

Transportation Needs and Funding Alternatives: A Survey

**Transportation Funding Series
Special Report No. 1**

by

**James B. London
Jason M. Peek
Ellen W. Saltzman
H. Günsel Günaydin**

August 22, 2001

The Jim Self Center on the Future



THE STROM THURMOND INSTITUTE OF GOVERNMENT & PUBLIC AFFAIRS

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Transportation Needs and Funding Alternatives: A Survey

Executive Summary

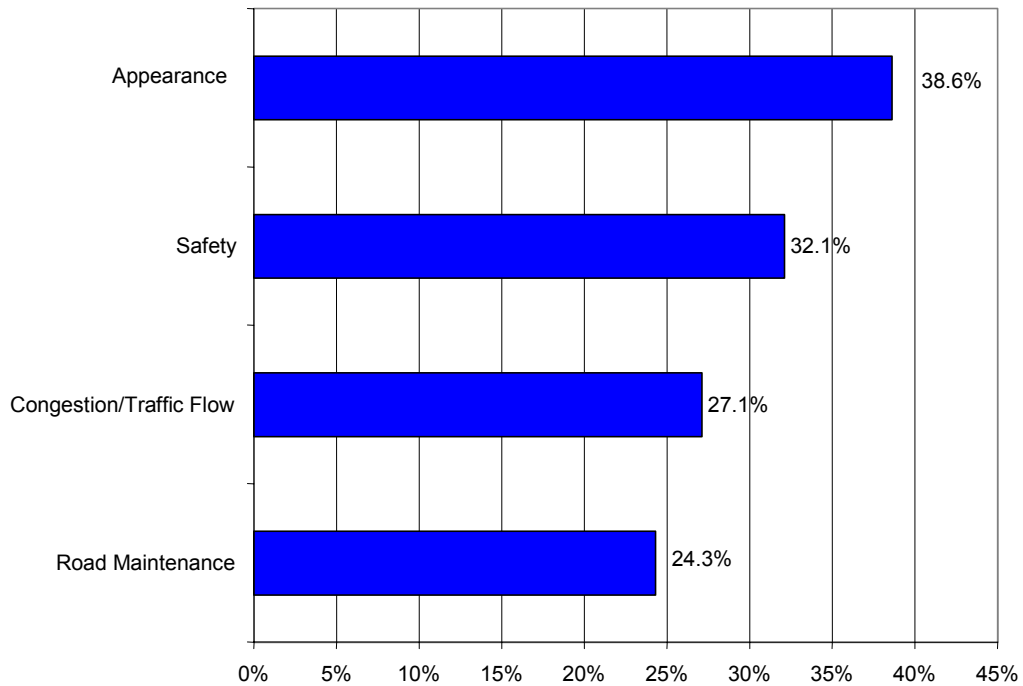
Expanding transportation infrastructure needs and constrained revenue sources are creating a fiscal crisis for state governments across the country. In South Carolina, a 1997 report by researchers at Rutgers University projected state infrastructure requirements at \$57 billion over the next 20 years with 51 percent of that total being for highway construction and maintenance. The South Carolina Multi-Modal Plan being developed at this time is likely to increase still further long-range transportation needs as the state embarks on a more comprehensive approach to meeting transportation requirements.

This report is the first of a series of reports from the Jim Self Center on the Future to address this issue of funding transportation infrastructure needs. The report summarizes survey responses from 1,000 households in South Carolina to identify issues of particular concern and to determine the level of acceptance of alternative funding strategies for transportation infrastructure. A telephone survey was conducted in February 2001 by David Sparks and Associates. The state was divided by geographic region into Coastal, Midlands and Upstate counties and by population into Urban, Next to Urban, and Rural counties to allow comparison between different population segments. Respondents were asked to rate a series of questions on a 1 to 5 scale where '1' represents poor, very unimportant, or decrease funding and '5' represents excellent, very important, or increase funding.

When asked their overall impression of South Carolina roads and highways, the mean response was 2.9, slightly below mid-range. Responses for Coastal residents were significantly less favorable than responses from both Upstate and Midlands regions with Coastal residents indicating a nearly two to one margin of unfavorable to favorable responses. On balance, Rural residents gave higher ratings than the other geographic groupings, but even there differences occurred with Upstate Rural residents responding favorably on 33.9 percent of surveys and Coastal Rural residents responding favorably on only 15.6 percent of surveys.

Respondents were then asked to respond to key transportation issues. Those issues included: safety, road maintenance, and congestion, and appearance. Overall, road maintenance (2.73), congestion/traffic flow (2.77), and safety (2.93) had mean responses at less than mid-range, while appearance had a higher mean response of 3.12. A comparison of favorable responses to these issue areas, i.e. '4' or '5' on a 5 point scale, is shown in Figure S-1.

Figure S-1: Percentage of Favorable Responses to Transportation Issues



For safety, responses were almost evenly split with 32.1 percent favorable responses and 33.7 percent unfavorable responses. Unfavorable responses were higher in Coastal and Upstate counties and were directly related to county size with the highest number of unfavorable ratings in Urban counties and the lowest number among Rural counties. Delineating further, favorable ratings ranged from a high of 47.3 percent for Rural Midlands residents to a low of 20.5 percent for Urban Upstate residents. A series of serious accidents along Interstate 85 in the Upstate may have influenced these responses.

Similar patterns are seen for congestion/traffic flow, although the gap between favorable (27.1 percent) and unfavorable responses (38.3 percent) widened. Concern over traffic congestion was significantly higher for Coastal and Upstate residents relative to Midlands residents, and again unfavorable responses were directly related to county size. The greatest perceived problem appears to be in Urban Coastal and Urban Upstate counties where unfavorable ratings were given 52.4 and 50.0 percent of the time, respectively.

With road maintenance the gap widens with 24.3 percent favorable responses and 40.9 percent unfavorable responses. In this case, Midlands residents registered the lowest approval ratings at 20.1 percent, and little variation occurred by county size. The highest favorable responses came in Urban Coastal counties (33.7 percent) with the lowest favorable response from Next to Urban Midlands counties (18.3 percent).

Of the four issue areas identified, only in the case of appearance did favorable responses exceed unfavorable responses at 38.6 to 26.4 percent. Favorable responses were highest for Upstate counties and lowest in Coastal counties. Little variation occurred by county size. The highest approval ratings were for Rural Upstate residents (44.9 percent), while the lowest ratings were for Rural Coastal residents (30.3 percent).

Funding Alternatives

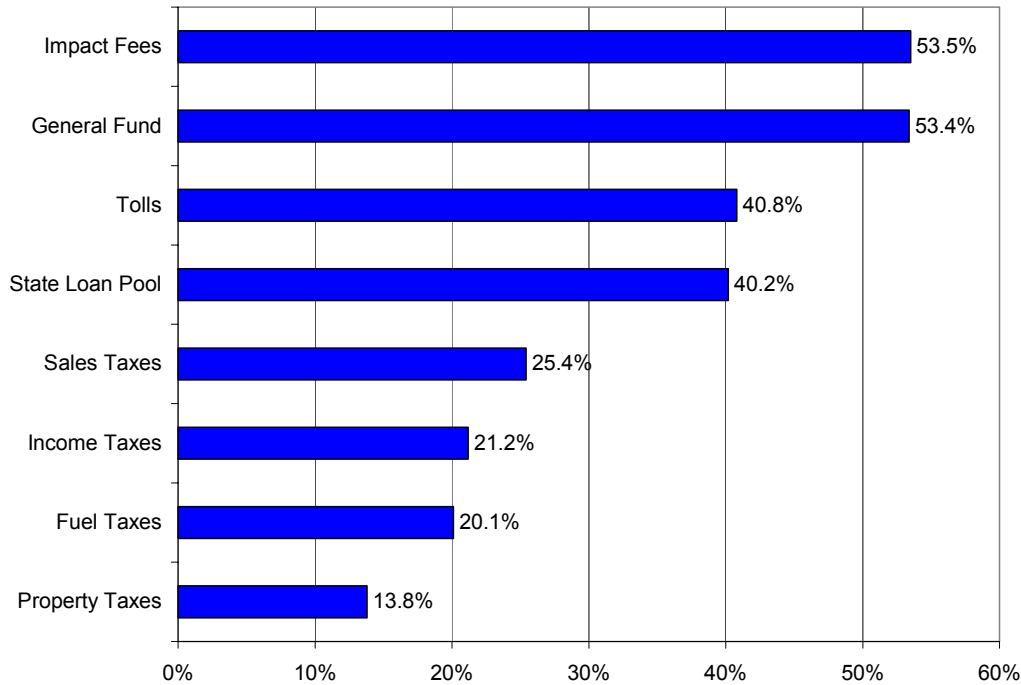
Although taxes and fees are never an attractive alternative, respondents were asked to rate a series of funding alternatives to gauge public acceptance with '1' being a poor alternative and '5' being an excellent funding alternative. Statewide, the highest mean ratings were given for highway impact fees (3.53) and general fund expenditures (3.51). Mid-range responses were for a state loan pool targeted for transportation needs (3.17) and tolls on high volume roads and bridges (2.98). The least favorable responses came for state taxes on new car purchases (2.59), state income taxes (2.34), gasoline/fuel taxes (2.25), and property taxes on automobiles (2.02). It is worth noting that the top four options in terms of respondent preferences are either fees or state revenue expenditures. The four lowest ranking options are taxes of various types.

Impact fees had the highest overall rating with 53.5 percent favorable responses compared to 16.9 percent unfavorable responses (Figure S-2). Impact fees are attractive to existing residents as new development pays for capital costs associated with new development. They are imposed however by local government and are a local rather than a state revenue source.

General fund expenditures were a close second as a funding alternative with 53.4 percent favorable responses and 17.6 percent unfavorable responses. This support for general fund expenditures may be a recognition on the part of respondents that transportation is a statewide issue and needs general fund commitment. It may more likely be that respondents see state appropriations as one step removed from the taxpayer and therefore less invasive than direct taxes. The largest revenue source for the general fund is the state income tax that was rated far lower as a funding alternative with a mean rating of 2.34 versus 3.51 for general fund expenditures.

A state loan pool was the next most popular funding alternative favored by 40.2 percent of respondents compared to 27.3 percent unfavorable responses. Rural residents indicated a higher acceptance rate than either of the other two county groupings. It may be that respondents understand that a state loan pool allows the state to leverage transportation funding to maximize investments in state priority projects. On the other hand as with general fund expenditures, it may be that the state loan pool is one step removed from the taxpayer and therefore more acceptable than a direct tax.

Figure S-2: Percentage of Favorable Responses for Funding Alternatives



Survey responses to tolls on roads and bridges were nearly evenly split with 40.8 percent favorable responses and 37.8 percent unfavorable responses. Rural residents were more likely to have a favorable response to tolls perhaps because they require a critical mass to be feasible that is likely to occur in more populated areas. Toll roads have received increased attention with a number of high profile projects including the Cooper River Bridge, Myrtle Beach Connector, Cross Island Expressway on Hilton Head, and Southern Connector in Greenville. Toll roads and bridges do serve as a proxy for road use. Frequent user tolls can adjust for local drivers that use the system on a regular basis.

None of the four direct taxes fared well in the ratings, but the sales tax on new car purchases had the fewest unfavorable responses. Still, an increase in the sales tax had only 25.4 percent favorable responses and 47.6 percent unfavorable responses. The Midlands and Next to Urban counties were least likely to support the sales tax option. Currently the sales tax on new purchases is capped at \$300, a figure that has been in place since 1976. An increase in the sales tax on new car purchases has been opposed by car dealers who argue that it will hurt new car sales and thereby negatively impact the state economy.

As indicated earlier, the income tax fared far worse than general fund expenditures in terms of acceptance despite the fact that 48 percent of general fund revenues are derived from income taxes. Income taxes had a 21.2 percent favorable response and a 57.2 percent unfavorable response. The connection between road use and income tax collections is weak so that they are not an

efficient means of funding highway programs. Yet, income-based revenues may be appropriate for non-highway transportation expenses because they are less regressive than other funding options.

Gasoline and fuel taxes had a still lower level of acceptance with 20.1 percent favorable responses and 61.2 percent unfavorable responses. The strong aversion to fuel taxes may be tied to the frequency with which they are paid. Because tolls are not feasible on most roadways, fuel taxes are the best proxy for highway use. At 16 cents per gallon in state fuel taxes, the average South Carolina driver pays \$8 per month in state fuel taxes for highway construction and maintenance.

Finally, property taxes on automobiles received the lowest rating among the options considered. Only 13.8 percent of respondents rated property taxes favorably as a funding option, while 68.8 percent rated property taxes unfavorably. Property tax relief has been a popular political movement in recent years. In South Carolina, the car tax referendum passed with 84.4 percent of the vote. Yet, property taxes are collected at the local rather than the state level and traditionally have not been earmarked for transportation programs.

Who Should Pay?

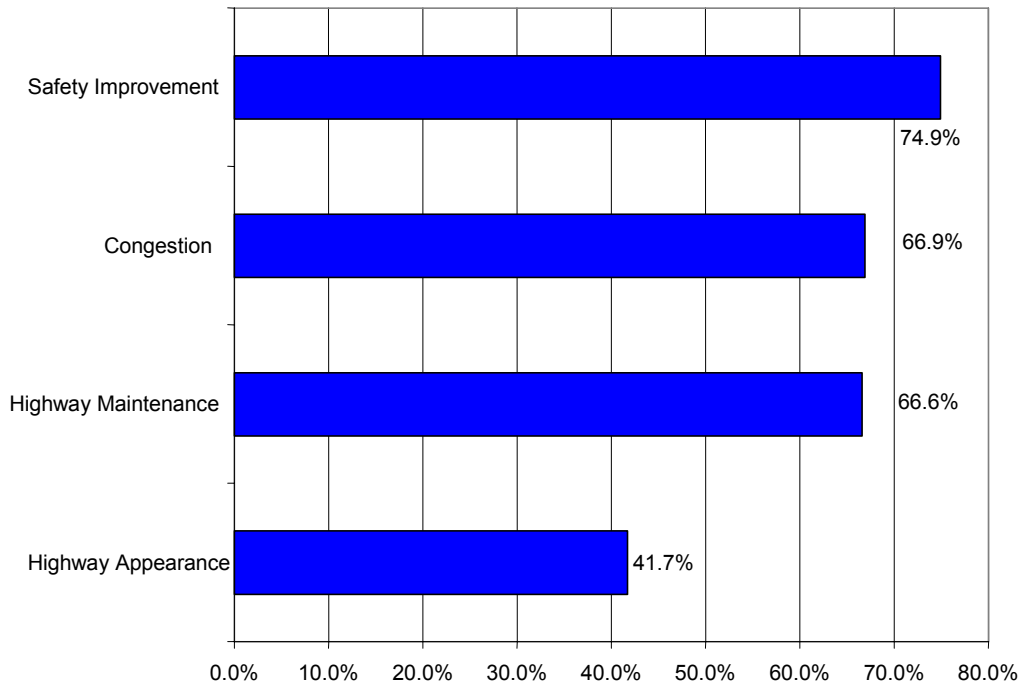
When asked to rate “how important it is to you that funding options for highways comes from fees and taxes related to the use of highways?” 67.1 percent of respondents gave a favorable rating to that proposition. Only 10.7 percent rated relating fees and taxes to highway use as an unfavorable proposition. This response conflicts with the responses made to the menu of individual taxes and fees. Yet, it does suggest that when individuals sit back as neutral third parties that they are more likely to draw connections between highway benefits and corresponding highway use charges.

Increased Funding for Selected Issues

Following on the transportation issues identified earlier, individuals being interviewed were asked their opinions on increased funding for those same issues. All four of the issues had mean responses above the mean response of ‘3.0’. The highest mean response was for increased funding for safety at 4.12. Nearly identical mean responses were given for increased funding for highway maintenance and to reduce congestion at 3.89 and 3.85. Slightly lower responses were given for increased funding to improve highway appearance at 3.26.

Among the individual issue areas, respondents were most inclined to support increased funding for safety improvements. Favorable responses were given on 74.9 percent of the time, while only 7.9 percent of respondents were unfavorably inclined (Figure S-3). Responses were higher from the Upstate and Midlands

Figure S-3: Percentage of Favorable Responses to Increased Funding for Selected Issues



than for the Coastal region, and Urban residents indicated the strongest preference when counties were grouped by size. It is interesting to note that safety came in third on in terms of issues of concern but was the highest funding priority undoubtedly influenced by the prospect of serious injury or loss of human life.

With highway maintenance, favorable responses were given 66.6 percent of the time with 6.6 percent unfavorable responses. Little difference occurred by geographic region, but willingness to pay was tied to county size with Rural residents most likely to support increased funding for road maintenance.

For traffic congestion, 66.0 percent of respondents indicated that increased funding should be applied versus 10.7 percent who indicated an unfavorable response to increased funding. Regionally, Coastal residents were significantly more likely to favor increased funding than Midlands residents; Upstate residents split the difference. Although residents of both large and small counties identified a need for increased funding to address congestion, funding preferences were related to county size with Urban residents being the most inclined to support increased spending to address congestion.

When asked about increased funding for highway appearance, the responses were positive although somewhat weaker than for the other three issues identified earlier. Favorable responses were given on 41.7 percent of surveys

compared to 25.8 percent unfavorable responses. Favorable responses in Rural counties were significantly higher (46.0 percent) than were favorable responses in Urban counties (36.8 percent). These figures suggest that although highway appearance is not seen as urgent an issue as safety, road maintenance, and traffic congestion it is of concern and that concern is greatest along rural roadsides.

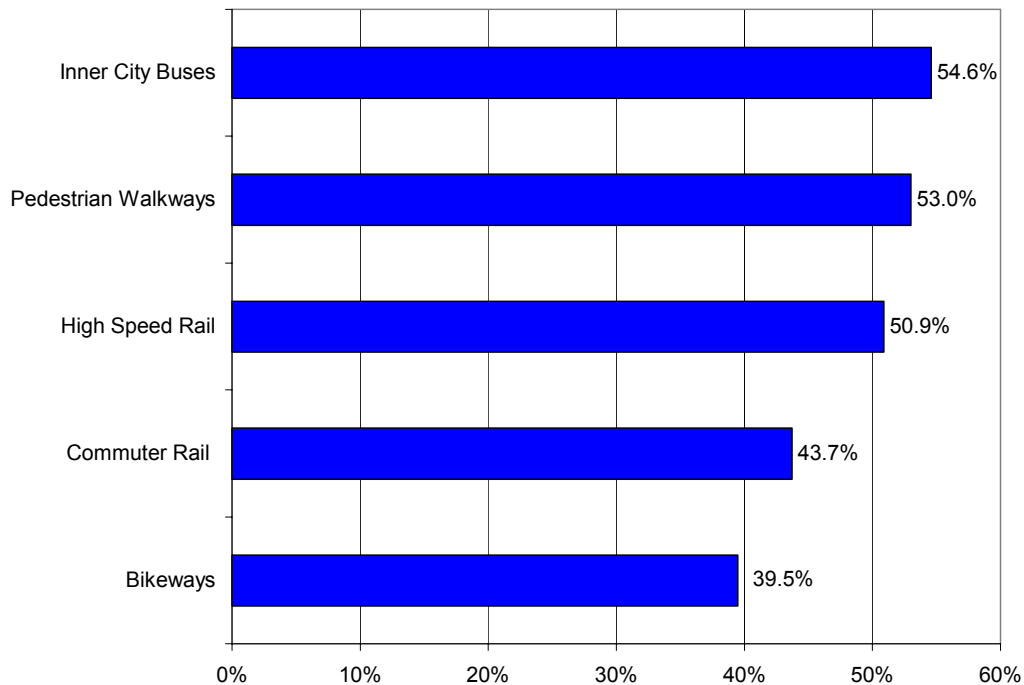
Funding of Other Transportation Programs

Next respondents were asked a series of questions that related to funding for other types of transportation programs. These programs included public transit (metro/inner city buses, commuter rail service, and passenger and high speed inter-city rail service) plus bikeways, pedestrian walkways, and highway beautification. Although somewhat less pressing than the hot button issues of safety, maintenance and congestion, mean responses for all of these issues exceeded '3' with a range of 3.53 for metro/inner city buses to 3.06 for highway beautification.

In general, funding for public transit issues fared well (Figure S-4). Metro/inner city buses received the highest mean response at 3.53. Favorable responses were indicated 54.9 percent of the time with 19.1 unfavorable responses. Mean responses were significantly higher for the Upstate versus Coastal areas and for Urban as opposed to Next to Urban counties. High speed rail also fared well with a mean of 3.41 and favorable/unfavorable responses of 50.9/24.1 percent. Favorable responses were higher in the Upstate and Midlands where the prospect of high speed rail has received greater press coverage and in Urban areas given the limited number of stations that are feasible. Commuter rail received slightly lower ratings with a 43.7/30.2 percent favorable/unfavorable mix. Favorable responses were significantly higher in the Upstate (49.4 percent) than in the Midlands or Coastal regions. Urban counties as might be expected were more inclined to rate the funding of commuter rail service favorably. The lower ratings for commuter transit may be because it is perceived of as less of an immediate issue.

Of the non-transit options, pedestrian walkways had the highest rating with a mean rating of 3.48 and favorable/unfavorable ratings of 53.0/23.4 percent. Bikeways, on the other hand, had a mean response of 3.07 and favorable/unfavorable ratings of 39.5/34.9 percent. The difference here may be due to the higher percentage of the population likely to use walkways as opposed to bikeways. Positive responses in both cases were highest in Urban areas, although for bikeways favorable responses for Next to Urban and Rural counties were not far behind. With highway beautification, the issue is one of concern, but funding priorities are mixed.

S-4: Percentage of Favorable Responses to Other Transportation Programs



Implications

These findings shed light on the public perception of transportation needs and at least to some degree on funding options. It is clear that the demand for transportation infrastructure to meet basic concerns of safety, maintenance and congestion exists now and is likely to increase due to both growth pressures and higher expectations on the part of the public at large. Yet, at the same time, the public is strongly averse to taxes and to a lesser extent to fees to pay for transportation improvements. This disconnect between needs and funding base is likely to become more serious still as revenues are projected to increase far more gradually than expenditure requirements. It is important that states begin now to reassess transportation funding alternatives. The next two reports in this series will attempt to provide background information for that assessment.

Chapter One

Introduction

One of the critical issues emerging for state governments across the country is funding for transportation infrastructure needs. In South Carolina, a 1997 report by researchers at Rutgers University and others, *South Carolina Infrastructure Study*, estimated that infrastructure requirements would total \$57 billion over the next twenty years. Of that total, 51 percent was expected to be for highway construction and maintenance. The South Carolina Department of Transportation's Multi-Modal Plan under development at this time is likely to increase still further the number and cost of projected long-range transportation needs as the plan takes a comprehensive approach to meeting transportation requirements (SCDOT 2001a).

While transportation needs continue to increase, revenue expansion has been far more modest in recent years. Since 1965, federal fuel taxes have actually declined by 41 percent in real dollar terms. Part of that loss is due to inflation while the other parts of the loss are due to better fuel efficiency in vehicles and to the allocation of a portion of these funds for deficit reduction beginning in 1990 (USDOT 1997). As a result, a gap between revenues for and expenditures on transportation infrastructure has begun to widen. In South Carolina, it is currently estimated that revenues for highway construction are rising by two percent per year while construction costs are rising by five percent per year (SCDOT 2001b).

Dealing with funding for transportation infrastructure requires a thorough assessment of needs and a comprehensive review of transportation funding options. This report is the first of three reports made by the Jim Self Center on the Future of the Strom Thurmond Institute of Government and Public Affairs that address these issues. This report presents the results of a survey of 1,000 households in South Carolina that solicited input on transportation issues and funding options. The survey asked respondents to:

- Assess the overall condition of South Carolina roadways,
- Identify important transportation-related issues,
- Consider funding priorities for specific program areas, and
- Determine a level of acceptance for alternate funding mechanisms.

Chapter Two

Methodology and County Groupings

Methodology

The survey contained 35 questions and addressed the following issue areas:

- The overall condition of South Carolina roads and highways in terms of safety, congestion and traffic flow, road maintenance, and appearance.
- The importance of increased funding to address safety, congestion and traffic flow, maintenance, and appearance needs.
- The level of acceptance of various funding options for raising additional money for transportation projects and programs. Options offered were gasoline taxes, property taxes on automobiles, sales taxes on new car purchases, state income taxes, bridge and highway tolls, highway impact fees, a state loan pool, and the state general fund.
- The importance of increased funding for alternative modes of transportation, including metro and inner city buses, commuter and high speed rail, bikeways, pedestrian walkways.

Other information collected included willingness to pay information and selected household demographics. Respondents also were given an opportunity to answer an open-ended question identifying significant problems they have experienced with the state's road and highway system. Appendix A contains the survey questions.

The survey was designed by the research team and David Sparks and Associates of Clemson, South Carolina, in consultation with the South Carolina Department of Transportation. The survey was administered to 1,000 households by David Sparks and Associates. The firm has extensive experience in political polling and corporate consumer satisfaction surveys. The firm maintains 50 telephones in its phone bank and an experienced survey team.

The survey was finalized and field tested in January 2001. The survey was administered in February 2001. Survey results discussed in this report were tabulated by David Sparks and Associates.

County Groupings

The state was divided into two different groupings to allow the tabulation and comparison of survey responses by geographic region (Coastal, Midlands, and Upstate) and county size (Urban, Next to Urban, and Rural). All divisions were made along county lines. In this report, survey results are reported in aggregates as well as separately for geographic region and county size.

Three geographic regions—Coastal, Midlands and Upstate—were designated. Counties were grouped by Council of Government (COG) planning areas with some adjustment along the boundaries to approximate as closely as possible equal population splits (Map 1, Table 1).

Coastal counties include counties in the Lowcountry, Berkeley-Charleston-Dorchester, and Waccamaw COGs, and all but Chesterfield County in the Pee-Dee COG. Collectively, they account for 33.3 percent of the state population. The Midlands Region consists of counties in the Lower Savannah, Central Midlands, and Santee-Lynches COGs as well as York and Lancaster Counties from the Catawba COG and Chesterfield from the Pee Dee COG. Collectively, those counties account for 34.3 percent of the state population. The Upstate Region consists of the Upper Savannah and Appalachian COGs and Union and Chester Counties from the Catawba COG. These counties account for 32.4 percent of the state population.

In addition to Geographic Regions, counties were grouped into Urban, Next to Urban and Rural based on population size and density (Map 2, Table 2). Urban counties include Greenville, Richland, Charleston, Spartanburg, and Lexington Counties. Those five counties each have populations of over 200,000 and population densities of between 298 and 453 persons per square mile. The Next to Urban counties include Horry, Anderson, York, Berkeley, Aiken, Florence, Beaufort, Sumter, and Pickens Counties. These nine counties all have populations greater than 100,000 but less than 200,000 residents and population densities that range from 128 to 227 persons per square mile. The remaining 32 counties all have populations of less than 100,000 residents. Urban, Next to Urban, and Rural Counties comprise 37.2, 31.8, and 31.0 percent of the state population, respectively.

