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Overall Project Background & Research Objectives
Overall Project Background

- In order to achieve Arlington County’s goal of a 40/60 mode split by 2030, the County must reach and encourage every segment of the population to use alternatives to SOV travel.

- Arlington County Commuter Services (ACCS) recognizes that the Hispanic/Latino market is a significant segment in the County.

- Reaching this important segment requires more than simply translating existing materials. Rather, it requires understanding the unique information needs for creation of effective communications and messaging.

- To better meet the unique needs of this market, ACCS embarked on a grant supported program identified as the *TDM Marketing to the Hispanic Community Project*, which is intended to be added to the ACCS current marketing program.
Overall Project Background (con’t)

• This program will be a specific, grass-roots effort aimed at promoting transit, biking, walking, telecommuting and carpooling/vanpooling to the Hispanic community.

• The resulting campaign will craft effective messages that resonate with this user segment and will combine strategies that target where and how the Hispanic community receives information.

• Examples of specific campaign elements are presented on the next page.
Examples of Possible Campaign Elements

- Producing Spanish language educational materials on subjects such as introduction to transit, how to use a SmarTrip card, reading a bus schedule, and fares.
- Producing flyers to post in places frequented by the Hispanic community.
- Creating a website in Spanish with introductory transit information.
- Developing a short video in Spanish on riding transit, walking, and biking.
- Providing spokespersons for the local Spanish radio stations and newspapers to discuss transit.
- Working with local Hispanic groups and civic associations to get information to their members.
- Holding educational events to teach newer Hispanic immigrants how to use the bus and understand key English phrases.
- Working with the Hispanic roundtable to maximize effective communications in the community.
Research Support for the
*TDM Marketing to the Hispanic Community Project*

- This primary research initiative is designed to support the *TDM Marketing to the Hispanic Community Project* – to identify transportation needs and preferences; assess the level of awareness and familiarity with transportation options and related information services that advance and support those options; and marketing communication preferences of the Hispanic/Latino segment.

- The key findings from this research initiative will guide effective messaging and communications program outreach of the *TDM Marketing to the Hispanic Community Project* - to encourage greater use of non-SOV travel.
Research Objectives

• Define current travel patterns among the Hispanic/Latino market in Arlington County.
• Gauge awareness and perceptions of transportation options and related services in the County.
• Measure preferences for travel modes in and around the county.
• Determine barriers to non-SOV travel options.
• Identify motivators to non-SOV travel options.
• Evaluate effective communication messaging and vehicles.
Research Methodology
Research Methodology

• A 15-minute questionnaire was designed by Arlington County Commuter Services, SIR and LDA Consulting.
• Spanish and English versions of the survey were created for both online and in-person fielding methodologies.
• Each respondent was incentivized with a $5 CVS gift card.
• A total of 277 completed interviews were achieved after clearing duplicate records and removing unqualified non-Hispanic respondents.
• The convenience (rather than random sample) yields a margin of error of + 5.9 percentage points at 95% confidence level.
• Respondents live and/or work within the County.
• By design, all respondents were required to be of Hispanic or Latino heritage. Five respondents indicated they were White/Caucasian as well as Hispanic/Latino.
• The fieldwork was conducted from April through June of 2013.
Research Methodology (con’t)

- In order to evaluate differences in awareness, perceptions and usage of transportation modes and communication preferences, survey results were analyzed by user segments as follows:
  - Those recalling transportation ads (Q10)
  - Arlington County residents (calculated from D1)
  - Arlington County workers (calculated from D1)
  - Residency in AC - < 10 yrs, > 10yrs (calculated from D2)
  - Generation (calculated from D6)
  - Gender – Male, Female (D8)
  - Household size – 1 or 2, 3 or 4, 5+ (calculated from D9)
  - Employment status – FT or PT, not employed (D10)
  - Income categorized <$40K/$40K+ (calculated from D11)
  - Choice Riders (defined as having access to a personal vehicle and using public transit)(calculated from Q1 and Q6)
Survey Respondent Profile
Comparison to County Profile
Comparison of Age: Census and Survey

D6. In what year were you born?

- 18 - 29: ACS Data 31%, Survey Data 24%
- 30 - 44: ACS Data 39%, Survey Data 34%
- 45 - 64: ACS Data 25%, Survey Data 32%
- Over 65: ACS Data 5%, Survey Data 9%

Note: Adult population 18 and older only

Arlington County profile is based on 2011 American Community Survey n = 30,256

Survey data n = 272
Almost two-thirds of respondents are female, and are over-represented in the survey, as slightly fewer than half of Hispanic/Latino Arlington County residents are female.

Arlington County profile is based on 2012 Census population estimates. n = 34,011

Survey Respondent Profile

Arlington County Profile

D8. Are you:

- Male
- Female

Survey data
n = 273
Employment Status

According to 2011 ACS data, 74% of the Hispanic/Latino population in Arlington County is employed, directly comparable to survey data results.

D10. Are you currently: Please select all that apply.

- Employed full-time: 53%
- Employed part-time: 21%
- A student: 16%
- A stay-at-home parent: 8%
- Unemployed: 7%
- Retired: 5%
- Other: 3%
Comparison of Income: Census and Survey

Due to fielding methodology, survey sample is one of convenience rather than truly random, skewing towards lower income brackets. Further, respondents listed up to nine adult household members, resulting in suspect household income reporting.

Arlington County profile is based on 2011 American Community Survey

n = 272

ACS Data

Survey Data

D11. Was your 2012 total annual household income before taxes:
54% of survey respondents have at least some college education, compared to Arlington County statistics of 51%.

Arlington County profile is based on 2011 American Community Survey

n = 19,610

n = 272

D12. What is the highest level of education you have completed?
Due to fielding methodology, survey sample is one of convenience rather than truly random, and the data set skews slightly towards female and lower income brackets. Keep this in mind in reading this report.
“Transit Dependents”, “Choice Riders” and “Non-Riders”

In the U.S. transportation planning industry, in general, and the U.S. mass transit planning industry, in particular, a common segmentation lens is used to better understand riders and potential riders – the “transit choice rider” segment and the “transit dependent” or captive rider segment.

These two terms designate whether or not transit is an elective option or not based on a rider’s access to an automobile.

Additionally, this survey data is segmented and reported by transit “Non-Riders” in addition to “Choice Riders” and “Transit Dependents.”
Access to a Personal Vehicle

Q6. Do you currently have access to a personal vehicle, such as a car, truck or motorcycle?

More than half of respondents indicated they have access to a personal vehicle.

n = 273

57% Yes
43% No
Profile of Those Most Likely to Have Access to a Personal Vehicle

<table>
<thead>
<tr>
<th>Profile of Personal Vehicle Access (Q6)</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not live in Arlington County (D1) *</td>
<td>75%</td>
<td>54%</td>
</tr>
<tr>
<td>Work in Arlington County (D1)</td>
<td>69%</td>
<td>49%</td>
</tr>
<tr>
<td>Are middle age GenX or Boomers (D6)</td>
<td>66%</td>
<td>45%</td>
</tr>
<tr>
<td>Income of $40,000 or more (D11)</td>
<td>86%</td>
<td>48%</td>
</tr>
<tr>
<td>Not employed, either full or part time (D10)*</td>
<td>92%</td>
<td>64%</td>
</tr>
<tr>
<td>Male (D8)</td>
<td>66%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Interpret as 75% of survey respondents who live outside of Arlington County, compared to 54% of those who live in the County, have access to a personal vehicle.

* Note compromised validity due to small cell sizes.
Two-thirds of respondents (67%) indicated that they take transit at least once in a typical week.

Among those specifying the number of transit trips taken, the average is 10 (maximum 51).

Taking transit is defined as using: Metrobus, ART, Metrorail, Other Trains

Q1. In a typical week, how many trips do you make using each of the following modes of transportation?
Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose:

Note: Percent making at least one transit trip per typical week reported.
Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose:

- Infrequently (1 - 6 trips /week)
- Frequently (7+ trips /week)
- Unspecified

Note: Because 43% of respondents checked that they used a particular mode but did not indicate number of trips, a new variable was created for analysis purposes, reporting a percentage of respondents using each mode in a typical week.

n = 277
Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose. Note variable based on times per week use transit.

There is an opportunity to increase usage among infrequent Choice Riders.
One-Quarter of Those Surveyed Are Choice Riders

Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose. Note: Percent making at least one transit trip per typical week reported.

Q6. Do you currently have access to a personal vehicle such as a car, truck or motorcycle?

As expected, transit use is significantly higher among those who do not have access to a personal vehicle.

* Indicates statistically different results as determined by calculated ChiSquare.

76 respondents (27% of total sample) are Choice Riders, e.g. having access to a personal vehicle, but electing to use public transit.

n = 275 total varies by mode
Common Modes of Transportation Used

Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose. Note calculated variable of all typical modes including mode usage with unspecified frequency.

Choice Riders n = 76
Dependents n = 110
Non-riders n = 87

* Indicates statistically different results as determined by calculated ChiSquare.

Note: Chart shows percentage of people reporting they use a given mode 1+ times in typical week. Modes listed in order of total sample use.

With the exceptions of carpool passenger and biking, there are significant differences in mode choice among different rider segments.

Choice Riders, when not driving by themselves, are most likely to use Metrorail and Metrobus.
As there are a large number of survey respondents (67%) who are already using transit at least once per week and many (43%) who don’t have access to a car, the opportunity and primary target for the the TDM Marketing to the Hispanic Community Project may best be understood by using the U.S. transit industry’s traditional segmentation scheme of “transit choice riders” and “transit dependent or captive riders.” This report focuses more on the “choice rider” opportunity.
10 Key Findings

Organized around how this study can inform the *TDM Marketing to the Hispanic Community Project*
Compared to all residents, Arlington County’s Hispanic community is doing more to help the County’s move towards the TDM modal split goal of 40/60, utilizing non-SOV forms of travel including public transit, ridesharing and non-motorized modes (bike and walk).
According to the 2011 American Community Survey, almost half of Arlington County Hispanics are SOV travelers and an additional 31% use public transit as a primary means of transportation.
## Modes of Transportation Used in a Typical Week

<table>
<thead>
<tr>
<th>Mode of Transportation Used</th>
<th>% Using in a Typical Week</th>
<th>Average Trips per Week</th>
<th>Maximum Trips per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take Arlington Transit - ART (Green bus)</td>
<td>46%</td>
<td>6.83</td>
<td>51</td>
</tr>
<tr>
<td>Drive by myself in a personal vehicle</td>
<td>42%</td>
<td>9.74</td>
<td>40</td>
</tr>
<tr>
<td>Take the Metrobus (White bus)</td>
<td>41%</td>
<td>5.97</td>
<td>21</td>
</tr>
<tr>
<td>Walk</td>
<td>40%</td>
<td>8.13</td>
<td>99</td>
</tr>
<tr>
<td>Take Metrorail (Metro)</td>
<td>35%</td>
<td>4.95</td>
<td>15</td>
</tr>
<tr>
<td>Am the driver of a personal vehicle with another passenger or passengers*</td>
<td>15%</td>
<td>7.24</td>
<td>20</td>
</tr>
<tr>
<td>Am a passenger in a personal vehicle with one or more other people*</td>
<td>15%</td>
<td>5.16</td>
<td>20</td>
</tr>
<tr>
<td>Ride in a taxicab</td>
<td>10%</td>
<td>2.71</td>
<td>15</td>
</tr>
<tr>
<td>Bicycle</td>
<td>8%</td>
<td>8.35</td>
<td>50</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

* A total of 22% (n = 60) respondents indicated they carpool, as a driver, a passenger, or both.

Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose.
Through the *TDM Marketing to the Hispanic Community Project* and related outreach (especially earned media), position the County’s “Hispanic community” as a leader in utilizing non-SOV modes of transportation to advance Arlington County’s 40/60 goal and support the County’s outstanding quality of life.
There’s even more room to grow. Arlington County’s Hispanic community, especially choice riders, are open to actively changing travel patterns and use of non-SOV alternatives, namely bus and Metrorail. Even transit non-riders are interested in TDM.
Actions Taken in Past Six Months

- Asked friend/family/coworker about transportation options: 26%
- Started going to work earlier or later: 25%
- Tried/started/increased use of bus: 23%
- Changed route to work: 19%
- Tried/started/increased use of walking: 18%
- Tried/started/increased use of Metrorail, train: 17%
- Changed or reduced number of days I work: 9%
- Tried/started/increased use of bicycling: 7%
- Asked employer about telecommuting options: 5%
- Purchased alternative fuel vehicle: 2%
- Tried or started telecommuting/teleworking: 1%

Two-thirds of respondents (67%) indicated they had taken transportation habit-related action in the past six months, and those taking action tended to make two or more efforts.

Q7. In the past six months, have you taken any of the following actions? Please select all that apply.

Comparison of any actions taken in past six months by rider segments:
- Total: 67%
- Choice Riders: 76%
- Dependents: 66%
- Non-Riders: 62%

n = 276
Q7. In the past six months, have you taken any of the following actions? Please select all that apply.

- 30% of current non-riders have recently inquired about transportation options, and 62% have taken some sort of TDM related action.

Choice Riders are more likely than others to have recently taken any action regarding transportation. 
(76% versus 64%)

Choice Rider defined as having access to a personal vehicle (Q6) and taking public transit (Q1):
- Bus
- Metrorail
- Other Trains

Choice Rider n = 76
Dependents n = 110
Non-riders n = 87

* Indicates statistically different results as determined by calculated ChiSquare.
The TDM Marketing to the Hispanic Community Project holds promise. Hispanic residents in the County, especially Choice Riders, are willing to consider alternative travel modes. They should be treated as a primary opportunity market for the TDM Marketing to the Hispanic Community Project.
Low familiarity of transportation options and related services are key barriers to increasing use of alternative modes among Hispanic travelers.
Classical Marketing Model

- **Awareness**
  (of alternative modes)

- **Familiarity**
  (of alternative modes)
  Q14. How familiar are you with ________________________

- **Consideration**
  (of alternative modes)

- **Desired Behavior**
  (greater use of alternative modes)
Beyond Transit, Familiarity with Transportation Options Is Very Low

Q12. On a scale of 1 to 5, with 1 being “Not at all Familiar” and 5 being “Very Familiar”, how familiar are you with the following transportation options in Arlington County?

- **Walking**: 20% Very Familiar, 51% Familiar, 71% Total
- **Metrorail**: 19% Very Familiar, 51% Familiar, 70% Total
- **ART bus**: 16% Very Familiar, 52% Familiar, 68% Total
- **Metrobus**: 20% Very Familiar, 40% Familiar, 60% Total
- **Bicycling**: 14% Very Familiar, 20% Familiar, 34% Total
- **Carpool, vanpool, slugging**: 18% Total
- **Trains other than Metro**: 12% Total

**Recap of Q1 - typically used weekly modes of transportation:**
- ART = 46%
- Metrobus = 41%
- Walk = 40%
- Metrorail = 35%
- Carpool = 22%
- Bicycle = 8%

Familiarity with carpool, vanpool and slugging is significantly higher among those residents recalling transportation related informational messages.

Q12. On a scale of 1 to 5, with 1 being “Not at all Familiar” and 5 being “Very Familiar”, how familiar are you with the following transportation options in Arlington County?
Familiarity With Transportation Options by Rider Segment

Q12. On a scale of 1 to 5, with 1 being “Not at all Familiar” and 5 being “Very Familiar”, how familiar are you with the following transportation options in Arlington County?

- Walking
  - Non-Riders: 68% (40% responded “4” or “5”)
  - Transit Dependents: 68% (40% responded “4” or “5”)
  - Choice Riders: 89% (40% responded “4” or “5”)

- Metrorail
  - Non-Riders: 79% (40% responded “4” or “5”)
  - Transit Dependents: 79% (40% responded “4” or “5”)
  - Choice Riders: 87% (40% responded “4” or “5”)

- ART bus
  - Non-Riders: 54% (40% responded “4” or “5”)
  - Transit Dependents: 73% (40% responded “4” or “5”)
  - Choice Riders: 94% (40% responded “4” or “5”)

- Metrobus
  - Non-Riders: 55% (40% responded “4” or “5”)
  - Transit Dependents: 80% (40% responded “4” or “5”)
  - Choice Riders: 71% (40% responded “4” or “5”)

- Bicycling
  - Non-Riders: 41% (40% responded “4” or “5”)
  - Transit Dependents: 36% (40% responded “4” or “5”)
  - Choice Riders: 50% (40% responded “4” or “5”)

- Carpool, vanpool, slugging
  - Non-Riders: 29% (40% responded “4” or “5”)
  - Transit Dependents: 22% (40% responded “4” or “5”)
  - Choice Riders: 22% (40% responded “4” or “5”)

- Trains other than Metro
  - Non-Riders: 15% (40% responded “4” or “5”)
  - Transit Dependents: 12% (40% responded “4” or “5”)
  - Choice Riders: 12% (40% responded “4” or “5”)

Recap of Q1 - typically used weekly modes of transportation:
- ART = 46%
- Metrobus = 41%
- Walking = 40%
- Metrorail = 35%
- Carpool = 22%
- Bicycle = 8%

Percent responding “4” or “5” on a five point scale.

Choice Rider n = 76
Dependents n = 110
Non-riders n = 87

* Indicates statistically different results as determined by calculated ChiSquare.

Southeastern Institute of Research
Familiarity **With All** of Arlington County Transportation Services Is Low

Q13. And how familiar would you say you are with the following services in Arlington County? Again, please use a 1 to 5 scale where 1 is “Not at all Familiar” and 5 is “Very Familiar”.

Note: There are no significant differences in familiarity of Arlington County services among Choice Riders versus Transit Dependents.

- **WalkArlington**: 10% 16% 26%
- **Arlington County Commuter...**: 9% 17% 26%
- **Commuter Store**: 11% 13% 24%
- **BikeArlington**: 9% 14% 23%
- **CommuterPage.com**: 5% 7% 13%
- **Pike Ride**: 5% 8% 12%
- **Car-Free Diet**: 5% 5% 10%
- **Commuter Connections**: 9%
- **CommuterDirect.com**: 9%
- **Guaranteed Ride Home**: 5%

\[ n = \text{varies} 129 - 245 \]
Familiarity With Transportation Services by Rider Segment

Q13. And how familiar would you say you are with the following services in Arlington County? Again, please use a 1 to 5 scale where 1 is “Not at all Familiar” and 5 is “Very Familiar”.

Note: There are no significant differences in familiarity of Arlington County services among Choice Riders versus those in other rider segments.

Percent responding “4” or “5” on a five point scale.

Choice Rider n = 76
Dependents n = 110
Non-riders n = 87

Opportunities abound to increase awareness of transportation services in Arlington County among all rider segments.
Classic Marketing Model

**Awareness**
(of alternative modes)

**Familiarity**
(of alternative modes)

**Consideration**
(of alternative modes)

Q15. On a scale of 1 to 5, with 1 being “Not at all Likely” and 5 being “Very Likely”, how likely are you to use _______________ in the future?

**Desired Behavior**
(greater use of alternative modes)
Current and Past Use of Programs

Capital Bikeshare

Familiar, Currently Use
- 33%
- 67%
- 100%

Familiar, Used In Past
- 38%
- 12%
- 50%

Familiar, Never Used
- 12%
- 16%
- 28%

Car Sharing

Familiar, Currently Use
- 100%
- 100%

Familiar, Used In Past
- 15%
- 23%
- 38%

Familiar, Never Used
- 9%
- 7%
- 16%

Half (50%) of those who are past but not current users of CaBi and 38% of past Car Sharing Program users are likely to use the service again in the future.

Q14. How familiar are you with Capital Bikeshare? Q17. Car Sharing Programs?
Q15. On a scale of 1 to 5, with 1 being “Not at all Likely” and 5 being “Very Likely”, how likely are you to use Capital Bikeshare in the future? Q18. Car Sharing Programs?
Lack of familiarity of non-SOV options and their related services, rather than negative perceptions of options and services, may be one of the greatest barriers to greater use. Increased familiarity comes from word of mouth and organized communications outreach. The *TDM Marketing to the Hispanic Community Project* must focus on building familiarity of non-SOV options and their related services.
Among Hispanic travelers, every mode option has its own idiosyncratic barrier(s) to greater use.
Q9. What reasons, if any, do you have for not taking public transportation more often? Please select all that apply.

- I don’t care to take public transit: 32%
- I have never considered public transit: 20%
- I don’t have enough information to consider it: 19%
- My residence is not convenient to public transit: 16%
- My work/school is not convenient to public transit: 14%
- I don’t have a regular job schedule: 9%
- I live too far away to commute on public transit: 9%
- I don’t have a regular/fixed job location: 8%
- Travel by public transit takes longer than travel by other modes: 7%
- Public transit schedules do not fit my personal schedule: 6%
- I don’t care to take public transit: 6%
- I have never considered public transit: 7%
- I don’t have a regular/fixed job location: 9%
- My residence is not convenient to public transit: 9%
- My work/school is not convenient to public transit: 9%
- I don’t have a regular job schedule: 9%
- I live too far away to commute on public transit: 16%
- I don’t care to take public transit: 32%
- Travel by public transit takes longer than travel by other modes: 20%
- Public transit schedules do not fit my personal schedule: 19%
- I don’t have a regular job schedule: 14%
- I live too far away to commute on public transit: 11%
- I don’t have a regular/fixed job location: 8%
- Travel by public transit takes longer than travel by other modes: 7%
- Public transit schedules do not fit my personal schedule: 6%

Approximately one-quarter (24%) of respondents only take public transit. The biggest barrier to taking public transit is the perceived time it takes. This holds true for why Choice Riders do not take transit more often as well as why Non-riders do not take transit at all.

