



REGIONAL CONNECTORS STUDY

Regional Survey

DECEMBER 17, 2018

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Executive Summary

Purpose

- The Hampton Roads Transportation Planning Organization (HRTPO) conducted the **regional survey** to help inform a regional long-term vision for 21st century transportation options for the Hampton Roads region. The survey was developed to better understand the priorities and travel experiences of people in the Hampton Roads region.

Methods

- Statistically valid survey mailed to 20,000 randomly selected households within the Hampton Roads region (see Appendix B). An initial random sample of 10,000 households were mailed the survey on 9/3/18. Due to a problem with the initial mailing that may have caused some surveys to arrive later than expected, an additional random sample of 10,000 households were mailed the survey on 9/28/18.
- Follow-up reminder postcard mailed one week after both the initial and secondary survey mailings.
- Respondents could choose to take the survey online (available in English, Spanish, and Tagalog).
- Most were completed by mail (81%) and 19% were completed online.
- An unweighted total of 1,612 people responded to the survey invite, for a response rate of 9%.
- The following demographics were underrepresented – African Americans, those with incomes under \$25,000, and those under 35 years of age. To ensure these diverse groups were represented, a total of 120 respondents from the Precision Sample online panel completed the online version of the survey.
- To ensure demographic representation, data were weighted by age using the 2012 – 2016 American Community Survey (ACS) data to match the demographic profile of the Hampton Roads region.
- Overall, an unweighted total of 1,732 people completed the survey for a margin of error of +/- 2.4%.
- Figures in the report summarize frequencies for the survey questions.
- Note that some totals in the charts may add up to somewhat less or somewhat more than 100% due to rounding, and in some cases where respondents provided multiple responses.
- Only statistically significant relationships are discussed throughout the report. To achieve the cut-off for statistical significance, regressions must have a 0.05 significance level (a 95 percent confidence level).

Traveling in the entire Hampton Roads Region: Key Findings

When looking at the Hampton Roads region overall, respondents were concerned about congestion and reported areas of improvement, but were not highly critical of the overall roadways in the region.

- Respondents thought making traffic faster was a top priority overall for the region while maintenance, congestion and tolling were the biggest transportation-specific concerns.
- When asked how to reduce congestion, most wanted improvements to existing roadways and to match improvements with future growth and development.
- Time spent traveling greatly affects quality of life, although most in the region reported being satisfied with the time it took to commute to work.
- Regardless of whether it was weekend or weekday, respondents felt lukewarm about the impact traffic had on their ability to travel for recreational activities.
- Respondents were split over the utilization of public transit in the region, but for those who did not use it, convenience and preferences for driving their own car limited their usage of public transit.
- In general, people preferred television to learn more about planned future improvements to the region, but saw social media and the radio as other viable avenues of communication.

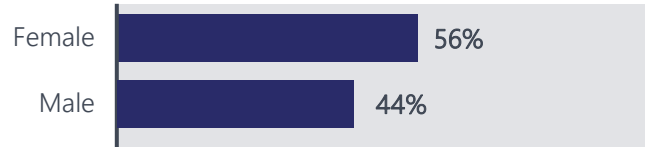
Traveling between the Peninsula and the Southside: Key Findings

Traveling between the Peninsula and the Southside was a key source of frustration among respondents.

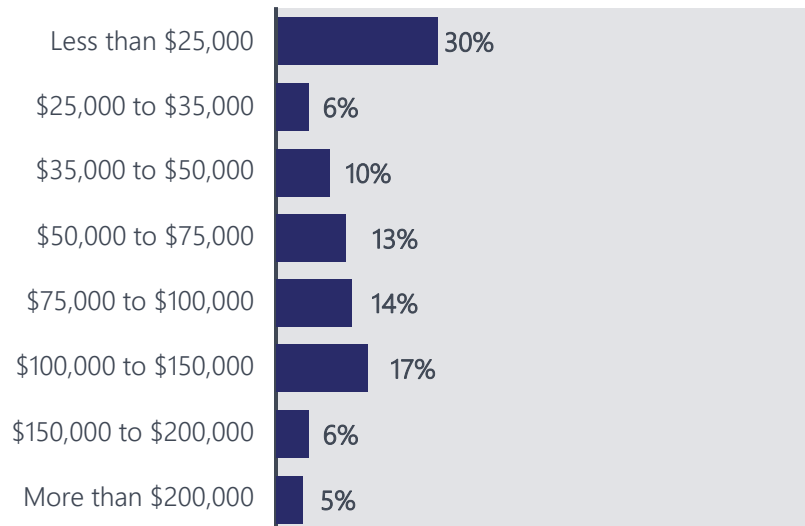
- Location greatly impacts quality of life as many respondents reported making major life choices to avoid using the roadways connecting the Peninsula to the Southside.
- Though a majority described the connectors as slow, many also said that increasing predictability of travel time would ease the pain of dealing with congestion. Only a third of respondents were unsure if increasing predictability would affect how they used the roads.
- People are traveling in the region for a variety of reasons, but the most commonly reported are for errands and visiting family/friends.
- Compared to the entire Hampton Roads region, fewer people regularly drove alone between the Peninsula and the Southside.

Demographic Profile – Part 1

Gender



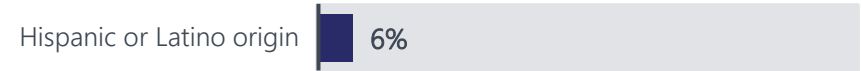
Household Income



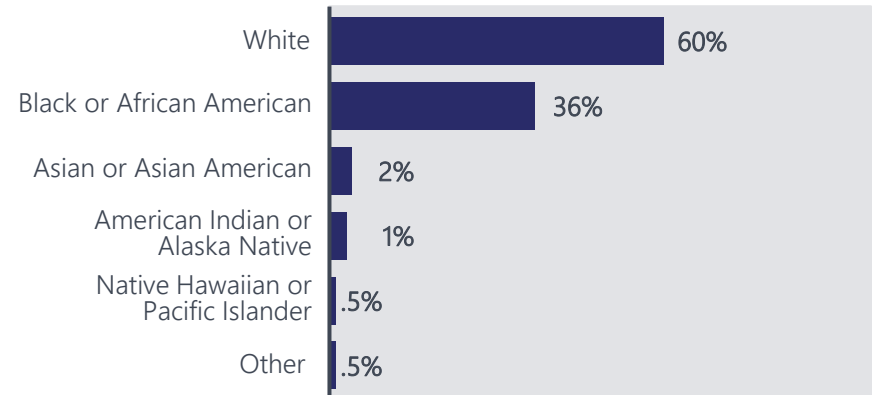
See Appendix C (pg. 39) for comparison to the Census's American Community Survey

Due to rounding, or options where participants could select multiple answers, percentages may not sum to 100%. Rounding occurs on all demographic slides.

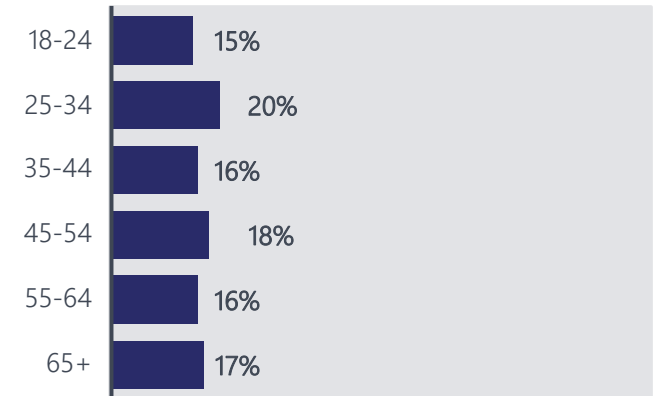
Ethnicity



Race

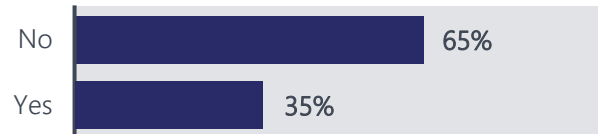


Age

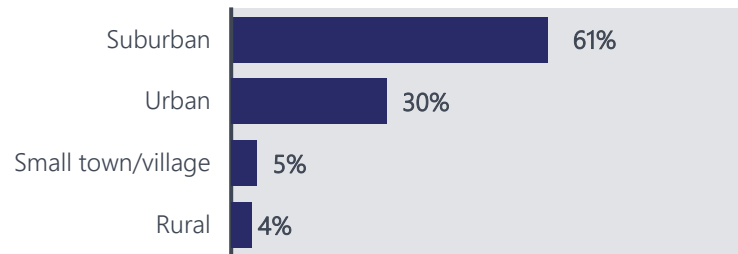


Demographic Profile – Part 2

Do you have children under 18 years of age living at home?

