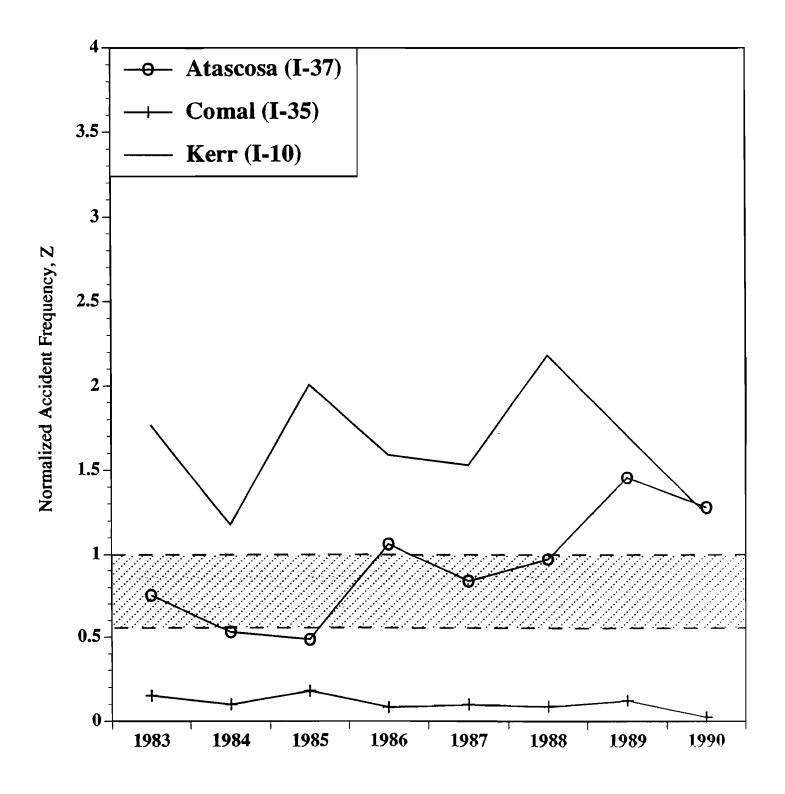


Fig. H.15. Normalized accident data for selected control sections in TxDOT District 15.

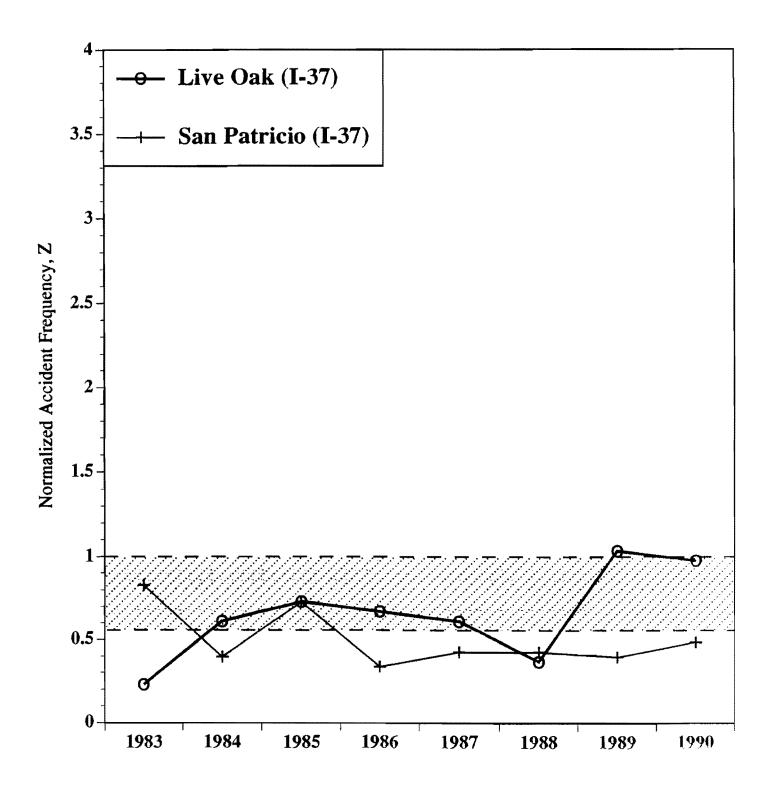


Fig. H.16. Normalized accident data for selected control sections in TxDOT District 16.

