DRPT’s 2015 Virginia Statewide Travel Study
What It Means for Us and Our Elected Officials

As Presented by John W. Martin at VTA’s 2016 Annual Conference on May 24, 2016
Today’s Agenda

1. Study Methodology
2. 7 Key Findings
3. What This All Means
4. What to Do Next
1. Study Methodology
By the Numbers
5
Objectives
Objectives

1. Obtain data on **travel behavior**, for both work and non-work trips.

2. Assess **awareness of transit service options** and growth potential.

3. Assess **awareness of transit and commuter assistance services** and programs and the effectiveness of these programs.

4. Assess **attitudes about travel and transportation** in the Commonwealth.

5. Develop **past and future comparisons**:
Two Waves
2007 and 2015
2 Sample Sets in 2015
Telephone and Online

• This 2015 study is based on the Virginia State of the Commute Benchmark Study, conducted in 2007.

• The 2007 study was conducted as a telephone survey.

• Due to the increasing difficulty and expense of conducting telephone surveys, future statewide travel studies will be conducted via the internet.

• To “bridge” the transition from all-telephone data collection to all-internet data collection, this project consists of two components: a statewide telephone survey and a statewide internet survey.
## Qualifications

<table>
<thead>
<tr>
<th>Telephone Survey</th>
<th>Internet Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents were <strong>employed</strong> residents of Virginia, ages 18 and older, selected by random digit dialing.</td>
<td>Both <strong>employed and not-employed</strong> Virginia residents, ages 18 and older, were eligible to participate in the survey.</td>
</tr>
</tbody>
</table>
9,954
2015 Interviews
## Survey Methodology

### Telephone Survey vs. Internet Survey

<table>
<thead>
<tr>
<th></th>
<th>Telephone Survey</th>
<th>Internet Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field dates</td>
<td>June 1–July 10, 2015</td>
<td>June 1–July 24, 2015</td>
</tr>
<tr>
<td>Sample size</td>
<td>5,185*</td>
<td>4,769</td>
</tr>
</tbody>
</table>

* 2,305 interviews were collected in 2015; 2,880 interviews collected in Northern Virginia in the comparable 2013 (MWCOG) State of the Commute Study were appended to the file of 2015 survey interviews for a total of 5,185 interviews.
12 Regions
## Markets/Sample Areas and Distribution of Sample

<table>
<thead>
<tr>
<th>Area</th>
<th>Telephone</th>
<th>Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Northern Virginia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- MWCOG sample</td>
<td>2,800</td>
<td>1,328</td>
</tr>
<tr>
<td>- NOVA additional sample</td>
<td>302</td>
<td></td>
</tr>
<tr>
<td><strong>Urban Crescent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Fredericksburg area</td>
<td>300</td>
<td>437</td>
</tr>
<tr>
<td>- Hampton Roads region</td>
<td>300</td>
<td>587</td>
</tr>
<tr>
<td>- Richmond metro area</td>
<td>300</td>
<td>603</td>
</tr>
<tr>
<td><strong>Other NOVA Commuter Service Markets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Culpeper/Rappahannock-Rapidan</td>
<td>150</td>
<td>261</td>
</tr>
<tr>
<td>- Front Royal/Winchester area</td>
<td>151</td>
<td>288</td>
</tr>
<tr>
<td><strong>Other Virginia Commuter Service Markets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Charlottesville area</td>
<td>150</td>
<td>262</td>
</tr>
<tr>
<td>- Middle Peninsula</td>
<td>100</td>
<td>228</td>
</tr>
<tr>
<td>- Northern Neck</td>
<td>101</td>
<td>242</td>
</tr>
<tr>
<td>- Roanoke/New River Valley</td>
<td>150</td>
<td>274</td>
</tr>
<tr>
<td><strong>Commuter Feeder Markets/Non-Served</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Commuter feeder markets</td>
<td>150</td>
<td>132</td>
</tr>
<tr>
<td>- Non-served areas</td>
<td>151</td>
<td>127</td>
</tr>
<tr>
<td><strong>TOTAL – Including MWCOG Sample</strong></td>
<td>5,185</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL – New Data Collection</strong></td>
<td>2,305</td>
<td>4,769</td>
</tr>
</tbody>
</table>
2 Firms
1 Agency
Special appreciation to
Chris Arabia
2. Seven Key Findings
Since 2007...
Commuting Times and Distances Have Not Changed
Commuters Travel a Wide Range of Commute Distances

Commute Distances in 2015 Are About the Same as in 2007

Mean (Distance)
2007: 16.9 miles (one-way)
2015: 16.8 miles (one-way)

Telephone Surveys 2007 and 2015

2007 n = 6,012
2015 n = 4,311

2007 Telephone Q17: How long is your typical daily commute one way? How many miles?
2015 Telephone Q16 and 17: How long is your typical daily commute one way? Please tell me both how many minutes and how many miles. First, how many minutes? ... And how many miles?
On Average, Commuters Travel 29 Minutes One-Way—About the Same as in 2007

