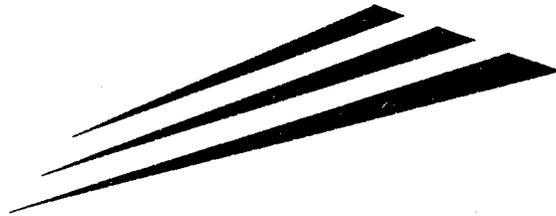


Research Report  
KTC-98-19



PB99-144024

# KENTUCKY TRANSPORTATION CABINET: ANNUAL ASSESSMENT OF CUSTOMER NEEDS AND SATISFACTION



Conducted by the

Kentucky Transportation Center  
College of Engineering  
University of Kentucky



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# KENTUCKY TRANSPORTATION CABINET: ANNUAL ASSESSMENT OF CUSTOMER NEEDS AND SATISFACTION

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The contents of this report reflect the views of the authors, who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the University of Kentucky, the Kentucky Transportation Cabinet, or the Federal Highway Administration.

October 1998

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16. Abstract The purpose of this study was to continue the efforts begun in 1997 to monitor Kentucky public opinion regarding the quality of the highway system and also include a portion to measure satisfaction with the current drivers' license and registration renewal processes. Kentucky's 1998 public opinion is compared to data collected in 1997 to gage Kentucky's progress over the past year, and is compared to the NQI Survey done on the national level to show how Kentuckian's opinions compare to those nationwide.			
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# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>i</b>
<b>INTRODUCTION &amp; METHODOLOGY</b>	<b>1</b>
<b>ABOUT THE NATIONAL STUDY</b>	<b>1</b>
<b>ABOUT THE KENTUCKY STUDIES</b>	<b>1</b>
<b>SURVEY COORDINATION AND ADMINISTRATION</b>	<b>2</b>
<b>PROFILE OF RESPONDENTS</b>	<b>3</b>
<b>MAJOR FINDINGS</b>	<b>5</b>
<b>OVERALL SATISFACTION WITH THE HIGHWAY SYSTEM</b>	<b>6</b>
<b>SATISFACTION WITH CHARACTERISTICS OF THE HIGHWAY SYSTEM</b>	<b>9</b>
<b>HOW KENTUCKY COMPARED OVER TIME</b>	<b>16</b>
<b>REGISTRATION AND LICENSE RENEWALS</b>	<b>19</b>
<b>PROFILE OF RESPONDENTS: DIFFERENCES IN DRIVING PATTERNS</b>	<b>22</b>
<b>CHARACTERISTICS OF THE HIGHWAY SYSTEM: PUBLIC DIFFERENCES</b>	<b>22</b>
<b>APPENDIX</b>	
<b>A. SURVEY INSTRUMENT</b>	



## **EXECUTIVE SUMMARY**

The purpose of this study was to continue the efforts begun last year to monitor Kentucky public opinion regarding the quality of the highway system and also include a portion to measure satisfaction with the current drivers' license and registration renewal processes.

When initially asked, 50 percent of Kentuckians were generally satisfied with their highway system, and after examining characteristics more closely, and being questioned about overall satisfaction a second time, their satisfaction levels were measurably higher at 60 percent. Thirty-one percent surveyed were neutral, leaving only nine percent dissatisfied, which is down seven percent from the 16 percent dissatisfied in 1997.

1998 results indicated that satisfaction levels did not improve over 1997 levels for any characteristic tested. The major areas of concern continued to be pavement conditions and maintenance response time. However, Kentucky's satisfaction levels are still higher than the National level on all but seven items — timeliness of snow removal, smoothness of ride on bridges, timeliness of litter removal, mileage and destination signs, smoothness of ride on pavement, visual appeal of landscaping, and timeliness of pavement repairs.

This year's study also included questions to reflect customer's satisfaction with the drivers' licensing and registration process. Results indicate that 89 percent of citizens are generally satisfied with the circuit clerk and 87 percent of citizens are generally satisfied with the county clerk. In both cases, only five percent or less responded that they were dissatisfied.

The following report gives details to support the above conclusions.



## **INTRODUCTION & METHODOLOGY**

### **ABOUT THE NATIONAL STUDY**

In 1992, representatives of industry, state transportation officials, and the Federal Highway Administration met to establish a national initiative to promote the quality of the nation's highway system. This collaboration resulted in the creation of the "National Quality Initiative (NQI) Steering Committee," which developed a long-range strategic plan to guide the Committee's activities during the first years of operations.

One component of this plan was to conduct a nationwide baseline study designed to assess public satisfaction with highways across the nation and to track this satisfaction over time. During the fall of 1995, Coopers & Lybrand, through Opinion Research Corporation, conducted a nationwide telephone survey of 2,205 licensed adult drivers and released a report of findings in May 1996.

Although the national survey provided evidence of people's attitudes regarding the nation's highway systems, the sample size at the individual state level was not adequate to provide a state-by-state analysis of opinions.

### **ABOUT THE KENTUCKY STUDIES**

In June 1997, the Kentucky Transportation Center, on behalf of the Kentucky Department of Highways, commissioned a statewide tracking study to determine satisfaction with Kentucky's highway system. This baseline study was designed to closely approximate the national study and enabled direct comparisons at the state level with national opinions. In August 1998, the Kentucky Department of Highways contracted with the Kentucky Transportation Center to conduct a second statewide study to monitor Kentucky public opinion regarding the quality of the highway system. This report summarizes these findings.

The survey instrument for the Kentucky studies was designed to measure the following seven characteristics of the state's highways:

- Bridge Conditions
- Maintenance Response Time
- Pavement Conditions
- Safety
- Travel Amenities
- Traffic Flow
- Visual Appeal

#### **SURVEY COORDINATION AND ADMINISTRATION**

Data for the Kentucky studies were collected and analyzed by Preston • Osborne Research of Lexington, Kentucky. Interviews were completed from August 13 to August 30, 1998 with Kentucky adults who met the following two screening criteria:

- 1) Licensed driver 18 years old or older; and
- 2) Had driven on a major highway within the past year.<sup>1</sup>

A listed sample was used to determine representative households in Kentucky. Following the procedure in the national study, those contacted for response were selected at random by asking for the individual in each household who was 18 years old or older and had the most recent birthday. If the selected individual was not a licensed driver or had not driven on a major highway within the past year, the interview was terminated, a replacement household contacted, and the screening process repeated.

For the 1998 Kentucky study, the questionnaire averaged 18 minutes in length. The process resulted in 667 completed interviews, which derived a margin of error of  $\pm 3.79$  percentage points at the 95 percent confidence interval.

---

<sup>1</sup> A major highway was defined to include any of the following: the interstate highway system, other multi-lane highways (expressways, freeways, and toll roads), and major two-lane highways (numbered highways with three or fewer digits).

## PROFILE OF RESPONDENTS

In addition to assessing various dimensions of survey participants' experience with the Kentucky highway system, the survey instrument assessed demographic information on participants, plus information regarding their driving patterns. These characteristics are important in determining satisfaction levels of various population segments, which can be used to prioritize and target highway improvement efforts. The tables below illustrate the demographic breakouts used to develop profiles of 1998 survey participants.

<b>Gender:</b>	<b>Number</b>	<b>Percent</b>
Male	307	46%
Female	360	54%

<b>Age:</b>	<b>Number</b>	<b>Percent</b>
18-34	130	20%
35-54	322	48%
55 and over	207	31%
Refused	8	1%

<b>Education:</b>	<b>Number</b>	<b>Percent</b>
8 <sup>th</sup> grade or less	24	4%
High school, incomplete	68	10%
High school, complete	259	39%
Some college	167	25%
College graduate	87	13%
Post college	57	9%
Refused	5	1%

<b>Primary Trip Type:</b>	<b>Number</b>	<b>Percent</b>
Commuting	213	32%
Work, other than commuting	88	13%
Shopping/Errands	215	32%
Recreation	150	23%

<b>Primary Type of Driving:</b>	<b>Number</b>	<b>Percent</b>
Interstate Highway System	230	35%
Other Multi-Lane Highways	157	24%
Major Two-Lane Highways	280	42%

<b>Majority of Highway Mileage:</b>	<b>Number</b>	<b>Percent</b>
Urban	195	29%
Rural	377	57%
Equal Urban/Rural	95	14%

<b>Congressional Districts:</b>	<b>Number</b>	<b>Percent</b>
1	109	16%
2	107	16%
3	116	17%
4	115	17%
5	105	16%
6	115	17%

<b>Vehicle Type:</b>	<b>Number</b>	<b>Percent</b>
Car	405	61%
Van	72	11%
Truck	136	20%
Sports Utility Vehicle	43	6%
Other	11	2%

## MAJOR FINDINGS

This section of the report outlines key findings of the 1998 study, organized around three main points:

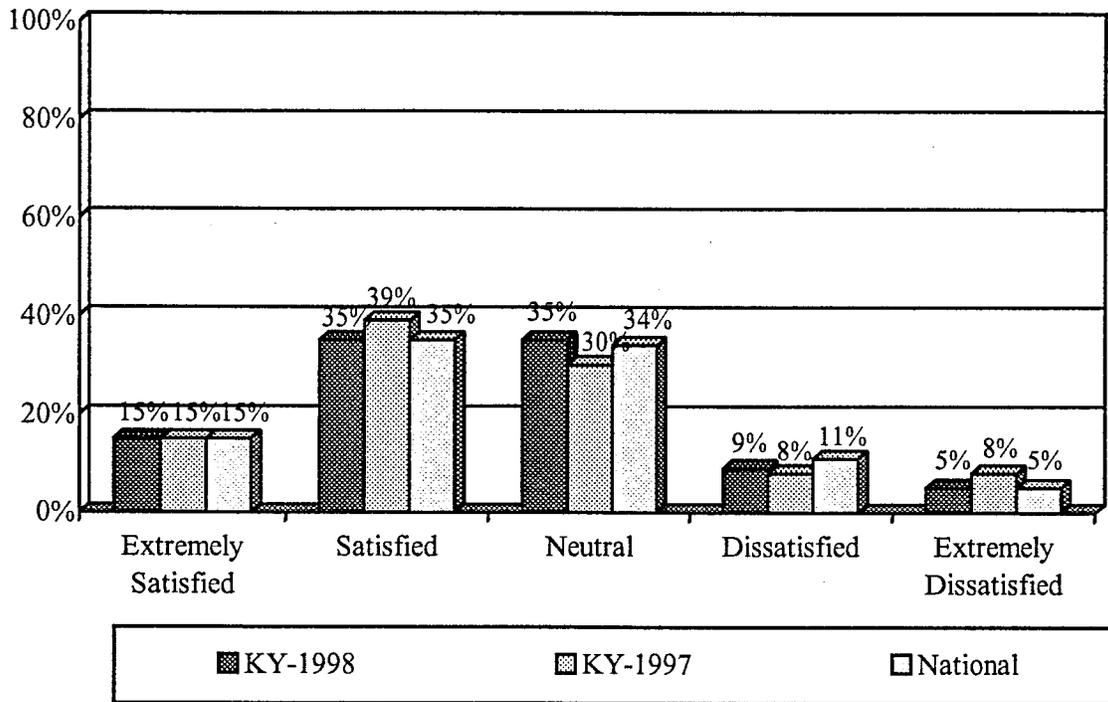
- Overall satisfaction with the highway system
- Satisfaction with **characteristics** of the highway system
- Satisfaction with registration and licensing processes

This report closely approximates the format generated for the national and 1997 studies. Where appropriate, results from these studies are included to provide points of comparison.

## OVERALL SATISFACTION WITH THE HIGHWAY SYSTEM

All 1998 study participants were asked to assess various characteristics of the highway system using a "1-5" rating scale, where "5" represented "Extremely Satisfied" and "1" represented "Extremely Dissatisfied."<sup>2</sup> Prior to asking respondents to rate their satisfaction with individual highway characteristics, participants were asked to rate their **overall** satisfaction with the major highway they used most often. The figure below illustrates these results.

OVERALL SATISFACTION WITH HIGHWAY SYSTEM



<sup>2</sup> Both previous reports described the rating scale as "5" representing "Very Satisfied" and "1" representing "Very Dissatisfied." However, examination of the questionnaires from each study showed that the rating scale was described to survey respondents as "Extremely Satisfied/Dissatisfied." As a result, this latter verbiage will be used in the current report.

As the figure demonstrates, when ratings of “4” (“Satisfied”) and “5” (“Extremely Satisfied”) were combined, Kentuckians expressed slightly lower overall satisfaction with the state’s highway system in 1998 (50 percent) than they did in 1997 (54 percent). However, 1998 statewide satisfaction levels were equal to those expressed by national respondents in 1996.

It is important to note that in both the 1997 and 1998 studies, a relatively large number (30-35 percent) of respondents expressed “neutral” responses—a rating of “3” on the 1-5 scale. This indicates quite a bit of room for improvement in satisfaction scores.

When reviewing satisfaction for different segments of the 1998 study population and how each rated the highway system, no significant differences were revealed when analyzing the data by the following: type of primary highway driving, location of primary driving, vehicle type, congressional district, and gender. There were, however, several significant differences between other characteristics.

**Primary Driving Purpose:**

- Those who drive primarily for shopping/errands and commuting to and from work expressed higher levels of satisfaction than did those who drive mostly for recreation or other work-related travel.

**Highway District:**

- Respondents who drive in the 1<sup>st</sup>, 5<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> highway districts indicated a higher level of overall satisfaction than did those from other highway districts.

**Age:**

- Participants aged 35-54 and 55 or older expressed significantly higher levels of satisfaction with statewide highways than individuals in the 18-24 age group.

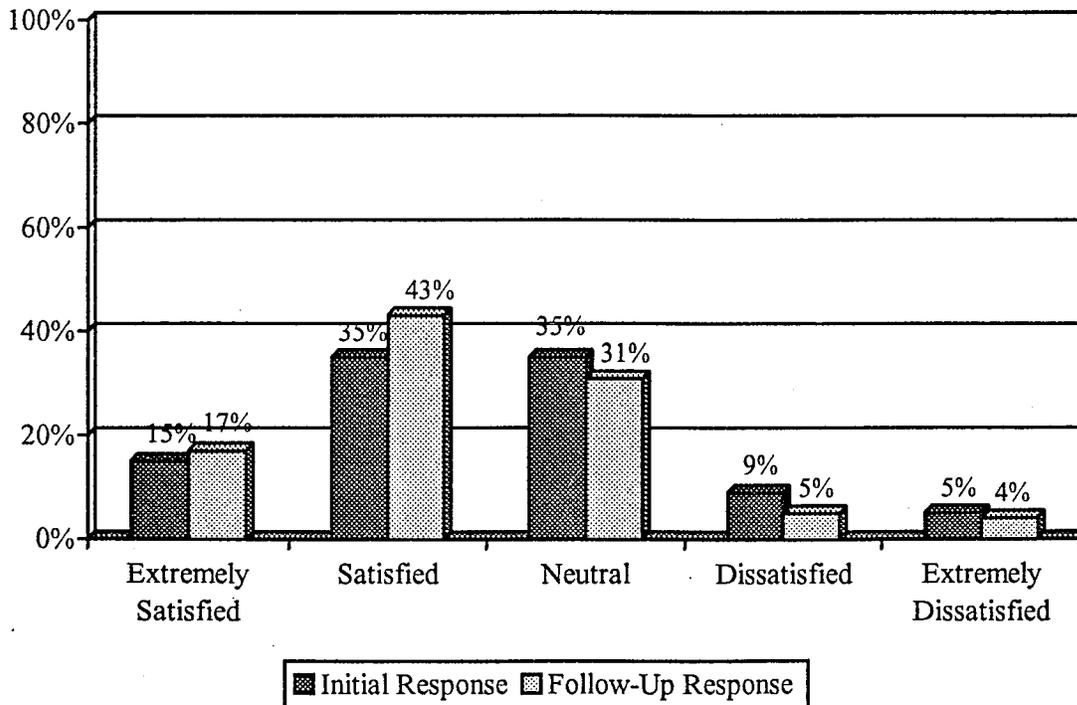
The results shown above differ somewhat from findings discussed in the 1997 report. In 1997, differences were revealed for primary driving purpose (shopping/errands and recreation had higher satisfaction ratings), primary type of

highway driving (multi-lane highways and Interstate highways received higher ratings than did two-lane highways), and congressional districts (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> received the highest ratings).

Near the close of each interview, after respondents had discussed individual highway characteristics plus a variety of attributes pertaining to each, participants were again asked to rate their overall satisfaction with the highway they use most often. Research has shown that, after respondents have considered a topic in greater detail, many times their satisfaction rating changes as a result of this scrutiny. This latter score is thought to give a more accurate representation of actual satisfaction.

Below are results from this follow-up question; for comparison, ratings from the initial satisfaction question are also shown. As the figure illustrates, satisfaction levels were measurably higher after respondents had considered the state's highway system in more detail.