Map 1. Geographic Regions

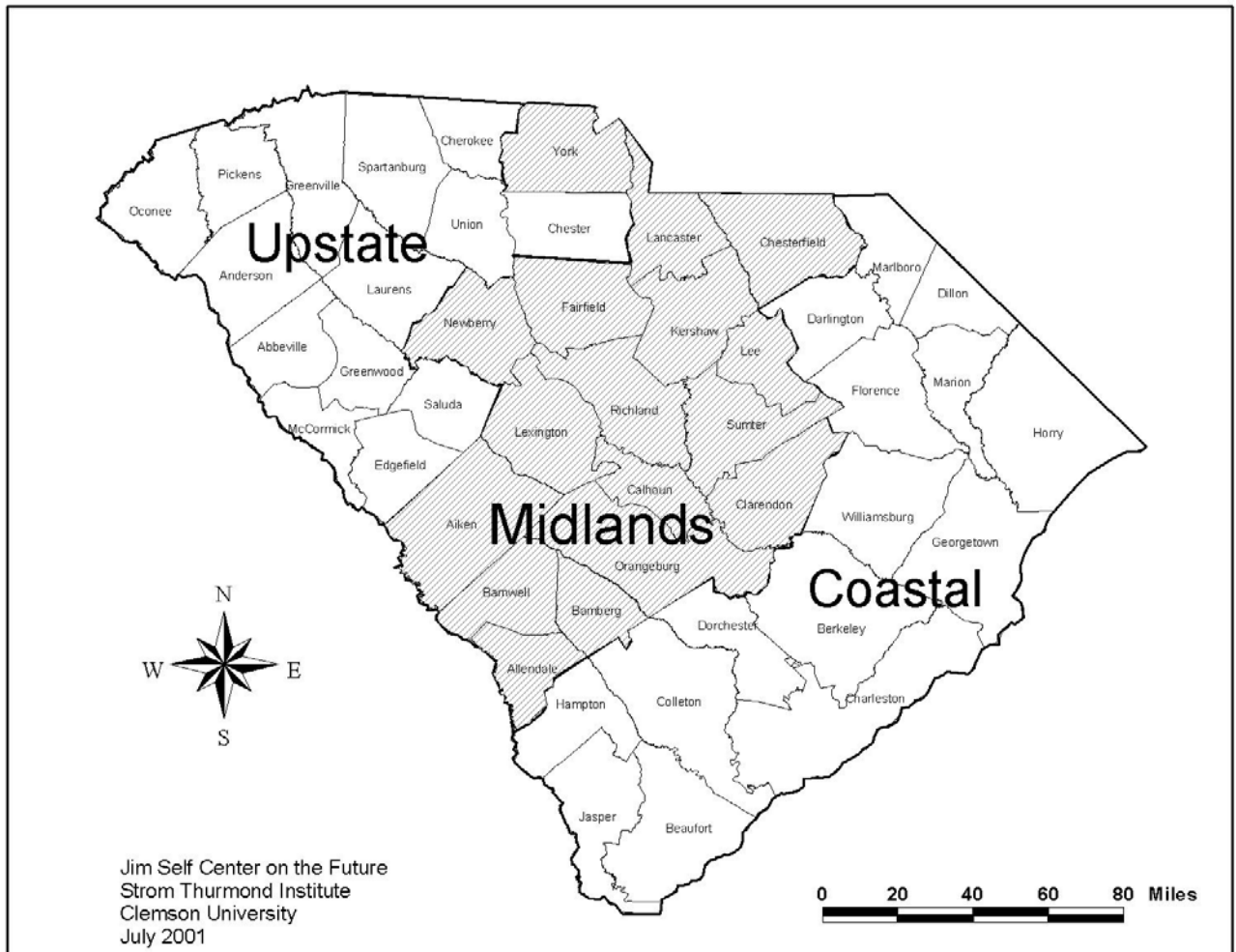


Table 1. Geographic Regions

Count	County	Population	Percent of Total	
1	Charleston	319,921	8.23%	Coastal
2	Horry	178,550	4.60%	
3	Berkeley	142,300	3.66%	
4	Florence	125,229	3.22%	
5	Beaufort	112,973	2.91%	
6	Dorchester	90,582	2.33%	
7	Darlington	66,488	1.71%	
8	Georgetown	54,934	1.41%	
9	Colleton	37,659	0.97%	
10	Williamsburg	36,840	0.95%	
11	Marion	34,475	0.89%	
12	Dillon	29,718	0.76%	
13	Marlboro	29,492	0.76%	
14	Hampton	19,108	0.49%	
15	Jasper	17,232	0.44%	
	Total	1,295,501	33.33%	
16	Richland	307,279	7.91%	Midlands
17	Lexington	208,972	5.38%	
18	York	158,180	4.07%	
19	Aiken	135,401	3.48%	
20	Sumter	112,412	2.89%	
21	Orangeburg	87,519	2.25%	
22	Lancaster	59,577	1.53%	
23	Kershaw	49,291	1.27%	
24	Chesterfield	41,531	1.07%	
25	Newberry	34,385	0.88%	
26	Clarendon	30,901	0.80%	
27	Fairfield	22,573	0.58%	
28	Barnwell	21,784	0.56%	
29	Lee	20,315	0.52%	
30	Bamberg	16,289	0.42%	
31	Calhoun	14,236	0.37%	
32	Allendale	11,325	0.29%	
	Total	1,331,970	34.27%	
33	Greenville	358,936	9.24%	Upstate
34	Spartanburg	249,636	6.42%	
35	Anderson	162,793	4.19%	
36	Pickens	108,126	2.78%	
37	Oconee	65,081	1.67%	
38	Greenwood	63,717	1.64%	
39	Laurens	63,360	1.63%	
40	Cherokee	50,074	1.29%	
41	Chester	34,927	0.90%	
42	Union	30,356	0.78%	
43	Abbeville	24,681	0.64%	
44	Edgefield	19,989	0.51%	
45	Saluda	16,983	0.44%	
46	McCormick	9,606	0.25%	
	Total	1,258,265	32.38%	

Map 2. County Size

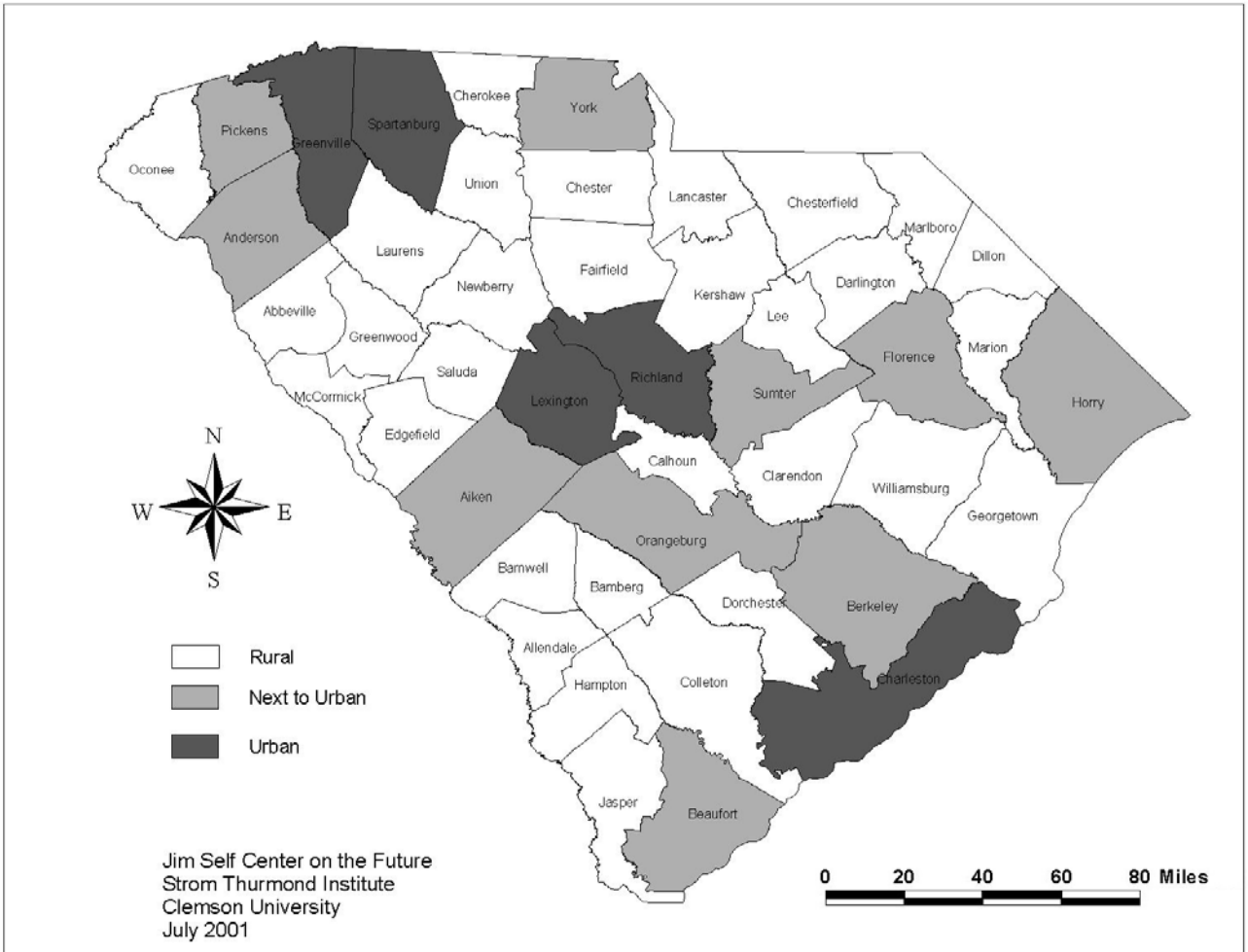


Table 2: County Size

Count	County	Population	Percent of Total	Area	Density	
1	Greenville	358,936	9.24%	792.09	453	Urban
2	Charleston	319,921	8.23%	917.42	349	
3	Richland	307,279	7.91%	756.54	406	
4	Spartanburg	249,636	6.42%	810.99	308	
5	Lexington	208,972	5.38%	700.82	298	
	Total/Avg	1,444,744	37.18%	795.57	363	
6	Horry	178,550	4.60%	1,133.71	157	Next to Urban
7	Anderson	162,793	4.19%	718.04	227	
8	York	158,180	4.07%	682.55	232	
9	Berkeley	142,300	3.66%	1,099.55	129	
10	Aiken	135,401	3.48%	1,073.08	126	
11	Florence	125,229	3.22%	799.21	157	
12	Beaufort	112,973	2.91%	587.02	192	
13	Sumter	112,412	2.89%	665.46	169	
14	Pickens	108,126	2.78%	496.92	218	
	Total/Avg	1,235,964	31.80%	806.17	179	
15	Dorchester	90,582	2.33%	574.79	158	Rural
16	Orangeburg	87,519	2.25%	1,105.99	79	
17	Darlington	66,488	1.71%	562.06	118	
18	Oconee	65,081	1.67%	625.1	104	
19	Greenwood	63,717	1.64%	455.53	140	
20	Laurens	63,360	1.63%	713.16	89	
21	Lancaster	59,577	1.53%	549.02	109	
22	Georgetown	54,934	1.41%	814.86	67	
23	Cherokee	50,074	1.29%	392.71	128	
24	Kershaw	49,291	1.27%	726.3	68	
25	Chesterfield	41,531	1.07%	798.78	52	
26	Colleton	37,659	0.97%	1,056.47	36	
27	Williamsburg	36,840	0.95%	934	39	
28	Chester	34,927	0.90%	580.56	60	
29	Marion	34,475	0.89%	479.72	72	
30	Newberry	34,385	0.88%	630.81	55	
31	Clarendon	30,901	0.80%	607.25	51	
32	Union	30,356	0.78%	514.21	59	
33	Dillon	29,718	0.76%	404.89	73	
34	Marlboro	29,492	0.76%	359.59	82	
35	Abbeville	24,681	0.64%	508.05	49	
36	Fairfield	22,573	0.58%	686.56	33	
37	Barnwell	21,784	0.56%	548.5	40	
38	Lee	20,315	0.52%	410.33	50	
39	Edgefield	19,989	0.51%	501.91	40	
40	Hampton	19,108	0.49%	559.93	34	
41	Jasper	17,232	0.44%	654.33	26	
42	Saluda	16,983	0.44%	451.37	38	
43	Bamberg	16,289	0.42%	393.28	41	
44	Calhoun	14,236	0.37%	380.32	37	
45	Allendale	11,325	0.29%	408.23	28	
46	McCormick	9,606	0.25%	489.1	20	
	Total/Avg	1,205,028	31.00%	589.93	65	

Chapter Three

Survey Results

Survey results are presented in two different ways: as mean (average) responses or as the percentage of respondents answering a question a certain way. For most questions, respondents are asked to rank their answers using a five point scale where one equals poor, very unimportant, or decrease funding, and five equals excellent, very important, or increase funding, depending on the question. The mean response indicates how the *average* respondent in a certain county grouping (geographic region or county size) answered the question. The percentage of respondents answering a question a certain way shows the distribution of the responses and indicates the strength of feeling about a given response.

Most of the survey results discussed in this report are presented graphically in terms of the percentage of respondents answering a question a certain way. In the discussion, 'ones' and 'twos' are considered unfavorable answers, and 'fours' and 'fives' are considered favorable answers. Answers of 'threes' are considered neutral.

Overall Conditions of South Carolina Roads and Highways

To begin the survey, respondents were asked their assessment of overall conditions of South Carolina roads and highways. The mean response statewide was 2.9 on a 5-point scale with '5' being an excellent rating and '1' being a poor rating. By far the most frequent response was the middle ground '3', irrespective of geographic region or county size (Figures 1 and 2).

Geographic Region

Mean responses in the Upstate (3.0) and Midlands (2.9) were significantly higher than in Coastal counties (2.7). Favorable responses were recorded for 22.3 percent of surveys statewide. The favorable response rate of 26.1 percent in the Upstate was significantly higher than and the 18.1 percent favorable response rate in Coastal counties. Favorable responses from the Midlands were 22.5 percent of the total. Unfavorable responses were given 28.3 percent of the time. By far, the highest negative response came from Coastal residents with 35.0 percent giving an unfavorable response.

County Size

When responses were grouped by county size, favorable responses ranged from 23.8 percent in Rural counties to 21.8 percent in Next to Urban counties and 21.2 percent in Urban counties. Unfavorable ratings were given on 33.6 percent of

Figure 1: Overall Conditions of South Carolina Roads and Highways by Geographic Region

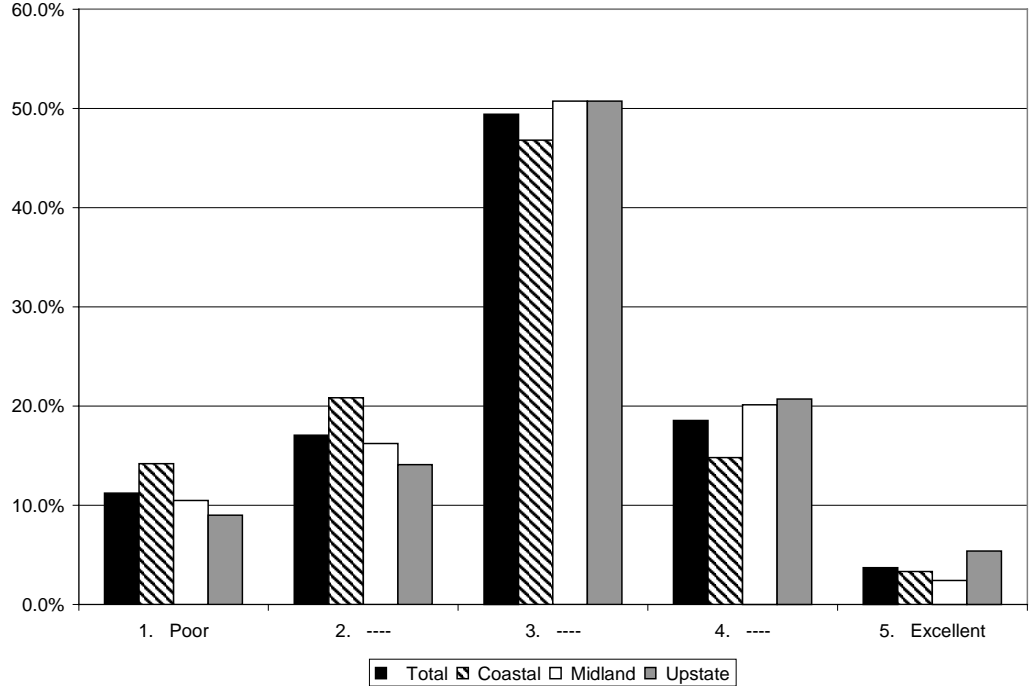
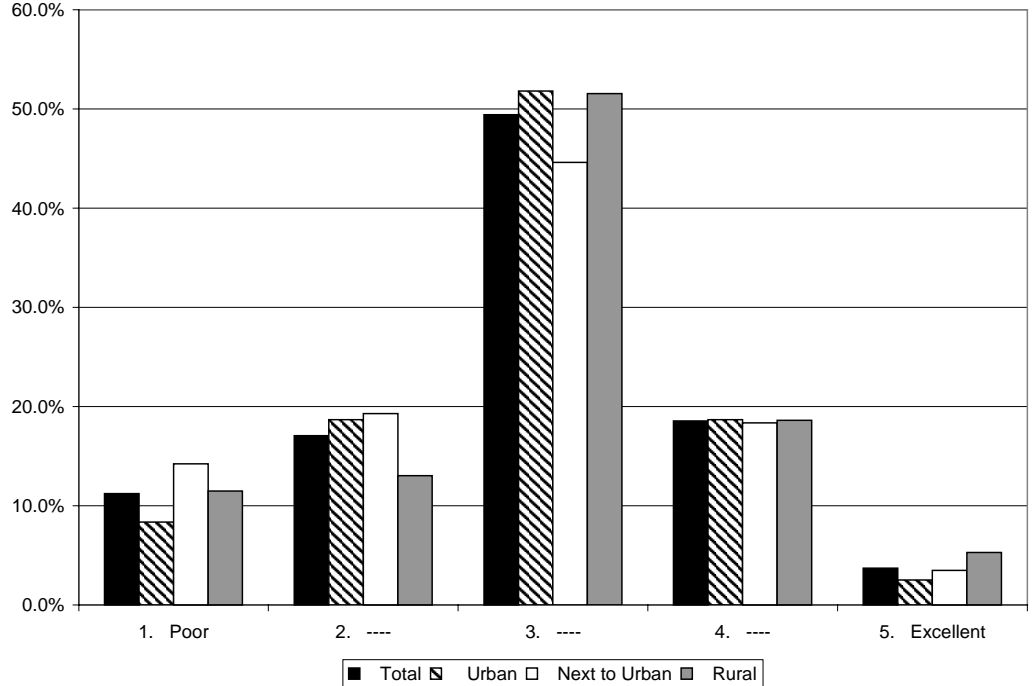


Figure 2: Overall Conditions of South Carolina Roads and Highways by County Size



responses by Next to Urban residents compared to 27.0 percent in Urban counties and to 24.6 percent in Rural counties. Overall, Upstate Rural residents responded favorably on 33.9 percent of surveys, while Coastal Rural residents responded favorably on only 15.6 percent of surveys.

Key Issue Areas

Next, respondents were asked to rate state roads and highways from poor to excellent in terms of four key issue areas: safety, congestion/traffic flow, road maintenance, and appearance. Statewide, appearance was rated highest in terms of the issue areas addressed with a slightly favorable mean rating of 3.12. All of the other three issues were less than mid-range with road maintenance rated lowest at 2.73 followed by congestion/traffic flow at 2.77 and safety at 2.93 (Tables 3 and 4).

Table 3: Mean Response Rating of South Carolina Roads and Highways by Geographic Region

	Total	Coastal	Midlands	Upstate
Appearance	3.12	3.03	3.11	3.21
Safety	2.93	2.93	3.05	2.82
Congestion/Traffic Flow	2.77	2.58	3.05	2.67
Road Maintenance	2.73	2.75	2.63	2.8

Scale: 1=Poor to 5=Excellent

Safety

Statewide, 32.1 percent of respondents indicated a favorable impression on safety issues, while 33.7 percent of respondents an unfavorable impression. Regionally, favorable responses ranged from 29.6 percent in the Upstate and 29.7 percent in the Coastal counties to 36.9 percent in the Midlands (Figure 3). Differences between Midlands and Upstate respondents were statistically significant with mean responses varying from 3.05 in the Midlands to 2.82 in the Upstate. A recent rash of accidents on Interstate 85 and historically high accident rates may have contributed to the Upstate response. Coastal residents were not far behind the Upstate in their responses with rapid growth affecting roadway capacity and safety.

Table 4: Mean Response Rating of South Carolina Roads and Highways by County Size

	Total	Urban	Next to Urban	Rural
Appearance	3.12	3.22	3.01	3.11
Safety	2.93	2.87	2.89	3.03
Congestion/Traffic Flow	2.77	2.6	2.77	2.96
Road Maintenance	2.73	2.80	2.64	2.73

Scale: 1=Poor to 5=Excellent

Concerns over safety also appear to be related to county size. Among Urban residents, 27.4 percent had a favorable response to highway safety compared to 30.7 percent for Next to Urban and 38.7 percent for Rural counties (Figure 4). Unfavorable ratings were indicated by Urban residents on 35.2 percent of responses compared to 31.7 percent for Rural residents. Delineating further, favorable responses relating to safety ranged from a high of 47.3 percent among Rural Midlands residents to a low of 20.5 percent among next to Urban Upstate residents (Greenville and Spartanburg Counties). Overall, the mean ratings are significantly higher for Rural than Urban responses.

Congestion and Traffic Flow

With congestion and traffic flow the regional differences are greater still. Overall, 27.1 percent of responses were favorable for this category with 38.3 percent unfavorable responses. Favorable responses ranged from a high of 36.3 in the Midlands to 24.5 percent in the Upstate and 20.3 percent in Coastal counties (Figure 5). Unfavorable responses ranged from 44.8 percent in the Coastal region and 43.3 percent in the Upstate to a low of 27.0 percent in the Midlands. Mean responses in the Midlands were statistically higher than responses from both Coastal and Upstate counties.

Favorable responses were inversely related to county size with a 32.6 percent favorable response in Rural counties compared to 27.2 percent in Next to Urban Counties and 22.4 percent in Urban counties (Figure 6). Unfavorable responses ranged from a high of 47.1 percent in Urban counties to 37.1 percent in Next to Urban counties and 29.3 percent in Rural counties. Among Urban counties, unfavorable responses were highest for Urban Coastal (52.4 percent) and Urban Upstate counties (50.0 percent). For Urban Coastal counties (Charleston County), favorable ratings were given 12.8 percent of the time.

Figure 3: Ratings of South Carolina Roads on Safety by Geographic Region

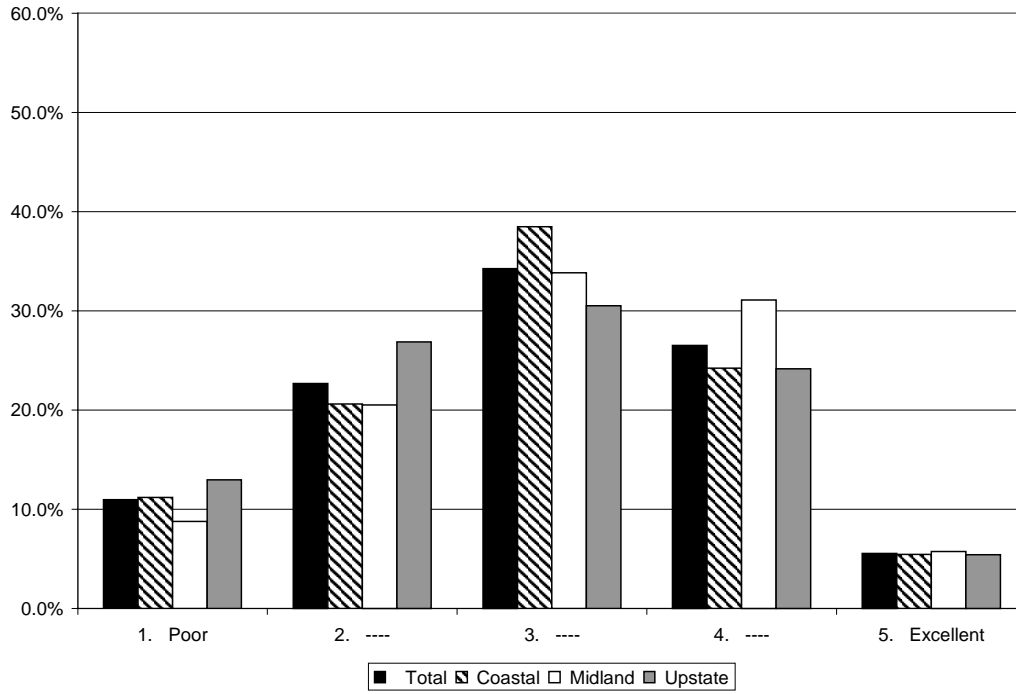


Figure 4: Ratings of South Carolina Roads on Safety by County Size

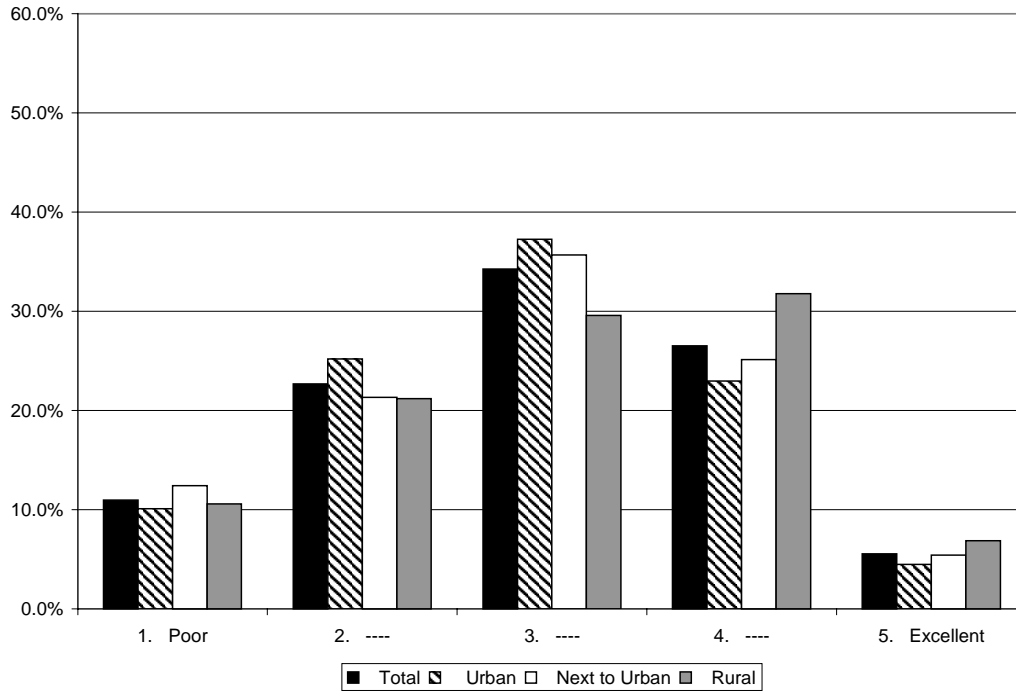


Figure 5: Ratings of South Carolina Roads on Congestion/Traffic Flow by Geographic Region