9% (n=18) of respondents have “Other” reasons for not taking public transportation. Of those, five reported that transit is too expensive and two stated that they have to drop children at school on the way to work.
Q9. What reasons, if any, do you have for not taking public transportation more often? Please select all that apply.

- Travel by public transit takes longer*
  - Non-Riders: 41%
  - Transit Dependents: 8%
  - Choice Riders: 28%

- Public transit does not fit my schedule*
  - Non-Riders: 27%
  - Transit Dependents: 11%
  - Choice Riders: 11%

- I don't have a regular job schedule
  - Non-Riders: 19%
  - Transit Dependents: 13%
  - Choice Riders: 12%

- I live too far away to commute on public transit*
  - Non-Riders: 22%
  - Transit Dependents: 5%
  - Choice Riders: 10%

- I don't have a regular/fixed job location
  - Non-Riders: 15%
  - Transit Dependents: 10%
  - Choice Riders: 15%

The best opportunities for ACCS to increase transit use lie in changing perceptions of travel time and assuring that schedules fit the needs of the market.

Barriers among Non-Riders include perceived travel time, commute distance and irregular job schedules.

Choice riders would ride more often if they felt the travel time was in line with SOV travel and would better fit personal schedules.

* Indicates statistically different results as determined by calculated ChiSquare.

Note: reasons listed in order of total sample results.

Choice Rider n = 74
Dependent n = 99
Non-rider n = 85
Q9. What reasons, if any, do you have for not taking public transportation more often? Please select all that apply.

* Indicates statistically different results as determined by calculated ChiSquare.

Note: reasons listed in order of total sample results.

52% of Transit Dependents and 10% (7) Choice Riders only take public transit.

Choice Rider n = 74
Dependent n = 99
Non-Rider n = 85

- I don't care to take public transit:
  - Non-Riders: 9%
  - Transit Dependents: 12%
  - Choice Riders: 1%

- I have never considered public transit:
  - Non-Riders: 11%
  - Transit Dependents: 4%
  - Choice Riders: 3%

- I don't have enough information:
  - Non-Riders: 5%
  - Transit Dependents: 4%
  - Choice Riders: 5%

- Not convenient to work/school:
  - Non-Riders: 6%
  - Transit Dependents: 4%
  - Choice Riders: 12%

- Not convenient to my residence:
  - Non-Riders: 4%
  - Transit Dependents: 7%

52% of Transit Dependents and 10% (7) Choice Riders only take public transit.
Perceived Lack of Safety Is a Barrier Associated with Both Biking and Walking

Q2. There are many factors that influence how safe you might feel as you travel in and around Arlington County. Factors like the behavior of other drivers, congestion on the roads, the mix of cars and bicycles on the road, the presence of pedestrians and many other issues potentially impact how safe you feel while traveling in Arlington. On a scale of 1 to 5, where 1 is “Not Very Safe” and 5 is “Extremely Safe”, overall how safe do you feel while driving a car, riding a bicycle or walking in Arlington?

Driving:
- 10% feel unsafe
- 73% feel safe

Walking:
- 19% feel unsafe
- 65% feel safe

Biking:
- 32% feel unsafe
- 43% feel safe

n = 229 Walk
- 150 Bike
- 197 Drive
Q2. There are many factors that influence how safe you might feel as you travel in and around Arlington County. Factors like the behavior of other drivers, congestion on the roads, the mix of cars and bicycles on the road, the presence of pedestrians and many other issues potentially impact how safe you feel while traveling in Arlington. On a scale of 1 to 5, where 1 is “Not Very Safe” and 5 is “Extremely Safe”, overall how safe do you feel while driving a car, riding a bicycle or walking in Arlington?

Almost one-quarter of transit dependent respondents feel unsafe while driving in the County.

*Total*  
- 10% Not Very Safe  
- 34% Very Safe  
- 40% Extremely Safe  
- 74%  

*Non-Riders*  
- 5% Not Very Safe  
- 30% Very Safe  
- 46% Extremely Safe  
- 76%  

*Transit Dependents*  
- 23% Not Very Safe  
- 30% Very Safe  
- 28% Extremely Safe  
- 58%  

*Choice Riders*  
- 6% Not Very Safe  
- 42% Very Safe  
- 40% Extremely Safe  
- 82%  

<table>
<thead>
<tr>
<th>Category</th>
<th>1 - Not Very Safe</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 - Extremely Safe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td>74%</td>
</tr>
<tr>
<td>Non-Riders</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td>76%</td>
</tr>
<tr>
<td>Transit Dependents</td>
<td>23%</td>
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<td></td>
<td>58%</td>
</tr>
<tr>
<td>Choice Riders</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
<td>82%</td>
</tr>
</tbody>
</table>
Q2. There are many factors that influence how safe you might feel as you travel in and around Arlington County. Factors like the behavior of other drivers, congestion on the roads, the mix of cars and bicycles on the road, the presence of pedestrians and many other issues potentially impact how safe you feel while traveling in Arlington. On a scale of 1 to 5, where 1 is “Not Very Safe” and 5 is “Extremely Safe”, overall how safe do you feel while driving a car, riding a bicycle or walking in Arlington?

Choice Riders, those electing to take public transit although not out of necessity, are significantly more comfortable than other rider segments walking within the County.
Q2. There are many factors that influence how safe you might feel as you travel in and around Arlington County. Factors like the behavior of other drivers, congestion on the roads, the mix of cars and bicycles on the road, the presence of pedestrians and many other issues potentially impact how safe you feel while traveling in Arlington. On a scale of 1 to 5, where 1 is “Not Very Safe” and 5 is “Extremely Safe”, overall how safe do you feel while driving a car, riding a bicycle or walking in Arlington?
Reasons for Feeling Unsafe While Traveling in Arlington County

Q2a. Are there any particular reasons why you marked that you feel unsafe while traveling in Arlington County?

- “I’ve seen too many close calls with drivers almost hitting bicyclists and pedestrians. Drivers are impatient and rude.”
- “[There are] not enough pedestrian friendly streets and continuous paths...a growing number but still lacking.”
- “I don’t like to drive my car down [named streets] for fear of damaging my car because of the bad maintenance.”
- “Traffic has grown too much. Bikers abound and most of them pass pedestrians without announcing themselves.”
Common Themes for Why People Feel Unsafe Driving, Biking and Walking in Arlington County

Q2a. Are there any particular reasons why you marked that you feel unsafe while traveling in Arlington County?

General
High traffic density. Nighttime safety concerns.

Walking
Bikers pass without warning.

Biking
Drivers do not respect rules of the road. Bikers cross traffic without warning.

Driving
Poor road maintenance results in damage to cars.

n = 19
To be most effective, the *TDM Marketing to the Hispanic Community Project* must also address the barrier(s) for each mode that ACCS can control. For transit, this includes addressing the perceived travel time and fine-tuning schedules to meet travel needs. For biking and walking this means improving safety or the perception of safety through educational programs.
Recall of communication of transportation options and services among Hispanic residents drives their familiarity and consideration ( Likelihood of Use ) of alternatives to SOV travel.
Q10. Do you recall seeing or hearing any informational messages recently for transportation or transportation services in Arlington County?

27% of all survey respondents (54 respondents) recalled seeing or hearing transportation related messages. Recall was similar across all rider segments.

Current Recall of Transportation Marketing Messages Is Low

- **Choice Riders**
  - 26% Recall ads
  - 20 respondents

- **Transit Dependents**
  - 26% Recall ads
  - 27 respondents

- **Non-Riders**
  - 28% Recall ads
  - 25 respondents

Choice Rider n = 76
Dependents n = 110
Non-riders n = 87
Q10. Do you recall seeing or hearing any informational messages recently for transportation or transportation services in Arlington County?  Q14. How familiar are you with Capital Bikeshare (CaBi)?  Q15. On a scale of 1 to 5, with 1 being “Not at all Likely” and 5 being “Very Likely” how likely are you to use Capital Bikeshare in the future?

Recall of transportation related messages in Arlington County lifts familiarity of CaBi by 18% and lifts likelihood of future use by 10%.
Recall of transportation related messages in Arlington County lifts familiarity of Car Share programs by 9% and lifts likelihood of future use by 19%.

Q10. Do you recall seeing or hearing any informational messages recently for transportation or transportation services in Arlington County? Q17. How familiar are you with Car Sharing Programs? Q18. On a scale of 1 to 5, with 1 being “Not at all Likely” and 5 being “Very Likely” how likely are you to use Car Sharing Programs in the future?
Q12. On a scale of 1 to 5, with 1 being “Not at all Familiar” and 5 being “Very Familiar”, how familiar are you with the following transportation options in Arlington County?

For the most part, there is no correlation between recall of transportation related messages and familiarity with transportation options in Arlington County.

n = varies 129 - 242
Familiarity With Transportation Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Total</th>
<th>Do Not Recall Ads</th>
<th>Recall Ads</th>
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<tbody>
<tr>
<td>WalkArlington*</td>
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<td></td>
</tr>
<tr>
<td>ACCS*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Commuter Store*</td>
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<td></td>
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</tr>
<tr>
<td>BikeArlington*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CommuterPage.com*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pike Ride*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Car-Free Diet*</td>
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<td></td>
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<tr>
<td>Commuter Connections</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CommuterDirect.com</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guaranteed Ride Home</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percent responding “4” or “5” on a five point scale.

Note:
Transportation options listed in order of familiarity among total sample.

* Indicates statistically different results as determined by calculated ChiSquare.

While ad messaging may not be resonating about transportation options in the County, there is significant correlation between recall of transportation related messaging and familiarity with transportation services in Arlington County.

Q13. And how familiar would you say you are with the following services in Arlington County?

Again, please use a 1 to 5 scale where 1 is “Not at all Familiar” and 5 is “Very Familiar”.

n =
**Perceived Benefits of Non-SOV Travel**

Q8. On a scale of 1 to 5, where 1 is “Do not Agree at All” and 5 is “Agree Totally”, to what extent would you say you agree or disagree that taking a transportation trip in a way other than driving alone:

- **Helps the environment**
- **Gives you the health benefits of getting exercise**
- **Saves money**
- **Avoids stress**
- **Gives you the opportunity to use time wisely**
- **Offers the opportunity for social interaction with others***
- **Eliminates the need to have a car**
- **Offers a better chance of on-time arrival at work**

*Indicates statistically different results as determined by calculated ChiSquare.

Note: Benefits of non-SOV travel listed in order among total sample.

Percent responding “4” or “5” on a five point scale.