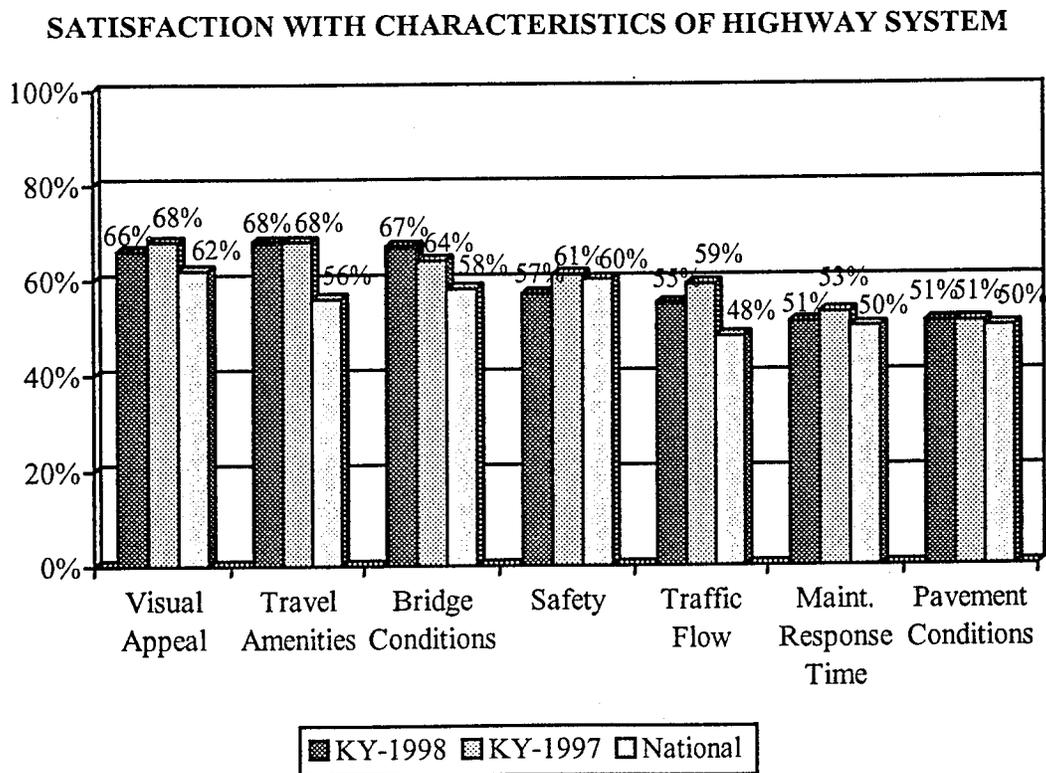
**OVERALL SATISFACTION COMPARISONS**



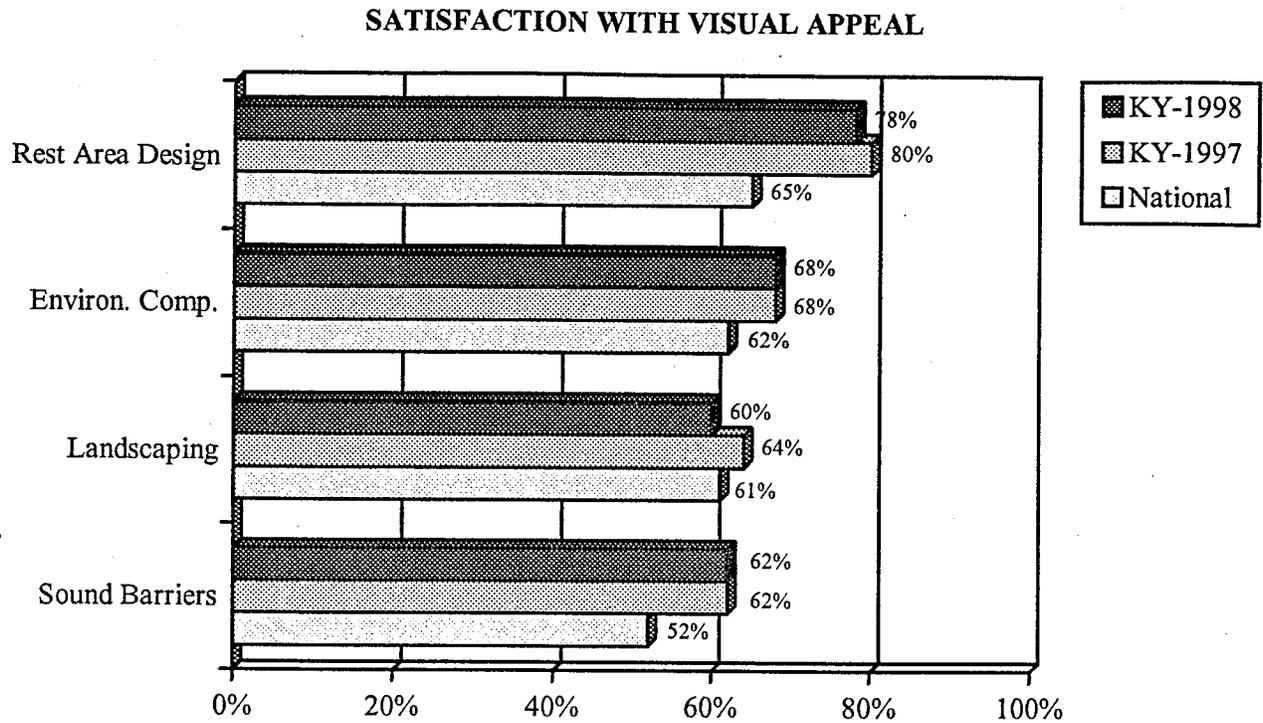
## SATISFACTION WITH CHARACTERISTICS OF THE HIGHWAY SYSTEM

Each of the seven major highway characteristics assessed in this study is composed of several distinct attributes. Respondents were asked to rate their satisfaction with each of the attributes identified with a given characteristic, and then were asked to provide an overall rating of satisfaction with the characteristic itself. To eliminate question order bias, characteristics were presented to respondents in random order.

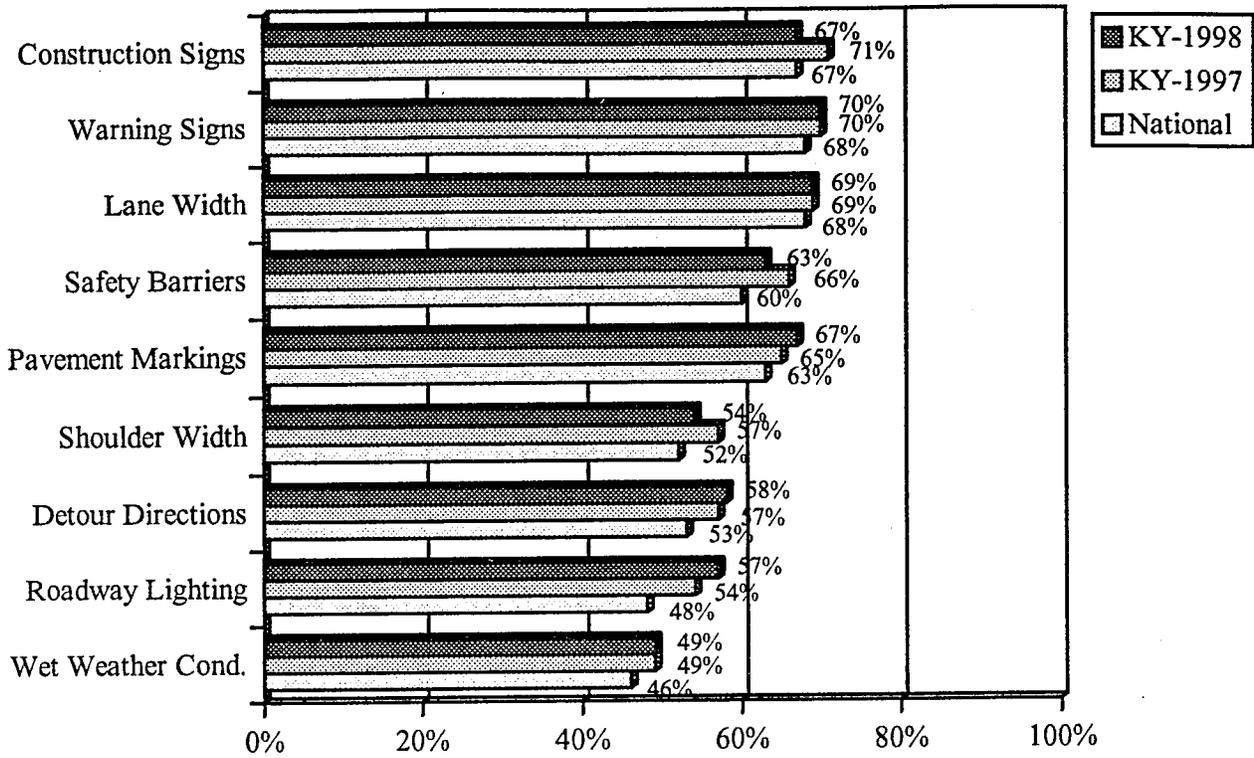
Below are the respective levels of public satisfaction with each major highway characteristic. For this figure, ratings of "4" ("Satisfied") and "5" ("Extremely Satisfied") were combined to reflect the overall satisfaction level.



