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TRANSPORTATION TELEPHONE SURVEY HAMPTON ROADS, VIRGINIA

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AUTHOR:

Michael S. Kimbrel

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Hampton Roads Planning District Commission 723 Woodlake Drive Chesapeake, Virginia 23320 (757) 420-8300 http://www.hrpdc.org

ABSTRACT

As an element of the Hampton Roads Public Involvement Procedure, the Hampton Roads Planning District Commission contracted with Northwest Research Group of Boise, Idaho, to conduct a Random Sample Telephone Survey of the residents of Hampton Roads. The survey was designed to poll the public on a number of transportation-related issues and provide results with a confidence level of 95 percent and a margin of error of plus or minus 4 percent. A total of 613 completed surveys were collected between May 12, 2005 and May 25, 2005.

ACKNOWLEDGMENTS

This report was prepared by the Hampton Roads Planning District Commission (HRPDC) in cooperation with the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), and the Virginia Department of Transportation (VDOT). The contents of this report reflect the views of the staff of the Hampton Roads Area Metropolitan Planning Organization (MPO). The MPO staff is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA, VDOT, or HRPDC. This report does not constitute a standard, specification, or regulation. FHWA or VDOT acceptance of this report as evidence of fulfillment of the objectives of this planning study does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.



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EXECUTIVE SUMMARY

The Hampton Roads Transportation Random Sample Telephone Survey was done as part of the Hampton Roads Public Involvement Procedure (PIP). The survey was the first attempt by the Hampton Roads Planning District Commission to obtain statistically valid data from a PIP activity. The sample size for the survey was 613 Hampton Roads residents, 18 years of age and older, and provided for a confidence level of 95 percent and a margin of error of ± 4 percent. Data for the survey was collected from May 12, 2005 to May 25, 2005.

The following is a summary of the findings of the survey:

• Transportation Mode Choice

- ▶ 97% of respondents used a Personal Vehicle at least 1 day per week
- ➤ 88% of respondents used a Personal Vehicle 5 or more days per week
- > 90% of respondents said they never Carpooled
- ➤ 96% of respondents said they never used Public Transportation

Getting Around in Hampton Roads

- ▶ 64% of respondents were Somewhat to Very Satisfied with their ability to make work or school trips
- ▶ 65% of respondents were Somewhat to Very Satisfied with their ability to make trips other than for work or school
- ➤ The Top Five problems with the transportation system in Hampton Roads were reported to be:
 - 1. Delays Caused by Congestion
 - 2. Lack of Highway Capacity
 - 3. Aggressive Drivers
 - 4. Poor Planning of Highway System
 - 5. Too Little Funding for Highways
- Causes of transportation problems experienced by respondents
 - Heavy Traffic 3.6 days/weekRoad Work 2.3 days/weekAccidents 1.9 days/week

Traffic Signals 1.6 days/week



Improving the Transportation System

- > Top Suggestions for Improving the Transportation System
 - Do more road construction at night
 - Improve/expand existing public transportation services
 - Expand existing highways
 - Offer new public transportation services
 - Improve the quality of traffic information
- Top Suggestions for Controlling Congestion (Excluding road building)
 - Increase the availability of public transportation services
 - Provide employee incentives to carpool
 - Encourage telecommuting options
 - Increase the availability of HOV lanes
- In terms of support for future highway building programs
 - 49% felt positive, 31% negative, 18% ambivalent
- ➤ In terms of support for future public transportation programs
 - 56% felt positive, 22 % negative, 23% ambivalent

Paying for Transportation System Improvements

➤ None of the options for funding transportation improvements received favorable marks from the respondents. On a 0 – 10 Scale (10 being Best), the mean average scores for the various options presented were:

•	Vehicle Registration Fees	4.63
•	Local Options Tax	3.96
•	Sales Tax	3.70
•	Toll Roads	3.48
•	Fuel Tax	3.48
•	Income Tax	3.40
•	Tolls & Fuel Tax	3.20
•	Mileage Use Fee	2.53

Public Involvement/Information

> For Construction Updates, the public relies on

TV News 33%
 Newspaper 27%
 Radio 23%

For Traffic Congestion Updates, the public relies on

Radio 64%TV News 38%Roadway Message Signs 10%



For Road Advisories, the public relies on

Radio 52%TV News 35%Roadway Message Signs 23%

For Transportation Project Updates or Plans, the public relies on

Newspaper 40%
 TV News 37%
 Radio 14%

- ➤ 57% of respondents felt positive about the importance of being involved in the transportation planning process, but 94% said they had never been involved.
- ➤ 59% of respondents did not feel that there were ample opportunities to get involved in the transportation planning process.
- > 57% of respondents did not believe that their concerns about transportation projects would be heard and acted upon.



