Research Report
KTC-04-17/SPR263-03-3F

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KENTUCKY HIGHWAY USER SURVEY 2004

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Kentucky Highway User Survey 2004

by

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in cooperation with
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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 highway systems, including a portion to measure satisfaction with current drivers' license and registration renewal processes. Kentucky's 2004 public opinion is compared to data colleted in previous years to gauge the state's progress.

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INTRODUCTION & METHODOLOGY

In 1992, state transportation officials, the Federal Highway Administration and other interested parties met to establish a national initiative to promote the quality of the nation's highway system. An outgrowth of this collaboration was the "National Quality Initiative (NQI) Steering Committee." The Committee developed a long-range strategic plan to guide its activities during the first years of operations.

One component of the plan was to conduct a nationwide baseline study designed to assess public satisfaction with the country's highways, followed by a tracking study to measure satisfaction over time. During the fall of 1995, the nationwide baseline study was conducted, and the first tracking study was conducted in 2000.

Although the national studies provided evidence of people's attitudes regarding the nation's highway system, the sample size at the individual level was inadequate to provide state-by-state analysis of opinions. Therefore, in June 1997, the Kentucky Transportation Center (KTC), on behalf of the Kentucky Transportation Cabinet, commissioned a statewide baseline study to determine satisfaction with Kentucky's highway system. The Kentucky baseline study closely approximated the national study, which enabled direct comparisons between state and national opinions. In August 1998, KTC conducted the first statewide tracking study to begin monitoring public opinion regarding the quality of Kentucky's highways. Annual follow-up studies were conducted until 2001, after which it was decided that biennial studies would be more appropriate due to the relatively stable evaluations that are achieved from year to year. The most recent study was commissioned in 2003.

While the 2003 study still retains many elements from the national baseline study and previous Kentucky studies, changes in the administration of the national tracking study and

the questions included led to a change in focus for the 2001 Kentucky tracking study to more accurately reflect highway issues of importance to the Commonwealth at that time. Some minor changes were also made to the 2003 study for this reason. This report summarizes results from the 2003 study.

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

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

In addition to specific questions about these highway characteristics, general questions were also included regarding the Kentucky Transportation Cabinet's job performance, car-pooling, opinions about the Cabinet's spending priorities, the safety and quality of Kentucky roads relative to neighboring states, and about the perceived need for additional safe pedestrian and bicycle travel facilities.

KENTUCKY HIGHWAY SURVEY COORDINATION & ADMINISTRATION

All data for the most recent Kentucky statewide study were collected and analyzed by the University of Kentucky Survey Research Center (SRC). Interviews were completed from

February 9 to March 15, 2004 with Kentucky adults who met two screening criteria: Licensed driver 18 years old or older, and had driven on a Kentucky highway within the past year[1]

Households in Kentucky were selected using a list-assisted Waksberg Random-Digit Dialing method, giving every household telephone line in Kentucky an equal probability of being selected. 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 highway within the past year, the interview was terminated, a replacement household was contacted, and the screening process was repeated.

A minimum of 20 attempts were made to each number in the sample, with an additional 10 attempts allowed for callbacks to individuals who were contacted at an inopportune time. Call attempts were varied by day and time, including weekends, to ensure representative results. Finally, one refusal conversion was attempted several days after an initial refusal to participate.

For the 2003 Kentucky study, the questionnaire averaged just over 16 minutes in length. The process resulted in 936 completed interviews, deriving a maximum overall margin of error of ±3.2 % at the 95 percent confidence interval.[2]

Note that in this report, all figures exclude "don't know" or "not applicable" responses. Also, note that all results reported to be *statistically significant* were evaluated at the .05 level. Analyses to determine the statistical significance of related responses were conducted

[1] A highway was defined to include any of the following: the interstate highway system, parkways, other multi-lane highways, major two-lane highways (numbered highways with three or fewer digits), and numbered rural secondary roads (with four or more digits).

[2] Note that for some individual items, such as "rest area cleaning" the margin of error can be as large as ±5.8 % due to the smaller number of respondents for whom these questions were applicable.

using the Contingency Table Analysis (Crosstabs) or T-Tests for Independent Samples procedures in SPSS, depending on the measurement level of the data.

PROFILE OF RESPONDENTS

In addition to assessing various dimensions of study participants' experiences with Kentucky highways, the survey instrument assessed demographic information on participants, plus information regarding driving patterns. These characteristics are important for investigating satisfaction by various population segments, which can be used to prioritize and target highway improvement efforts, and also to ensure the results are representative of the larger population. The tables below illustrate the demographic breakouts used to develop profiles of 2003 study participants.

GENDER	**FREQUENCY**	**PERCENT**
Male	411	44%
Female	525	56%

AGE	**FREQUENCY**	**PERCENT**
18-34	168	19%
35-54	444	49%
55 and over	296	33%

EDUCATION	**FREQUENCY**	**PERCENT**
8th grade or less	27	3%
High school, incomplete	62	7%
High sch. Diploma/GED	333	37%
Some college	239	26%
College graduate	132	15%
Graduate degree	114	13%

PRIMARY TRIP TYPE	**FREQUENCY**	**PERCENT**
Commuting	388	42%
Shopping/errands	295	32%
Recreation	113	12%
Work, other than commuting	120	13%

PRIMARY TYPE OF DRIVING	FREQUENCY	PERCENT
Major two-lane highways	373	40%
Interstate highway system	249	27%
Other multi-lane highways	154	17%
Rural secondary roads	160	17%

MAJORITY OF HIGHWAY MILEAGE	FREQUENCY	PERCENT
Rural	524	56%
Urban	348	37%
Equal urban/rural	62	7%

VEHICLE TYPE	FREQUENCY	PERCENT
Car	484	53%
Truck	178	20%
Sports utility vehicle	151	17%
Van	84	9%
Other	12	1%

MAJOR FINDINGS

This section of the report outlines key findings from the 2003 study, organized around three main points:

- Overall satisfaction with the highway system
- Satisfaction with **characteristics** of the highway system
- Attitudes about car-pooling, comparative quality of Kentucky's highways, and the Kentucky Transportation Cabinets performance and spending priorities

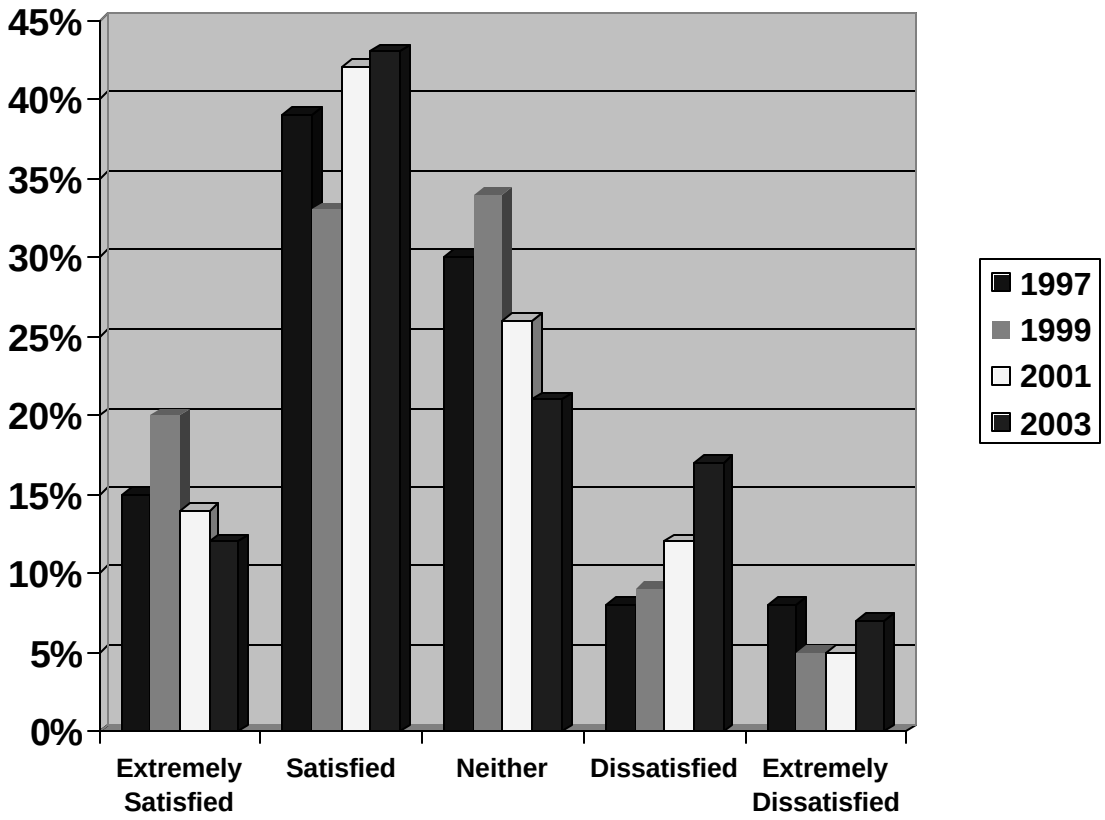
This report closely approximates the format generated for the previous Kentucky studies. Where appropriate, results from these studies are included as points of comparison.[3]

[3] It should be noted that apparent 'changes' in results before and after the 2000 Kentucky survey may be as much due to more rigorous methodology as to real changes in opinion. The current study methodology has resulted in a more representative sample, particularly with younger drivers, which may explain observed differences in opinion. Also, it should be noted that all charts are created from unweighted data.

OVERALL SATISFACTION WITH THE HIGHWAY SYSTEM

As in previous years, all 2003 study participants were asked to assess various characteristics of Kentucky's highway system using a 5-point rating scale, where 5 represented "extremely satisfied" and 1 represented "extremely dissatisfied." Prior to rating their satisfaction with individual highway characteristics, participants scored their **overall** satisfaction with the major highway type they used most often for the trip type they took most often.

Trends in Overall Satisfaction with the Highway System



Closer examination of 2003 results indicates that overall satisfaction with state highways (combined “satisfied” and “extremely satisfied” responses) has remained fairly stable over time, although recently the trend has been away from “extremely satisfied.”

A concern however is the trend toward dissatisfaction. Since 1999 a steadily declining number of respondents reported being “neither satisfied nor dissatisfied” with more respondents instead reporting they are dissatisfied. Overall those reported being dissatisfied has increased from 14% to 24% since the 1999 study.