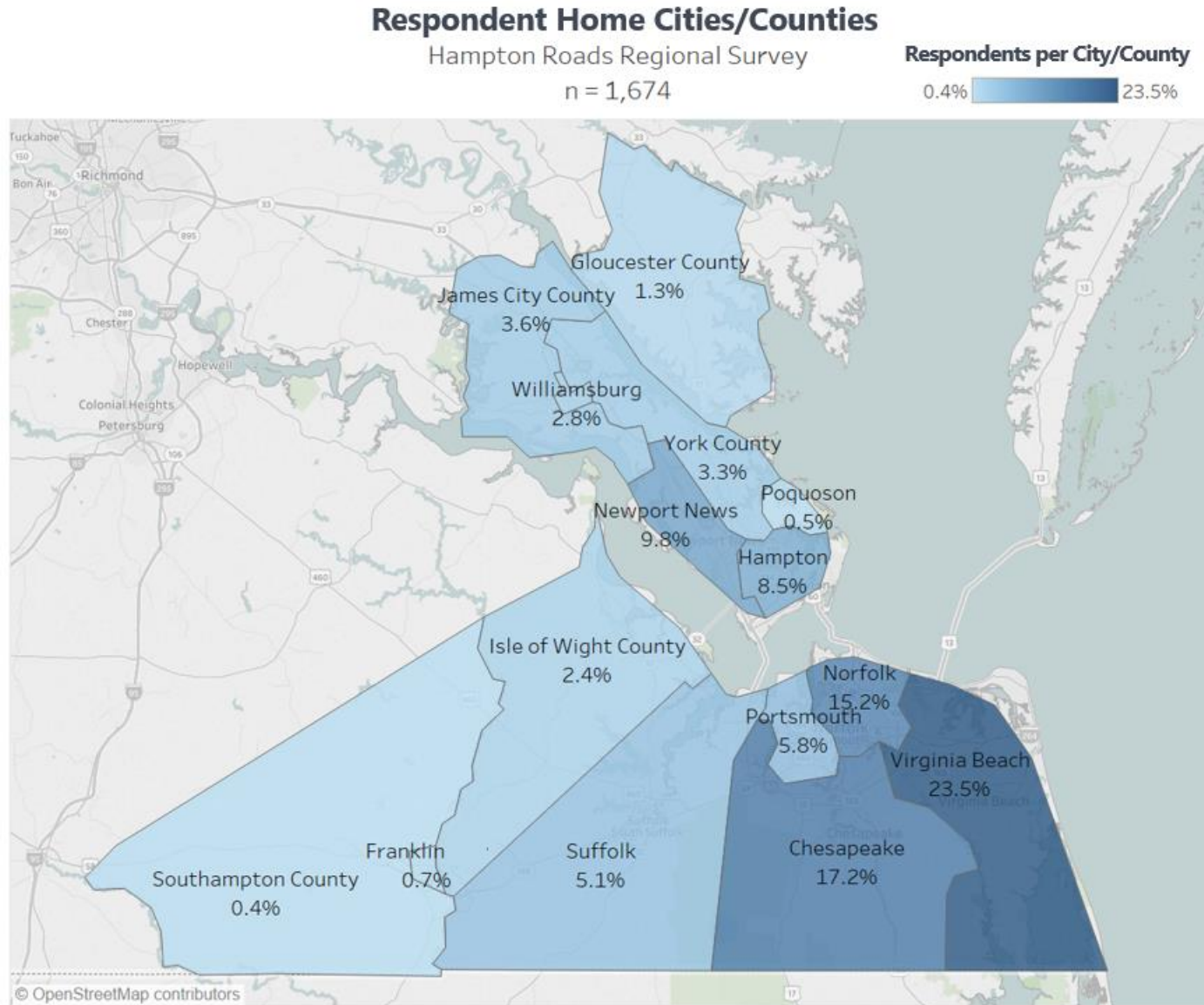


What type of community do you live in now?



Due to rounding, or options where participants could select multiple answers, percentages may not sum to 100%. Rounding occurs on all demographic slides.

Demographic Profile: Respondent Home City/County



Detailed Findings

How to Read Findings in This Report

Charts in this report include total results for all respondents. In the example below, we identify some important chart elements to facilitate interpreting them.

Base: people who answered the question, which is used to calculate the overall percentages.

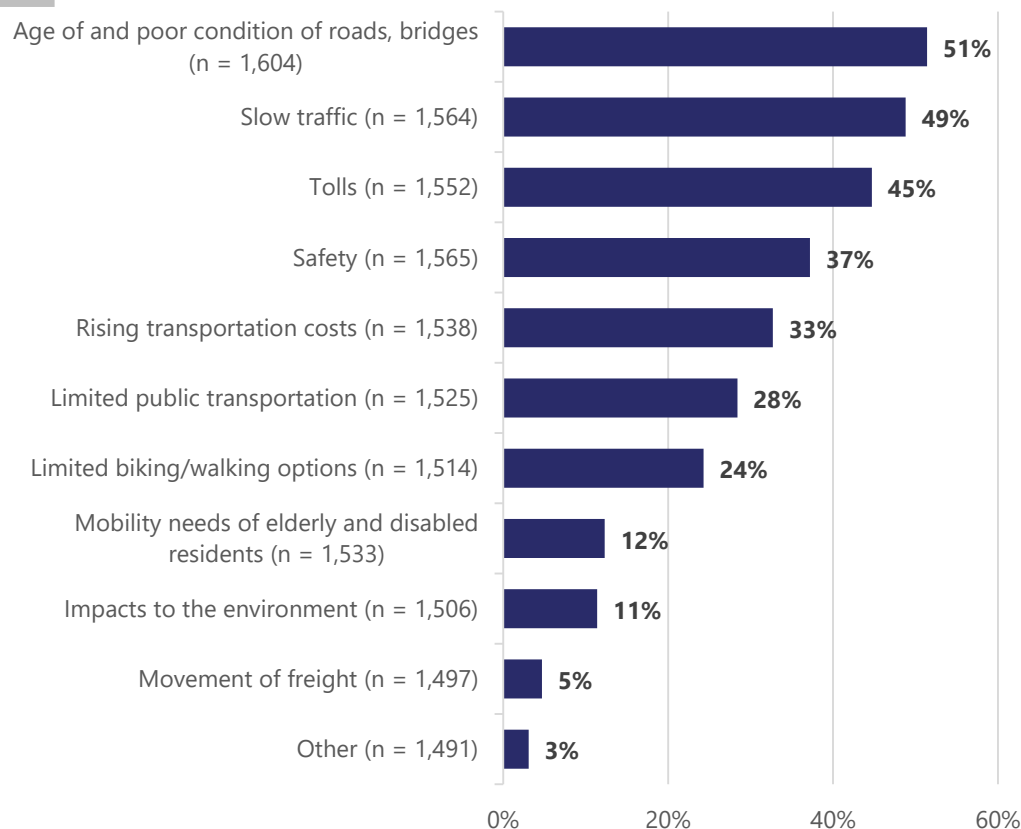
What are the TOP 3 transportation problems you are most concerned about in the Hampton Roads region?

Base: all respondents. Multiple responses allowed.
Percentages add to more than 100%.



Looking deeper

- Statistically significant relationships appear on the same page or on a subsequent page. The magnifying glass icon denotes these findings.
- Relationships consider all else (e.g., demographics) to be equal. In this example, respondents who thought limited public transportation was one of the top 3 transportation problems in the region were more likely to have identified as Hispanic/Latino, even when accounting for influences like other demographics.



Crime, job creation, and traffic are top of mind as the most important issues for the Hampton Roads region.

- Over half of respondents thought reducing crime (55%) was the most pressing issue facing the region.
- Almost half cited long term job creation (48%) and making traffic faster (47%) as important issues as well.

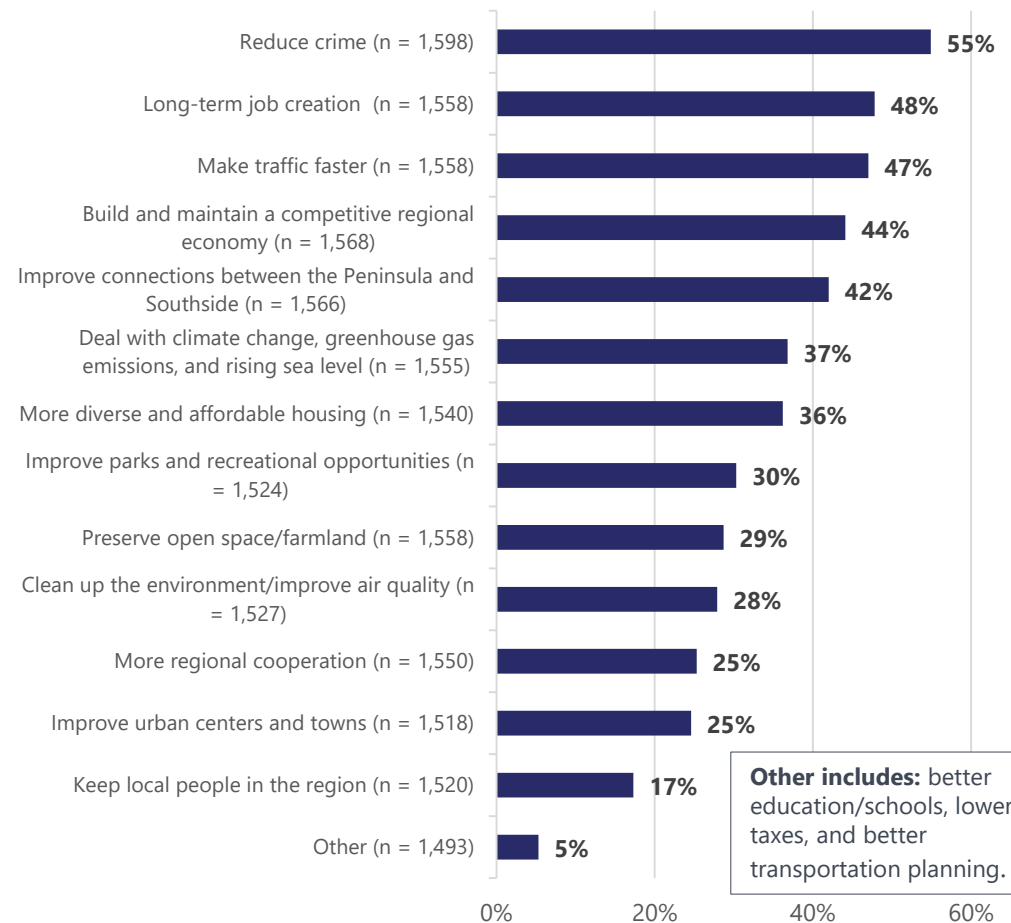


Statistically significant relationships on next page.

What are the TOP 5 most important issues facing the Hampton Roads region?

Base: all respondents. Multiple responses allowed.

Percentages add to more than 100%.



Relationships: Pressing issues for Hampton Roads

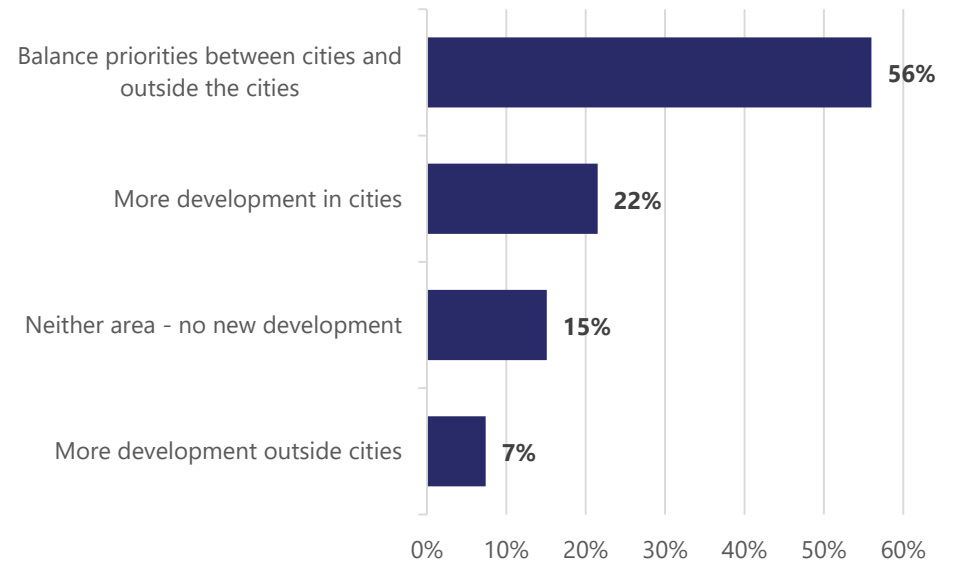
- Respondents who consider building and maintaining a competitive regional economy to be one of the top issues facing the Hampton Roads region were:
 - 2 times less likely to be Hispanic/Latino
 - More than 2 times more likely to be White
 - 2 times more likely to say newspaper is the best way to keep people informed
- Respondents who consider more diverse and affordable housing to be one of the top issues facing the Hampton Roads region were:
 - 3 times more likely to be People of Color
 - 2 times more likely to say newspaper is the best way to keep people informed.
- Respondents who consider improving urban centers and towns to be one of the top issues facing the Hampton Roads region were:
 - 2 times more likely to say television and direct mail are the best way to keep people informed
- Respondents who consider keeping local people in the region to be one of the top issues facing the Hampton Roads region were:
 - 2 times more likely to say newspaper and direct mail are the best way to keep people informed
- Respondents who consider an option not listed on this survey to be one of the top issues facing the Hampton Roads region were:
 - More than 8 times more likely to be White

A majority of respondents asked for a balance between developing within city and non-city areas.