Mean (Time)
2007: 28 minutes (one-way)
2015: 29 minutes (one-way)

Telephone Surveys 2007 and 2015

2007 n = 6,293
2015 n = 4,537

2007 Telephone Q16: How long is your typical daily commute one way? How many minutes?
2015 Telephone Q16 and 17: How long is your typical daily commute one way? Please tell me both how many minutes and how many miles. First, how many minutes? ... And how many miles?
Fredericksburg Commuters Have the Longest Trip, Both in Minutes and in Miles; Roanoke Commuters Have the Shortest

<table>
<thead>
<tr>
<th>Region</th>
<th>Average Trip in Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fredericksburg</td>
<td>45</td>
</tr>
<tr>
<td>Culpeper</td>
<td>41</td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>35</td>
</tr>
<tr>
<td>Front Royal/Winchester</td>
<td>34</td>
</tr>
<tr>
<td>Middle Peninsula</td>
<td>31</td>
</tr>
<tr>
<td>Northern Neck</td>
<td>30</td>
</tr>
<tr>
<td><strong>Statewide</strong></td>
<td><strong>29</strong></td>
</tr>
<tr>
<td>Hampton Roads</td>
<td>26</td>
</tr>
<tr>
<td>Richmond</td>
<td>26</td>
</tr>
<tr>
<td>Charlottesville/ Central Shenandoah</td>
<td>25</td>
</tr>
<tr>
<td>Roanoke/New River Valley</td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Average Trip in Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fredericksburg</td>
<td>29</td>
</tr>
<tr>
<td>Culpeper</td>
<td>27</td>
</tr>
<tr>
<td>Front Royal/Winchester</td>
<td>26</td>
</tr>
<tr>
<td>Middle Peninsula</td>
<td>24</td>
</tr>
<tr>
<td>Northern Neck</td>
<td>23</td>
</tr>
<tr>
<td>Richmond</td>
<td>18</td>
</tr>
<tr>
<td>Charlottesville/ Central Shenandoah</td>
<td>18</td>
</tr>
<tr>
<td><strong>Statewide</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>16</td>
</tr>
<tr>
<td>Hampton Roads</td>
<td>16</td>
</tr>
<tr>
<td>Roanoke/New River Valley</td>
<td>15</td>
</tr>
</tbody>
</table>

2015 Telephone Q16 and 17: How long is your typical daily commute one way? Please tell me both how many minutes and how many miles. First, how many minutes? ... And how many miles?
Virginia Has Become More Multimodal
Virginia Commuters Make About Three-Quarters of Their Weekly Commute Trips by Driving Alone

- Drive alone: 76.6%
- Carpool/vanpool: 6.8%
- Train: 3.8%
- Bus: 3.0%
- Walk/bike: 1.5%
- Telework/CWS: 8.3%

Excludes employees who are self-employed with only work location at home.

2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ...?
Statewide, the **Share of Drive-Alone Work Trips** Has Decreased Since 2007

- **2007**: 81.6%
- **2015**: 76.6%

**2007** n = 6,588
**2015** n = 4,659

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ...?
Statewide, the **Share of Drive-Alone Work Trips** Has Decreased Since 2007

2007 to 2015 -5 points = 6%

*Decrease in Drive-Alone Work Trips*

2007 n = 6,588
2015 n = 4,659

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
At the Same Time, Virginia’s Population Has Grown

7.7 Million

2007

8.3 Million

2015

2007 n = 6,588
2015 n = 4,659
2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
At the Same Time, Virginia’s Population Has Grown

Virginia Population

2007 to 2015

7.7 Million

8.3 Million

7.8% Increase in Population

2007 n = 6,588
2015 n = 4,659
2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
Which **Regions** Have Had the Greatest Shifts Away from SOV Drive-Alone?
Since 2007, Drive-Alone Rates Have Decreased in 7 out of 10 Regional Markets Across Virginia

Sample sizes not shown due to space limitations.

2007 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?

<table>
<thead>
<tr>
<th>Region</th>
<th>2007</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unserved</td>
<td>91%</td>
<td>89%</td>
</tr>
<tr>
<td>Feeder</td>
<td>89%</td>
<td>94%</td>
</tr>
</tbody>
</table>
Hampton Roads, Culpeper, and Richmond Are Leading the Way in Percentage Decrease in Drive-Alone Rate

<table>
<thead>
<tr>
<th>Location</th>
<th>Decrease</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hampton Roads</td>
<td>-10 points</td>
<td>11%</td>
</tr>
<tr>
<td>Culpeper</td>
<td>-8 points</td>
<td>9%</td>
</tr>
<tr>
<td>Richmond</td>
<td>-8 points</td>
<td>8%</td>
</tr>
</tbody>
</table>
Which **Generation** Demonstrates Greatest Use of Alternatives to Drive-Alone Modes?
Millennials Are More Likely to Walk, Use the Train, and Use the Bus than Are the Other Generations