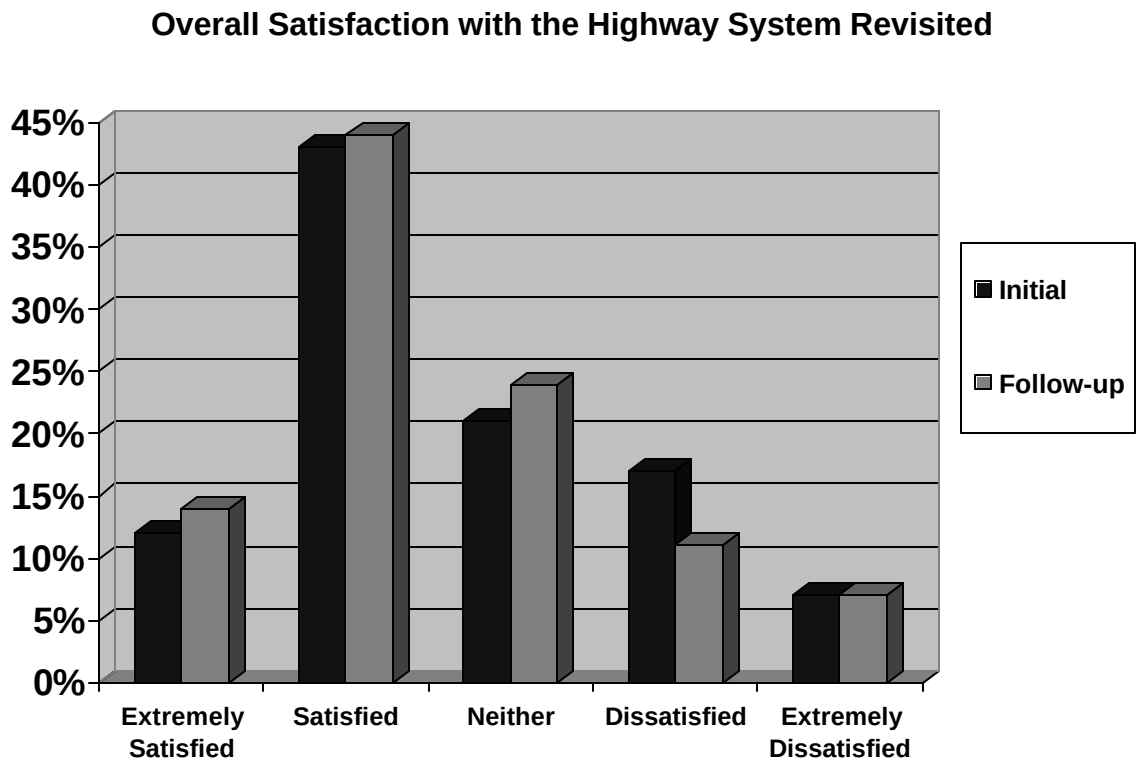
Examination of overall satisfaction by vehicle type and primary highway type revealed few statistically significant differences. Unlike previous years, there were no statistically significant differences in satisfaction by vehicle type. However, this year those who traveled primarily on RURAL SECONDARY ROADS were significantly more likely to be dissatisfied than those who traveled primarily on all other types of roads.

FOLLOW-UP OVERALL SATISFACTION RATINGS

Near the close of each interview, after they had discussed individual highway characteristics plus a variety of attributes pertaining to each, participants provided a second rating of their overall satisfaction with the highway they use most often. This provides another, perhaps more accurate picture of satisfaction after respondents have had time to reflect on all the different attributes of the highway system.

Below are 2003 results from the follow-up question juxtaposed with the initial 2003 results. As can be seen clearly, satisfaction increased (and dissatisfaction decreased) after respondents considered their experiences with the state’s highways in more detail. Initial satisfaction was 55 percent, compared to 58 percent at the follow-up. Also, an additional 3

percent were neither satisfied nor dissatisfied when asked the follow-up question, leading to reduction in reported dissatisfaction from 24 percent to 18 percent.



As with the initial satisfaction question, those who traveled primarily on RURAL SECONDARY ROADS were still significantly less satisfied than all other drivers. In addition, after reflection upon questions asked during the course of the interview, CAR drivers were now significantly more likely to be satisfied than SUV drivers.

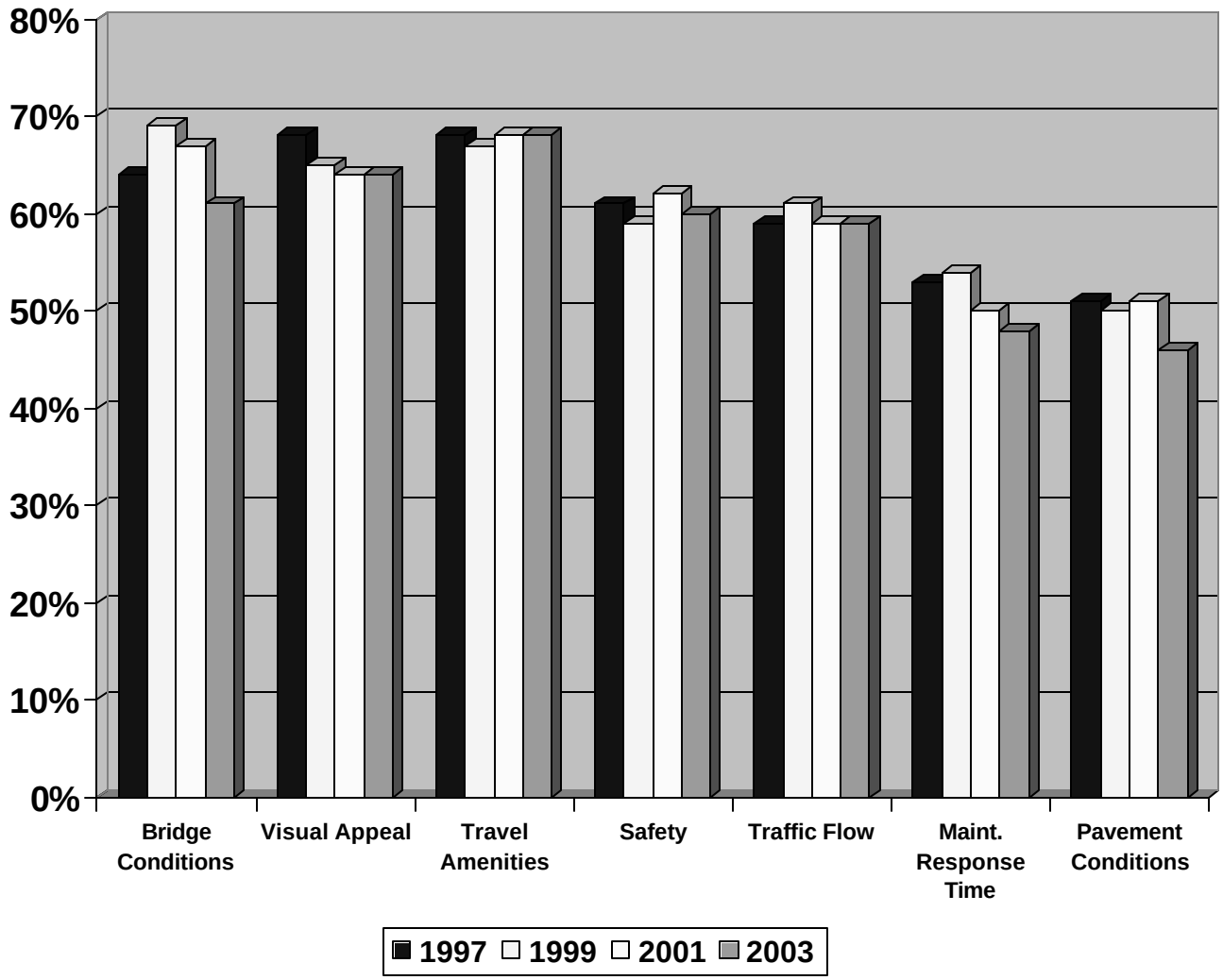
SATISFACTION WITH HIGHWAY CHARACTERISTICS

A total of seven highway characteristics were tested in this study – safety, traffic flow, pavement conditions, bridge conditions, visual appeal, maintenance response time, and travel amenities. For each of the seven characteristics, respondents were asked to rate their

satisfaction with a series of several distinct attributes.[4] They then provided an overall satisfaction rating for that characteristic.

Below are the levels of satisfaction with each highway characteristic tested. **Note that in this figure, ratings of 4 ("satisfied") and 5 ("extremely satisfied") were combined to reflect the overall satisfaction level.**

Trends in Satisfaction with Highway Characteristics

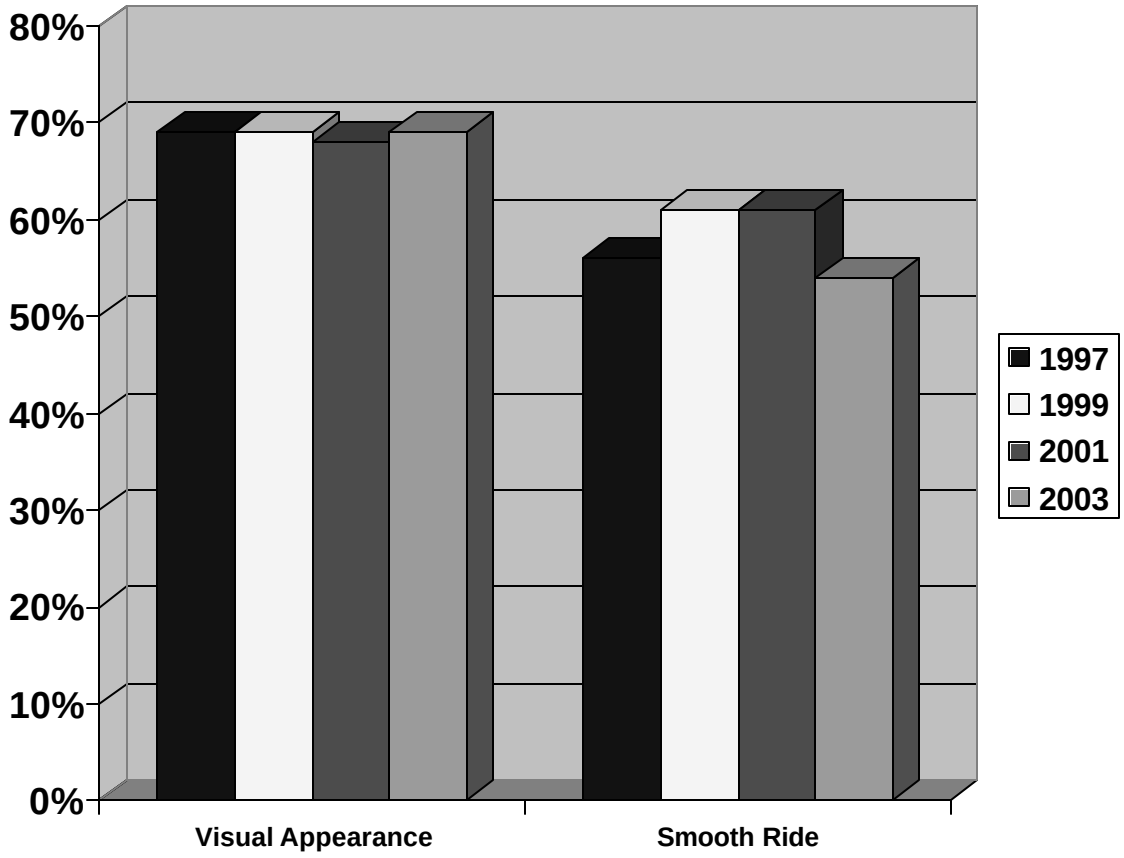


[4] To eliminate biases, the attributes of each highway characteristic were presented to respondents in random order.

Compared with 2001, overall satisfaction with Visual Appeal, Travel Amenities, and Traffic Flow remained the same, while satisfaction with Bridge Conditions, Safety, Maintenance Response Time, and Pavement Conditions has decreased. For Bridge Conditions and Maintenance Response Time, this continues a trend.