- A majority (56%) of respondents preferred balancing new development between cities and outside the cities.

When considering the location of new development, which do you prefer?

Base: all respondents (n = 1,476).



Aging conditions, slow traffic, and tolls were the most concerning transportation problems.

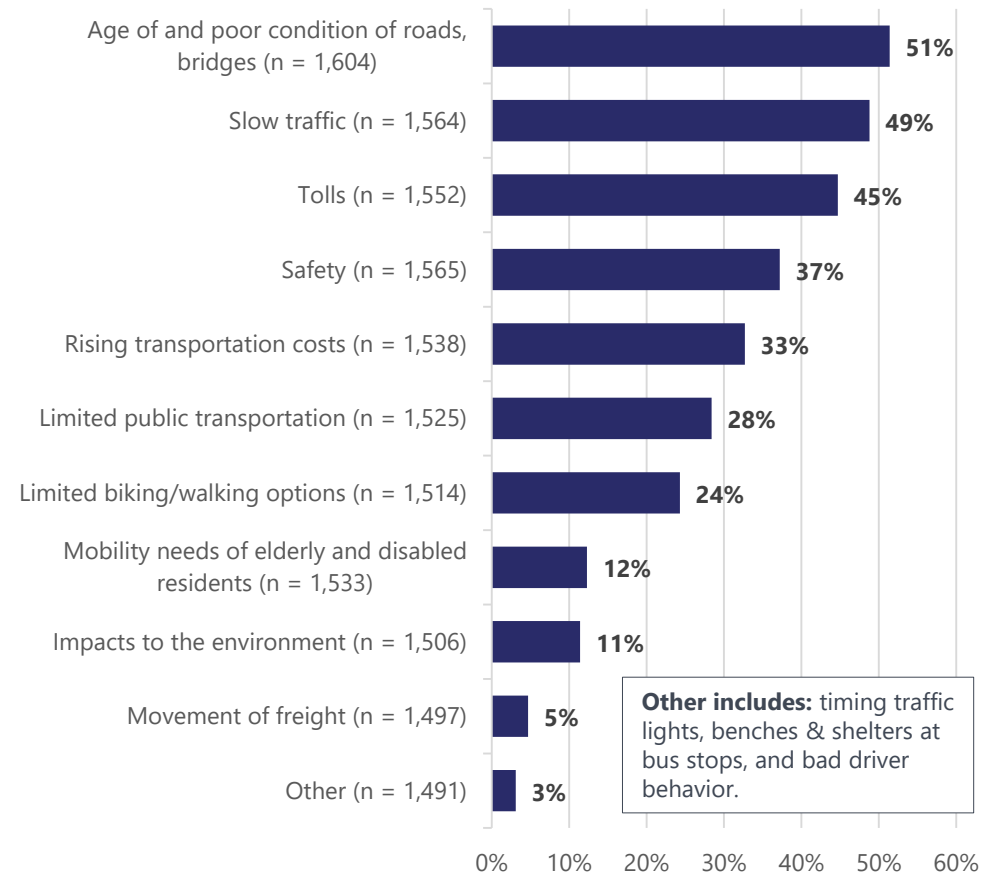
- Overall, respondents were most concerned with aging roads/bridges (51%), slow traffic (49%), and tolls (45%).
- Rising transportation costs (33%) as well as the limited options for public transportation (28%) and biking/walking (24%) were also a concern for some.



Statistically significant relationships on next page.

What are the TOP 3 transportation problems you are most concerned about in the Hampton Roads region?

Base: all respondents. Multiple responses allowed.
Percentages add to more than 100%.



Relationships: Top regional transportation problems

- Respondents who selected tolls were:
 - More than 2 times less likely to be Hispanic/Latino
- Respondents who selected rising transportation costs were:
 - More than 2 times more likely to think television is the best way to keep people informed.
- Respondents who selected limited public transportation were:
 - More than 2 times more likely to be Hispanic/Latino
 - More than 2 times more likely to think websites or social media are the best way to keep people informed
- Respondents who selected limited biking/walking options were:
 - More than 2 times more likely to be Hispanic/Latino
 - More than 2 times more likely to travel for recreation
- Respondents who selected “other” were:
 - More than 2 times more likely to travel for work
 - More than 2 times less likely to say television was the best way to keep people informed
- Respondents who selected mobility needs of elderly and disabled residents were:
 - More than 2 times more likely to be male
 - More than 2 times more likely to say newspaper or websites were the best way to keep people informed
 - More than 2 times less likely to travel for work in the last 7 days
- Respondents who selected impacts to the environment were:
 - More than 2 times less likely to say television is the best way to keep people informed
 - 2 times more likely to say email is the best way to keep people informed
- Respondents who selected moving freight were:
 - More than 3 times more likely to say newspapers or email were the best ways to keep people informed.

Most respondents reported driving alone in the region.

- Half of respondents (50%) drove alone everyday in the Hampton Roads region within the last 7 days. A quarter (25%) said they drove alone 4 – 6 days of that last 7 days.
- Walking, busing, and carpooling were also popular among respondents. At least once in the last 7 days: 49% walked, 33% carpooled, and 15% took the bus.



Statistically significant relationships on next page.

In the last 7 days, how many days did you use each of the following ways to travel in the Hampton Roads region?

Base: all respondents.

	0 Days	1 day	2 days	3 days	4 days	5 days	6 days	7 days
Drive alone (n = 1,624)	11%	5%	4%	6%	6%	12%	7%	50%
Walk (n = 1,256)	51%	11%	9%	8%	5%	4%	2%	10%
Carpool (n = 1,201)	66%	7%	11%	4%	4%	3%	1%	4%
Bus (n = 1,166)	85%	4%	2%	2%	2%	2%	0.4%	3%
Uber or Lyft (n = 1,160)	79%	6%	6%	3%	1%	2%	1%	2%
Bicycle (n = 1,179)	81%	7%	4%	2%	2%	2%	1%	1%
Light Rail (n = 1,160)	90%	3%	2%	2%	1%	2%	0.3%	1%
Vanpool (n = 1,150)	94%	1%	1%	1%	1%	1%	0.3%	1%
Taxi (n = 1,157)	90%	5%	2%	1%	1%	1%	0.3%	1%
Passenger Ferry (n = 1,159)	92%	4%	1%	1%	1%	0.2%	0.0%	1%
Work from home (n = 1,143)	78%	6%	4%	2%	2%	3%	1%	3%
Other (n = 22)	49%	8%	6%	16%	7%	0.0%	0.0%	14%

Other includes:
paratransit, motorcycle,
as passenger.

Relationships: How did you travel in the Hampton Roads region within the past 7 days?

- Respondents who drove alone were:
 - 3 times more likely to have traveled for work in the past 7 days
- Respondents who used light rail were:
 - 2 times less likely to be Hispanic/Latino
- Respondents who used passenger ferries were:
 - 4 times less likely to be Hispanic/Latino
 - 2 times less likely to travel in the Hampton Roads region for work in the last 7 days
- Respondents who used a taxi were:
 - 3 times more likely to be Hispanic/Latino or People of Color
- Respondents who used Uber or Lyft were:
 - More than 2 times more likely to be Hispanic/Latino
- Respondents who biked were:
 - More than 3 times more likely to be Hispanic/Latino

Errands and shopping were the most common activity for traveling in the Hampton Roads region.

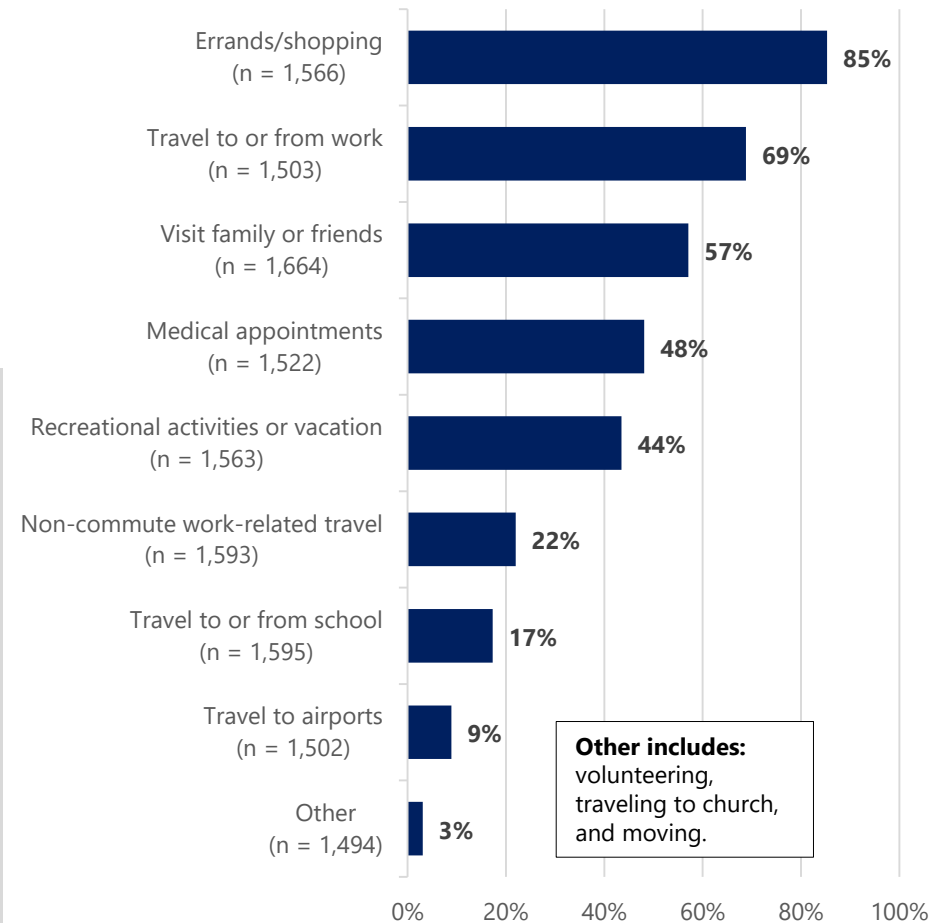
- In the last 7 days, 85% of respondents reported traveling in the Hampton Roads region for errands/shopping.
- Traveling to or from work accounted for 69% of respondents reasons for traveling.
- About half of respondents had traveled in the region to visit family or friends (57%), medical appointments (48%), or recreational activities or vacation (44%).

