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**SURVEY OF ATTITUDES TOWARD THE TEXAS STATE  
DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION**

by

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**Research Report 1187-1F  
Research Study Number 2-16-87-1187  
Public Attitude Survey and Analysis  
of SDHPT Activities**

Sponsored by

**Texas State Department of  
Highways and Public Transportation**

in cooperation with

**U.S. Department of Transportation  
Federal Highway Administration**

November 1988



# METRIC (SI\*) CONVERSION FACTORS

## APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
<b>LENGTH</b>				
in	inches	2.54	millimetres	mm
ft	feet	0.3048	metres	m
yd	yards	0.914	metres	m
mi	miles	1.61	kilometres	km

<b>AREA</b>				
in <sup>2</sup>	square inches	645.2	millimetres squared	mm <sup>2</sup>
ft <sup>2</sup>	square feet	0.0929	metres squared	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.836	metres squared	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.59	kilometres squared	km <sup>2</sup>
ac	acres	0.395	hectares	ha

<b>MASS (weight)</b>				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams	Mg

<b>VOLUME</b>				
fl oz	fluid ounces	29.57	millilitres	mL
gal	gallons	3.785	litres	L
ft <sup>3</sup>	cubic feet	0.0328	metres cubed	m <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.0765	metres cubed	m <sup>3</sup>

NOTE: Volumes greater than 1000 L shall be shown in m<sup>3</sup>.

## TEMPERATURE (exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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## APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
<b>LENGTH</b>				
mm	millimetres	0.039	inches	in
m	metres	3.28	feet	ft
m	metres	1.09	yards	yd
km	kilometres	0.621	miles	mi

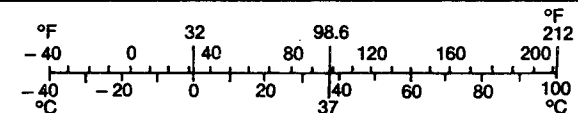
<b>AREA</b>				
mm <sup>2</sup>	millimetres squared	0.0016	square inches	in <sup>2</sup>
m <sup>2</sup>	metres squared	10.764	square feet	ft <sup>2</sup>
km <sup>2</sup>	kilometres squared	0.39	square miles	mi <sup>2</sup>
ha	hectares (10 000 m <sup>2</sup> )	2.53	acres	ac

<b>MASS (weight)</b>				
g	grams	0.0353	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams (1 000 kg)	1.103	short tons	T

<b>VOLUME</b>				
mL	millilitres	0.034	fluid ounces	fl oz
L	litres	0.264	gallons	gal
m <sup>3</sup>	metres cubed	35.315	cubic feet	ft <sup>3</sup>
m <sup>3</sup>	metres cubed	1.308	cubic yards	yd <sup>3</sup>

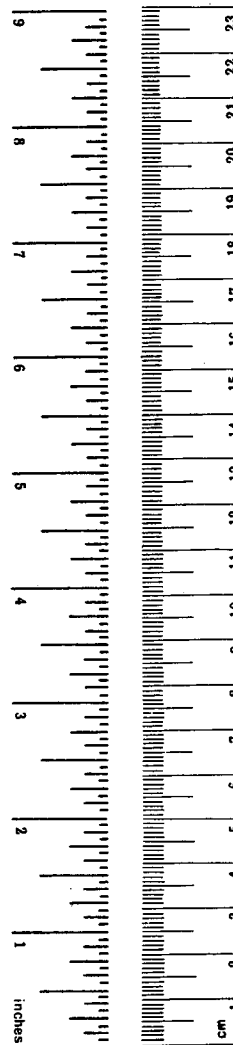
## TEMPERATURE (exact)

°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F
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These factors conform to the requirement of FHWA Order 5190.1A.

\* SI is the symbol for the International System of Measurements





## PREFACE

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The contents of this report reflect the views of the authors and do not necessarily reflect the official views or policies of the Federal Highway Administration or the Texas State Department of Highways and Public Transportation. This report does not constitute a standard, a specification, or a regulation.

## EXECUTIVE SUMMARY

This report documents the results of a telephone survey of 9,714 Texans conducted in the Fall of 1987 to determine attitudes toward the Texas State Department of Highways and Public Transportation (SDHPT) and its operations. The survey was designed to assess the overall image of the SDHPT among the public, and more specifically to identify misconceptions, information deficiencies, and perceived strengths and weaknesses of the Department at District and State levels. Subject areas addressed by the survey and described and included in this report are: effectiveness of SDHPT, quality of Texas roadways, knowledge about funding for SDHPT, and opinions toward various activities of the SDHPT.

In general, the majority of Texans think the Highway Department is doing a good job (73%); the majority rate Texas' highways as better than average (68%); and almost half (49%) believe that Texas' highways are better than highways in other states. The conclusion was that the SDHPT has a positive image overall in the State of Texas.



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**SURVEY OF ATTITUDES TOWARD THE TEXAS STATE  
DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION**

**INTRODUCTION**

The Texas State Department of Highways and Public Transportation (SDHPT) has historically received strong grass roots support for its highway programs for Texas. The rural (FM System) road program, the Federal/State Primary and Secondary System, and the Interstate System have each had their individual prominence in the minds of Texas voters. Today, however, the Texas citizenry is involved in the support of a large highway maintenance, construction, and rehabilitation expenditure program that lacks the appeal inherent in something that is new and exciting (such as the Interstate System), or was clearly needed to "get the farmer out of the mud" (such as the FM System). It is possible that much of Texas' populace, particularly young and newly arrived Texans, take for granted both the role that highways have in today's society and role of the agency responsible for this system. Their focus is likely to be on problem areas of highway service, for example, urban congestion, potholes or other pavement failures, or delays due to maintenance or improvement.

As the SDHPT plans its activities for the next 20 years, it is important to have public support for implementation of its programs to construct, maintain, and rehabilitate the State's highway facilities. For this reason, a statewide assessment of public opinion of the SDHPT and its activities was undertaken. The purpose of this assessment was to provide SDHPT with information as to its overall image among Texans, to identify misconceptions, and to ascertain the level of knowledge among the Texas citizenry for certain issues of importance to the Department.

**SURVEY METHOD**

A telephone survey of adults in 9,714 households was conducted September 5 through November 6, 1987. As a first step in defining survey parameters, an SDHPT task force was established to guide the development of the study and to assist in the identification of salient issues to be addressed in the public attitude survey. Next, a mail-out questionnaire was administered to SDHPT District Public Affairs Officers. The mail-out survey was followed by

telephone calls, to yield a 96 percent participation rate from the Districts. The survey results were analyzed to determine subject areas of interest throughout the State. The telephone survey instrument was designed using the information obtained from the Districts and the task force. The questionnaire included open-ended, fixed response, attitude scaling, and rank evaluation questions (see APPENDIX A). Subject areas addressed in the survey and described in this report included: quality of Texas highways, effectiveness of SDHPT, needs for improvement, responsibilities of SDHPT, knowledge about funding for SDHPT, and attitudes toward various services and activities of the SDHPT.

### Survey Administration

The telephone survey was administered by the Public Policy Resources Laboratory at Texas A&M University. Calls were made between 6 p.m. and 9 p.m., Monday through Friday and on weekends between 1 p.m. and 9 p.m. A minimum of 400 respondents were interviewed from each District, for a total sample size of 9,714.

The survey sample was selected from among all working blocks of all telephone exchanges in each county using a random sampling procedure. The percent of households with telephones varied from a low of 81 percent in District 21 to a high of 93 percent in District 2.

After a residential household was reached, the respondent was selected using the "last birthday" method. The interviewer asked to speak to the person 18 years of age or older who had the most recent birthday. This technique randomizes within households, which is necessary to avoid the potential bias presented by a tendency for females within households to answer the phone more often than males.

The response rate was 76 percent. That is, 24 percent of households reached refused to participate in the survey. Four attempts were made to reach each number before that number was replaced. One attempt was made by survey supervisors to convert each refusal.

The respondents were asked to answer 60 questionnaire items. 45 of the questions covered subjects related to SDHPT. The remaining 15 questions were designed to provide data about the respondent. The duration of the interviews averaged between 10 and 20 minutes.

## Sample Characteristics

The sample used for the statewide survey was of sufficient size that sampling error was quite small. In 95 out of 100 such samples, the results should differ by no more than 2 percentage points in either direction from what would have been obtained if every telephone number in the State had been dialed.

The sample surveyed represented a reasonable approximation of the adult population in Texas. Table 1 provides a breakdown of demographic variables for the sample. As indicated in the table, 44 percent of the respondents were male and 56 percent were female. Females are more likely to be over-represented in telephone surveys for several reasons. First, there are slightly more females in the population than males. Second, there are more single person households that are females, thus increasing the likelihood of contacting females. Finally, previous research has shown that females are less apt to refuse to participate in surveys than males.