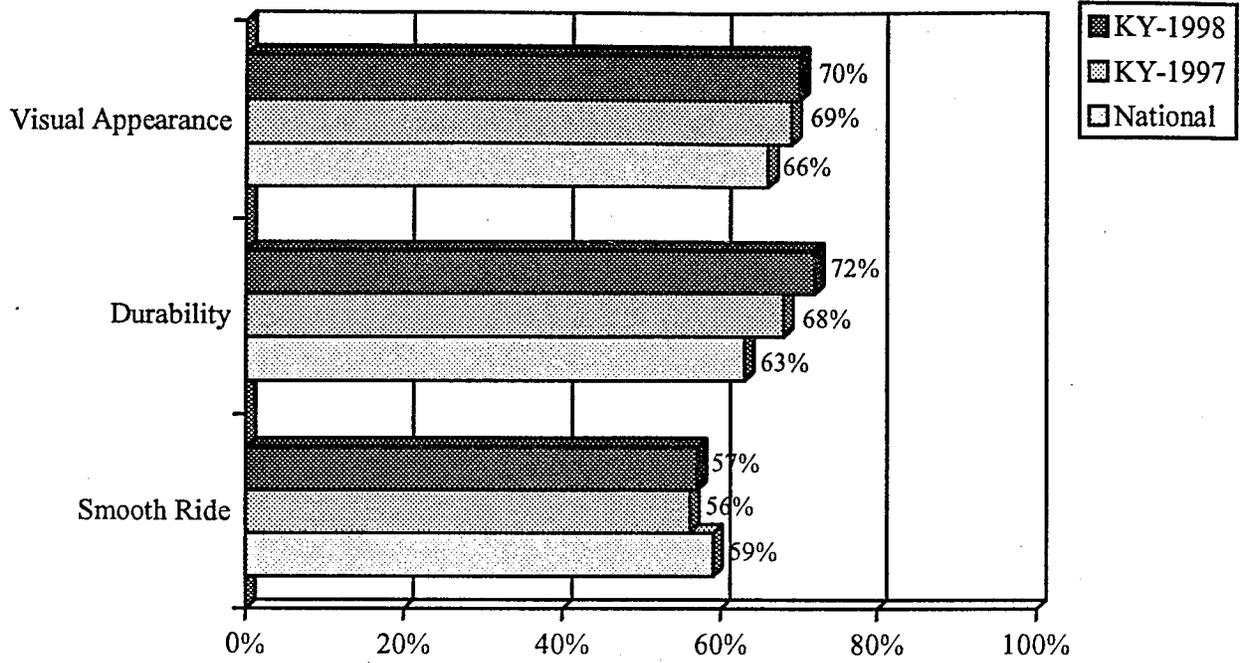
Following are the respective levels of public satisfaction with attributes broken out by each major characteristic.