<table>
<thead>
<tr>
<th>Modes Used for Non-Work Trips</th>
<th>Millennial</th>
<th>Gen X</th>
<th>Boomer</th>
<th>Silent/Greatest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample size</strong></td>
<td>386</td>
<td>1,186</td>
<td>1,660</td>
<td>530</td>
</tr>
<tr>
<td>Drive alone or by taxi</td>
<td>65%</td>
<td>75%</td>
<td>76%</td>
<td>68%</td>
</tr>
<tr>
<td>Drive or ride with others in a personal vehicle</td>
<td>78%</td>
<td>68%</td>
<td>63%</td>
<td>66%</td>
</tr>
<tr>
<td>Walk</td>
<td>21%</td>
<td>12%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Train</td>
<td>9%</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Bus</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Calculated from:
2015 Internet Q43a: Still thinking about yesterday, in the table below, check all the types of transportation you used to make these [non-work] trips.
2015 Internet Q43c: Still thinking about last weekend, in the table below, check all the types of transportation you used to make these [non-work] trips on Saturday or Sunday.
Use of Transit and Telework Have Increased Dramatically
Unfortunately, Carpooling and Vanpooling Are Not Growing

2007 n = 6,588
2015 n = 4,659

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
Transit Use and Telework/Compressed Schedule Have Both Increased

Telephone Surveys 2007 and 2015

2007 n = 6,588
2015 n = 4,659

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?

Drive alone: 81.6% (2007) vs. 76.6% (2015)
Carpool/vanpool: 7.3% (2007) vs. 6.8% (2015)
Train: 3.3% (2007) vs. 3.8% (2015)
Bus: 1.8% (2007) vs. 3.0% (2015)
Bike/walk: 1.5% (2007) vs. 1.5% (2015)
Telework/CWS: 4.5% (2007) vs. 8.3% (2015)
Use of Transit by **Train** Has Increased

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
Use of Transit by **Bus**

Has Increased

2007: 1.8%
2015: 3.0%

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
Use of Transit Has Increased 33%

Transit (Train and Bus)

- 2007: 5.1%
- 2015: 6.8%

+1.7 pts. or +33%

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?

- Train
  - 2007: 3.3%
  - 2015: 3.8%

- Bus
  - 2007: 1.8%
  - 2015: 3.0%
And This Increase Has Come Without a (Perceived) Increase in Transit Service

*Perceptions*
In 2015, 60% have transit service available in the area where they live, about the same as in 2007.

In 2015, 56% have bus service where they live, and 28% have train service.

2007 n = 6,528
2015 n = 4,876

2007 Telephone Q44: Regardless of whether or not you use them, what train or bus companies provide service in the area where you live?
2015 Telephone Q44: Regardless of whether or not you use them, do any train or bus companies provide service in the area where you live? How about train? And bus?
Slightly More than 60% Have Transit Service Available in the Area Where They **Work**, Just as in 2007

In 2015, 62% have bus service where they **work**, and 28% have train service.

2007 n = 6,472
2015 n = 4,659

2007 Telephone Q44c: What train or bus companies provide service in the area where you **work**?
2015 Telephone Q44c: Do any train or bus companies provide service in the area where you **work**? How about train? And bus?
Use of **Telework** Has Increased

2007: 4.5%
2015: 8.3%

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ...?
Use of **Telework** Has Increased

**Telework**

- 2007: 4.5%
- 2015: 8.3%

\[+84\%\]

2007 and 2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
Use of Telework Has Increased

Telework at Least Occasionally

2007: 12%
2015: 19%

2015 Telephone Q15: Now thinking about LAST week, how did you get to work each day ... ?
2007 and 2015 Telephone Q13: Now I want to ask you about telecommuting, also called teleworking. For the purposes of this survey, “telecommuters” are defined as “wage and salary employees who at least occasionally work at home or at a telework or satellite center during an entire work day, instead of traveling to their regular work place.” Based on this definition, are you a telecommuter?
1 in 5 Virginia Workers Telework at Least Occasionally
Telework at Least Occasionally

Teleworkers

2007: 438,000
2015: 729,000

2007
n = 6,606
2015
n = 4,825
Excludes employees who are self-employed with only work location at home

2007 and 2015 Telephone Q13: Now I want to ask you about telecommuting, also called teleworking. For the purposes of this survey, “telecommuters” are defined as “wage and salary employees who at least occasionally work at home or at a telework or satellite center during an entire work day, instead of traveling to their regular work place.” Based on this definition, are you a telecommuter?
Why Has Telework/CWS Experienced Such a Dramatic Increase?
The Share of Employers Who Offer Formal Teleworking Programs Has Increased

2007 n = 6,269
2015 n = 4,828
2007 Telephone Q14d: Does your employer have a formal telework program at your workplace or permit employees to telework under an informal arrangement with the supervisor?
2015 Telephone Q14d: Does your employer have a formal telework program at your workplace or permit employees to telework under an informal arrangement with the supervisor?
DRPT’s Telework!VA

DRPT would like to thank all of the Telework Champions and the businesses and individuals that pledged and participated during Virginia Telework Week. Your telework efforts have helped improve traffic congestion and air quality.