In regard to ethnicity, the sample was somewhat over-represented by Anglos and persons in the category designated as Other, and under-represented by Blacks and Hispanics. According to 1985 U.S. Bureau of the Census estimates, Anglos represented approximately 65 percent of the Texas population, Hispanics represented approximately 22 percent, Blacks represented approximately 12 percent, and all Others totalled less than two percent of the Texas population. Therefore, the Black and Hispanic representation in this survey was three and four percent, respectively, less than their representation in the general population of Texas. These segments of the population are often under-represented in random telephone surveys because they have fewer households with telephones. In addition, Black and Hispanic households have fewer adults per household than Anglo households. In an effort to maximize the response rate for Hispanics, interviews were conducted in Spanish when necessary, which was 4.3 percent of the time.

The age breakdown of the survey sample corresponded fairly well with the age composition of the State. No single age group was skewed in this sample. The median age for the survey respondents was 41.

Table 2 describes the survey sample in terms of socioeconomic status. The sample was somewhat higher educated than the Texas population. According to the 1980 U.S. Census, 13.7 percent of the statewide population had college

degrees, compared to the 23 percent with college education for the sample.

Table 1. Demographic Description of Survey Sample

---

<u>Gender</u>	
Male	44.4
Female	55.6

<u>Ethnicity</u>	
Anglo	68.7
Black	9.3
Hispanic	17.5
Other	3.6

<u>Age</u>	
18-25	19.3
26-35	25.6
36-45	19.7
46-55	13.0
56-65	10.5
66-75	7.5
76+	3.2

---

The income distribution for the sample given in Table 2 indicates that each income category received adequate representation. Four percent of the respondents refused to give their household income, and eight percent did not know their household income. The median income per household for those who responded to this question was \$30,892, which was higher than the median for the State. The median household income in Texas in 1987 was estimated at \$22,225 (U.S. Department of Commerce, 1988). Again, under-representation of low-income households is a function of the lower proportion of households with telephones among this socioeconomic group.

Of those who gave their occupation, 37 percent were in professional or administrative occupations (white collar workers), and 59 percent were clerical workers, service workers, laborers, and other blue collar workers. Three percent of the sample were drivers by profession.

Other background information collected indicated that approximately 55 percent of the sample were native Texans. Over 70 percent were homeowners.

And, 74 percent professed to be registered voters.

Table 2. Survey Sample Socioeconomic Characteristics

---

<u>Education Levels</u>	
	<u>%</u>
Less than high school	17.8
High school graduate	34.0
Some college	24.3
College graduate	16.9
Graduate degree	6.4

<u>Income Levels</u>	
Under \$10,000	11.7
\$10,000 to \$19,999	18.5
\$20,000 to \$29,999	18.4
\$30,000 to \$39,999	15.3
\$40,000 to \$49,999	9.0
Over \$50,000	15.1

<u>Occupations</u>	
White Collar	37.0
Blue Collar	59.3

---

In summary, the sample characteristics were, on the whole, fairly representative of the Texas adult population. However, given the telephone survey technique and its inherent biases, the sample contained slightly more females and slightly fewer Blacks and Hispanics than the Texas adult population at large. The sample also tended to be more educated and have higher incomes than average for Texas. These differences should be noted. However, they were not problematic since the focus of the survey was on prevailing attitudes and determining relationships between attitudes and other variables. The magnitude of data available for each sample characteristic was sufficient to describe such relationships. APPENDIX B is a table that further describes the sample in terms of several of the demographic variables of interest in the analysis of the attitudinal data.

The completed data set was adjusted to provide more accurate descriptions of statewide results. A weight was applied for each Highway Department District. These weights adjust the value of each response so that when the

data is used to describe statewide opinions, each District's representation is given the proportion it should have, based on its share of the population. Additionally, a weight was factored in for the purpose of levelling the effect of household size. Ideally, the use of a random sample of telephone numbers to represent households gives every household an equal chance of being selected into the sample. If only one person per household is selected for interviewing, a person who lives in a household comprised of only one adult has a greater chance of being selected into the sample than a person in a four-person household (Trolldahl, 1964). Therefore, because this survey was intended to estimate the adult population rather than the household population, a weight was applied.

## **SURVEY RESULTS**

The results of the attitude survey were analyzed according to subject matter. The approach used to analyze each subject area was to describe the response frequencies and to examine the significant variations among respondents. Chi-square tests of significance were used to identify significant differences among the distributions, with a significance level set at  $p < .01$ . Analysis of Variance was used to identify interaction effects for several questions that involved roadway evaluations. A regression analysis revealed no greater explanatory power over the chi-square tests. The distribution of responses for each question is provided as APPENDIX C.

### **Attitudes Toward SDHPT**

A segment of the questionnaire consisted of questions designed to assess the overall image held by the people of Texas of the SDHPT as a public agency. First, respondents were asked how they would describe the job SDHPT is doing. Thirteen percent of the respondents said they thought the Department is doing an excellent job. The majority, 59.5% said the Department is doing a good job. Only three percent of those surveyed thought the Department is doing a poor job, while 23 percent said the job the Department is doing is only fair.

Table 3 provides responses for three questions regarding the public view of SDHPT. The survey showed SDHPT to be well regarded by Texans: 56 percent believed the Department is managed efficiently, and 66 percent said they feel



they are getting their money's worth from the Department. 44 percent gave the Highway Department higher marks than other State agencies in meeting goals. Over 18 percent of the respondents said they did not know if the Highway Department is more effective in meeting the public's goals than other State agencies. This was considered to be an indication that respondents were reporting their attitudes reliably in contrast to providing socially acceptable responses.

The opinion held by people who had actually had contact with the Highway Department was solicited. Twenty-six percent of the sample, or 2515 people had contacted what they considered to be their local SDHPT office either by letter, phone, or mail. (Over one-third who reported contact with SDHPT gave responses that indicated they probably had contacted the Department of Public Safety, DPS, instead. This misconception will be discussed later in the report.)

Table 3. Responses to Questions About SDHPT as an Agency

<u>Question</u>	Percent Response				Strongly Disagree
	Strongly Agree	Agree	Neutral	Disagree	
The Highway Dept. is managed efficiently.	1.8	54.1	13.6	20.6	1.4
As a taxpayer, I feel I am getting my money's worth from the Highway Dept.	4.6	61.5	9.7	19.5	2.6
The Highway Dept. is more effective in meeting the public's goals than other State agencies.	1.5	42.4	23.0	14.0	.5

The opinion in regard to the Highway Department was very high for those who reported previous contact with the Department. Approximately 77 percent said the Highway Department's response to them was very good or good. Only 11 percent reported having been responded to in a negative way. These percentages reflect a positive rapport with the public in one-to-one contact.

As might be expected, there were some differences in opinion on the effectiveness of the Highway Department based on demographic characteristics.

Table 4 shows the statistically significant variables for the question, "would you describe the job that the State Highway Department is doing as excellent, good, only fair, or poor?" As shown in the table, a much greater percentage of the Anglo respondents (76 percent) saw the job the Department is doing as excellent or good. Black respondents rated the Department lowest (59 percent excellent or good). Males and registered voters were more favorable toward the Department. The middle age group and the higher income levels were also more likely to respond favorably to this question. Finally, as education increased, positive opinions of the way the Highway Department is doing its job increased.

Differences at the District level were also found for how the Highway Department is doing its job, in the opinion of those surveyed. The percent of respondents who rated the Department as "good" to "excellent" ranged from 66 percent to 81 percent across Districts. Districts that received the highest percentages of "good" and "excellent" responses were Districts 6, 7, 9, 14, and 23. No particular geographic region distinguished itself on this variable. Nor was there a discrepancy between urban and rural viewpoints on this variable.

The results by demographic characteristics for respondents who reported contact with SDHPT revealed similar relationships. That is, those that said they had contacted the Department nearest them and had received a favorable response were more likely to be Anglo, registered voters. Positive attitudes increased with education and age.

A departure from the previous two response patterns was found in response to the statement, "The Highway Department is managed efficiently." As indicated in Table 5, native Texans were much more likely to agree that the Highway Department is managed efficiently. Hispanics, more than any other ethnic group, agreed that the Highway Department is managed efficiently. Agreement with this statement also increased with age; however, in contrast to other questions about the Department, as income and education increased, positive responses decreased.