INTRODUCTION

BACKGROUND

In its continuing effort to improve public involvement in the transportation planning process in Hampton Roads, the Hampton Roads Planning District Commission (HRPDC) contracted with Northwest Research Group (NWRG) of Boise, Idaho, to conduct a Random Sample Telephone Survey. The survey was done as an element of the Hampton Roads Public Involvement Procedure (PIP) and was designed to provide the first statistically-valid results of any PIP activity conducted by the HRPDC. The survey polled Hampton Roads residents on transportation-related issues and was designed to have a confidence level of 95 percent and a margin of error of plus or minus 4 percent.

PRODUCING THE QUESTIONNAIRE

The staffs of the HRPDC and NWRG worked together to produce the initial questionnaire. HRPDC staff was interested in gathering information from the public on a number of transportation-related topics, including transportation mode choice, satisfaction with the transportation system, ways to improve the transportation system, how to pay for transportation system improvements, and public involvement in the transportation planning process.

NWRG pre-tested the initial questionnaire using 20 random interviews. After the pre-test, the questionnaire was revised to reduce the average time required to complete the survey to between 10 and 15 minutes.

SAMPLING

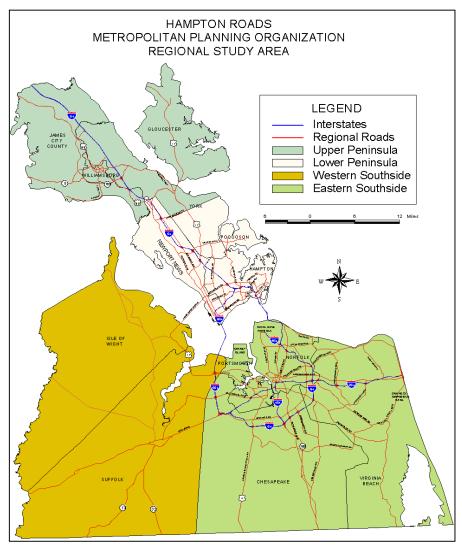
The standard sample size calculation for a random sample survey with a 95 percent confidence level and a plus or minus 4 percent margin of error calls for a sample size of 600. The actual population size is generally unimportant when calculating the sample size, unless the population is a relatively small and known group of people, such as the members of a particular club or association.

It is important that the sample for a survey such as this one be as truly random as possible. The HRPDC had only three requirements for the sample – that the respondents be at least 18 years of age, that they be residents of Hampton Roads, and that the sample include representation from all parts of Hampton Roads. NWRG purchased a random sample of home telephone numbers based on these criteria.



For sampling purposes, the region was divided into four sub-regions. Disproportionate sampling was used to ensure minimum sample sizes within each sub-region.

Upper The Peninsula consisted of James City County, Williamsburg, the lower portion of Gloucester County. and the portion of York County north of 105. Route The Peninsula Lower consisted of Hampton, Poquoson, Newport News, and the portion of York County south of Route 105. Western Southside consisted of Isle of Wight County and Suffolk. Eastern Southside consisted Virginia Beach, Norfolk, Portsmouth and Chesapeake. Approximately 200 interviews were conducted in each of the higher population density areas - the Lower Peninsula and



the Eastern Southside. Approximately 100 interviews were conducted in each of the lower population density areas - the Upper Peninsula and the Western Southside. The sample data were weighted based on the 2000 Census to more accurately reflect the population of Hampton Roads. A final weighting scheme was applied in order to neutralize any error that might be caused by over or under sampling in terms of gender and age groups.

The survey was primarily conducted between 4 PM and 9 PM EDT on weekdays and between noon and 8 PM EDT on weekends. A limited number of caller shifts was scheduled earlier in the day on weekdays in an attempt to capture individuals with different work schedules. A total of 613 completed interviews were collected between May 12, 2005 and May 25, 2005.



STUDY ORGANIZATION

This study has been organized into four sections:

Section 1, Respondent Characteristics, describes the mix of citizens that participated in the survey.

Section 2, Current Transportation System, includes information on the transportation mode choices made by survey respondents, the level of satisfaction with the current transportation system, and what caused people the most trouble with regard to getting around in Hampton Roads.

Section 3, Improving the Transportation System, summarizes what survey participants think should be done to improve the transportation system in Hampton Roads and how improvements should be funded.

Section 4, Public Involvement, includes information from the portion of the survey that was designed to gather data to help the HRPDC improve and enhance its public involvement efforts.