With one exception, respondents consider potential benefits of non-SOV travel similarly regardless of whether or not they have been exposed to ad messaging.

---

n = varies

* Indicates statistically different results as determined by calculated ChiSquare.
The *TDM Marketing to the Hispanic Community Project* can make a difference. It must be funded and executed correctly – the right messages, placed in the right media, at the right volume.
The *TDM Marketing to the Hispanic Community Project* must include the right key message points that encourage greater use of non-SOV modes.
In traditional rideshare marketing, encouraging greater use of non-SOV modes typically includes key messaging that advances both *benefits* of using non-SOV modes (the why or what’s in it for me – “WIIFM”) and *practical advice* on how to use the modes (the how).
### Respondents See Many Benefits of Non-SOV Travel:

<table>
<thead>
<tr>
<th>Benefit</th>
<th>1 - Do Not Agree At All</th>
<th>2</th>
<th>3 - Neutral</th>
<th>4</th>
<th>5 - Agree Totally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helps the environment</td>
<td>10%</td>
<td>20%</td>
<td>57%</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Gives you the health benefits of getting exercise</td>
<td>15%</td>
<td>27%</td>
<td>41%</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Avoids stress</td>
<td>16%</td>
<td>22%</td>
<td>43%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>Saves money</td>
<td>13%</td>
<td>24%</td>
<td>41%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>Gives you the opportunity to use time wisely</td>
<td>17%</td>
<td>23%</td>
<td>38%</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>(read, nap, work, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offers the opportunity for social interaction with others</td>
<td>16%</td>
<td>22%</td>
<td>38%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Eliminates the need to have a car</td>
<td>32%</td>
<td>14%</td>
<td>36%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Offers a better chance of on-time arrival at work</td>
<td>28%</td>
<td>22%</td>
<td>26%</td>
<td>48%</td>
<td></td>
</tr>
</tbody>
</table>

Q8. On a scale of 1 to 5, where 1 is “Do not Agree at All” and 5 is “Agree Totally”, to what extent would you say you agree or disagree that taking a transportation trip in a way other than driving alone:

All rider segments – Choice Riders, Transit Dependents and Non-Riders - agree similarly with the benefits of non-SOV travel.

n = varies 229 - 244
Specific Information Needed About Transportation Options

Q21. Specifically, what information do you feel you need about transportation options in Arlington County?

Among those needing transportation related information, most need ART bus schedules and routes.

All differences are statistically different results as determined by calculated ChiSquare.

Those not needing any information:
- Total: 20%
- Choice: 21%
- Dependent: 11%
- Non-rider: 30%

All Respondents
- n = 254
- Those Needing Info. n = 181

0% 20% 40% 60% 80% 100%

ART bus schedules, routes
- All Respondents: 46%
- Those Needing Any Information: 70%

Metrobus schedules, routes
- All Respondents: 36%
- Those Needing Any Information: 54%

Metro schedules, routes
- All Respondents: 32%
- Those Needing Any Information: 48%

Information about Capital Bikeshare
- All Respondents: 20%
- Those Needing Any Information: 30%

Carpool, vanpool, slugging
- All Respondents: 20%
- Those Needing Any Information: 31%

I do not need any transportation information
- All Respondents: 0%
- Those Needing Any Information: 20%

Other
- All Respondents: 1%
- Those Needing Any Information: 9%
Q21. Specifically, what information do you feel you need about transportation options in Arlington County?

**Transportation Information Needed Among Those Needing Info by Rider Type**

- **ART bus schedules, routes**:
  - Non-Riders: 26%
  - Transit Dependents: 49%
  - Choice Riders: 61%

- **Metrobus schedules, routes**:
  - Non-Riders: 19%
  - Transit Dependents: 44%
  - Choice Riders: 43%

- **Metrorail schedules, routes**:
  - Non-Riders: 22%
  - Transit Dependents: 34%
  - Choice Riders: 41%

- **Information about Capital Bikeshare**:
  - Non-Riders: 24%
  - Transit Dependents: 16%
  - Choice Riders: 21%

- **Carpool, vanpool, slugging**:
  - Non-Riders: 16%
  - Transit Dependents: 26%
  - Choice Riders: 21%

**Results**

- **Those needing info.**
  - Total n = 181
  - Choice Rider n = 54
  - Dependents n = 78
  - Non-riders n = 49

Even those who categorize themselves as non-transit riders feel they need information about transit options.

All riders, whether by choice or by dependency, need schedules and routes for bus and Metrorail.

* Indicates statistically different results as determined by calculated ChiSquare.
Some of these key message points are getting through with ACCS’ current communication outreach efforts – both the why and how.

Q10. Do you recall seeing or hearing any informational messages recently for transportation or transportation services in Arlington County? Q11a. If yes, what did those messages say?
Main Themes of Messages Seen or Heard

- “See something, say something”
- Changes to schedules and routes
- Changes to Columbia Pike
- Being “green”
- Save money
- Modes and options
- Variety of services
- Safety, especially at night
- Hybrid buses
- SmarTrip benefits
- Informing for better service

Q10. Do you recall seeing or hearing any informational messages recently for transportation or transportation services in Arlington County? Q11a. If yes, What did those messages say?

n = 54
However, the “Benefit” Side of Messaging (the Why or “WIIFM”) May Need More Weight as They Are Not Showing Up as Much

Q10. Do you recall seeing or hearing any informational messages recently for transportation or transportation services in Arlington County? Q11a. If yes, What did those messages say?

Note: There is no difference in recall among Choice Riders versus Transit Dependents and Non-Riders.
The *TDM Marketing to the Hispanic Community Project* messaging, especially to appeal to Choice Riders, should include the benefits of helping the environment, improving one’s health, reducing stress, saving money, as well as practical information on transit schedules.
The *TDM Marketing to the Hispanic Community Project* must utilize the right media channels to reach Hispanic Choice Riders.
Q20. What are the most effective ways for Arlington County to communicate to you about transportation options in and around the County? Please rate the following on a scale of 1 to 5, where 1 is “Not at all Preferred” and 5 is “Most Preferred”.
Q20. What are the most effective ways for Arlington County to communicate to you about transportation options in and around the County? Please rate the following on a scale of 1 to 5, where 1 is “Not at all Preferred” and 5 is “Most Preferred”.

<table>
<thead>
<tr>
<th>Method</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>18%</td>
<td>58%</td>
<td>76%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posters in Metro stations and bus stops</td>
<td>20%</td>
<td>51%</td>
<td>71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications at community centers or events</td>
<td>21%</td>
<td>47%</td>
<td>68%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ads in local newspapers</td>
<td>20%</td>
<td>45%</td>
<td>65%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>16%</td>
<td>49%</td>
<td>65%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>21%</td>
<td>41%</td>
<td>62%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brochures at information kiosks</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mailings to home or office</td>
<td>15%</td>
<td>44%</td>
<td>59%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note that surveys were fielded in community spaces and events, potentially affecting the response to this question.
Preferred Methods of Communication About Transportation Options (2 of 2)

Q20. What are the most effective ways for Arlington County to communicate to you about transportation options in and around the County? Please rate the following on a scale of 1 to 5, where 1 is “Not at all Preferred” and 5 is “Most Preferred”.

- Website: 19% 37% 56%
- Communications through faith-based organizations: 19% 36% 55%
- Posters and advertisements at my place of work: 19% 36% 55%
- Posters and advertisements at the building where I live: 18% 36% 54%
- Text messages: 15% 38% 53%
- Other: 21% 24% 45%
- Social media (twitter, Facebook, LinkedIn): 10% 35% 45%
- YouTube: 13% 26% 39%

In considering preferred communication overall, Hispanic residents rely on numerous vehicles, indicating preference for an average of nine ways of receiving information and messages.
Q20. What are the most effective ways for Arlington County to communicate to you about transportation options in and around the County? Please rate the following on a scale of 1 to 5, where 1 is “Not at all Preferred” and 5 is “Most Preferred”.

While there are differences in communication preferences between Choice Riders and Transit Dependents, the top three preferred channels for Choice Riders are posters in Metro stations and bus stops, television and ads in local newspapers.

Percent responding “4” or “5” on a five point scale.

n = varies
Choice Rider n = 76
Q20. What are the most effective ways for Arlington County to communicate to you about transportation options in and around the County? Please rate the following on a scale of 1 to 5, where 1 is “Not at all Preferred” and 5 is “Most Preferred”.

<table>
<thead>
<tr>
<th>Method</th>
<th>Choice Riders</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brochures at information kiosks</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Posters and advertisements at my place of work</td>
<td>56%</td>
<td>53%</td>
</tr>
<tr>
<td>Text messages</td>
<td>52%</td>
<td>55%</td>
</tr>
<tr>
<td>Posters and advertisements at the building where I live</td>
<td>51%</td>
<td>57%</td>
</tr>
<tr>
<td>Communications through faith-based organizations</td>
<td>49%</td>
<td>58%</td>
</tr>
<tr>
<td>Social media (twitter, Facebook, LinkedIn)</td>
<td>49%</td>
<td>43%</td>
</tr>
<tr>
<td>YouTube</td>
<td>36%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Percent responding “4” or “5” on a five point scale.
Stated Media Preferences Are Consistent with Where Current Transportation Messages Were Seen or Heard

<table>
<thead>
<tr>
<th>Top Mentions Regarding Where Messages Were Seen/Heard</th>
<th>Number of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buses and Bus Stops</td>
<td>15</td>
</tr>
<tr>
<td>TV</td>
<td>11</td>
</tr>
<tr>
<td>Community Spaces (Centers, Libraries, Schools)</td>
<td>9</td>
</tr>
<tr>
<td>Radio</td>
<td>3</td>
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<tr>
<td>Newspaper</td>
<td>3</td>
</tr>
<tr>
<td>Metro</td>
<td>3</td>
</tr>
</tbody>
</table>

Q11b. If yes, where did you see or hear those messages?

Note that surveys were fielded in community spaces, potentially affecting the response to this question.
While Choice Riders have slightly different preferences for media channels than do other rider segments, the most preferred media channels to reach Choice Riders for the *TDM Marketing to the Hispanic Community Project* are posters at Metrorail and bus stops and television. Note: TV may be affordable as Hispanic cable TV is relatively inexpensive and may be available on county basis.
The majority of Transit Dependents prefer marketing information only in Spanish (55%), compared to one-quarter of Non-Riders (26%) and one-fifth (19%) of Hispanic Choice Riders who share this preference.
Q22. Do you prefer to get information:

- English: 13%
- Either Language: 53%
- Spanish: 34%

Percent of the market who would be effectively communicated to in:
- Spanish: 87%
- English: 47%

$n = 274$
Choice Rider $n = 76$
Language Preference for Information
Transit Dependent versus Choice Riders

Q22. Do you prefer to get information:

- **English**:
  - Non-Riders: 40%
  - Transit Dependents: 23%
  - Choice Riders: 37%

- **Spanish**:
  - Non-Riders: 26%
  - Transit Dependents: 55%
  - Choice Riders: 19%

- **Either Language**:
  - Non-Riders: 38%
  - Transit Dependents: 25%
  - Choice Riders: 37%

Many Transit Dependent Riders are relying on receiving transportation related information in their native tongue.