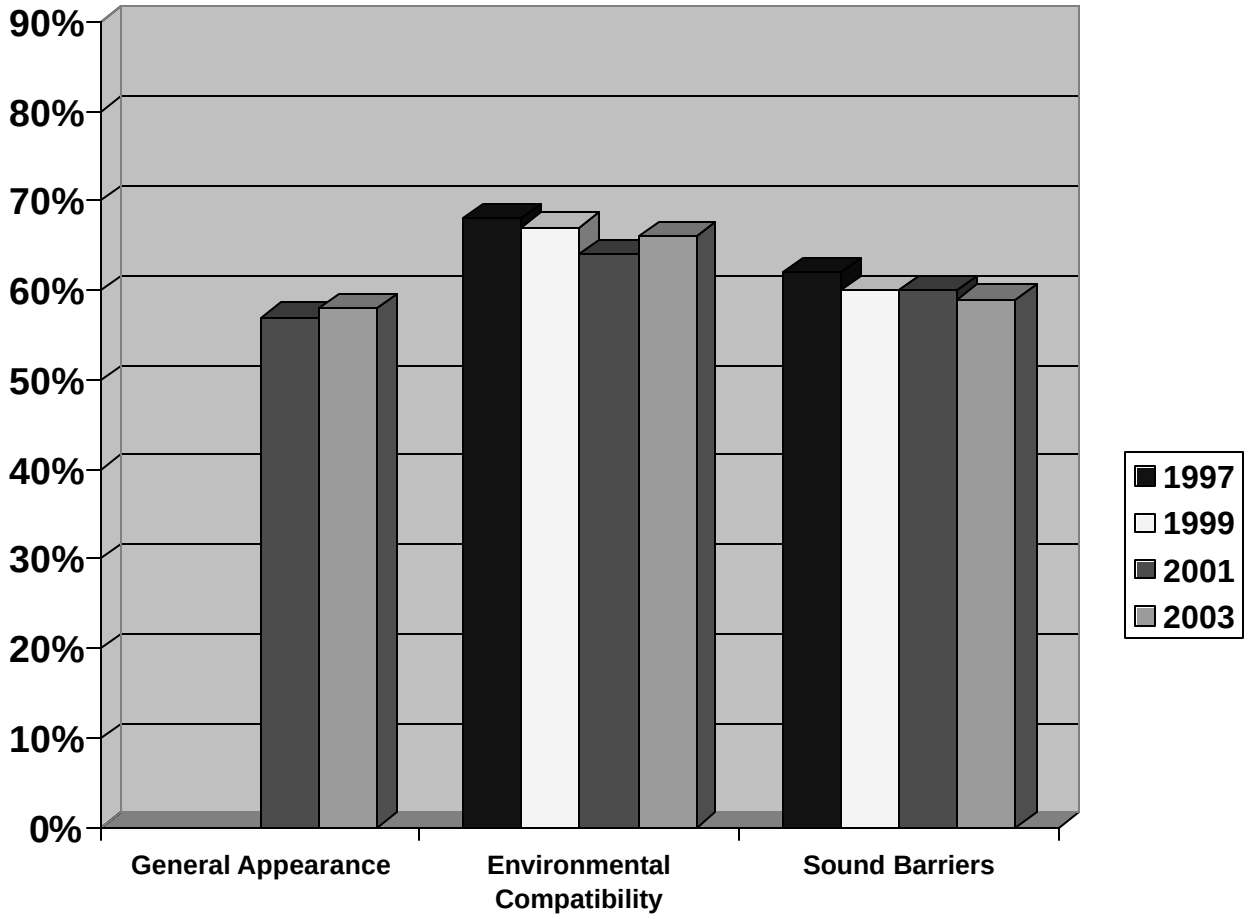
Presented on the following pages are the trends in ratings of specific attributes of each highway characteristic. Charts are presented in the order the characteristics appear in the chart above.

Trends in Satisfaction – Bridge Conditions[5]



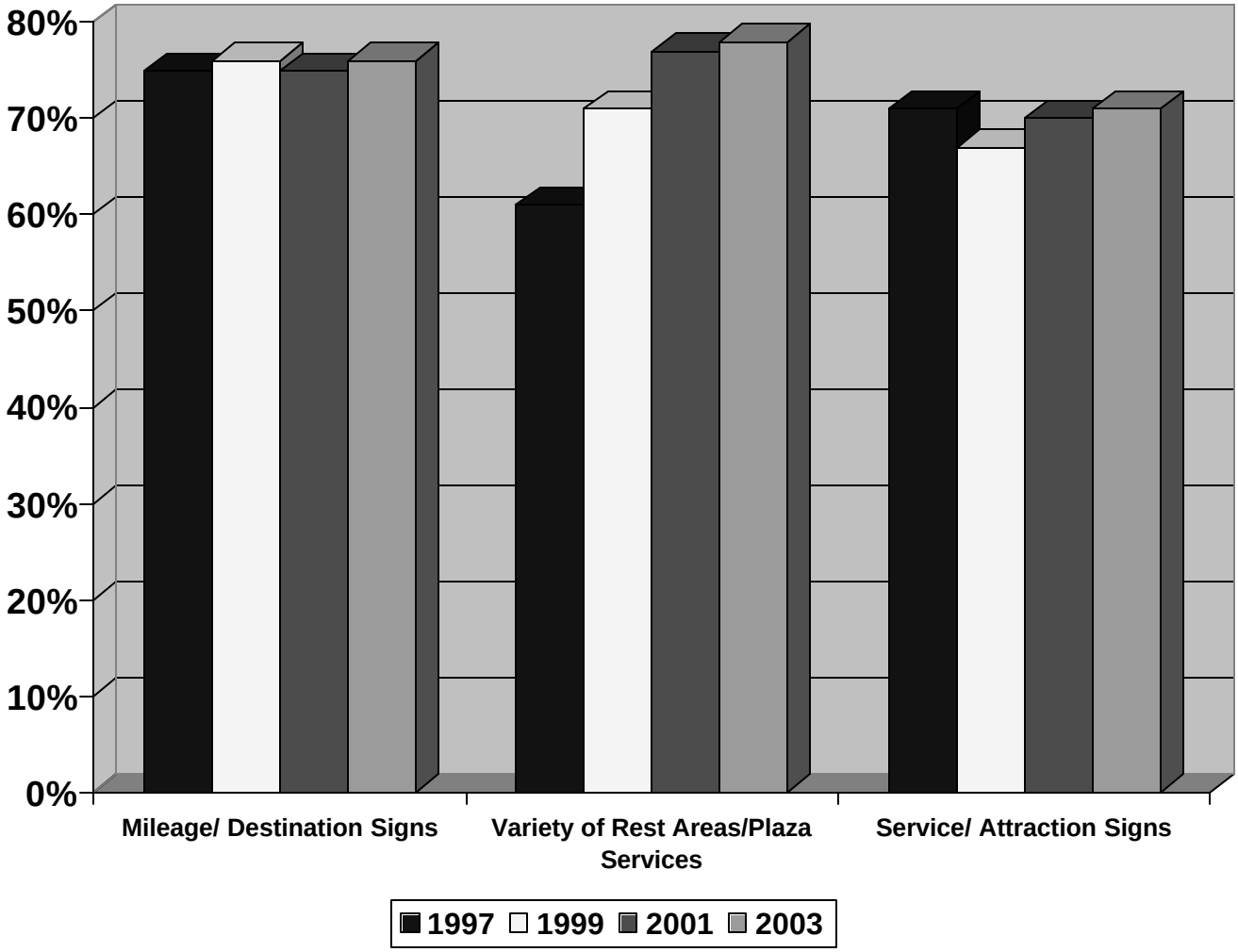
[5] The exact question wording was changed for the Smooth Ride item in 2003. In 2003 respondents were asked their satisfaction with the smoothness of the *the end bumps at the start and end of bridges"* as opposed to the previous survey asking about the smoothness of the ride. The specificity of this change could affect responses.

Trends in Satisfaction – Visual Appeal[6]

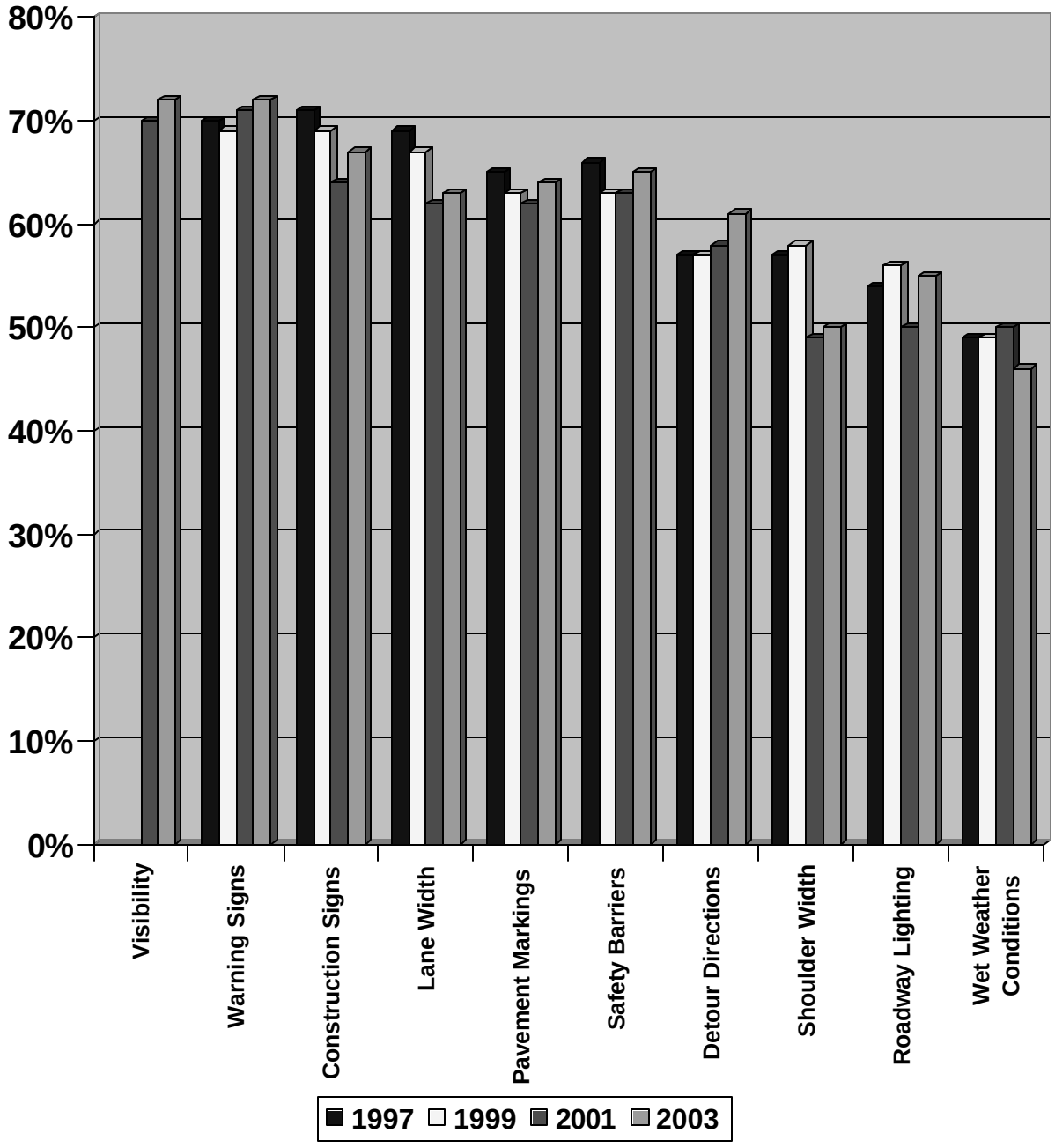


[6] The exact question wording was changed for the General Appearance item in 2003. In 2003 respondents were asked their satisfaction with the general appearance of the roadway, such as the height of the grass, or how repairs look. In 2001, the question also referred to "being free of litter."