Table 4. Opinion of the Job SDHPT is Doing by Demographic Variables

	<u>Excellent</u>	<u>Good</u>	<u>Only Fair</u>	<u>Poor</u>
<u>Ethnicity</u>				
Anglo	14.4	63.1	19.1	2.0
Black	12.7	47.7	32.3	5.1
Hispanic	16.7	56.1	23.3	2.2
Other	12.2	54.8	27.4	3.0
<u>Gender</u>				
Male	15.9	59.9	20.6	2.6
Female	13.5	61.0	21.5	2.1
<u>Age</u>				
18-29 years	9.4	64.8	23.0	1.9
30-49 years	15.1	62.6	18.9	2.5
50-64 years	17.2	58.0	20.9	2.3
65 and over	17.4	53.6	22.6	2.3
<u>Income</u>				
Under \$10,000	15.7	52.8	26.3	2.8
\$10,000 to \$20,000	14.4	59.7	23.0	2.0
\$20,000 to \$30,000	12.8	64.2	19.9	2.0
\$30,000 to \$40,000	13.9	66.5	17.1	1.8
\$40,000 to \$50,000	15.5	64.1	17.4	2.1
\$50,000 and above	16.2	62.8	17.3	2.8
<u>Education</u>				
Less than high school	15.5	51.5	26.7	3.6
High school or some college	13.4	62.3	20.9	2.0
College degree(s)	16.6	65.1	15.6	1.8
<u>Voters</u>				
Registered	15.1	60.5	20.8	2.2
Non-registered	12.4	60.9	21.9	2.7

Table 5. Responses by Demographic Variables to "The Highway Department is Managed Efficiently"

	Percent Response				Strongly Disagree
	Strongly Agree	Agree	Neutral	Disagree	
<u>Texas Residence</u>					
Native	1.6	58.4	11.7	19.4	1.6
Non-native	2.9	44.9	18.7	22.5	1.2
<u>Ethnicity</u>					
Anglo	1.6	52.0	14.6	21.3	1.6
Black	1.6	52.5	11.2	24.8	1.7
Hispanic	2.7	66.3	10.5	14.2	.8
Other	3.7	44.0	18.2	25.5	.3
<u>Age</u>					
18-29 years	1.9	56.2	16.0	20.3	1.2
30-49 years	2.0	49.9	14.3	23.5	2.0
50-64 years	1.7	55.9	11.6	18.6	1.1
65 and over	1.3	62.9	7.8	13.3	.7
<u>Income</u>					
Under \$10,000	1.5	62.2	12.7	14.3	.8
\$10,000 to \$20,000	2.3	58.7	12.2	18.7	1.3
\$20,000 to \$30,000	1.8	54.0	13.1	24.1	.9
\$30,000 to \$40,000	2.0	53.8	14.4	19.6	2.3
\$40,000 to \$50,000	1.3	49.2	12.6	28.2	.8
\$50,000 and above	2.6	49.0	15.9	22.6	1.7
<u>Education</u>					
Less than high school	2.1	61.0	9.7	15.0	.9
High school or some college	1.2	53.8	13.7	22.6	1.5
College degree(s)	3.2	50.1	16.8	19.7	1.7

### Roadway Evaluations

Survey respondents were asked to evaluate the roadway system in Texas in terms of quality, appearance, and in comparison to other State's roadways. Figure 1 depicts the ratings that were given for roadways in general, for freeways inside cities and urban areas, for the State's four-lane roadways that connect cities, for the State's paved two-lane roadways, and the overall appearance of Texas' highways. These rankings were based on a scale of 0 to 10, with 0 being poor, 10 being excellent, and using 5 as average.

As illustrated in Figure 1, all of the roadways in Texas as a group received a 6.9 rating. Four-lane highways that connect cities received the highest rating, 7.3. The State's two-lane paved system received the lowest rating, 5.8. In terms of overall appearance the average rate for all responses was 7.3.

Comparisons by respondent characteristics were made for each roadway rating question. It was determined that, in general, urban residents rated Texas roadways higher than rural residents, with one exception. The exception was that rural respondents rated urban freeways higher than did urban respondents. A significantly greater number of males gave roads in general, four-lane and two-lane roads higher rankings than the rankings given by females. In general, as age and education increased, evaluation of the roadways improved. However, the lowest income group of respondents gave the roadway system the highest marks, and the middle income group gave the system the lowest marks. Analysis by ethnicity revealed that Hispanics ranked the three types of roads highest. In addition, native Texans and registered voters rated highways higher than non-natives and non-registered voters. The Districts with the highest ratings for all roads combined were Districts 6 (Odessa), 7 (San Angelo), 21 (Pharr), and 23 (Brownwood).

A comparison of Texas' roads to other states' roads was made by asking the respondents if they thought Texas' roads were better, worse, or about the same as other states' roads. Statewide, 48.5 percent said Texas' roads were better. Only nine percent said they were worse, and 32 percent said they were about the same. In terms of which states Texans thought had superior roads, several states were cited with some regularity. California was the most often mentioned state, named by 1125 respondents. Other states mentioned were Florida (named by 322 respondents) and Colorado (named by 267 respondents). Residents of Districts that border other states (Oklahoma and New Mexico) listed them 198 and 154 times, respectively. Sixty-seven percent of the respondents said they could not think of any other state that had better roads than Texas.

Respondents were asked their opinion of the roads in their county in comparison with roads in other parts of Texas. Parity of roads throughout the State was indicated by 58 percent of those interviewed. Seventeen percent said other parts of the State had better roads, and 20 percent said roads were worse elsewhere in the State. Districts in which residents thought their roads were

# PUBLIC RATINGS OF THE QUALITY OF TEXAS HIGHWAYS

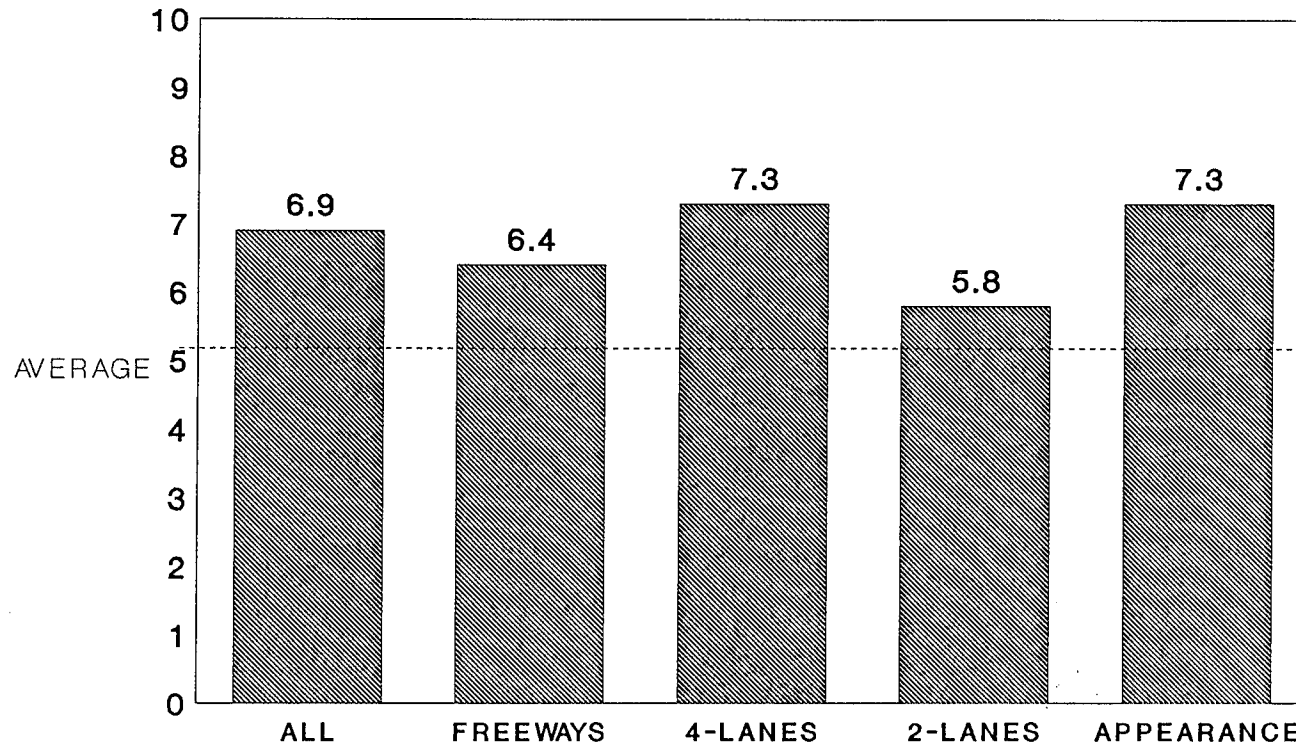


Figure 1

better were 4 (Amarillo), 5 (Lubbock), 6 (Odessa), 10 (Tyler), 12 (Houston), 14 (Austin), 18 (Dallas), 19 (Atlanta), and 25 (Childress).

Responses to statements concerning highways and highway maintenance are given in Table 6. While Texans were in agreement that the Highway Department does a good job of maintaining highways, they agree more strongly that the work takes too long.

Table 6 also indicates that the State's highways were not a dominant factor for vacation decisions. This was quite possibly explained by the high quality of Texas roads overall, as indicated by responses to questions discussed above.

Table 6. Opinions Toward Highways and Highway Maintenance

Statement	Strongly Agree	Agree	Not Sure	Dis-agree	Strongly Disagree
	%	%	%	%	%
The Highway Department does a good job of maintaining highways.	2.4	75.5	8.1	11.7	.7
Highway work takes too long.	16.6	52.8	7.6	19.6	1.0
The quality of roads in Texas affects my decision about where to vacation.	2.4	36.0	9.4	47.1	1.6

### SDHPT Operations

Information regarding use of and opinions about several facets of SDHPT operations were solicited. Specifically, respondents were asked about Tourist Information Centers, roadside rest areas, litter, and public transportation.

