

Resident Transportation Needs Assessment Survey

Report of Results

April 2022

Prepared by:





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Executive Summary

About

The City of Alexandria's Department of Transportation and Environmental Services contracted with the National Research Center, Inc. (NRC) team at Polco to conduct a survey on city-wide multimodal transportation trends and preferences. The data from the survey will be used for several purposes, including performance measurement and planning. Similar travel surveys were also conducted in Alexandria in 2016 and 2018/2019, allowing for comparisons by year. Because the 2016 survey was also conducted by Polco and survey methodologies were more similar than the 2018/2019 survey, comparisons in this report are primarily made to the 2016 data.

All households located within Alexandria city limits were eligible to be a part the 2021 survey; 4,200 were selected at random to receive the survey. Each selected household was contacted at least twice via mail starting September 28, 2021, and data collection closed on November 17, 2021. A total of 617 residents completed a survey, for a response rate of 18%. Typical response rates for a survey of this type are between 12% and 24%. With 617 responses, the 95% confidence interval is plus or minus 4 percentage points. Further details on the survey methodology can be found in *Appendix H: Survey Methodology*.

Key Insights

⇒ Walking and driving dominated as the most common travel modes used.

When asked how frequently they used a variety of transportation modes in the month prior to the survey, almost half or respondents indicated they walked or drove alone daily (or nearly daily) and only 10% had not walked or driven alone in the past month.

⇒ Most people with jobs still drove a single-occupancy vehicle to work, but they used it less often than in the past.

Employed survey respondents, who represented 79% of all respondents, were asked what modes they had used to go to and from work each day of the previous week. Twenty-five percent of all work commute trips were made by driving alone (down from 48% in 2016), but in both 2016 and 2021, about 6 in 10 said they had driven alone at least once in the week for their commute.

⇒ Working from home is much more common since the COVID-19 pandemic.

Sixty-four percent of individuals said that since COVID-19, they have worked from home more days of the week or gone fully remote, which is reflected in commute mode numbers. The proportion of residents working from home at least once in the previous week increased from 16% in 2016 to 60% in 2021. Additionally, the proportion of all commute trips from the previous week that were "work from home" increased from 6% to 40%.

⇒ There were shifts in non-driving commute modes from 2016 to 2021.

Only 6% of work trips were on Metrorail in 2021, compared to 14% in 2016. The percent of commute trips by Capital Bikeshare increased from 0% to 3% from 2016 to 2021.

⇒ Driving remains the most convenient mode, which motivates people to use it for their commute to work.

For those who often drive to work, over half (54%) cited the quickness and convenience as the primary reason. About one-quarter indicated that they need or want to make stops or run errands on their commute and another 26% said that they work an irregular work schedule. Each of these were similar to 2016. In 2016, 18% said they did not drive alone to work even once in the week prior to the survey and this increased to 29% in 2021.

⇒ Private vehicle was by far the most common choice of transportation for noncommute trips.

All respondents were asked what forms of transportation they used for seven different types of non-commuting destination trips, such as to shop at the grocery store, to dine at a restaurant, or to visit friends or family. Driving was by far the most popular choice for grocery store trips and non-grocery errands, with about 80% of survey participants saying they made at least some of these types of trips by driving.

About 30% of respondents said they walked for these types of trips in 2016, and that increased to closer to 50% in 2021. Other modes such as bicycling, using Metrorail or a bus, or a taxi or rideshare service were used by nine percent or fewer respondents to run errands.

⇒ Non-driving modes were more often used in 2021 than 2016 for trips including going to restaurants, visiting friends or family, visiting parks and recreation center and fun or fitness.

Over 70% of respondents reported driving to go out to restaurants, and a similar proportion drove to visit their friends and family in 2016. These numbers dropped to 58% for driving to restaurants and 64% for driving to visit friends and family in 2021.

When choosing to visit parks or recreation centers or engage in an activity for fun or fitness, many residents chose to walk more often than drive alone in 2021 but driving alone was a common second choice for both activities. For other social activities driving alone was the most popular choice (53%) with walking as a second choice (32%).

⇒ Many things impact how often residents walk or bike.

Just over half of respondents said they would bike more often if there was more street lighting after dark, more off-street walking/multi-use paths, if sidewalks and paths were in better condition, if there were more crosswalks, if they felt safer from traffic, or if there were more Capital Bikeshare stations.

While physical ability was a smaller barrier for walking, it was a larger barrier for biking. Additionally, residents were much more likely to say they just don't want to bike than they were to say they just don't want to walk.

⇒ More school-aged children walked to school in 2021 than in 2016.

In 2021, about 4 in 10 respondents with children indicated that their child or children used a school bus, were driven by a caregiver or walked to school. For walking this was a statistically significant uptick from 2016 when 24% walked.

Distance to the school (67%), time needed to use other modes (35%), safety (29%), and the inconvenience of using other modes (28%) were the most frequently cited reasons for children to be driven school rather than using other alternatives.

$\Rightarrow\,$ The use of route-finding apps is common among residents.

Over 50% of residents indicated they use GPS apps like Google Maps or Waze at least a few times a week and only 16% said they had never used such applications.

Survey Background

The City of Alexandria's Department of Transportation and Environmental Services contracted with the National Research Center, Inc. (NRC) at Polco to conduct a second iteration of a survey first conducted in 2016 to assess City-wide multimodal transportation trends and preferences.

Results from this survey will be used for performance measurement, assessment, and planning; tracking mode share goals for Transportation Management Plans; informing and justifying capital projects throughout the city; and providing data insights for relevant transportation studies and reports.

Outreach for this survey used multiple communications channels to ensure a robust response through two efforts. The first was an address-based sample outreach effort. A total of 4,200 household addresses were randomly selected from a US Postal Service (USPS) list of all residential addresses in the city to receive a mailed survey and/or a mailed invitation to an online survey. Mailings were sent over a three-week period with the initial invitation mailed on September 28th, 2021. Data collection was closed November 17th, 2021.

- 1,800 selected households were contacted two times over two weeks with a postcard invitation to complete the survey online (using the provided URL).
- 2,400 selected households received three mailings over three weeks, a postcard invitation to complete the survey online, followed by two mailing of a paper survey, with a postage-paid reply envelope for returning the completed survey.

Additionally, a second online survey was programmed (with the same questions as the address-based sampled survey) and invitations were made available to residents via City social media and other communication channels. This open participation effort was conducted in October and November 2021.

Overall, there were 617 responses to the mailed invitations/surveys from the sampled outreach effort: for a response rate of 18% and a margin of error of ±4%. More information about how the survey was conducted can be found in *Appendix H: Survey Methodology*. A copy of the questionnaire can be found *Appendix I: Survey Questions*.

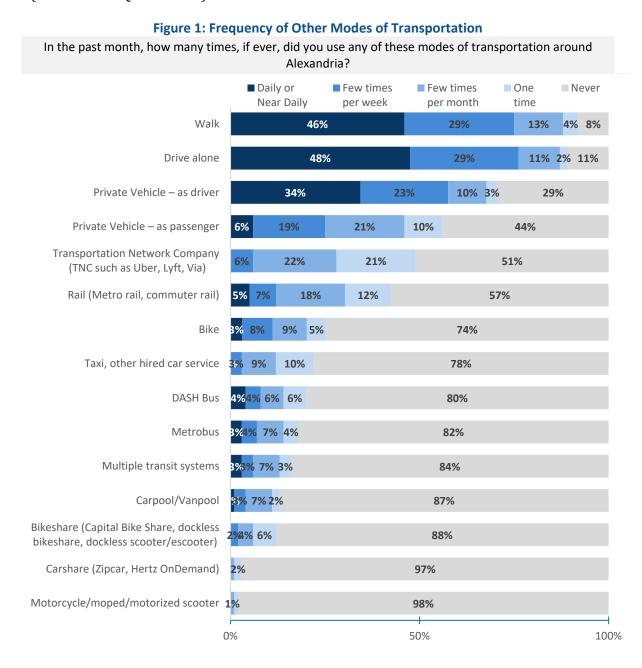
This report summarizes the results of the responses to the sampled outreach effort. A complete set of responses to each closed-ended (fixed) survey question can be found in *Appendix A: Complete Set of Responses*, while the verbatim responses to the open-ended questions (which could be answered in the respondent's own words) are found in *Appendix B: Verbatim Answers to Open-Ended Questions*. Cross-tabulations of selected survey questions by respondent characteristics are found in *Appendix C: Selected Survey Responses by Area of Residence* and *Appendix D: Selected Survey Responses by Respondent Characteristics*. For all cross-tabulations, testing was used to identify statistical differences An explanation of how statistical differences are noted (i.e., how to interpret the cross-tabulation tables) is included at the beginning of *Appendix C: Selected Survey Responses by Area of Residence* on page 45).

Additionally, 282 residents responded to the open participation outreach effort. The results of these responses are summarized in *Appendix G: Complete Set of Responses for the Open* Participation and compared to the Sample Outreach responses in *Appendix F: Results by Outreach Type (Addressed-Based Sample versus Open Participation).*

Frequency of Different Modes of Transportation

Respondents were asked how often they had used various forms of transportation in the month prior to the survey. Private vehicle as a driver or passenger, walking, and driving alone were used at least once by more than half of respondents – but less than half used any one of those modes daily. Scooters, carshares, bikeshares, and carpools were used least frequently.