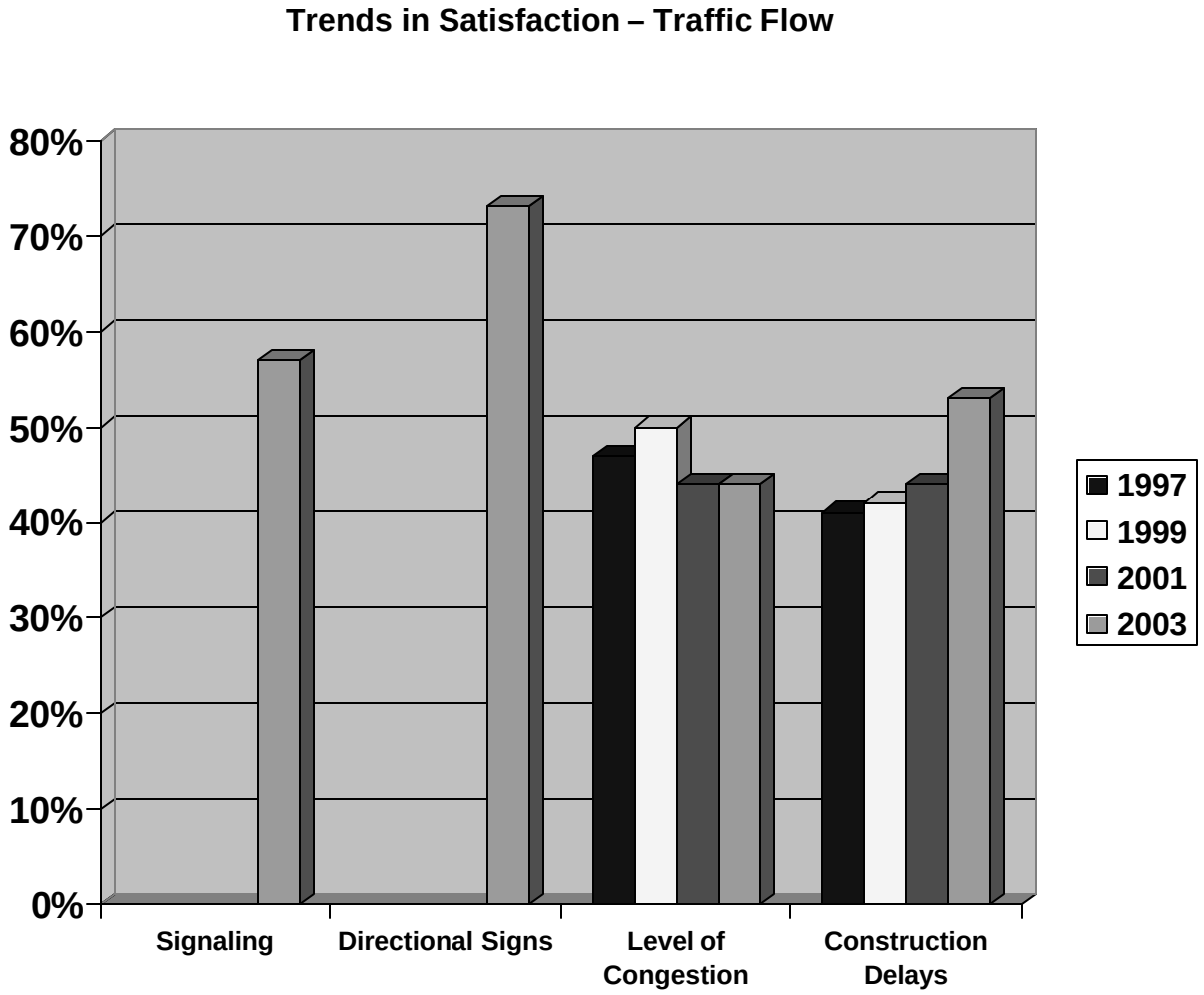
Trends in Satisfaction – Travel Amenities[7]



Trends in Satisfaction – Safety



[7] Percentages for questions regarding rest areas are based on N=308 for the 2003 survey.

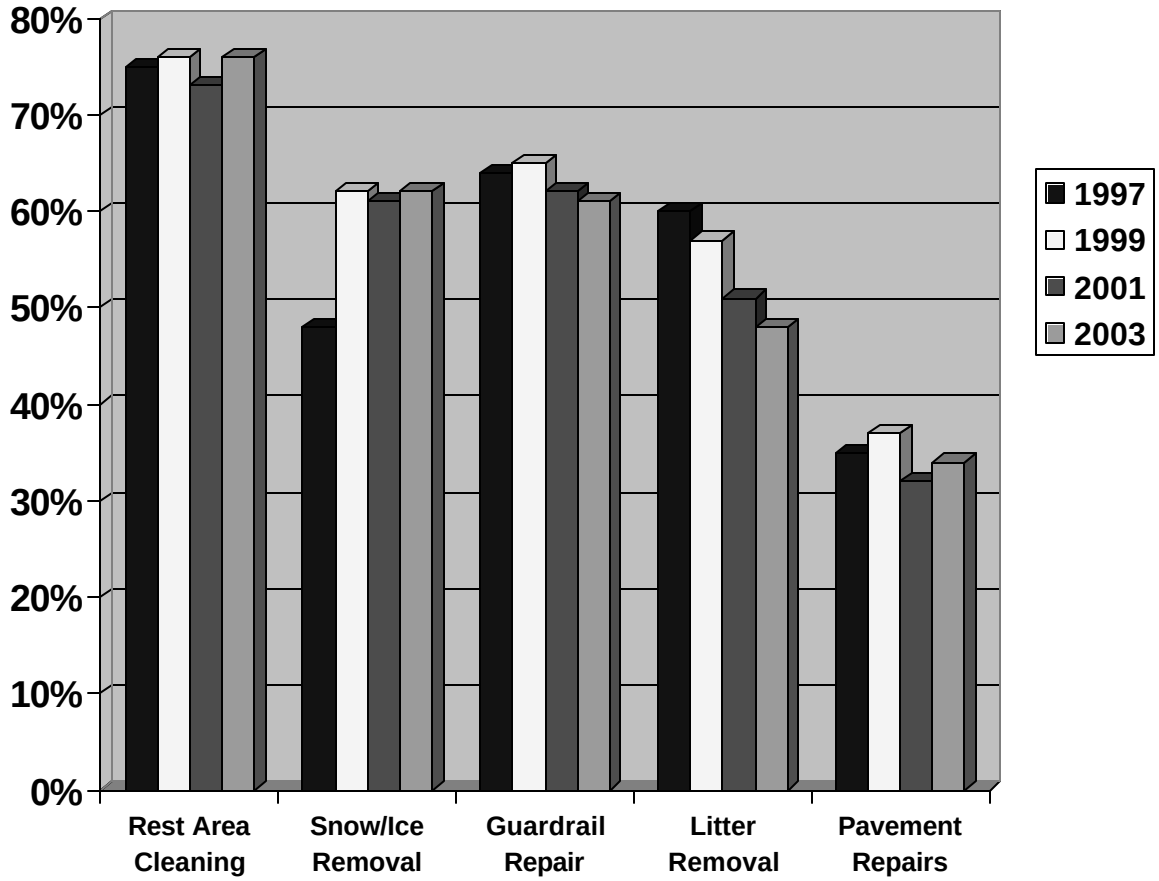


In 2003 follow-up questions were added to the survey to better understand (dis)satisfaction with the level of congestion on highways. Those who were dissatisfied with the level of congestion (31%) were asked "Does the level of congestion surprise you or do you expect congestion at the time of day you drive these roads?" Most (74%) said they expected congestion.

In addition, all respondents were asked "Do you ever take alternate routes to avoid congestion?" Most (65%) said yes; those who said no (35%) were asked "What is the MAIN reason you do not take alternate routes when you encounter congestion?" The responses (N=312) are displayed in the following table:

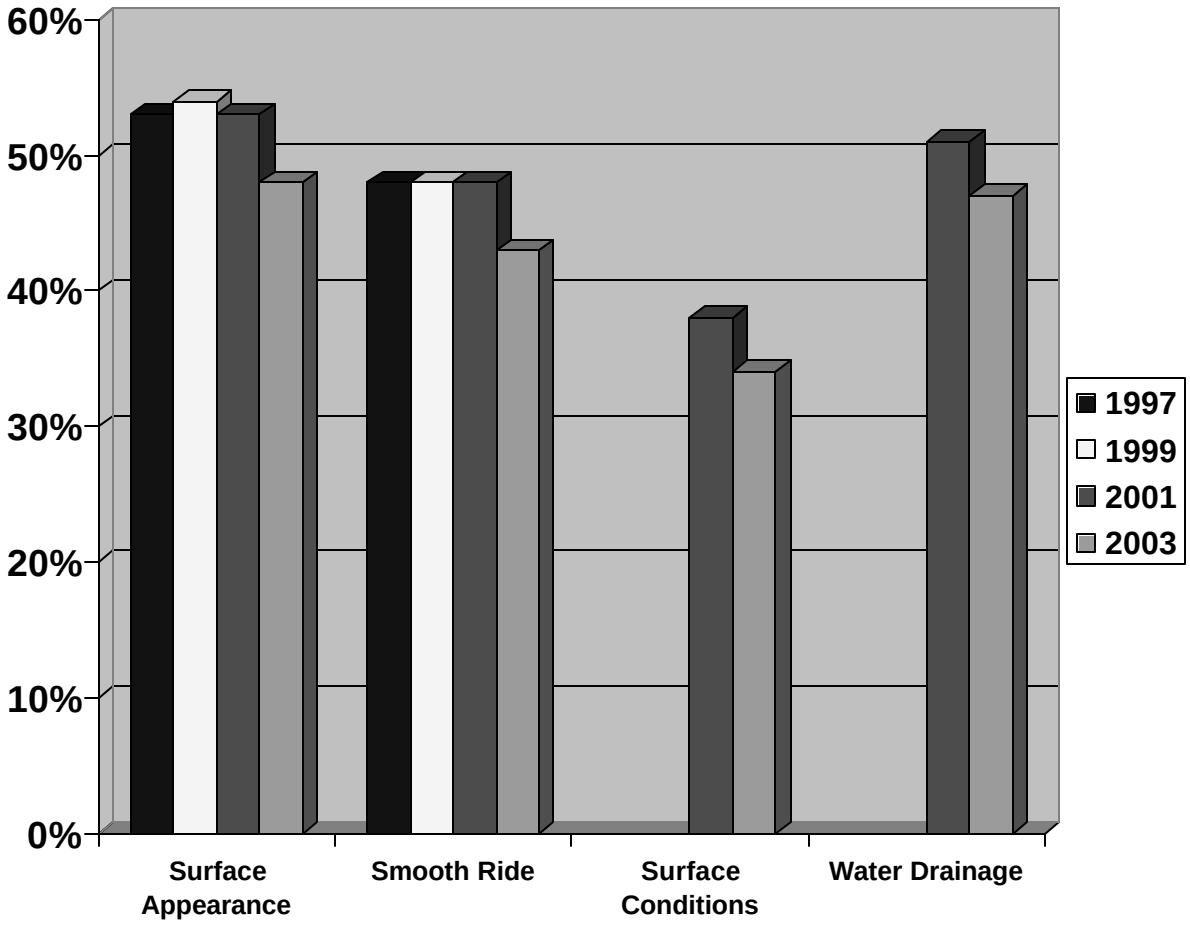
No alternate route available	32%
Too far out of the way	19%
No congestion on routes traveled	16%
Not any faster	15%
Might get lost	7%
Alternate route not safe	2%
Miscellaneous reasons	9%

Trends in Satisfaction – Maintenance Response Time[8]



[8] The exact question wording was changed for two of these items in 2001. In 2001 respondents were asked their satisfaction with snow *and ice* removal. They were also asked about *the time it takes to repair pavement damage or potholes"* as opposed to previous surveys' question about satisfaction with 'pavement repairs.'

