2017 UNIVERSITY OF VIRGINIA TRANSPORTATION SURVEY

Prepared for:

Department of Parking and Transportation

Prepared by:

University of Virginia
June 2017
2017 University of Virginia
Transportation Survey

CSR is a unit of the Weldon Cooper Center for Public Service at the University of Virginia

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CSR Director  Director of Research
Thanks to the Survey Committee!

- Rebecca White
  Director,
  Department of Parking and Transportation

- Jonathan Monceaux
  Transportation Demand Management Professional,
  Department of Parking and Transportation
Survey Design
Purpose of the Survey

- Assess the basic commuting practices of UVa employees
- Determine use and awareness of existing programs offered by Parking and Transportation
- Assess the modes of transportation utilized by employees and their satisfaction with these modes
- Explore factors that would allow for mode changes
- Identify obstacles to switching modes
- Analyze by demographic groups
Questionnaire Development

- Started with previous survey from 2014
- CSR prepared a draft of the questionnaire based on committee input
- Draft was edited and approved by the committee
- Questionnaire formatted for self-administration and programmed for web administration
Survey Topics

- Personal daily commute to work at UVa
- Primary mode of transportation and follow-up items
  - Single operating vehicle (including licensed motorcycle/moped)
  - Carpool/Vanpool
  - UVA/CTS/JAUNT Transit
  - Bicycle (including unlicensed motorcycle/moped)
  - Walking
- Within primary modes: interest in alternate modes
- Other transportation issues
- Demographics
Sample for the Survey

• Sample of UVa Faculty and Staff

• Sample was a disproportionate stratified sample
  – 400 Faculty and Administration
  – 400 Clerical and Technical
  – 400 Service and Maintenance

• Data are weighted for analysis to the population distribution by staff type, except where otherwise noted
How the Survey Was Conducted

• Voluntary and confidential
• Paper Version
  – All mailings by UVa Messenger Mail
  – Sent to all Service and Maintenance employees regardless of email status, and others without emails
    • Advance notification letter
    • First survey packet
    • Second survey packet to non-responders
• Web Version (Qualtrics survey software)
  – Advance notification letter by UVa Messenger Mail
  – Invitation email
  – Reminder email to non-respondents
  – Closeout email to non-respondents
Accuracy of the Survey

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2014</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>Completes</td>
<td>617</td>
<td>665</td>
<td>621</td>
</tr>
<tr>
<td>Response Rate</td>
<td>51%</td>
<td>56%</td>
<td>51%</td>
</tr>
<tr>
<td>Margin of error</td>
<td>+/- 4.5%*</td>
<td>+/- 4.3%</td>
<td>+/- 4.6%</td>
</tr>
</tbody>
</table>

There are other sources of error in surveys besides sampling error. These errors can be difficult or impossible to measure.
Paper and Web Versions

- Data collection period: May 2017 – July 2017
- Web completions – 538 (87% of completions)
  - Paper completions – 83 (13%)
Demographic Profile
Unweighted data based on self-reported answers to “primary affiliation” in the survey (2011), and on pre-assigned sample type in 2014 and 2017.
Primary Work Location

- Main Hosp.: 42%
- Central Gr.: 20%
- North Gr.: 6%
- Various: 6%
- Stadium: 6%
- Fontaine: 3%
- West Gr.: 2%
- Carruthers: 2%
- Northridge: 1%
- Old Ivy Rd.: 1%
- West Main St.: 1%
- Research Pk.: 0.8%
- Other: 10%

Unweighted Data
Survey Results

Personal Daily Commute to Work
Commuting Distance

- More than 50 mi.: 4%
- 31-50 mi.: 12%
- 21-30 mi.: 16%
- 11-20 mi.: 19%
- 6-10 mi.: 18%
- 0-5 mi.: 31%
Commuting Time

- 0-15 min.: 22%
- 16-30 min.: 39%
- 31-45 min.: 21%
- 46-60 min.: 11%
- More than 1 hr.: 7%
Normal Work Schedule and Variation