Total n = 274
Transit Dependent n = 199
Choice Rider n = 75
The TDM Marketing to the Hispanic Community Project should be produced in Spanish and English to reach both groups. English should be included, perhaps to a lesser degree, as 13% of the people in this study prefer receiving transportation information in English only.
Some respondents want to remain involved in the TDM Marketing to the Hispanic Community Project.
Arlington County is continually striving to improve transportation services in the area and we want you to be a part of this important process.

You have the opportunity to join a panel to share your opinions with us through short email surveys. We would not use your email for any other purpose – just periodic feedback.

Would you be interested in possibly participating in such a panel?
38% of Respondents (n = 104) Indicated Interest in Participating in a Research Panel

Arlington County is continually striving to improve transportation services in the area and we want you to be a part of this important process. You have the opportunity to join a panel to share your opinions with us through short email surveys. We would not use your email for any other purpose – just periodic feedback. Would you be interested in possibly participating in such a panel?

Note that this interest in further engagement with ACCS is significant, particularly in light of the understanding that this audience tends to be wary of publicizing personal information.
### Panel Potential Membership Makeup

<table>
<thead>
<tr>
<th>Rider Categories</th>
<th></th>
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<tbody>
<tr>
<td>Choice Riders</td>
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<td></td>
</tr>
<tr>
<td>Transit Dependents</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Non-riders</td>
<td>29</td>
<td></td>
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<table>
<thead>
<tr>
<th>Household Size</th>
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</thead>
<tbody>
<tr>
<td>1 or 2 People</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>3 or 4 People</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>5 or More People</td>
<td>25</td>
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<table>
<thead>
<tr>
<th>Generation</th>
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<tbody>
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<td>Millennial</td>
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<td>GenX</td>
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</tr>
<tr>
<td>Boomer</td>
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<tr>
<td>Silent</td>
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<table>
<thead>
<tr>
<th>Transit Use Frequency</th>
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<tbody>
<tr>
<td>1 - 6 times /wk</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>7+ times /wk</td>
<td>34</td>
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<td>Unspecified</td>
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<thead>
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<th>Connection to AC</th>
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<tbody>
<tr>
<td>Live in AC</td>
<td>95</td>
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</tr>
<tr>
<td>Work in AC</td>
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<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>39</td>
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</tr>
<tr>
<td>Female</td>
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<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Employed</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Employed PT</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Employed FT</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

Q54. Are you interested in joining such a panel?

Counts (frequencies) of those interested in panel participation by selected demographic criteria.

Note that there are overlaps (double counts) in the Connection to AC and Employment categories, as some respondents both live and work in the county and some respondents are employed part-time as well as being employed full-time and/or being a student.
Immediately thank these volunteers. Involve them in the development of the *TDM Marketing to the Hispanic Community Project* final plan and communication program materials. Tap them as program ambassadors. Engage them in the program rollout.
Key measures in this report can be used to measure the effectiveness (ROI) of the TDM Marketing to the Hispanic Community Project
**Performance Measures**

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>Current Use</th>
<th>Suggested Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV Traveler</td>
<td>42%</td>
<td>&lt;40%</td>
</tr>
<tr>
<td>Transit User</td>
<td>67%</td>
<td>65%+</td>
</tr>
<tr>
<td>Frequent Transit User (7+ trips /week)</td>
<td>34%</td>
<td>50%+</td>
</tr>
<tr>
<td>Non-Motorized Modes</td>
<td>40%</td>
<td>50%+</td>
</tr>
</tbody>
</table>

* For comparison purposes, the sample methodology used in future waves must come as close as possible to the one deployed for this study.
Implication

Build in specific, quantifiable objectives into the *TDM Marketing to the Hispanic Community Project* final plan and a follow-up tracking study at the appropriate time (perhaps two to three years from now).
Appendix A
Survey Respondent Profile
D1. Do you:

- Live in AC: 88%
- Work in AC: 40%
- Live and Work in AC: 28%
- Other: 12%

Total Connections:

- Live in AC: 88%
- Work in AC: 40%
- Live and Work in AC: 28%
- Other: 12%

n = 274
D2. If you live in Arlington County, how long have you lived in the County?

Survey respondents have lived in Arlington County an average of 12 years.

Slightly over half (53%) of resident respondents have lived in the county 10 or fewer years, while 47% report residency of over 10 years.

<table>
<thead>
<tr>
<th>Duration</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>8%</td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>25%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>26%</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>21%</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>20%</td>
</tr>
</tbody>
</table>

n = 233
D3. If you live in Arlington County, where do you live? Please select only one.

Precoded areas of the County with fewer than 5 mentions are included in “Other” as follows:

- Clarendon 1
- Crystal City 1
- Pentagon City 2
- Virginia Square 1
- Westover 4

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia Pike</td>
<td>41%</td>
</tr>
<tr>
<td>Buckingham</td>
<td>16%</td>
</tr>
<tr>
<td>Ballston</td>
<td>14%</td>
</tr>
<tr>
<td>Shirlington</td>
<td>12%</td>
</tr>
<tr>
<td>Courthouse</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>Rosslyn</td>
<td>3%</td>
</tr>
<tr>
<td>Lee Highway</td>
<td>2%</td>
</tr>
</tbody>
</table>

n = 237
A total of 31 respondents (11.2%) indicated they live outside of Arlington County, but were qualified to participate in the research as they work in Arlington County.

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfax County, VA</td>
<td>20</td>
</tr>
<tr>
<td>Prince William County, VA</td>
<td>4</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>3</td>
</tr>
<tr>
<td>Montgomery County, MD</td>
<td>2</td>
</tr>
<tr>
<td>Loudon County, VA</td>
<td>1</td>
</tr>
<tr>
<td>Prince Georges County, MD</td>
<td>1</td>
</tr>
</tbody>
</table>

n = 31

A total of 31 respondents (11.2%) indicated they live outside of Arlington County, but were qualified to participate in the research as they work in Arlington County.
7 in 10 survey respondents live within 3 blocks of a Metro or bus stop.

“Other” responses (approx. miles):
- 1.1
- 1.2
- 1.4
- 2
- 2.5

D4. How far from your home is the closest bus or Metro stop?

70% 3 or fewer blocks
- 15% 4 to 5 blocks
- 6% 6 to 7 blocks
- 4% 8 - 10 blocks
- 3% More than 10 blocks
- 2% Don't Know

7 in 10 survey respondents live within 3 blocks of a Metro or bus stop.

n = 274

Southeastern Institute of Research
D6. In what year were you born? (Note: Age calculated from year born)

3 respondents under the age of 18 completed the survey on behalf of their parents.

3 respondents are in their 90's.

The average respondent age is 42.

n = 255
For the purpose of data analysis, respondents were categorized into generational cohorts as follows:

- **Millennial** (1983+)
- **GenX** (1965 – 1982)
- **Boomer** (1946 – 1964)
- **Silent** (1945 and older)

In some cases, generational differences are reported in collapsed categories of younger vs older.

**D6. In what year were you born?** (Note: generational calculated from D6)

- **28%** Millennial (30 and younger)
- **44%** GenX (31 to 49)
- **21%** Boomer (50 to 67)
- **8%** Silent (68 and older)

n = 255
Southeastern Institute of Research

Including yourself, how many people currently reside in your household: # Adults aged 21 and older, # Children under 21 (Note: Total household size calculated).

Respondent households have between one and nine adults (average of 2.7) and up to four children (average of 1.8). Two households report having 12 members.

n = 249

D9. Including yourself, how many people currently reside in your household: # Adults aged 21 and older, # Children under 21 (Note: Total household size calculated).
D9. Including yourself, how many people currently reside in your household: # Children under 21.

- None: 49%
- One: 22%
- Two: 19%
- Three: 8%
- Four: 3%

Half of respondents report having no children in their households.
According to 2011 ACS data, 74% of the Hispanic/Latino population in Arlington County is employed.

D10. Are you currently: Please select all that apply.

- Employed full-time: 53%
- Employed part-time: 21%
- Student: 16%
- Stay-at-home parent: 8%
- Unemployed: 7%
- Retired: 5%
- Other: 3%

"Other" responses include four respondents who specified that they are self-employed.

2011 American Community Survey
n = 23,879

n = 272
Household Income

D11. Was your 2012 total annual household income before taxes:

- Less than $20,000: 39% (n = 277)
- $20,000 to $39,999: 21%
- $40,000 to $59,999: 11%
- $60,000 to $79,999: 6%
- $80,000 to $99,999: 4%
- $100,000 or more: 6%
- No response: 13%

For analysis purposes, household income was categorized into:

- Under $40,000: 60% (n = 166)
- $40,000+: 29% (n = 80*)

*Despite the small sample size, this better represents AC total Hispanic population than a division at $20,000 would.
Cautionary Note: Household Income

When viewing household income by household size, it becomes apparent some respondents reported total household income while others reported as individuals. As there are up to nine adults in a household, there is likely more than one wage earner in numerous households.

n = 277

D11. Was your 2012 total annual household income before taxes: Household size calculated from D9, sum of adults and children in household.
D12. What is the highest level of education you have completed?

- Less than high school: 17%
- High school or equivalent: 20%
- Some college: 10%
- Technical or associate degree: 12%
- Bachelors degree: 17%
- Graduate degree: 16%
- No response: 8%

n = 277
Appendix B
Response Detail by User Segments
## Modes of Transportation Used in a Typical Week by Residents and Workers

<table>
<thead>
<tr>
<th>Mode of Transportation Used</th>
<th>% of Total Sample</th>
<th>% of AC Residents</th>
<th>% of AC Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take Arlington Transit - ART (Green bus)</td>
<td>46%</td>
<td>62%*</td>
<td>47%**</td>
</tr>
<tr>
<td>Drive by myself in a personal vehicle</td>
<td>42%</td>
<td>46%*</td>
<td>61%**</td>
</tr>
<tr>
<td>Take the Metrobus (White bus)</td>
<td>41%</td>
<td>53%</td>
<td>52%</td>
</tr>
<tr>
<td>Walk</td>
<td>40%</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>Take Metrorail (Metro)</td>
<td>35%</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td>Am the driver of a personal vehicle with another passenger or passengers</td>
<td>15%</td>
<td>20%</td>
<td>27%**</td>
</tr>
<tr>
<td>Am a passenger in a personal vehicle with one or more other people</td>
<td>15%</td>
<td>20%</td>
<td>23%</td>
</tr>
<tr>
<td>Ride in a taxicab</td>
<td>10%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>8%</td>
<td>12%</td>
<td>18%**</td>
</tr>
</tbody>
</table>

* Is significantly different from non-residents, ** is significantly different from non-workers

Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose. Note calculated variable of all typical modes including mode usage with unspecified frequency. Residents and workers calculated from D1.