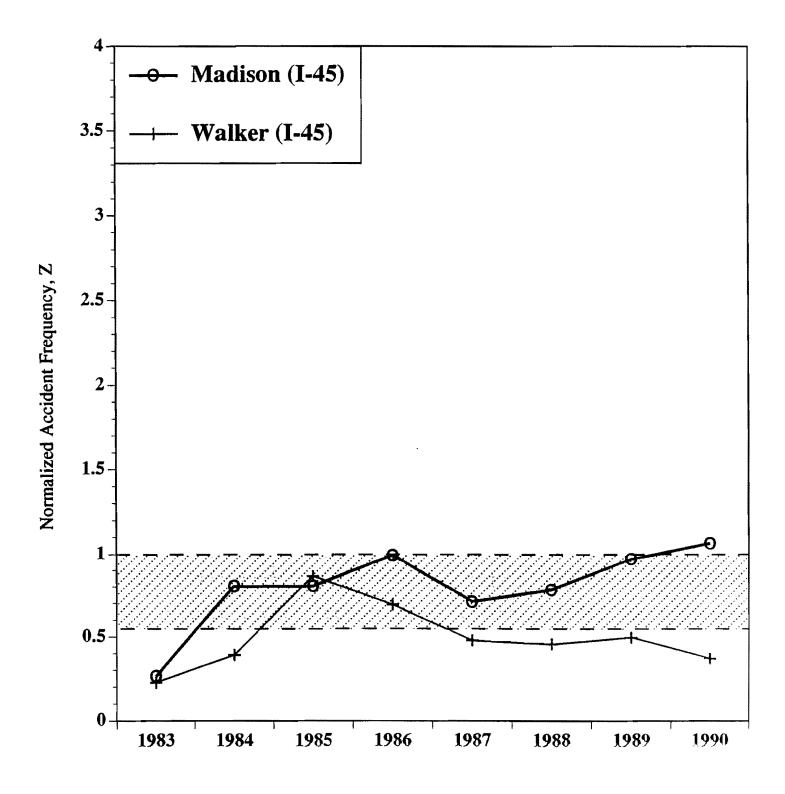


Fig. H.17. Normalized accident data for selected control sections in TxDOT District 17.

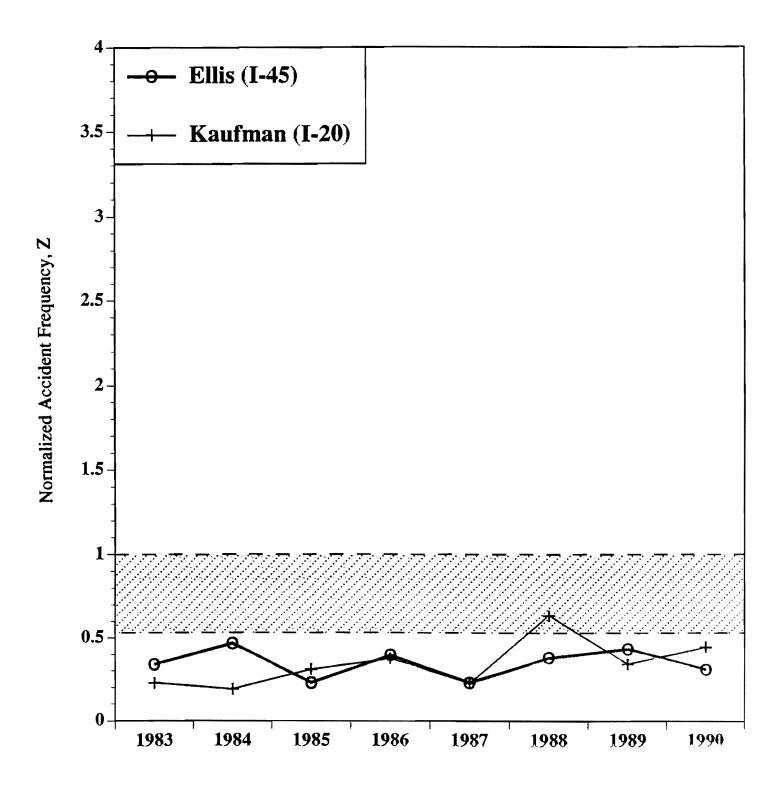


Fig. H.18. Normalized accident data for selected control sections in TxDOT District 18.