Looking deeper

- Respondents who traveled to school were:
 - 2 times more likely be younger
 - 3 times more likely to be Hispanic/Latino
- Respondents who traveled for errands/shopping were:
 - 2 times more likely to say the radio is the best way to keep people informed
- Respondents who traveled for recreation/vacation were:
 - More than 2 times more likely to be White

In the last 7 days, why did you travel in the Hampton Roads region?

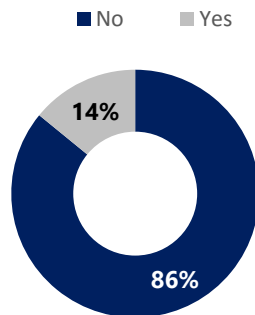
Base: all respondents. Multiple responses allowed.
Percentages add to more than 100%.



Commute time for work varied among respondents.

Is your main place of employment at home?

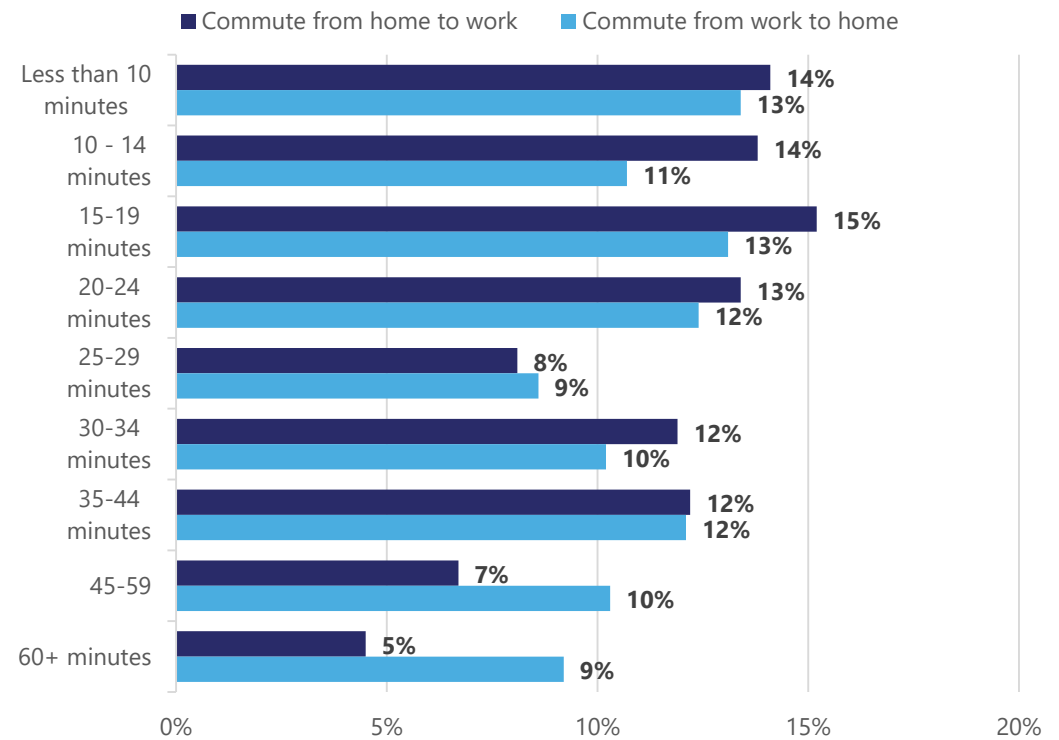
Base: all respondents who have traveled to work in the Hampton Roads region within the last 7 days (n = 322).



- Most people (86%) who reported traveling to work, have a main place of employment outside their home. Other respondents worked from home within the last 7 days.
- The time it takes respondents to commute either to or from work was distributed over the time categories, with no commute category having more than 15% of responses.

How many minutes does it typically take you to commute from home to work AND from work to home?

Base: all respondents who have traveled to work in the Hampton Roads region within the last 7 days and who do not work from home (n = 883).



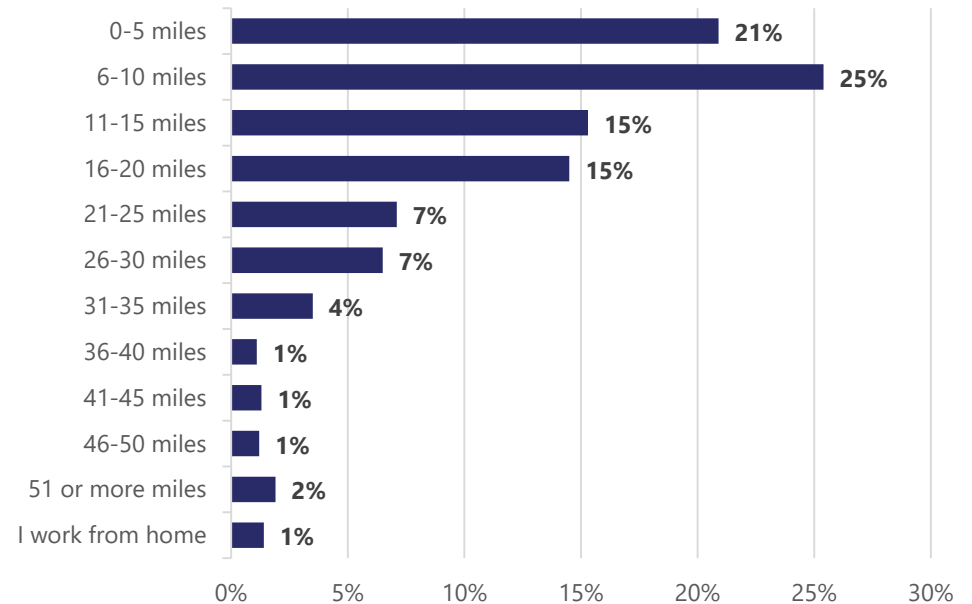
The majority of respondents live near their place of work.

- 61% of respondents reported living within 15 miles of their work.
- However, almost a quarter (23%) of respondents lived over 20 miles away from their work

See Appendix A (pg. 34) for frequency of workplace by city and zip code.

What is the approximate one-way distance in miles between your home and your work?

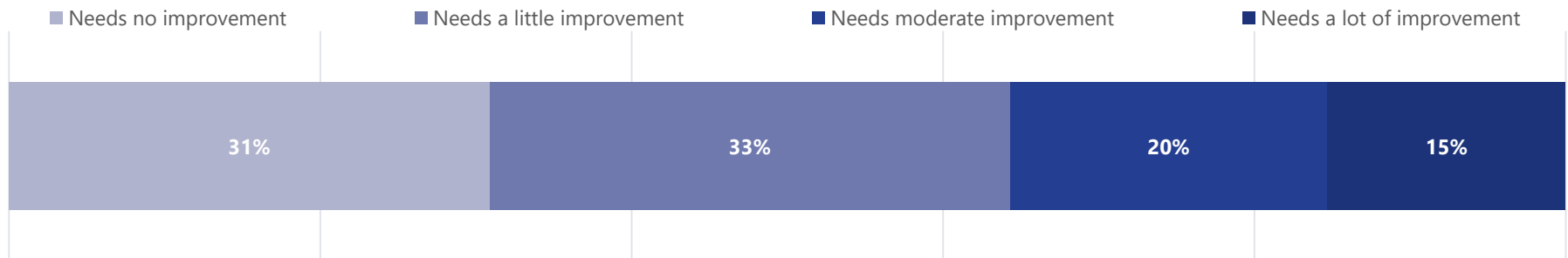
Base: all respondents who have traveled to work in the Hampton Roads region within the last 7 days and their main placement of employment is not at home (n =883).



Respondents are split on their opinions concerning commuting to work in the region.

The time it takes you to commute to work:

Base: all respondents who have traveled to work in the Hampton Roads region within the last 7 days and their main placement of employment is not at home (n=874).



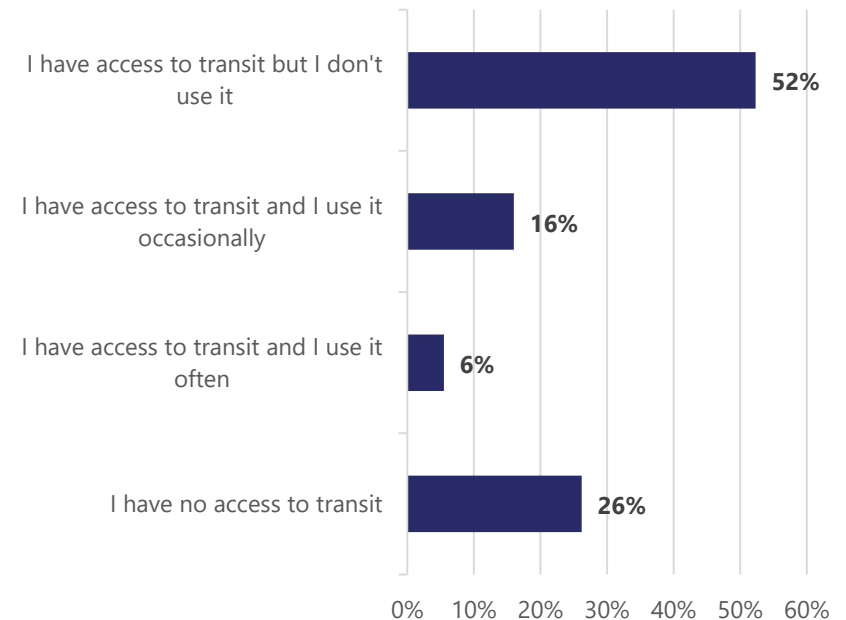
- Almost two thirds (64%) of respondents think their commute to work needs either no improvement (31%) or only a little improvement (33%).

The majority of respondents have access to transit, but don't use it.

- Almost half (52%) of respondents have access to transit but do not use it, while a quarter (26%) have no transit access in the Hampton Roads region.

How do you use public transit services (bus, light rail, ferry) in the Hampton Roads region?

Base: all respondents (n = 1,605).



Respondents prefer taking their own car instead of transit.