- Fairly Regular: 66%
- Varies Day-To-Day: 20%
- Varies Week-To-Week: 8%
- Rotating Shift Schedule: 2.0%
- Other: 4%
Number of Round-trip Commutes

- 0-4 times per week: 19%
- 5 times per week: 71%
- 6-10 times per week: 9%
- More than 10 times per week: 0.5%
Modes of Transportation to Work

- SOV: 82%
- Car/Vanpool: 6% (Primary), 8% (Secondary)
- Motorcycle: 0.4% (Primary), 1% (Secondary)
- JAUNT, UTS, or CAT: 2% (Primary), 6% (Secondary)
- Bicycle: 1% (Primary), 3% (Secondary)
- Walk: 3% (Primary), 6% (Secondary)
- Other: 4% (Primary), 4% (Secondary)
- None: 59%
Primary Modes that are not SOV

- Car/Vanpool: 6% (2017), 10% (2014), 12% (2011)
- Motorcycle: 0.4% (2017), 0.2% (2014), 1% (2011)
- JAUNT, UTS, or CAT: 2% (2017), 3% (2014), 5% (2011)
- Bicycle: 1% (2017), 2% (2014), 4% (2011)
- Walk: 3% (2017), 3% (2014), 3% (2011)
- Other: 3% (2017), 3% (2014), 4% (2011)
2017 Commute Distance/Time by Modes

Table shows mean distance and mean time

<table>
<thead>
<tr>
<th>Mode</th>
<th>Distance (miles)</th>
<th>Time (mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>19</td>
<td>34</td>
</tr>
<tr>
<td>Carpool</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Transit</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>Bicycle</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Walk</td>
<td>3</td>
<td>21</td>
</tr>
</tbody>
</table>
Frequency of Using Secondary Mode

Among those with a second mode
Primary and Secondary Modes

- 67% of SOV users have no secondary mode of transportation
- 37% of Car/Vanpoolers use SOV for secondary mode of transportation
- 33% of Bicyclists use SOV for secondary mode of transportation
- 50% of Transit users walk to work as a secondary mode of transportation
Awareness of Transportation Services

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ALTERNATE MODES OF TRANSPORTATION
Why SOV Users Have Not Tried Carpool/Vanpooling

- Uncomfortable: 27%
- Can't find: 17%
- Work Schedule: 51%
- Flexibility: 51%
- Other: 11%
Why SOV Users Have Not Tried Transit

- Unfamiliar w/ Schedule: 28%
- No access: 54%
- Too slow: 23%
- Flexibility: 37%
- Other: 16%
Why SOV Users Have Not Tried Bicycling (commute less than 4 miles)

- Too Far: 11%
- Unsafe: 50%
- No Parking: 4%
- Flexibility: 30%
- Other: 53%
Why SOV Users Have Not Tried Walking (commute less than 4 miles)

- Too Far: 77%
- Unsafe: 33%
- Flexibility: 44%
- Other: 26%
Satisfaction with Alternate Modes of Transportation

Among those using as primary mode:

- Car/Vanpool: Very Satisfied 69%, Somewhat Satisfied 16%, Somewhat Dissatisfied 8%, Very Dissatisfied 7.0%
- Transit: Very Satisfied 54%, Somewhat Satisfied 42%, Somewhat Dissatisfied 3%
- Bicycle: Very Satisfied 76%, Somewhat Satisfied 24%
- Walking: Very Satisfied 62%
Best Way to Learn About Modes of Transportation

More than one answer accepted for 17 paper surveys where respondents checked more than one. Percentages add to more than 100%.
Most Desired Improvement for Car/Vanpools

<table>
<thead>
<tr>
<th>Improvement</th>
<th>2017</th>
<th>2014</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Discount</td>
<td>56%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occasional Parking</td>
<td>36%</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Zipcar Credit</td>
<td>1%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Dedicated Parking</td>
<td></td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Sheltered parking</td>
<td></td>
<td></td>
<td>5%</td>
</tr>
</tbody>
</table>

- 2017: Year of the most recent data
- 2014: Year of previous data
- 2011: Year of the earliest data
Most Desired Improvement for Transit Users