Residents of the West End and Central sub areas were less likely to walk, bike, or use rail (see Table 42: Question #8 by Area). Black residents were more likely than White to use DASH Bus, Metrobus, Multiple transit systems, or carpool/vanpool (see Table 93: Question #8 by Respondent Gender, Race and Ethnicity.) Younger adults were more likely than older adults to walk or use rideshares or rail (see Table 76: Question #8)



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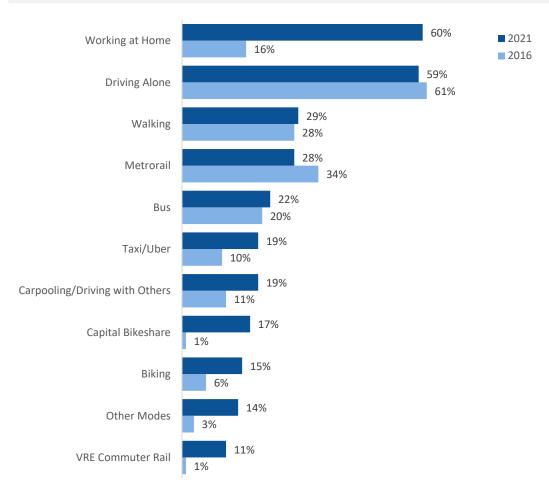
Modal Share of the Work Commute

Seventy-nine percent of respondents were employed full- or part-time when they completed the survey (see in *Appendix A: Complete Set of Responses*). These employed respondents were asked to note all the modes they used to get to work on each day in the week prior to completing the survey. This question was used to assess the modal share of the work commute.

The proportion of employed respondents who drove alone at least once was statistically similar when comparing 2021 (59%) to 2016 (61%), but the impact of the COVID-19 pandemic could be seen in a 44% increase in people working from home at least once a week (60% in 2021 compared to 16% in 2016). The next most common modes used for the work commute were walking (29% at least once in the week) and Metrorail (28%). Other statistically significant changes from 2016 to 2021 included increased number of commuters using bikes, bikeshare, carpooling, rideshares, commuter rail, and "other" modes and a decrease in use of Metrorail.

Figure 2: Use of Modes for Work Commute Trips (Percent of Employed Respondents Who Made At least One Work Commute Trip via Each Mode)

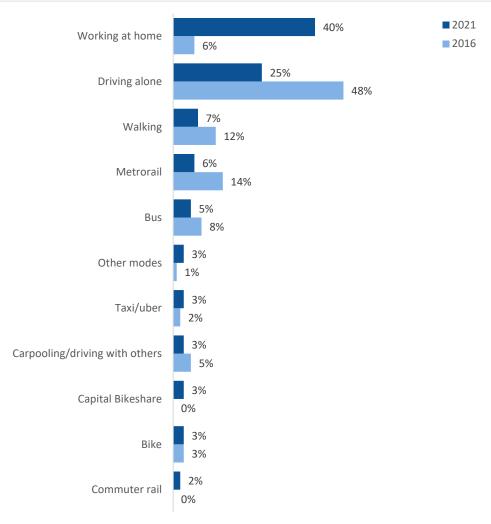
In the last week that you worked, please indicate all the mode(s) you used as part of how you got to work on each day (please select all that apply). For example, if you rode Capital Bikeshare to the metro and then walked to your building on Monday, you would select Capital Bikeshare, Metro and Walk as your modes for Monday.



An alternative way of parsing the mode share data from this question is to take the proportion of times a mode was used over the week for each person and then average those proportions across all employed respondents. While Figure 2 shows that a similar proportion of people commuted by driving alone at least once a week in both years, from 2016 to 2021 there was a decrease in the proportion of all the work commute trips that were via driving alone. There were also decreases in walking, bus, and Metrorail use. Working from home increased in both the proportion of people doing this at least once a week and in the proportion of times it was done during the week.

Figure 3: Modal Share of Work Commute Trips (Average percent of work trips made by via Each Mode)

In the last week that you worked, please indicate all of the mode(s) you used as part of how you got to work on each day (please select all that apply). For example, if you rode Capital Bikeshare to the metro and then walked to your building on Monday, you would select Capital Bikeshare, Metro and Walk as your modes for Monday.

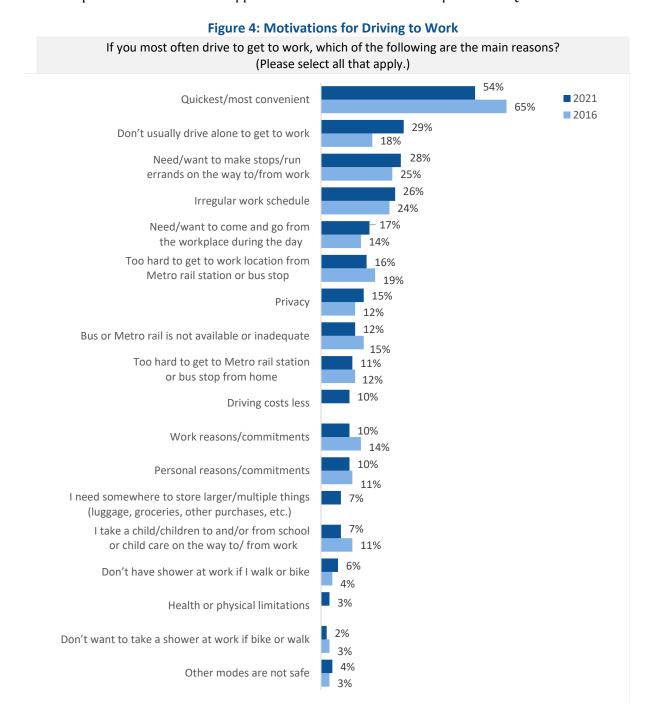


^{*}Percentages for a given year may not sum to exactly 100% due to rounding.

Differences in work commute trips by respondent subgroups:

- There were not many differences by sub area, but those in West Central and Central were more likely to drive alone and drive alone more often than those in the other areas (North Ridge/Arlandria/Potomac Yard/Carlyle, Del Ray and Old Town). Those in the Central area were least likely to work from home. (See Table 35 and Table 36)
- Employed respondents whose employers provided free or pre-tax parking were more likely to drive alone to work (38% mode share, 70% at least once) compared to those without the benefit (16% mode share, 59% at least once). Those who had Commuter SmartBenefits, Car/Vanpool or Bikeshare or Bike subsidies were more likely than their counterparts to use rail and less likely to drive alone. (See Table 51 and Table 52).
- The overall mode share for trips did not vary much by age or having children at home, but the percent of people making at least one trip varied in a few areas. Older adults were more likely to have a work commute trip by Capital Bikeshare or carpooling. Those with schoolage children made a greater proportion of their work commute trips by Capital Bikeshare, driving alone, or driving with others than did respondents without school-age children. (See Table 69 and Table 70).
- Mode share generally did not vary by gender or race, but Hispanic respondents were more
 likely than non-Hispanics to have used a wider variety of modes in the week, being more
 likely to have used a bike, bus, Metrorail, commuter rail, and driving alone at least once in
 the week. Hispanic residents also had a higher proportion of their trips by bike, bus,
 Metrorail and commuter rail. (See Table 85 and Table 86)

Survey participants for whom driving alone was their most common work commute choice were asked what influenced this. The most common response was that it was the quickest or most convenient way to get to work (54% of those who answered the question). This was the top reason in 2016 as well. The second most common response was that they usually don't drive alone to get to work (suggesting the prior week had not been a typical week for these respondents); this increased from 18% in 2016 to 29% in 2021. The third most common motivations were needing to make stops or having an irregular schedule; for about one-quarter of respondents. Respondents had the opportunity to write in a response in their own words if their reason was not included on the list. Those responses can be found in *Appendix B: Verbatim Answers to Open-Ended Questions*.



Mode Choices for Non-Commute Trips

All respondents were asked what forms of transportation they used for seven different types of non-commuting destination trips, such as shopping at the grocery store, dining at a restaurant, or visiting friends or family. The figures on the next two pages display the proportion of all respondents who indicated that they used each mode for each particular type of trip.

While the comparison to 2016 is shown, it should be noted that "carpool" was added to the list of travel mode options in the 2021 survey and "Drove" was changed to "Drove alone". Therefore, trend line comparisons related to driving should be used with caution.

Driving was by far the most popular choice for grocery store trips and non-grocery errands, with 78% or more of survey participants saying they made at least some of these types of trips by driving. About 30% of respondents said they walked for grocery or non-grocery errands in 2016; this increased to 44% for grocery store errands and 52% for non-grocery store trips in 2021. Walking also increased as a mode to get to restaurants and to visit friends and family.

When choosing to visit parks or recreation centers, engage in an activity for fun or fitness, or for other social activities, over half of respondents said they walked for some of these trips, at rates higher than in 2016.

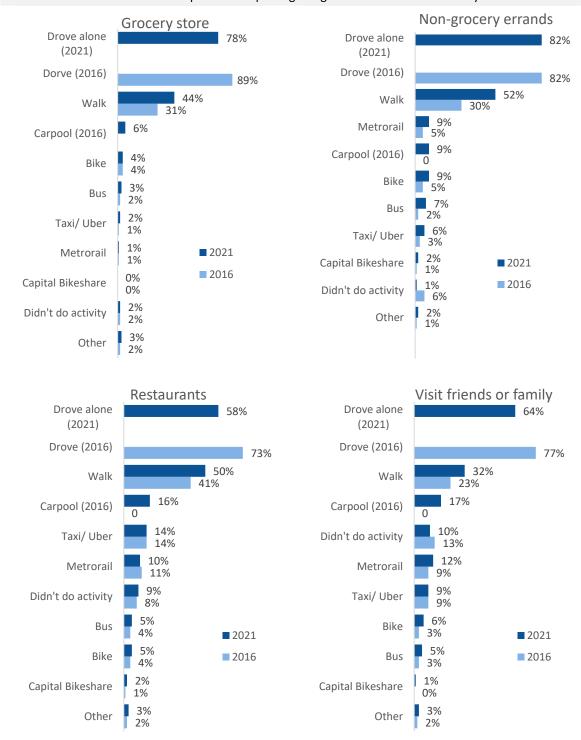
Differences in non-commute trips by respondent subgroups:

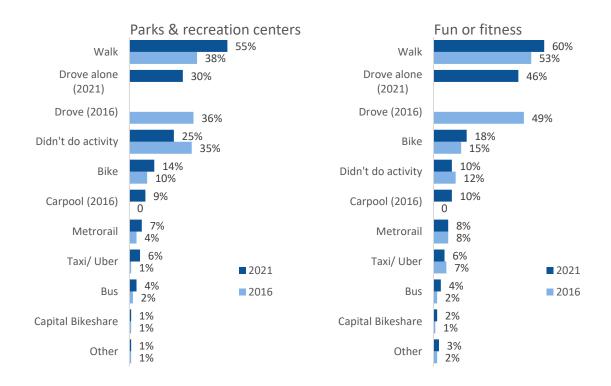
- Respondents living in the West End were less likely than those living in the rest of the city to have walked for these non-commute trips, while those in Old Town were more likely to use Metrorail than those in the West End. (See Table 40: Travel Mode for 7 Kinds of Trips by Area.)
- Younger residents (under the age of 34) tended to be more likely to walk, ride Metrorail, carpool, or use a taxi or other ride sharing service than were older residents. Those with school-aged children were more likely than others to bike. (See Table 74: Travel Mode for 7 Kinds of Trips by Children and Age).
- Females were more a bit more likely to use Capital Bikeshare than were males, while White respondents were more likely to drive compared to those of other racial backgrounds and Hispanic respondents were more likely to carpool or use Metrorail than other ethnicities. (See Table 91: Travel Mode for 7 Kinds of Trips by Respondent Gender, Race and Ethnicity).