Trends in Satisfaction – Pavement Conditions



KENTUCKY'S PERFORMANCE OVER TIME

As stated previously, current satisfaction with Kentucky highways is lower than in 2001. Overall satisfaction decreased for four characteristics and was unchanged for three. Two of these changes were only 2% or 3% - within the margin of error. However, satisfaction with bridge and pavement conditions decreased 6% and 5% respectively.

Closer examination of biennial trends since 1997 reveal that satisfaction with all characteristics has experienced small changes from year to year, often in no particular direction. Two trends to watch, however, are what appear to be downward trends in "Bridge Conditions" and "Maintenance Response Time."

Regarding the individual highway attributes tested, results showed that performance by Kentucky's highways improved on 19 attributes, maintained performance on 1, and decreased on 9. Opinion about eight of these attributes changed significantly since 2001 – six in the direction of decreased satisfaction. The two significant increases in satisfaction were with 'Construction Delays' (up 9%) and 'Roadway Lighting' (up 5%) while the statistically significant decreases in satisfaction were virtually all attributes related to pavement conditions.

Another point of interest is that careful examination of satisfaction patterns with individual attributes for the "Travel Amenities" and "Safety" characteristics reveals increases in satisfaction for almost all attributes since 2001. The lone exception is a significant decrease in satisfaction with 'Wet Weather Conditions.' Conversely, satisfaction with all attributes of "Pavement Conditions" declined in 2003 – all significantly.

Examination of attribute satisfaction in 2003 compared to 2001 revealed several variations. The following lists illustrate attributes that fluctuated from 2001 – decreases are

shown on the left; increases on the right. Differences exceeding the margin of error are *italicized*.

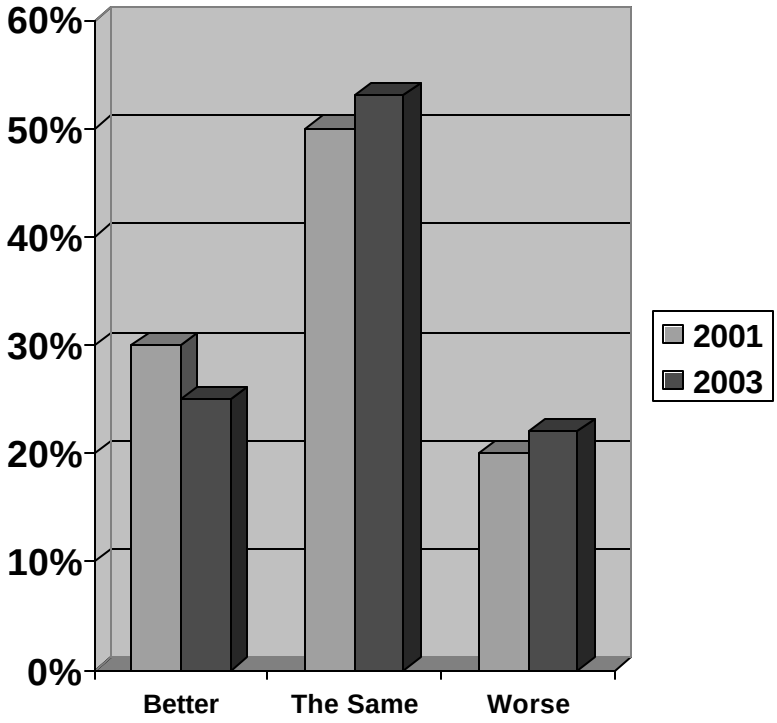
Decreases:	**Increases:**
Pavement surface appearance	*Roadway Lighting*
Ride smoothness on pavement	*Construction delays*
Wet weather pavement conditions	Lane Width
Ride smoothness on bridges	Service/attraction signs
Pavement surface conditions	General appearance
Pavement water drainage	Environmental compatibility
Timeliness of litter removal	Visibility
Guardrail repair	Detour Directions
Sound barriers	Variety of rest area/plaza services
	Mileage/destination signs
	Safety Barriers
	Warning signs
	Shoulder width
	Timeliness of rest area cleaning
	Visual appearance of bridges
	Timeliness of snow/ice removal
	Pavement repairs
	Construction signs
	Pavement markings

HOW IS KENTUCKY DOING? GENERAL OPINIONS ABOUT KENTUCKY HIGHWAYS

For the 2003 survey several questions were repeated to assess how safe people felt on Kentucky highways, how well they were maintained, and how they stacked up to neighboring states where people may have experience driving. The results are presented below. First, respondents were asked how they would compare Kentucky highways to neighboring states. While more thought Kentucky highways were better than worse, more than half of the respondents thought they were about the same. Furthermore, unlike 2001, the difference between those who said Kentucky's highways were better rather than worse was not beyond the survey margin-of-error.

Differences of opinion among types of respondents are few. The exception is that drivers who primarily use *rural secondary roads* are more likely to think Kentucky highways are worse than neighboring states than those who primarily drive any other type of highway. This is a pattern that holds throughout many results for this survey.

Kentucky Highways Compared to Neighboring States

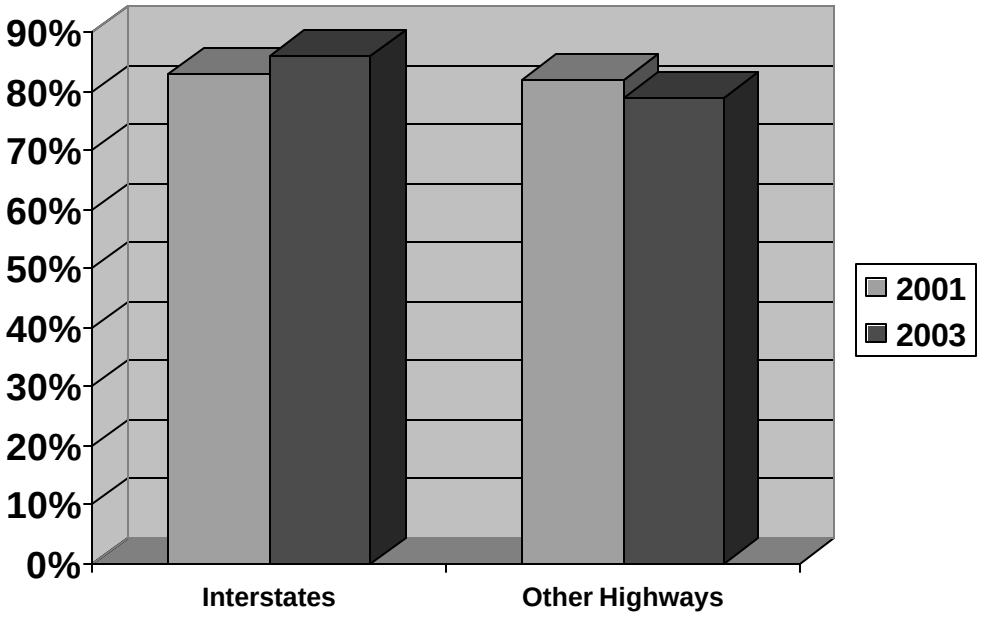


Two questions were asked about whether the respondent thought Kentucky highways are safe. One was asked with respect to Kentucky Interstates and one asked about non-interstate highways. Two questions were also asked about whether the respondent thought Kentucky highways are well maintained. One was asked with respect to Kentucky Interstates and one asked about non-interstate highways.

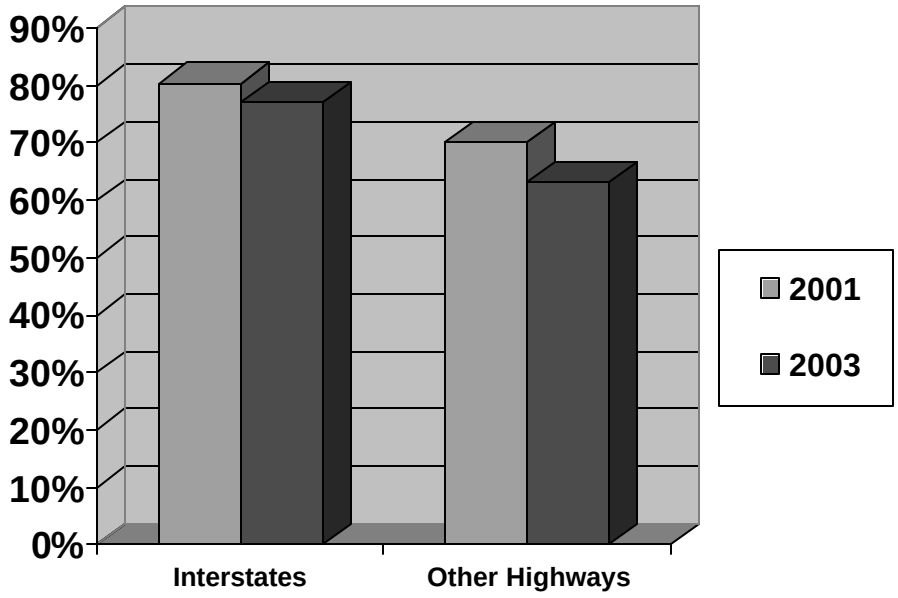
In general, respondents think Kentucky highways are safe and well maintained, with the Interstates fairing better than other highways. As seen below, the opinion that our interstates are safe has increased since 2001, while the opinion that any of our highways are well maintained has decreased since 2001.

Those who drive mostly in rural areas are less likely than urban/suburban drivers to think that interstates are safe. Car drivers are more likely than truck drivers to consider any highway well maintained. SUV drivers are also more likely to think Kentucky interstates are well maintained than truck drivers. Those who primarily travel on the interstate are less likely to say that any of our highways are well maintained than those who mostly travel on major two lane highways. Interstate drivers are also less likely than rural secondary road drivers to rate our interstates as well maintained.