Almost equal numbers of respondents had visited a Tourist Information Center as had not (49.2 percent said they had visited a Center, 49.6 percent said they had not). The largest number of Tourist Information Center visitors was in the Wichita Falls District (District 3).

Of those who stop at rest areas, 76 percent said they were usually clean. However, 13 percent of those surveyed reported they did not feel safe stopping at rest areas, and 51 percent said they did not feel safe stopping under

certain conditions such as at night or when they were driving alone. Attitudes toward rest area safety were markedly different for males and females, as illustrated by Figure 2.

The highly successful litter program implemented by SDHPT was acknowledged by the respondents to the survey. Sixty-eight percent said there was less litter on Texas' highways now than there was a year ago.

With regard to public transportation systems, not surprisingly, the public was divided in opinion between those residing in urban areas and those in non-urban areas. Statewide, 54 percent of those surveyed agreed with the statement "city bus systems are a good value for the taxpayer's money." Those that agreed with the statement more often were residents of a District in which a public transportation system was in operation. Districts where more than half of the respondents agreed that city bus systems were a good value for the taxpayer's money were 2 (Fort Worth), 7 (San Angelo), 12 (Houston), 14 (Austin), 15 (San Antonio), 16 (Corpus Christi), 17 (Bryan), 18 (Dallas), 21 (Pharr), and 24 (El Paso). Districts 3, 4, 5, 9, and 20 are Districts that have transit systems and less than half of the respondents in those Districts believed that transit is a good value for the taxpayer's money. The District with the highest percentage of people that thought transit was a good value was 15 (San Antonio--64 percent), and the lowest percentage that agreed was in District 25 (Childress--34 percent). Survey respondents who had lived in Texas less than six years were much more likely than native Texans to believe that transit was a good value for taxpayer's money. Over 84 percent of the sample had not ridden a city bus in the previous 12 months, and only 4.8 percent considered themselves regular public transportation users.

### Information Dissemination

The public was surveyed to assess the effectiveness of the various efforts used by SDHPT to inform its constituency of necessary information. Table 7 gives the questions and response percentages for this subject area.

In general, the public believed the Highway Department provides information about its projects adequately (65 percent agreed). The public was not as well informed about construction activities (48 percent agreed). A large percentage (71 percent) agreed that SDHPT should do more to inform the public of its activities. This was especially true for Districts 21 (Pharr), 20 (Beaumont),



# PERCEIVED ROADSIDE REST AREA SAFETY

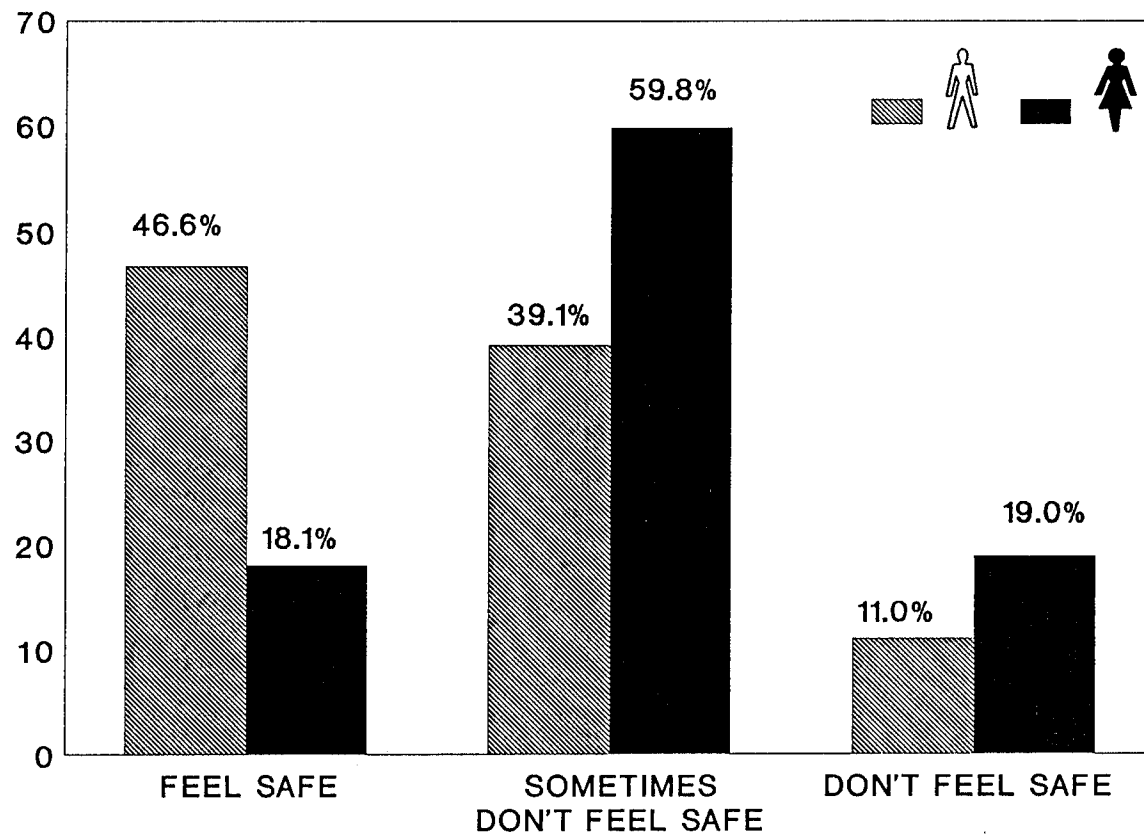


Figure 2

and in large urban areas (with populations of greater than 500,000). As indicated in the Table, 88 percent of the respondents agreed that most highway signs are easy to understand.

Table 7. Opinions Regarding Information Provided by SDHPT

---

How would you rate the State Highway Department in terms of keeping people informed about its projects?

	%
Very well.....	15.9
Adequately.....	49.4
Poorly.....	24.2
Very Poorly.....	5.4

The public is adequately informed of construction activities.

	%
Strongly Agree.....	1.3
Agree.....	46.4
Not Sure.....	7.4
Disagree.....	36.0
Strongly Disagree.....	4.5

Most highway signs are easy to understand.

	%
Strongly Agree.....	6.1
Agree.....	81.9
Not Sure.....	2.0
Disagree.....	8.0
Strongly Disagree.....	1.1

The Highway Department should do more to inform the public of its activities.

	%
Strongly Agree.....	5.6
Agree.....	64.9
Not Sure.....	8.4
Disagree.....	17.9
Strongly Disagree.....	.3

---

Respondents were also asked to identify from a list of sources the one source where they most often get news or information about what the State Highway Department is doing. The number one source for information or news

about Department activities was newspapers. This and other sources was relied upon in the following order:

	%
Newspapers.....	44.3
Radio.....	9.7
TV.....	23.5
Word-of-mouth.....	6.2
Civic or public meetings.....	1.3
Other.....	10.9

### Knowledge Assessment

The survey included several questions to determine the public's knowledge of SDHPT and its responsibilities. It was hypothesized that many people confuse the State Highway Department with other public agencies. Therefore, the tasks listed in Table 8 were given, and respondents were asked to identify which are responsibilities of SDHPT. As seen in the Table, the people surveyed clearly recognized the construction and maintenance of state roads as a responsibility of the Highway Department. However, for many people in Texas (over 68 percent of the respondents) several functions of the Department of Public Safety (DPS) were credited to the Highway Department as well. The confusion of the SDHPT with the DPS was further evidenced by those that reported they had contacted their local Highway Department office and gave a reason for their contact as one served by the DPS. Thirty-four percent of those who had contacted their local SDHPT office, or 867 respondents, gave DPS business as their reason for contact.

Table 8. Perceived Responsibilities of SDHPT

	% Who Said Task is SDHPT's Responsibility
To build state roads.....	92.1
To issue speeding tickets on state roads.....	67.8
To repair potholes on city streets.....	36.0
To issue driver licenses.....	71.6
To operate city bus systems...	20.9
To repair state roads.....	96.2

Females were more likely than males to confuse SDHPT with the DPS. This misunderstanding was also more prevalent among respondents under age 30, Hispanics, non-voters, non-native Texans, and respondents with lower levels of income and education. These groups were also more inclined to answer "don't know" to this set of questions.

Confusion over roadway jurisdiction was also revealed by responses to the two questions: "What is the best roadway in your county maintained by the State Highway Department?" and "Can you think of any roads in your county that the State Highway Department needs to improve?" In response, one-third of those who named roads in the county that needed to be improved named city roads that were not maintained by SDHPT, and 6 percent of the best roads named were not SDHPT roads. Interestingly, more of the best roads named were part of the State maintained system than those cited as needing improvement (73 percent compared to 25 percent).