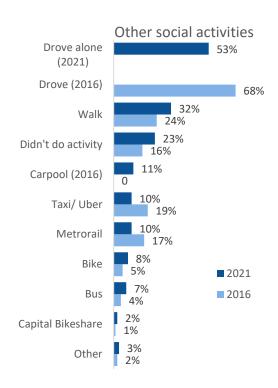
Figure 5: Transportation Modes Used for Various Activities

In the last month, please indicate which mode(s) you used to complete or participate in each of the following. (Please select all that apply.)

Percent of respondents reporting using each mode for each activity







Active Transportation (Walking and Bicycling)

Several questions were included on the survey to assess residents' current use of active transportation modes – walking and bicycling – and to ascertain what the barriers were to using specific forms of transportation.

In 2021, a large majority of respondents had walked, run, or jogged for fun or exercise while only about one-third had ridden a bicycle.

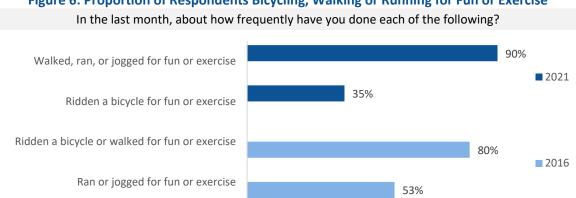


Figure 6: Proportion of Respondents Bicycling, Walking or Running for Fun or Exercise

Differences in bicycling, walking or running for fun or exercise by respondent subgroups:

- Those in the West End were a little less likely to have walked, run, or jogged for fun or exercise (79% had) than those in other areas. (See Table 44: Question #10 by Area.)
- Younger adults were more likely than middle age or older adults to walk, bike, run or jog for fun or exercise. (See Table 78: Question #10 by Children and Age.)
- White respondents were more likely than their counterparts to walk, run or jog for fun or exercise. (See Table 95: Question #10 by Respondent Gender, Race and Ethnicity.)

Respondents were also asked what would increase their use of walking as a means of transportation. About two-thirds or more somewhat or strongly agreed they would walk more if there were more street lighting after dark and if there were more off-street walking options such as multi-use trails/paths. Less likely to impact walking was having better health or physical ability (30% agreed this was a barrier) or access to workplace showers (25%).

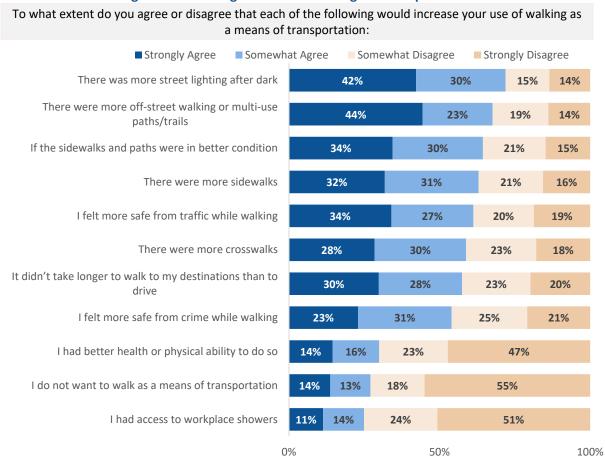


Figure 7: What Might Increase Walking for Transportation

Differences in motivations for walking more by respondent subgroups:

- Those in the West End were more likely than others to say they were not interested in walking more, that health was a barrier to walking, and that if more things were closer, they would walk more. (See Table 45: Question #11 by Area.)
- Younger adults were more likely than middle age or older adults to say they would walk more if there were more sidewalks, crosswalks, off street walking or multi-use paths, and if there was more street lighting after dark. (See Table 79: Question #11 by Children and Age.)
- Females more than males would walk more if there were improved sidewalks, lighting after dark, and if they felt safer from traffic while walking. Black respondents were more likely to cite health as a barrier, and Hispanic respondents were more likely to say they were not interested; destinations were too far, or health prohibited them. (See Table 96: Question #11 by Respondent Gender, Race and Ethnicity.)

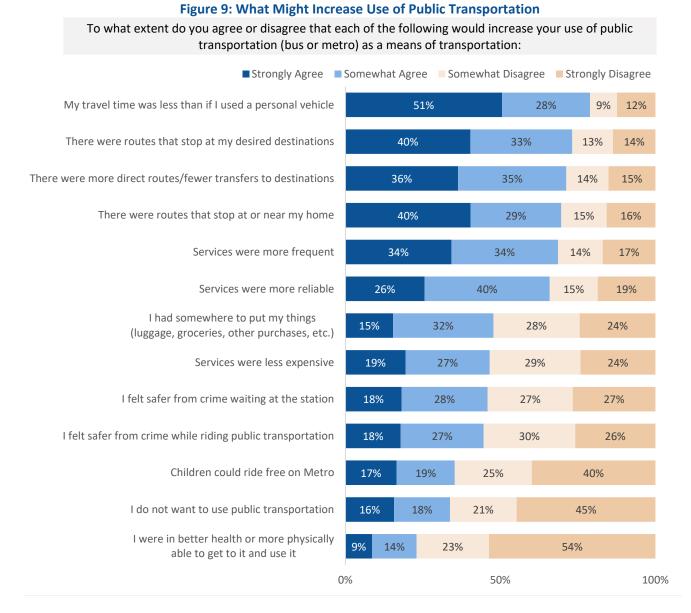
Most residents said they didn't want to bicycle as means of transportation (61%) – many also said they didn't know how to bike (46%), or they didn't have the physical ability to bike (54%). Others would bike if destinations were closer (54%) or if there were more Capital Bikeshare stations (60%). Of lowest importance on the list of barriers was having more access to workplace showers, access to an electric/pedal assist bicycle, access to a bicycle, more street lighting after dark, and more off-street bike or multi-use paths/trails. Younger adults, black residents, and Hispanic residents were more likely than their counterparts to name multiple barriers (see Table 80 and Table 97).

Figure 8: What Might Increase Bicycling for Transportation To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation: ■ Strongly Agree ■ Somewhat Agree Somewhat Disagree ■ Strongly Disagree I do not want to use a bicycle 41% 20% 9% 30% as a means of transportation If there were more Capital Bikeshare stations 38% 22% 11% 29% It didn't take longer to ride a bicycle to my destinations 30% 24% 16% 30% than to drive I had better health or physical ability to do so 24% 30% 10% 36% There were more on-street bike lanes 25% 23% 15% 37% I knew how to ride a bike 30% 16% 40% 14% I felt more safe from crime while riding a bicycle 21% 24% 17% 38% I felt more safe from traffic while riding a bicycle 20% 17% 14% 49% There were places to securely park 16% **19**% 14% 51% a bicycle at other destinations I had a place to securely store a bicycle at work 14% 21% 26% 40% I had access to workplace showers 11% 16% 14% 59% I had access to an electric/pedal assist bicycle 10% **17**% 17% 56% There was more street lighting after dark 9% 17% 20% 54% There were more off-street bike 16% 20% 57% or multi-use paths/trails I had access to a bicycle 9% 6% 10% 75% 0% 50% 100%

Public Transportation

When asked what might increase their use of public transportation, survey participants said that time and convenience were the biggest issues, with crime, health, and child accommodations as lesser concerns. Nearly 80% of respondents strongly or somewhat agreed that they might use public transportation if the travel time were less than using a personal vehicle, and if the routes stopped closer to home or other desired destinations. Over 65% agreed that having more direct routes, or more frequent and reliable services would influence them to consider using public transportation. Just under half thought feeling safe from crime while waiting at a station or while riding public transportation would make them more likely to use it.

Younger adults, black residents, and Hispanic residents were more likely than their counterparts to name multiple barriers to transit use (see Table 77 and Table 97).



Factors Influencing Mode Choices

Respondents were asked whether they or anyone in their household owned or had use of passenger vehicles, bicycles, motorcycles or electric-assist bicycles. About 9 in 10 respondent households had access to one or more automobiles. Nearly half had access to one or more usable bicycles, which was down from 2016 when 57% had access to a bicycle. Only 4% of households had a motorcycle or scooter, while 3% households reported having an electric-assisted bicycle (up from 0% in 2016).

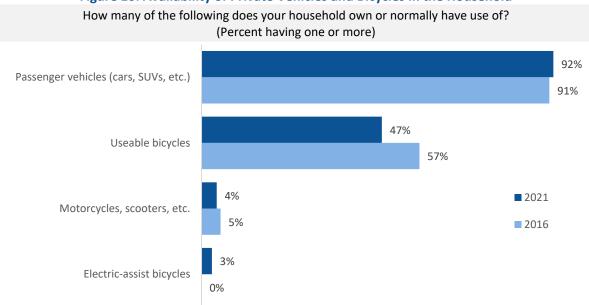


Figure 10: Availability of Private Vehicles and Bicycles in the Household

As shown in Figure 11 through Figure 13 below, lack of access to a motor vehicle among employed respondents was associated with a lower proportion of work commute trips being made by driving alone and a higher proportion of trips made by Metrorail. Residents in households that had access to bicycles were also less likely to drive alone for the work commute.