"Other" modes used include:
- Telecommuting
- Taking a train other than Metro
- Motorcycle, Scooter or Moped

Note that residents who also work in the county are counted in each category.

n = 275 total
240 residents
109 workers
Modes of Transportation Used in a Typical Week by Length of Residency

<table>
<thead>
<tr>
<th>Mode of Transportation Used</th>
<th>% of Total Sample</th>
<th>% &lt;10 yr Residents</th>
<th>% &gt; 10 yr Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take Arlington Transit - ART (Green bus)</td>
<td>46%</td>
<td>68%</td>
<td>63%</td>
</tr>
<tr>
<td>Drive by myself in a personal vehicle</td>
<td>42%</td>
<td>43%</td>
<td>52%</td>
</tr>
<tr>
<td>Take the Metrobus (White bus)</td>
<td>41%</td>
<td>60%</td>
<td>51%</td>
</tr>
<tr>
<td>Walk</td>
<td>40%</td>
<td>50%</td>
<td>51%</td>
</tr>
<tr>
<td>Take Metrorail (Metro)</td>
<td>35%</td>
<td>47%</td>
<td>45%</td>
</tr>
<tr>
<td>Am the driver of a personal vehicle with another passenger or passengers</td>
<td>15%</td>
<td>19%</td>
<td>26%</td>
</tr>
<tr>
<td>Am a passenger in a personal vehicle with one or more other people</td>
<td>15%</td>
<td>25%</td>
<td>14%</td>
</tr>
<tr>
<td>Ride in a taxicab</td>
<td>10%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>8%</td>
<td>16%</td>
<td>9%</td>
</tr>
</tbody>
</table>

No significant differences in mode usage by length of residency in Arlington County.

Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose. Note calculated variable of all typical modes including mode usage with unspecified frequency. Residency tenure categories calculated from D2.
### Modes of Transportation Used in a Typical Week by Income

<table>
<thead>
<tr>
<th>Mode of Transportation Used</th>
<th>% of Total Sample</th>
<th>% &lt; $40K</th>
<th>% &gt; $40K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take Arlington Transit - ART (Green bus)</td>
<td>46%</td>
<td>61%*</td>
<td>40%*</td>
</tr>
<tr>
<td>Drive by myself in a personal vehicle</td>
<td>42%</td>
<td>43%*</td>
<td>74%*</td>
</tr>
<tr>
<td>Take the Metrobus (White bus)</td>
<td>41%</td>
<td>53%</td>
<td>42%</td>
</tr>
<tr>
<td>Walk</td>
<td>40%</td>
<td>47%</td>
<td>43%</td>
</tr>
<tr>
<td>Take Metrorail (Metro)</td>
<td>35%</td>
<td>40%</td>
<td>49%</td>
</tr>
<tr>
<td>Am the driver of a personal vehicle with another passenger or passengers</td>
<td>15%</td>
<td>15%*</td>
<td>38%*</td>
</tr>
<tr>
<td>Am a passenger in a personal vehicle with one or more other people</td>
<td>15%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>Ride in a taxicab</td>
<td>10%</td>
<td>3%</td>
<td>18%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>8%</td>
<td>6%*</td>
<td>23%*</td>
</tr>
</tbody>
</table>

* Indicates significant differences in mode use by income categories.

Q1. In a typical week, how many trips do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose. Note calculated variable of all typical modes including mode usage with unspecified frequency. Income categories calculated from D11.
Profiles of Mode Use (1 of 2)

### Profile of SOV Drivers (Q1YesNo1)

<table>
<thead>
<tr>
<th>Segment</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live outside of Arlington County (D1)</td>
<td>69%</td>
<td>46%</td>
</tr>
<tr>
<td>Work in Arlington County (D1)</td>
<td>61%</td>
<td>42%</td>
</tr>
<tr>
<td>Income of $40,000 or more (D11)</td>
<td>74%</td>
<td>43%</td>
</tr>
<tr>
<td>Not employed, either full or part time (D10)</td>
<td>92%</td>
<td>55%</td>
</tr>
<tr>
<td>Male (D8)</td>
<td>63%</td>
<td>41%</td>
</tr>
</tbody>
</table>

### Profile Carpool Drivers (Q1YesNo2)

<table>
<thead>
<tr>
<th>Segment</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work in Arlington County (D1)</td>
<td>27%</td>
<td>16%</td>
</tr>
<tr>
<td>Household size of 3 or 4 (D9)</td>
<td>29%</td>
<td>13%</td>
</tr>
<tr>
<td>Income of $40,000 or more (D11)</td>
<td>38%</td>
<td>15%</td>
</tr>
<tr>
<td>Not employed, either full or part time (D10)*</td>
<td>56%</td>
<td>23%</td>
</tr>
</tbody>
</table>

* Note compromised validity due to small cell sizes.

n = varies

Only shows statistically different results as determined by calculated ChiSquare.
Profiles of Mode Use (2 of 2)

<table>
<thead>
<tr>
<th>Profile of Carpool Riders (Q1YesNo3)</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belong to the Millennial Generation (D6)</td>
<td>36%</td>
<td>16%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profile of ART Riders (Q1YesNo6)</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live in Arlington County (D1)</td>
<td>62%</td>
<td>25%</td>
</tr>
<tr>
<td>Do not work in Arlington County (D1)</td>
<td>64%</td>
<td>47%</td>
</tr>
<tr>
<td>Income of less than $40,000 (D11)</td>
<td>61%</td>
<td>40%</td>
</tr>
<tr>
<td>Employed full or part time (D10)*</td>
<td>54%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profile of Bike Riders (Q1YesNo10)</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work in Arlington County (D1)</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>Income of $40,000 or more (D11)</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>Not employed either full or part time (D10)*</td>
<td>38%</td>
<td>11%</td>
</tr>
<tr>
<td>Male (D8)</td>
<td>21%</td>
<td>6%</td>
</tr>
</tbody>
</table>

* Note compromised validity due to small cell sizes.

Similarly, 57% of employed respondents, compared to 0% of unemployed, take Metrobus. Also compromised validity due to small cell size.

n = varies

* Note compromised validity due to small cell sizes.
# Modes of Transportation Used in a Typical Week by Transit Use

<table>
<thead>
<tr>
<th>Mode of Transportation</th>
<th>n</th>
<th>Total</th>
<th>Frequent</th>
<th>Infrequent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take Arlington Transit - ART (Green bus)</td>
<td>106</td>
<td>6.83</td>
<td>8.75</td>
<td>2.58</td>
</tr>
<tr>
<td>Drive by myself in a personal vehicle</td>
<td>81</td>
<td>9.74</td>
<td>5.67</td>
<td>10.55</td>
</tr>
<tr>
<td>Take the Metrobus (White bus)</td>
<td>91</td>
<td>5.97</td>
<td>7.65</td>
<td>2.38</td>
</tr>
<tr>
<td>Walk</td>
<td>87</td>
<td>8.13</td>
<td>10.05</td>
<td>5.93</td>
</tr>
<tr>
<td>Take Metrorail (Metro)</td>
<td>77</td>
<td>4.95</td>
<td>6.63</td>
<td>2.17</td>
</tr>
<tr>
<td>Am the driver of a personal vehicle with another passenger or passengers</td>
<td>37</td>
<td>7.24</td>
<td>5.71</td>
<td>6.64</td>
</tr>
<tr>
<td>Am a passenger in a personal vehicle with one or more other people</td>
<td>38</td>
<td>5.16</td>
<td>4.00</td>
<td>5.29</td>
</tr>
<tr>
<td>Ride in a taxicab</td>
<td>24</td>
<td>2.71</td>
<td>2.60</td>
<td>2.89</td>
</tr>
<tr>
<td>Bicycle</td>
<td>17</td>
<td>8.35</td>
<td>16.00</td>
<td>2.20</td>
</tr>
</tbody>
</table>

Q1. In a typical week, **how many trips** do you make using each of the following modes of transportation? Please consider a trip to be a one-way journey for work, school, errands, recreation or any other purpose.

Note: Due to small sample sizes, mean trips per mode intended to be directional (qualitative) in nature.

Transit use = ART
Metrobus
Metrorail
Other train

Infrequent = 1 - 6 trips/week
Frequent = 7+ trips/week

n = 159
Varies by mode
Note: high % of SOV did not specify # of trips.
## Differences in Actions Taken by Segment

<table>
<thead>
<tr>
<th>Action Taken (Q7)</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asked employer about telecommuting</td>
<td>Work in AC (D1)</td>
<td>9% vs 2%</td>
</tr>
<tr>
<td>Changed route to work</td>
<td>Do not live in AC (D1)</td>
<td>32% vs 17%</td>
</tr>
<tr>
<td>Changed route to work</td>
<td>Work in AC (D1)</td>
<td>26% vs 14%</td>
</tr>
<tr>
<td>Purchased alternative fuel vehicle*</td>
<td>Income ≥ $40K (D11)</td>
<td>5% vs &lt;1%</td>
</tr>
<tr>
<td>Tried/started/increased use of bus</td>
<td>≤ 10 yrs in AC (D2)</td>
<td>30% vs 18%</td>
</tr>
<tr>
<td>Tried/started/increased use of bus</td>
<td>Younger vs Older (D6)</td>
<td>28% vs 11%</td>
</tr>
<tr>
<td>Tried/started/increased use of bus*</td>
<td>Employed (D10)</td>
<td>24% vs 0%</td>
</tr>
<tr>
<td>Tried/started/increased use of Metro</td>
<td>Male (D8)</td>
<td>25% vs 13%</td>
</tr>
<tr>
<td>Tried/started/increased use of bicycling**</td>
<td>Work in AC (D1)</td>
<td>11% vs 5%</td>
</tr>
<tr>
<td>Tried/started/increased use of bicycling**</td>
<td>Income ≥ $40K (D11)</td>
<td>12% vs 5%</td>
</tr>
<tr>
<td>Tried/started/increased use of bicycling</td>
<td>Male (D8)</td>
<td>13% vs 3%</td>
</tr>
</tbody>
</table>

---

* Only shows statistically different results as determined by calculated ChiSquare.