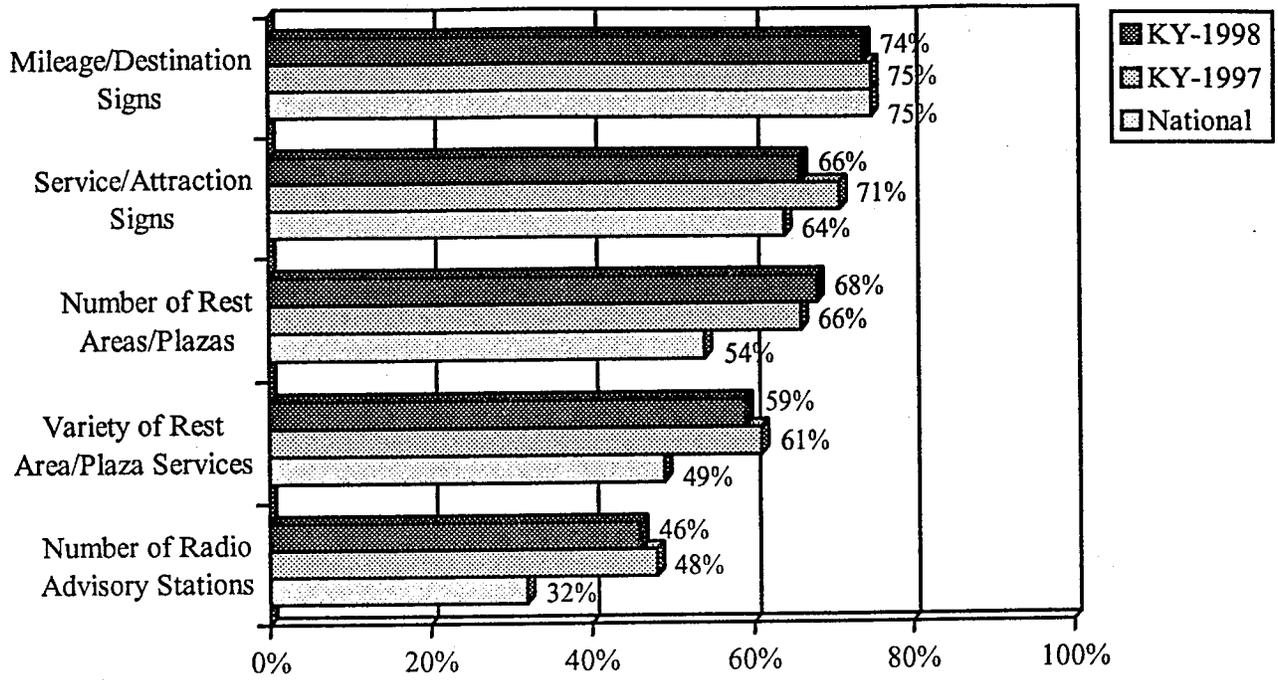
### SATISFACTION WITH SAFETY ATTRIBUTES



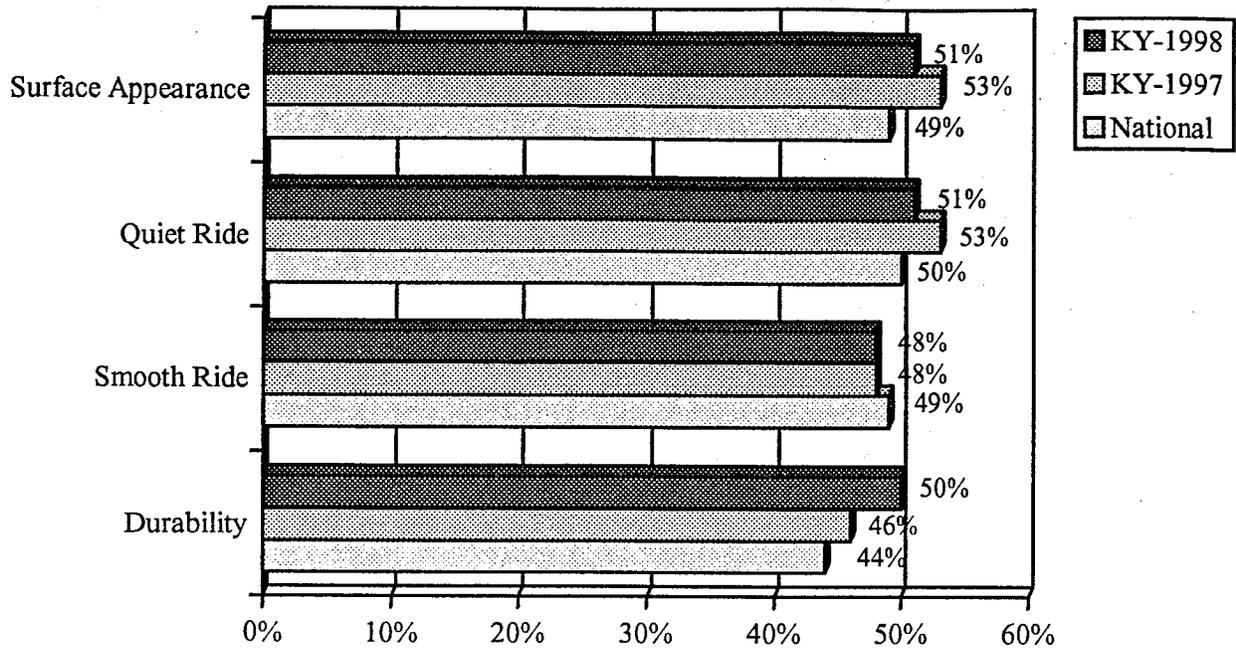
### SATISFACTION WITH BRIDGE CONDITIONS



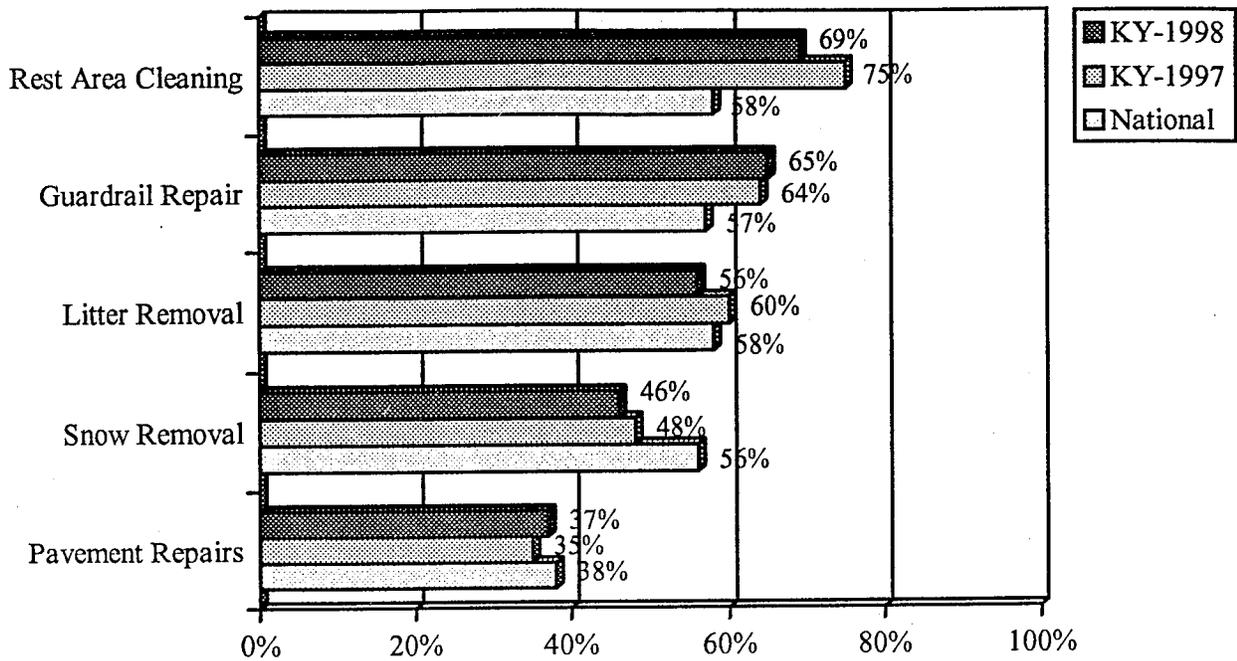
### SATISFACTION WITH TRAVEL AMENITIES



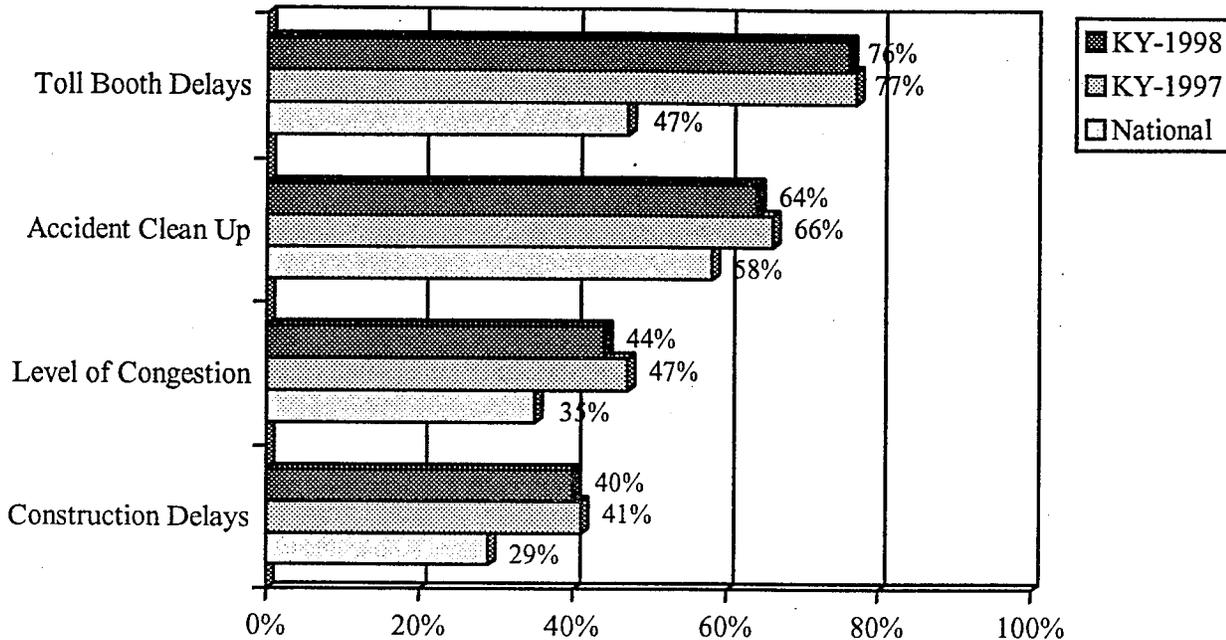
### SATISFACTION WITH PAVEMENT CONDITIONS



### SATISFACTION WITH MAINTENANCE RESPONSE TIME



### SATISFACTION WITH TRAFFIC FLOW



### HOW KENTUCKY COMPARED OVER TIME

In 1998, Kentuckians expressed satisfaction levels similar to 1997 scores for five of the seven primary highway characteristics. Additionally, for each of these, 1998 statewide satisfaction levels were higher than satisfaction ratings in the *national* study. However, 1998 results also showed that Kentucky's statewide satisfaction levels did not improve over 1997 statewide scores for any characteristic tested. Also, satisfaction showed significant declines in 1998 for two key characteristics—safety and traffic flow.

Regarding the 34 highway attributes tested, 1998 Kentucky drivers showed higher levels of satisfaction than did drivers in the national study on all but seven items—timeliness of snow removal, smoothness of ride on bridges, timeliness of litter removal, mileage and destination signs, smoothness of ride on pavement, visual appeal of landscaping, and timeliness of pavement repairs. However, only one of these differences—timeliness of snow removal—reached significance.

On a more encouraging note, in 1998 Kentucky scored higher than national ratings on a total of 26 highway attributes. These are shown below, broken out by characteristic.

### **Safety**

- Pavement markings
- Warning signs
- Lane width
- Safety barriers
- Shoulder width
- Wet weather conditions
- Detour directions
- Roadway lighting

### **Pavement Conditions**

- Durability
- Surface appearance
- Quietness of ride

### **Traffic Flow**

- Toll booth delays
- Accident clean up
- Congestion levels
- Construction delays

### **Maintenance Response Time**

- Rest area cleaning
- Guardrail repair

### **Bridge Conditions**

- Visual appearance
- Durability

### **Travel Amenities**

- Number of rest area/plaza services
- Variety of rest areas/plazas
- Service/attraction signs
- Number of radio advisory stations

## Visual Appeal

- Sound barriers
- Environmental compatibility
- Rest area design

When comparing attribute satisfaction ratings in 1997 with 1998 ratings, several differences emerged. The following lists illustrate attributes that showed variations from 1997 scores: improvements are shown in the list to the left; declines are shown to the right. Those differences reaching significance are italicized.

### Improvements:

- Pavement markings
- Detour directions
- Roadway lighting
- Visual appearance of bridges
- Bridge durability
- Smoothness of ride on bridges
- Number of rest areas/plazas
- Timeliness of pavement repairs
- Pavement durability
- Timeliness of guardrail repair

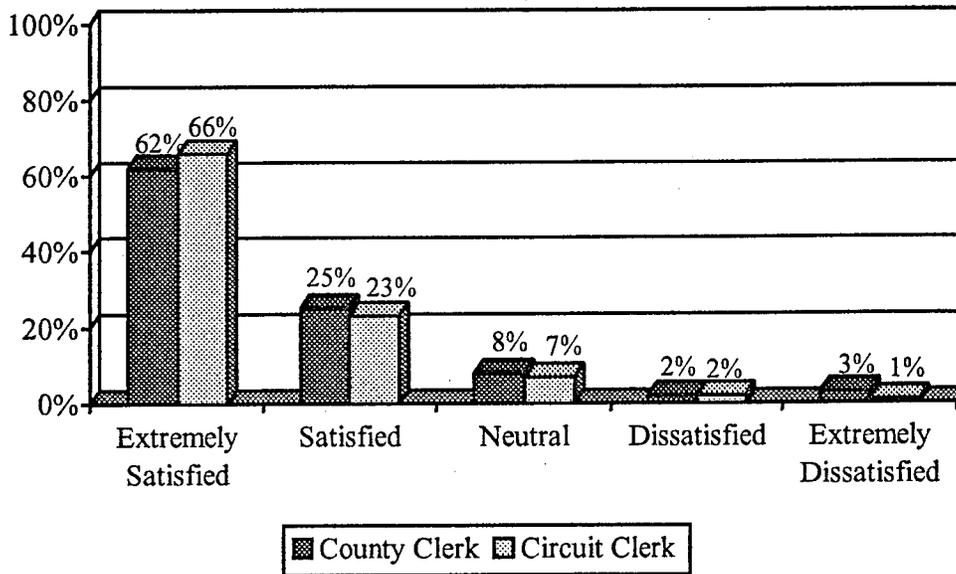
### Declines:

- *Rest area cleaning*
- *Service/attraction signs*
- *Visual appeal of landscaping*
- *Construction signs*
- *Timeliness of litter removal*
- Safety barriers
- Congestion level
- Shoulder width
- Rest area design
- Variety of rest area/plaza services
- Number of radio advisory stations
- Pavement surface appearance
- Quietness of ride on pavement
- Timeliness of snow removal
- Accident clean up
- Construction delays
- Wet weather conditions
- Mileage/destination signs
- Toll booth delays

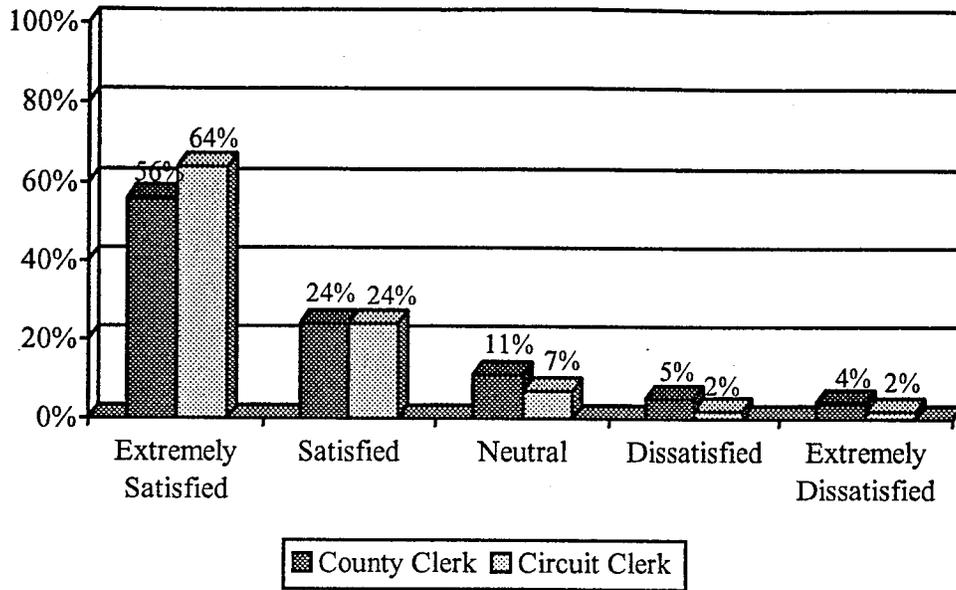
## REGISTRATION AND LICENSE RENEWALS

How satisfied were Kentuckians with the manner in which they were treated by staff at the County and Circuit Clerk offices? How satisfied were they with the length of time taken to process their vehicle registration or drivers' license? What changes, if any, would Kentucky drivers like to see in the registration and license renewal processes? Results from these questions are illustrated in the figures below.

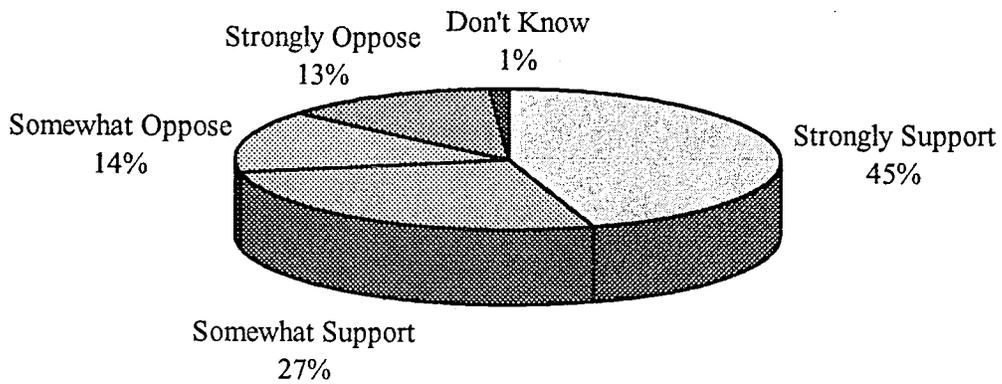
**SATISFACTION WITH OVERALL TREATMENT**



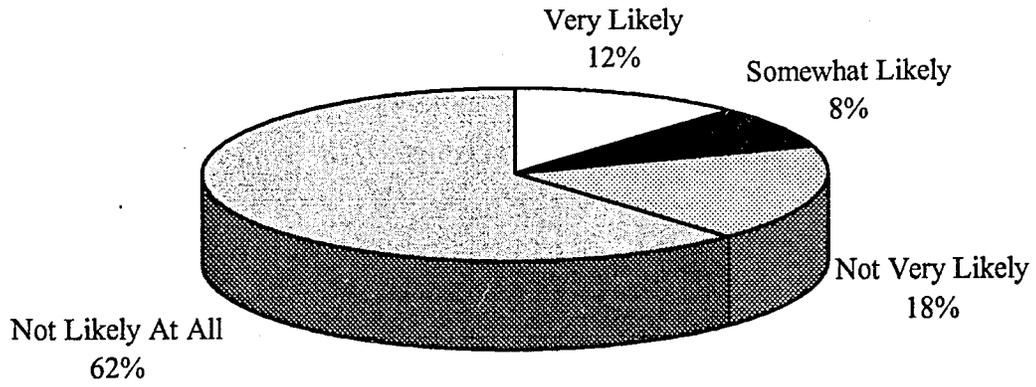
**SATISFACTION WITH LENGTH OF TIME  
TAKEN FOR REGISTRATION/LICENSE RENEWAL**



**SUPPORT FOR INCREASING TIME BETWEEN  
LICENSE RENEWALS TO SIX YEARS**



**LIKELIHOOD OF RENEWING LICENCSE IN A  
COUNTY OTHER THAN HOME COUNTY**



## **Additional Findings**

Whereas the previous sections reviewed the major findings of the survey, this section further analyzes results to reveal additional insights regarding satisfaction levels and driving patterns of different segments of the population. Additional analysis can also be achieved by referring to the cross-tabulated data included as an appendix to this report.

### **PROFILE OF RESPONDENTS: DIFFERENCES IN DRIVING PATTERNS**

Following is a summary of trends identified when reviewing the driving habits of various segments of the population:

#### **Age Differences**

*Those aged 55 and older:*

- Drive more for shopping and errands than other age groups
- Drive less for commuting or other work-related reasons than other age groups

#### **Gender Differences**

- Males do more driving for commuting and other work-related activity than do females
- Females drive more frequently for shopping and errands relative to males

### **CHARACTERISTICS OF THE HIGHWAY SYSTEM: PUBLIC DIFFERENCES**

Following is a summary of trends identified when reviewing the differing levels of satisfaction among the driving public. Each of the seven characteristics measured in this survey is listed below with key demographic differences included for each.

## **Traffic Flow**

- Satisfaction with traffic flow was greater in the 1<sup>st</sup> and 9<sup>th</sup> highway districts than in other districts
- Rural drivers had higher satisfaction than urban drivers or those who drive equally in urban and rural areas
- Lower satisfaction was expressed by participants in the 3<sup>rd</sup> and 4<sup>th</sup> Congressional districts, whereas higher satisfaction was expressed in the 1<sup>st</sup> and 2<sup>nd</sup>
- The youngest (18-34 years) and oldest (55+ years) age groups had higher satisfaction than other age groups

## **Safety**

- Lower satisfaction scores were given by drivers in the 3<sup>rd</sup>, 10<sup>th</sup>, and 12<sup>th</sup> highway districts
- Higher satisfaction was expressed by shoppers, and lower satisfaction for those who drive for work-related business other than commuting

## **Visual Appeal**

- Higher satisfaction was found among the youngest (18-34 years) and oldest (55+ years) age segments

## **Travel Amenities**

- Interstate travelers gave higher ratings than those who usually drive on other types of highways
- 12<sup>th</sup> district respondents gave the lowest scores, by a large margin
- Females were less satisfied than males

## **Maintenance Response Time**

- A lower level of satisfaction existed among recreational drivers and those who drive for work-related business other than commuting
- Respondents aged 18-34 and 55+ were the most satisfied among the various age groups