Figure 11: Average percent of employed respondents' work trips made by driving alone by respondent characteristics



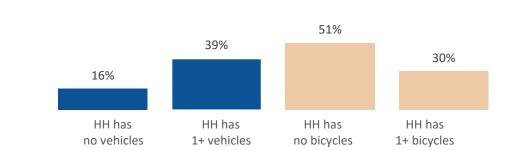


Figure 12: Average percent of employed respondents' work trips made by bicycle by respondent characteristics



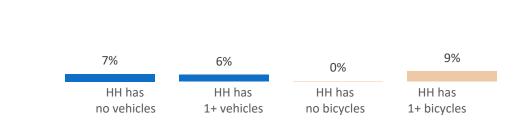
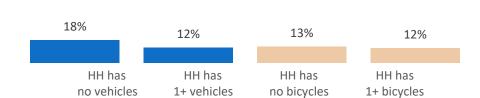


Figure 13: Average percent of employed respondents' work trips made by Metrorail by respondent characteristics





The three figures below display the proportion of respondents who reported making trips to non-commute destinations by driving, bicycling, or using Metrorail by respondent characteristics. Those living in households without motor vehicles were much less likely to make trips by driving (33%) than were those who lived in households with automobiles (49%). Less than 10% of people in households with one or more bicycle indicated that they made non-work commute trips by bicycle.

Figure 14: Percent of respondents who drive for at least some non-commute destination trips by respondent characteristics

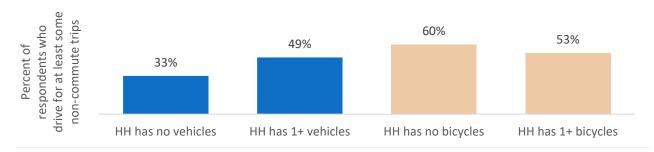


Figure 15: Percent of respondents who bike for at least some non-commute destination trips by respondent characteristics

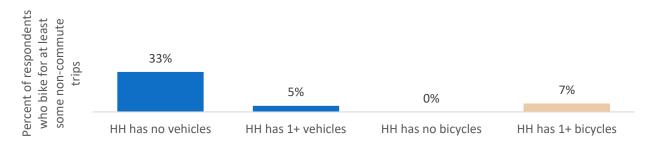
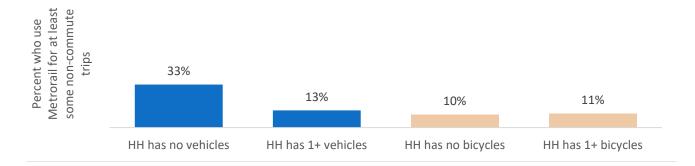


Figure 16: Percent of respondents who use Metrorail for at least some non-commute destination trips by respondent characteristics



Transportation of School-Aged Children

A set of questions on the survey addressed the school commute of children. Respondents who had children were asked what modes of transportation were used by their children to get to and from school. As with the work commute, respondents could choose more than one mode, which may indicate that a child gets to school using various modes of transportation or, in households with more than one child, different children use different modes.

About 4 in 10 respondents with children indicated that their child or children used a school bus, were driven by a caregiver or walked to school. For walking this was a statistically significant uptick from 2016 when 24% walked. About 10% or fewer reported their child was driven by a driving service, drove themselves, or used public transportation to get to and from school. Noted in the figure below are wording changes made in 2021 that may affect the accuracy of trendline comparison.

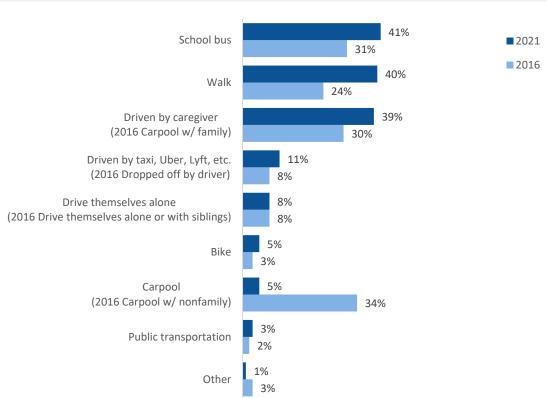


Figure 17: Modes of Transportation for Children Traveling To/From School

Please indicate how your child(ren) typically travel to/from school? (Please select all that apply.)*

Respondents with school age children who lived in West End reported using the school bus for the school commute more than in any of the other areas of Alexandria (see Table 48: Question #14 by Area). Female, Black, and multi-racial respondents were more likely than male and White respondents to say their children commuted by bus (see Table 99: Question #14 by Respondent Gender, Race and Ethnicity.)

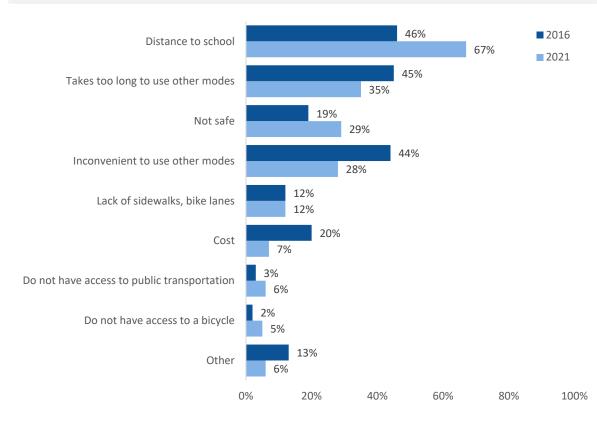
^{*}Percentages may add to more than 100% as respondents could choose more than one travel mode.

^{**} The responses of those who wrote something in the "other" space can be found in Appendix B: Verbatim Answers to Open-Ended Questions.

Parents were asked about barriers to using modes other than driving for children's school transportation. Distance to the school, time needed to use non-driving modes, safety, and the inconvenience of using other modes were the most frequently cited reasons for not using alternatives to driving in both years. Cost and inconvenience became lesser barriers, and distance and safety became greater barriers, from 2016 to 2021.

Figure 18: Barriers to Using Modes Other Than Driving for Children's School Transportation

If your children are driven to school or drive themselves, please indicate which, if any, of the following factors discourage you from using other modes of transportation for your child(ren) to/from school (please select all that apply):



^{*}Percentages may add to more than 100% as respondents could choose more than one travel mode.

^{**} The responses of those who wrote something in the "other" space can be found in Appendix B: Verbatim Answers to Open-Ended Questions

0%

100%

Traveling Tools and Amenities

Figure 18 shows the frequency that resident used GPS apps to determine their route. Over 50% of residents used them at least a few times a week and only 16% said they had never used such applications. Residents aged 54 and younger used GPS apps more frequently than those aged 55 or older. (See Table 75: Question #7 by Children and Age in the appendices.)



50%

Figure 19: Traveling Tools to Assist Drivers

A majority of employed residents received SmartBenefits (subsidized transit) or free parking. Twelve percent or fewer of residents received the other employer-provided transportation benefits listed in the survey question.

Residents of the combined area of North Ridge, Arlandria, Potomac Yard and Carlyle were more likely than those in the Central and West End areas to be offered these benefits. Residents from the West End and Central areas received free parking from their employer more often than others (see Table 38: Question #4 by Area). Females more than males had employers who offered SmartBenefits (see Table 89: Question #4 by Respondent Gender, Race and Ethnicity).

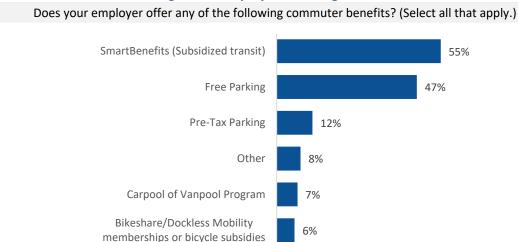


Figure 20: Employer Traveling Benefits

^{*}Percentages add to more than 100% as respondents could choose more than one response.

COVID-19 Impacts on Work Habits

For those who are employed, most had experienced changes related to working from home due to the COIVD-19 pandemic. Over one-third of respondents said they worked from home more days of the week and 28% said they went remote full-time. Only 7% say they worked from home less often and 30% had little or no change in the amount they worked from home. There was little variation by area or demographic characteristics.

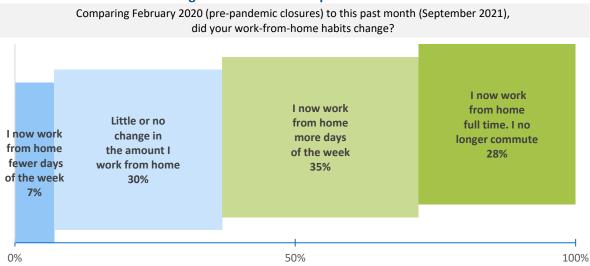


Figure 21: COVID-19 Impacts on Work

Appendix A: Complete Set of Responses for the Address-based Sample Survey

The following pages contain a complete set of responses to each question on the survey.