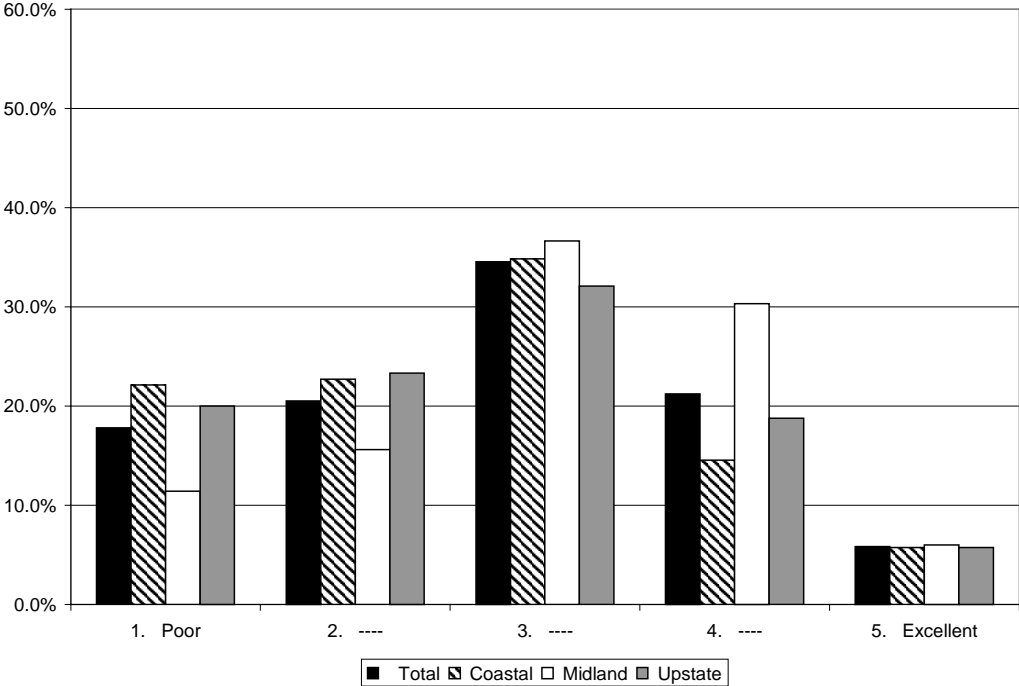
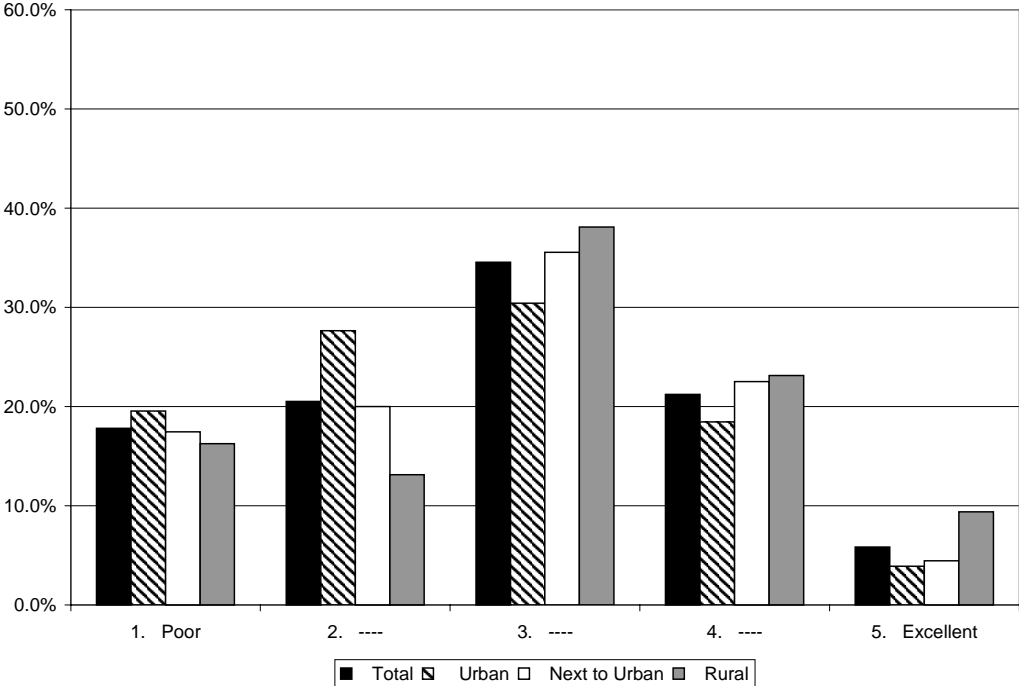


Figure 6: Ratings of South Carolina Roads on Congestion/Traffic Flow by County Size



Mean responses were significantly higher for Rural counties than for either Next to Urban or Urban counties. Rapid growth is straining roadway capacity and increasing travel time in and around metropolitan areas of the state. This growth generated congestion is obviously greater in urban areas of the state and appears to be more pronounced along the coast and in the upstate.

Road Maintenance

Overall, 24.3 percent of respondents indicated a favorable response to highway maintenance, while 40.9 percent indicated an unfavorable response as shown in (Figure 7). In this case, the Midlands had the lowest approval rating with 20.1 percent of responses being favorable compared to 25.6 percent in the Upstate and 27.2 percent in the Coastal counties. The Midlands had the highest rate of unfavorable responses at 43.1 followed by the Coast (42.0 percent) and Upstate (37.5 percent). Mean responses were significantly higher in the Upstate than the Midlands. Some of this variation may be due to greater attention by respondents to safety and congestion issues in the Upstate and Coastal areas.

Little variation occurred based on county size (Figure 8). The most favorable responses to road maintenance came from Urban counties at 26.3 percent, while the fewest favorable responses were in Next to Urban counties at 22.2 percent. The highest unfavorable responses came from Rural counties at 42.8 percent and Next to Urban Counties at 42.3 percent. The highest favorable response rate occurred in Urban Coastal counties (Charleston County) at 33.7 percent, while the lowest favorable response occurred in Midlands Next to Urban counties (Richland and Lexington Counties) at 18.3 percent. Mean responses in Urban counties were significantly higher than Next to Urban counties.

Appearance

At 38.6 percent, favorable responses to the appearance of roads and highways in the state was higher than was the case for the other three categories. Unfavorable responses were given 26.4 percent of the time. Favorable responses ranged from 34.9 percent in Coastal counties to 39.9 in the Midlands and 41.0 percent in the Upstate (Figure 9). Unfavorable responses were highest in the Midlands (29.6 percent) and Coastal (28.3 percent) regions. Responses in the Upstate (3.21) were significantly higher than in the Coastal region (3.03).

Favorable responses on highway appearance were highest among Urban respondents at 41.1 percent (Figure 10). Responses by Rural and Next to Urban respondents were 37.3 and 37.0 percent, respectively. Unfavorable responses ranged from a high of 29.5 percent in Next to Urban counties to 24.1 percent in Urban counties. The highest favorable ratings occurred in Rural Upstate (46.3 percent) and Urban Midlands counties (44.9 percent); the lowest rating occurred for Rural Coastal counties (30.3 percent). Mean responses for Urban counties were significantly higher than responses from Next to Urban counties.

Figure 7: Ratings of South Carolina Roads on Highway Maintenance by Geographic Region

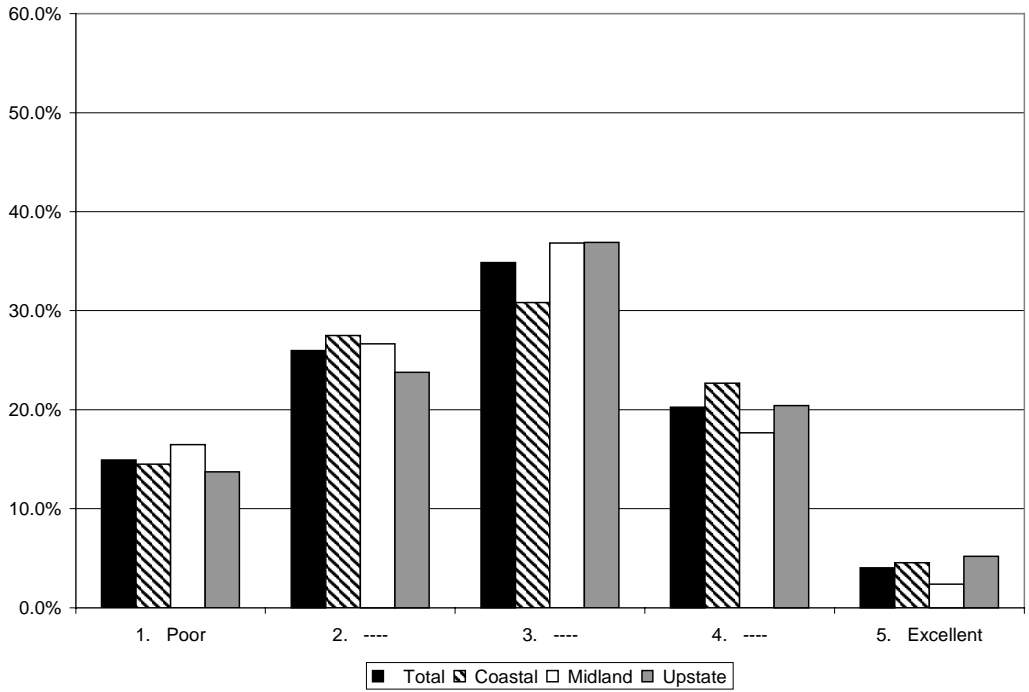


Figure 8: Ratings of South Carolina Roads on Highway Maintenance by County Size

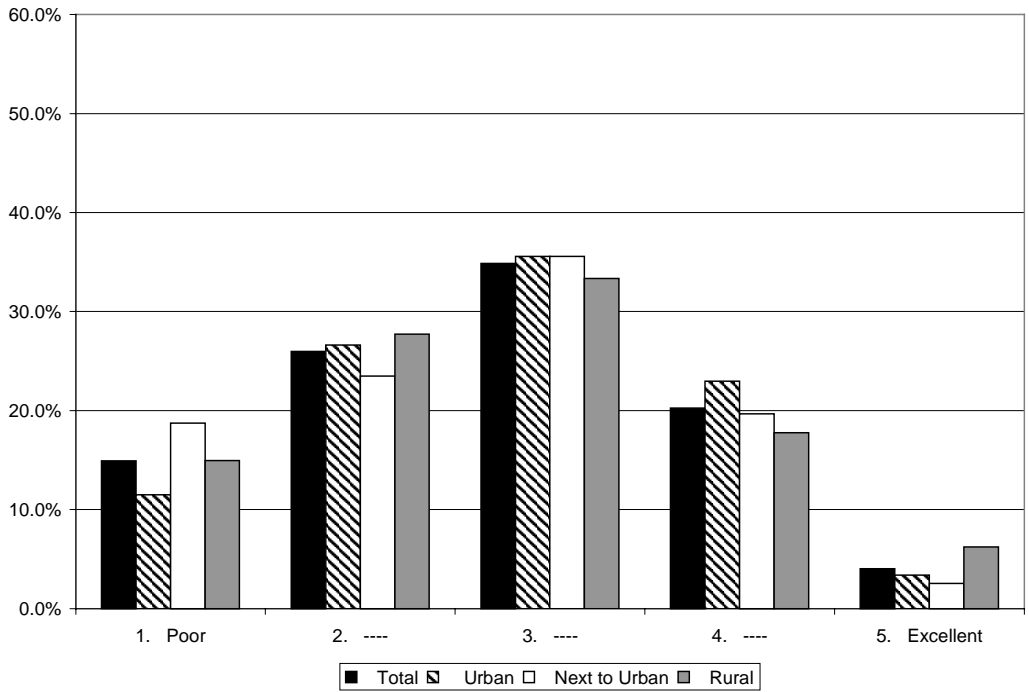


Figure 9: Ratings of South Carolina Roads on Appearance by Geographic Region

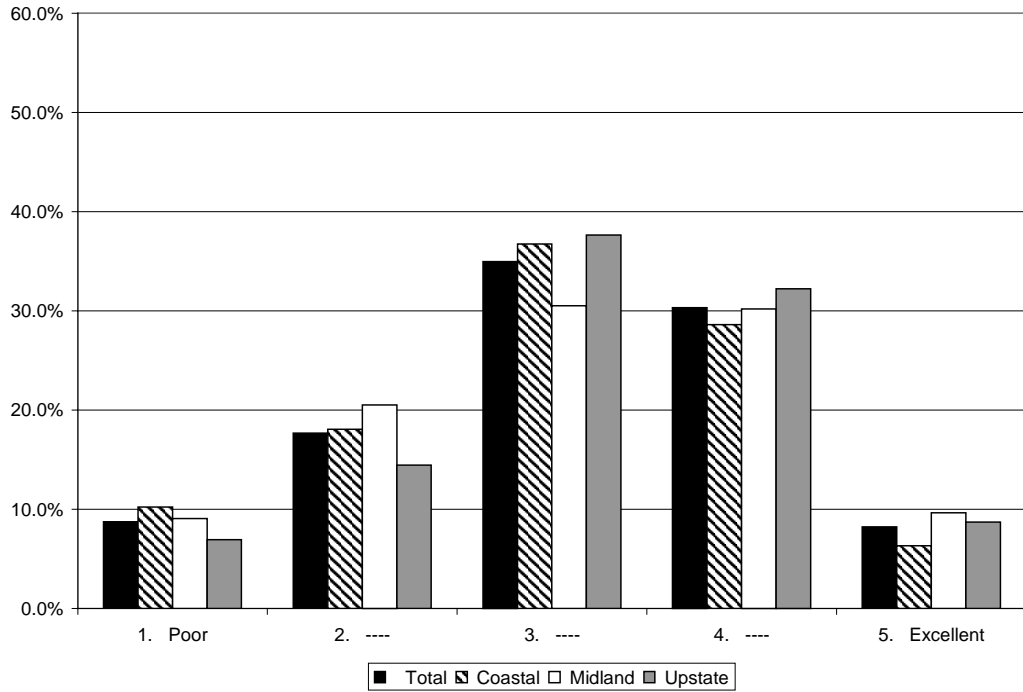
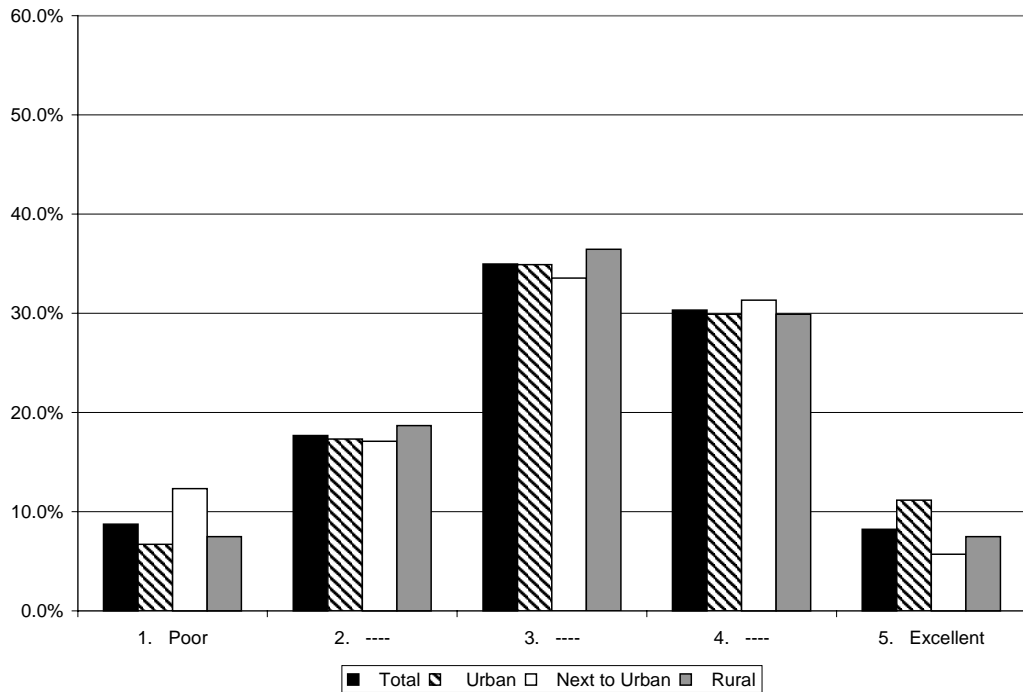


Figure 10: Ratings of South Carolina Roads on Appearance by County Size



Open-Ended Responses

Respondents were then asked an open-ended question to determine which particular transportation issues were important to them. By far the most important single issue was “potholes” or “too many potholes”. Other issues often identified included: “too much traffic congestion”, “speeding”, “too much litter”, “a lot of road construction”, and “eighteen wheelers”. Overall, issues of road maintenance were the most often cited issues identified by 36.3 percent of respondents. Safety including speeding and trucks (22.5 percent), and congestion (19.9 percent) were the next most cited issues. Construction issues (9.9 percent), litter (4.8 percent) and people/drivers (4.5 percent) were also indicated.

Funding Options

Although taxes and fees are never a very attractive proposition, respondents were asked to rate a series of transportation funding alternatives on a 1 to 5 scale with 1 being a poor idea and 5 being an excellent idea. Summaries of the results are indicated in Table 5 by geographic area and in Table 6 by county size. Statewide, the most favorable responses were given for highway impact fees where new development pays for needed road improvements (3.53) and general funds from the state budget (3.51). Mid-range responses were for a state loan pool targeted for transportation needs (3.17) and tolls on high volume roads and bridges (2.98). The least favorable responses came for state taxes on new car purchases (2.59), state income taxes (2.34), gasoline/fuel taxes (2.25), and property taxes on automobiles (2.02). It is worth noting that the top four options in terms of respondent preferences are either fees or state revenue expenditures. The four lowest ranking options are taxes of various types.

Table 5: Mean Ratings on Transportation Funding Alternatives by Geographic Region

	Total	Coastal	Midland	Upstate
Highway impact fees	3.53	3.56	3.55	3.47
General funds from the state budget	3.51	3.52	3.46	3.55
State loan pool for transportation	3.17	3.18	3.17	3.15
Tolls on high volume roads & bridges	2.98	2.98	3.06	2.91
Sales taxes on new car purchases	2.59	2.64	2.52	2.63
State income taxes	2.34	2.34	2.27	2.41
Gasoline/Fuel taxes	2.25	2.21	2.27	2.28
Property taxes on automobiles	2.02	1.96	2.07	2.02

Scale: 1=Poor to 5=Excellent

Table 6: Mean Ratings on Transportation Funding Alternatives by County Size

	Total	Urban	Next to Urban	Rural
Highway impact fees	3.53	3.58	3.47	3.52
General funds from the state budget	3.51	3.51	3.57	3.44
State loan pool for transportation	3.17	3.09	3.21	3.2
Tolls on high volume roads & bridges	2.98	2.93	2.91	3.12
Sales taxes on new car purchases	2.59	2.66	2.53	2.58
State income taxes	2.34	2.31	2.39	2.32
Gasoline/Fuel taxes	2.25	2.44	2.10	2.19
Property taxes on automobiles	2.02	2.05	1.95	2.04

Scale: 1=Poor to 5=Excellent

Impact Fees

Impact fees are being used in high growth areas of the country and are being used increasingly in high growth areas of South Carolina. The rationale for impact fees is that new development should bear the capital costs associated with that new development. Without impact fees, many communities have realized that new development often does not cover full public service costs. Funds derived from impact fees must be earmarked for specific service categories of which transportation is an eligible use; there must be a 'rational-nexus', i.e. direct relationship between new development and service requirements; and new development can only be expected to pay up to the current level of service. Impact fees are established and collected locally and offer local rather than state revenues for transportation.

Overall, 53.5 percent of respondents indicated a favorable response for the use of impact fees ('4' or '5') with only 16.9 percent indicating an unfavorable response ('1' or '2'). Geographically, favorable responses ranged from 56.2 percent in the Midlands to 50.6 percent in the Upstate (Figure 11). Based on county size, little difference was indicating ranging from 55.3 percent for Urban counties to 52.6 percent for Next to Urban counties (Figure 12). No significant differences by geographic region or county size were indicated.

General Funds

The use of general funds from the state budget was a close second choice of respondents. There may be two explanations for this response. The first

Figure 11: Ratings of Highway Impact Fees to Fund Transportation by Geographic Region

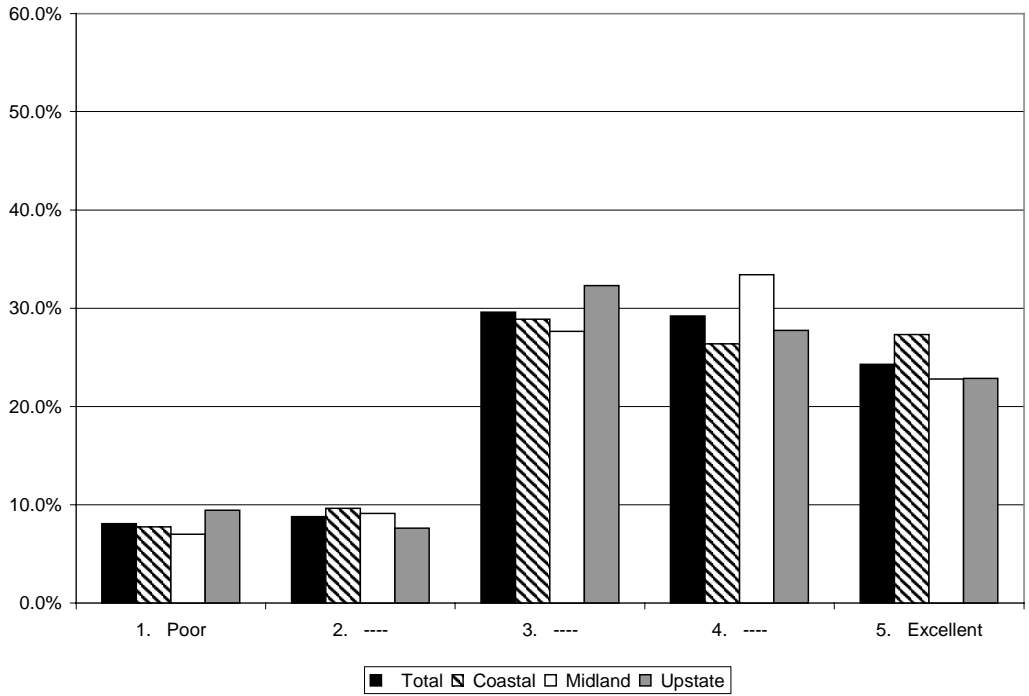
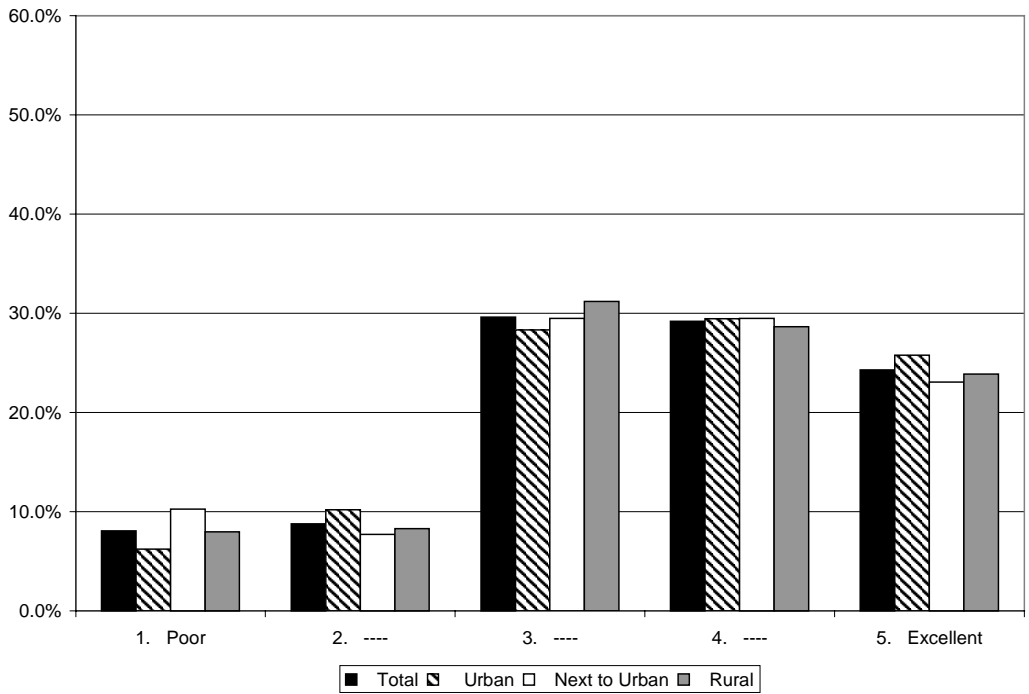


Figure 12: Ratings of Highway Impact Fees to Fund Transportation by County Size



explanation may be that transportation is a statewide issue and that at least a portion of those costs bear collective support from the budget. The second and probably more likely explanation is one of perception. Because General Fund expenditures are one step removed from the taxpayer, they are seen as somewhat less invasive. In reality, the bulk of the General Fund is derived from state income taxes. State income taxes, the more direct connection, had a much less favorable perception with a mean response of 2.34 versus 3.51 for the General Fund. Some of this difference may be attributed to an interpretation on the part of respondents that income taxes might mean a tax increase while the General Fund meant a reallocation of existing funds.

General fund expenditures also had better than a 50 percent favorable response at 53.4 percent with a 17.6 percent unfavorable response. The range varies slightly with a high of 54.6 percent in Coastal counties and a low of 52.2 in the Midlands (Figure 13). Grouping by county size, the highest responses were in Next to Urban counties at 55.2 percent, while the lowest responses were in Rural counties at 51.3 percent (Figure 14). No significant mean differences were observed.

State Loan Pool

A state loan pool targeted for transportation needs was the next most popular funding option with a mean response of 3.17. The State Infrastructure Bank functions currently as a loan pool although hampered by both level and certainty of funding. A loan pool provides investment capital in a revolving fund that can be

leveraged to promote priority transportation projects. There may be two possible explanations for favorable responses here. The first explanation may be once again that the loan pool is one step removed from the taxpayer although the loan pool is supported by state bonding capacity. Secondly, it may be that respondents understand that the loan pool as a means of leveraging federal, local and private investment monies to target high priority transportation projects.