### Funding and Spending Issues

Questions about SDHPT revenues and expenditures were asked in order to determine the level of knowledge and the intensity of feeling of Texas residents on these issues. Of particular interest was the public's awareness of the taxes that are used to fund the Department, and the level of funding that is derived from gasoline taxes. Respondents were advised that "don't know" was an acceptable response. The responses given in Table 9 indicate the level of uncertainty regarding SDHPT funding. This group of questions elicited the highest number of "don't know" responses. Vehicle registration fees, the federal government, and gasoline taxes were most often checked as sources of revenue for the Highway Department. Corporate franchise taxes were said to be a source of revenue by 12 percent of the respondents, despite the fact that Texas does not have a corporate franchise tax.

Table 9. Believed Sources of SDHPT Revenue

<u>Source of Revenue</u>	<u>Percent Response</u>		
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
State sales tax.....	52.8	19.0	28.2
Property tax.....	25.6	46.8	27.5
Gasoline tax.....	68.3	11.2	20.4
Vehicle registration fees.....	70.7	8.5	20.8
Corporate franchise tax.....	12.0	31.2	56.7
The federal government.....	70.0	10.2	19.7
Traffic fines.....	53.8	19.9	26.1

Respondents were also questioned about the gasoline tax and its uses. As indicated in Table 10, 31 percent of the sample realized that the current federal tax on each gallon of gasoline was approximately 10 cents. However, most did not know that a portion of the federal gasoline tax revenue is dedicated to public transportation. Almost half of the Texans interviewed thought the State tax on gasoline was lower than it was. 32 percent admitted they did not know, and 14.5 percent correctly answered 15 cents.

Knowledge about revenues and expenditures was related to several demographic characteristics. Respondents over 65 years of age and females were much more likely to give "don't know" as a response to questions regarding taxes. Higher educated persons and those with higher incomes were also much more likely to know how funds are allocated. Additionally, correct identification of the state and federal tax on gasoline was more often made by those living in the major urban areas of the state, respondents who were between 50 and 64 years of age, and registered voters.

In addition to determining how much Texans knew about the allocation of funds, opinions were elicited regarding the use of the dedicated highway fund for other purposes. According to the responses shown in Tables 11 and 12, Texans may not be fully aware of how gasoline tax revenue is spent, but they strongly support the use and control of these funds for highway related activities in Texas. Supporters tended to be native Texans rather than newcomers. They were also more likely to be male, older, of a higher income level, and registered to vote.

Table 10. Public Knowledge Regarding Gasoline Tax

How much is the current federal tax on each gallon of gasoline?

	%
A penny.....	5.3
About a nickel.....	24.6
About a dime.....	30.6
About a quarter.....	12.5
Don't know.....	27.0

Is any of the federal gasoline tax revenue spent on public transportation?

	%
Yes.....	27.5
No.....	24.0
Don't know.....	48.3

How much is the current state tax on each gallon of gasoline?

	%
5 cents.....	30.6
10 cents.....	18.6
15 cents.....	14.5
25 cents.....	4.4
Don't know.....	31.8

Table 11. Believed Allocation of Gasoline Tax

<u>Agency Receiving Funds From Gas Tax</u>	<u>Percent Response</u>		
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Department of Public Safety.....	61.5	12.7	25.6
Public schools.....	21.3	53.7	24.9
Highway Department .....	77.6	5.2	17.1
Parks and Wildlife Department.....	23.5	41.1	35.1
Department of Mental Health and Mental Retardation.....	10.3	55.0	34.7
State Universities and Colleges.....	16.8	50.7	32.2

Table 12. Opinions Regarding Use of Highway Funds

Statement	Strongly Agree	Agree	Not Sure	Dis- agree	Strongly Disagree
	%	%	%	%	%
Revenue from the gasoline tax should not be used to support agencies or programs other than the Highway Department.....	5.8	54.0	9.3	21.3	1.0
It is OK to use highway funds for other purposes.....	.3	15.1	5.1	64.5	7.1
After the Interstate Highway System is complete, the federal gasoline tax revenue should continue to be used to support highway related activities.....	2.8	79.2	5.7	6.7	.3
The state government, not the federal government, should collect and manage funds to maintain the Interstate Highways in Texas.....	3.0	66.1	8.3	16.3	.7

A group of statements were made about SDHPT expenditures, and respondents were asked to agree or disagree. A greater mandate for highway construction and maintenance over public transportation was indicated. Over 50 percent of the respondents thought more money should be spent on roadside beautification. It was determined that taxpayers, on the whole, believed they are getting their money's worth from the Highway Department (Table 13).

**Comments**

At the conclusion the interview, each respondent was asked if there was anything they would like to add about Texas' highways or about the State Department of Highways and Public Transportation. This invitation resulted in 5,300 comments. These comments ran the gamut of topics addressed by the questionnaire. Table 14 is a list of the comments by subject category and direction of opinion. Miscellaneous comments included comments about signs and information, litter, the speed limit law, and comments about the survey. The

Table 13. Opinions Regarding SDHPT Expenditures

Statement	Strongly Agree	Agree	Not Sure	Dis-agree	Strongly Disagree
	%	%	%	%	%
Less money should be spent on building highways.....	.8	13.4	4.7	69.4	9.4
Less money should be spent on repairing highways.....	.5	9.1	2.5	72.4	14.3
Current funding for the highway system is adequate.....	.9	41.4	14.8	21.5	.9
More money should be spent for beautification of the roadsides.....	3.4	48.0	10.7	34.9	.8
More money should be spent on public transportation.....	3.9	41.6	12.5	32.6	1.5
The Highway Department spends its money wisely.....	.5	42.8	19.1	18.8	1.2
As a taxpayer, I feel I am getting my money's worth from the Highway Department..	4.6	61.5	9.7	19.5	2.6

largest number of comments were positive ones made about the Highway Department. The most common comments were statements such as "You're doing a great job," and "Keep up the good work." The two subject areas where negative comments outnumbered positive comments pertained to personnel and finances. A large number of comments about personnel were in reference to maintenance and construction crews. Overall, positive comments outnumbered negative comments by more than two to one.



Table 14. Respondent Comments

Subject of Comment	Number Positive	Number Negative	Number Neutral
Physical Aspects of Texas' roads and roadsides	668	439	904
Services Provided by SDHPT	86	49	262
SDHPT Personnel	21	103	115
Finances	8	59	176
General Comments about SDHPT as a Public Agency	912	71	289
Other Miscellaneous	133	103	455
TOTAL COMMENTS	1828	824	2201

#### SUMMARY AND CONCLUSIONS

The survey showed that Texans have favorable attitudes toward SDHPT and the Texas system of roadways. However, there is a lack of knowledge of the responsibilities and the financing mechanisms of the Department. Those who had the highest opinions also tended to be more knowledgeable about SDHPT operations. In general, higher opinions and greater knowledge levels were associated with males, Anglos, higher socioeconomic levels, native Texans, and registered voters. Open-ended comments provided further evidence that SDHPT has a positive image for the people of Texas.

## REFERENCES

- Troldahl, V.C. and R.E. Carter, Jr., "Random Selection of Respondents Within Households in Phone Surveys," Journal of Marketing Research, May, 1964.
- U.S. Department of Commerce, Bureau of Economic Analysis, "Survey of Current Business," Table 1, Vol.68, No. 8, August, 1988.
- U.S. Census Bureau, "General Social and Economic Characteristics ," July 1983.

APPENDIX A

✓ 3352 ✓

Log/ID# \_\_\_\_\_

Edit Check \_\_\_\_\_

Interviewer # \_\_\_\_\_

Time Start \_\_\_\_ : \_\_\_\_ Time End \_\_\_\_ : \_\_\_\_

Minutes \_\_\_\_\_

Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

INTRODUCTION: Hello, this is \_\_\_\_\_ calling from the Public Policy Resources Lab. We're conducting a statewide public opinion poll about transportation in Texas. This confidential survey will take only a few minutes of your time, and we'd really appreciate your participation.

(WRITE PHONE NUMBER AND FIPS CODE BELOW AND CONTINUE)

S2. (\_\_\_\_) \_\_\_\_\_

S3. FIPS CODE: 4 8 \_\_\_\_\_

S4. (DO NOT ASK) Sex of Respondent:  
 Male .....1  
 Female .....2

S5. In order to determine who to interview, could you tell me, of the people who currently live in your household that are 18 or older -- including yourself -- who had the most recent birthday? I don't mean who is the youngest adult, but rather, who had the last birthday? [NOTE: CIRCLE THE APPROPRIATE NUMBER]

- A. IF PERSON YOU ARE SPEAKING WITH -- SKIP TO BEGIN ..... 1
- B. IF SOMEONE ELSE (SPECIFY) \_\_\_\_\_ -- ASK TO SPEAK TO THAT PERSON & REREAD INTRODUCTION AND SKIP TO BEGIN. ARRANGE CALLBACK IF NECESSARY & RECORD INFORMATION ON CALLBACK RECORD FORM ..... 2
- C. DON'T KNOW ALL BIRTHDAYS, ONLY SOME -- CONTINUE TO S6 ..... 3
- D. DON'T KNOW ANY BIRTHDAYS OTHER THAN OWN -- SKIP TO BEGIN ..... 4
- E. REFUSED -- FILL OUT COMMENTS SECTION ON RECORD FORM ..... 5
- S6. Of the ones that you do know, who had the most recent birthday? (SPECIFY) \_\_\_\_\_ -- ASK TO SPEAK TO THAT PERSON & CONTINUE AFTER REREADING INTRODUCTION. ARRANGE CALLBACK IF NECESSARY & RECORD INFORMATION ON CALL RECORD FORM ..... 6

BEGIN

First, I'd like to ask you several questions about the quality of the highways in Texas.