Do You Think Kentucky Highways Are Safe?



Do You Think Kentucky Highways Are Well Maintained?



KENTUCKY TRANSPORTATION CABINET PERFORMANCE AND POLICY ISSUES

All respondents were asked questions about the Cabinet's performance as stewards of the environment and state tax dollars. Respondents were also asked policy-related questions about car-pooling, pedestrian and bicycle travel facilities, the relative importance of key highway aspects, and preference for how highway money should be prioritized.

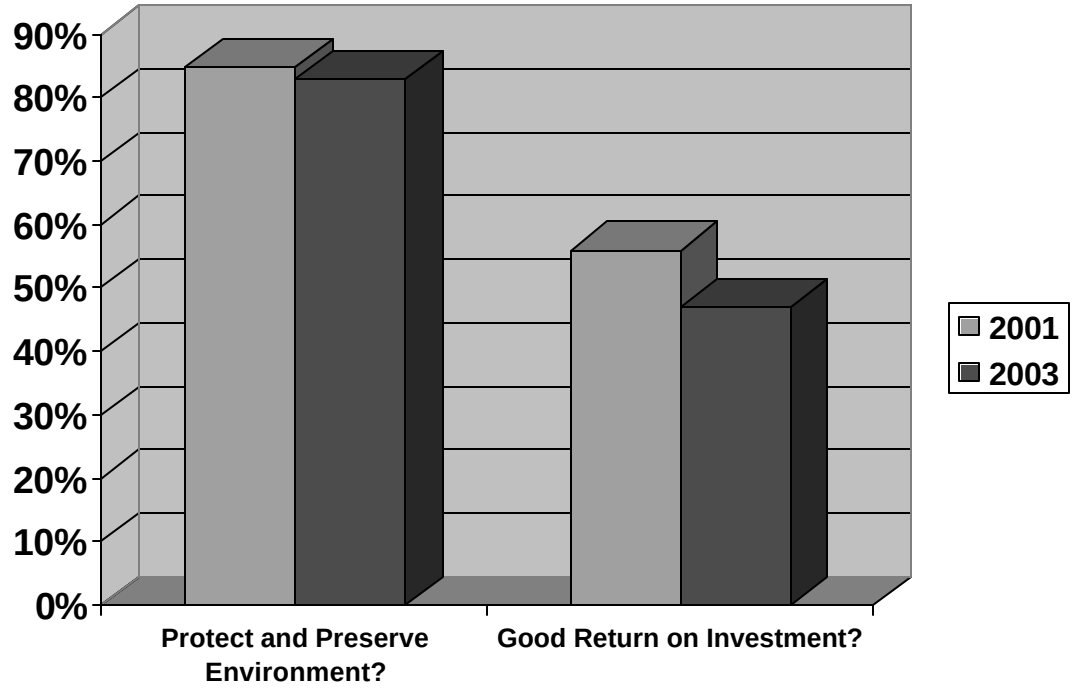
Cabinet Performance

When asked about whether the Cabinet takes adequate measures to protect and preserve the environment, an overwhelming majority (83%) agreed. The only significant difference between respondent groups on this issue was that Interstate users were more likely than other multi-lane highway users to agree.

However, when asked if they thought they were getting a good return from the Cabinet in terms of transportation infrastructure for their gasoline tax dollars, Kentucky drivers were

much more negative. Only 47% said yes – a steep decline from 2001. Given the negative publicity the Cabinet has had in the media of late, this is not a surprising result, and may be transitory. There were no significant differences on this question between any types of driver.

Kentucky Transportation Cabinet – Good Stewards?

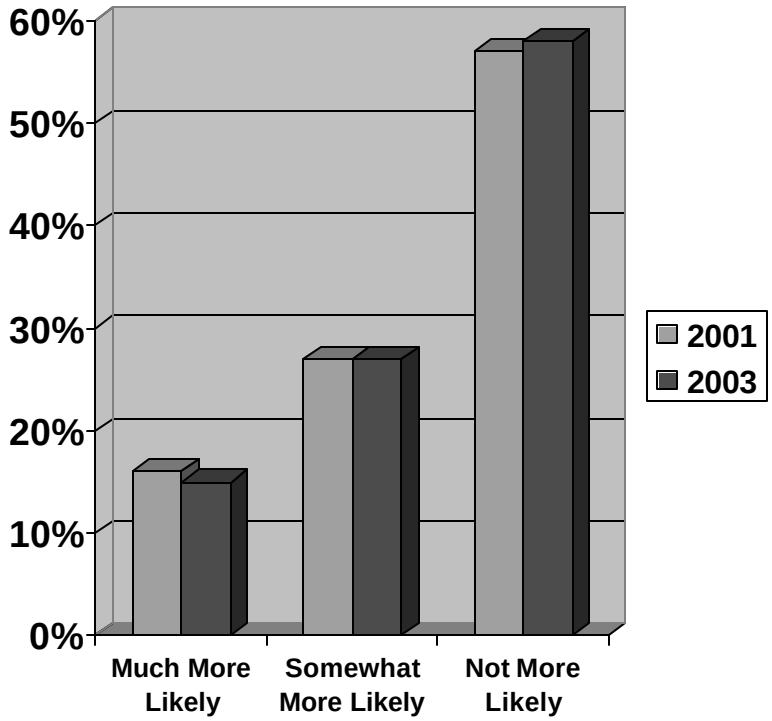


Car Pooling

Respondents were asked whether they thought Kentucky should do more to promote ride sharing or car pooling such as providing common parking areas near highway exits or dedicating highway lanes for exclusive use by car-poolers during rush hour. Overall 71% agreed that more should be done to promote this behavior, down from 73% in 2001. Those who primarily drive rural secondary roads were significantly more likely to agree than those who mainly drive all other types of highways. Van and truck drivers were more likely to agree than SUV drivers.

Respondents were also asked how much more likely they would be to car-pool or share rides if such accommodations were made to the highway system. As the chart below indicates, while Kentucky drivers think more should be done to promote ride-sharing, they are not overly eager to do so themselves. Overall, 42% *of those who do not already share rides* said they would be more likely to start doing so. Currently, 1% report ride sharing. This parallels the 2001 results. As to differences among drivers, van drivers report being more willing than SUV drivers to share rides.

Likelihood of Ride Sharing if Changes are made to Highway System



Pedestrian and Bicycle Travel Facilities

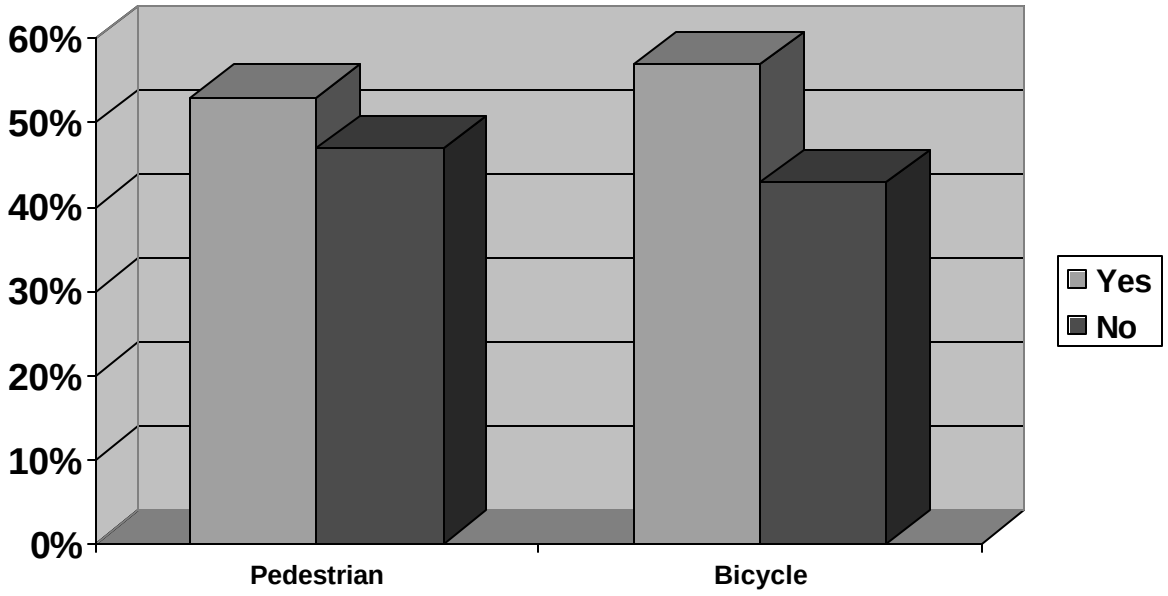
For the 2003 survey questions were added to determine public perception of the need for additional facilities for bicycle and pedestrian travel where people live and work.

Respondents were asked separately about the need for additional pedestrian facilities such as marked crosswalks or sidewalks and about the need for bicycle facilities such as bike lanes, paved shoulders, or road sharing signage. They were also asked how often they thought they would use these facilities if available.

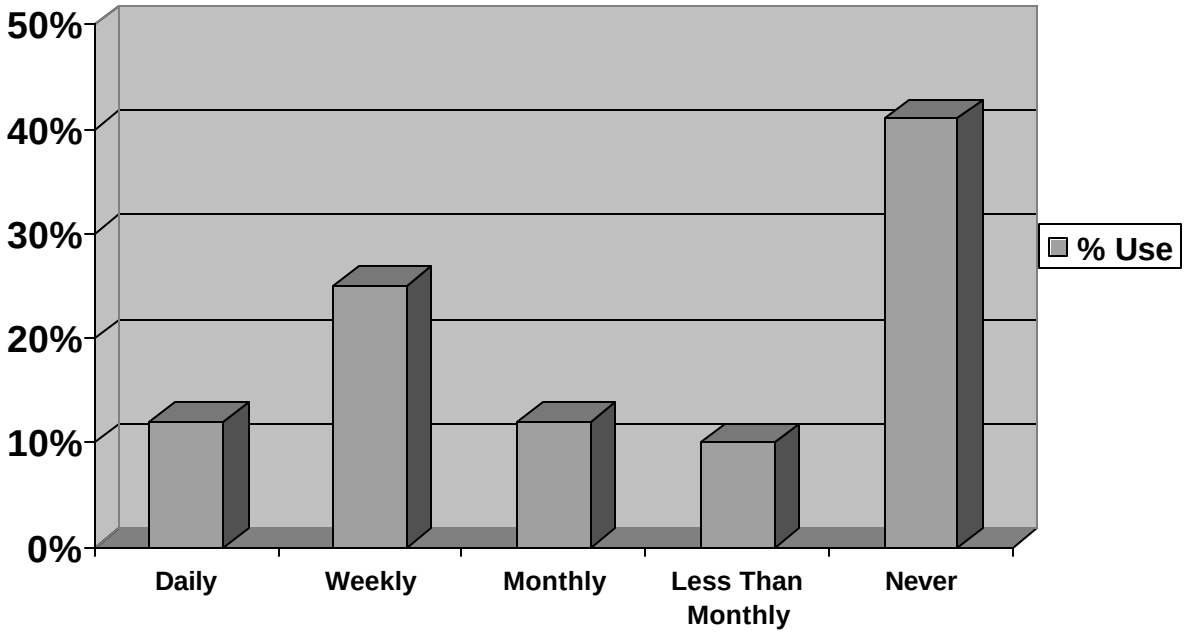
As seen in the chart below, a majority thought each were needed, although in the case of pedestrian accommodations the difference was within the survey margin-of-error. Car and SUV drivers were more likely to state a need for additional pedestrian facilities than truck drivers. Drivers who mainly travel in rural areas were less likely to see a need for additional pedestrian facilities than urban/suburban drivers.