The use of a state loan pool for transportation needs was favored by 40.2 percent of respondents, while 27.3 percent indicated an unfavorable response to this option. Favorable responses were almost identical among regions varying from 40.5 percent in Coastal counties to 40.0 percent in the Midlands (Figure 15).

More variation occurred based on county size as Rural residents indicated a 44.6 percent favorable response compared to 37.6 percent for Next to Urban and 38.7 percent for Urban residents (Figure 16). Next to Urban respondents were particularly non-committal on this issue with 39.9 percent indicating a neutral '3' response and only 22.5 percent indicating an unfavorable response. No significant differences in mean ratings were indicated.

Figure 13: Ratings of General Fund Expenditures to Fund Transportation by Geographic Region

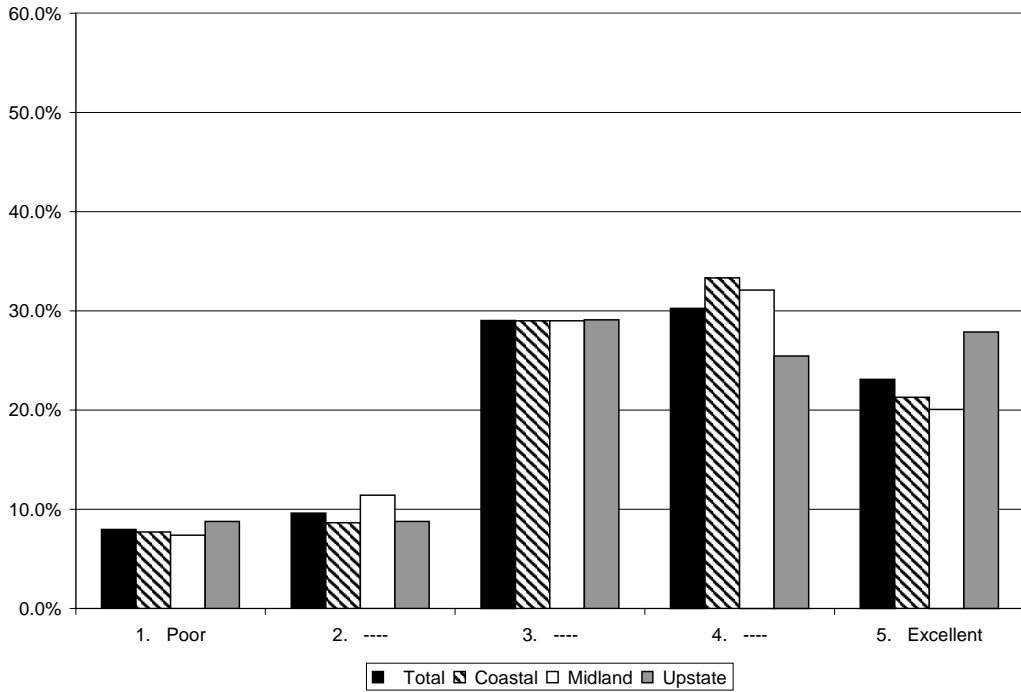


Figure 14: Ratings of General Fund Expenditures to Fund Transportation by County Size

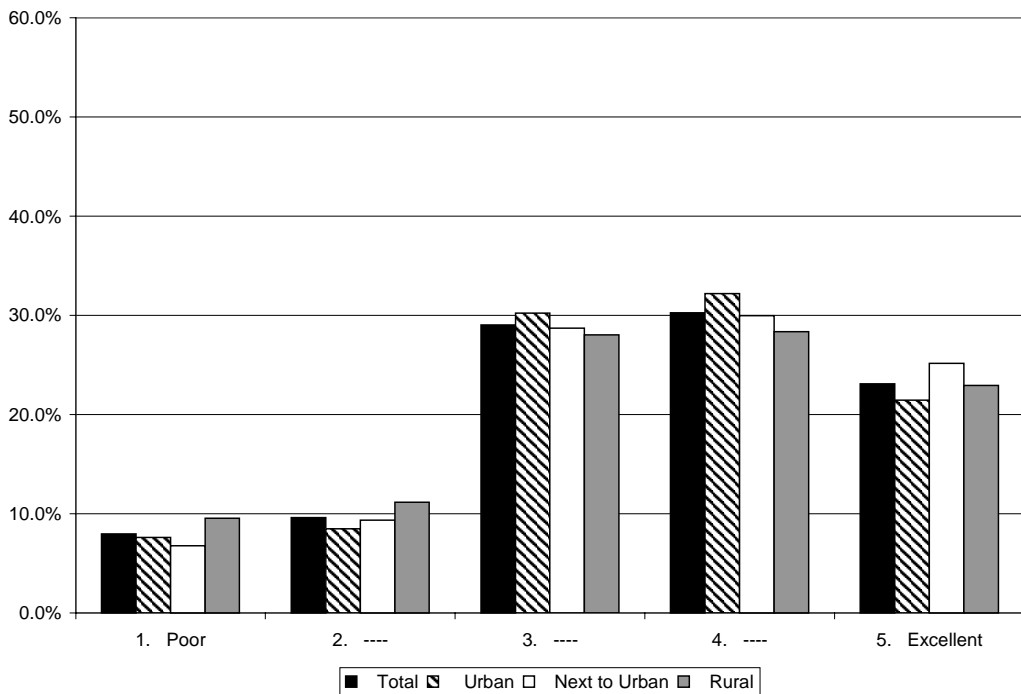


Figure 15: Ratings of a State Loan Pool to Fund Transportation by Geographic Region

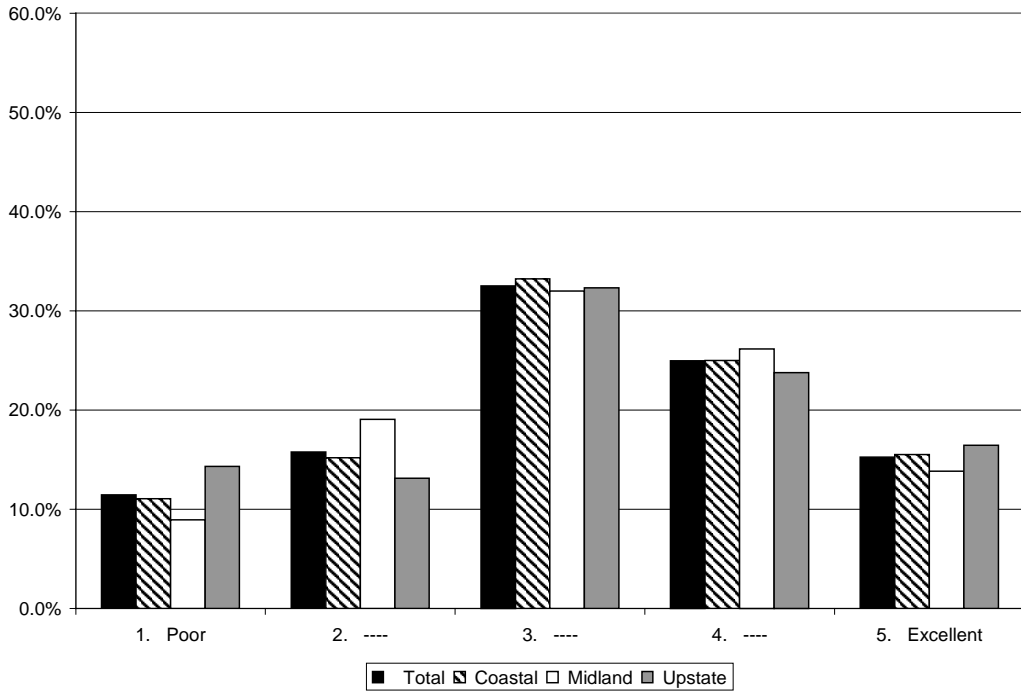
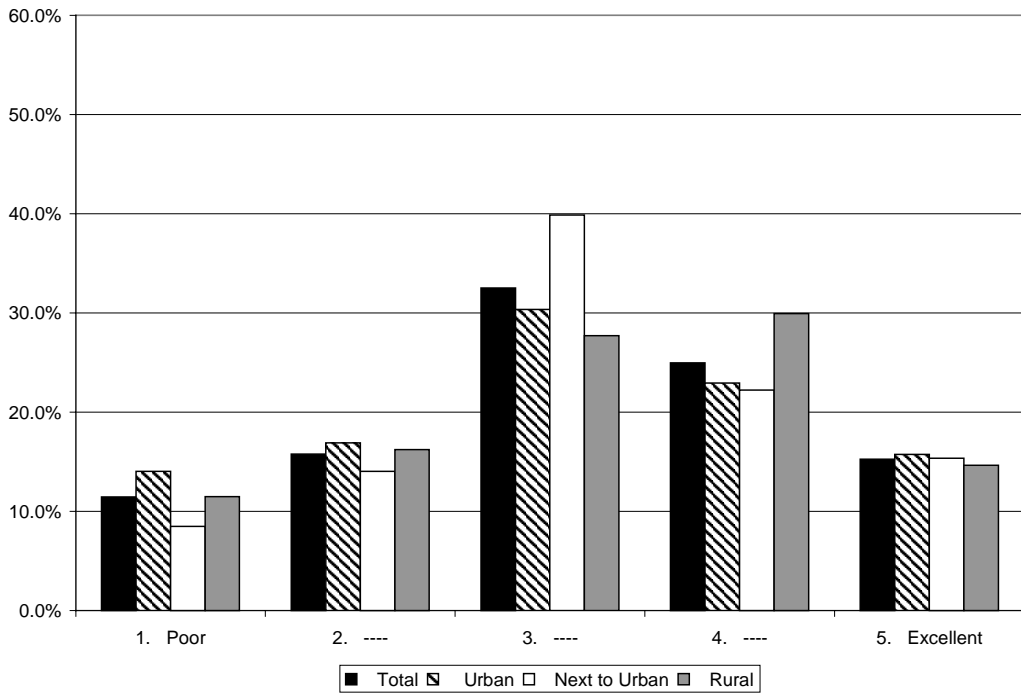


Figure 16: Ratings of a State Loan Pool to Fund Transportation by County Size



Tolls on Roads and Bridges

Tolls on high volume, limited access roads and major bridge projects registered in the mid-range with a mean response of 2.98. Forty percent of responses were favorable although there was also a fairly high negative response with nearly 24 percent of respondents rating them as a poor alternative (1 on a 5 point scale).

The use of tolls has been given increased attention with the Cooper River Bridge, the Myrtle Beach Connector, the Cross Island Expressway on Hilton Head, and the Southern Connector in Greenville. Tolls are the most direct user fee for highway transport but work only on high volume limited access roads and bridges; otherwise, receipts may not justify collection costs. Although tolls are not popular, tolls and fuel taxes are the only options considered here that transfer some of the transportation expense directly to out of state drivers. This issue is worth noting particularly as tourism becomes a still more important part of the state's economic base. Local, frequent use traffic can be accommodated with coupon books that make local travel on toll roads more affordable.

Favorable responses for tolls were indicated 40.8 percent of the time with a 37.8 unfavorable response rate. Regionally, favorable responses across regions ranging from 42.1 in the Midlands to 40.2 percent in the Upstate and 40.1 percent along the Coast (Figure 17). Sorting by county size, favorable responses ranged from 44.1 percent in Rural counties to 38.1 percent in Next to Urban Counties (Figure 18). No significant mean differences exist in the responses, but some variability does occur. Mean responses range from 3.06 in the Midlands to 2.91 in the Upstate and from 3.12 in Rural counties to 2.91 in Next to Urban and 2.93 in Urban counties. Tolls have been implemented in both the Upstate and Coastal regions with a number of projects discussed as toll roads particularly along the coast. The Midlands has been spared the same degree of threat.

Because toll roads require a critical mass to be economically viable, except for interstate highways they are more likely to occur in Urban and Next to Urban areas. Rural residents may feel more buffered from that threat.

Sales Tax on New Car Purchases

Of the four tax items listed, the least unfavorable option was the sales tax on new car purchases. Currently, the sales tax on new car purchases is capped at \$300. That cap was set in 1976, but has been carefully protected by car dealers who argue that higher sales taxes would curtail car purchases and thus negatively impact the state's economy. Yet, under current conditions, the sales tax on a \$50,000 luxury car amounts to 0.6 percent versus 3 percent on a \$10,000 car. The current tax has become more regressive as car prices have risen over the past 25 years. The state exempts a number of other items from the sales tax, including prescription drugs, electricity and other fuels used for home energy purposes, and most recently, a portion of the sales tax on food.

Figure 17: Ratings of Highway Tolls to Fund Transportation by Geographic Region

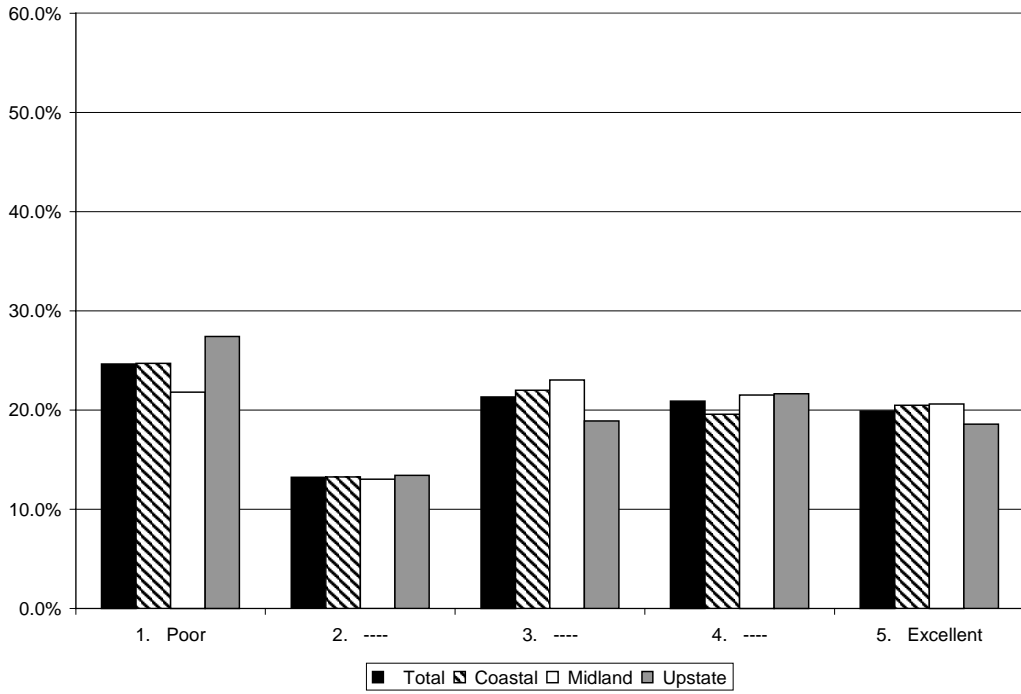
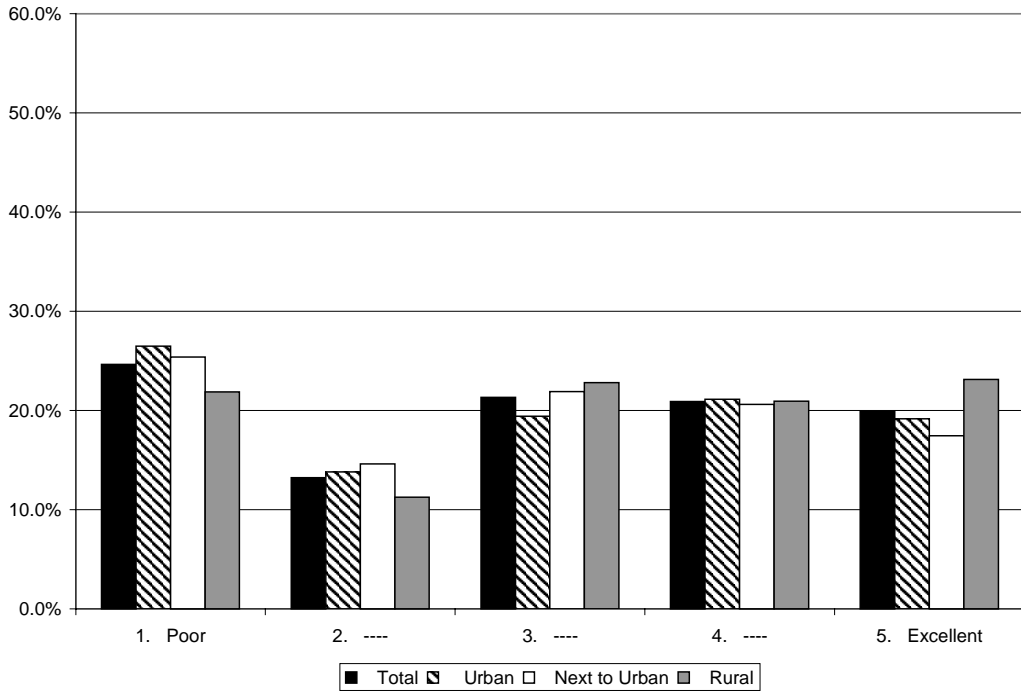


Figure 18: Ratings of Highway Tolls to Fund Transportation by County Size



With all of the tax categories, unfavorable responses now outweigh favorable responses. For sales taxes, 25.4 percent of respondents indicated a favorable response, while 47.6 percent of responses were unfavorable. Some variability occurs by region ranging from 27.9 percent favorable response in the Upstate to 22.0 percent in the Midlands (Figure 19). Based on county size, 27.2 percent of Rural responses were favorable in their reaction to sales taxes on cars versus 22.8 percent in Next to Urban counties (Figure 20). No significant differences occurred in mean responses with the highest mean ratings for Coastal and Upstate counties.

Income Taxes

Income taxes as indicated above are given low ratings as a funding option. While income taxes comprise 48.1 percent of the state revenues supporting the General Fund, only 2.8 percent of state transportation revenues are derived from the General Fund at this time. Much of the aversion to income taxes as a funding source is tied to the general public sentiment against taxes. Income taxes may be more appropriate for non-highway transportation expenses because they are less regressive than other funding options. Yet, the connection between road use and income tax collections is weak, income taxes are not an efficient means of funding highway programs.

Overall, 21.2 percent of respondents indicated a favorable rating of state income taxes as a means of funding transportation; 57.2 percent gave an unfavorable response. Upstate respondents favored income taxes on 24.1 percent of responses, while favorable responses in Coastal and Midlands counties were 20.8 and 18.0 percent, respectively (Figure 21). Little variation occurred by county size (Figure 22), and mean differences were not significant.

Gasoline and Fuel Taxes

Gasoline and fuel taxes have the second lowest level of acceptance with a mean rating of 2.25. Part of the reason for the high negative rating for fuel taxes is that they are highly visible and paid frequently whenever drivers pull up to the gas pump. With higher market prices for fuel, consumer resistance to higher fuel taxes is higher still. Because tolls are not feasible on most roadway stretches, fuel taxes are the best proxy for highway use among the options listed here as they reflect some combination of miles driven and vehicle weight. At 16 cents per gallon in state fuel taxes, the average South Carolina driver pays \$8 per month for highway construction and maintenance.

Favorable ratings for gasoline and fuel taxes were 20.1 percent of total responses, with 61.2 percent responding unfavorably. Regional differences were slight, ranging from a 21.9 percent favorable rating in the Upstate to a 18.7 percent favorable rating in the Midlands (Figure 23).

Figure 19: Ratings of Sales Taxes to Fund Transportation by Geographic Region

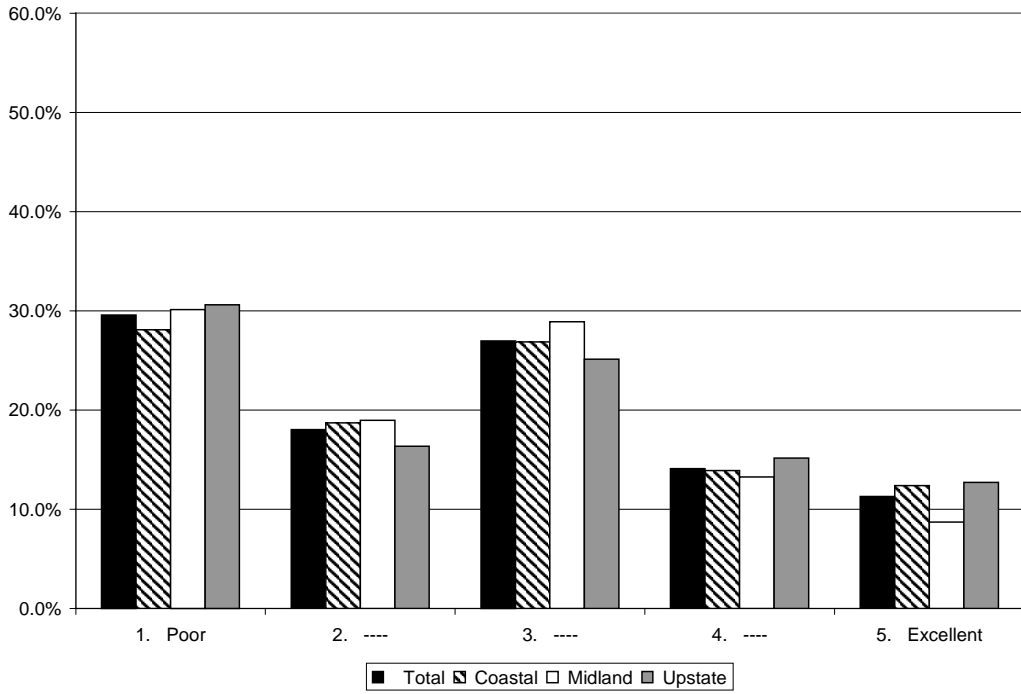


Figure 20: Ratings of Sales Taxes to Fund Transportation by County Size

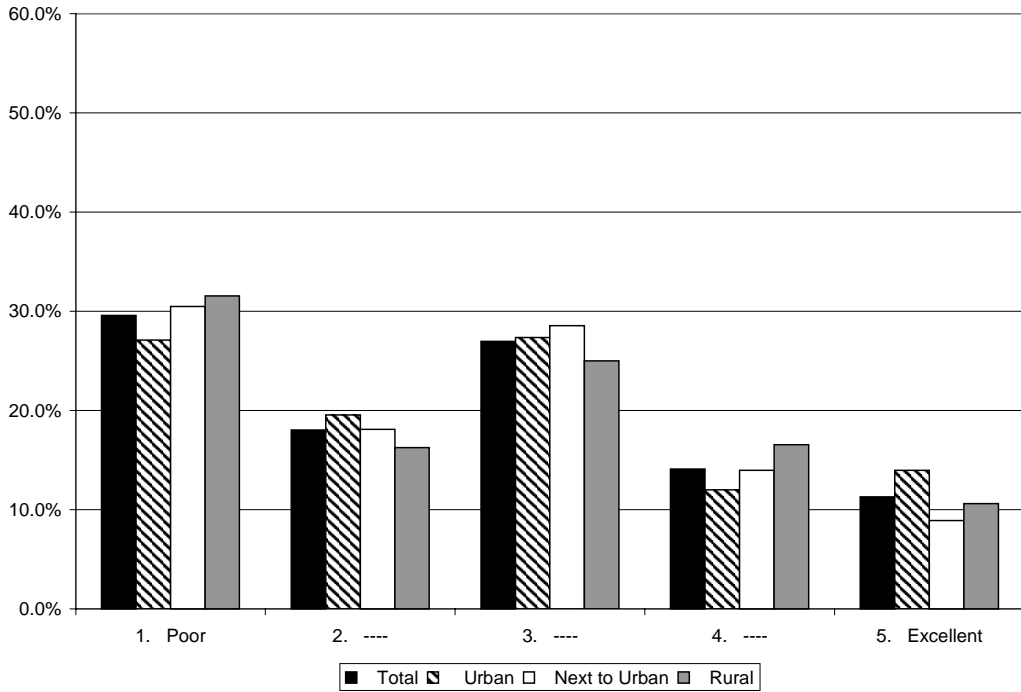


Figure 21: Ratings of Income Taxes to Fund Transportation by Geographic Region

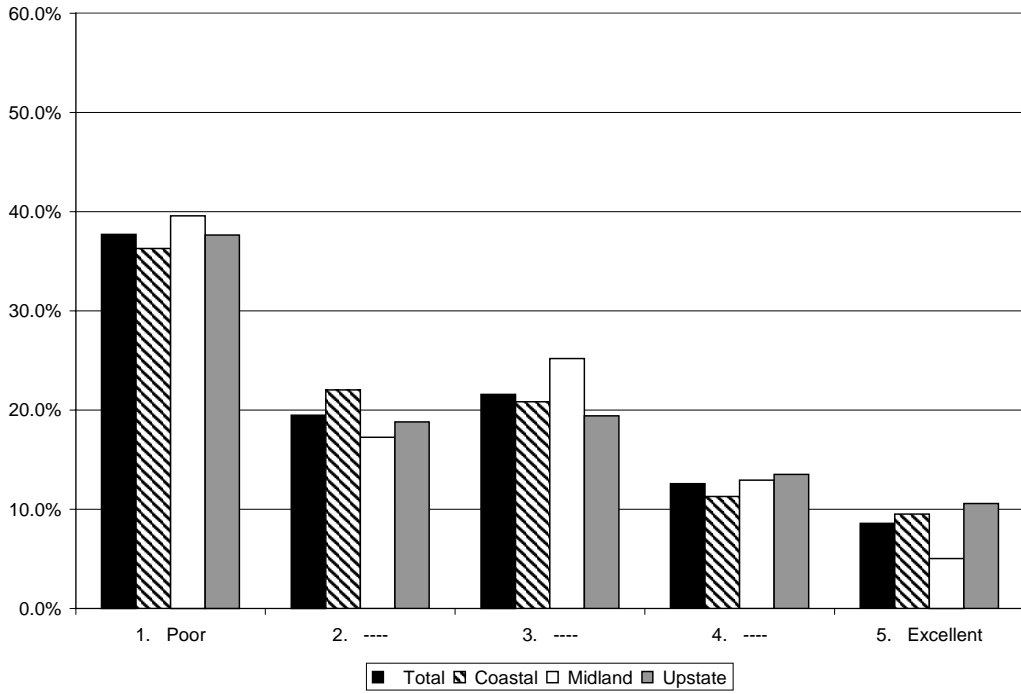
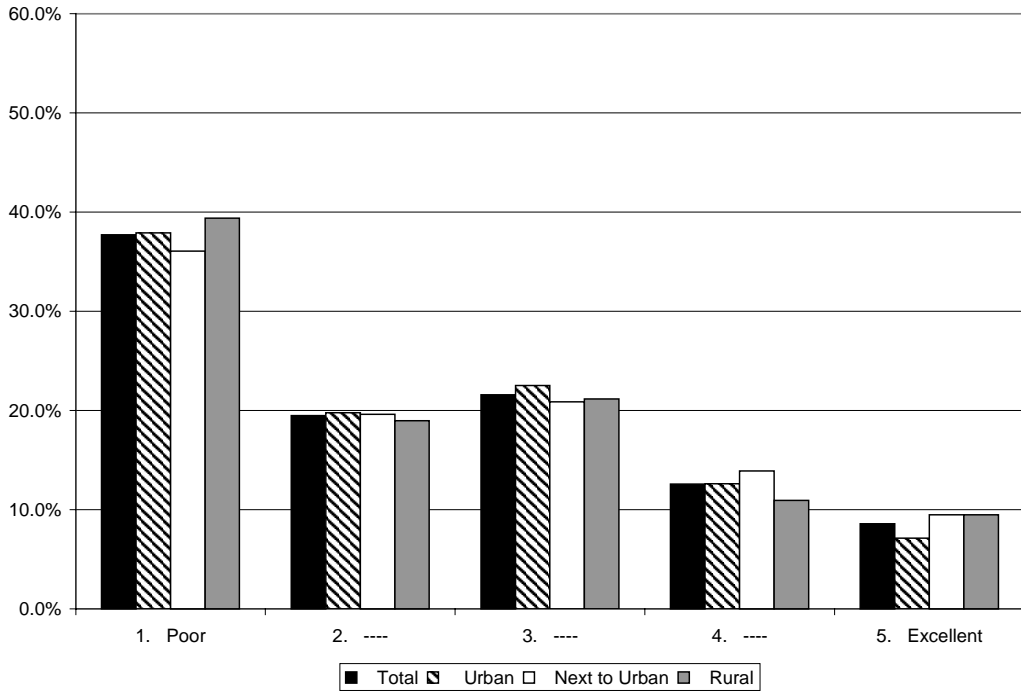


Figure 22: Ratings of Income Taxes to Fund Transportation by County Size



Significant variation occurred by county size. Urban counties had a 24.0 percent favorable rating with only 15.0 percent of Next to Urban residents giving a favorable rating (Figure 24). Mean responses were significantly higher in the Urban (2.4) than in Rural (2.2) and Next to Urban (2.1) counties.