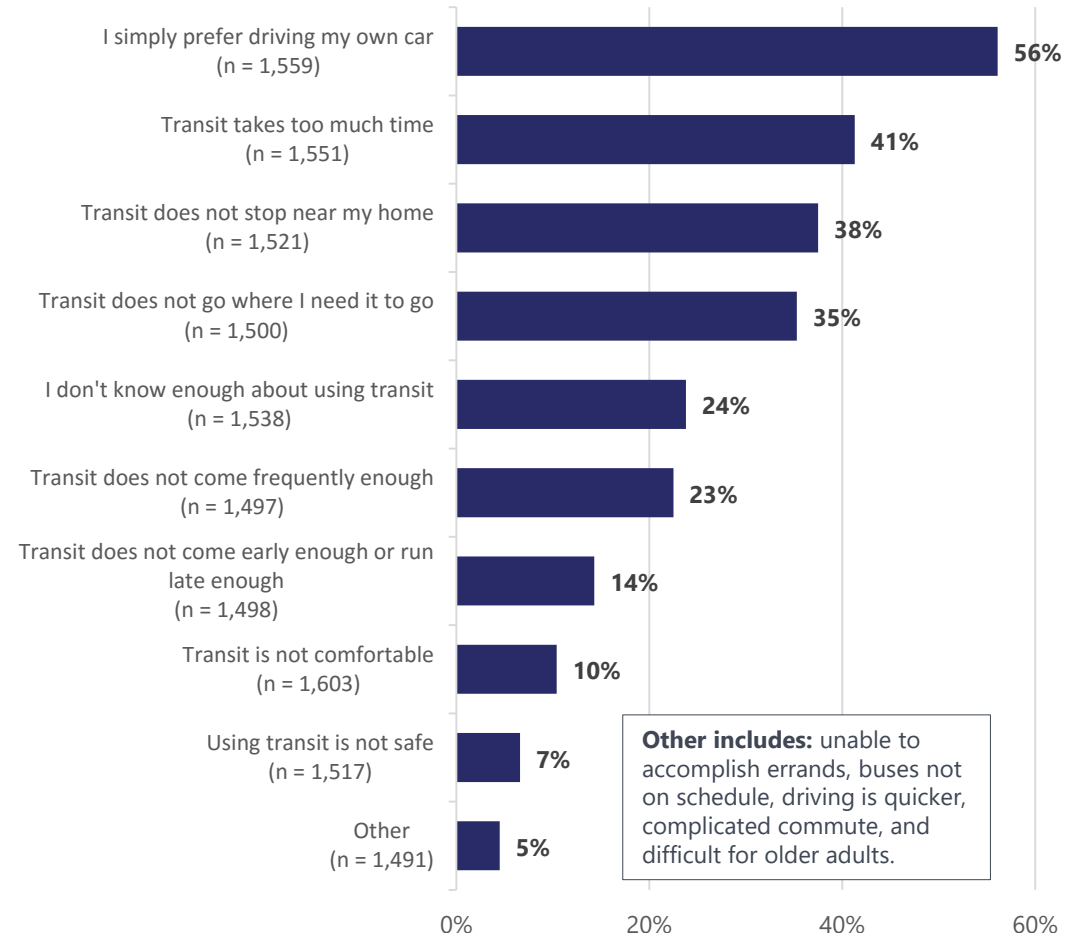
- A majority of respondents (56%) prefer driving their own car.
- Some cited bus routes as a barrier for using public transit. 38% said it does not stop near their home. 35% said it does not go near their destination.
- Time commitment was another concern with 41% reporting that transit takes too much time.

Looking deeper

- Respondents who said transit does not stop near their home were:
 - 2 times more likely to live in urban or suburban communities
- Respondents who said using transit is not safe were:
 - More than 2 times more likely to be younger
 - More than 2 times more likely to say the radio is the best way to keep people informed

What are the TOP 3 barriers to you using the transit services or using them more frequently?

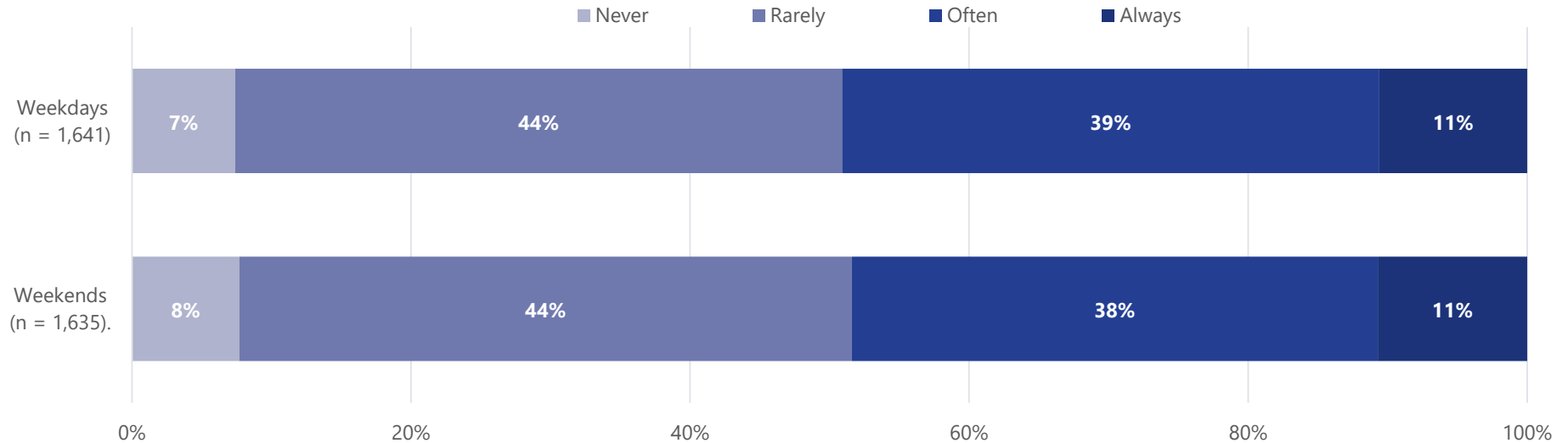
Base: all respondents. Multiple responses allowed. Percentages add to more than 100%.



People feel that slow traffic can limit recreational travel, but the extent of the impact is split.

How often does slow traffic limit your travel for fun activities during...

Base: all respondents.



- Regardless of whether it is weekday or weekend, a majority of respondents felt that slow traffic limited recreational travel either rarely (44%) or often (39% for weekdays and 38% on weekends).
- Few people cited the extremes of either never (7% for weekdays and 8% on weekends) or always (11%) feeling that slow traffic limits travel for recreational activities.

Majority of respondents think improving roads and planning for future growth will reduce congestion.

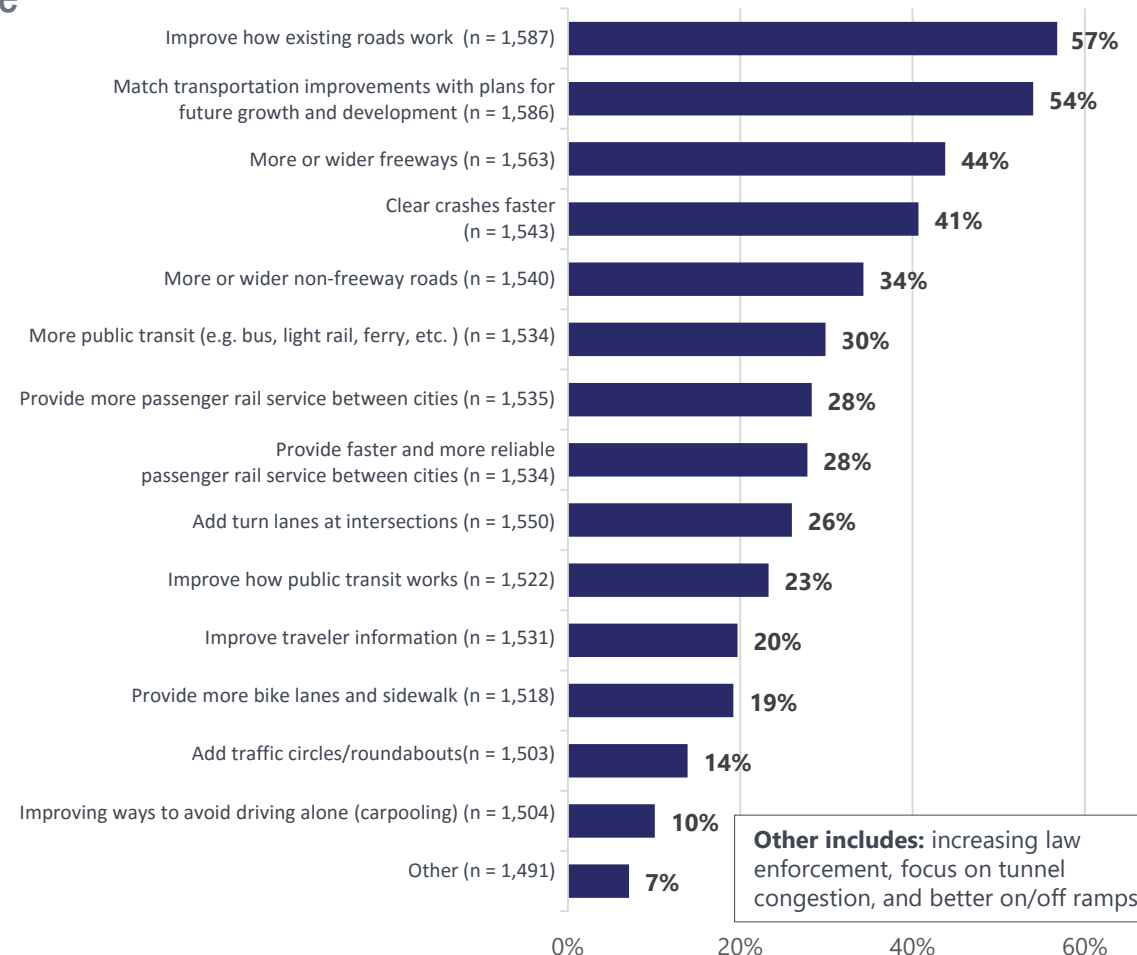
- Improving how existing roads work (57%) and matching transportation improvements with plans for future growth & development (54%) were the most popular ways to reduce congestion.

Looking deeper

- Respondents who prefer more/wider freeways are 2 times less likely to be Hispanic/Latino.
- Respondents who prefer matching transportation improvements with plans for future growth are 2 times more likely to think direct mail is the best way to keep people informed.
- Respondents who prefer improving existing roads are 2 times more likely to be White.

What do you think are the 5 BEST WAYS to reduce congestion in the Hampton Roads region?

Base: all respondents. Multiple responses allowed. Percentages add to more than 100%.



The most popular way to travel between the Peninsula and the Southside is by driving alone.

- Almost half (45%) reported driving alone between the Peninsula and the Southside at least one day within the last 7 days. 10% said they drove alone everyday.
- In contrast, 50% of respondents drove alone *everyday* in the general Hampton Roads region.



Looking deeper

- Respondents who use the bus were:
 - More than 5 times more likely to be People of Color
 - More than 2 times less likely to say the radio or social media are the best way to keep people informed
 - More than 2 times less likely to live in rural or small town communities
- Respondents who use Uber or Lyft were:
 - More than 3 times more likely to be Hispanic/Latino

In the last 7 days, how many days did you use each of the following ways to travel between the Peninsula and the Southside?