Thank you!

Virginia Telework Week 2016 Champions

<table>
<thead>
<tr>
<th>Business Champions</th>
<th>Individual Champions</th>
</tr>
</thead>
<tbody>
<tr>
<td>VITA</td>
<td>Wendy Naat</td>
</tr>
<tr>
<td>Virginia Retirement System</td>
<td>Wendy Hinton</td>
</tr>
<tr>
<td>Virginia Racing Commission</td>
<td>Wendi Carroll</td>
</tr>
<tr>
<td>Virginia Parole Board</td>
<td>Wei Han</td>
</tr>
</tbody>
</table>
There Is Potential for Another

600,000 Teleworkers in Virginia

The proportion of commuters who “could and would” telework has decreased since 2007, but this is largely because actual telework counts have risen substantially.

<table>
<thead>
<tr>
<th>Telework Status</th>
<th>2007</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently teleworking</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>Not teleworking</td>
<td>88%</td>
<td>81%</td>
</tr>
<tr>
<td>– Job responsibilities allow telework, and employee is INTERESTED in telework (“could and would”)</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>– Job responsibilities allow telework, but employee is NOT INTERESTED</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>– Job responsibilities do NOT allow telework</td>
<td>61%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Represents potential of nearly

600,000 additional new teleworkers

2007 and 2015 Telephone Q13: Telecommuters are defined as “wage and salary employees who at least occasionally work at home or at a telework or satellite center during an entire work day instead of travelling to their regular workplace.” Based on this definition, are you a telecommuter?
With a Little Work, We Could Realistically Double the Number of Virginia Teleworkers
Satisfaction with Commute Has Increased Slightly
Almost Seven in Ten Commuters Are Satisfied with Their Commute Trip to Work

56%

5 - Very satisfied with trip to work
45%

4 - Somewhat satisfied with trip to work
24%

3 - Not very satisfied with trip to work
19%

2 - Not at all satisfied with trip to work
7%

1 - Not at all satisfied with trip to work
5%

n = 4,649
Excludes “don’t knows”

2015 Telephone Q56f: Overall, how satisfied are you with your trip to work?
Satisfaction with Work Commute Is About the Same Today as in 2007

2007 Telephone Q56a: Overall, how satisfied are you with your trip to work?
2015 Telephone Q56f: Overall, how satisfied are you with your trip to work?

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>2007</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 - Very satisfied</td>
<td>46%</td>
<td>45%</td>
</tr>
<tr>
<td>Rating 4</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>Rating 3</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>Rating 2</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>1 - Not at all satisfied</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

67% in 2007
69% in 2015

2007 n = 3,253
2015 n = 4,649
Commute Satisfaction Has Increased in Just over Half of Virginia’s Markets

Sample sizes not shown due to space limitations.
2007 Telephone Q56a: Overall, how satisfied are you with your trip to work?
2015 Telephone Q56f: Overall, how satisfied are you with your trip to work?

Values shown are total proportion rating their satisfaction a “4” or “5” on a 5-point scale, where “5” means “very satisfied.”
Which **Regions**
Have Had the Greatest Increases
in Satisfaction with Work Commutes?
Northern Virginia, Hampton Roads, and Fredericksburg Are Leading the Way in Increased Commute Satisfaction

Northern Virginia  +13 points  26%
Hampton Roads  +6 points  10%
Fredericksburg  +5 points  9%
No Question, the Shorter the Commute, the More Satisfied Commuters Are with Their Trip to Work

Length of time commute takes:

1 to 10 minutes 93%
11 to 20 minutes 81%
21 to 30 minutes 63%
31 to 45 minutes 51%
Over 45 minutes 38%

Questions asked only of employed respondents.

Proportions are those who rated their satisfaction a “4” or “5” on a 1–5 scale, where “5” means “very satisfied.”

1 to 10 minutes n = 729
11 to 20 minutes n = 1,161
21 to 30 minutes n = 874
31 to 45 minutes n = 923
Over 45 minutes n = 850

2015 Telephone Q56f: Overall, how satisfied are you with your trip to work?
2015 Telephone Q16: How long is your typical daily commute one way? ... First, how many minutes?
But Those Who Bike or Walk to Work, Followed by Those Who Take Transit (Bus and Train), Are Most Likely to Be Satisfied with Their Trip to Work

<table>
<thead>
<tr>
<th>Primary commute mode</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike/walk</td>
<td>93%</td>
</tr>
<tr>
<td>Bus</td>
<td>73%</td>
</tr>
<tr>
<td>Train</td>
<td>70%</td>
</tr>
<tr>
<td>Drive alone</td>
<td>68%</td>
</tr>
<tr>
<td>Carpool/vanpool</td>
<td>65%</td>
</tr>
</tbody>
</table>

Proportions are those who rated their satisfaction a “4” or “5” on a 1–5 scale, where “5” means “very satisfied.”