Property Taxes

Finally, property taxes on automobiles received the lowest rating among options considered. Cutting car taxes has been a popular political stance in recent years. In South Carolina, the referendum to cut car taxes on the November 2000 election ballot passed with 84.4 percent of the vote. In actuality, property taxes are collected by local rather than state government, and those revenues typically have not been targeted for transportation. Counties are now exploring funding options including fees and increased millage on property taxes to offset the projected revenue loss from the elimination of the property tax on automobiles.

Only 13.8 percent of respondents rated property taxes favorably as a funding option, while 68.8 percent rated property taxes unfavorably with half of respondents rating property taxes as a poor option ('1' out of '5'). Regionally, favorable responses ranged from 15.6 percent in the Upstate to 11.7 percent in the Midlands (Figure 25). By county size, favorable responses ranged from 15.6 percent in Rural and 14.7 percent in Urban counties to a low of 10.8 in Next to Urban counties (Figure 26). In three of the four tax categories and particularly in terms of fuel and property taxes, Next to Urban residents had the lowest favorable responses. These responses are not inconsistent with the growing block of fiscally conservative voters in suburban areas of the state. No significant differences occurred in mean responses.

Who Should Pay?

The general aversion to taxes is not surprising. In general, the highest levels of acceptance were for fees and for state expenditures one step removed from the taxpayer. Fuel taxes, the primary source of funding under current conditions was next to last in terms of level of acceptance.

Interestingly, when asked to rate "how important it is to you that funding options for highways comes from fees and taxes related to the use of the highways?" 67.1 percent of respondents gave a favorable rating to that proposition. Only 10.7 percent rated relating fees and taxes to highway use as an unfavorable proposition (Figure 27, Figure 28). This response is not consistent with the responses made above to a menu of individual fees and taxes. It does suggest that when individuals step back into a neutral observer category that they are more likely to draw connections between highway benefits and corresponding highway use charges.

Figure 23: Ratings of Fuel Taxes to Fund Transportation by Geographic Region

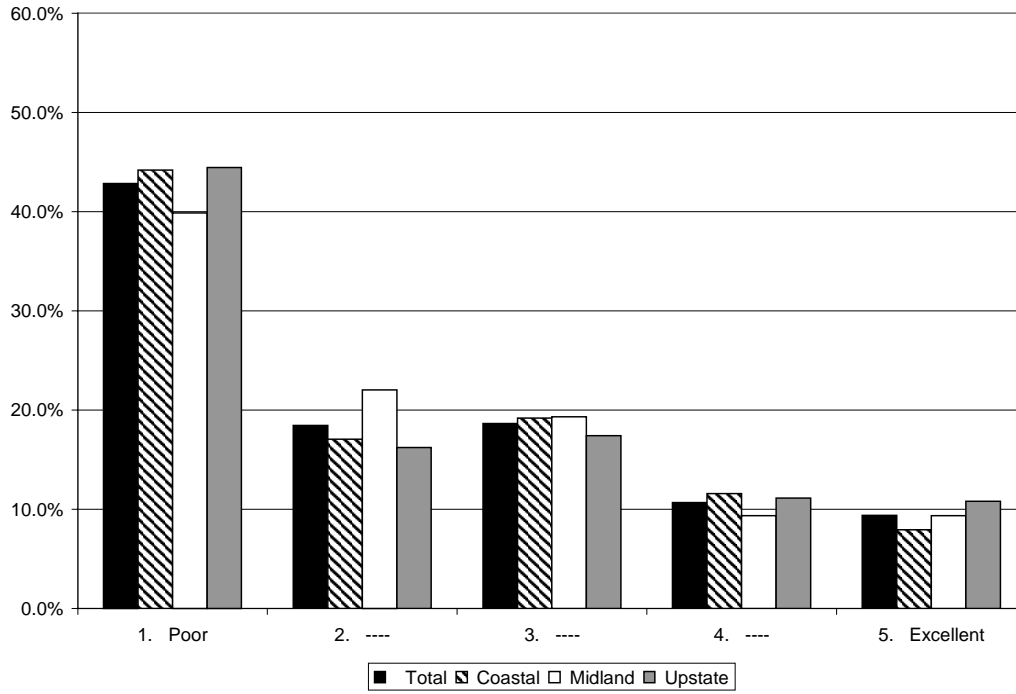


Figure 24: Ratings of Fuel Taxes to Fund Transportation by County Size

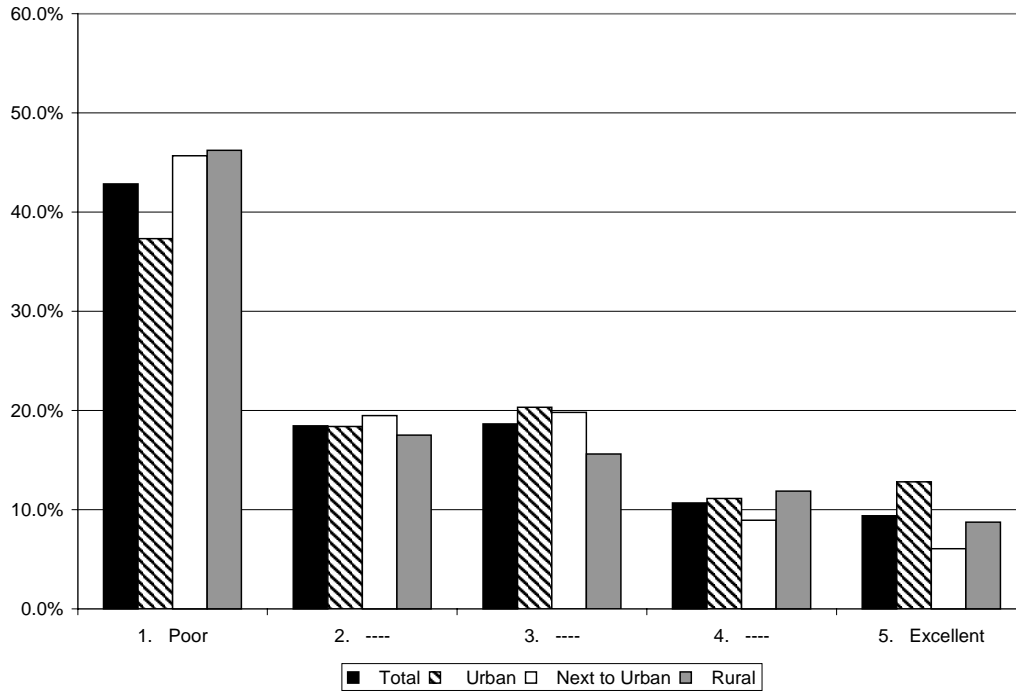


Figure 25: Ratings of Property Taxes to Fund Transportation by Geographic Region

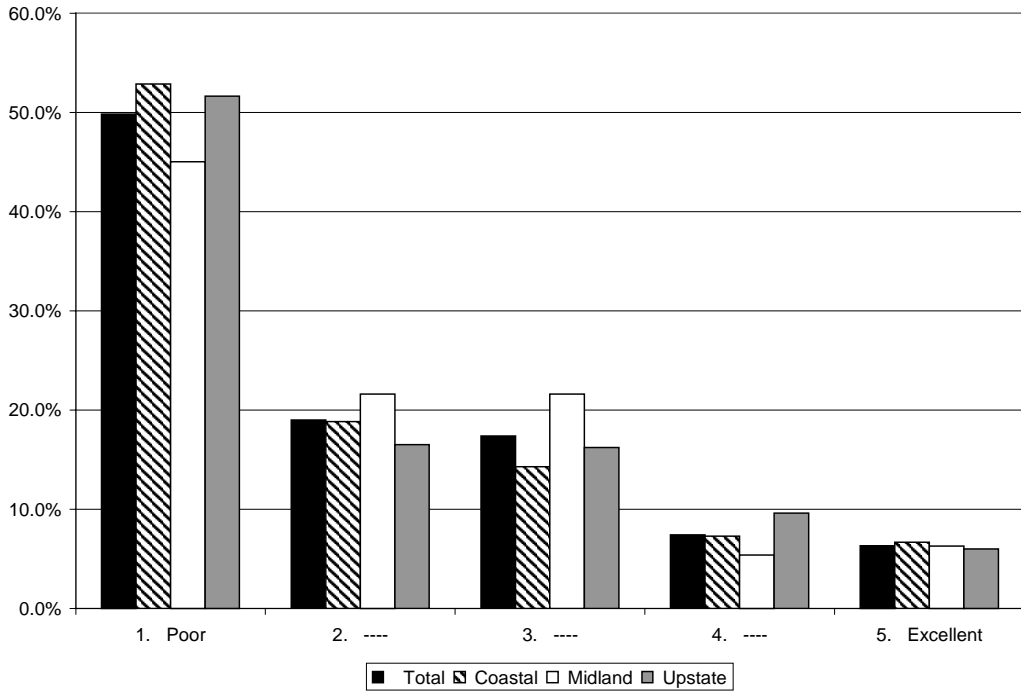


Figure 26: Ratings of Property Taxes to Fund Transportation by County Size

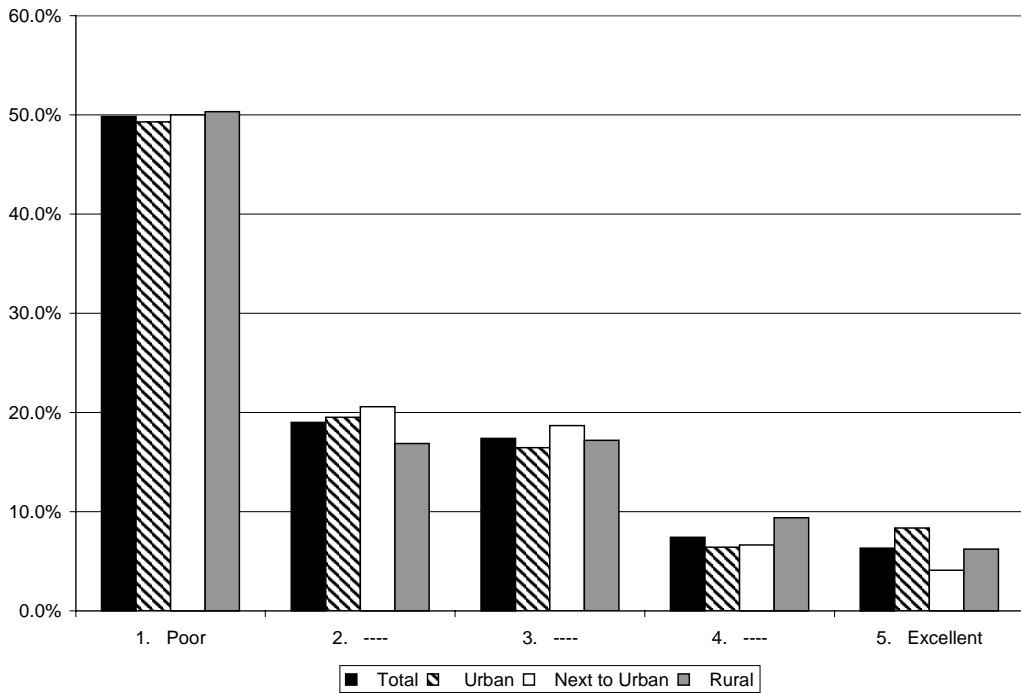


Figure 27: Importance that Funding Come from Fees and Taxes Related to Highway Use by Geographic Region

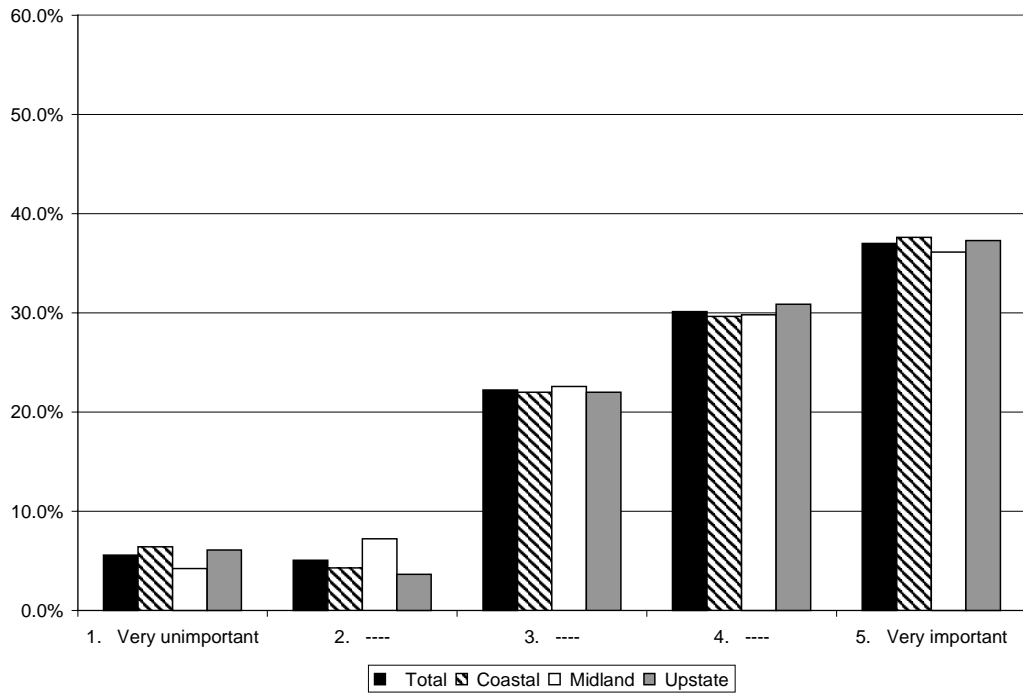
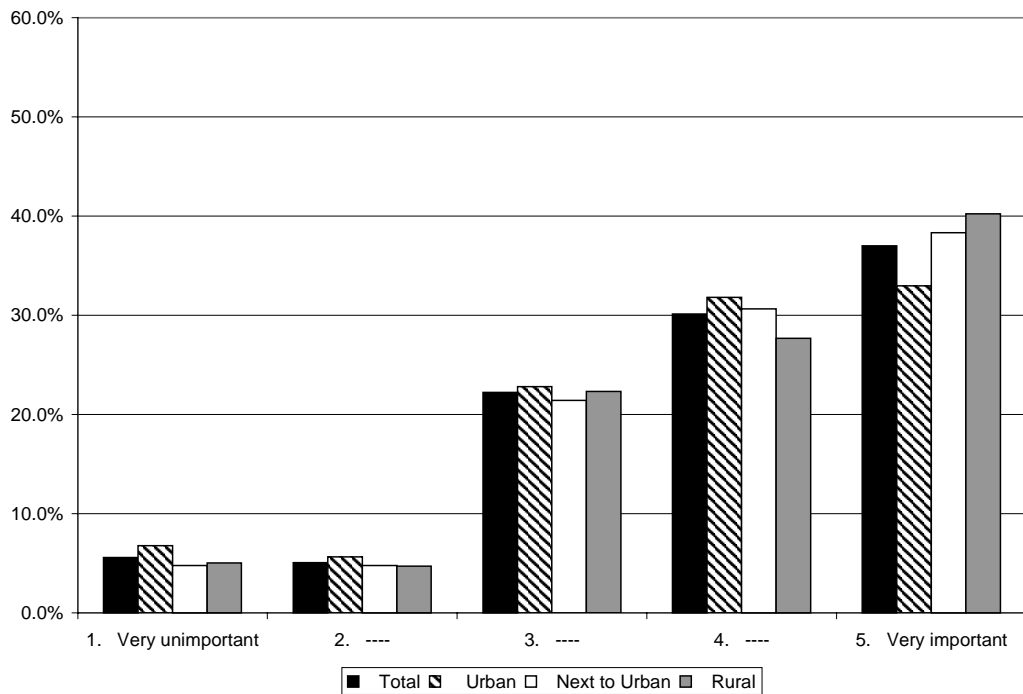


Figure 28: Importance that Funding Come from Fees and Taxes Related to Highway Use by County Size



Increased Funding for Selected Issues

Following on the transportation issues identified earlier, individuals being interviewed were asked their opinions on increased funding for those same issues. All four of the issues had mean responses above the mid-range of '3.0'. The highest mean response was for increased funding for safety at 4.12. Nearly identical mean responses were given for increased funding for highway maintenance and to reduce congestion at 3.89 and 3.85. Slightly low mean responses were given for increased funding to improve highway appearance at 3.26 (Table 7, Table 8).

Safety Improvement

In terms of safety improvement, 74.9 percent of respondents were favorably inclined to provide increased funding for safety improvements, while only 7.9 percent of respondents were unfavorably inclined. Responses from the Midlands (78.6 percent) and Upstate (77.2 percent) were significantly higher than responses from Coastal counties (68.9 percent). These responses are somewhat inconsistent with earlier responses as Midlands residents registered less concern over safety than the other two regions (Figure 29). By county size, Urban residents at 77.2 percent rated funding for safety improvements higher than the other two regions (Figure 30). Mean responses were significantly higher for the Midlands and Upstate (both at 3.18) than for Coastal counties (2.98).

Highway Maintenance

Increased funding for highway maintenance received favorable ratings 66.6 percent of the time, while 8.4 percent of responses did not favor increased funding for maintenance programs. Regional differences were minor ranging from 68.5 percent in the Midlands to 63.3 percent in the Upstate (Figure 31). In terms of county size, willingness to support increased funding was inversely related to county size with Rural residents most likely to support increased funding at a 69.0 percent approval rating (Figure 32). Mean differences were not significant.

Traffic Congestion

To reduce traffic congestion, 66.9 percent of respondents indicated that increased funding should be applied versus 10.7 percent who indicated an unfavorable response to increased funding. Regionally, Coastal residents were significantly more likely to favor increased funding than Midlands residents at 70.6 versus 63.1 percent. Upstate residents split the difference at 67.0 percent. These preferences are consistent with the perception of the problem indicated earlier in (Figure 33). As might be expected, funding preferences are directly related to county size. Urban residents indicated favorable responses 70.5 percent of the time compared to 65.8 percent for Next to Urban residents and

Table 7: Importance of Increased Funding for Highways and Roads by Geographic Region

	Total	Coastal	Midlands	Upstate
For safety improvement to the highway system	4.12	3.98	4.18	4.18
For highway maintenance	3.89	3.82	3.94	3.90
To reduce congestion	3.85	3.93	3.76	3.86
To improve the appearance of state roadways	3.26	3.19	3.32	3.26

Scale: 1= Very Unimportant to 5=Very Important

Table 8: Importance of Increased Funding for Highways and Roads by County Size

	Total	Urban	Next to Urban	Rural
For safety improvement to the highway system	4.12	4.15	4.09	4.11
For highway maintenance	3.89	3.82	3.92	3.93
To reduce congestion	3.85	3.96	3.83	3.75
To improve the appearance of state roadways	3.26	3.15	3.27	3.35

Scale: 1= Very Unimportant to 5=Very Important

63.9 percent for Rural residents (Figure 34). Mean responses for were significantly higher for Urban versus Rural residents.

Highway Appearance

Favorable responses for increased funding for highway appearance were given 41.7 percent of the time compared to 25.8 percent unfavorable responses. The range of responses varied slightly from 43.2 percent in the Midlands to 40.3

Figure 29: Ratings for Increased Funding for Safety Improvements to the Highway System by Geographic Region

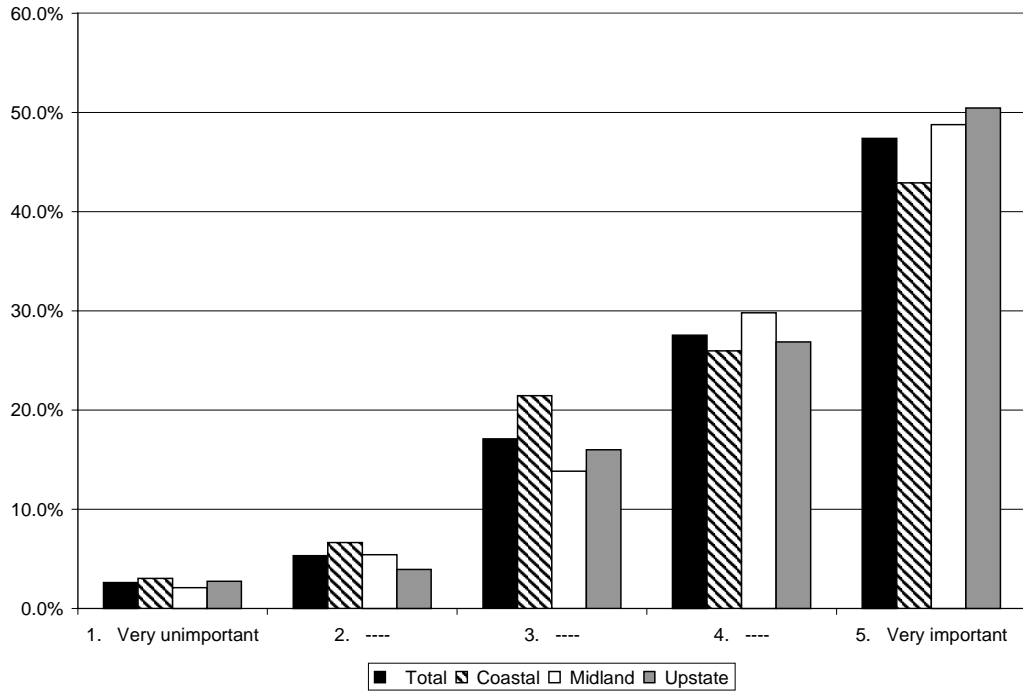


Figure 30: Ratings for Increased Funding for Safety Improvements to the Highway System by County Size

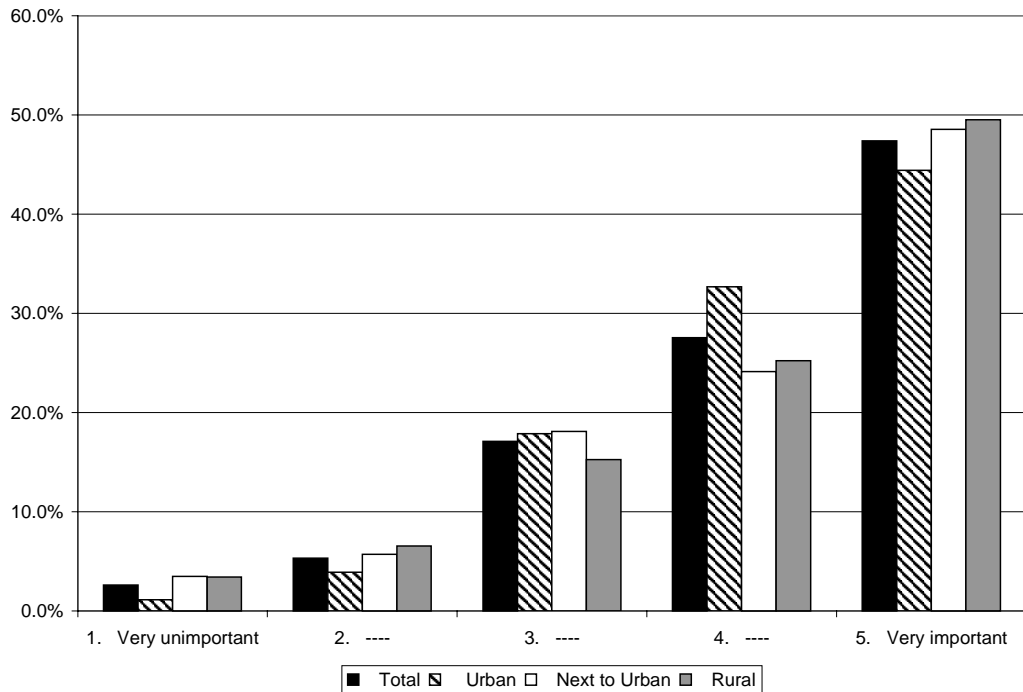


Figure 31: Ratings for Increased Funding for Highway Maintenance by Geographic Region