Base: all respondents.

	0 Days	1 day	2 days	3 days	4 days	5 days	6 days	7 days
Drive Alone (n = 1,489)	55%	12%	9%	5%	3%	4%	2%	10%
Bus (n = 1,205)	90%	3%	0.2%	2%	1%	1%	0.4%	2%
Uber or Lyft (n = 1,193)	88%	4%	3%	1%	1%	1%	1%	2%
Carpool (n = 1,226)	85%	7%	4%	1%	2%	1%	0.4%	1%
Vanpool (n = 1,193)	94%	2%	1%	1%	0.3%	1%	1%	0.3%
Taxi (n = 1,192)	93%	3%	2%	1%	1%	1%	0.0%	1%
Other (n = 21)	31%	40%	15%	7%	4%	0.0%	0.0%	4%

Other includes:
company car, travel with children, and wheelchair.

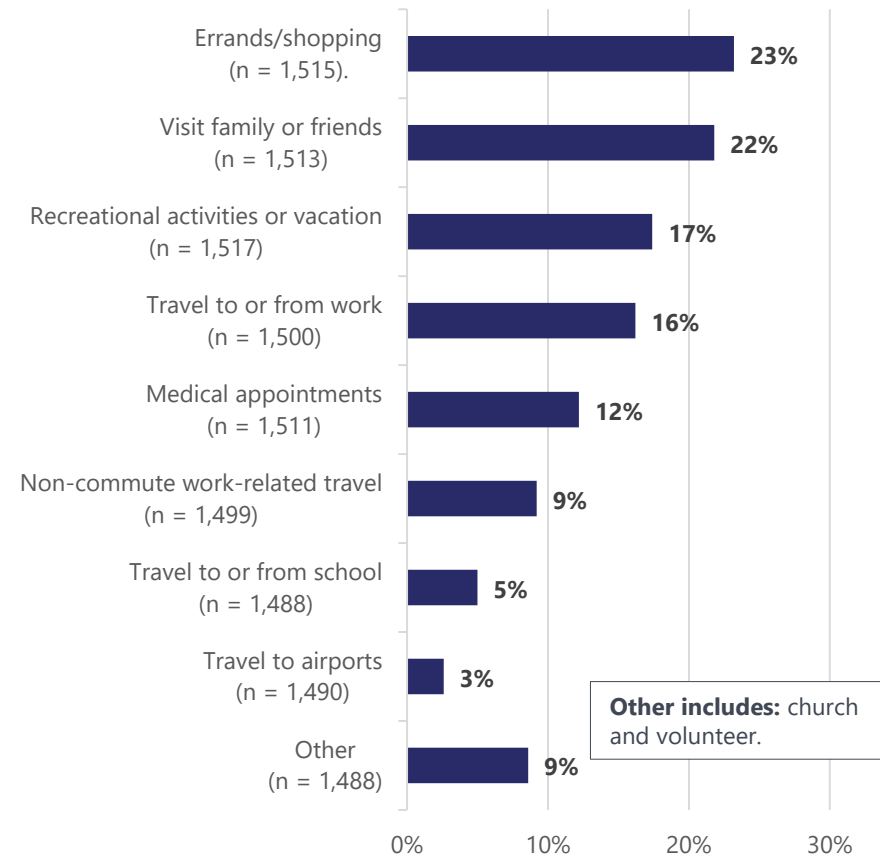
People travel between the Peninsula and the Southside for errands/shopping and visiting friends or family.

- Similar to the Hampton Roads region in general, people most commonly traveled between the Peninsula and the Southside for errands/shopping (23%) and visiting family or friends (22%).

 **Statistically significant relationships on next page.**

In the last 7 days, why did you travel between the Peninsula and the Southside?

Base: all respondents. Multiple responses allowed.
Percentages add to more than 100%.



Relationships: Reasons for traveling between the Peninsula and the Southside in the last 7 days

Respondents generally did not travel between the Peninsula and the Southside in the last 7 days. However, there were some key statistically significant relationships.

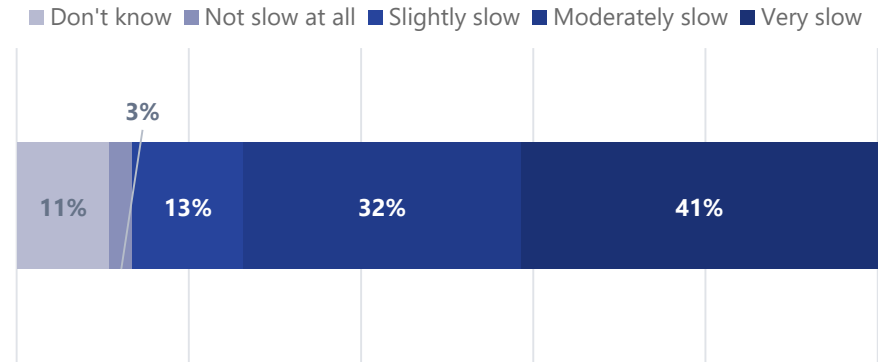
- Respondents who traveled between the Peninsula and the Southside for school were:
 - More than 8 times more likely to be Hispanic/Latino
- Respondents who traveled between the Peninsula and the Southside for non-commute work-related travel were:
 - 2 times more likely to say newspaper is the best way to keep people informed
 - 4 times more likely to have traveled though the Hampton Roads region for recreation in the past 7 days
- Respondents who traveled between the Peninsula and the Southside for airport-related travel were:
 - More than 3 times less likely to say direct mail or social media are the best ways to reach people
 - 3 times more likely to have traveled though the Hampton Roads region for work in the past 7 days
- Respondents who traveled between the Peninsula and the Southside for Other-related travel were:
 - More than 2 times less likely to have traveled though the Hampton Roads region for recreation in the past 7 days

Many respondents believe the roadways connecting the Peninsula to the Southside are slow and impactful.

- 86% of respondents said the roadways connecting the Peninsula to the Southside were slow to some degree. 41% thought they were very slow, 32% moderately slow, and only 13% thought they were slightly slow.

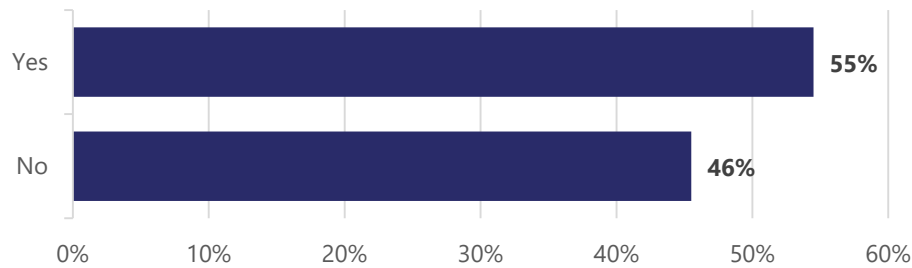
How slow are the roadways (bridges, tunnels) that connect the Peninsula to the Southside?

Base: all respondents (n = 1,637)



Have you ever made a housing or employment decision to avoid needing to use the roadways that connect the Peninsula to the Southside?

Base: all respondents (n = 1,643).

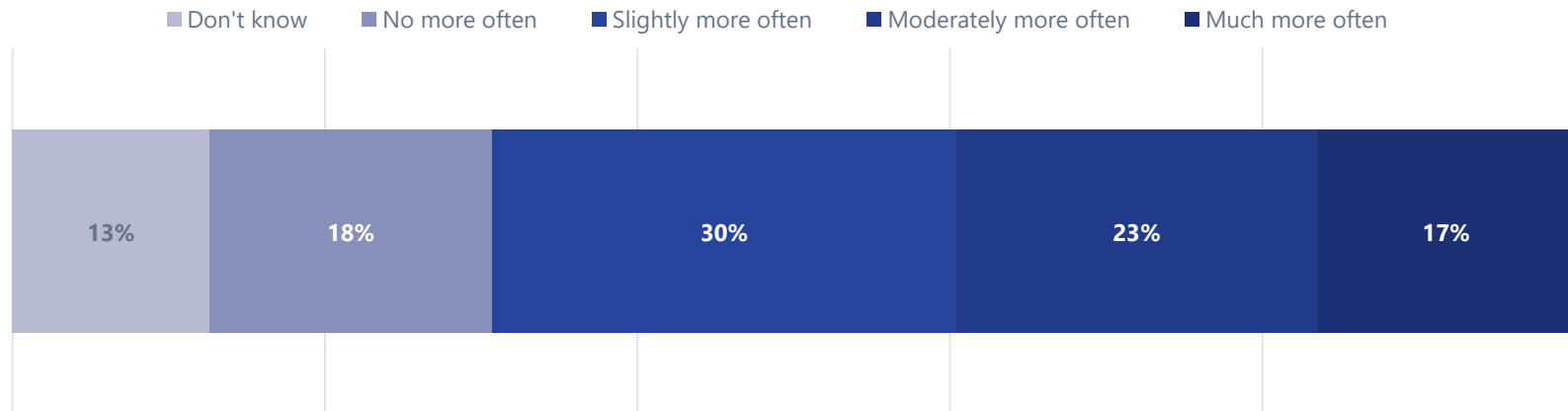


- A majority of respondents (55%) said that they have made a housing or employment decision to avoid needing to use the roadways that connect the Peninsula to the Southside.

Respondents were split on how the certainty of travel time would impact their use of the crossings

If you were more certain of the travel time on the roadways that connect the Peninsula to the Southside, how much more often would you use the crossings?

Base: all respondents (n = 1,646).