- More Frequent Service: 46% (2017), 38% (2014), 24% (2011)
- Direct Routes: 11% (2017), 8% (2014), 7% (2011)
- Bus Stop Amenities: 52% (2017), 33% (2014), 11% (2011)
- Other: 13% (2017), 12% (2014), 3% (2011)
Most Desired Improvement for Bicyclists

- Covered Parking: 43% (2017), 21% (2014), 11% (2011)
- Showers: 25% (2017), 11% (2014), 5% (2011)
- Occasional Parking: 34% (2017), 58% (2014)
- Other: 16% (2017), 14% (2014)
Most Desired Improvement for Walkers

- Blinking Lights at Crosswalks: 23% (2017), 27% (2014), 3% (2011)
- Occasional Parking: 57% (2017), 53% (2014), 36% (2011)
- Other: 25% (2017), 14% (2014), 3% (2011)
- Sheltered parking: 8% (2017), 3% (2014), 3% (2011)
In 2011, an additional 8.8% of respondents; in 2014, 28% of respondents also indicated “Other” as a mode they would be willing to try.
How SOV Primary Users Get to Errands and Meetings

- Personal Vehicle: 78% (2017), 80% (2014), 79% (2011)
- Bike: 1% (2017), 2% (2014), 2% (2011)
- Walk: 47% (2017), 44% (2014), 35% (2011)
- State Vehicle: 6% (2017), 7% (2014), 5% (2011)
- Zipcar: 0% (2017), 0.1% (2014), 0% (2011)
- Other: 8% (2017), 9% (2014), 4% (2011)
How Car/Van Pool Primary Users Get to Errands and Meetings

- Personal Vehicle: 62% (2017), 50% (2014), 70% (2011)
- UTS/CAT/JAUNT: 24% (2017), 26% (2014), 17% (2011)
- Bike: 9% (2017), 2% (2014), 4% (2011)
- State Vehicle: 11% (2017), 9% (2014), 13% (2011)
- Zipcar: 0% (2017), 1% (2014), 0% (2011)
- Other: 7% (2017), 11% (2014), 0% (2011)
How Transit Primary Users Get to Errands and Meetings

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<table>
<thead>
<tr>
<th>Mode</th>
<th>2017</th>
<th>2014</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Vehicle</td>
<td>48%</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>UTS/CAT/JAUNT</td>
<td>29%</td>
<td>39%</td>
<td>78%</td>
</tr>
<tr>
<td>Bike</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Walk</td>
<td>79%</td>
<td>70%</td>
<td>58%</td>
</tr>
<tr>
<td>State Vehicle</td>
<td>0%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>Zipcar</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
How Bicycle Primary Users Get to Errands and Meetings

- Personal Vehicle: 20%, 24%, 19%
- UTS/CAT/JAUNT: 35%, 37%, 19%
- Bike: 54%, 63%, 74%
- Walk: 79%, 61%, 67%
- State Vehicle: 7%, 2%, 1%
- Zipcar: 0%, 0%, 0%
- Other: 18%, 3%, 0%

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Top Reasons to Use Alternative Modes of Transportation

- Costs Less
- Environmental Benefits
- Reduces Congestion
- Lifestyle
- Less Stressful
- Health Reasons
- Saves Time
- Other

2017: 63%  72%
2014: 66%  68%
2011: 53%  55%

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Top Reasons NOT to Use Alternative Forms of Transportation

- Need more flexibility: 77% (2017), 67% (2014), 67% (2011)
- Schedule of family/personal activities: 63% (2017), 69% (2014), 63% (2011)
- Commute takes longer: 64% (2017), 67% (2014), 67% (2011)
- Bad Weather: 24% (2017), 25% (2014), 22% (2011)
- Safety: 18% (2017), 20% (2014), 16% (2011)
- Unable to find someone to carpool: 12% (2017), 15% (2014), 18% (2011)
- Do not know the UTS/CAT routes: 8% (2017), 6% (2014), 6% (2011)
- Other: 11% (2017), 10% (2014), 8% (2011)
2017 University of Virginia Transportation Survey

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