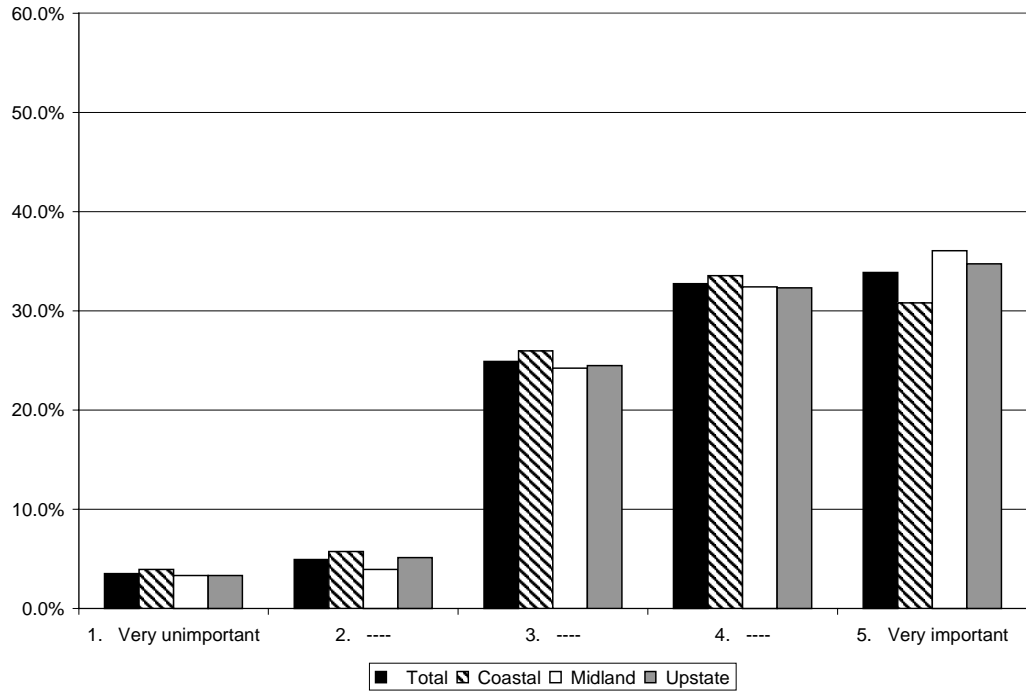


Figure 32: Ratings for Increased Funding for Highway Maintenance by County Size

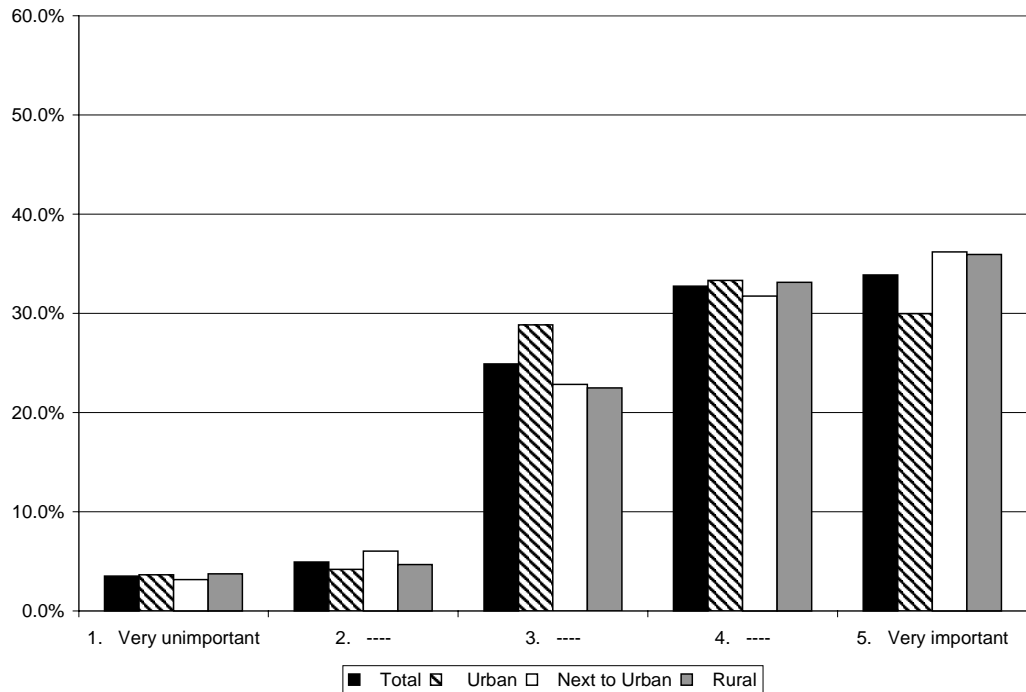


Figure 33: Ratings for Increased Funding to Reduce Congestion by Geographic Region

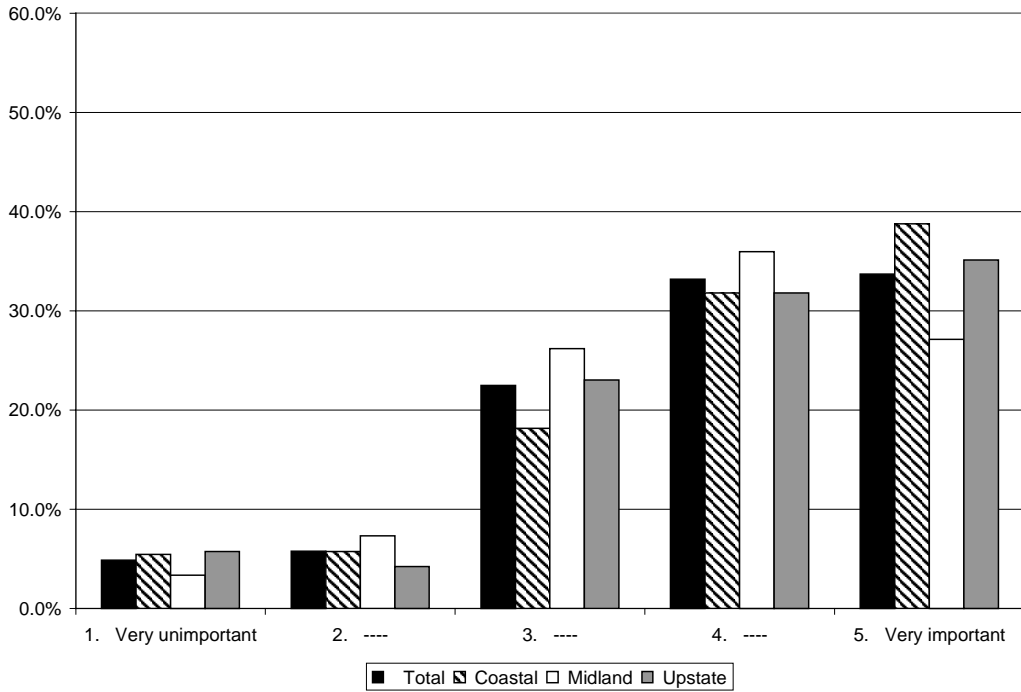
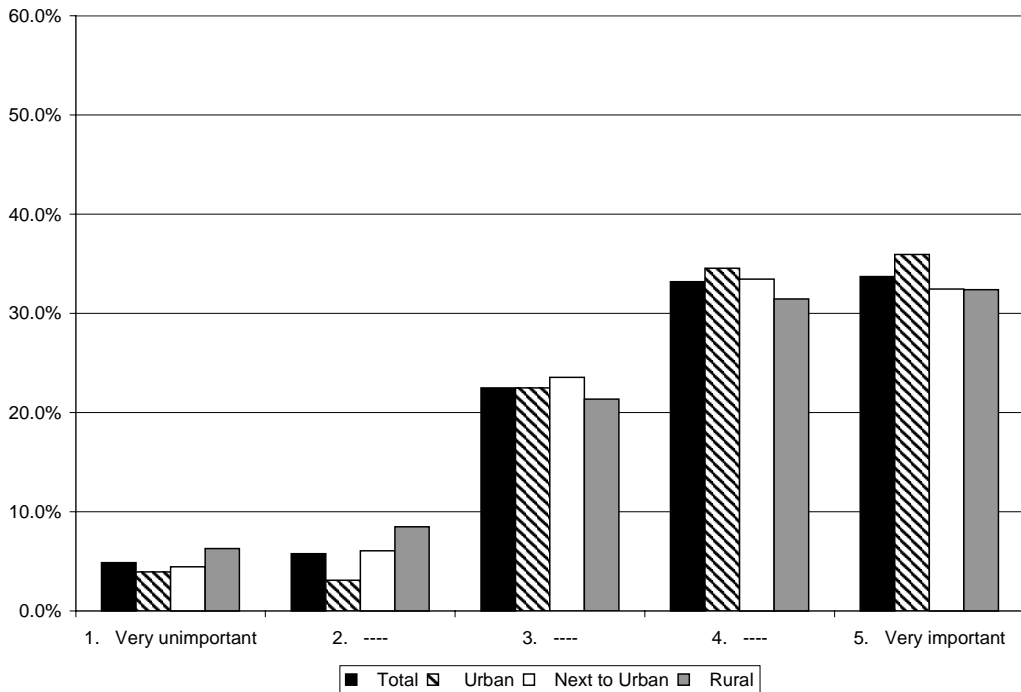


Figure 34: Ratings for Increased Funding to Reduce Congestion by County Size



percent along the Coast (Figure 35). The 46.0 percent favorable response among Rural residents was significantly higher than the 36.8 percent response among Urban residents as were the mean responses (Figure 36). These figures suggest that although highway appearance is not seen as urgent an issue as safety, road maintenance, and traffic congestion it is of concern and that concern is greatest along rural roadsides.

Funding of Other Transportation Programs

Next respondents were asked a series of questions that related to funding for other types of transportation programs. These programs include public transit (metro/inner city buses, commuter rail service, and passenger and high speed inter-city rail service) plus bikeways, pedestrian walkways, and highway beautification. Although somewhat less pressing than the hot-button issues of safety, maintenance and congestion, mean responses for all of these issues exceeded '3' with a range of 3.53 for metro/inner city buses to 3.06 for highway beautification (Table 9, Table 10).

Metro/Inner City Buses

Metro/inner city buses received the most attention of these non-highway transportation programs. Favorable responses were indicated 54.9 percent of the time with 19.1 percent unfavorable responses. Favorable responses were significantly higher in the Upstate (58.6 percent) than in Coastal counties (50.8 percent) with Midlands responses splitting the difference (Figure 37). Responses from Urban residents (57.4 percent) and Rural residents (56.4 percent) were higher than responses from Next to Urban counties (50.4 percent, Figure 38). Mean responses were significantly higher for Upstate versus Coastal regions and for Urban versus Next to Urban counties.

Commuter Rail Service

Commuter rail service received slightly lower ratings than inner city buses with 43.7 percent favorable responses and 30.2 percent unfavorable responses. That difference may be tied in part to the immediacy of the issues and to the relative cost of implementing a commuter rail system. Favorable responses were significantly higher in the Upstate at 49.4 percent compared to either the Coastal (40.2 percent) or Midlands (41.6 percent) regions (Figure 39). Based on county size, favorable responses from Urban residents (48.4 percent) were significantly higher than those from Next to Urban residents (40.8 percent, Figure 40).

Interestingly, Urban responses from Coastal counties, i.e. Charleston, were favorable on 51.8 percent of responses compared to 50.4 percent for Urban Upstate counties (Greenville and Spartanburg) and 44.1 percent for Urban Midlands counties (Richland and Lexington). The difference occurs as Next to

Figure 35: Ratings for Increased Funding to Improve the Appearance of State Roadways by Geographic Region

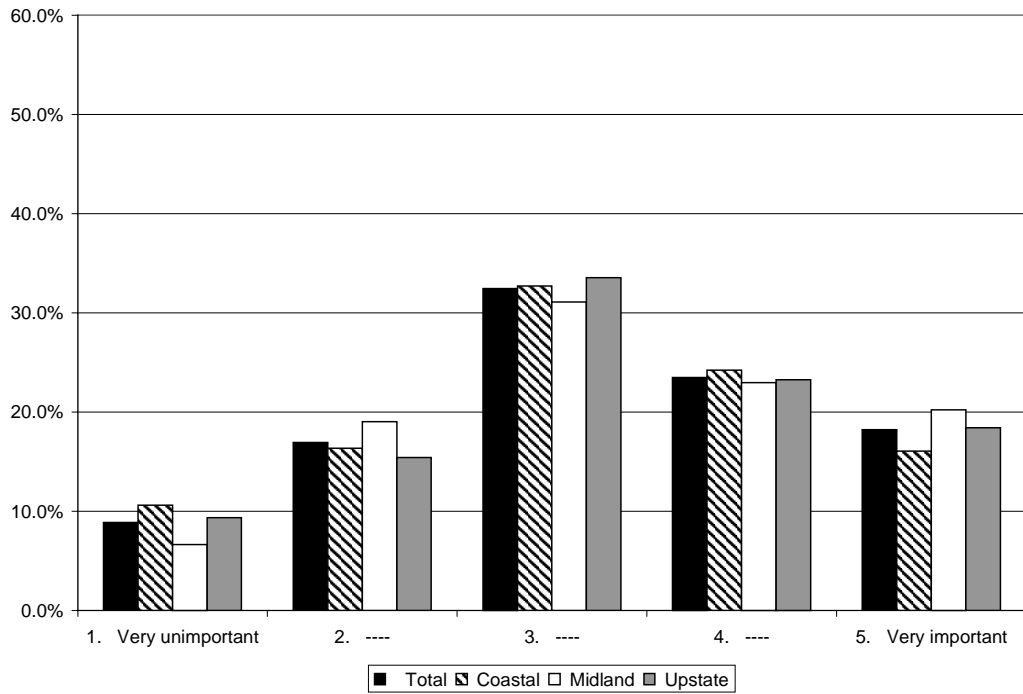


Figure 36: Ratings for Increased Funding to Improve the Appearance of State Roadways by County Size

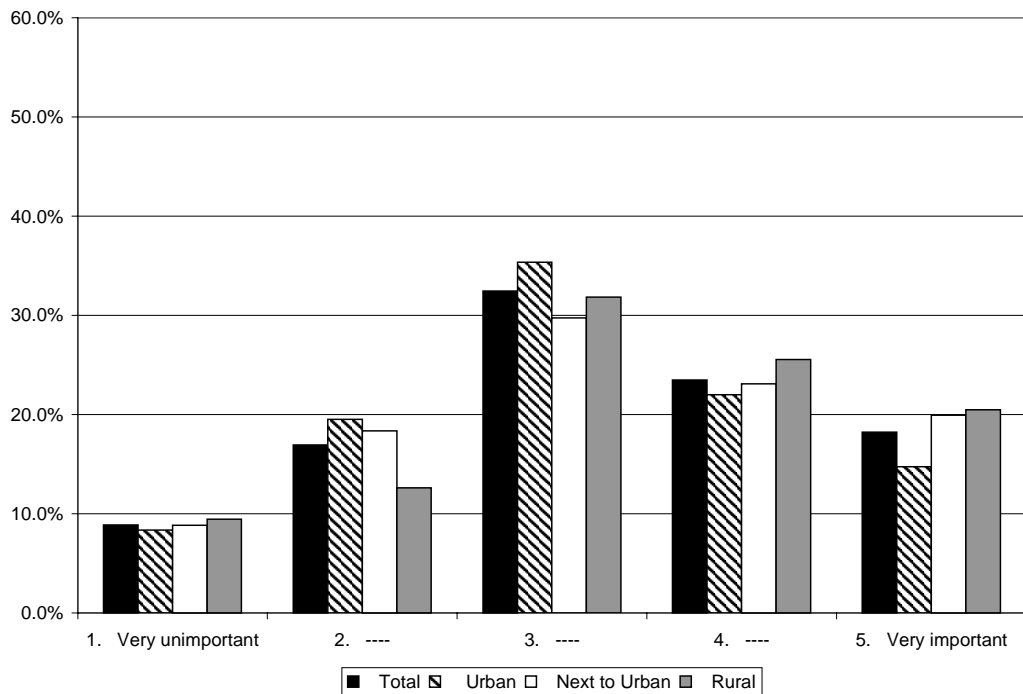


Table 9: Funding of Other Transportation Programs by Geographic Region

	Total	Coastal	Midlands	Upstate
Metro/Inner city buses	3.53	3.43	3.54	3.63
Pedestrian walkways	3.48	3.36	3.50	3.57
Introduce more passenger and high speed rail opportunities	3.41	3.24	3.42	3.56
Commuter rail service	3.21	3.09	3.21	3.34
Bikeways	3.07	3.01	3.09	3.09
Highway beautification	3.06	2.93	3.09	3.15

Scale: 1= Significantly Reduce Funding to 5= Significantly Increase Funding

Table 10: Funding of Other Transportation Programs by County Size

	Total	Urban	Next to Urban	Rural
Metro/Inner city buses	3.53	3.66	3.45	3.47
Pedestrian walkways	3.48	3.50	3.47	3.46
Introduce more passenger and high speed rail opportunities	3.41	3.59	3.29	3.32
Commuter rail service	3.21	3.33	3.08	3.22
Bikeways	3.07	3.10	3.09	3.03
Highway beautification	3.06	2.98	3.06	3.14

Scale: 1= Significantly Reduce Funding to 5=Significantly Increase Funding

Urban and Rural counties in the Upstate continue with high favorable ratings at 50.0 and 47.6 percent. Because the Upstate region is more compact, the perception may be that a multi-county commuter system is more viable in the Upstate than in other regions of the state at this time.

Figure 37: Ratings for Increased Funding for Metro/Inner City Buses by Geographic Region

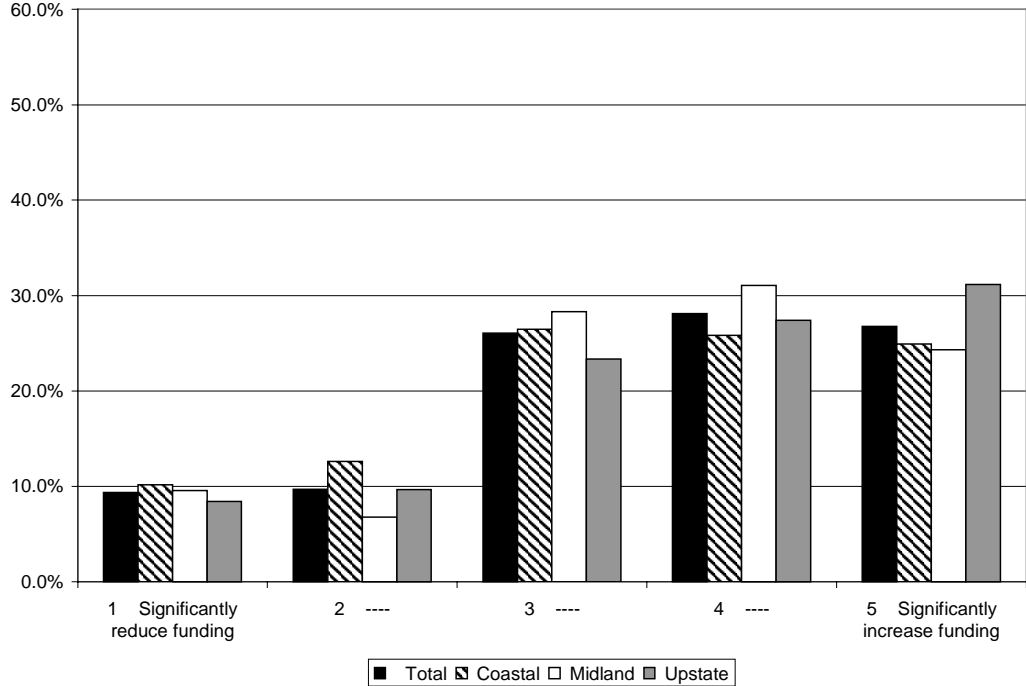


Figure 38: Ratings for Increased Funding for Metro/Inner City Buses by County Size

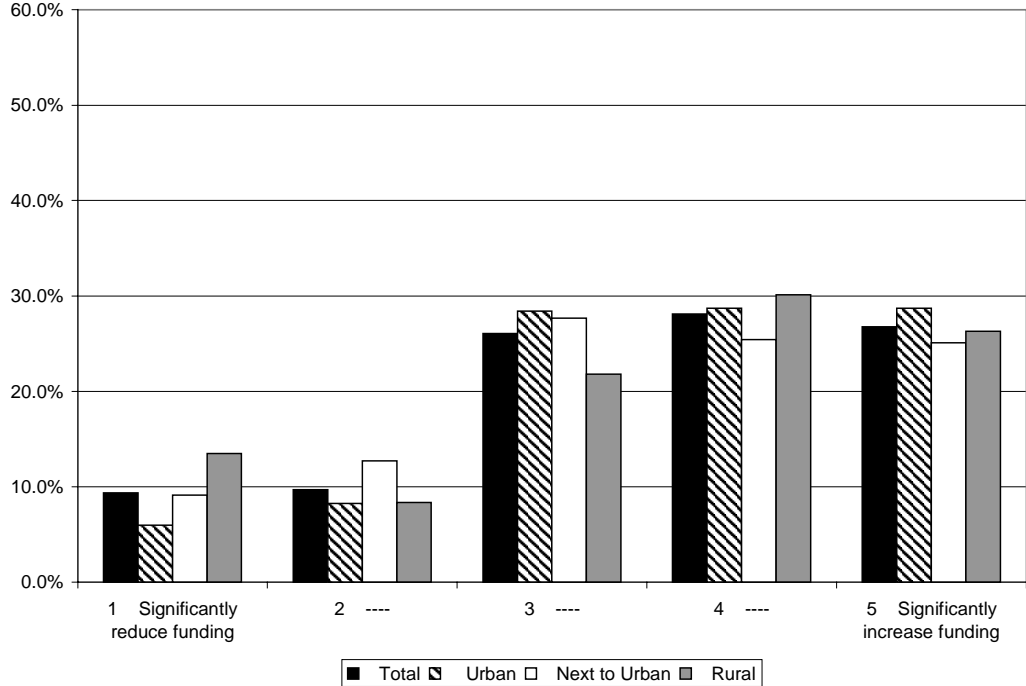


Figure 39: Ratings for Increased Funding for Commuter Rail Service by Geographic Region

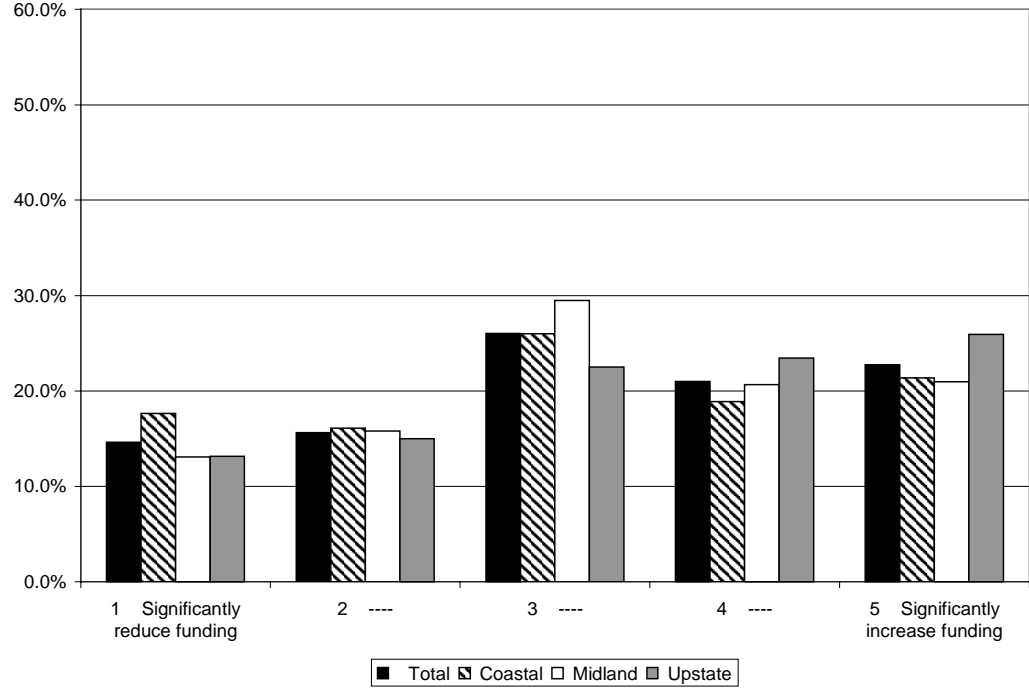
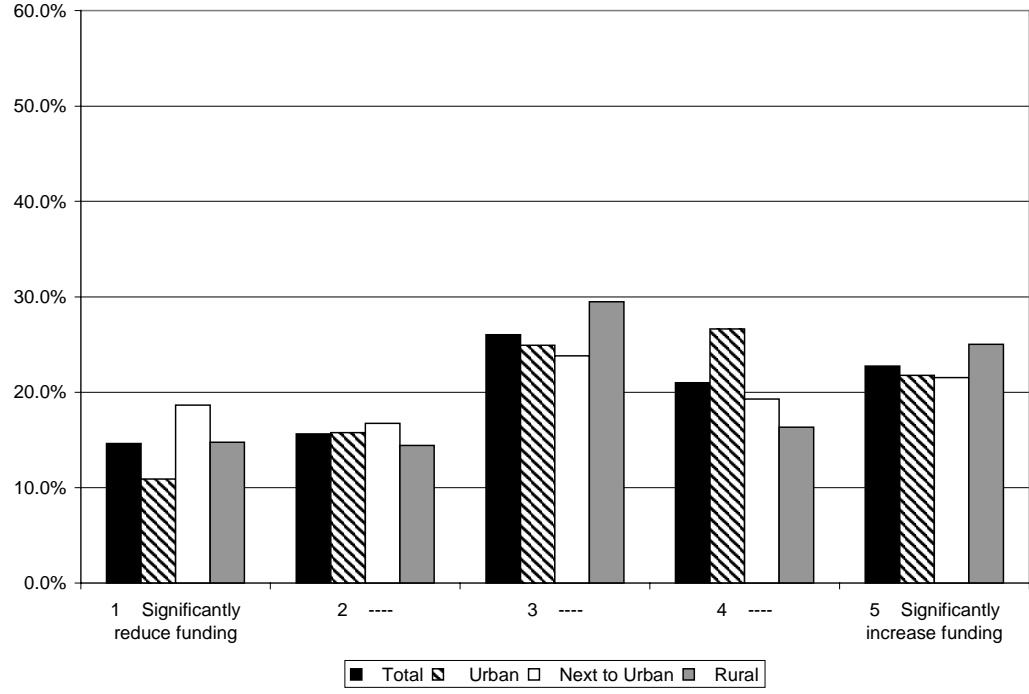


Figure 40: Ratings for Increased Funding for Commuter Rail Service by County Size



High Speed, Inter-City Rail Service

For high speed, inter-city rail service, favorable responses were given 50.9 percent of the time with 24.1 percent unfavorable responses. Favorable responses were significantly higher in the Upstate at 55.5 percent versus the Coast at 44.9 percent, while the Midlands had a 52.3 percent favorable response (Figure 41). Favorable responses in Urban counties at 55.8 percent were significantly higher than responses from Next to Urban counties at 47.4 percent (Figure 42). The highest favorable responses occurred in Urban Upstate and Urban Coastal counties, although the Midlands had the most stable responses across the various sized counties. The proposed Southeast high speed rail corridor has two possible spurs—one through Greenville/Spartanburg and one through Columbia. A connection between Columbia and Charleston has been discussed as well. Local initiatives and press coverage likely have influenced perceptions on this issue.

Bikeways

Increased funding for bikeways generated a 39.5 percent favorable response and a 34.9 percent unfavorable response. Favorable responses ranged from 41.9 percent in the Upstate to 37.4 percent in Coastal counties (Figure 43). Very little difference was registered based on county size. Urban residents gave favorable responses 40.0 percent of the time, but Rural and Next to Urban residents gave favorable responses 39.6 and 38.8 percent of the time, respectively (Figure 44). Surprisingly in the Upstate, residents of Rural counties showed a stronger preference than Urban residents by a 45.0 to 38.0 percent margin.