** Results by all age cohorts:
- Millennial – 30%
- GenX – 27%
- Boomer – 11%
- Silent – 10%

---

* Note compromised validity due to small cell sizes. ** Note not significant below .05, but included due to AC focus on CaBi.
Differences in Perceptions of Safety While Traveling in Arlington County

<table>
<thead>
<tr>
<th>Perception of Safety While Driving (Q2)</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those who work in AC (D1)</td>
<td>62%</td>
<td>46%</td>
</tr>
<tr>
<td>Males (D8)</td>
<td>63%</td>
<td>47%</td>
</tr>
<tr>
<td>Income $&gt;40,000 (D11)</td>
<td>76%</td>
<td>48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perception of Safety While Biking (Q2)</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (D8)</td>
<td>29%</td>
<td>19%</td>
</tr>
</tbody>
</table>

No respondents with incomes $40,000 and over feel unsafe while driving.

As Arlington County residents/workers are more likely to bike as they presumably tend to have shorter commutes, they are also more likely than non-AC workers to report feeling unsafe while biking (23% vs 14%).
Profiles of Typical Ways to Pay for Public Transportation

<table>
<thead>
<tr>
<th>Profile of Typical SmarTrip Card Users</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live in Arlington County (D1)</td>
<td>72%</td>
<td>40%</td>
</tr>
<tr>
<td>Do not work in Arlington County (D1)</td>
<td>72%</td>
<td>60%</td>
</tr>
<tr>
<td>Have lived in Arlington County ≤ 10 years (D2)</td>
<td>85%</td>
<td>58%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profile of Typical Cash Users</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not recall seeing or hearing any ads (Q10)</td>
<td>27%</td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profile of Public Transportation Non-Users</th>
<th>% of Segment</th>
<th>Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not live in Arlington County (D1)</td>
<td>46%</td>
<td>13%</td>
</tr>
<tr>
<td>Work in Arlington County (D1)</td>
<td>26%</td>
<td>11%</td>
</tr>
<tr>
<td>Have lived in Arlington County &gt; 10 years (D2)</td>
<td>18%</td>
<td>7%</td>
</tr>
<tr>
<td>Income of $40,000 or more (D11)</td>
<td>26%</td>
<td>15%</td>
</tr>
</tbody>
</table>

n = varies

Only shows statistically different results as determined by calculated ChiSquare.
Differences in Perceptions of SmarTrip

Agreement that SmarTrip (Q6):

<table>
<thead>
<tr>
<th>Agreement that SmarTrip (Q6)</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is easy to use</td>
<td>Recall ads (Q10)</td>
<td>63% vs 47%</td>
</tr>
<tr>
<td>Is easy to use</td>
<td>≤ 10 years in AC (D2)</td>
<td>69% vs 53%</td>
</tr>
<tr>
<td>Is easy to use</td>
<td>Employed (D10)</td>
<td>63% vs 31%</td>
</tr>
<tr>
<td>Saves Money</td>
<td>Income &lt; $40K (D11)</td>
<td>48% vs 41%</td>
</tr>
</tbody>
</table>
Differences in Agreement About Non-SOV Advantages

<table>
<thead>
<tr>
<th>Agreement that non-SOV travel (Q8):</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers opportunity for social interaction</td>
<td>Recall ads (Q10)</td>
<td>65% vs 44%</td>
</tr>
<tr>
<td>Offers better on-time arrival</td>
<td>Income &lt; $40K (D11)</td>
<td>46% vs 31%</td>
</tr>
<tr>
<td>Helps the environment</td>
<td>Income &gt; $40K (D11)</td>
<td>78% vs 63%</td>
</tr>
</tbody>
</table>

Agreement defined as selecting a 4 or 5 on a five point scale, where 5 is Agree Totally.

Only shows statistically different results as determined by calculated ChiSquare.

n = varies
Differences in Reasons for Not Taking Public Transportation

<table>
<thead>
<tr>
<th>Reason for Not Using Transit (Q9):</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not apply, only use transit</td>
<td>Live in AC (D1)</td>
<td>24% vs 8%</td>
</tr>
<tr>
<td>Does not apply, only use transit</td>
<td>Do not work in AC (D1)</td>
<td>28% vs 14%</td>
</tr>
<tr>
<td>Do not have a fixed job location</td>
<td>Male (D8)</td>
<td>20% vs 5%</td>
</tr>
<tr>
<td>Live too far away to commute by transit*</td>
<td>Do not live in AC (D1)</td>
<td>35% vs 8%</td>
</tr>
<tr>
<td>Residence is not convenient to transit*</td>
<td>Do not live in AC (D1)</td>
<td>22% vs 4%</td>
</tr>
<tr>
<td>Residence is not convenient to transit</td>
<td>Work in AC (D1)</td>
<td>11% vs 4%</td>
</tr>
<tr>
<td>Residence is not convenient to transit*</td>
<td>Income &gt; $40K</td>
<td>11% vs 4%</td>
</tr>
<tr>
<td>Travel by transit takes longer</td>
<td>Income &gt; $40K</td>
<td>40% vs 17%</td>
</tr>
<tr>
<td>Don’t care to take public transit</td>
<td>Work in AC</td>
<td>8% vs 2%</td>
</tr>
</tbody>
</table>

* Note compromised validity due to small cell sizes.

n = varies

Only shows statistically different results as determined by calculated ChiSquare.
Q3. If you take public transportation, how do you typically pay for your fare? Please select all that apply. Income categories calculated from D11.

Typical Ways to Pay for Public Transportation by Income

Note: There are no significant differences in fare type by income.

n = 274
Typical Ways to Pay for Public Transportation by Transit Use

Q3. If you take public transportation, how do you typically pay for your fare? Please select all that apply. Transit use calculated from Q1.

n = 274

Note: There are no significant differences in fare type by transit use (unspecified excluded).
Q4. Is your SmarTrip card registered? Note transit use calculated from Q1.

n = 156

Note: 156 of the 187 respondents who indicated they use SmarTrip answered this question.

SmarTrip Card Registration by Income

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>&gt; $40K</th>
<th>&lt; $40K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>43%</td>
<td>48%</td>
<td>42%</td>
</tr>
<tr>
<td>No</td>
<td>35%</td>
<td>27%</td>
<td>36%</td>
</tr>
<tr>
<td>Unsure</td>
<td>22%</td>
<td>25%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Note: There are no significant differences in SmarTrip card registration by income.
Q4. Is your SmarTrip card registered? Note transit use calculated from Q1.

Note: There are no significant differences in SmarTrip card registration by transit use – either by frequency or ever use.

Note: 156 of the 187 respondents who indicated they use SmarTrip answered this question.
Q5. On a scale of 1 to 5, where 1 is “Do not Agree at All” and 5 is “Agree Totally”, to what extent would you say you agree or disagree with the following statements about SmarTrip: Note SmarTrip use Q3.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Typically SmarTrip</th>
<th>Typically cash</th>
<th>n = varies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is easy to use, Total</td>
<td>16% 62%</td>
<td>20% 66%</td>
<td>78% 86%</td>
</tr>
<tr>
<td>Am interested in future, Total</td>
<td>19% 58%</td>
<td>18% 65%</td>
<td>77% 83%</td>
</tr>
<tr>
<td>Saves money, Total</td>
<td>18% 44%</td>
<td>19% 47%</td>
<td>62% 66%</td>
</tr>
<tr>
<td>Protects my balance, Total</td>
<td>12% 32% 44%</td>
<td>11% 36% 47%</td>
<td>47%</td>
</tr>
</tbody>
</table>

All perceptions of SmarTrip among users versus non-users are statistically different as determined by calculated ChiSquare.
Perceptions About SmarTrip by Registered SmarTrip Card

Q5. On a scale of 1 to 5, where 1 is “Do not Agree at All” and 5 is “Agree Totally”, to what extent would you say you agree or disagree with the following statements about SmarTrip: Note SmarTrip use Q3.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Registered</th>
<th>Not registered</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protects my balance, Total</td>
<td>44%</td>
<td>58%</td>
<td>50%</td>
</tr>
<tr>
<td>Protects my balance, Registered</td>
<td>66%</td>
<td>34%</td>
<td>55%</td>
</tr>
<tr>
<td>Protects my balance, Not registered</td>
<td>30%</td>
<td>70%</td>
<td>40%</td>
</tr>
<tr>
<td>Saves money, Total</td>
<td>62%</td>
<td>38%</td>
<td>50%</td>
</tr>
<tr>
<td>Saves money, Registered</td>
<td>74%</td>
<td>26%</td>
<td>55%</td>
</tr>
<tr>
<td>Saves money, Not registered</td>
<td>22%</td>
<td>78%</td>
<td>45%</td>
</tr>
<tr>
<td>Am interested in future, Total</td>
<td>77%</td>
<td>23%</td>
<td>50%</td>
</tr>
<tr>
<td>Am interested in future, Registered</td>
<td>66%</td>
<td>34%</td>
<td>48%</td>
</tr>
<tr>
<td>Am interested in future, Not registered</td>
<td>30%</td>
<td>70%</td>
<td>40%</td>
</tr>
<tr>
<td>Is easy to use, Total</td>
<td>62%</td>
<td>38%</td>
<td>50%</td>
</tr>
<tr>
<td>Is easy to use, Registered</td>
<td>79%</td>
<td>21%</td>
<td>55%</td>
</tr>
<tr>
<td>Is easy to use, Not registered</td>
<td>25%</td>
<td>75%</td>
<td>45%</td>
</tr>
</tbody>
</table>

* Indicates statistically different results as determined by calculated ChiSquare.

Those with registered cards are significantly more likely to consider cost savings and protecting their balance to be advantages, benefits that are correlated.

n = varies 131 to 152
Q3. If you take public transportation, how do you typically pay for your fare? Please select all that apply.

- SmarTrip Card: 68%
- Cash: 24%
- Do Not Use Public Transportation: 18%
- Pass: 2%

While only 54% of those having access to a personal vehicle (versus 85% of those who do not) typically use SmarTrip, Choice Riders are more likely than Transit Dependents to use SmarTrip.*

Note there are no significant differences in fare payment preference by income or by frequency of transit use.

* Indicates statistically different results as determined by calculated ChiSquare.

n = 274
Choice Rider n = 76
SmarTrip Card Registration

Resident who recall seeing or hearing informational messages about transportation and transportation services in Arlington County are significantly more likely to have a registered SmarTrip card.

Q4. Is your SmarTrip card registered?

- Yes: 43%
- No: 35%
- Unsure: 22%

Note: 156 of the 187 respondents who indicated they use SmarTrip answered this question.

n = 156

Note: Those who recall informational messages for transportation/transportation services in Arlington County (Q10) are significantly more likely than non-recallers to have their SmarTrip card registered (Q4) (67% vs. 34%).
Q5. On a scale of 1 to 5, where 1 is “Do not Agree at All” and 5 is “Agree Totally”, to what extent would you say you agree or disagree with the following statements about SmarTrip:

- **SmarTrip is easy to use**: 4% (1), 16% (2), 62% (4), 78% (5)
- **Using SmarTrip saves money**: 13% (1), 18% (2), 44% (4), 62% (5)
- **SmarTrip protects my balance in case something happens to my card**: 21% (1), 12% (2), 32% (4), 44% (5)
- **I am interested in using SmarTrip in the future**: 7% (1), 19% (2), 58% (4), 77% (5)

Not only are Choice Riders more likely than Transit Dependents to use SmarTrip, they are also significantly more likely to consider it easy to use (91% versus 72%).