Just over 1/3 (37%) said they would use the facilities at least weekly, while over 40% said they would never use them. Car drivers would use the facilities more frequently than truck drivers, while those who drive primarily on interstate highways report being much more likely to use such facilities than drivers on all other highway types.

Need for Additional Safe Travel Accommodations



Anticipated Frequency of Use of Additional Safe Travel Accommodations

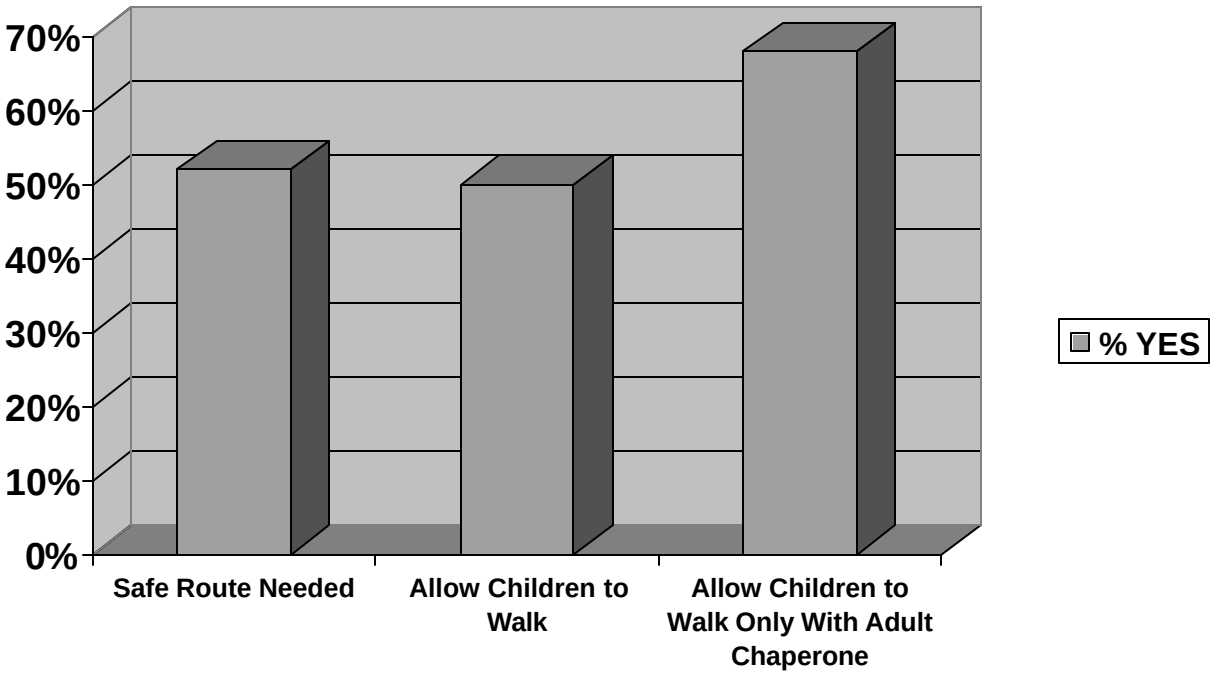


Respondents were then asked about whether additional pedestrian facilities were needed specifically to allow a *safe route to schools* in their area, whether they would allow their children to walk to school if such facilities were developed, and if not, would they allow their children to walk to school if neighborhoods or communities provided adults to accompany the children. The results are presented below. Essentially, respondents were split on whether additional safe facilities were needed in school areas with 52% agreeing. Those who travel primarily in urban/suburban areas were more likely to agree.

Respondents who had children were evenly split on whether they would allow their children to walk to school if safe facilities such as sidewalks or marked crosswalks were developed in their area, although more than 1/3 of those who said no changed their response when asked about letting their children use these facilities in the presence of an adult. This indicates that up to 68% of respondents with children may use such facilities if developed.

Again, those who drive primarily in urban/suburban areas were more likely to report being willing for their children to walk to school if the facilities were developed.

Additional Pedestrian Facilities Needed and Used in School Areas

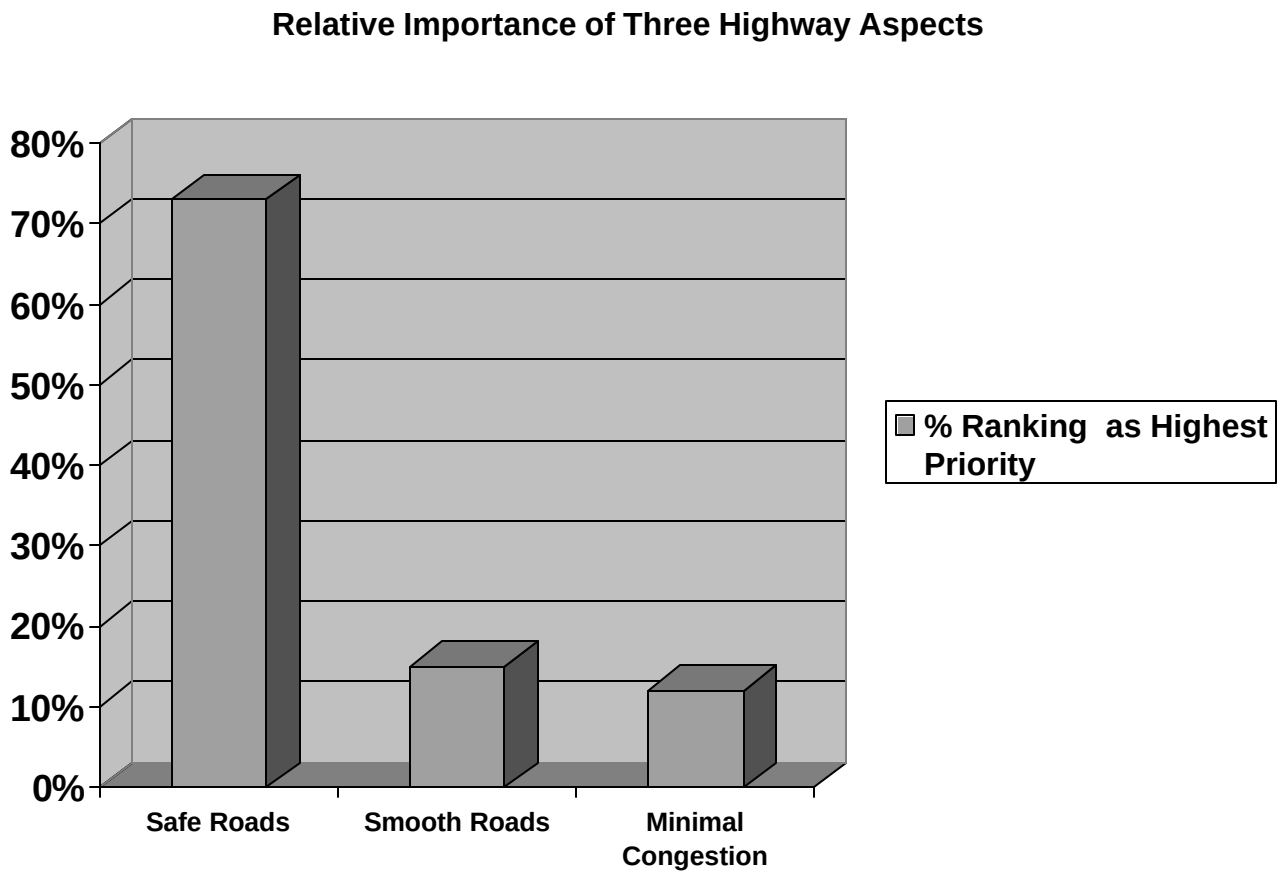


Relative Importance of Highway Aspects

Finally, respondents were asked to rank the relative importance of safe, smooth, or minimally congested roads and also given the opportunity to rank order their preferences among four areas for how the expenditure of highway dollars should be prioritized. The first chart below shows the priorities with respect to the three highway aspects. Clearly respondents deem safe roads to be the most important aspect compared to the other two.

Truck drivers were more likely to rank 'smooth roads' higher than car or SUV drivers. Rural secondary road drivers were also more likely to rate 'smooth roads' as a higher priority than those who travel primarily on any other type of highway. Those who travel primarily on

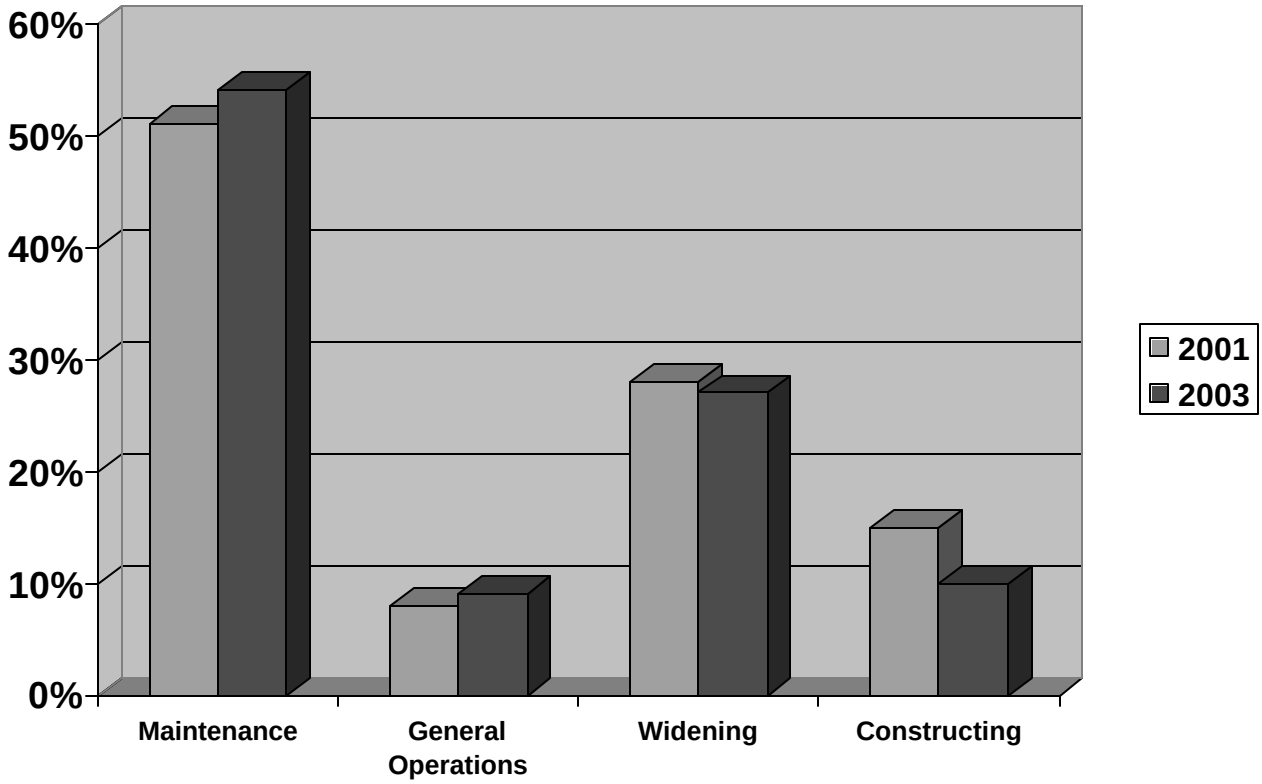
other multi-lane highways were more likely to rate 'safe roads' higher than interstate or rural secondary road drivers. Finally, major two lane highway drivers were also more likely to rate 'safe roads' higher than rural secondary road drivers.