Pedestrian Walkways

Pedestrian walkways had a 53.0 percent favorable response compared to a 23.4 percent unfavorable response. Positive ratings were more frequent for walkways than for bikeways. That difference may be due in part to the larger segment of the population likely to use walkways as opposed to bikeways. Favorable responses ranged from 54.7 percent in the Midlands to 50.6 percent in Coastal counties (Figure 45) and from 56.0 percent in Urban counties to 50.9 in Next to Urban counties (Figure 46). Positive ratings were highest among Urban residents in the Midlands (59.4 percent). Only in the Upstate did Next to Urban residents (55.1 percent) rate walkways higher than their Urban counterparts.

Highway Beautification

Increased funding for highway beautification was nearly evenly split with 34.0 percent favorable responses and 32.4 percent unfavorable responses. Favorable responses ranged from 36.6 percent in the Upstate to 29.8 percent in Coastal counties (Figure 47). By county size, favorable responses ranged from 36.7 percent in Rural counties compared to 32.9 percent in Next to Urban and 32.5

Figure 41: Ratings for Increased Funding For High Speed Inter-City Rail Service by Geographic Region

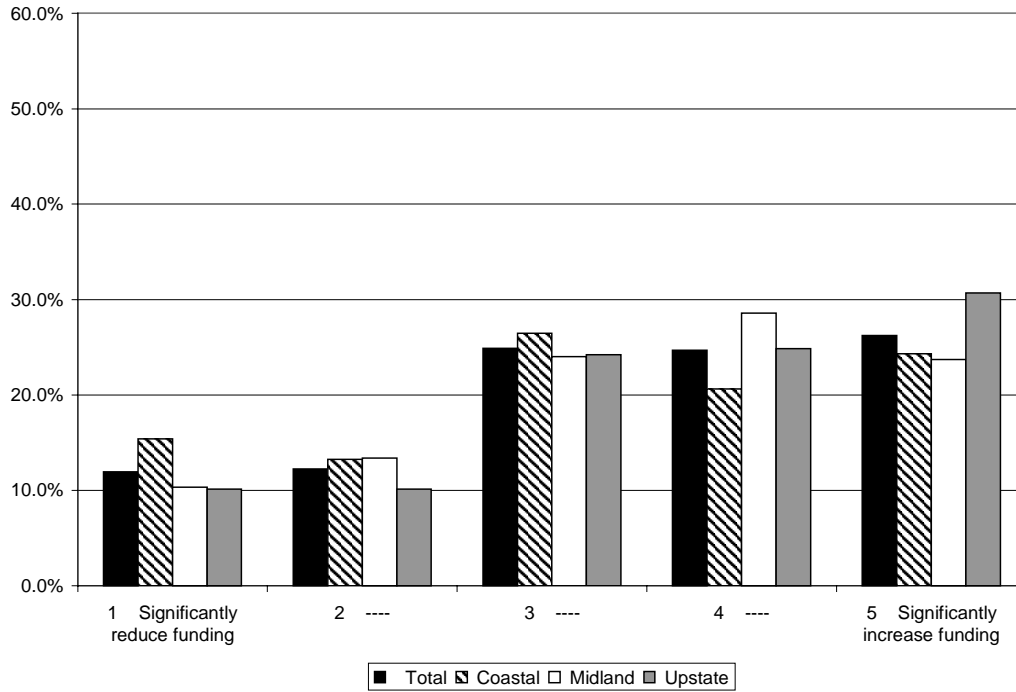


Figure 42: Ratings for Increased Funding for High Speed Inter-City Rail Service by County Size

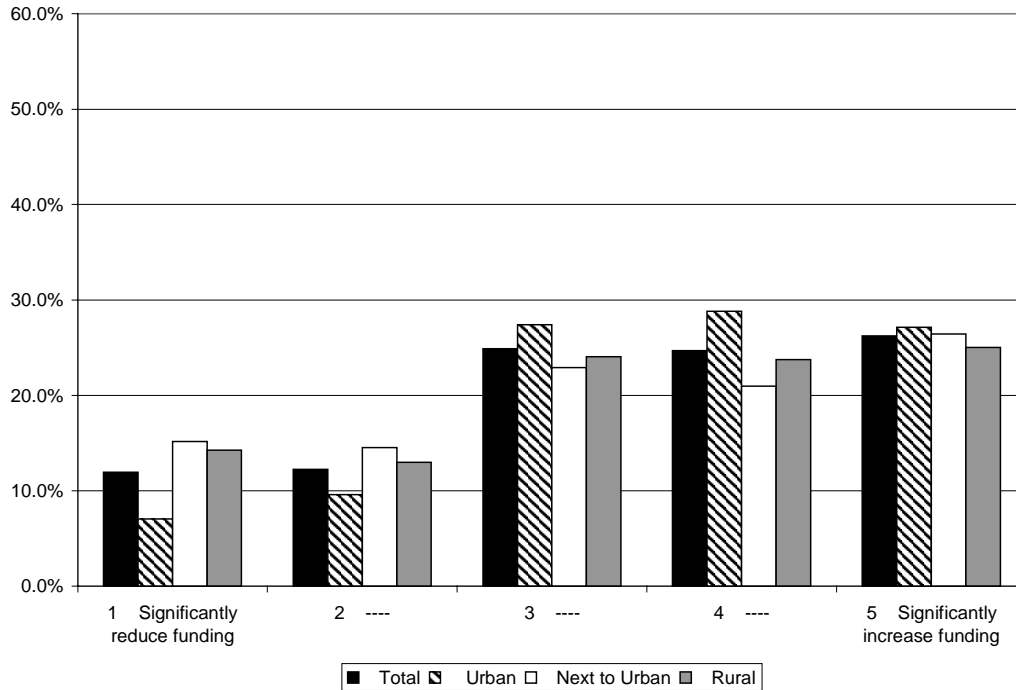


Figure 43: Ratings for Increased Funding for Bikeways by Geographic Region

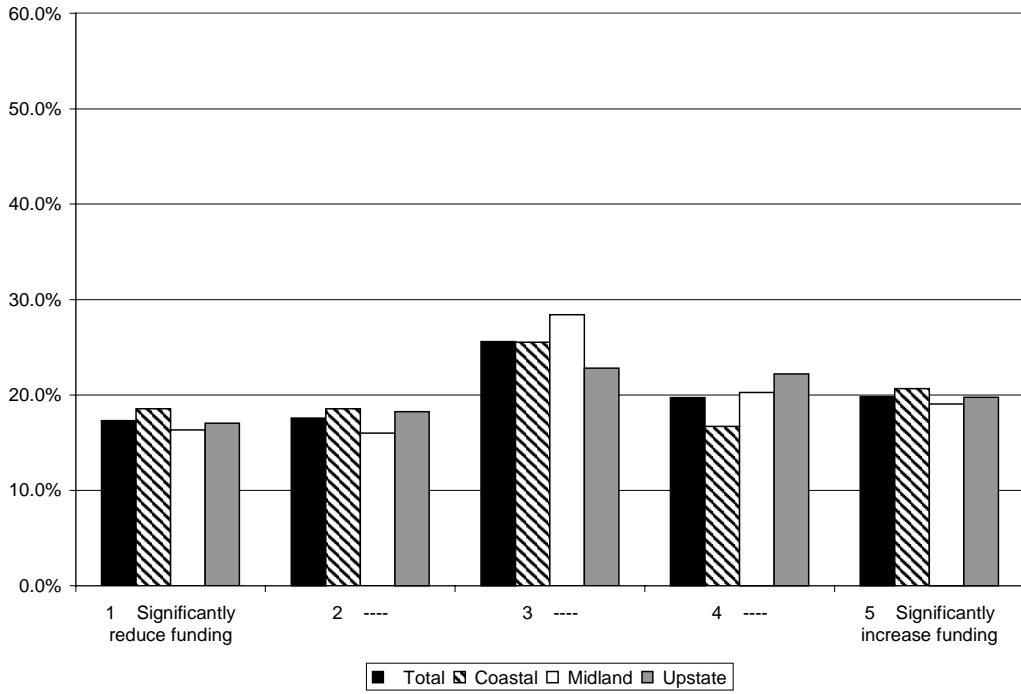


Figure 44: Ratings for Increased Funding for Bikeways by County Size

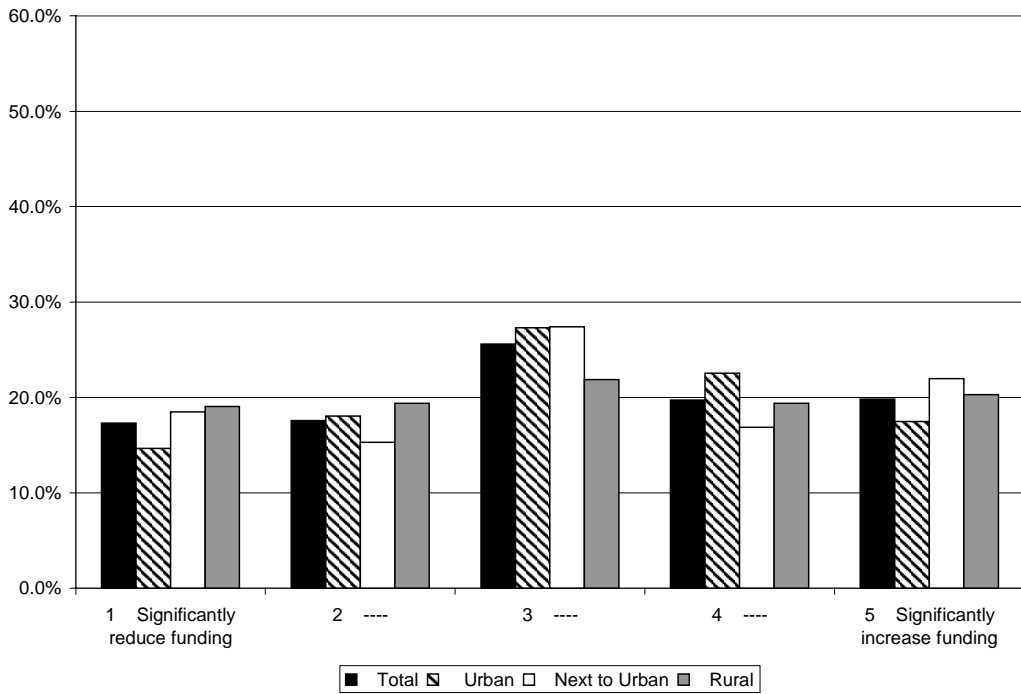


Figure 45: Ratings for Increased Funding for Pedestrian Walkways by Geographic Region

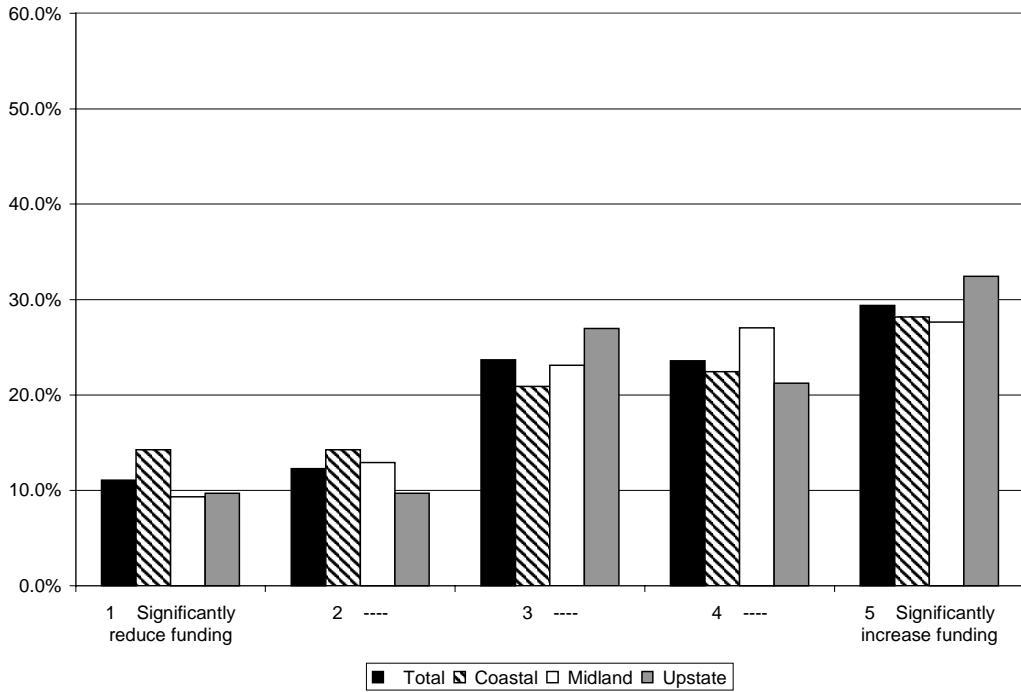


Figure 46: Ratings for Increased Funding for Pedestrian Walkways by County Size

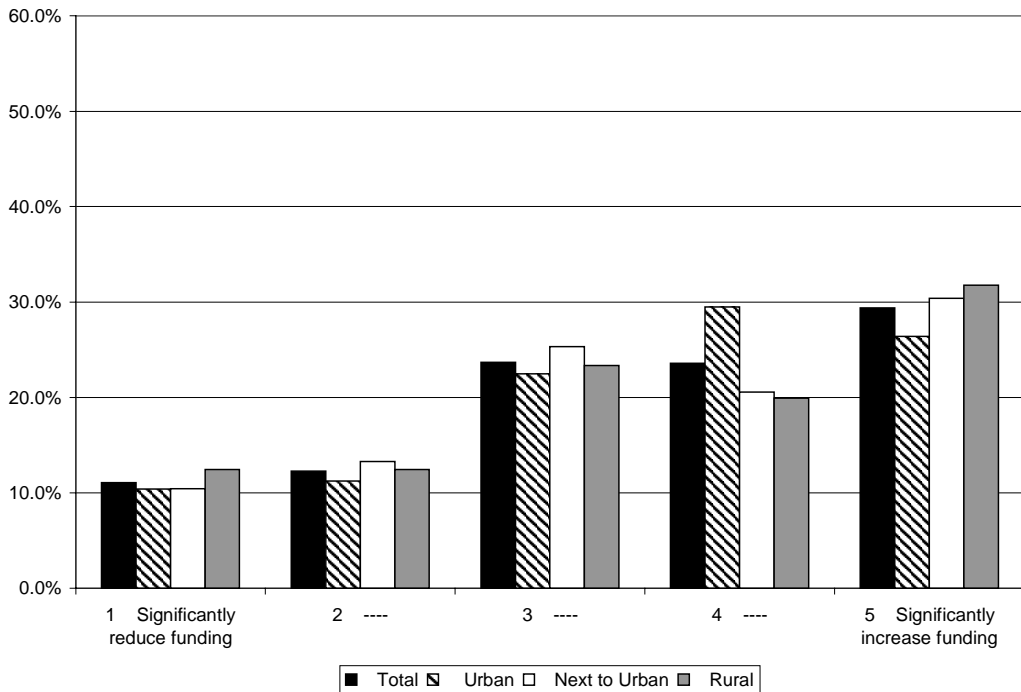


Figure 47: Ratings for Increased Funding for Highway Beautification by Geographic Region

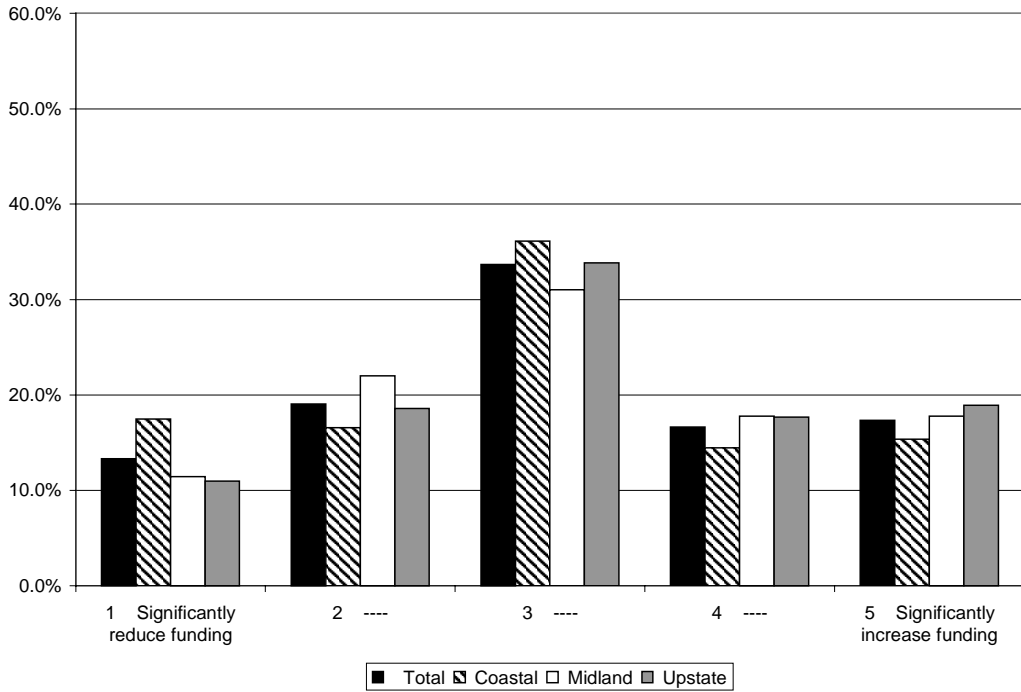
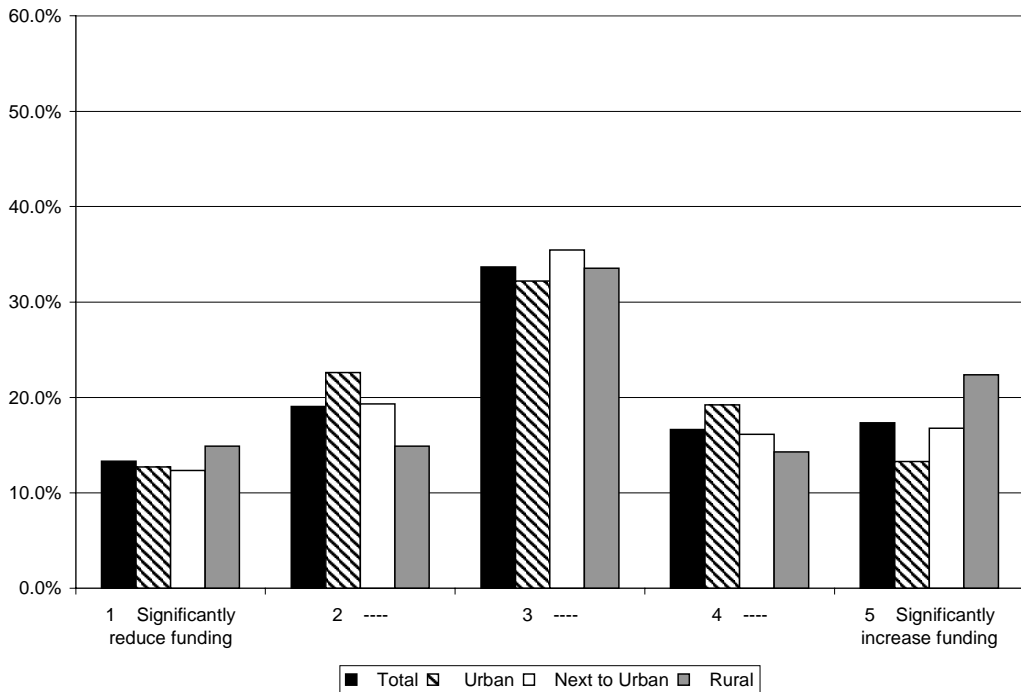


Figure 48: Ratings for Increased Funding for Highway Beautification by County Size



percent in Urban counties (Figure 48). Highway beautification was addressed earlier. The issue is of concern, but funding priorities are mixed.

Willingness to Pay

The average driver in South Carolina pays \$8 per month in state road use taxes given the current tax rate of 16 cents per gallon. Given this tax rate, respondents were asked if drivers should pay \$8 per month, less than \$8 per month, or more than \$8 per month. The results in Table 11 and Table 12 do not appear to offer a great deal of insight as to acceptable funding levels. The majority of responses (56.5 percent) indicated that \$8 per month is an acceptable level. Slightly more respondents indicated that higher taxes were appropriate than those indicating

Table 11: Willingness to Pay Highway Use Taxes by Geographic Region

	Total	Coastal	Midlands	Upstate
Total	100%	100%	100%	100%
Pay less than \$8 per month	19.2%	19.8%	18.3%	19.5
Pay \$8 per month	56.9%	56.5%	59.3%	55.5%
Pay more than \$8 per month	22.1%	22.5%	19.5%	24.3%
DK/NA/Refused	1.8%	1.2%	3.0%	1.2%

Table 12: Willingness to Pay Highway Use Taxes by County Size

	Total	Urban	Next to Urban	Rural
Total	100%	100%	100%	100%
Pay less than \$8 per month	19.2%	15.8%	20.1%	22.0%
Pay \$8 per month	56.9%	54.3%	57.9%	58.9%
Pay more than \$8 per month	22.1%	28.4%	19.4%	17.5%
DK/NA/Refused	1.8%	1.4%	2.6%	1.6%

that lower taxes were appropriate (22.1 versus 19.2), although the differences were not significant.

Demographics

Overview

At the end of the survey, respondents were asked basic demographic information to provide a profile of respondents and to allow for a comparison of responses among sub-groups. Demographic profiles were compared to census information for the state (Appendix B). Because reporting of the 2000 Census of Population has been limited to date, comparisons are made to the 2000 Census where available (total population and racial mix). For other indicators, 1990 census figures or estimates from a private economic forecasting firm were used.¹

On balance, survey respondents are slightly older than the average state resident, with higher percentages of respondents in the 'middle age' categories of 35-49 and 50-64 years but a slightly lower percentage of respondents in the 65 and older age group (Tables B-1 and B-2). A higher percentage of respondents were female than in the state population as a whole—58.7 versus 51.9 percent (Tables B-3 and B-4). In addition, a higher percentage of survey respondents were white (74.4 versus 67.2 percent) than the state population (Tables B-5 and B-6). Survey respondents also appear to be better educated (Tables B-7 and B-8) and in higher income brackets than the average population (Tables B-9 and B-10).

Preferences by Educational Attainment

In comparing between demographic groups, educational attainment appears to be significant in affecting attitudes about transportation and transportation finance (Table 13). With fuel taxes an unpopular option among all demographic sub-groups there is a strong positive correlation between the level of acceptance and level of education. Mean ratings range from 1.94 for those individuals with some high school education to 2.65 for individuals with post-college education.

The percentage of favorable responses for individuals with post-college education are nearly twice that for respondents with a high school education (Figures 49 and 50).

¹ Woods & Poole Economics, Inc. Washington, D.C. Copyright 2000. Woods & Poole does not guarantee the accuracy of this data. The use of this data and the conclusion drawn from it are solely the responsibility of the authors.

Table 13: Ratings of Transportation Funding Options by Level of Educational Attainment

	Education					
	Total	Some HS	HS Grad.	Some Coll.	Coll. Grad.	Post Coll.
Highway impact fees where new development pays for needed road improvements	3.53	3.44	3.44	3.61	3.52	3.59
General funds from the state budget	3.51	3.63	3.48	3.53	3.59	3.31
A state loan pool targeted for transportation	3.17	3.48	3.24	3.15	3.13	3.01
Tolls on high volume, limited access roads and major bridge projects	2.98	2.92	3.03	2.93	2.98	3.02
Sales taxes on new car purchases	2.59	2.37	2.55	2.67	2.61	2.60
State Income taxes	2.34	2.31	2.49	2.20	2.32	2.38
Gasoline/fuel taxes	2.25	1.94	2.11	2.12	2.36	2.65
Property taxes on automobiles	2.02	2.25	2.04	1.95	1.98	2.02

Figure 49: Ratings of Gasoline/Fuel Taxes as a Funding Option by Level of Educational Attainment

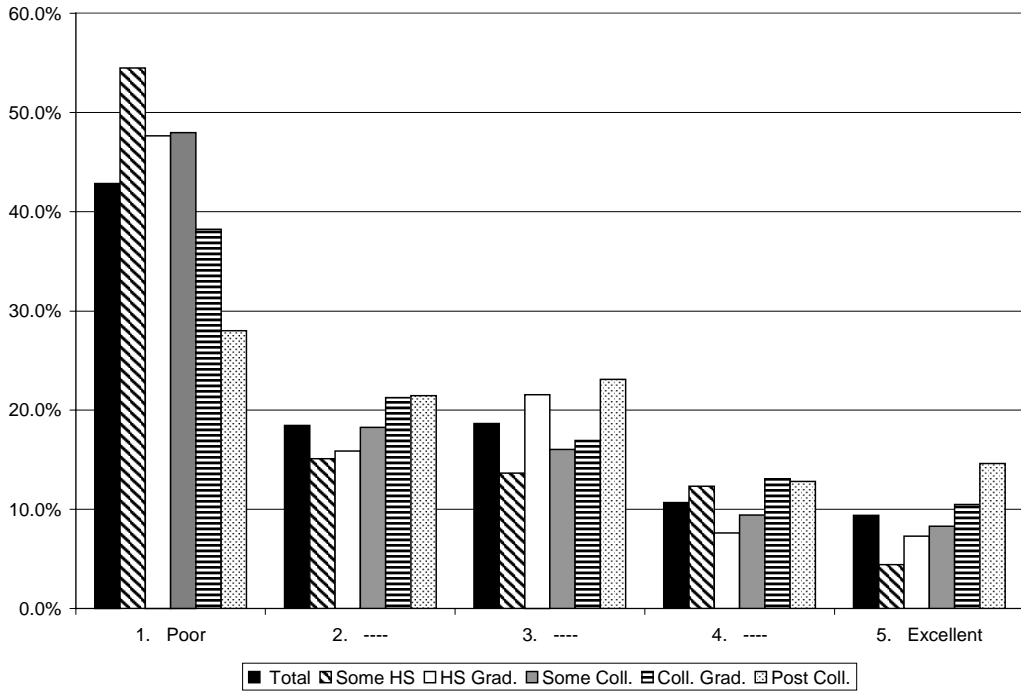
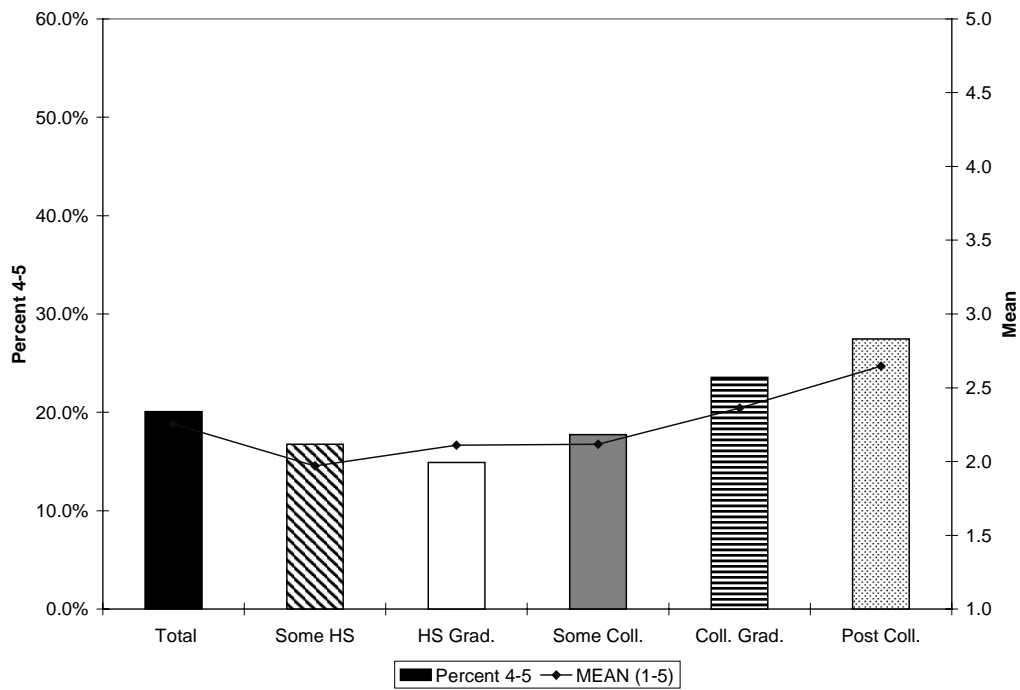


Figure 50: Mean and Percentage of Favorable Ratings for Gasoline/Fuel Taxes as a Funding Option by Level of Educational Attainment



On the other hand, the preference for the use of less direct or buffered expenditures including general funds (Figures 51 and 52) and a state loan pool. (Figures 53 and 54) is inversely related to level of education.

