KENTUCKY TRANSPORTATION CABINET:
ANNUAL ASSESSMENT OF CUSTOMER NEEDS AND SATISFACTION

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### 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.
# Table of Contents

**EXECUTIVE SUMMARY**

**INTRODUCTION & METHODOLOGY**

- About the National Study
- About the Kentucky Studies
- Survey Coordination and Administration

**PROFILE OF RESPONDENTS**

**MAJOR FINDINGS**

- Overall Satisfaction with the Highway System
- Satisfaction with Characteristics of the Highway System
- How Kentucky Compared Over Time
- Registration and License Renewals
- Profile of Respondents: Differences in Driving Patterns
- Characteristics of the Highway System: Public Differences

**APPENDIX**

- A. Survey Instrument
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.¹

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 ±3.79 percentage points at the 95 percent confidence interval.

¹ 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.

<table>
<thead>
<tr>
<th>Gender:</th>
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<tr>
<td>Male</td>
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<td>Female</td>
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<td>35-54</td>
<td>322</td>
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<td>55 and over</td>
<td>207</td>
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<tr>
<td>Refused</td>
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<td>8th grade or less</td>
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<td>High school, incomplete</td>
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<td>Some college</td>
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<td>College graduate</td>
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<td>Post college</td>
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<td>Refused</td>
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<td>Work, other than commuting</td>
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<td>Shopping/Errands</td>
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<td>Recreation</td>
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<td>23%</td>
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<td>Primary Type of Driving:</td>
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<td>Percent</td>
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<tr>
<td>Interstate Highway System</td>
<td>230</td>
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<td>Other Multi-Lane Highways</td>
<td>157</td>
<td>24%</td>
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<td>Major Two-Lane Highways</td>
<td>280</td>
<td>42%</td>
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<th>Majority of Highway Mileage:</th>
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<td>Urban</td>
<td>195</td>
<td>29%</td>
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<tr>
<td>Rural</td>
<td>377</td>
<td>57%</td>
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<td>Equal Urban/Rural</td>
<td>95</td>
<td>14%</td>
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<th>Congressional Districts:</th>
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<tr>
<td>2</td>
<td>107</td>
<td>16%</td>
</tr>
<tr>
<td>3</td>
<td>116</td>
<td>17%</td>
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<tr>
<td>4</td>
<td>115</td>
<td>17%</td>
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<tr>
<td>5</td>
<td>105</td>
<td>16%</td>
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<tr>
<td>6</td>
<td>115</td>
<td>17%</td>
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<th>Vehicle Type:</th>
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<td>Car</td>
<td>405</td>
<td>61%</td>
</tr>
<tr>
<td>Van</td>
<td>72</td>
<td>11%</td>
</tr>
<tr>
<td>Truck</td>
<td>136</td>
<td>20%</td>
</tr>
<tr>
<td>Sports Utility Vehicle</td>
<td>43</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>2%</td>
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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.” 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

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/Extremely 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 1st, 5th, 8th, and 9th 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 (1st, 2nd, and 3rd 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.
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.

SATISFACTION WITH CHARACTERISTICS OF HIGHWAY SYSTEM

![Bar chart showing satisfaction levels for different highway characteristics across years and regions]
Following are the respective levels of public satisfaction with attributes broken out by each major characteristic.

![Satisfaction with Visual Appeal Chart]

Legend:
- KY-1998
- KY-1997
- National
### Satisfaction with Safety Attributes

- **Construction Signs**
  - KY-1998: 71%
  - KY-1997: 70%
  - National: 68%

- **Warning Signs**
  - KY-1998: 70%
  - KY-1997: 70%
  - National: 68%

- **Lane Width**
  - KY-1998: 69%
  - KY-1997: 69%
  - National: 68%

- **Safety Barriers**
  - KY-1998: 63%
  - KY-1997: 60%
  - National: 66%

- **Pavement Markings**
  - KY-1998: 67%
  - KY-1997: 67%
  - National: 65%

- **Shoulder Width**
  - KY-1998: 54%
  - KY-1997: 52%
  - National: 63%

- **Detour Directions**
  - KY-1998: 58%
  - KY-1997: 78%
  - National: 7%

- **Roadway Lighting**
  - KY-1998: 54%
  - KY-1997: 7%
  - National: 7%

- **Wet Weather Cond.**
  - KY-1998: 49%
  - KY-1997: 49%
  - National: 60%
SATISFACTION WITH BRIDGE CONDITIONS

Visual Appearance
- KY-1998: 70%
- KY-1997: 69%
- National: 66%

Durability
- KY-1998: 72%
- KY-1997: 68%
- National: 63%

Smooth Ride
- KY-1998: 55%
- KY-1997: 56%
- National: 59%
Satisfaction with Maintenance Response Time

- Rest Area Cleaning: 69% KY-1998, 58% KY-1997, 68% National, 75%
- Guardrail Repair: 65% KY-1998, 64% KY-1997, 57%
- Litter Removal: 55% KY-1998, 60% KY-1997, 58%
- Snow Removal: 46% KY-1998, 48% KY-1997, 59%
- Pavement Repairs: 7% KY-1998, 33% KY-1997, 38%
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**