Table 1: Question #1

What is your employment status?	Percent	Number
Employed full- or part-time	79%	N=480
Not employed, not looking for work (retired, stay-at-home parent, etc.)	16%	N=94
Currently not employed	5%	N=31
Total	100%	N=605

Table 2: Work Commute Mode Share

Work Commute Mode Share	Average percent of work trips	Number
Average percent of work trips made by walking	7%	N=617
Average percent of work trips made by bike	3%	N=617
Average percent of work trips made by Capital Bikeshare	3%	N=617
Average percent of work trips made by bus	5%	N=617
Average percent of work trips made by driving alone	25%	N=617
Average percent of work trips made by carpooling/driving with others	3%	N=617
Average percent of work trips made Metrorail	6%	N=617
Average percent of work trips made taxi/uber	3%	N=617
Average percent of work trips made by VRE commuter rail	2%	N=617
Average percent of work trips made by working at home	40%	N=617
Average percent of work trips made by other modes	3%	N=617

Table 3: Commute Trips by Employed Respondents via Each Mode in Previous Week

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Percent of Employed Respondents Who Made at Least One Work Commute Trip via Each Mode in Previous Week	Percent	Number
Percent making any work trips in last week by walking	29%	N=617
Percent making any work trips in last week by bike	15%	N=617
Percent making any work trips in last week by Capital Bikeshare	17%	N=617
Percent making any work trips in last week by bus	22%	N=617
Percent making any work trips in last week by driving alone	59%	N=617
Percent making any work trips in last week by carpooling/driving with others	19%	N=617
Percent making any work trips in last week by Metrorail	28%	N=617
Percent making any work trips in last week by taxi/uber	19%	N=617
Percent making any work trips in last week by VRE commuter rail	11%	N=617
Percent making any work trips in last week by working at home	60%	N=617
Percent making any work trips in last week by other modes	14%	N=617

Table 4: Commute Trips by Employed Respondents via Transit in Previous Week

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Transit in Previous Week	Percent of respondents	Number
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	33%	N=617
Took transit AND walked on same day on any day in previous week	10%	N=617
Took transit AND biked on same day on any day in previous week	1%	N=617
Took transit AND biked or walked on same day on any day in previous week	0%	N=617

Table 5: Commute Trips by Employed Respondents via Each Mode in Previous Week

Table 5. Commute Tripo by Employed Respondents the East Mode in Testions 110cm		
Percent of Employed Respondents Who Made at Least One Work Commute Trip via Each Mode in Previous Week	Percent	Number
Percent making any work trips in last week by walking	29%	N=617
Percent making any work trips in last week by bike	15%	N=617
Percent making any work trips in last week by Capital Bikeshare	17%	N=617
Percent making any work trips in last week by bus	22%	N=617
Percent making any work trips in last week by driving alone	59%	N=617
Percent making any work trips in last week by carpooling/driving with others	19%	N=617
Percent making any work trips in last week by Metrorail	28%	N=617
Percent making any work trips in last week by taxi/uber	19%	N=617
Percent making any work trips in last week by VRE commuter rail	11%	N=617
Percent making any work trips in last week by working at home	60%	N=617
Percent making any work trips in last week by other modes	14%	N=617

Table 6: Question #2

Monday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	10%	N=617
Bike	1%	N=617
Capital Bikeshare	0%	N=617
Bus	13%	N=617
Drove alone	32%	N=617
Carpool (drove or rode in a car with others	2%	N=617
Metrorail	12%	N=617
Taxi/ Uber	2%	N=617
VRE commuter rail	0%	N=617
Worked at home	43%	N=617
I did not work	14%	N=617
Other	1%	N=617

Table 7: Question #2

Tuesday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	6%	N=617
Bike	1%	N=617
Capital Bikeshare	3%	N=617
Bus	4%	N=617
Drove alone	24%	N=617
Carpool (drove or rode in a car with others	4%	N=617
Metrorail	6%	N=617
Taxi/ Uber	1%	N=617
VRE commuter rail	10%	N=617
Worked at home	43%	N=617
I did not work	10%	N=617
Other	1%	N=617

Table 8: Question #2

Wednesday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	7%	N=617
Bike	11%	N=617
Capital Bikeshare	10%	N=617
Bus	4%	N=617
Drove alone	30%	N=617
Carpool (drove or rode in a car with others	2%	N=617
Metrorail	7%	N=617
Taxi/ Uber	4%	N=617
VRE commuter rail	1%	N=617
Worked at home	39%	N=617
I did not work	4%	N=617
Other	1%	N=617

Table 9: Question #2

Thursday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	9%	N=617
Bike	2%	N=617
Capital Bikeshare	1%	N=617
Bus	7%	N=617
Drove alone	24%	N=617
Carpool (drove or rode in a car with others	2%	N=617
Metrorail	16%	N=617
Taxi/ Uber	11%	N=617
VRE commuter rail	0%	N=617
Worked at home	42%	N=617
I did not work	4%	N=617
Other	1%	N=617

Table 10: Question #2

Friday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	16%	N=617
Bike	2%	N=617
Capital Bikeshare	4%	N=617
Bus	4%	N=617
Drove alone	19%	N=617
Carpool (drove or rode in a car with others	3%	N=617
Metrorail	6%	N=617
Taxi/ Uber	3%	N=617
VRE commuter rail	0%	N=617
Worked at home	45%	N=617
I did not work	13%	N=617
Other	2%	N=617

Table 11: Question #2

Saturday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	4%	N=617
Bike	4%	N=617
Capital Bikeshare	1%	N=617
Bus	1%	N=617
Drove alone	18%	N=617
Carpool (drove or rode in a car with others	11%	N=617
Metrorail	1%	N=617
Taxi/ Uber	5%	N=617
VRE commuter rail	0%	N=617
Worked at home	6%	N=617
I did not work	59%	N=617
Other	11%	N=617

Table 12: Question #2

Sunday (Percent of respondents who used each mode)	Percent of respondents	Number	
Walk	7%	N=617	
Bike	2%	N=617	
Capital Bikeshare	0%	N=617	
Bus	5%	N=617	
Drove alone	7%	N=617	
Carpool (drove or rode in a car with others	1%	N=617	
Metrorail	3%	N=617	
Taxi/ Uber	1%	N=617	
VRE commuter rail	0%	N=617	
Worked at home	6%	N=617	
I did not work	78%	N=617	
Other	1%	N=617	

Table 13: Question #3

Comparing February 2020 (pre-pandemic closures) to this past month (September 2021), did your work-from-home habits change? (Percent of respondents)	Percent	Number
I now work from home more days of the week	35%	N=163
Little or no change in the amount I work from home	30%	N=140
I now work from home full time. I no longer commute	28%	N=130
I now work from home fewer days of the week	7%	N=31
Total	100%	N=464

Table 14: Question #4

Does your employer offer any of the following commuter benefits? (Select all that apply.)		Number
SmartBenefits (Subsidized transit)	55%	N=205
Free Parking	47%	N=177
Pre-Tax Parking	12%	N=43
Other	8%	N=31
Carpool of Vanpool Program	7%	N=25
Bikeshare/Dockless Mobility memberships or bicycle subsidies	6%	N=22
Total	100%	N=374

Table 15: Question #5

If you most often drive to get to work, which of the following are the main reasons? (Please select all that apply.)	Percent	Number
Quickest/most convenient	52%	N=215
Don't usually drive alone to get to work	33%	N=136
Need/want to make stops/run errands on the way to/from work	26%	N=106
Irregular work schedule	22%	N=90
Need/want to come and go from the workplace during the day	16%	N=67
Too hard to get to work location from Metrorail station or bus stop	15%	N=64
Privacy	15%	N=63
Too hard to get to Metrorail station or bus stop from home	13%	N=54
Bus or Metrorail is not available or inadequate	12%	N=48
Personal reasons/commitments	11%	N=45
Driving costs less	11%	N=44
Work reasons/commitments	10%	N=40
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	7%	N=27
Don't have shower at work if I walk or bike	6%	N=25
I take a child/children to and/or from school or child care on the way to/ from work	6%	N=25
Other modes are not safe	3%	N=13
Health or physical limitations	3%	N=10
Don't want to take a shower at work if bike or walk	2%	N=10
Total	100%	N=410

Table 16: Travel Mode for 7 Kinds of Trips

Percent of respondents using each mode to complete any of 7 kinds of trips (parks & recreation centers, grocery store, non-grocery errands, restaurants, fun or fitness, visit friends or family, other social activities)	Percent of respondents	Number
Percent who ever walk	84%	N=617
Percent who ever bike	41%	N=617
Percent who ever use Capital Bikeshare	29%	N=617
Percent who ever bus	25%	N=617
Percent who ever drive	86%	N=617
Percent who ever carpool	39%	N=617
Percent who ever use Metrorail	41%	N=617
Percent who ever use a taxi/uber	36%	N=617
Percent who ever do something else	26%	N=617

Table 17: Question #6

Parks & recreation centers	Percent of respondents	Number
I did not do this activity	30%	N=617
Walk	40%	N=617
Bike	12%	N=617
Capital Bikeshare	11%	N=617
Bus	5%	N=617
Drove alone	42%	N=617
Carpool	10%	N=617
Metrorail	6%	N=617
Taxi/ Uber	7%	N=617
Other	1%	N=617

Table 18: Question #6

Grocery store	Percent of respondents	Number
I did not do this activity	15%	N=617
Walk	32%	N=617
Bike	25%	N=617
Capital Bikeshare	2%	N=617
Bus	4%	N=617
Drove alone	57%	N=617
Carpool	4%	N=617
Metrorail	4%	N=617
Taxi/ Uber	4%	N=617
Other	4%	N=617

Table 19: Question #6

Non-grocery errands	Percent of respondents	Number
I did not do this activity	11%	N=617
Walk	35%	N=617
Bike	9%	N=617
Capital Bikeshare	2%	N=617
Bus	10%	N=617
Drove alone	57%	N=617
Carpool	8%	N=617
Metrorail	14%	N=617
Taxi/ Uber	9%	N=617
Other	16%	N=617

Table 20: Question #6

Restaurants	Percent of respondents	Number
I did not do this activity	16%	N=617
Walk	38%	N=617
Bike	5%	N=617
Capital Bikeshare	4%	N=617
Bus	14%	N=617
Drove alone	44%	N=617
Carpool	25%	N=617
Metrorail	9%	N=617
Taxi/ Uber	13%	N=617
Other	4%	N=617

Table 21: Question #6

Fun or fitness	Percent of respondents	Number
I did not do this activity	11%	N=617
Walk	54%	N=617
Bike	13%	N=617
Capital Bikeshare	22%	N=617
Bus	5%	N=617
Drove alone	34%	N=617
Carpool	9%	N=617
Metrorail	7%	N=617
Taxi/ Uber	9%	N=617
Other	4%	N=617

Table 22: Question #6

Visit friends or family	Percent of respondents	Number
I did not do this activity	30%	N=617
Walk	24%	N=617
Bike	5%	N=617
Capital Bikeshare	2%	N=617
Bus	5%	N=617
Drove alone	50%	N=617
Carpool	14%	N=617
Metrorail	11%	N=617
Taxi/ Uber	12%	N=617
Other	4%	N=617