Similar but slightly weaker associations occur by income category (Table 14). That association is expected given the correlation between income and education. For similar reasons, whites are slightly more willing to accept user fees than non-whites.

Figure 51: Ratings of General Fund Expenditures as a Funding Option by Level of Educational Attainment

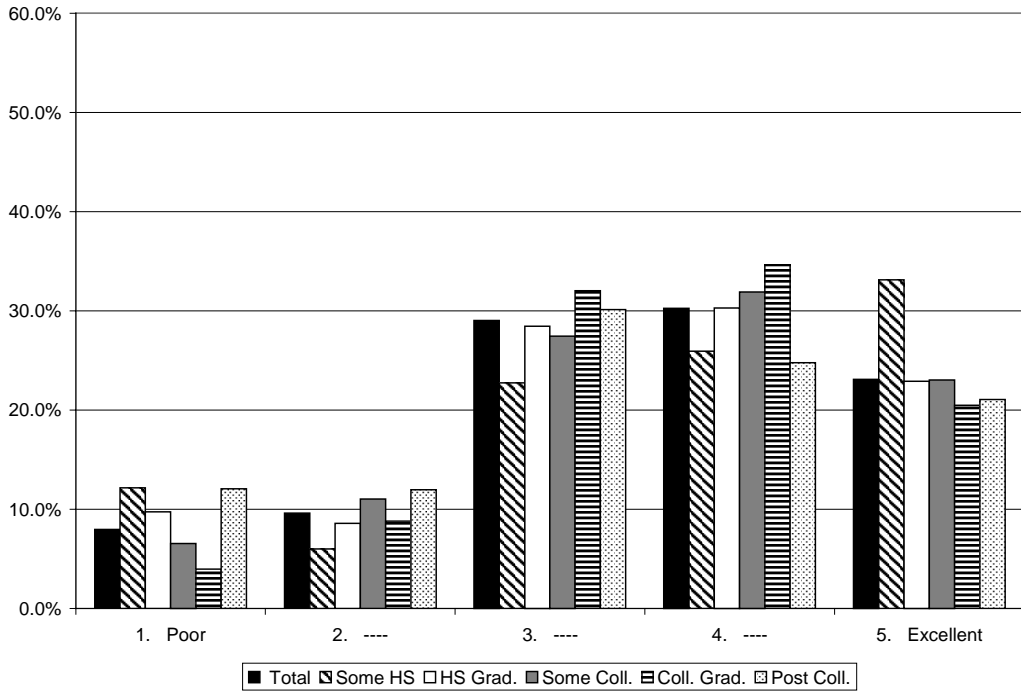


Figure 52: Mean and Percentage of Favorable Ratings for General Fund Expenditures as a Funding Option by Level of Educational Attainment

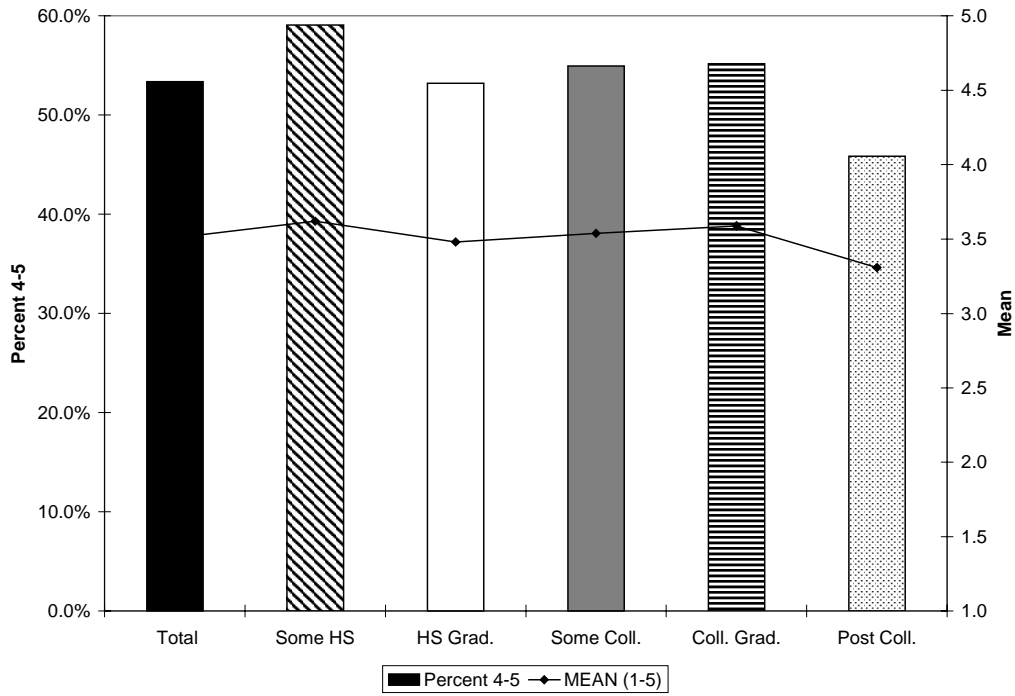


Figure 53: Ratings of State Loan Pool as a Funding Option by Level of Educational Attainment

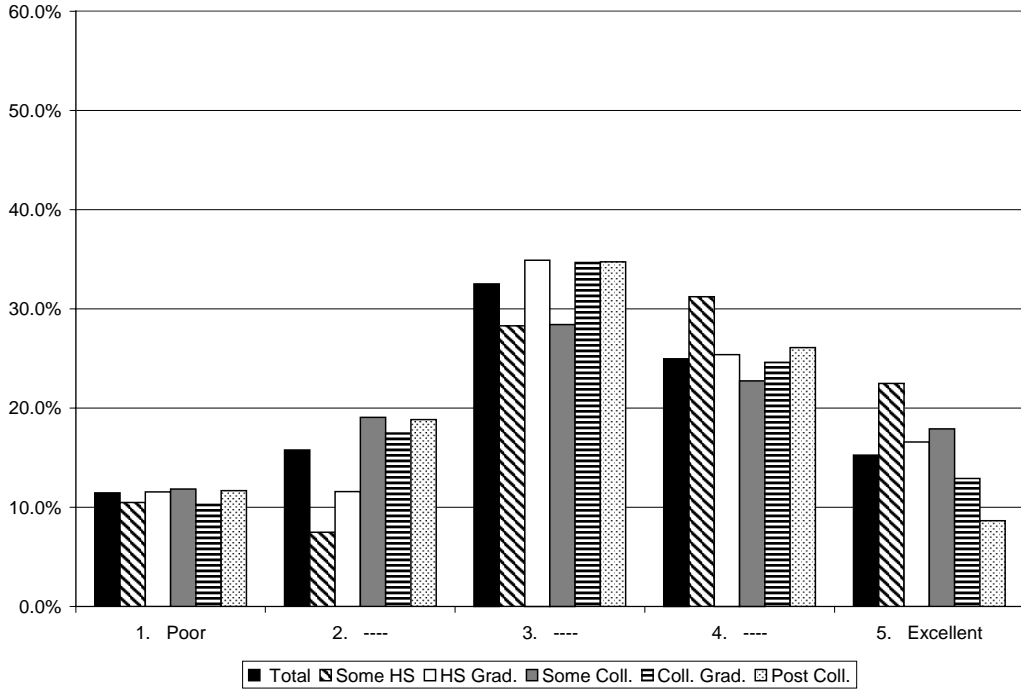


Figure 54: Mean and Percentage of Favorable Ratings for State Loan Pool as a Funding Option by Level of Educational Attainment

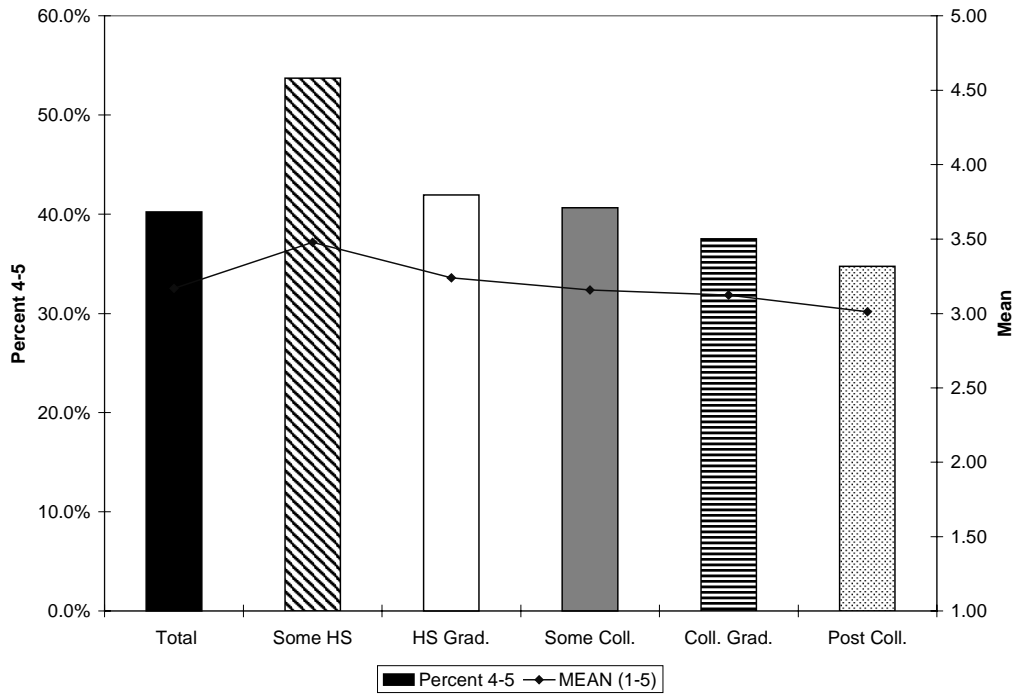


Table 14: Ratings of Transportation Funding Options by Level of Income

	Income					
	Total	Under \$ 15k	\$15k- \$25k	\$25- \$50k	\$50k- \$100k	Over \$100k.
Highway impact fees where new development pays for needed road improvements	3.53	3.47	3.38	3.55	3.58	3.61
General funds from the state budget	3.51	3.48	3.75	3.49	3.44	3.47
A state loan pool targeted for transportation	3.17	3.21	3.35	3.19	3.09	3.08
Tolls on high volume, limited access roads and major bridge projects	2.98	2.90	3.10	2.89	3.07	2.98
Sales taxes on new car purchases	2.59	2.59	2.54	2.58	2.65	2.61
State Income taxes	2.35	2.31	2.56	2.52	2.12	2.08
Gasoline/fuel taxes	2.25	1.99	2.16	2.19	2.47	2.31
Property taxes on automobiles	2.01	2.34	2.07	2.01	1.92	1.89

Chapter Four

Summary and Conclusions

Survey respondents' overall rating of roads and highways in South Carolina is slightly below average at 2.9 on a five-point scale. Ratings are lower still for particular issues including road maintenance (2.73) and congestion/traffic flow (2.77). Safety issues were rated slightly higher at 2.93. Open-ended responses indicated substantial frustration with potholes, construction delays, congestion, and safety concerns.

When asked if increased funding was warranted for these individual issue areas, survey respondents strongly supported increased funding for safety (4.12), highway maintenance (3.89), and reducing congestion (3.85). Congestion concerns, in particular, were related to county size as might be expected. Increased funding for roadway appearance had a weaker but still positive rating (3.26). Transit options and pedestrian walkways were also given ratings between 3.53 and 3.21.

The critical issue is how do we pay for these transportation improvements? When asked which funding options were acceptable, the most acceptable options were fees and state government expenditures one step removed from the taxpayer. The least favorable options were taxes. Fuel and property taxes were rated particularly low with unfavorable ratings of 61.2 and 68.8 percent, respectively. These results are consistent with the aversion to taxes that appears to be universal among the American public. Yet, when asked if fees and taxes should be tied to highway use, 67.1 percent of respondents gave a favorable response.

These findings shed light on the public perception of transportation needs and at least to some degree on funding options. It is clear that the demand for transportation infrastructure to meet basic concerns of safety, maintenance, and congestion exists now and is likely to increase due to both growth pressures and higher expectations on the part of the public at large. Yet, at the same time, the public is strongly averse to taxes and to a lesser extent to fees to pay for transportation improvements. This disconnect between needs and funding base is likely to become more serious still as revenues are projected to increase far more gradually than expenditure requirements. It is important that the state begin now to reassess transportation funding alternatives. The next two reports in this series will attempt to provide background information for that assessment.

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Appendices

Appendix A

**Survey of Highway Funding Options
January 2001
(1000 completes)**

Introduction

Hello, this is _____ from David Sparks and Associates. We are conducting a survey on behalf of the Strom Thurmond Institute at Clemson University and are interested in your thoughts about highway conditions and transportation priorities in South Carolina. All of your answers are completely confidential.

May I speak to someone in your house who is 18 years or older? (When the correct person is on the phone repeat introduction)

A. Your opinions will help South Carolina make important decisions about highway safety, maintenance, and funding. Do you have about 5 minutes to answer some questions?

1. Yes
2. No (Schedule a callback time)
3. DK/NA/Ref. (If applicable, schedule a callback time)

1) On a 5 point scale where 5 is excellent and 1 is poor, how would you rate the overall condition of South Carolina roads and highways today.

1. Poor
- 2.
- 3.
- 4.
5. Excellent
6. DK/NA/Ref.

2) On the same 5 point scale where 5 is excellent and 1 is poor, please rate the condition of South Carolina roads and highways on each of the following. (Rotate attributes)

- (a) Safety
- (b) Congestion/Traffic flow
- (c) Road maintenance
- (d) Appearance

1. Poor
- 2.
- 3.
- 4.
5. Excellent
6. DK/NA/Ref.

2e) What significant problems have you recently observed or experienced with roads and highways in the state? Any others?

1. Maintenance
2. Safety
3. Aggressive Driving
4. Trash
5. Congestion
6. Speeding
7. Trucks
8. Construction
9. Other
10. Favorable
11. DK/NA/Ref.

3) How many miles do you personally drive in a year? (Interviewer note: If respondent says I don't really know say, "just an estimate will be fine.")

Capture actual miles driven in a year, 999999 = DK/NA/Ref.

A Rutgers University study estimates that it will take nearly 30 billion dollars to fund South Carolina transportation needs over the next 20 years. Transportation needs are things like road and bridge construction, highway maintenance, and road signs. Highway expenses are currently rising much faster than highway revenues and that gap is widening. In order to meet future transportation needs the money must come from somewhere.

4) I am going to read 8 options that could be used as a source of funds to generate money for South Carolina's transportation needs. On a 5 point scale where 5 is an Excellent idea and 1 is a Poor idea, please tell me what you think of each of the following funding options.

(rotate a-c) (rotate d-h)

1. Poor
- 2.
- 3.
- 4.
5. Excellent
6. DK/NA/Ref.

- (a) Gasoline/fuel taxes
- (b) Property taxes on automobiles
- (c) Sales taxes on new car purchases
- (d) General funds from the State budget
- (e) Tolls on high volume, limited access roads and major bridge projects
- (f) Highway impact fees where new development pays for needed road improvements

(g) A state loan pool targeted for transportation needs

(h) State income taxes

[Note deleted old d & e (too much detail) and combined old g & h]

Interviewer notes - Explanation of question 4:

D. Paid for out of the state general budget – funds are not tied to highway use

F. Impact fees are charged to new development to support roads. Water and sewer etc. New development bears the cost of new services

G. Where the state sets aside funds to be loaned for high priority projects

5) On a 5 point scale where 5 is very important and 1 is very unimportant please tell me how important it is to you that funding for highways comes from fees and taxes related to the use of the highways.

5a-d) On the same 5 point scale where 5 is very important and 1 is very unimportant, please rate the following on the level of importance for the state of South Carolina to consider for highways and transportation?

a) Increase funding for safety improvement to the highway system

b) Increase funding to reduce congestion

c) Increase funding for highway maintenance

d) Increase funding to improve the appearance of state roadways.

1. Very unimportant

2.

3.

4.

5. Very important

6. DK/NA/Ref.

6) The state's long term transportation plan is addressing other transportation issues that relate to mass transit including buses and rail service. Also included are enhancement programs like bicycle and walking paths and highway beautification. On a 5 point scale where 5 is to significantly increase funding and 1 is significantly reduce funding, how should South Carolina proceed in meeting each of these transportation options? (rotate)

1 Significantly reduce Funding

2

3

4

5 Significantly Increase Funding

6 DK/NA/Ref.

(a) Metro/Inner city buses

(b) Commuter rail service (In city service)

- (c) Introduce more passenger and high speed rail opportunities (between city service)
- (d) Bikeways
- (e) Pedestrian walkways
- (f) Highway beautification

7) Sometimes people feel alarmed when they hear the word taxes, yet some combination of taxes and fees is necessary to meet transportation needs in South Carolina. The average South Carolina driver contributes about \$8 per month based on state gasoline taxes toward the State Highway Fund. Do you feel that drivers should (Read responses)

- 1. Continue to pay \$8 per month (Skip to Q.8)
- 2. Pay less than \$8 per month
- 3. Pay more than \$8 per month
- 4. DK/NA/Ref.

Interviewer note: 16 cents per gallon state gasoline tax

If more or less ask:

**7a) What amount should the average driver pay per year?
Capture actual amount, 999999 = DK/NA/Ref.**

Demographics:

These next few questions are for classification purposes only.

8) Do you have a current South Carolina driver's license?

- 1. Yes
- 2. No
- 3. DK/NA/Ref

9) Please stop me when I reach your level of education

- 1. Some high school
- 2. High school graduate
- 3. Some College
- 4. College graduate
- 5. Post College
- 6. DK/NA/Ref.

10) Would you please stop me when I reach the category that contains your age

- 1. 18-24
- 2. 25-34
- 3. 35-49

4. 50-64
5. 65 or older
6. DK/NA/Ref.

11) What would you say is your main racial or ethnic heritage? (Do not read responses)

1. White
2. Black
3. Hispanic
4. Asian
5. Other
6. DK/NA/Ref.

12) Is your household income over or under \$25,000?

- Under - is it over or under \$15,000
- Over – is it over or under \$50,000
- Over – is it over or under \$100,000

Those are all of the questions I have for you. Thank you for your time, your opinions are important.

Gender: 1=Male 2=Female

Appendix B

Table B-1: Age by Geographic Region

	State Total 2000^a	Survey Total	Coastal	Midland	Upstate
Total	100%	100%	100%	100%	100%
18-24	9.7 ^b %	8.3%	9.6%	7.5%	7.8%
25-34	19.3%	16.7%	14.1%	21.0%	15.0%
35-49	32.2%	33.9%	37.5%	28.7%	35.4%
50-64	21.6%	26.1%	25.2%	25.1%	27.9%
65 or older	17.1%	14.0%	12.6%	16.5%	12.9%
DK/NA/Refused	--	1.0%	0.9%	1.2%	0.9%

^aEstimated data. Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright 2000.

^bStatistic reported for age group 20 to 24.

Table B-2: Age by County Size

	State Total 2000^a	Survey Total	Urban	Next to Urban	Rural
Total	100%	100%	100%	100%	100%
18-24	9.7 ^b %	8.3%	7.8%	8.8%	8.3%
25-34	19.3%	16.7%	20.2%	15.4%	14.2%
35-49	32.2%	33.9%	32.5%	31.0%	38.1%
50-64	21.6%	26.1%	23.6%	28.4%	26.5%
65 or older	17.1%	14.0%	15.0%	14.5%	12.5%
DK/NA/Refused	--	1.0%	0.8%	1.9%	0.3%

^aEstimated data. Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright 2000.

^bStatistic reported for age group 20 to 24.

Table B-3: Gender by Geographic Region

	State Total 2000^a	Survey Total	Coastal	Midland	Upstate
Total	100%	100%	100%	100%	100%
Male	48.1%	41.3%	40.8%	43.7%	39.3%
Female	51.9%	58.7%	59.2%	56.3%	60.7%

^aEstimated data. Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright.

Table B-4: Gender by County Size

	*State Total 2000^a	Survey Total	Urban	Next to Urban	Rural
Total	100%	100%	100%	100%	100%
Male	48.1%	41.3%	43.5%	37.5%	42.8%
Female	51.9%	58.7%	56.5%	62.5%	57.2%

^aEstimated data. Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright.

Table B-5: Race by Geographic Region

	State Total 2000 ^a	Survey Total	Coastal	Midland	Upstate
Total	100%	100%	100%	100%	100%
White	67.2%	74.4%	72.4%	72.8%	78.1%
Black	29.5%	18.8%	20.7%	18.6%	17.1%
Hispanic	2.4% ^b	1.0%	1.2%	1.2%	0.6%
Asian	0.9%	0.4%	0.6%	0.3%	0.3%
Other	1.3%	3.5%	3.9%	3.9%	2.7%
Two or more races	1.0% ^c	--	--	--	--
DK/NA/Refused	--	1.9%	1.2%	3.3%	1.2%

^aEstimated data. Source: *U.S Census Bureau, <http://factfinder.census.gov/>

^bOf any race ^cNew category in Census 2000.

Table B-6: Race by County Size

	State Total 2000 ^a	Survey Total	Coastal	Midland	Upstate
Total	100%	100%	100%	100%	100%
White	67.2%	74.4%	77.6%	78.6%	66.5%
Black	29.5% ^b	18.8%	15.3%	12.3%	29.2%
Hispanic	2.4%	1.0%	1.4%	1.3%	0.3%
Asian	0.9%	0.4%	0.6%	0.6%	--
Other	1.3%	3.5%	2.8%	4.4%	3.4%
*Two or more races	1.0% ^c	--	--	--	--
DK/NA/Refused	--	1.9%	2.3%	2.8%	0.6%

^aEstimated data. Source: *U.S Census Bureau, <http://factfinder.census.gov/>

^b Of any race ^cNew category in Census 2000.

Table B-7: Level of Education by Geographic Region

	State Total 1990^a	Survey Total	Coastal	Midland	Upstate
Total	100%	100%	100%	100%	100%
Some high school	18.1%	6.8%	6.9%	5.7%	7.8%
High school graduate	29.5%	24.8%	22.5%	27.8%	24.0%
Some college	15.8%	27.7%	31.2%	26.6%	25.2%
College graduate	17.5%	23.1%	22.5%	22.8%	24.0%
Post college	5.4%	16.6%	16.2%	15.3%	18.3%
DK/NA/Refused	--	1.0%	0.6%	1.8%	0.6%

^aS.C. Statistical Abstract 1999. Table: Educational Attainment for Persons 25 years and over by County, 1990.

Table B-8: Level of Education by County Size

	State Total 1990^a	Survey Total	Urban	Next to Urban	Rural
Total	100%	100%	100%	100%	100%
Some high school	18.1%	6.8%	3.3%	7.2%	10.2%
High school graduate	29.5%	24.8%	20.3%	22.0%	32.6%
Some college	15.8%	27.7%	27.3%	30.2%	25.7%
College graduate	17.5%	23.1%	24.5%	24.8%	19.8%
Post college	5.4%	16.6%	23.1%	14.5%	11.4%
DK/NA/Refused	--	1.0%	1.4%	1.3%	0.3%

^aS.C. Statistical Abstract 1999. Table: Educational Attainment for Persons 25 years and over by County, 1990.

Table B-9: Level of Income by Geographic Region

	State Total 2000 ^a	Survey Total	Coastal	Midland	Upstate
Total	100%	100%	100%	100%	100%
Under \$15,000	14.1% ^b	9.3%	11.4%	8.4%	8.1%
\$15,000 to less than \$25,000	30.5% ^c	12.8%	11.4%	14.1%	12.9%
\$25,000 to less than \$50,000	31.7% ^d	31.7%	33.9%	32.0%	29.1%
\$50,000 to less than \$100,000	20.6%	38.0%	35.4%	36.5%	42.0%
\$100,000 and over	3.6%	26.9%	26.7%	24.9%	29.1%
DK/NA/Refused	--	9.2%	8.1%	9.9%	9.6%

^aEstimated data (in 1990 \$). Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright.

^bStatistic reported for income less than \$10,000. ^cStatistic reported for income \$10,000 to \$29,999.

^dStatistic reported for income \$30,000 to \$49,999.

Table B-10: Level of Income by County Size

	State Total 2000^a	Survey Total	Urban	Next to Urban	Rural
Total	100%	100%	100%	100%	100%
Under \$15,000	14.1% ^b	9.3%	7.3%	9.7%	11.1%
\$15,000 to less than \$25,000	30.5% ^c	12.8%	13.9%	9.4%	14.9%
\$25,000 to less than \$50,000	31.7% ^d	31.7%	30.6%	27.1%	37.5%
\$50,000 to less than \$100,000	20.6%	38.0%	41.2%	41.4%	30.9%
\$100,000 and over	3.6%	26.9%	27.8%	28.6%	24.1%
DK/NA/Refused	--	9.2%	7.5%	14.5%	5.9%

^aEstimated data (in 1990 \$). Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright.

^bStatistic reported for income less than \$10,000. ^cStatistic reported for income \$10,000 to \$29,999.

^dStatistic reported for income \$30,000 to \$49,999.

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