### **Bridge Conditions**

- Satisfaction was higher among those who drive for commuting and shopping and errands than those who drive for other purposes
- Sports utility vehicle and car drivers were less satisfied than respondents who drive other types of vehicles
- Females were more dissatisfied with bridge conditions than males

### **Pavement Conditions**

- Lower satisfaction existed among work-related and recreational drivers
- Both the 2<sup>nd</sup> and 5<sup>th</sup> congressional districts experienced lower satisfaction scores than the rest of the state
- Highway districts 1, 7, and 9 had higher satisfaction with pavement conditions than other districts

**Appendix A:**

**Survey Instrument**

**C — complete (circle, date, initial)**  
**R — refused**  
**NA — no answer**  
**B — busy**  
**CB — call back**  
**AM — answering machine**  
**T — terminated (include reason)**  
**DS — disconnected number**

Leanna Hall  
Research Manager  
606-276-6114  
(can call collect, 9:00-5:00 EDT)

Date: June 1997

### **9-1-(area code)-xxx-xxxx-wait for tone-272**

**Note: If you hear a second tone, enter 3-digit code again.**

Hello, my name is \_\_\_\_\_ and I am calling on behalf of the Kentucky Department of Highways. May I please speak to the adult in the household 18 years or older who had the most recent birthday? (*IF ASKED READ: We ask for the adult with the most recent birthday in order to randomize the selection of people in your household.*)

#### **Once connected:**

Hello, my name is \_\_\_\_\_ and I am calling on behalf of the Kentucky Department of Highways. Our firm, Preston Osborne Research, has been hired by the University of Kentucky to conduct a brief study to determine satisfaction with our highway system and we would like to include your opinions. I'd like to begin by asking you a few brief questions. (*IF ASKED: This interview will take approximately 12 to 15 minutes.*)

1. Gender (*NOTE, DO NOT ASK*)

- 1 Male
- 2 Female

2. Questionnaire Rotation Code. (*NOTE, DO NOT ASK*)

3. First, are you a licensed driver? (*DO NOT READ LIST*)

- 1 Yes
- 2 No (*SKIP TO Q. 87— PAGE 18*)
- 9 Refused (*SKIP TO Q. 87— PAGE 18*)

4. And in the past year, have you driven on **major** highways for either business, pleasure, or personal needs? By major highways, I mean driving on the interstates, parkways, other multi-lane highways, or any major two-lane highways. (*DO NOT READ LIST; IF ASKED: A major two-lane highway is any numbered highway which has three digits or less. Interstates are those limited access highways that connect two or more states and have route numbers printed on a blue shield.*)

- 1 Yes

- 2 No (SKIP TO Q. 87— PAGE 18)
- 9 Refused (SKIP TO Q. 87— PAGE 18)
5. Do you use major highways for commuting to and from work or school? (DO NOT READ LIST)
- 1 Yes
  - 2 No
  - 9 Don't know (PROMPT)
6. Do you use major highways for work or business **other** than driving to and from your **work place**? (DO NOT READ LIST)
- 1 Yes
  - 2 No
  - 9 Don't know (PROMPT)
7. What about for shopping and errands? (DO NOT READ LIST)
- 1 Yes
  - 2 No
  - 9 Don't know (PROMPT)
8. What about for recreation? (DO NOT READ LIST)
- 1 Yes
  - 2 No
  - 9 Don't know (PROMPT)
9. (IF "NO" ON Q.5-8 ASK) For what purpose do you use major highways? (DO NOT READ LIST. TRY TO CLASSIFY THE RESPONDENT'S ANSWER INTO ONE OF THE FOUR CATEGORIES BELOW. IF THEIR RESPONSE IS VERY DIFFERENT FROM THE CATEGORIES BELOW, CLASSIFY AS "OTHER.")
- 1 Commuting to and from work or school
  - 2 Work or business other than driving to and from your work place
  - 3 Shopping and errands
  - 4 Recreation
  - # Other (BE SPECIFIC)
10. (IF MORE THAN ONE "YES" ON Q.5-8 OR MORE THAN ONE ANSWER ON Q.9, ASK) I need to talk to you about just one of these trip types. For which one do you do the most driving? Would it be:  
(READ ONLY THE TYPES OF TRIPS RESPONDENT INDICATED IN PREVIOUS QUESTIONS)
- 1 Commuting to and from work or school
  - 2 Work or business other than driving to and from your work place
  - 3 Shopping and errands
  - 4 Recreation
  - # Other (BE SPECIFIC)
  - 9 Don't know (VOLUNTEERED— PROMPT; IF STILL DON'T KNOW, SKIP TO Q. 87— PAGE 18)

11. Approximately how many miles do you drive on major highways in an average week for [TRIP TYPE]? (IF RESPONDENT IS UNABLE TO ANSWER IN AN AVERAGE WEEK, ASK: Approximately how many miles would you say you drive on major highways in a typical year for [TRIP TYPE]? CHOOSE THE APPROPRIATE TIME FRAME, THEN ENTER IN THE NUMBER OF MILES DRIVEN.)

- 1 Week
- 2 Year

\_\_\_\_\_ # of miles driven (IF A RANGE IS GIVEN, RECORD THE AVERAGE) 9 Don't know (VOLUNTEERED— PROMPT FOR A GUESS)

12. For the remainder of this interview, I'd like you to focus on the major highways you use most often for [TRIP TYPE]. (IF ANSWER IS CHOICE TWO (2), YOU MAY SAY "WORK OR BUSINESS OTHER THAN COMMUTING")

On which of the following types of major highways would you say you drive the most miles? Would you say:

- 1 The interstate highway system
- 2 Other multi-lane highways such as expressways, tollways, or parkways or
- 3 Major two-lane highways which would include any numbered highway which has **three** digits or less
- 9 Don't know (PROMPT: I need to talk with you about just one of these highway systems. Which one do you have the most experience with? Would it be: READ LIST AGAIN. IF AFTER PROMPT, STILL DON'T KNOW, SKIP TO Q. 87— PAGE 18)

13. Is most of your mileage on [HIGHWAY TYPE] in urban or rural areas? (DO NOT READ LIST; CODE SUBURBAN AS URBAN)

- 1 Urban/Suburban
- 2 Rural
- 3 Equal Urban and Rural (VOLUNTEERED)
- 9 Don't know (VOLUNTEERED— PROMPT)

14. Let's talk about your **overall** satisfaction with the major highways you use. Again, please focus on the [HIGHWAY TYPE] you use for [TRIP TYPE]. Using a 5-point scale, where **5 means extremely satisfied** and **1 means extremely dissatisfied**, how satisfied are you overall? Of course, you can use any number between 5 and 1 as well. (RECORD NUMERIC RESPONSE)

- 9 Don't Know (VOLUNTEERED— PROMPT)

Now, I'd like to discuss your satisfaction with specific characteristics of the major highways you use. We'll use that same 5-point scale, where **5 means extremely satisfied** and **1 means extremely dissatisfied**. If at any point a characteristic **doesn't apply** to the highway you drive, please let me know. Let's start with...

## SAFETY

15. ...**safety**. How satisfied are you with the roadway lighting on the [HIGHWAY TYPE] you drive on most? (RECORD NUMERIC RESPONSE)  
7 Not applicable (VOLUNTEERED)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)
16. Using the same scale of 1 to 5, where **5 means extremely satisfied** and **1 means extremely dissatisfied**, how satisfied are you with shoulder width? (RECORD NUMERIC RESPONSE; IF ASKED: This is also referred to as a break-down lane or berm.)  
7 Not applicable (VOLUNTEERED)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)
17. How satisfied are you with safety barriers such as guardrails or crash cushions? (RECORD NUMERIC RESPONSE)  
7 Not applicable (VOLUNTEERED)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)
18. With lane width? (RECORD NUMERIC RESPONSE)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)
19. With warning signs? (RECORD NUMERIC RESPONSE; IF ASKED: Yellow diamond shaped signs indicating changing roadway conditions, such as sharp curve, lane ends, narrow bridge, etc.)  
7 Not applicable (VOLUNTEERED)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)
20. With construction signs? (RECORD NUMERIC RESPONSE; IF ASKED: Orange signs indicating on-going construction.)  
7 Not applicable (VOLUNTEERED)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)
21. With detour directions? (RECORD NUMERIC RESPONSE)  
7 Not applicable (VOLUNTEERED)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)
22. With pavement markings? (RECORD NUMERIC RESPONSE; IF ASKED: Lines on the pavement separating lanes or indicating passing zones, and so on.)  
9 Don't Know (VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE)

**SAFETY continued on next page**

## **SAFETY (Continued)**

23. With pavement in wet weather conditions? (*RECORD NUMERIC RESPONSE; IF ASKED: This encompasses your ability to see pavement markings, stop safely/skid resistant surface, and encounter minimal hydroplaning.*)  
9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
24. Thinking about the areas of **safety** we just discussed, using that same scale, **overall**, how satisfied would you say you are with the **safety** of the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)  
9 Don't Know (*VOLUNTEERED— PROMPT*)

Next, let's talk about...