Priority for Spending Highway Money

With respect to spending priorities for highway money in Kentucky, respondents were asked to prioritize spending among the following four areas: 1) Maintenance of Existing Roads, 2) General Traffic Operations Such As Signs, Signals and Turn Lanes, 3) Widening Existing Roads, and 4) Constructing New Roads. The chart below shows the percentage of all respondents who selected each area as their HIGHEST priority compared to the 2001 results.

Priority Spending Area For Kentucky Highway Dollars



Clearly, the majority of Kentucky drivers prefer that "Maintenance of Existing Roads" be given the highest priority by the Cabinet. This majority is even larger than in 2001. However, examining the portion of the population that preferred an area as the *number one* priority does not make full use of the data. The chart above may mislead one to believe that "General Operations" was the public's lowest priority, when in fact "Constructing New Roads" was lowest. This can be determined by looking at the aggregate priority rankings overall. The aggregate highest ranked priority for Kentucky motorists is to spend money on "Maintenance of Existing Roads" (average rank = 1.7). The next highest ranking priority was "Widening Existing Roads" (average rank = 2.2), followed by "General Traffic Operations Such As Signs, Signals and Turn Lanes" (average rank = 2.9), and lastly, "Constructing New

Roads" (average rank = 3.1). This anomaly can be explained by noting that while fewer considered general operations to be the highest priority, many more considered it to be the second or third priority while 46% agreed new construction should be the lowest priority (see APPENDIX for details). What is clear is that the maintenance and widening of existing roads are considered much higher priorities to the driving public than the other two areas.

As one might expect, opinions differed significantly on some of these preferences depending on the primary type of highway driven, particularly about the priority of "Widening Existing Roads." Those who drive major two-lane highways and rural secondary roads gave a significantly *higher* priority rank to widening roads than those who drive the interstate or other multi-lane highways. Interstate drivers put higher priority on "Maintaining Existing Roads" than did rural secondary road users. Truck drivers gave a significantly *lower* priority rank to general operations than car or SUV drivers. Also, those who do most of their driving in rural areas ranked "Widening Existing Roads" a higher priority than urban/suburban drivers.

ADDITIONAL FINDINGS

This section highlights additional results regarding the relationships between satisfaction highway characteristics and type of vehicle driven, primary type of highway driven, and whether the majority of miles was in urban/suburban or rural areas. Each of the seven characteristics measured in this survey is listed below with key driving pattern differences outlined for each. Only statistically significant relationships are reported.

Traffic Flow

- Those who reported most of their driving was in rural areas were more satisfied than those driving in urban/suburban areas.

Safety

- Higher satisfaction was expressed by interstate drivers than by major two-lane highway users.
- Lower satisfaction was expressed by rural secondary road drivers than by drivers of all other types of highways.
- Those who reported most of their driving was in rural areas were less satisfied than those driving in urban/suburban areas.

Visual Appeal

- Lower satisfaction was expressed by rural secondary road drivers than by drivers of all other types of highways.
- Car drivers were more satisfied than SUV drivers.

Travel Amenities

- Interstate travelers gave higher ratings than those who usually drive on major two-lane highways or other multi-lane highways.
- Lower ratings were given by rural secondary road drivers than by drivers of all other types of highways.
- Car drivers were more satisfied than van or SUV drivers.

Maintenance Response Time

- Car drivers were more satisfied than truck or SUV drivers.
- Lower satisfaction was expressed by rural secondary road drivers than by

Interstate or major two lane highway drivers.

Bridge Conditions

No significant relationships were found.

Pavement Conditions

- Lower satisfaction was expressed by rural secondary road drivers than by drivers of all other types of highways.

APPENDIX

Trends in Overall Satisfaction with the Highway System (p. 6)

	Extremely Satisfied	Satisfied	Neither	Dissatisfied	Extremely Dissatisfied
2003	12%	43%	21%	17%	7%
2001	14%	42%	26%	12%	5%
2000	14%	39%	27%	15%	5%
1999	20%	33%	34%	9%	5%
1998	15%	35%	35%	9%	5%
1997	15%	39%	30%	8%	8%

Overall Satisfaction with the Highway System Revisited (p. 8)

	Extremely Satisfied	Satisfied	Neutral	Dissatisfied	Extremely Dissatisfied
Initial	12%	43%	21%	17%	7%
Follow-up	14%	44%	25%	11%	7%

Trends in Satisfaction with Highway Characteristics (p. 9)

	Bridge Conditions	Visual Appeal	Travel Amenities	Safety	Traffic Flow	Maint. Response Time	Pavement Conditions
2003	61%	64%	68%	66%	59%	48%	46%
2001	67%	64%	68%	62%	59%	50%	51%
2000	67%	67%	65%	58%	57%	52%	48%
1999	69%	65%	67%	59%	61%	54%	50%
1998	67%	66%	68%	57%	55%	51%	51%
1997	64%	68%	68%	61%	59%	53%	51%

Trends in Satisfaction – Bridge Conditions (p. 10)

	Durability	Visual Appearance	Smooth Ride*
2003		69%	54%
2001		68%	61%
2000	70%	70%	60%
1999	71%	69%	61%
1998	72%	70%	57%
1997	68%	69%	56%

Trends in Satisfaction – Visual Appeal (p. 11)

	Rest Area Design	Landscaping	Environmental Compatibility	Sound Barriers	General Appearance#
2003			66%	59%	58%
2001			64%	60%	57%
2000	79%	65%	64%	58%	
1999	79%	62%	67%	60%	
1998	78%	60%	68%	62%	
1997	80%	64%	68%	62%	

Trends in Satisfaction – Travel Amenities (p.12)

	Mileage/ Destination Signs	Variety of Rest Areas/Plaza Services	Number of Rest Areas/Plazas	Service/ Attraction Signs	Number of Radio Advisory Stations
2003	75%	78%		71%	
2001	75%	77%		70%	
2000	74%	72%	67%	66%	48%
1999	76%	71%	71%	67%	51%
1998	74%	59%	68%	66%	46%
1997	75%	61%	66%	71%	48%

* Question wording was changed for 2003 (see fn. 5, p. 10).
# Question wording was changed for 2003 (see fn. 6, p. 11).

Trends in Satisfaction – Safety (p. 13)

	Warning Signs	Construction Signs	Lane Width	Pavement Markings	Safety Barriers
2003	72%	67%	63%	64%	65%
2001	71%	64%	62%	62%	63%
2000	69%	65%	63%	62%	62%
1999	69%	69%	67%	63%	63%
1998	70%	67%	69%	67%	63%
1997	70%	71%	69%	65%	66%

	Detour Directions	Shoulder Width	Roadway Lighting	Wet Weather Conditions	Visibility
2003	61%	50%	55%	46%	72%
2001	58%	49%	50%	50%	70%
2000	55%	54%	52%	44%	
1999	57%	58%	56%	49%	
1998	58%	54%	57%	49%	
1997	57%	57%	54%	49%	

Trends in Satisfaction – Traffic Flow (p. 14)

	Toll Booth Delays	Accident Clean-up	Level of Congestion	Construction Delays	Signaling	Directional Signs
2003			44%	53%	57%	73%
2001	66%		44%	44%		
2000	66%	62%	46%	44%		
1999	81%	62%	50%	42%		
1998	76%	64%	44%	40%		
1997	77%	66%	47%	41%		

Trends in Satisfaction – Maintenance Response Time (p. 15)

	Rest Area Cleaning	Snow Removal*	Guardrail Repair	Litter Removal	Pavement Repairs*
2003	76%	62%	61%	48%	34%
2001	73%	61%	62%	51%	32%
2000	74%	64%	59%	54%	35%
1999	76%	62%	65%	57%	37%
1998	69%	46%	65%	56%	37%
1997	75%	48%	64%	60%	35%

Trends in Satisfaction – Pavement Conditions (p. 16)

	Quiet Ride	Surface Appearance	Durability	Smooth Ride	Surface Conditions	Water Drainage
2003		48%		43%	34%	47%
2001	54%	53%	48%	48%	38%	51%
2000	51%	44%	42%	41%		
1999	54%	54%	51%	48%		
1998	51%	51%	50%	48%		
1997	53%	53%	46%	48%		

Kentucky Highways Compared to Neighboring States (p. 19)

	Better	The Same	Worse
2003	25%	53%	22%
2001	30%	50%	20%

Do You Think Kentucky Highways Are Safe? (p. 20)

	Interstates (%Yes)	Other Highways (%Yes)
2003	86%	79%
2001	83%	82%

*Question wording was changed for 2001 (see fn. 8, p. 15).

Do You Think Kentucky Highways Are Well Maintained? (p. 21)

	Interstates (%Yes)	Other Highways (%Yes)
2003	77%	63%
2001	80%	70%

Kentucky Transportation Cabinet – Good Stewards? (p. 22)

	Protect and Preserve Environment? (%Yes)	Good Return on Investment? (%Yes)
2003	83%	47%
2001	85%	56%

Should Kentucky Do More To Promote Ride Sharing? (p.22)

	Yes	No
2003	71%	29%
2001	73%	27%

Likelihood of Ride Sharing If Changes Are Made To Highway System (p. 23)

	Much More Likely	Somewhat More Likely	Not More Likely
2003	15%	27%	58%
2001	16%	27%	57%

Need For Safe Travel Accommodations (p. 24)

	Pedestrian (%Yes)	Bicycle (%Yes)
2003	53%	57%

Anticipated Frequency of Use of Additional Safe Travel Accommodations (p.25)

2003	Daily	Weekly	Monthly	Less than monthly	Never
% to use	12%	25%	12%	10%	41%

Additional Pedestrian Facilities Needed and Used in School Areas? (p. 26)

2003	Safe Route Needed?	Allow Children to Walk?	Allow Walk w/ Adult Chaperone?
% Yes	52%	50%	18%

Priority Highway Aspects (p. 27)

PRIORITY RANK	1	2	3
Safe Roads	73%	17%	7%
Smooth Roads	15%	47%	39%
Minimal Congestion	12%	36%	54%

Priority Spending Area For Kentucky Highway Dollars (p. 28)

PRIORITY RANK	1	2	3	4
Maintaining Roads				
2003	54%	23%	14%	7%
2001	51%	28%	15%	6%
General Operations				
2003	9%	26%	31%	36%
2001	8%	24%	37%	31%
Widening Roads				
2003	27%	35%	25%	11%
2001	28%	32%	26%	14%

Constructing Roads				
2003	10%	16%	30%	46%
2001	15%	16%	22%	47.%