A1. On a scale of 0 to 10, with 0 being poor and 10 being excellent, and using 5 as average, how would you rate Texas' highways overall? (FOR CLARIFICATION -- IN TERMS OF THE WAY THEY ARE CONSTRUCTED, MAINTAINED, AND THEIR APPEARANCE.)

Poor 0 1 2 3 4 5 6 7 8 9 10 Excellent Don't Know....98

A2. Using the same scale, how would you rate the quality of the freeways inside cities and urban areas of Texas?

Poor 0 1 2 3 4 5 6 7 8 9 10 Excellent Don't Know....98

A3. How would you rate the State's 4-lane roadways that connect cities on a scale of 0 to 10?

Poor 0 1 2 3 4 5 6 7 8 9 10 Excellent Don't Know....98

A4. Also using the same scale, how would you rate the State's paved 2-lane roadways?

Poor 0 1 2 3 4 5 6 7 8 9 10 Excellent Don't Know....98

A5. Finally, on a scale of 0 to 10, how would you rate the overall appearance of Texas' highways?

Poor 0 1 2 3 4 5 6 7 8 9 10 Excellent Don't Know....98

A6. How do you think Texas' highways compare with other States' highways? Are they better, worse, or about the same?

Better ..... 1
Worse ..... 2
About the same ..... 3
Don't know ..... 8
Refused/No answer ..... 9

A7. Can you think of a State (or other States) that has better highways than Texas? (FOR CLARIFICATION -- ALL HIGHWAYS CONNECTING CITIES) Which ones? [NOTE: WRITE IN STATES NAMED]

Blank lines for writing state names.

No ..... 97
Don't know ..... 98
Refused/No answer ..... 99

A7B. Number of States Named

Blank lines for counting states.

A8. How do the State roads in your county compare with the roads in the rest of the State? Are they better, worse, or about the same?

Better ..... 1
Worse ..... 2
About the same ..... 3
Don't know ..... 8
Refused/No answer ..... 9

A9. Can you think of any roads in your county that the State Highway Department needs to improve? IF YES, What are they? (WRITE IN ROADS NAMED) (PROBE FOR HIGHWAY NUMBER)

Blank lines for writing road names and highway numbers.

No ..... 97
Don't know ..... 98
Refused/No answer ..... 99

A10. In your opinion, what is the best roadway in your county maintained by the State Highway Department?

Don't know ..... 98  
 Refused/No answer ..... 99

B1. Next I'd like you to tell me which of the following are responsibilities of the State Highway Department. For each activity answer yes or no.

[READ EACH ITEM AND HAVE RESPONDENT SAY YES OR NO] (ROTATE LIST)

	Yes	No	Don't Know	Refused
B1A. To build state roads .....	1	0	8	9
B1B. To issue speeding tickets on state roads.....	1	0	8	9
B1C. To repair pot holes on city streets .....	1	0	8	9
B1D. To issue driver licenses .....	1	0	8	9
B1E. To operate city bus systems .....	1	0	8	9
B1F. To repair state roads .....	1	0	8	9

B2. Would you describe the job that the State Highway Department is doing as excellent, good, only fair, or poor?

Excellent ..... 1  
 Good ..... 2  
 Only fair ..... 3  
 Poor ..... 4

Don't know ..... 8  
 Refused/No answer ..... 9

B3. How would you rate the State Highway Department in terms of keeping people informed about its projects? Do they provide information very well, adequately, poorly, or very poorly?

Very well..... 1  
 Adequately..... 2  
 Poorly..... 3  
 Very Poorly..... 4

Don't know ..... 8  
 Refused/No answer ..... 9

B4. How do you most often get your news or information about what the State Highway Department is doing?  
 From.... (CIRCLE ONE)

Newspapers..... 1  
 Radio..... 2  
 TV..... 3  
 Word-of-mouth..... 4  
 Civic or public meetings..... 5  
 Some other way (specify) ..... 6

Don't know ..... 8  
 Refused/No answer ..... 9

B5. Have you ever contacted the State Highway Department office nearest you, either by letter, phone, or in person?

Yes ..... 1  
 No ..... 2  
 Don't know ..... 8  
 Refused/No answer ..... 9

B5A. IF YES, What was the reason for your contact? (RECORD REASON GIVEN)

Request for information ..... 1 \_\_\_\_\_  
 Complaint ..... 2 \_\_\_\_\_  
 Compliment ..... 3 \_\_\_\_\_  
 DPS or law enforcement related ..... 4 \_\_\_\_\_  
 [INCLUDES GETTING A DRIVER LICENSE, PAYING A TICKET, ETC.]  
 Other ..... 5 \_\_\_\_\_  
 Don't know ..... 8 \_\_\_\_\_  
 Refused/No answer ..... 9 \_\_\_\_\_

B5B. IF YES, What was your opinion of the Highway Department's response to you?  
 Was it very good, good, poor, very poor, or neither good nor poor?

Very good ..... 1  
 Good ..... 2  
 Poor ..... 3  
 Very poor ..... 4  
 Neither good nor poor ..... 5  
  
 Don't know ..... 8  
 Refused/No answer ..... 9

B6. Have you ever visited a Tourist Information Center in Texas?

Yes ..... 1  
 No ..... 2  
 Don't know ..... 8  
 Refused/No answer ..... 9

B7A. Which of the following statements best describes your feelings about safety and roadside rest areas? (READ LIST)

I feel safe stopping at rest areas ..... 1  
 I don't feel safe stopping at rest areas under some  
 conditions, such as at night or when I'm alone ..... 2  
 I don't feel safe stopping at rest areas ..... 3  
  
 Don't know ..... 8  
 Refused/No answer ..... 9

B7B. How would you describe the cleanliness of roadside rest areas? Are they:

Almost always clean ..... 1  
 Frequently clean ..... 2  
 Only occasionally clean ..... 3  
 Almost never clean ..... 4  
  
 Don't stop at rest areas ..... 5  
 Don't know ..... 8  
 Refused/No answer ..... 9

B8. Would you say that you see less litter, more litter, or about the same amount of litter on Texas highways than you did a year ago?

Less litter.....	1
More litter.....	2
About the same amount of litter.....	3
Don't know .....	8
Refused/No answer .....	9

B9. How often have you ridden a city bus for work, school, medical, or shopping purposes during the last 12 months?

None .....	0
Once or twice .....	1
Less than once per month .....	2
Regularly monthly .....	3
Regularly weekly .....	4
Don't know .....	8
Refused/No answer .....	9

The next few questions I'd like to ask you are designed to measure public knowledge about funding for the State Highway Department. No one is expected to know every answer, so feel free to say you're not sure of the choices given.

C1. I'm going to read a list of sources of revenue, and I'd like you to tell me which ones are currently used to fund the State Highway Department. (ROTATE LIST)

	Yes	No	Don't Know	Refused
C1A. State sales tax .....	1	0	8	9
C1B. Property tax .....	1	0	8	9
C1C. Gasoline tax .....	1	0	8	9
C1D. Vehicle registration fees .....	1	0	8	9
C1E. Corporate franchise tax .....	1	0	8	9
C1F. The federal government .....	1	0	8	9
C1G. Traffic fines.....	1	0	8	9

C2. How much is the current federal tax on each gallon of gasoline? Is it:

a penny .....	1
about a nickel .....	2
about a dime, or .....	3
about a quarter .....	4
Don't know .....	8
Refused/No answer .....	9

C3. Is any of that federal gasoline tax revenue spent on public transportation such as bus systems & commuter rail service?