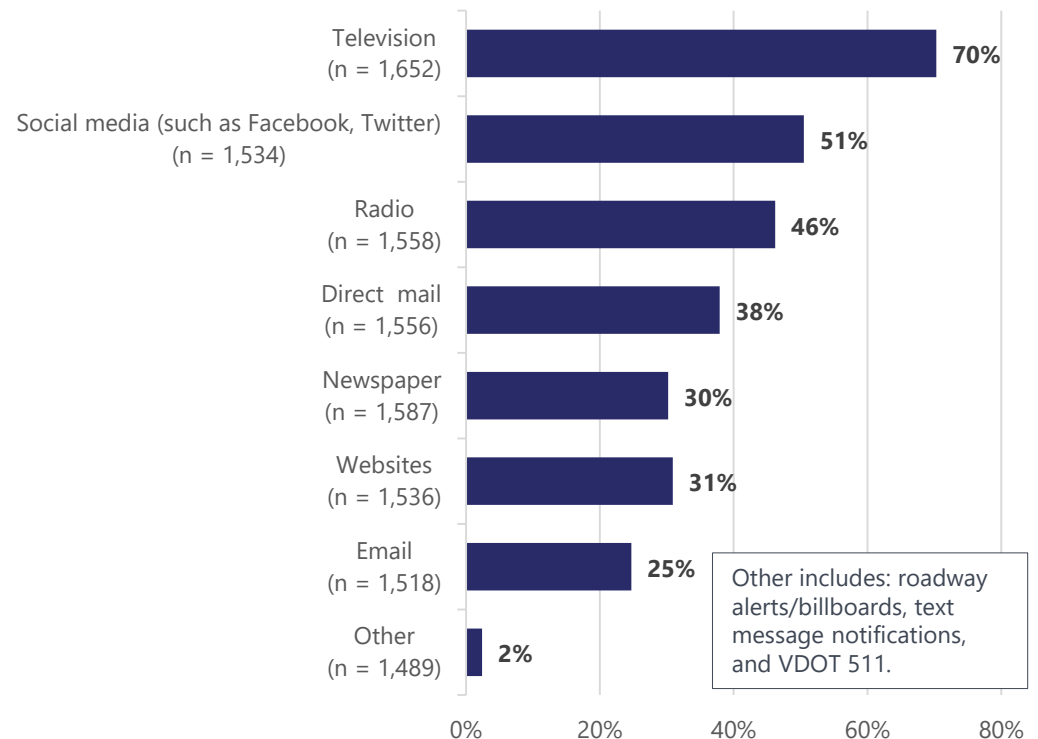
- 70% said they would use the crossings more often if they were more certain of travel times on the roadways connecting the Peninsula to the Southside. However, the extent to which they would use the crossings varied. Many (40%) respondents said they would use the crossings at least moderately more often. 30% reported they would use the crossings slightly more often, and 31% said they would not use the crossings more often or that they were unsure.

Respondents like to stay informed through television.

- The 3 most popular ways to receive information on planned improvements to the roadways are through: television (70%), social media (51%), and radio (46%).

What do you think are the 3 BEST WAYS to keep the public informed about planned improvements to the roadways in the Hampton Roads region?

Base: all respondents. Multiple responses allowed. Percentages add to more than 100%.



Appendices

Appendix A: Primary Workplace (City/County)

Where is your primary workplace (City/County)?

Base: all respondents who have traveled to work in the Hampton Roads region within the last 7 days and who do not work from home (n = 276).

Norfolk	28%
Virginia Beach	21%
Hampton	13%
Chesapeake	12%
Newport News	7%
Portsmouth	7%
Williamsburg	5%
Suffolk	3%
North Charleston, SC	1%
Gloucester	1%
Cofield, NC	1%
James City	1%
Fort Eustis	0.3%
Glen Allen	0.3%
Elizabeth City, NC	0.1%
Fort Lee	0.1%
Phoebus	0.1%
Surry	0.1%

Appendix A: Primary Workplace (Zip Code)

Where is your primary workplace (Zip Code)?

Base: all respondents who have traveled to work in the Hampton Roads region within the last 7 days and who do not work from home (n = 276).

23666	8%	23323	2%	23451	1%	23692	0.1%
23320	7%	23702	2%	23703	1%	23701	0.1%
23462	6%	23606	2%	23704	1%	23801	0.1%
23185	5%	23605	1%	23608	1%	23883	0.1%
23511	5%	23456	1%	23661	1%	27909	0.1%
23510	4%	23669	1%	23707	1%	23060	0.3%
23508	4%	23322	1%	23245	1%	23461	0.3%
23505	4%	23507	1%	23434	1%	23601	0.3%
23454	3%	23188	1%	23681	1%	23651	0.3%
23452	3%	23455	1%	27922	1%	23708	0.3%
23453	3%	23360	1%	20371	0.1%	27011	0.3%
23502	3%	25456	1%	22520	0.1%	23061	0.4%
23435	2%	29401	1%	22910	0.1%	23315	0.4%
23464	2%	23459	1%	23321	0.1%	23445	0.4%
23504	2%	23513	1%	23437	0.1%	23450	0.4%
23665	2%	23602	1%	23509	0.1%	23460	0.4%
23709	2%	23604	1%	23517	0.1%	23503	0.4%
23607	2%	23324	1%	23518	0.1%	23551	0.4%
				23663	0.1%	23668	0.4%

Appendix B: Survey Instrument (Introduction)



Hampton Roads Regional Survey

This survey will help to inform a regional long-term vision for the Hampton Roads region. Your address was randomly selected to participate in this survey to make sure all areas of the Hampton Roads region are included. Answering the survey questions is optional, but we hope you will participate. Your answers are confidential and reported only in combination with other people. By taking a few minutes (less than 10) to complete the survey you will be making sure your voice is heard, providing information to improve travel in the Hampton Roads region, and helping to keep the Hampton Roads region a great place to live!

After answering the questions, simply fold so that the return address to PRR, Inc. shows. Please secure with one small piece of tape and drop in the mail. No postage needed. Please mail no later than October 12, 2018. If you prefer, you can complete the survey online at: <http://sgiz.mobi/s3/Hampton-Roads-Regional-Survey>.

If you have any questions about the survey, please contact research@prrbiz.com.

Online survey access code

PMK483

We thank you in advance for your participation!

Please continue on next page



Appendix B: Survey Instrument (Questions 1-18)

Please indicate your choices like this: ☒

Please tell us about your travel in the Hampton Roads region

1. What are the TOP THREE transportation problems you are most concerned about in the Hampton Roads region? (SELECT ONLY YOUR TOP 3)

- | | |
|---|---|
| <input type="checkbox"/> Slow traffic | <input type="checkbox"/> Tolls |
| <input type="checkbox"/> Limited public transportation (bus, light rail, etc.) | <input type="checkbox"/> Age of and poor condition of roads, bridges |
| <input type="checkbox"/> Limited biking/walking options (bike lanes, sidewalks, crosswalks, etc.) | <input type="checkbox"/> Impacts to the environment |
| <input type="checkbox"/> Safety (e.g., speeding, red light running, accidents, etc.) | <input type="checkbox"/> Movement of freight |
| <input type="checkbox"/> Rising transportation costs (fuel costs, transit fares, parking costs, etc.) | <input type="checkbox"/> Mobility needs of elderly and disabled residents |
| <input type="checkbox"/> Other (please specify): _____ | |

2. In the last seven days, how many days did you use each of the following ways to travel in the Hampton Roads region?

- | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> Drive alone | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Carpool | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Vanpool | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Bus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Light rail | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Passenger ferry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Taxi | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Uber or Lyft | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Bicycle | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Walk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Telecommute instead of traveling in the region (work from home) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Other (please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. In the last seven days, why did you travel in the Hampton Roads region? (CHECK ALL THAT APPLY)

- | | | |
|---|--|--|
| <input type="checkbox"/> Travel to or from work | <input type="checkbox"/> Non-commute work-related travel | <input type="checkbox"/> Medical appointments |
| <input type="checkbox"/> Travel to or from school | <input type="checkbox"/> Recreational activities or vacation | <input type="checkbox"/> Travel to airports |
| <input type="checkbox"/> Errands/shopping | <input type="checkbox"/> Visit family or friends | <input type="checkbox"/> Other (please specify): _____ |

PLEASE ANSWER Q4, Q5, Q6 AND Q7 ONLY IF YOU CHOSE "TRAVEL TO OR FROM WORK" IN Q3.

4. How many minutes does it typically take you to commute from home to work AND from work to home?

- | | | | | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| I work from home <input type="checkbox"/> | <10 mins | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-44 | 45-59 | 60+ mins |
| <input type="checkbox"/> Commute from home to work | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Commute from work to home | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. What is the approximate one-way distance in miles between your home and your work?

- | | | | | | |
|---|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---|
| I work from home <input type="checkbox"/> | 6-10 miles <input type="checkbox"/> | 16-20 miles <input type="checkbox"/> | 26-30 miles <input type="checkbox"/> | 36-40 miles <input type="checkbox"/> | 46-50 miles <input type="checkbox"/> |
| 0-5 miles <input type="checkbox"/> | 11-15 miles <input type="checkbox"/> | 21-25 miles <input type="checkbox"/> | 31-35 miles <input type="checkbox"/> | 41-45 miles <input type="checkbox"/> | 51 or more miles <input type="checkbox"/> |

6. The time it takes you to commute to work:

- Needs no improvement ☐ Needs a little improvement ☐ Needs moderate improvement ☐ Needs a lot of improvement ☐

7. Where is your primary workplace? City: _____ Zip code (5 digits): _____

8. How do you use public transit services (bus, light rail, ferry) in the Hampton Roads region?

- | | |
|---|--|
| <input type="checkbox"/> I have access to transit but I don't use it | <input type="checkbox"/> I have access to transit and I use it often |
| <input type="checkbox"/> I have access to transit and I use it occasionally | <input type="checkbox"/> I have no access to transit |

9. What are the TOP THREE barriers to you using the transit services or using them more frequently? (SELECT ONLY YOUR TOP 3)

- | | |
|--|--|
| <input type="checkbox"/> Transit does not stop near my home | <input type="checkbox"/> Transit is not comfortable |
| <input type="checkbox"/> Transit does not go where I need it to go | <input type="checkbox"/> Using transit is not safe |
| <input type="checkbox"/> Transit does not come frequently enough | <input type="checkbox"/> I simply prefer driving my own car |
| <input type="checkbox"/> Transit does not come early enough or run late enough | <input type="checkbox"/> I don't know enough about using transit |
| <input type="checkbox"/> Transit takes too much time | <input type="checkbox"/> Other (please specify): _____ |

10. In the last seven days, how many days did you use each of the following ways to travel between the Peninsula and the Southside?

- | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> Drive alone | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Carpool | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Vanpool | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Bus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Taxi | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Uber or Lyft | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Other (please specify): _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

11. In the last seven days, why did you travel between the Peninsula and the Southside? (CHECK ALL THAT APPLY)

- | | | |
|---|--|--|
| <input type="checkbox"/> Travel to or from work | <input type="checkbox"/> Non-commute work-related travel | <input type="checkbox"/> Medical appointments |
| <input type="checkbox"/> Travel to or from school | <input type="checkbox"/> Recreational activities or vacation | <input type="checkbox"/> Travel to airports |
| <input type="checkbox"/> Errands/shopping | <input type="checkbox"/> Visit family or friends | <input type="checkbox"/> Other (please specify): _____ |

Stuck in traffic? Help us understand your experience with slow traffic.