65% of those who typically do not use SmarTrip are interested in using it in the future.

n = varies 185 - 208
Only shows statistically different results as determined by calculated ChiSquare.

Preference defined as selecting a 4 or 5 on a five point scale, where 5 is Most Preferred.

<table>
<thead>
<tr>
<th>Preferred means of communication (Q20):</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Media</td>
<td>Millennial (D6)</td>
<td>47% vs 28%</td>
</tr>
<tr>
<td>YouTube</td>
<td>Millennial (D6)</td>
<td>44% vs 24%</td>
</tr>
<tr>
<td>Website</td>
<td>Do not live in AC (D1)</td>
<td>59% vs 39%</td>
</tr>
<tr>
<td>Website</td>
<td>Work in AC (D1)</td>
<td>50% vs 36%</td>
</tr>
<tr>
<td>Email</td>
<td>Work in AC (D1)</td>
<td>54% vs 39%</td>
</tr>
<tr>
<td>Text messages</td>
<td>Millennial (D6)</td>
<td>43% vs 32%</td>
</tr>
</tbody>
</table>

Preference for technology based communication decreases as does age.

<table>
<thead>
<tr>
<th>Social Media</th>
<th>GenX</th>
<th>Boomer</th>
<th>Silent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millennial = 47%</td>
<td>34%</td>
<td>26%</td>
<td>15%</td>
</tr>
<tr>
<td>YouTube</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millennial = 44%</td>
<td>25%</td>
<td>24%</td>
<td>15%</td>
</tr>
<tr>
<td>Text Messaging</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millennial = 43%</td>
<td>35%</td>
<td>32%</td>
<td>20%</td>
</tr>
</tbody>
</table>

n = varies
## Differences in Preference for Communication About Transportation

<table>
<thead>
<tr>
<th>Preferred means of communication (Q20):</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters or ads at work</td>
<td>Work in AC (D1)</td>
<td>48% vs 32%</td>
</tr>
<tr>
<td>Posters or ads at work</td>
<td>Employed (D10)</td>
<td>46% vs 15%</td>
</tr>
<tr>
<td>Radio</td>
<td>Income &lt; $40K (D11)</td>
<td>59% vs 44%</td>
</tr>
<tr>
<td>Television</td>
<td>Employed (D10)</td>
<td>66% vs 38%</td>
</tr>
<tr>
<td>Television</td>
<td>Income &lt; $40K (D11)</td>
<td>74% vs 53%</td>
</tr>
<tr>
<td>Communication at community events</td>
<td>Older people (D6)*</td>
<td>67% vs 49%</td>
</tr>
<tr>
<td>Communication at faith-based organizations</td>
<td>Income &lt; $40K</td>
<td>51% vs 33%</td>
</tr>
</tbody>
</table>

*“Older” defined as Boomer + Silent as compared to Millennial + GenX
Preference for communication at community events diminishes as does age.

Silent = 75%  Boomer = 64%  GenX = 54%  Millennial = 43%

n = varies

Only shows statistically different results as determined by calculated ChiSquare.

Preference defined as selecting a 4 or 5 on a five point scale, where 5 is Most Preferred.
Differences in Specific Transportation Information Needs

<table>
<thead>
<tr>
<th>Information Needed (Q21):</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpool, vanpool, slugging</td>
<td>Do not live in AC (D1)</td>
<td>32% vs 18%</td>
</tr>
<tr>
<td>Carpool, vanpool, slugging</td>
<td>Work in AC (D1)</td>
<td>27% vs 16%</td>
</tr>
<tr>
<td>ART bus schedules, routes</td>
<td>Live in AC (D1)</td>
<td>49% vs 27%</td>
</tr>
<tr>
<td>ART bus schedules, routes</td>
<td>Gen X and Gen Y (D6)</td>
<td>52% vs 34%</td>
</tr>
<tr>
<td>ART bus schedules, routes</td>
<td>Household Size (D9)</td>
<td>See note below*</td>
</tr>
<tr>
<td>ART bus schedules, routes</td>
<td>Income &lt; $40K (D11)</td>
<td>52% vs 38%</td>
</tr>
<tr>
<td>ART bus schedules, routes</td>
<td>Female (D8)</td>
<td>51% vs 36%</td>
</tr>
</tbody>
</table>

- Interest in ART schedules and routes trends upwards significantly as does household size.
  - 1 or 2 people: 37%
  - 3 or 4 people: 42%
  - 5 or more people: 64%

Non-AC residents (D1) are significantly more likely than residents to feel they do not need any transportation information (32% vs 18%).

Only shows statistically different results as determined by calculated ChiSquare.

n = varies
Differences in Familiarity With Transportation Options

<table>
<thead>
<tr>
<th>Familiarity w/ transportation options (Q12):</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpool, vanpool, slugging</td>
<td>Recall ads (Q10)</td>
<td>24% vs 14%</td>
</tr>
<tr>
<td>Carpool, vanpool, slugging</td>
<td>Live in AC (D1)</td>
<td>31% vs 13%</td>
</tr>
<tr>
<td>Carpool, vanpool, slugging</td>
<td>Work in AC (D1)</td>
<td>22% vs 12%</td>
</tr>
<tr>
<td>ART Bus</td>
<td>Millennial (D6)</td>
<td>80% vs 60%</td>
</tr>
<tr>
<td>ART Bus*</td>
<td>Employed (D10)</td>
<td>64% vs 31%</td>
</tr>
<tr>
<td>Metrobus</td>
<td>Employed (D10)</td>
<td>58% vs 23%</td>
</tr>
<tr>
<td>Bicycling in Arlington County</td>
<td>Millennial (D6)</td>
<td>41% vs 29%</td>
</tr>
<tr>
<td>Walking in Arlington County</td>
<td>Millennial (D6)</td>
<td>77% vs 61%</td>
</tr>
</tbody>
</table>

Familiarity with walking in AC decreases as does age.

- Millennial = 77%
- GenX = 66%
- Boomer = 59%
- Silent = 40%

* Note compromised validity due to small cell sizes.

Only shows statistically different results as determined by calculated ChiSquare.

Familiarity defined as selecting a 4 or 5 on a five point scale, where 5 is Very Familiar.

n = varies
Differences in Familiarity With Transportation Services in the County

<table>
<thead>
<tr>
<th>Familiarity w/ services in AC (Q13):</th>
<th>Segment</th>
<th>% Compared to Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington County Commuter Services (ACCS)</td>
<td>Recall ads (Q10)</td>
<td>33% vs 20%</td>
</tr>
<tr>
<td>Commuter Store</td>
<td>Recall ads (Q10)</td>
<td>33% vs 18%</td>
</tr>
<tr>
<td>Car-Free Diet</td>
<td>Recall ads (Q10)</td>
<td>21% vs 4%</td>
</tr>
<tr>
<td>Pike Ride</td>
<td>Recall ads (Q10)</td>
<td>24% vs 7%</td>
</tr>
<tr>
<td>BikeArlington</td>
<td>Recall ads (Q10)</td>
<td>36% vs 14%</td>
</tr>
<tr>
<td>WalkArlington</td>
<td>Recall ads (Q10)</td>
<td>32% vs 21%</td>
</tr>
</tbody>
</table>

Only shows statistically different results as determined by calculated ChiSquare.

Familiarity defined as selecting a 4 or 5 on a five point scale, where 5 is Very Familiar.

n = varies

26% of the total sample recalled seeing or hearing any informational messages recently for transportation or transportation services in Arlington County.
## Reasons Likely to Use CaBi

<table>
<thead>
<tr>
<th>Reasons Likely to Use CaBi</th>
<th>Number Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>It’s Healthy/A Good Form of Exercise</td>
<td>4</td>
</tr>
<tr>
<td>It’s a Fun Activity/On Weekends/In the Summer</td>
<td>4</td>
</tr>
<tr>
<td>For Convenience</td>
<td>3</td>
</tr>
</tbody>
</table>

n = 15

Q16. Why or why not? (Responses 4 or 5 selected)
## Reasons Unlikely to Use CaBi

Q16. Why or why not? (Responses 1 or 2 selected)

<table>
<thead>
<tr>
<th>Reasons Unlikely to Use CaBi</th>
<th>Number Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t Feel Safe/Feel Bikes Are Dangerous</td>
<td>9</td>
</tr>
<tr>
<td>Already Own a Bike</td>
<td>6</td>
</tr>
<tr>
<td>Don’t Know How to Ride</td>
<td>4</td>
</tr>
<tr>
<td>Don’t Want or Need a Bike</td>
<td>4</td>
</tr>
<tr>
<td>No CaBi Station Close</td>
<td>2</td>
</tr>
</tbody>
</table>

Uncomfortable

Impractical for transportation needs

CaBi is expensive

Don’t like bikes

n = 30
# Reasons Likely to Use Car Sharing Programs

<table>
<thead>
<tr>
<th>Reasons Likely to Use Car Sharing Programs</th>
<th>Number Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means Fewer Cars on the Road (Traffic/Emissions)</td>
<td>3</td>
</tr>
<tr>
<td>Saves Money</td>
<td>2</td>
</tr>
<tr>
<td>Saves Time (Over Transit)</td>
<td>1</td>
</tr>
<tr>
<td>Have Access to a Car, but do not Own One</td>
<td>1</td>
</tr>
<tr>
<td>Gives Access to a Comfortable Car</td>
<td>1</td>
</tr>
<tr>
<td>Useful for Emergencies or for Fun</td>
<td>1</td>
</tr>
</tbody>
</table>

n = 10
# Reasons Unlikely to Use Car Sharing Programs

<table>
<thead>
<tr>
<th>Reasons Unlikely to Use Car Sharing Programs</th>
<th>Number Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Already Have a Car</td>
<td>8</td>
</tr>
<tr>
<td>Don’t Need a Car</td>
<td>7</td>
</tr>
<tr>
<td>General Disinterest</td>
<td>7</td>
</tr>
<tr>
<td>Not Convenient (to Location, for Schedule)</td>
<td>6</td>
</tr>
<tr>
<td>Don’t Know the Program</td>
<td>4</td>
</tr>
<tr>
<td>Prefer Public Transportation</td>
<td>1</td>
</tr>
<tr>
<td>Too Expensive</td>
<td>1</td>
</tr>
</tbody>
</table>

Q19. Why or why not? (Responses 1 or 2 selected)
For Additional Information on This Study Contact:

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804-358-8981
Supporting Documents
Supporting Documents

• English Online Survey

• English Paper Survey

• Spanish Online Survey

• Spanish Paper Survey

• Data Tables

• Raw Data