Table 23: Question #6

Other social activities	Percent of respondents	Number
I did not do this activity	25%	N=617
Walk	23%	N=617
Bike	5%	N=617
Capital Bikeshare	3%	N=617
Bus	7%	N=617
Drove alone	55%	N=617
Carpool	10%	N=617
Metrorail	28%	N=617
Taxi/ Uber	9%	N=617
Other	2%	N=617

Table 24: Question #7

In the past month, how often did you use a GPS app like Google Maps or Waze to help determine your route to avoid traffic? (Percent daily or a few times week)	Percent	Number
Daily or Near Daily	31%	N=190
Few times per week	30%	N=182
Few times per month	20%	N=123
Never	16%	N=99
One time	3%	N=16
Total	100%	N=609

Table 25: Question #8

In the past month, how many times, if ever, did you use any of these modes of	· ·	or Near aily	Few times per week				•		One time		Never	
transportation around Alexandria? (Percent daily or a few times week)	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number		
Walk	46%	N=259	29%	N=161	13%	N=75	4%	N=23	8%	N=46		
Bike	3%	N=18	8%	N=43	9%	N=50	5%	N=29	74%	N=391		
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter/escooter)	0%	N=2	2%	N=11	4%	N=20	6%	N=29	88%	N=446		
Drive alone	48%	N=270	29%	N=166	11%	N=59	2%	N=9	11%	N=60		
Private Vehicle – as driver	34%	N=190	23%	N=128	10%	N=57	3%	N=15	29%	N=163		
Private Vehicle – as passenger	6%	N=29	19%	N=103	21%	N=112	10%	N=52	44%	N=232		
Motorcycle/moped/motorized scooter	0%	N=1	0%	N=0	1%	N=7	1%	N=5	98%	N=500		
Taxi, other hired car service	0%	N=1	3%	N=16	9%	N=47	10%	N=56	78%	N=416		
Carshare (Zipcar, Hertz OnDemand)	0%	N=1	0%	N=2	1%	N=3	2%	N=10	97%	N=500		
Transportation Network Company (TNC such as Uber, Lyft, Via)	0%	N=0	6%	N=31	22%	N=119	21%	N=111	51%	N=268		
Rail (Metrorail, commuter rail)	5%	N=28	7%	N=40	18%	N=98	12%	N=66	57%	N=306		
DASH Bus	4%	N=20	4%	N=23	6%	N=32	6%	N=32	80%	N=428		
Metrobus	3%	N=14	4%	N=21	7%	N=39	4%	N=22	82%	N=438		
Multiple transit systems	3%	N=16	3%	N=13	7%	N=35	3%	N=18	84%	N=441		
Carpool/Vanpool	1%	N=5	3%	N=15	7%	N=39	2%	N=11	87%	N=456		

Table 26: Question #9

To what extent do you agree or disagree that each of the following would increase your use of public transportation (bus or metro) as		Strongly Agree		Somewhat Agree		Somewhat Disagree		Strongly Disagree	
a means of transportation: (Percent somewhat or strongly agree)	Percent	Number	Percent	Number	Percent	Number	Percent	Number	
Services were more reliable	31%	N=169	44%	N=241	12%	N=67	13%	N=71	
Services were more frequent	40%	N=223	36%	N=201	12%	N=64	12%	N=66	

To what extent do you agree or disagree that each of the following would increase your use of public transportation (bus or metro) as		Strongly Agree		Somewhat Agree		Somewhat Disagree		Strongly Disagree	
a means of transportation: (Percent somewhat or strongly agree)	Percent	Number	Percent	Number	Percent	Number	Percent	Number	
There were more direct routes/fewer transfers to destinations	44%	N=242	34%	N=189	11%	N=61	10%	N=57	
Services were less expensive	25%	N=132	30%	N=160	27%	N=147	18%	N=97	
My travel time was less than if I used a personal vehicle	56%	N=312	27%	N=149	8%	N=43	10%	N=55	
There were routes that stop at my desired destinations	48%	N=265	31%	N=170	11%	N=63	10%	N=56	
There were routes that stop at or near my home	46%	N=250	30%	N=165	13%	N=69	12%	N=64	
I felt safer from crime while riding public transportation	21%	N=113	31%	N=167	27%	N=145	22%	N=121	
I felt safer from crime waiting at the station	21%	N=116	31%	N=172	25%	N=135	23%	N=123	
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	18%	N=98	34%	N=186	27%	N=148	21%	N=112	
Children could ride free on Metro	19%	N=103	23%	N=123	23%	N=123	35%	N=190	
I were in better health or more physically able to get to it and use it	9%	N=47	17%	N=91	23%	N=125	51%	N=278	
I do not want to use public transportation	14%	N=80	18%	N=100	20%	N=115	48%	N=270	

Table 27: Question #10

In the last month, about how frequently have you done each of the following? (Percent ever)	Never		1-10 times a month		11-20 times a month		More than 20 times a month	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Ridden a bicycle for fun or exercise	65%	N=378	25%	N=148	7%	N=39	3%	N=19
Walked, ran, or jogged for fun or exercise	10%	N=62	34%	N=205	24%	N=145	31%	N=189

Table 28: Question #11

To what extent do you agree or disagree that each of the following would increase your use of walking as a means of transportation:		ly Agree	Somewhat Agree		Somewhat Disagree		Strongly Disagree	
(Percent somewhat or strongly agree)	Percent	Number	Percent	Number	Percent	Number	Percent	Number
There were more sidewalks	36%	N=207	32%	N=181	19%	N=109	13%	N=76
There were more crosswalks	34%	N=193	31%	N=176	20%	N=112	16%	N=90
If the sidewalks and paths were in better condition	38%	N=219	29%	N=167	19%	N=109	13%	N=76
There were more off-street walking or multi-use paths/trails	50%	N=287	22%	N=125	16%	N=90	12%	N=67
There was more street lighting after dark	49%	N=280	27%	N=154	13%	N=76	11%	N=61
I had access to workplace showers	14%	N=79	17%	N=91	24%	N=130	45%	N=249
I felt more safe from traffic while walking	37%	N=211	27%	N=151	20%	N=113	17%	N=94
I felt more safe from crime while walking	24%	N=135	30%	N=168	26%	N=148	20%	N=111
I had better health or physical ability to do so	16%	N=89	16%	N=91	20%	N=114	48%	N=267
It didn't take longer to walk to my destinations than to drive	33%	N=186	27%	N=152	21%	N=116	19%	N=104
I do not want to walk as a means of transportation	14%	N=81	13%	N=73	19%	N=108	54%	N=309

Table 29: Question #12

To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation:	Strongly Agree Somewhat Agree Somewhat Disagree		Somewhat Agree		Somewhat Agree				Strongly	Disagree
(Percent somewhat or strongly agree)	Percent	Number	Percent	Number	Percent	Number	Percent	Number		
There were more on-street bike lanes	30%	N=159	26%	N=138	14%	N=73	30%	N=160		
There were more off-street bike or multi-use paths/trails	45%	N=235	22%	N=114	10%	N=55	23%	N=123		
There was more street lighting after dark	38%	N=201	25%	N=131	14%	N=74	23%	N=125		
I had access to a bicycle	21%	N=109	24%	N=126	13%	N=65	42%	N=217		
I had access to an electric/pedal assist bicycle	11%	N=59	21%	N=111	20%	N=104	47%	N=245		
I had access to workplace showers	12%	N=64	22%	N=115	17%	N=89	48%	N=247		
I had a place to securely store a bicycle at work	21%	N=111	24%	N=127	15%	N=78	39%	N=203		
There were places to securely park a bicycle at other destinations	26%	N=137	35%	N=181	9%	N=49	29%	N=153		
I felt more safe from traffic while riding a bicycle	47%	N=241	20%	N=105	8%	N=43	25%	N=128		
I felt more safe from crime while riding a bicycle	14%	N=74	22%	N=115	28%	N=146	35%	N=181		
I had better health or physical ability to do so	11%	N=59	19%	N=98	15%	N=79	54%	N=282		
It didn't take longer to ride a bicycle to my destinations than to drive	24%	N=124	24%	N=123	17%	N=89	35%	N=181		
I knew how to ride a bike	11%	N=55	7%	N=35	10%	N=54	72%	N=375		
If there were more Capital Bikeshare stations	10%	N=49	21%	N=106	20%	N=104	50%	N=255		
I do not want to use a bicycle as a means of transportation	26%	N=147	19%	N=106	15%	N=85	40%	N=229		

Table 30: Question #13

Do you have school-aged children? (Percent yes)	Percent	Number
No	87%	N=526
Yes	13%	N=80
Total	100%	N=606

Table 31: Question #14

Please indicate how your child(ren) typically travel to/from school? (Please select all that apply.)	Percent	Number
School bus	41%	N=34
Walk	40%	N=33
Carpool w/ family	39%	N=32
Dropped off by driver	11%	N=9
Drive themselves alone or with siblings	8%	N=7
Carpool w/ nonfamily	5%	N=4
Bike	5%	N=4
Public transportation	3%	N=2
Other	1%	N=1
Total	100%	N=81

^{*}Only asked of those with a school-aged child or children

Table 32: Question #15

If your children are driven to school or drive themselves, please indicate which, if any, of the following factors discourage you from using other modes of transportation for your child(ren) to/from school (please select all that apply):	Percent	Number
Distance to school	67%	N=38
Takes too long to use other modes	35%	N=20
Not safe	29%	N=16
Inconvenient to use other modes	28%	N=16
Lack of sidewalks, bike lanes	12%	N=7
Cost	7%	N=4
Do not have access to public transportation	6%	N=4
Other	6%	N=3
Do not have access to a bicycle	5%	N=3
Total	100%	N=57

Appendix B: Verbatim Answers to Open-Ended Questions

Following are verbatim responses to open-ended questions. Because these responses were written by survey participants, they are presented here in verbatim form, including any typographical, grammatical or other mistakes. Within each question the responses are in alphabetical order.

Q14 How do your child(ren) typically travel to/from school? (Select all that apply.)

- No child.
- No children.
- · No children.
- N/A.
- NA.

Q5 If you typically drive alone to get to work, which of the following are the main reasons?