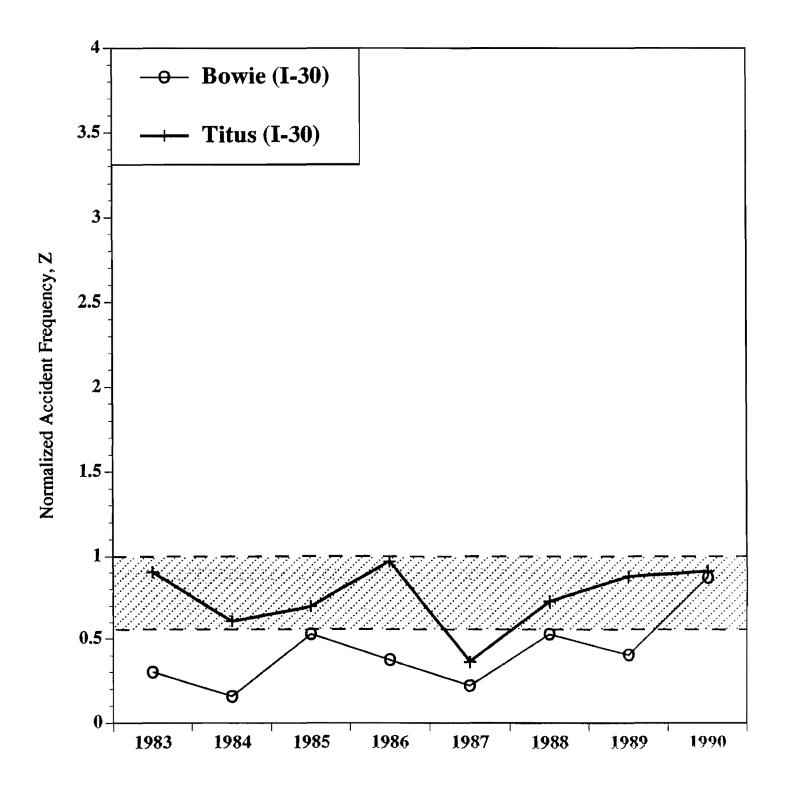


Fig. H.19. Normalized accident data for selected control sections in TxDOT District 19.

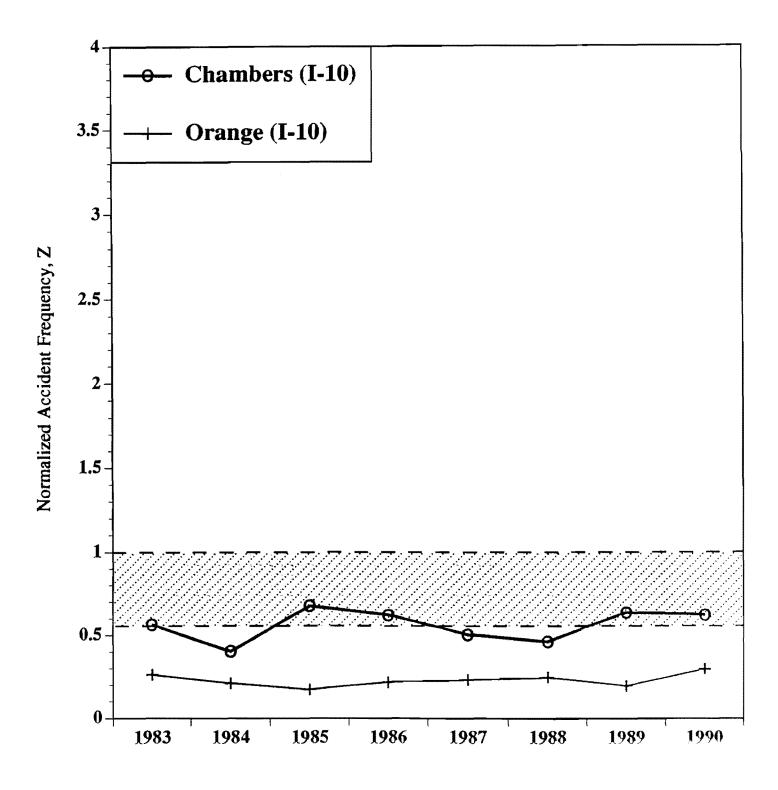


Fig. H.20. Normalized accident data for selected control sections in TxDOT District 20.