12. How often does slow traffic during weekdays limit your travel for fun activities?

- Never ☐ Rarely ☐ Often ☐ Always ☐

13. How often does slow traffic during weekends limit your travel for fun activities?

- Never ☐ Rarely ☐ Often ☐ Always ☐

14. What do you think are the FIVE BEST WAYS to improve traffic flow in the Hampton Roads region? (SELECT ONLY YOUR TOP 5)

- ☐ More or wider freeways
 - ☐ More or wider non-freeway roads
 - ☐ More public transit (e.g., bus, light rail, ferry, etc.)
 - ☐ Match transportation improvements with plans for future growth and development
 - ☐ Improve how existing roads work (e.g., coordinating traffic signals)
 - ☐ Improve how public transit works
 - ☐ Improve traveler information (e.g., electronic message signs, 511, highway advisory radio)
 - ☐ Improve education on carpooling and other ways to avoid driving alone
 - ☐ Clear crashes faster
 - ☐ Add turn lanes at intersections
 - ☐ Add traffic circles/roundabouts
 - ☐ Provide more bike lanes and sidewalks
 - ☐ Provide more passenger rail service between cities
 - ☐ Provide faster and more reliable passenger rail service between cities
- Other (please specify): _____

15. How slow are the roadways (bridges, tunnels) that connect the Peninsula to the Southside?

- Not slow at all ☐ Slightly slow ☐ Moderately slow ☐ Very slow ☐ Don't know ☐

16. Have you ever made a housing or employment decision to avoid needing to use the roadways that connect the Peninsula to the Southside? No ☐ Yes ☐

17. If you were more certain of the travel time on the roadways that connect the Peninsula to the Southside, how much more often would you use the crossings?

- No more often ☐ Slightly more often ☐ Moderately more often ☐ Much more often ☐ Don't know ☐

18. What do you think are the THREE BEST WAYS to keep the public informed about planned improvements to the roadways in the Hampton Roads region? (SELECT ONLY YOUR TOP 3)

- | | | | |
|------------------------------------|-------------------------------------|---|--|
| <input type="checkbox"/> Radio | <input type="checkbox"/> Television | <input type="checkbox"/> Direct mail | <input type="checkbox"/> Email |
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> Websites | <input type="checkbox"/> Social media (such as Facebook, Twitter) | <input type="checkbox"/> Other (please specify): _____ |

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Please continue on next page →

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Appendix B: Survey Instrument (Questions 19-29)

Please tell us what you think

19. What are the TOP FIVE most important issues facing the Hampton Roads region? (SELECT ONLY YOUR TOP 5)

- | | | | |
|--|--------------------------|---|--------------------------|
| Build and maintain a competitive regional economy | <input type="checkbox"/> | Improve connections between the Peninsula and Southside | <input type="checkbox"/> |
| Clean up the environment/improve air quality | <input type="checkbox"/> | Improve parks and recreational opportunities | <input type="checkbox"/> |
| Preserve open space/farmland | <input type="checkbox"/> | Reduce crime | <input type="checkbox"/> |
| Deal with climate change, greenhouse gas emissions, and rising sea level | <input type="checkbox"/> | Improve urban centers and towns | <input type="checkbox"/> |
| Make traffic faster | <input type="checkbox"/> | Keep local people in the region | <input type="checkbox"/> |
| More diverse and affordable homes | <input type="checkbox"/> | Long-term job creation | <input type="checkbox"/> |
| More regional cooperation | <input type="checkbox"/> | Other (please specify): _____ | <input type="checkbox"/> |

20. When considering the location of new development, which do you prefer?

- | | | | |
|---------------------------------|--------------------------|---|--------------------------|
| More development in cities | <input type="checkbox"/> | Balance development between cities and outside the cities | <input type="checkbox"/> |
| More development outside cities | <input type="checkbox"/> | Neither-- no new development | <input type="checkbox"/> |

Please tell us about yourself

We have a few questions about yourself and your household. Your answers are confidential and will be combined with those of other respondents. Answering these questions helps us to make sure we have heard from all types of people who live in the Hampton Roads region.

21. What type of community do you live in?

- | | |
|---|--------------------------|
| Urban (e.g., downtown Norfolk, downtown Hampton) | <input type="checkbox"/> |
| Suburban (e.g., Great Bridge neighborhood – Chesapeake, Kingsmill neighborhood – James City County) | <input type="checkbox"/> |
| Rural (e.g., Gloucester County) | <input type="checkbox"/> |
| Small town/village (e.g., Franklin, Windsor) | <input type="checkbox"/> |

22. Where do you live?

- | | | | | | |
|----------------------|--------------------------|-------------------|--------------------------|--------------------|--------------------------|
| Chesapeake | <input type="checkbox"/> | James City County | <input type="checkbox"/> | Southampton County | <input type="checkbox"/> |
| Franklin | <input type="checkbox"/> | Newport News | <input type="checkbox"/> | Suffolk | <input type="checkbox"/> |
| Gloucester County | <input type="checkbox"/> | Norfolk | <input type="checkbox"/> | Virginia Beach | <input type="checkbox"/> |
| Hampton | <input type="checkbox"/> | Poquoson | <input type="checkbox"/> | Williamsburg | <input type="checkbox"/> |
| Isle of Wight County | <input type="checkbox"/> | Portsmouth | <input type="checkbox"/> | York County | <input type="checkbox"/> |

23. What is the zip code of your home (5 digits)? _____

24. How do you identify? Male ☐ Female ☐ Gender(s) not listed here ☐

25. What is your age? 18 to 24 ☐ 25 to 34 ☐ 35 to 44 ☐ 45 to 54 ☐ 55 to 64 ☐ 65 and older ☐

26. Do you have children under 18 years of age living at home? No ☐ Yes ☐

27. Are you of Hispanic or Latino origin? No ☐ Yes ☐

28. How do you identify? (CHECK ALL THAT APPLY)

- | | | | |
|----------------------------------|--------------------------|---|--------------------------|
| Black/African American | <input type="checkbox"/> | Asian/ Asian American | <input type="checkbox"/> |
| White/Caucasian | <input type="checkbox"/> | Native Hawaiian or other Pacific Islander | <input type="checkbox"/> |
| American Indian or Alaska Native | <input type="checkbox"/> | Race(s) not listed here (please specify): _____ | <input type="checkbox"/> |

29. What was your 2017 total household income before taxes?

- | | | | | | |
|--------------------------------|--------------------------|----------------------------------|--------------------------|----------------------------------|--------------------------|
| Less than \$25,000 | <input type="checkbox"/> | \$50,000 to less than \$75,000 | <input type="checkbox"/> | \$150,000 to less than \$200,000 | <input type="checkbox"/> |
| \$25,000 to less than \$35,000 | <input type="checkbox"/> | \$75,000 to less than \$100,000 | <input type="checkbox"/> | \$200,000 and over | <input type="checkbox"/> |
| \$35,000 to less than \$50,000 | <input type="checkbox"/> | \$100,000 to less than \$150,000 | <input type="checkbox"/> | | |

Thank you for your participation!

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Appendix C: Comparison to the American Community Survey

Demographics		Survey Sample	Census
Gender	Female	56%	51%
	Male	44%	49%
Age	18-24	15%	15%
	25-34	20%	20%
	35-44	16%	16%
	45-54	18%	17%
	55-64	16%	16%
	65+	17%	17%
Ethnicity	Hispanic	6%	6%
Race	White/Caucasian	60%	62%
	Black/ African American	36%	29%
	Asian/Asian American	2%	4%
	American Indian or Alaskan Native	1%	0.3%
	Native Hawaiian or other Pacific Islander	.5%	0.1%
	Race(s) not listed here (please specify)	.5%	1%
	2 or more races	6%	2%
Household Income	Less than \$25,000	30%	19%
	\$25,000 to less than \$35,000	6%	9%
	\$35,000 to less than \$50,000	10%	14%
	\$50,000 to less than \$75,000	13%	20%
	\$75,000 to less than \$100,000	14%	14%
	\$100,000 to less than \$150,00	17%	15%
	\$150,000 to less than \$200,000	6%	6%
	\$200,000 and over	5%	4%
Due to rounding, or options where participants could select multiple answers, percentages may not sum to 100%. Rounding occurs on all demographic slides.			

Appendix C: Comparison to the American Community Survey

	Demographics	Survey Sample	Census
Home County	Chesapeake	17%	13%
	Franklin	1%	0.5%
	Gloucester County	1%	2%
	Hampton	9%	8%
	Isle of Wight County	2%	2%
	James City County	4%	4%
	Newport News	10%	11%
	Norfolk	15%	15%
	Poquoson	1%	1%
	Portsmouth	6%	6%
	Southampton County	0%	1%
	Suffolk	5%	5%
	Virginia Beach	24%	26%
	Williamsburg	3%	1%
	York County	3%	4%

Due to rounding, or options where participants could select multiple answers, percentages may not sum to 100%. Rounding occurs on all demographic slides.

Appendix D: Detailed Methods

PRR developed a statistically valid mail survey in consultation with HRTPO and Michael Baker International. An initial random sample of 10,000 households were mailed the survey on 9/3/18. Due to a problem with the initial mailing that may have caused some surveys to arrive later than expected, an additional random sample of 10,000 households were mailed the survey on 9/28/18.

A follow-up reminder postcard was also mailed one week after each survey mailing. This mail survey had 29 questions and provided postage for easy mail back. Respondents could choose to take the survey online (available in English, Spanish, and Tagalog) using a unique ID code included in the mailing. A copy of the survey is provided in Appendix B.

A total of 1,124 surveys were undeliverable, resulting in a total of 18,876 potential respondents for the survey. An unweighted total of 1,612 people responded to the survey invite, for a response rate of 9%. PRR then compared the respondents demographics to those of the adult population in the Hampton Roads region. We found that the following demographics were underrepresented – African Americans, those with incomes under \$25,000, and those under 35 years of age. To ensure that these diverse groups were represented, a total of 120 respondents from the Precision Sample online panel completed the online version of the survey. This resulted in less need to weight the data to reflect the actual demographics of the Hampton Roads region. To ensure demographic representation, data were weighted by age using the 2012 – 2016 American Community Survey (ACS) data to match the demographic profile of the Hampton Roads region. Overall, an unweighted total of 1,732 people completed the survey for a margin of error of +/- 2.4%. Most surveys (81%) were completed by mail and 19% were completed online.

Figures in the report summarize frequencies for the survey questions. Only statistically significant relationships are discussed throughout the report. To achieve the cut-off for statistical significance, regressions must have a 0.05 significance level (a 95 percent confidence level). PRR used odds ratios which are measures of the effect between a predictor (e.g., type of residential community) and an outcome (e.g., selecting the most important issue facing the region). Generally, the outcome compares people in two groups: those who selected the most common response, and those who did not. Odds ratios of 1 represent that the influences on the outcome (i.e., response) are equally likely in both groups. Only odds ratios that represent a difference of at least “two times” more/less likely are reported.

When calculating regressions, we accounted for the unique contribution of several variables including: age, gender, income, residential community, race, ethnicity, traveling for work, and traveling for recreation. To account for self-selection effects common in multi-mode survey, we accounted for if someone responded online versus via mail. Note that some totals in the charts may add up to somewhat less or somewhat more than 100% due to rounding, and in some cases where respondents provided multiple responses.