- Live 65 miles from office.
- Prefer to drive to metro.
- SSD.
- METRO TAKES A LOT LONGER.
- I don't drive.
- Metro is unreliable.
- I don't work w/ anybody.

Q15: If your children are driven to school or drive themselves, which, if any, of the following factors keep your child(ren) from walking, biking, or taking school bus or public transportation to/from school (Select all that apply):

- Private school w/o bus option also too young for bus now.
- Bus is often late.
- No school bus for kids school.
- No children.
- N/A.
- No children.
- No children.
- N/A.
- My child is preschool.
- None
- Town days we drive; the school bus comes too early & the pandemic makes me less inclined to have the kids on bus.

Appendix C: Selected Survey Responses by Area of Residence

Understanding the Crosstabulation Tables

The subgroup comparison tables contain the crosstabulations of responses to the random survey by responses to the open participation survey. Chi-square or ANOVA tests of significance were applied to these breakdowns of survey questions. A "p-value" of 0.05 or less indicates that there is less than a 5% probability that differences observed between groups are due to chance; or in other words, a greater than 95% probability that the differences observed in the selected categories of the sample represent "real" differences among those populations. As subgroups vary in size and each group has a unique margin of error, statistical testing is used to determine whether differences between subgroups are statistically significant.

Each column in the following tables is labeled with a letter for each subgroup being compared. The letters start over with "A" for each different characteristic. (For example, the Areas below are marked "A" through "E".)

For each pair of subgroup ratings within a characteristic within a row that has a statistically significant difference, an uppercase letter denoting significance is shown in the cell with the larger column proportion. The letter denotes the subgroup with the smaller column proportion from which it is statistically different. Subgroups that have no uppercase letter denotation in their column and that are also not referred to in any other column were not statistically different.

Looking at *Table 33: Question #1 by Area* the responses were not statistically significantly different, as there are no Upper-Case Letters denoting difference. However in *Table 34: Work Commute Mode Share by Area* on the next page, the "Average percent of work trips made by walking" (first row) shows that Old Town (E) was statistically higher than Central (A), but there were no other statistically significant differences in that row. For "Average percent of work trips made by driving alone" West End (A) and Central (B) were both was statistically higher than the areas in columns (C), (D), and (E).

Table 33: Question #1 by Area

What is your employment status?	Area							
	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)		
	(A)	(B)	(C)	(D)	(E)			
Employed full- or part-time	83%	76%	82%	79%	77%	79%		
Not employed, not looking for work (retired, stay-at-home parent, etc.)	14%	16%	12%	21%	17%	16%		
Currently not employed	3%	8%	5%	1%	6%	5%		

Table 34: Work Commute Mode Share by Area

Work Commute Mode Share			Area			Overall
	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
Average percent of work trips made by walking	6%	6%	7%	5%	11% B	7%
Average percent of work trips made by bike	1%	4% A	2%	3%	4% A	3%
Average percent of work trips made by Capital Bikeshare	4%	4%	2%	1%	3%	3%
Average percent of work trips made by bus	4%	6%	6%	3%	4%	5%
Average percent of work trips made by driving alone	35% C D E	34% C D E	15%	14%	19%	25%
Average percent of work trips made by carpooling/driving with others	4%	4%	2%	5%	3%	3%
Average percent of work trips made Metrorail	4%	5%	7%	10% A	8%	6%
Average percent of work trips made taxi/uber	4%	4%	2%	2%	2%	3%
Average percent of work trips made by VRE commuter rail	1%	2%	2%	2%	2%	2%
Average percent of work trips made by working at home	36%	29%	49% B	54% B	41%	40%
Average percent of work trips made by other modes	1%	3%	5%	2%	2%	3%

Table 35: Commute Trips by Employed Respondents via Each Mode in Previous Week by Area

Percent of Employed Respondents Who Made at Least One Work Commute Trip via	Area						
Each Mode in Previous Week	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)	
	(A)	(B)	(C)	(D)	(E)		
Percent making any work trips in last week by walking	28%	28%	30%	19%	34%	29%	
Percent making any work trips in last week by bike	5%	18%	17%	17%	21% A	15%	
Percent making any work trips in last week by Capital Bikeshare	18%	20%	14%	8%	19%	17%	
Percent making any work trips in last week by bus	18%	25%	24%	17%	22%	22%	
Percent making any work trips in last week by driving alone	67% C	71% C E	47%	51%	52%	59%	
Percent making any work trips in last week by carpooling/driving with others	22%	22%	15%	19%	16%	19%	
Percent making any work trips in last week by Metrorail	19%	24%	31%	37%	34%	28%	
Percent making any work trips in last week by taxi/uber	23%	24%	13%	14%	16%	19%	
Percent making any work trips in last week by VRE commuter rail	5%	13%	13%	11%	13%	11%	
Percent making any work trips in last week by working at home	61%	49%	71% B	67%	60%	60%	
Percent making any work trips in last week by other modes	8%	16%	17%	10%	16%	14%	

Table 36: Commute Trips by Employed Respondents via Transit in Previous Week by Area

Percent of Employed Respondents Who Made at Least One Work Commute Trip via	Area						
Transit in Previous Week	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)	
	(A)	(B)	(C)	(D)	(E)		
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	23%	31%	36%	43%	37%	33%	
Took transit AND walked on same day on any day in previous week	8%	9%	16%	9%	10%	10%	
Took transit AND biked on same day on any day in previous week	0%	0%	1%	5% A B C E	0%	1%	
Took transit AND biked or walked on same day on any day in previous week	0%	0%	0%	0%	0%	0%	

Table 37: Question #3 by Area

Comparing February 2020 (pre-pandemic closures) to this past month (September 2021),	Area						
did your work-from-home habits change? (Percent of respondents)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)	
	(A)	(B)	(C)	(D)	(E)		
I now work from home more days of the week	29%	34%	38%	35%	40%	35%	
Little or no change in the amount I work from home	37% C	41% C	17%	22%	26%	30%	
I now work from home full time. I no longer commute	24%	21%	40% B	33%	25%	28%	
I now work from home fewer days of the week	9%	3%	6%	9%	9%	7%	

Table 38: Question #4 by Area

Does your employer offer any of the following commuter benefits? (Select all that						Overall
apply.)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
SmartBenefits (Subsidized transit)	39%	43%	77%	64%	56%	55%
			A B			
Free Parking	64%	57%	29%	32%	46%	47%
	C D	С				
Pre-Tax Parking	15%	10%	9%	19%	9%	12%
Other	9%	11%	6%	7%	9%	8%
Carpool of Vanpool Program	4%	11%	7%	1%	6%	7%
Bikeshare/Dockless Mobility memberships or bicycle subsidies	3%	9%	12%	0%	3%	6%

Table 39: Question #5 by Area

If you most often drive to get to work, which of the following are the main reasons?			Area			Overall
(Please select all that apply.)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
Quickest/most convenient	58% C	68% C D	36%	37%	52%	52%
Don't usually drive alone to get to work	17%	25%	46% A B	46% A	41% A	33%
Need/want to make stops/run errands on the way to/from work	35%	28%	17%	19%	26%	26%
Irregular work schedule	25%	20%	21%	26%	22%	22%
Need/want to come and go from the workplace during the day	23%	19%	14%	11%	11%	16%
Too hard to get to work location from Metrorail station or bus stop	15%	20%	11%	8%	18%	15%
Privacy	23%	16%	10%	14%	13%	15%
Too hard to get to Metrorail station or bus stop from home	21% C	18% C	4%	12%	6%	13%
Bus or Metrorail is not available or inadequate	10%	19%	8%	12%	8%	12%
Personal reasons/commitments	17% C	18% C	3%	8%	6%	11%
Driving costs less	21% C E	12%	5%	9%	4%	11%
Work reasons/commitments	11%	14%	7%	9%	3%	10%
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	3%	8%	9%	4%	8%	7%
Don't have shower at work if I walk or bike	3%	9%	4%	5%	9%	6%
I take a child/children to and/or from school or child care on the way to/ from work	4%	6%	9%	8%	3%	6%
Other modes are not safe	3%	5%	1%	2%	3%	3%
Health or physical limitations	1%	4%	3%	0%	3%	3%
Don't want to take a shower at work if bike or walk	1%	3%	3%	0%	3%	2%

Table 40: Travel Mode for 7 Kinds of Trips by Area

Percent of respondents using each mode to complete any of 7 kinds of trips (parks &			Area	Area						
recreation centers, grocery store, non-grocery errands, restaurants, fun or fitness, visit friends or family, other social activities)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)				
	(A)	(B)	(C)	(D)	(E)					
Percent who ever walk	69%	80% A	88% A	96% A B	95% A B	84%				
Percent who ever bike	36%	42%	43%	34%	46%	41%				
Percent who ever use Capital Bikeshare	24%	32%	30%	23%	33%	29%				
Percent who ever bus	19%	22%	31%	23%	31%	25%				
Percent who ever drive	84%	85%	83%	95%	85%	86%				
Percent who ever carpool	43%	39%	36%	49%	31%	39%				
Percent who ever use Metrorail	31%	39%	48%	35%	51% A	41%				
Percent who ever use a taxi/uber	31%	29%	38%	39%	44%	36%				
Percent who ever do something else	20%	30%	28%	23%	26%	26%				

Table 41: Question #7 by Area

In the past month, how often did you use a GPS app like Google Maps or Waze to help			Area			Overall
determine your route to avoid traffic? (Percent daily or a few times week)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
Daily or Near Daily	33%	33%	26%	24%	33%	31%
Few times per week	32%	26%	36%	37%	25%	30%
Few times per month	17%	16%	19%	29%	26%	20%
Never	15%	23%	17%	7%	13%	16%
		D				
One time	3%	2%	2%	4%	3%	3%