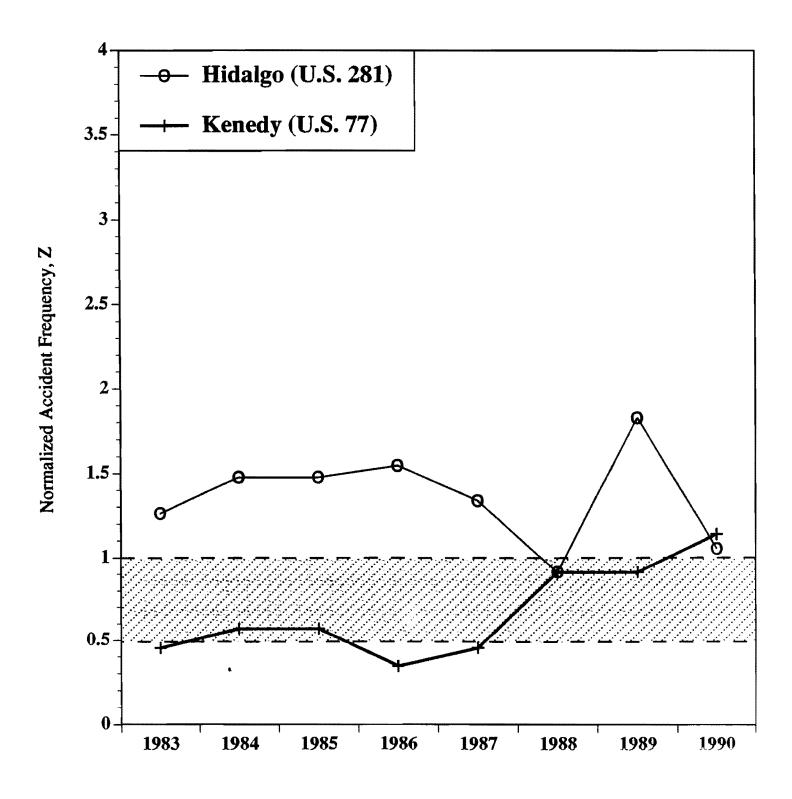


Fig. H.21. Normalized accident data for selected control sections in TxDOT District 21.

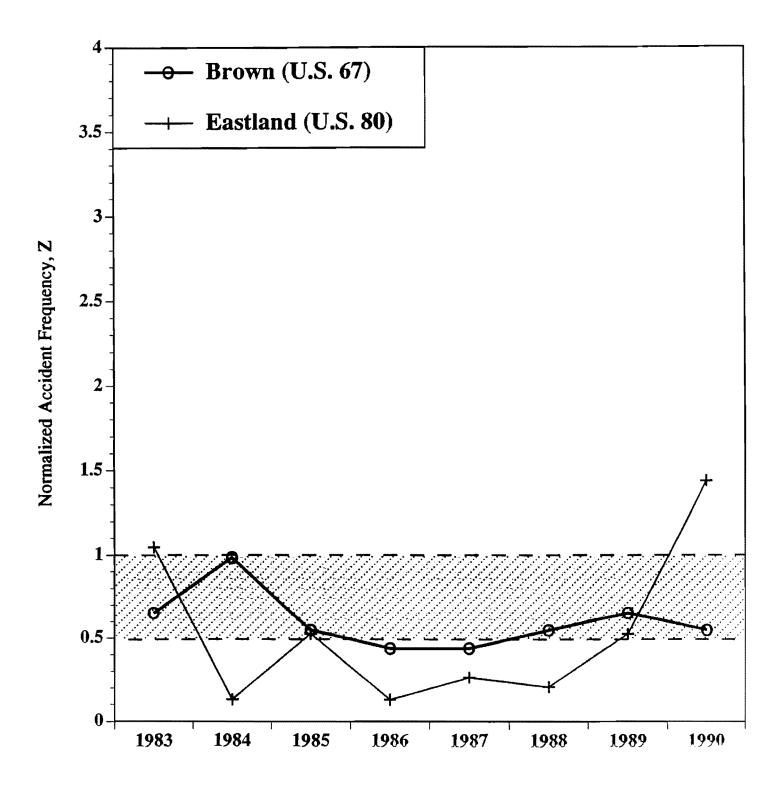


Fig. H.22. Normalized accident data for selected control sections in TxDOT District 23.