2015 Telephone Q56f: Overall, how satisfied are you with your trip to work?
5

Awareness and Use of Rideshare Support Infrastructure Have Increased
Park-and-Ride Lots
Awareness of the Location of Park-and-Ride Lots Has Increased, from 28% in 2007 to 34% in 2015

2007 and 2015 Telephone Q52: Do you know the locations of park-and-ride lots along the route that you take to work?

2007
n = 6,467

2015
n = 4,659
Use of **Park-and-Ride** Lots Has Increased

Among 34% Aware of Park-and-Ride Lots

- 13% in 2007
- 17% in 2015
Guaranteed Ride Home
Awareness of Guaranteed Ride Home and Emergency Ride Home Programs Is About the Same Today as in 2007; Just as in 2007, Awareness Is Higher in Northern Virginia

Statewide: 2007 n = 5,914, 2015 n = 4,370
Northern Virginia: 2007 n = 2,739, 2015 n = 2,843
Other Virginia: 2007 n = 3,175, 2015 n = 1,527

2007 Telephone Q102: Do you know if there is a regional GRH, or guaranteed ride home/emergency ride home, program available in the event of unexpected emergencies and unscheduled overtime for commuters who rideshare or use public transportation?
2015 Telephone Q102: Do you know if there is a regional guaranteed ride home or emergency ride home program available in the event of unexpected emergencies and unscheduled overtime for commuters who rideshare or use public transportation? You might know of the program as GRH or ERH.

Note: This question measures awareness of GRH/ERH rather than actual availability of program.
Local Commute Programs and Services
Awareness of Commuter Assistance Programs

Sample sizes not shown due to space limitations.
2007 and 2015 Telephone Q88d: Have you ever heard of an organization or service called [SERVICE OR PROGRAM]?
Awareness of Commuter Assistance Programs

Sample sizes not shown due to space limitations.

2007 and 2015 Telephone Q86: Have you ever heard of an organization in the Washington region called Commuter Connections?

2007 and 2015 Telephone Q88d: Have you ever heard of an organization or service called [SERVICE OR PROGRAM]?

Awareness for Loudoun County has grown 18 points
Use of Commuter Services Has Increased Among Those Aware of Commuter Services

Use of **Commuter Services**

- 13% in 2007
- 17% in 2015
Use of Commuter Services
Inside Northern Virginia

Sample sizes not shown due to space limitations.
2007 and 2015 Telephone Q88a: Have you contacted Commuter Connections in the past year or visited a website sponsored by this organization?
2007 Telephone Q88e: Have you contacted [SERVICE OR PROGRAM] in the past year or visited a website sponsored by this organization?
2015 Telephone Q88e: Have you contacted [SERVICE OR PROGRAM] in the past year or visited its website?
Use of Commuter Services

Outside Northern Virginia

Sample sizes not shown due to space limitations.
2007 Telephone Q88e: Have you contacted [SERVICE OR PROGRAM] in the past year or visited a website sponsored by this organization?
2015 Telephone Q88e: Have you contacted [SERVICE OR PROGRAM] in the past year or visited its website?
Satisfaction with Work Commute and Virginia’s Transportation System Drives Quality of Life Ratings
More than Two-Thirds Rate the Quality of Life in the Area Where They Live as Favorable

2015 Internet Q56d1: Overall, how would you rate the quality of life in the area where you live?

- 5 - Excellent quality of life: 28%
- 4: 42%
- 3: 23%
- 2: 5%
- 1 - Poor quality of life: 2%

n = 4,588
Excludes “don’t knows”
One-Third Are Satisfied with the Transportation System in the Area Where They Live

5 - Very satisfied with transportation system in area where live

4

3

2

1 - Not at all satisfied with transportation system in area where live

n = 4,402
Excludes “don’t knows”

2015 Telephone Q56e: How satisfied are you with the transportation system in the area where you live?
Commuters Who Are Satisfied with Their Trip to Work Are More Likely to Be Satisfied with the Transportation System

Proportions are those who rated their satisfaction with transportation system in the area where they live a “4” or “5” on a 1–5 scale, where “5” means “very satisfied.”

Overall Satisfaction with Transportation System

Not satisfied with trip to work  
n = 1,510

Satisfied with trip to work  
n = 2,814

16%  
42%

2015 Telephone Q56e: How satisfied are you with the transportation system in the [HOME] region?
2015 Telephone Q56f: Overall, how satisfied are you with your trip to work?
Those Satisfied with the Transportation System Are More Likely to Rate **Quality of Life** Favorably

![Quality of Life Ratings](chart)

**Proportions are those who rated the quality of life in the area where they live a “4” or “5” on a 1–5 scale, where “5” means “excellent.”**

**Telephone Survey 2015**

**2015 Telephone Q56d1:** Overall, how would you rate the quality of life in the area where you live?

**2015 Telephone Q56e:** How satisfied are you with the transportation system in the [HOME] region?

---

**Not satisfied with transportation system**

- *n = 1,069*

**Satisfied with transportation system**

- *n = 3,185*
Commuters Who Are Satisfied with Their **Trip to Work** Are More Likely to Hold a Favorable View of the **Quality of Life** in the Area Where They Live

---

**Internet Survey 2015**

Proportions are those who rated the quality of life in the area where they live a “4” or “5” on a 1–5 scale, where “5” means “excellent.”