A **Technical Appendix**, containing all of the tabulated data from the survey, is available on compact disc.



RESPONDENT CHARACTERISTICS

As stated previously, completed surveys were collected from 613 users of the Hampton Roads transportation system. A transportation system user was defined as a randomly selected member of a Hampton Roads household, 18 years of age or older, who had recent experience using the region's transportation system. For the purposes of this survey, the transportation system included the region's network of roadways and public transportation services.

POST SURVEY WEIGHTING

Once the survey had been completed and all of the results tabulated, several stages of weighting were applied to the data to adjust for the probability of selection and to ensure that the data more adequately represented the population of Hampton Roads as a whole.

Probability of Selection

Probability sampling assumes that each household has a known and non-zero probability of selection. However, in telephone surveys these days, not all households have an equal probability of selection, since homes with multiple phone lines or more residents have a greater probability of selection than single person households or homes with only one phone. Therefore, the first stage of weighting was applied to account for such differences in the probability of selection.

Post-Stratification Weighting

As noted previously, disproportionate sampling was used to ensure minimum sample sizes within each of the sub-regions of Hampton Roads. In order to allow the sample to more closely represent the region's population, post-stratification weights were developed using data from the 2000 Census and applied to the data. A similar weighting scheme was used to adjust for any over or under sampling in terms of sex or age group.



SURVEY RESPONDENT STATS

The characteristics of the survey respondents, after weighting, are as follows:

- Sex
- Male: 49 %Female: 51 %
- Employment Status

Employed (Full or Part-Time): 71 %
Not Employed: 15 %
Retired (Not Working): 14 %

Commuter Status

Commuter: 70 %Non-Commuter: 30 %

Age Groups

18 - 34 Years: 29.2 %
 35 - 49 Years: 28.9 %
 50 - 64 Years: 29.1 %
 65 + Years: 12.8 %



CURRENT TRANSPORTATION SYSTEM

Survey participants were asked about their use of the transportation system and how satisfied they were with being able to get around in Hampton Roads. In addition, they were asked about the types of problems they encountered while traveling throughout the region. The information from those portions of the survey is summarized below.

MODE CHOICE

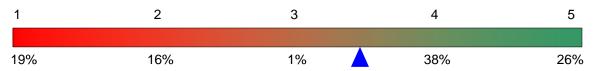
In terms of transportation mode preference, personal vehicle use ranked first by a wide margin. The stats regarding mode choice are summarized below.

- Personal Vehicle Use
 - At least one day per week: 97 %
 - > 5 or more days per week: 88 %
 - Carpool/Vanpool Use
 - Never carpool or vanpool: 90 %
 - ➤ The 18 34 age group had the largest proportion of carpool users (20%), although of that 20%, 9% only carpooled one day per week.
 - Public Transportation Use
 - ➤ Never use public transportation: 96 %
 - ➤ The 50 64 age group had the largest proportion of public transportation users
 - As a group, females used public transportation more than males (approximately 3 to 1).

CUSTOMER SATISFACTION

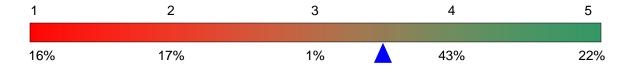
Respondents were asked to rate their level of satisfaction with the transportation system for making work, school, and other types of trips. The rating scale ranged from **1 – Very Dissatisfied** to **5 – Very Satisfied**. The results are shown below.

- Satisfaction with work or school trips
 - ▶ 64% were Somewhat to Very Satisfied
 - The Mean Average response was 3.37





- Satisfaction with trips other than to work or school
 - ▶ 65% were Somewhat to Very Satisfied
 - ➤ The Mean Average response was 3.40



PROBLEMS ENCOUNTERED USING THE TRANSPORTATION SYSTEM

Respondents were asked to rate how much of a problem each of the following items was with regard to their regular trips around Hampton Roads. The rating scale ranged from **0** – **Not a Problem** to **10** – **Very Serious Problem**. During the interviews, the list of items was presented randomly, however, they are shown below in order from worst problem to least problem based on the mean average response.

Delays Caused by Congestion	7.24
 Lack of Highway Capacity 	6.82
Aggressive Drivers	6.56
 Poor Planning of Highway System 	6.19
 Too Little Funding for Highways 	6.15
 Too Much Growth & Development 	6.05
 Too Little Funding for Public Transportation 	5.90
 Too Many Construction Zones 	5.90
 Too Few Public Transportation Users 	5.68
 Poor Highway Maintenance 	5.67
 Too Few Bike Paths & Sidewalks 	5.67
 Too Little Cooperation Among Jurisdictions 	5.49
 Too Much Air Pollution from Vehicles 	5.10
 Lack of Information on Congestion 	4.72
 Too Many Large Trucks on Highways 	4.61

Respondents were asked how many days per week they experienced problems for the following reasons. As with all such lists in the survey, the four reasons were presented randomly during the interview. The mean average responses are shown below.