Yes.....	1
No .....	0
Don't know .....	8
Refused/No answer .....	9

C4. How much is the current state tax on each gallon of gasoline? Is it:

- 5 cents..... 1
- 10 cents..... 2
- 15 cents..... 3
- 25 cents ..... 4
  
- Don't know ..... 8
- Refused/No answer.....9

C5. Is the money from the State gasoline tax used to fund: (Rotate list)

	YES	NO	DK	RF
C5A. The Department of Public Safety?.....	1	0	8	9
C5B. Schools?.....	1	0	8	9
C5C. Highways?.....	1	0	8	9
C5D. The Parks and Wildlife Department.....	1	0	8	9
C5E. The Department of Mental Health and Mental Retardation?.....	1	0	8	9
C5F. State Universities and Colleges?.....	1	0	8	9

D. For the next set of questions, I will read a statement and I'd like you to tell me if you Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), or feel neutral (N) about it. [REPEAT ANSWER CHOICES AS NECESSARY] [NOTE: ? REFERS TO DON'T KNOW AND R REFERS TO REFUSE/NO ANSWER]

Code Numbers

	SA	A	N	D	SD	?	R
D1. As a taxpayer, I feel I am getting my money's worth from the Highway Department.....	1	2	3	4	5	8	9
D2. The Highway Department is managed efficiently.....	1	2	3	4	5	8	9
D3. Less money should be spent on building highways...	1	2	3	4	5	8	9
D4. Less money should be spent on repairing highways...	1	2	3	4	5	8	9
D5. City bus systems are a good value for the taxpayer's money .....	1	2	3	4	5	8	9
D6. The public is adequately informed of construction activities .....	1	2	3	4	5	8	9
D7. Highway work takes too long .....	1	2	3	4	5	8	9
D8. Most highway signs are easy to understand.....	1	2	3	4	5	8	9
D9. Revenue from the gasoline tax should not be used to support agencies or programs other than the Highway Department .....	1	2	3	4	5	8	9 Depends 7
D10. Current funding for the highway system is adequate ...	1	2	3	4	5	8	9 Depends 7
D11. It is ok to use highway funds for other purposes.....	1	2	3	4	5	8	9 7
D12. More money should be spent for beautification of the roadsides .....	1	2	3	4	5	8	9
D13. The Highway Department spends its money wisely .....	1	2	3	4	5	8	9
D14. More money should be spent on public transportation in Texas .....	1	2	3	4	5	8	9



	SA	A	N	D	SD	?	R
D15. After the Interstate Highway System is complete, the federal gasoline tax revenue should continue to be used to support highway related activities .....	1	2	3	4	5	8	9
D16. The State government, not the federal government, should collect and manage funds to maintain the Interstate Highways in Texas.....	1	2	3	4	5	8	9
D17. The Highway Department does a good job of maintaining highways .....	1	2	3	4	5	8	9
D18. The quality of roads in Texas affects my decision about where to vacation .....	1	2	3	4	5	8	9
D19. The Highway Department should do more to inform the public of its activities .....	1	2	3	4	5	8	9
D20. The Highway Department is more effective in meeting the public's goals than other State agencies .....	1	2	3	4	5	8	9

E. Now to conclude this interview, I'd like to ask a few questions about yourself so that we can see how different groups of people feel about the things we've been asking you about.

E1. Including yourself, how many people age 18 and over live in your household?

CODE EXACT NUMBER \_\_\_\_\_

E2. How many people under the age of 18 live in your household?

CODE EXACT NUMBER \_\_\_\_\_

E3. How many licensed drivers live in your household?

CODE EXACT NUMBER \_\_\_\_\_

E4. How many vehicles are there in your household?

CODE EXACT NUMBER \_\_\_\_\_

E5. What was the last grade in school you completed?

- 0-4 grades ..... 1
- 5-8 grades ..... 2
- Grades 9-11; some high school..... 3
- Grade 12; high school graduate ..... 4
- Grade 13-15; some college  
(including business or trade school) ..... 5
- Grade 16; graduated college ..... 6
- Graduate work ..... 7
  
- Don't know ..... 8
- Refused/No answer ..... 9

E6. Last week were you working full-time, part-time, going to school, keeping house, or what?

- Working full-time ..... 1
- Working part-time ..... 2
- Going to school ..... [Skip to E8]..... 3
- Keeping house .....[Skip to E8]..... 4
- Disabled ..... 5
- Retired ..... 6
- Unemployed ..... 7
- Refused/No answer ..... 9

E7. (IF NOT ALREADY ANSWERED< ASK:) What kind of work do you normally do? That is, what is your job called?

[RECORD VERBATIM] \_\_\_\_\_

- Professional ..... 1
- Administrator or manager  
(including farm managers) ..... 2
- Clerical or Service ..... 3
- Blue collar (including farm workers) ..... 4
- Driving Profession..... 5
- Refused/No answer ..... 9

E8. How many years have you lived in Texas, or have you lived here all your life?

[CODE EXACT NUMBER OF YEARS] \_\_\_\_\_

- Less than one year ..... 00
- All my life ..... 90
- Don't know ..... 98
- Refused/No answer ..... 99

E9. What is your current age?

[CODE EXACT NUMBER OF YEARS] \_\_\_\_\_

- 95 years of age or older ..... 95
- Don't know ..... 98
- Refused/No answer ..... 99

E10. Which of the following best describes your racial or ethnic group --Anglo, Black, Hispanic, or something else?

- Anglo ..... 1
- Black ..... 2
- Hispanic (including Chicano,  
Mexican-American, Puerto Rican,  
Cuban, or Spanish American) ..... 3
- Something else ..... 6
- Don't know ..... 8
- Refused/No answer ..... 9

E11. Are you registered to vote in the place you presently live?

- Yes ..... 1
- No ..... 2
  
- Don't know ..... 8
- Refused/No answer ..... 9

E12. Do you own your own home or are you renting?

- Own..... 1
- Rent..... 2
  
- Don't know ..... 8
- Refused/No answer ..... 9

E13. What city do you live in?

[CODE NAME OF CITY] \_\_\_\_\_

[IF NAME OF CITY REFUSED, THEN ASK FOR CITY SIZE]

- Outside of city limits ..... 0
- Less than 5,000 ..... 1
- 5,000 - 10,000 ..... 2
- 10,001 - 50,000 ..... 3
- 50,001 - 100,000 ..... 4
- 100,001 - 500,000 ..... 5
- Over 500,000 ..... 6
  
- Don't know ..... 8
- Refused/No answer ..... 9

E14. Last year was your total family income before taxes: [READ LIST; PROBE IF NECESSARY: This is for statistical purposes only and is used for grouping data for publication.]

- Under \$10,000 ..... 1
- \$10,000 to \$20,000 ..... 2
- \$20,000 to \$30,000 ..... 3
- \$30,000 to \$40,000 ..... 4
- \$40,000 to \$50,000 ..... 5
- \$50,000 and above ..... 6
  
- Don't know ..... 8
- Refused/No answer ..... 9

F. Now, is there anything at all you would like to add about Texas' highways or the State Highway Department?  
[RECORD VERBATIM]

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That's all of my questions. I'd like to thank you very much for taking time to answer them and for participating in this survey.

[DO NOT ASK; RECORD AT THE END OF THE INTERVIEW]

E15. Language:  
English ..... **1**  
Spanish ..... **2**

PLEASE BE CERTAIN YOU HAVE RECORDED THE PHONE #, FIPS CODE, AND THE TIME OF INTERVIEW ON PAGE 1.

**APPENDIX B**  
**DEMOGRAPHIC CHARACTERISTICS OF SURVEY SAMPLE**

AGE	MALE				FEMALE			
	ANGLO	BLACK	HISPANIC	OTHER	ANGLO	BLACK	HISPANIC	OTHER
18-29	694	79	198	52	726	115	225	37
30-49	1069	83	207	52	1432	136	301	47
50-64	535	35	79	20	702	61	68	27
65+	400	28	36	10	771	54	27	19
<b>TOTAL</b>	<b>2698</b>	<b>225</b>	<b>520</b>	<b>134</b>	<b>3631</b>	<b>366</b>	<b>621</b>	<b>130</b>



**APPENDIX C**  
**QUESTIONNAIRE RESULTS**

A1. On a scale of 0 to 10, with 0 being poor and 10 being excellent, and using 5 as average, how would you rate Texas' highways overall?

	%
0 .....	1.1
1 .....	.3
2 .....	.6
3 .....	2.0
4 .....	4.9
5 .....	21.9
6 .....	10.6
7 .....	18.7
8 .....	21.5
9 .....	7.3
10 .....	9.6

A2. Using the same scale, how would you rate the quality of the freeways inside cities and urban areas of Texas?

	%
0 .....	2.1
1 .....	.7
2 .....	2.0
3 .....	5.1
4 .....	8.3
5 .....	23.3
6 .....	10.7
7 .....	15.4
8 .....	15.9
9 .....	5.0
10 .....	7.2

A3. How would you rate the State's 4-lane roadways that connect cities on a scale of 0 to 10?

	%
0 .....	.4
1 .....	.1
2 .....	.4
3 .....	1.6
4 .....	2.7
5 .....	16.9
6 .....	9.9
7 .....	17.6
8 .....	24.4
9 .....	9.8
10 .....	11.4

A4. Also using the same scale, how would you rate the State's paved 2-lane roadways?

	%
0 .....	2.2
1 .....	.9
2 .....	2.9
3 .....	6.2
4 .....	10.5
5 .....	27.0
6 .....	13.6
7 .....	13.2
8 .....	12.0
9 .....	4.1
10 .....	4.0

A5. Finally, on a scale of 0 to 10, how would you rate the overall appearance of Texas' highways?

	%
0 .....	.7
1 .....	.3
2 .....	.7
3 .....	1.6
4 .....	3.5
5 .....	14.3
6 .....	9.1
7 .....	16.8
8 .....	24.9
9 .....	13.8
10 .....	12.8

A6. How do you think Texas; highways compare with other State's highways? Are they better, worse, or about the same?