---

Not satisfied with trip to work  
$n = 1,512$

Satisfied with trip to work  
$n = 1,217$

---

2015 Internet Q56d1: Overall, how would you rate the quality of life in the area where you live?  
2015 Internet Q56f: Overall, how satisfied are you with your trip to work?
Clearly, transportation is related to quality of life. But what is the nature of that relationship? Can the quality of the transportation system actually improve quality of life?
Regression Analysis

Regression analysis allows us to assess or examine the relationship between satisfaction with transportation and perception of the quality of life.

Note: The regression analysis is based on data from the internet survey.
The Key Perceived Quality of Life Drivers for Virginia Residents

Education system

Accessible healthcare

Job opportunities

Recreational and entertainment opportunities

Maintaining and improving transportation
Regression Analysis Indicates a Statistically Significant Relationship Between Satisfaction with Transportation and Perception of Quality of Life

**Finding:** Those who are satisfied with the transportation system in their area are significantly more likely to view the quality of life favorably.

**Key takeaway:** Satisfaction with the transportation system drives perception of quality of life.

.360 is the standardized coefficient and indicates the strength of the impact.
Regression Analysis Indicates That Satisfaction with Trip to Work Is a Statistically Significant Driver of Satisfaction with the Transportation System, Which Drives Quality of Life

**Key takeaway:** To improve quality of life, increase satisfaction with the transportation system. To improve satisfaction with the transportation system, increase satisfaction with work commute among commuters.
Guess Who’s More Satisfied with Their Work Commute and the Transportation System?
Those Who Bike or Walk or Commute by Bus or Train Are More Likely to Be Satisfied with Their Trip to Work

Proportions are those who rated their satisfaction a “4” or “5” on a 1–5 scale, where “5” means “very satisfied.”

Primary commute mode:

- Bike/walk: 93%
- Bus: 73%
- Train: 70%
- Drive alone: 68%
- Carpool/vanpool: 65%

2015 Telephone Q56f: Overall, how satisfied are you with your trip to work?
Those Who **Commute by Bus or Train** Are More Likely to Be **Satisfied with the Transportation System**

<table>
<thead>
<tr>
<th>Primary commute mode</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>58%</td>
</tr>
<tr>
<td>Train</td>
<td>51%</td>
</tr>
<tr>
<td>Bike/walk</td>
<td>42%</td>
</tr>
<tr>
<td>Drive alone</td>
<td>32%</td>
</tr>
<tr>
<td>Carpool/vanpool</td>
<td>31%</td>
</tr>
<tr>
<td>Telework</td>
<td>25%</td>
</tr>
</tbody>
</table>

2015 Telephone Q56e: How satisfied are you with the transportation system in the [HOME] region?

Excludes “don’t knows”
The Vast Majority of Virginians See the Value of Investing in Virginia’s Transportation System, Including Alternative Transportation Options
Societal Benefits of Ridesharing

“Consider the benefits of traveling by carpool, vanpool, bus, or train. What impact or benefit does a community or region receive when people use these types of transportation?”
80% of Commuters Recognize the
**Societal Benefits** of Ridesharing

Less traffic/less congestion: 52%
Reduce pollution: 37%
Save energy: 16%
Reduce greenhouse gases: 8%
Less wear and tear on roads: 6%
Safety/less road rage: 5%
Companionship/sense of community: 3%
Reduced accidents: 3%
Not sure: 16%
No benefits: 4%

2015 Telephone Q56a: What impact or benefit does a community or region receive when people use these types of transportation?

n = 4,659
Proportions will total to more than 100% because respondents were allowed to give more than one answer.
“How important is the availability of alternative transportation options to Virginia’s economy?”
82% Say It’s Important
Virginians Believe the Availability of Alternative Transportation Options Is Important to Virginia’s Economy

Overall, 82% say it is important (score of 4 or 5).

- 5 - Very important to economy: 55% overall, 55% employed, 55% not employed.
- 4: 27% overall, 28% employed, 25% not employed.
- 3: 13% overall, 12% employed, 14% not employed.
- 2: 3% overall, 3% employed, 3% not employed.
- 1 - Not at all important to economy: 2% overall, 2% employed, 2% not employed.

2015 Internet Q60c: How important is the availability of alternative transportation options to Virginia’s economy?

Overall, n = 4,560
Employed n = 2,938
Not employed n = 1,622
Excludes “don’t knows”
Residents Across Virginia Believe Alternative Transportation Options Are Important to Virginia’s Economy

Values shown are total proportion rating importance a “4” or “5” on a 5-point scale, where “5” means “very important.”