![Graph showing satisfaction levels for County and Circuit Clerks]
SATISFACTION WITH LENGTH OF TIME TAKEN FOR REGISTRATION/LICENSE RENEWAL

- Extremely Satisfied: County Clerk 64%, Circuit Clerk 24%
- Satisfied: County Clerk 24%, Circuit Clerk 24%
- Neutral: County Clerk 11%, Circuit Clerk 7%
- Dissatisfied: County Clerk 5%, Circuit Clerk 2%
- Extremely Dissatisfied: County Clerk 4%, Circuit Clerk 2%

SUPPORT FOR INCREASING TIME BETWEEN LICENSE RENEWALS TO SIX YEARS

- Strongly Support: 45%
- Somewhat Support: 27%
- Somewhat Oppose: 14%
- Strongly Oppose: 13%
- Don't Know: 1%
LIKELIHOOD OF RENEWING LICENCE IN A COUNTY OTHER THAN HOME COUNTY

- Very Likely: 12%
- Somewhat Likely: 8%
- Not Very Likely: 18%
- Not Likely At All: 62%
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 1st and 9th 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 3rd and 4th Congressional districts, whereas higher satisfaction was expressed in the 1st and 2nd
- 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 3rd, 10th, and 12th 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
- 12th 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\textsuperscript{nd} and 5\textsuperscript{th} 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
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
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 breakdown 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...
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...
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...
BRIDGE CONDITIONS

35. ... **bridge 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)*
   7 Not applicable—no bridges on route *(SKIP TO NEXT PAGE)*
   9 Don’t Know *(VOLUNTEERED—PROMPT)*

36. How satisfied are you with the visual appearance? *(RECORD NUMERIC RESPONSE)*
   9 Don’t Know *(VOLUNTEERED—PROMPT)*

37. With the durability? *(RECORD NUMERIC RESPONSE; IF ASKED: Doesn’t require frequent repairs.)*
   9 Don’t Know *(VOLUNTEERED—PROMPT)*

38. Thinking about the areas of **bridge conditions** we just discussed, using that same scale, **overall**, how satisfied would you say you are with the **bridge conditions** of the [HIGHWAY TYPE] you drive on most? *(RECORD NUMERIC RESPONSE)*
   9 Don’t Know *(VOLUNTEERED—PROMPT)*

Next, let’s talk about...
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...
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)

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<tbody>
<tr>
<td>1</td>
<td>Car</td>
</tr>
<tr>
<td>2</td>
<td>Van (SKIP TO Q. 85)</td>
</tr>
<tr>
<td>3</td>
<td>Truck (SKIP TO Q. 86)</td>
</tr>
<tr>
<td>4</td>
<td>Sports Utility Vehicle—Ford Explorer, Nissan Pathfinder, Jeep Wrangler (SKIP TO Q. 87)</td>
</tr>
<tr>
<td>5</td>
<td>Recreational vehicle (RV) or camper (SKIP TO Q. 87)</td>
</tr>
<tr>
<td>6</td>
<td>Bus (SKIP TO Q. 87)</td>
</tr>
<tr>
<td>7</td>
<td>Motorcycle (SKIP TO Q. 87)</td>
</tr>
<tr>
<td>#</td>
<td>Other (BE SPECIFIC)</td>
</tr>
<tr>
<td>98</td>
<td>Refused (VOLUNTEERED—SKIP TO Q. 87)</td>
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<tr>
<td>99</td>
<td>Don’t know (VOLUNTEERED—PROMPT)</td>
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57. Is that car a:

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<tr>
<td>1</td>
<td>Luxury car</td>
</tr>
<tr>
<td>2</td>
<td>A sports or high performance car or</td>
</tr>
<tr>
<td>3</td>
<td>A conventional car</td>
</tr>
<tr>
<td>9</td>
<td>Don’t know (VOLUNTEERED—PROMPT)</td>
</tr>
</tbody>
</table>

58. Is your car a:

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<tbody>
<tr>
<td>1</td>
<td>Compact car</td>
</tr>
<tr>
<td>2</td>
<td>Intermediate size car or</td>
</tr>
<tr>
<td>3</td>
<td>Full-size car</td>
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<tr>
<td>4</td>
<td>Don’t know (VOLUNTEERED—PROMPT)</td>
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</table>

59. Is your van a:

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<tbody>
<tr>
<td>1</td>
<td>Mini-van</td>
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<tr>
<td>2</td>
<td>Cargo van or</td>
</tr>
<tr>
<td>3</td>
<td>Passenger van</td>
</tr>
<tr>
<td>9</td>
<td>Don’t know (VOLUNTEERED—PROMPT)</td>
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</table>

60. Is your truck a:

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<tbody>
<tr>
<td>1</td>
<td>Two axle, four tire truck or (Light duty truck)</td>
</tr>
<tr>
<td>2</td>
<td>A truck with six or more tires (Heavy duty truck)</td>
</tr>
<tr>
<td>3</td>
<td>Don’t know (VOLUNTEERED—PROMPT)</td>
</tr>
</tbody>
</table>
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)*