	%
Better.....	48.5
Worse.....	8.6
About the same.....	32.0
Don't know.....	10.7
No answer.....	.2

A7. Can you think of a State (or other States) that has better highways than Texas?

	N	%
California	1225	11.0
Florida	322	2.9
Colorado	267	2.4



A8. How do the State roads in your county compare with the roads in the rest of the State? Are they better, worse, or about the same?

	%
Better.....	17.3
Worse.....	19.9
About the same.....	58.1
Don't know.....	4.5
No answer.....	.3

A9. Can you think of any roads in your county that the State Highway Department needs to improve? If yes, what are they?

13.7% named roads that are non-SDHPT roads	
27.5% named SDHPT roads	
No.....	46%
Don't know.....	10%
No answer.....	1%

A10. In your opinion, what is the best roadway in your county maintained by the State Highway Department?

4.7% named roads that are non-SDHPT roads	
70.7% named SDHPT roads	
Don't know.....	22.8%
No answer.....	.8%

B1. Which of the following are responsibilities of the State Highway Department?

	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
A. To build state roads.....	92.1	4.3	3.5
B. To issue speeding tickets on state roads.....	67.8	27.7	4.3
C. To repair potholes on city streets.....	36.0	60.6	3.3
D. To issue driver licenses..	71.6	24.1	4.2
E. To operate city bus systems.....	20.9	71.5	7.5
F. To repair state roads.....	96.2	2.2	1.5

B2. Would you describe the job that the State Highway Department is doing as excellent, good, only fair, or poor?

	%
Excellent.....	13.0
Good.....	59.4
Only fair.....	23.3
Poor.....	2.6
Don't know.....	1.5
No answer.....	.1

B3. How would you rate the State Highway Department in terms of keeping people informed about its projects? Do they provide information very well, adequately, poorly, or very poorly?

	%
Very well.....	16.0
Adequately.....	49.4
Poorly.....	24.2
Very poorly.....	5.4
Don't know.....	4.8
No answer.....	.1

B4. How do you most often get your news or information about what the State Highway is doing?

	%
Newspaper.....	44.3
Radio.....	9.7
TV.....	23.5
Word-of-mouth.....	6.2
Civic or public meetings.....	1.3
Some other way.....	10.9
Don't know.....	3.7
No answer.....	.6

B5. Have you ever contacted the State Highway Department office nearest you, either by letter, phone, or in person?

	%
Yes.....	25.9
No.....	73.6
Don't know.....	.2
No answer.....	.3

B5A. If yes, what was the reason for your contact?

	%
Request for information.....	31.3
Complaint.....	18.4
Compliment.....	.8
DPS or law enforcement related.....	34.4
Other.....	9.3
Don't know.....	1.2
No answer.....	4.5

B5B. If yes, what was your opinion of the Highway Department's response to you? Was it very good, good, poor, very poor, or neither good nor poor?

	%
Very good.....	35.5
Good.....	42.1
Poor.....	7.3
Very poor.....	6.0
Neither good nor poor..	5.2
Don't know.....	1.5
No answer.....	2.4

B6. Have you ever visited a Tourist Information Center in Texas?

	%
Yes.....	49.2
No.....	49.6
Don't know.....	.9
No answer.....	.3

B7A. Which of the following statements best describes your feelings about safety and roadside rest areas?

	%
I feel safe stopping at rest areas.....	32.4
I don't feel safe stopping at rest areas under some conditions, such as at night or when I'm alone....	51.1
I don't feel safe stopping at rest areas.....	13.4
Don't know.....	2.9
No answer.....	.3

B7B. How would you describe the cleanliness of roadside rest areas?

	%
Almost always clean....	45.3
Frequently clean.....	30.7
Only occasionally clean.....	12.6
Almost never clean.....	3.4
Don't stop at rest areas.....	6.5
Don't know.....	1.2
No answer.....	.2

B8. Would you say that you see less litter, more litter, or about the same amount of litter on Texas highways than you did a year ago?

	%
Less litter.....	67.6
More litter.....	5.6
About the same.....	22.1
Don't know.....	4.3
No answer.....	.3

B9. How often have you ridden a city bus for work, school, medical, or shopping purposes during the last 12 months?

	%
None.....	84.4
Once or twice.....	7.1
Less than once per month.....	2.9
Regularly monthly.....	1.2
Regularly weekly.....	3.6
Don't know.....	.5
No answer.....	.3

C1. I'm going to read a list of sources of revenue, and I'd like you to tell me which ones are currently used to fund the State Highway Department.

	Yes	No	Don't Know	No Answer
A. State sales tax.....	52.8	19.0	28.2	.1
B. Property tax.....	25.6	46.8	27.5	.1
C. Gasoline tax.....	68.3	11.2	20.4	.1
D. Vehicle registra- tion fees.....	70.7	8.5	20.8	.1
E. Corporate franchise tax.....	12.0	31.2	56.7	.1
F. The federal govern- ment.....	70.0	10.2	19.7	.1
G. Traffic fines.....	53.8	19.9	26.1	.2

C2. How much is the current federal tax on each gallon of gasoline?

	%
A penny.....	5.3
About a nickel.....	24.6
About a dime.....	30.6
About a quarter.....	12.5
Don't know.....	27.0
No answer.....	.0

C3. Is any of that federal gasoline tax revenue spent on public transportation such as bus systems & commuter rail service?

	%
Yes.....	27.5
No.....	24.1
Don't know.....	48.3
No answer.....	.1

C4. How much is the current state tax on each gallon of gasoline?

	%
5 cents.....	30.5
10 cents.....	18.6
15 cents.....	14.5
25 cents.....	4.4
Don't know.....	31.8
No answer.....	.1

C5. Is the money from the State gasoline tax used to fund:

	Yes	No	Don't Know
A. The Department of Public Safety.....	61.5	12.7	25.6
B. Schools.....	21.3	53.7	24.9
C. Highways.....	77.6	5.2	17.1
D. The Parks and Wildlife Department.....	23.5	41.1	35.1
E. The Department of Mental Health and Mental Retardation.....	10.3	55.0	34.7
F. State Universities and Colleges.....	16.8	50.7	32.2

D. For the next set of questions, I will read a statement and I'd like you to tell me if you Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), or feel neutral (N) about it. (? refers to Don't Know and R refers to refused.)

	SA	A	N	D	SD	?	R
1. As a taxpayer, I feel I am getting my money's worth from the Highway Department....	4.6	61.5	9.7	19.5	2.6	2.0	.1
2. The Highway Department is managed efficiently.....	1.8	54.1	13.6	20.5	1.4	8.3	.2
3. Less money should be spent on building highways.....	.8	13.4	4.7	69.4	9.4	2.1	.1
4. Less money should be spent on repairing highways.....	.5	9.1	2.5	72.4	14.3	1.2	.1

	SA	A	N	D	SD	?	R
5. City bus systems are a good value for the taxpayer's money.....	2.9	50.9	13.2	19.5	2.9	10.4	.3
6. The public is adequately informed of construction activities.....	1.3	46.4	7.4	36.0	4.5	4.3	.2
7. Highway work takes too long...	16.6	52.8	7.5	19.6	1.0	2.4	.1
8. Most highway signs are easy to understand.....	6.1	81.9	2.1	8.0	1.1	.7	.3
9. Revenue from the gasoline tax should not be used to support agencies or programs other than the Highway Department...	5.8	54.0	9.3	21.3	1.0	6.1	.2
10. Current funding for the highway system is adequate.....	.9	41.4	14.8	21.5	.9	20.1	.3
11. It is OK to use highways funds for other purposes.....	.3	15.1	5.1	64.5	7.1	3.1	.3
12. More money should be spent on public transportation in Texas.....	3.4	48.0	10.7	34.9	.8	1.9	.3
13. The Highway Department spends its money wisely.....	.5	42.8	19.1	18.8	1.2	17.4	.3
14. More money should be spent on public transportation in Texas.....	3.9	41.6	12.5	32.6	1.5	7.7	.2
15. After the Interstate Highway System is complete, the federal gasoline tax revenue should continue to be used to support highway related activities.....	2.8	79.2	5.7	6.7	.3	5.2	.1
16. The State government, not the federal government, should collect and manage funds to maintain the Interstate Highways in Texas.....	3.0	66.1	8.3	16.3	.7	5.6	.1
17. The Highway Department does a good job of maintaining highways.....	2.4	75.5	8.1	11.7	.7	1.5	.1

	SA	A	N	D	SD	?	R
18. The quality of roads in Texas affects my decision about where to vacation.....	2.4	36.0	9.4	47.1	1.6	3.3	.2
19. The Highway Department should do more to inform the public of its activities.....	5.6	64.9	8.4	17.9	.3	2.8	.1
20. The Highway Department is more effective in meeting the public's goals than other State agencies.....	1.5	42.3	23.0	14.0	.5	18.3	.3