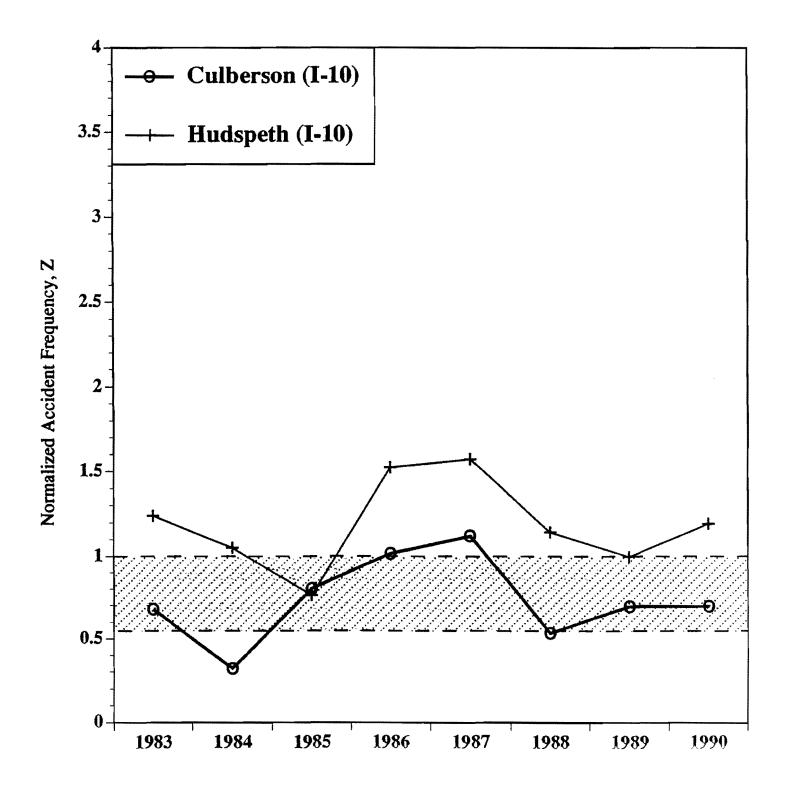


Fig. H.23. Normalized accident data for selected control sections in TxDOT District 24.

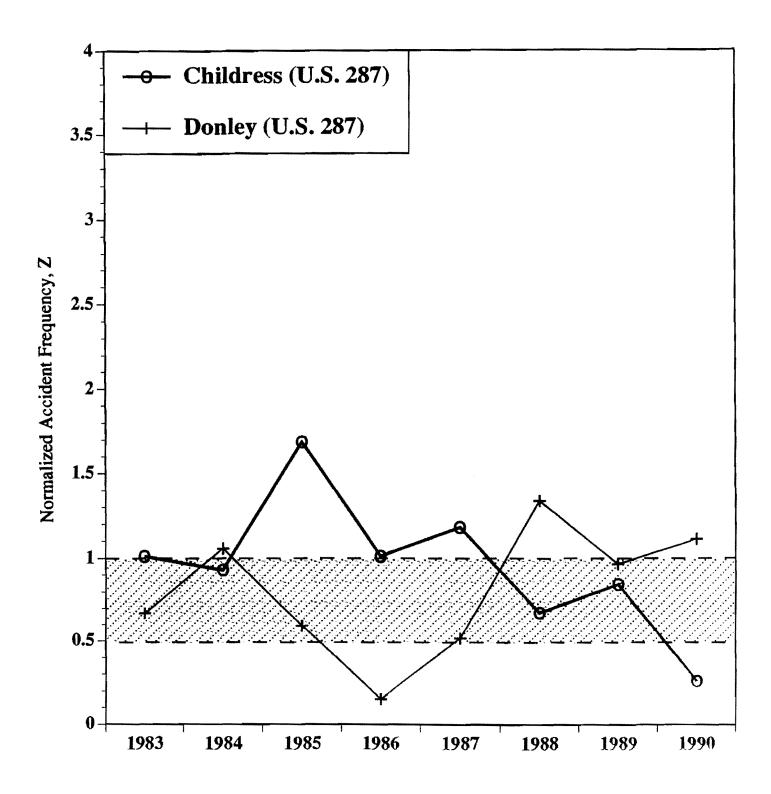


Fig. H.24. Normalized accident data for selected control sections in TxDOT District 25.