## TRAFFIC FLOW

25. ... **traffic flow**. We'll use that same 5-point scale, where **5 means extremely satisfied** and **1 means extremely dissatisfied**. How satisfied are you with the level of congestion on the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)
- 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
26. How satisfied are you with toll booth delays? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
- 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
27. With construction delays? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
- 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
28. With accident clean-up? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
- 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
29. Thinking about the areas of **traffic flow** we just discussed, using that same scale, **overall**, how satisfied would you say you are with the **traffic flow** of the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)
- 9 Don't Know (*VOLUNTEERED— PROMPT*)

Next, let's talk about...

## PAVEMENT CONDITIONS

30. ... **pavement conditions**. We'll use that same 5-point scale, where **5 means extremely satisfied** and **1 means extremely dissatisfied**. First, how satisfied are you with the smoothness of the ride on the [HIGHWAY TYPE] you drive on most? (RECORD NUMERIC RESPONSE)  
9 Don't Know (VOLUNTEERED—PROMPT)
31. How satisfied are you with the surface appearance? (RECORD NUMERIC RESPONSE; IF ASKED: Absence of surface defects such as patches, rutting and ripples in the pavement.)  
9 Don't Know (VOLUNTEERED—PROMPT)
32. With the durability? (RECORD NUMERIC RESPONSE; IF ASKED: Doesn't require frequent repairs.)  
9 Don't Know (VOLUNTEERED—PROMPT)
33. With the quietness of the ride? (RECORD NUMERIC RESPONSE; IF ASKED: Absence of tire noise caused by pavement.)  
9 Don't Know (VOLUNTEERED—PROMPT)
34. Thinking about the areas of **pavement conditions** we just discussed, using that same scale, **overall**, how satisfied would you say you are with the **pavement conditions** of the [HIGHWAY TYPE] you drive on most? (RECORD NUMERIC RESPONSE)  
9 Don't Know (VOLUNTEERED—PROMPT)

Next, let's talk about...

## VISUAL APPEAL

39. ... **visual appeal**. We'll use that same 5-point scale, where **5 means extremely satisfied** and **1 means extremely dissatisfied**. First, how satisfied are you with the appearance of sound barriers? (*RECORD NUMERIC RESPONSE; IF ASKED: Appearance of walls alongside highways to block sound from residential areas.*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
40. How satisfied are you with the landscaping? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
41. With the design of rest areas? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
42. With the compatibility with the natural environment? (*RECORD NUMERIC RESPONSE; IF ASKED: The highway blends in well with the natural surroundings.*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
43. Thinking about the areas of **visual appeal** we just discussed, using that same scale, **overall**, how satisfied would you say you are with the **visual appeal** of the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)
- 9 Don't Know (*VOLUNTEERED— PROMPT*)

Next, let's talk about...

## MAINTENANCE RESPONSE TIME

44. ... **maintenance response time**. We'll use that same 5-point scale, where **5 means extremely satisfied** and **1 means extremely dissatisfied**. First, how satisfied are you with the litter removal on the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)  
9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
45. How satisfied are you with the snow removal? (*RECORD NUMERIC RESPONSE*)  
9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
46. With the pavement repairs? (*RECORD NUMERIC RESPONSE*)  
9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
47. With the guardrail and barrier repairs? (*RECORD NUMERIC RESPONSE*)  
7 Not applicable (*VOLUNTEERED*)  
9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
48. With the rest area cleaning? (*RECORD NUMERIC RESPONSE*)  
7 Not applicable (*VOLUNTEERED*)  
9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
49. Thinking about the areas of **maintenance response time** we just discussed, using that same scale, **overall**, how satisfied would you say you are with the **maintenance response time** of the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)  
9 Don't Know (*VOLUNTEERED— PROMPT*)

Next, let's talk about...

## TRAVEL AMENITIES

50. ... **travel amenities**. We'll use that same 5-point scale, where **5 means extremely satisfied** and **1 means extremely dissatisfied**. First, how satisfied are you with the number of rest areas or service plazas on the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED— SKIP TO Q. 52*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
51. How satisfied are you with the variety of rest area or plaza services? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
52. With the number of highway radio advisory stations that you can tune to for information about the area? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
53. With the signs for motorist services and attractions? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
54. With the signs for mileage and destinations? (*RECORD NUMERIC RESPONSE*)
- 7 Not applicable (*VOLUNTEERED*)
  - 9 Don't Know (*VOLUNTEERED— PROMPT TO DETERMINE IF IT IS APPLICABLE*)
55. Thinking about the areas of **travel amenities** we just discussed, using that same scale, **overall**, how satisfied would you say you are with the **travel amenities** of the [HIGHWAY TYPE] you drive on most? (*RECORD NUMERIC RESPONSE*)
- 9 Don't Know (*VOLUNTEERED— PROMPT*)

Next, let's talk about...

56. Finally, I have just a few questions for classification purposes only. What type of vehicle do you drive most often for [TRIP TYPE]? (DO NOT READ LIST; PROMPT IF NECESSARY)

- 1 Car
- 2 Van (SKIP TO Q. 85)
- 3 Truck (SKIP TO Q. 86)
- 4 Sports Utility Vehicle— Ford Explorer, Nissan Pathfinder, Jeep Wrangler (SKIP TO Q. 87)
- 5 Recreational vehicle (RV) or camper (SKIP TO Q. 87)
- 6 Bus (SKIP TO Q. 87)
- 7 Motorcycle (SKIP TO Q. 87)
- # Other (BE SPECIFIC)
- 98 Refused (VOLUNTEERED— SKIP TO Q. 87)
- 99 Don't know (VOLUNTEERED— PROMPT)

57. Is that car a:

- 1 Luxury car
- 2 A sports or high performance car or
- 3 A conventional car
- 9 Don't know (VOLUNTEERED— PROMPT)

58. Is your car a:

- 1 Compact car =====\  
(ALL RESPONSES SKIP
- 2 Intermediate size car or TO Q. 87)
- 3 Full-size car
- 4 Don't know (VOLUNTEERED— PROMPT)=====/

59. Is your van a:

- 1 Mini-van =====\  
(ALL RESPONSES SKIP
- 2 Cargo van or TO Q. 87)
- 3 Passenger van
- 9 Don't know (VOLUNTEERED— PROMPT)=====/

60. Is your truck a:

- 1 Two axle, four tire truck or (Light duty truck)
- 2 A truck with six or more tires (Heavy duty truck)
- 3 Don't know (VOLUNTEERED— PROMPT)

61. (IF TERMINATED: Now, I just need to ask you a few questions for classification purposes only.)

May I please have your age? (DO NOT READ LIST UNLESS NECESSARY TO PROMPT)

- 1 18-24
- 2 25-34
- 3 35-44
- 4 45-54
- 5 55-64
- 6 65 or older
- 9 Refused (VOLUNTEERED)

62. What was the last grade in school you completed? (DO NOT READ LIST UNLESS NECESSARY TO PROMPT)

- 1 8th grade or less
- 2 High School incomplete (Grades 9, 10, 11)
- 3 High School complete (Grade 12)/GED/Vo-tech
- 4 Some college
- 5 College Graduate
- 6 Post Graduate/Degree
- 9 Refused (VOLUNTEERED)

63. I'd like to verify that I reached you by dialing (XXX)XXX-XXXX. Is that correct?

- 1 Yes
- 2 No (ASK FOR CORRECT PHONE NUMBER AND RECORD AT TOP OF SHEET)

(IF TERMINATED:)

For this study, the Kentucky Department of Highways has asked us to concentrate on licensed drivers who have driven on major highways in the past year. Therefore, those are all the questions I have for you. I'd like to thank you very much for your time.

(FOR THOSE WHO WERE NOT TERMINATED:)

64. And finally, do you have any additional comments you'd like to make about anything we've discussed today or anything else pertaining to Kentucky's highways? (OPEN END; RECORD VERBATIM RESPONSE)

- 99 No additional comments (VOLUNTEERED)

Occasionally my supervisor needs to call respondents back to verify an answer. To ensure that we speak to the correct person if we do have to call back, may I please have either your initials or your first name only? *(IF RESPONDENT HESITATES, ASSURE THEM THIS IS OPTIONAL AND CLOSE.)*

That was the last question. Again, my name is \_\_\_\_\_ and I'm with Preston Osborne Research in Lexington and we appreciate your taking part in our survey today.

- 65. County *(RECORD FROM PHONE LIST)*
- 66. Congressional District *(RECORD FROM PHONE LIST)*
- 67. Area Development District *(RECORD FROM PHONE LIST)*
- 68. Highway District *(RECORD FROM PHONE LIST)*