•	Heavy Traffic	3.66 Days
•	Road Work	2.27 Days
•	Accidents	1.91 Days
•	Traffic Signals	1.62 Days



IMPROVING THE TRANSPORTATION SYSTEM

Survey respondents were asked a number of questions pertaining to ways to improve the transportation system in Hampton Roads. These questions were included to provide insight to the public's thoughts on a variety of strategies, project types, and funding preferences.

STRATEGIES

Respondents were asked to rate a number of strategies for improving the transportation system and/or reducing traffic congestion. In the first question, citizens were asked to rate eight strategies in terms of whether or not they agreed that the strategies would improve the transportation system. The rating scale ranged from 1 – Strongly Disagree to 5 – Strongly Agree. The results, in terms of mean average response to each strategy, are shown below.

 More road construction was done at night 	4.46
 Existing public transportation was improved or expanded 	4.20
 Existing highways were expanded 	4.04
 New public transportation services were offered 	4.00
Better quality traffic information was available	3.87
 More new highways were built 	3.44
HOV Lanes were expanded	3.32
HOV Lanes were eliminated	2.30

Respondents were then asked to rate the extent to which a number of alternatives to highway construction should be used to help control congestion. The rating scale ranged from **0** – **Not at All** to **10** – **To a Great Extent**. The results, in terms of mean average response to each alternative, are shown below.

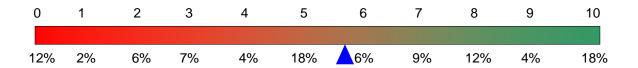
•	Increase the availability of public transportation services	7.07
•	Provide employee incentives to carpool	6.91
•	Encourage telecommuting options	6.70
•	Increase the availability of HOV Lanes	5.67
•	Implement toll road alternatives for rush hour congestion	4.24
•	Increase parking rates in downtown & suburban areas	3.37



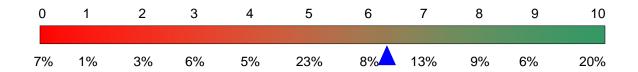
PUBLIC SUPPORT FOR FUTURE TRANSPORTATION PROGRAMS

To get an idea of how the people of Hampton Roads think the transportation system should be improved, respondents were asked how likely they would be to support future programs to build more roadways and to build or expand public transportation services in the region. Respondents ranked their support on a scale from **0 – Not at All** to **10 – Extremely Likely**. The results for each question are shown below.

- Support for building new roadways
 - ➤ The Mean Average response was 5.63



- Support for building or expanding public transportation
 - > The Mean Average response was 6.23



RESPONSIBILITY FOR IMPROVING TRANSPORTATION

Respondents were asked to rank, in order, who they thought should be responsible for correcting transportation-related problems or issues. Respondents ranked State agencies first (56%), followed by Local agencies (31%) and Federal agencies (11%).

PAYING FOR TRANSPORTATION IMPROVEMENTS

The questionnaire included a couple of questions to gauge the public's opinions on paying for improvements to the region's transportation system. The first question was designed to obtain the respondent's perspective on how transportation dollars should be spent. The budget for transportation projects in Hampton Roads is measured in billions of dollars – a difficult sum for most people to comprehend. For this reason, the survey asked respondents how they would divide \$100 among three transportation



categories – maintenance, new highway construction, and public transportation. The results are shown below.

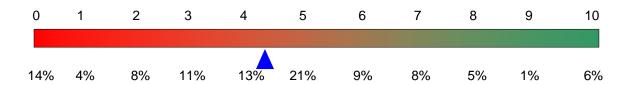
•	Maintenance of Existing Roads	\$39
•	New Highway Construction	\$32
•	New/Improved Public Transportation Services	\$29

The second question posed a number of possible new funding options and asked the respondents to rate their support for each option. The rating scale ranged from **0** – **Not at All** to **10** – **Strongly Support**. The results, in terms of mean average response to each alternative, are shown below.

•	Vehicle Registration Fees	4.46
•	Local Options Tax	4.20
•	Sales Tax	4.04
•	Toll Roads	4.00
•	Fuel Tax	3.87
•	Income Tax	3.44
•	Combination of Tolls & Fuel Tax	3.32
•	Mileage Use Fee	2.30

A final question attempted to gauge the public's perception of the efficiency with which tax dollars were spent on the Region's transportation infrastructure.