- Northern Virginia: 89%
- Fredericksburg: 83%
- Richmond: 83%
- Charlottesville: 83%
- Culpeper: 82%
- Feeder: 80%
- Northern Neck: 80%
- Roanoke: 77%
- Hampton Roads: 77%
- Middle Peninsula: 77%
- Unserved: 75%
- Front Royal: 74%

2015 Internet Q60c: How important is the availability of alternative transportation options to Virginia’s economy?
“How important is the availability of alternative transportation options for Virginia’s workers to get to and from work?”
85%

Say It’s Important
Nearly 9 in 10 Virginians Say the Availability of Transportation Options for Workers to Get to and from Work Is Important

Results Are Comparable for Employed and Not-Employed Residents

Overall, 85% say it is important (score of 4 or 5).

2015 Internet Q60d: How important is the availability of alternative transportation options for Virginia’s workers to get to and from work?

Internet Survey 2015

Question asked only in internet survey.
Residents Across Virginia Believe the Availability of Transportation Options for Virginia’s Workers to Get to and from Work Is Important

<table>
<thead>
<tr>
<th>Location</th>
<th>Proportion Rating</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Virginia</td>
<td>91%</td>
<td>5</td>
</tr>
<tr>
<td>Northern Neck</td>
<td>89%</td>
<td>5</td>
</tr>
<tr>
<td>Culpeper</td>
<td>88%</td>
<td>5</td>
</tr>
<tr>
<td>Fredericksburg</td>
<td>88%</td>
<td>5</td>
</tr>
<tr>
<td>Richmond</td>
<td>88%</td>
<td>5</td>
</tr>
<tr>
<td>Charlottesville</td>
<td>86%</td>
<td>5</td>
</tr>
<tr>
<td>Front Royal</td>
<td>82%</td>
<td>5</td>
</tr>
<tr>
<td>Feeder</td>
<td>81%</td>
<td>5</td>
</tr>
<tr>
<td>Roanoke</td>
<td>81%</td>
<td>5</td>
</tr>
<tr>
<td>Middle Peninsula</td>
<td>81%</td>
<td>5</td>
</tr>
<tr>
<td>Hampton Roads</td>
<td>79%</td>
<td>5</td>
</tr>
<tr>
<td>Unserved</td>
<td>72%</td>
<td>5</td>
</tr>
</tbody>
</table>

The values shown are the total proportion rating importance a “4” or “5” on a 5-point scale, where “5” means “very important.”

2015 Internet Q60d: How important is the availability of alternative transportation options for Virginia’s workers to get to and from work?
“How important is it for Virginia to **invest in** alternative transportation options to provide workers with affordable travel for their work commutes?”
83%
Say It’s Important
Virginians Also Say It Is Important to Invest in Alternative Transportation to Provide Workers with Affordable Travel for the Work Commute

**Internet Survey 2015**

Question asked only in internet survey.

2015 Internet Q60e: How important is it for Virginia to invest in alternative transportation options to provide workers with affordable travel for their work commutes?

<table>
<thead>
<tr>
<th>Score</th>
<th>Overall</th>
<th>Employed</th>
<th>Not employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>62%</td>
<td>60%</td>
<td>59%</td>
</tr>
<tr>
<td>4</td>
<td>24%</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>3</td>
<td>11%</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>1</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Overall, 83% say it is important (score of 4 or 5).

Overall, n = 4,583

Employed, n = 2,952

Not employed, n = 1,631

Excludes “don’t know”
Residents Across Virginia Believe It Is Important to Provide Affordable Transportation Options for Work Commutes

2015 Internet Q60e: How important is it for Virginia to invest in alternative transportation to provide workers with affordable travel options for their work commutes?

Values shown are total proportion rating importance a “4” or “5” on a 5-point scale, where “5” means “very important.”
“In your opinion, how important is it that Virginia invest in its transportation system to maintain and grow Virginia’s economy?”
86%
Say It’s Important
Vast Majority of Virginians Believe It Is Important That Virginia Invest in Its Transportation System to Maintain and Grow Virginia’s Economy

Results Are Comparable for Employed and Not-Employed Residents

Overall, 86% say it is important (score of 4 or 5).

2015 Internet Q60b: In your opinion, how important is it that Virginia invest in its transportation system to maintain and grow Virginia’s economy?
Residents Across Virginia Believe It Is Important That Virginia Invest in Its Transportation System to Maintain and Grow Virginia’s Economy

2015 Internet Q60b: In your opinion, how important is it that Virginia invest in its transportation system to maintain and grow Virginia’s economy?

Values shown are total proportion rating importance a “4” or “5” on a 5-point scale, where “5” means “very important.”
These Are Shared Beliefs!
### Across Age Groups

<table>
<thead>
<tr>
<th></th>
<th>Under 25</th>
<th>25–34</th>
<th>35–44</th>
<th>45–54</th>
<th>55–64</th>
<th>65 and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important to invest in transportation system to maintain and grow Virginia’s economy</td>
<td>80%</td>
<td>82%</td>
<td>84%</td>
<td>88%</td>
<td>89%</td>
<td>89%</td>
</tr>
<tr>
<td>Importance of alternative transportation options to Virginia’s economy</td>
<td>82%</td>
<td>80%</td>
<td>84%</td>
<td>83%</td>
<td>88%</td>
<td>81%</td>
</tr>
<tr>
<td>Importance of alternative transportation options to get workers to and from work</td>
<td>83%</td>
<td>84%</td>
<td>87%</td>
<td>86%</td>
<td>88%</td>
<td>87%</td>
</tr>
<tr>
<td>Important to invest in alternative transportation to provide affordable travel options for work commuters</td>
<td>88%</td>
<td>83%</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Base sizes not shown due to space limitations.
2015 Internet Q60e: How important is it ... ?
### Across Generations

<table>
<thead>
<tr>
<th>Importance</th>
<th>Millennials</th>
<th>Gen X</th>
<th>Boomers</th>
<th>Silent/Greatest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important to invest in transportation system to maintain and grow Virginia’s economy</td>
<td>81%</td>
<td>85%</td>
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<td>91%</td>
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<td>Importance of alternative transportation options to Virginia’s economy</td>
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<td>89%</td>
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<tr>
<td>Important to invest in alternative transportation to provide affordable travel options for work commuters</td>
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<td>84%</td>
<td>87%</td>
</tr>
</tbody>
</table>

Base sizes not shown due to space limitations.
2015 Internet Q60e: How important is it ...?
As Expected,
Across Alt. Mode Users

<table>
<thead>
<tr>
<th></th>
<th>Train</th>
<th>Carpool/Vanpool</th>
<th>Bus</th>
<th>Walk/Bike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important to invest in transportation system to maintain and grow Virginia’s economy</td>
<td>95%</td>
<td>88%</td>
<td>88%</td>
<td>91%</td>
</tr>
<tr>
<td>Importance of alternative transportation options to Virginia’s economy</td>
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<tr>
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<td>86%</td>
<td>94%</td>
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<tr>
<td>Important to invest in alternative transportation to provide affordable travel options for work commuters</td>
<td>91%</td>
<td>87%</td>
<td>84%</td>
<td>93%</td>
</tr>
</tbody>
</table>
But What About Drive-Alone Commuters and Teleworkers?
**Yes, Drive-Alone Commuters and Telework Users, Too**

<table>
<thead>
<tr>
<th></th>
<th>Drive alone</th>
<th>Telework</th>
<th>Train</th>
<th>Carpool/Vanpool</th>
<th>Bus</th>
<th>Walk/Bike</th>
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<td>88%</td>
<td>91%</td>
<td>87%</td>
<td>84%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Base sizes not shown due to space limitations.

2015 Internet Q60e: How important is it ... ?
If You Build It, They Will Come!
“How much more likely would you be to use public transit or to use it more often if each of the following public transit improvements were made in the area where you live?”
There Is Pent-Up Demand for More Transit Service

*Percentage of Respondents Who Say They Are More Likely to Use Public Transit or Use It More Often*

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Rating 4</th>
<th>Rating 5 - Much more likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus/train closer to my home</td>
<td>13%</td>
<td>28%</td>
</tr>
<tr>
<td>Bus/train operates more frequently</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td>Bus/train fare is less expensive</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>Bus/train makes fewer stops</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Bus/train operates earlier/later or on weekends</td>
<td>12%</td>
<td>18%</td>
</tr>
<tr>
<td>More parking available at bus stop/train station</td>
<td>12%</td>
<td>18%</td>
</tr>
<tr>
<td>Bus stop has shelter or protected seating area</td>
<td>11%</td>
<td>16%</td>
</tr>
</tbody>
</table>

2015 Internet Q43h: How much more likely would you be to use public transit or to use it more often if each of the following public transit improvements were made in the area where you live?
3. What This All Means
We Now Have Empirical Evidence That We Can Share with Our Stakeholders and Leaders
5 Key Messages

1

Virginia is becoming more multimodal, and transit is part of this success story.
Higher satisfaction ratings with work commute directly correlate to higher satisfaction ratings with Virginia’s transportation system. Higher ratings of Virginia’s transportation system drive higher quality of life ratings.
Those who commute to work by bus/train (versus other modes) are more satisfied with their work commutes and Virginia’s transportation system.
We need to get more people on board. This comes with little risk, as more people would ride the bus if more convenient transit services were available.
Investment in Virginia’s transportation system would be widely supported. The vast majority of Virginians, including “drive-alone commuters,” feel it is important that Virginia invest in its transportation system to maintain and grow Virginia’s economy. This includes alternative transportation options.
Invest in Transit Now
4. What to Do Next
1

Get a Copy of This Deck and Share It with Your Leadership Team
Look for a Regional Version of This Report Headed Your Way
Plan to Share Your Regional Report with Your Local Elected Leaders
Thank You!

John W. Martin
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