- To what extent do you agree or disagree that you are getting your money's worth for your tax dollar to build and maintain Hampton Roads' transportation infrastructure?
 - Scale: 0 10 (0 = Strongly Disagree, 10 =Strongly Agree)
 - ➤ Mean Average = 4.23



PUBLIC INVOLVEMENT

As an element of the Public Involvement Procedure for Hampton Roads, in addition to transportation-related questions, the survey included questions to help the HRPDC improve its public involvement efforts. Respondents were asked about the sources they depend on for various types of transportation information. In addition, citizens were asked about their preferences pertaining to getting involved in the transportation planning process.

INFORMATION SOURCES

Respondents were asked where they got information pertaining to construction updates, traffic congestion updates, road advisories, and transportation project updates or plans. Respondents were read a list of possible sources, in random order, and asked whether they obtained information from each of the sources. In addition, respondents were allowed to specify sources not in the list. The questions and top answers, in order of most used source to least used source, are shown below.

• Where do you get information about Construction Updates?

	TV News	33%
\triangleright	Newspaper	27%
	Radio	23%
	Don't Bother	15%
	Roadway Message Signs	14%
\triangleright	Website	4%
	Telephone Hotline	2%

• Where do you get information about Traffic Congestion Updates?

\triangleright	Radio	64%
>	TV News	38%
	Roadway Message Signs	10%
	Newspaper	6%
	Don't Bother	5%
	Telephone Hotline	2%
	Website	1%



Where do you get information about Road Advisories?

	Radio	52%
	TV News	35%
	Roadway Message Signs	23%
\triangleright	Newspaper	10%
\triangleright	Don't Bother	7%
	Telephone Hotline	3%
	Website	2%

• Where do you get information about Transportation Project Updates or Plans?

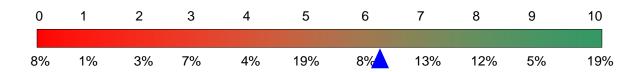
	Newspaper	40%
\triangleright	TV News	37%
\triangleright	Don't Bother	14%
\triangleright	Radio	14%
\triangleright	Website	4%
\triangleright	Public Meetings	2%

INVOLVEMENT IN THE TRANSPORTATION PLANNING PROCESS

Several questions in the survey were designed to provide a better understanding of how public involvement in the transportation planning process might be improved. These questions sought the public's opinions on the importance of being involved in the planning process and the number of opportunities for public involvement in Hampton Roads. In addition, respondents were asked whether they thought their opinions mattered to transportation officials. Finally, citizens were asked about how they had participated in the transportation planning process and/or how they would prefer to get involved.

In the first question, respondents were asked whether it was important to them to be involved in setting transportation priorities in Hampton Roads. Respondents ranked their answers on a scale from **0** – **Not at All** to **10** – **Extremely Important**. The results are shown below.

• The Mean Average response was 6.12





Although the majority of respondents said they thought it was important to be involved in the transportation planning process, when asked if they had been involved in the planning process in Hampton Roads, **94 percent said no**. The following questions touched on some possible reasons for lower than desired levels of public participation.

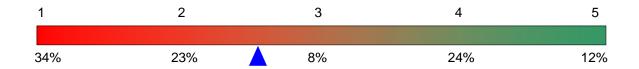
• Do you feel you have ample opportunities to get involved in the transportation planning process in Hampton Roads?

Yes: 41%No: 59%

• Do you agree or disagree that when you express concerns about a transportation project that those concerns are heard and acted upon?

➤ Scale: 1 – 5 (1 = Strongly Disagree, 5 = Strongly Agree)

 \rightarrow Mean = 2.57



The last two questions in this section were included in the survey to help staff ascertain how the public preferred to get involved in regional transportation planning.

• For those who have been involved in the transportation planning process, which two of the following methods have you used?

Answers, in order of preference, were:

Public Meetings 75%
Voting/Elections 50%
Phone Surveys 20%
Web Surveys 19%
Mail Surveys 9%

It should be noted that only 34 respondents were able to answer this question.



• For those who have not been involved in the transportation planning process, which two of the following methods would you prefer to use?

Answers, in order of preference, were:

	Voting/Elections	59%
\triangleright	Mail Surveys	46%
\triangleright	Public Meetings	34%
\triangleright	Web Surveys	34%
	Phone Surveys	28%

It should be noted that 555 respondents answered this question.