Table 42: Question #8 by Area

In the past month, how many times, if ever, did you use any of these			Area			Overall
modes of transportation around Alexandria? (Percent daily or a few times week)	West End	Central	North Ridge/Arlandria/ Potomac Yard/Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
Walk	84%	86%	95%	99%	98%	92%
			A	A B	АВ	
Bike	15%	21%	32%	35%	34%	26%
			A	Α	Α	
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter, escooter)	13%	9%	14%	11%	15%	12%
Drive alone	92%	89%	84%	95%	89%	89%
Private Vehicle – as driver	75%	67%	66%	79%	71%	71%
Private Vehicle – as passenger	55%	52%	56%	71%	57%	56%
Motorcycle, moped, motorized scooter	0%	2%	3%	3%	3%	2%
Taxi, other hired car service	18%	24%	28%	17%	21%	22%
Carshare (Zipcar, Hertz OnDemand)	2%	3%	2%	2%	6%	3%
Transportation Network Company (TNC such as Uber, Lyft, Via)	45%	42%	53%	59%	55%	49%
Rail (Metrorail, commuter rail)	24%	38%	51%	50%	57%	43%
			A	Α	АВ	
DASH Bus	16%	26%	21%	14%	19%	20%
Metrobus	18%	24%	14%	23%	12%	18%
Multiple transit systems	12%	22%	17%	15%	12%	16%
Carpool, Vanpool	25% C E	14%	6%	13%	9%	13%

Table 43: Question #9 by Area

To what extent do you agree or disagree that each of the following would increase your use of			Area			Overall
public transportation (bus or metro) as a means of transportation: (Percent somewhat or strongly agree)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
Services were more reliable	78%	78%	74%	73%	70%	75%
Services were more frequent	76%	79%	76%	77%	76%	77%
There were more direct routes/fewer transfers to destinations	82%	78%	81%	78%	73%	78%
Services were less expensive	65% C D	61%	46%	40%	53%	55%
My travel time were less than if I used a personal vehicle	84%	81%	80%	87%	83%	83%
There were routes that stop at my desired destinations	80%	78%	83%	74%	76%	78%
There were routes that stop at or near my home	78%	77%	80%	69%	70%	76%
I felt safer from crime while riding public transportation	63% D	59% D	49%	30%	45%	51%
I felt safer from crime waiting at the station	64% D E	62% D E	48%	35%	45%	53%
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	67% C D E	57%	46%	40%	44%	52%
Children could ride free on Metro	56% D E	45%	39%	32%	32%	42%
I were in better health or more physically able to get to it and use it	36% C D	33% D	19%	9%	22%	26%
I do not want to use public transportation	46% C D E	37% D	28%	17%	23%	32%

Table 44: Question #10 by Area

In the last month, about how frequently have you done each of the following?	Area								
(Percent ever)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)			
	(A)	(B)	(C)	(D)	(E)				
Ridden a bicycle or walked for fun or exercise	27%	32%	43%	37%	39%	35%			
Ran or jogged for fun or exercise	79%	87%	95%	96%	94%	90%			
			A	A	A				

Table 45: Question #11 by Area

To what extent do you agree or disagree that each of the following would increase your use			Area			Overall
of walking as a means of transportation: (Percent somewhat or strongly agree)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
There were more sidewalks	74%	73%	60%	61%	66%	68%
There were more crosswalks	78% C E	73% C	50%	59%	60%	65%
If the sidewalks and paths were in better condition	71%	73%	62%	58%	69%	68%
There was more off-street walking or multi-use paths, trails	77%	73%	71%	73%	69%	72%
There was more street lighting after dark	80%	77%	68%	72%	81%	76%
I had access to public or workplace showers	35%	30%	36%	22%	29%	31%
I felt more safe from traffic while walking	69%	66%	55%	67%	64%	64%
I felt more safe from crime while walking	62%	56%	45%	47%	56%	54%
I had better health or physical ability to do so	47% C D E	36% D	28%	11%	27%	32%
It didn't take longer to walk to my destinations than to drive	82% B C E	53%	46%	63%	61%	60%
I do not want to walk as a means of transportation	40% C D E	35% D E	24%	16%	12%	27%

Table 46: Question #12 by Area

To what extent do you agree or disagree that each of the following would increase your use			Area			Overall
of a bicycle as a means of transportation: (Percent somewhat or strongly agree)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
There were more on-street bike lanes	57%	58%	50%	72%	52%	56%
There was more off-street bike or multi-use paths, trails	64%	65%	57%	80% C	72%	66%
There was more street lighting after dark	66%	65%	50%	66%	67%	63%
I had access to a bicycle	51%	52%	40%	42%	41%	45%
I had access to an electric/pedal assist bicycle	35%	35%	32%	34%	30%	33%
I had access to public or workplace showers	32%	36%	36%	33%	37%	35%
I had a place to securely store a bicycle at work	51%	45%	47%	35%	49%	46%
There were places to securely park a bicycle at other destinations	60%	58%	63%	67%	63%	61%
I felt more safe from traffic while riding a bicycle	64%	63%	66%	81%	69%	67%
I felt more safe from crime while riding a bicycle	52% C	35%	32%	34%	33%	37%
I had better health or physical ability to do so	41% D E	37%	29%	19%	21%	30%
It didn't take longer to ride a bicycle to my destinations than to drive	54%	44%	43%	55%	50%	48%
I knew how to ride a bike	18%	19%	16%	12%	18%	17%
If there were more Capital Bikeshare stations	35%	31%	29%	32%	27%	30%
I do not want to use a bicycle as a means of transportation	58% C E	44%	39%	42%	39%	45%

Table 47: Question #13 by Area

Do you have school-aged children? (Percent yes)			Area			Overall
	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
No	89%	83%	86%	82%	94%	87%
Yes	11%	17%	14%	18%	6%	13%

Table 48: Question #14 by Area

Please indicate how your child(ren) typically travel to/from school? (Please select			Area			Overall
all that apply.)	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
School bus	82% C D E	53%	19%	19%	12%	41%
Walk	24%	43%	42%	65%	21%	40%
Carpool w/ family	10%	33%	58%	29%	70% A	39%
Dropped off by driver	7%	16%	9%	8%	11%	11%
Drive themselves alone or with siblings	0%	3%	13%	18%	18%	8%
Carpool w/ nonfamily	0%	14%	0%	0%	0%	5%
Bike	0%	7%	10%	0%	0%	5%
Public transportation	7%	3%	3%	0%	0%	3%
Other	3%	0%	0%	6%	0%	1%

^{*}Only asked of those with a school-aged child or children

Table 49: Question #15 by Area

If your children are driven to school or drive themselves, please indicate which, if any, of the			Area			Overall
following factors discourage you from using other modes of transportation for your child(ren) to/from school (please select all that apply):	West End	Central	North Ridge/ Arlandria/ Potomac Yard/ Carlyle	Del Ray	Old Town	(A)
	(A)	(B)	(C)	(D)	(E)	
Distance to school	38%	52%	95%	57%	80%	67%
Takes too long to use other modes	18%	36%	26%	9%	67%	35%
Not safe	37%	19%	31%	11%	68%	29%
Inconvenient to use other modes	18%	15%	26%	56%	40%	28%
Lack of sidewalks, bike lanes	62% B C	9%	3%	16%	0%	12%
Cost	18%	13%	0%	0%	0%	7%
Do not have access to public transportation	0%	4%	16%	8%	0%	6%
Other	0%	12%	0%	14%	0%	6%
Do not have access to a bicycle	18%	0%	0%	0%	13%	5%

Appendix D: Selected Survey Responses by Respondent Characteristics

The tables in this Appendix display survey results by selected respondent characteristics. An explanation of how to interpret statistical differences can be found in *Appendix C: Selected Survey Responses by Area of Residence* on page 45.

Note that there are three variables used for cross-tabulations in this appendix (Household has private vehicle(s); Household has bicycle(s); and Use Google Maps or Waze monthly), statistical tests compare the two categories within the variable (i.e., whether those who say yes (A) are different from those who say no (B)), they do not compare across variables (i.e., tests do not indicate if those with a private vehicle have a statistically different response than those who don't have a bicycle).

By Travel Amenities

Table 50: Question #1 by Travel Amenities

What is your employment status?	Household vehic	-		old has cle(s)	Use Google N mon	Overall	
	Yes			No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	1
Employed full- or part-time	79%	60%	81% B	58%	89%	86%	79%
Not employed, not looking for work (retired, stay-at-home parent, etc.)	16%	26%	14%	30% A	6%	9%	16%
Currently not employed	5%	15%	5%	12% A	5%	5%	5%

Table 51: Work Commute Mode Share by Travel Amenities

Work Commute Mode Share	Househ priv vehic	ate	House has bio	ehold cycle(s)	Use G Maps o mor		pre-tax	er free or parking red only)	Car/Vanpool o	martBenefits, or Bikeshare or Employed Only)	Overall
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Average percent of work trips made by walking	8%	7%	7%	6%	7%	6%	7%	6%	6%	7%	7%
Average percent of work trips made by bike	2%	5%	3%	5%	3%	2%	2%	3%	3%	3%	3%
Average percent of work trips made by Capital Bikeshare	3%	7%	3%	5%	3%	3%	3%	3%	2%	3%	3%
Average percent of work trips made by bus	6%	8%	4%	9% A	4%	4%	3%	6% A	5%	4%	5%
Average percent of work trips made by driving alone	22%	25%	26%	16%	34%	26%	38% B	16%	17%	33% A	25%
Average percent of work trips made by carpooling/driving with others	3%	12% A	3%	8% A	4%	2%	3%	3%	3%	4%	3%
Average percent of work trips made Metrorail	7%	6%	6%	8%	6%	5%	4%	8% A	9% B	4%	6%
Average percent of work trips made taxi/uber	3%	13% A	3%	8% A	2%	3%	3%	3%	2%	4% A	3%
Average percent of work trips made by VRE commuter rail	2%	5%	2%	6% A	2%	2%	2%	2%	2%	1%	2%
Average percent of work trips made by working at home	41% B	8%	41%	24%	31%	44% A	33%	45% A	47% B	34%	40%
Average percent of work trips made by other modes	3%	5%	3%	5%	3%	3%	2%	3%	3%	2%	3%

Table 52: Commute Trips by Employed Respondents via Each Mode in Previous Week by Travel Amenities

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Each Mode in Previous Week	pri	nold has vate cle(s)	Household has bicycle(s)		Use Google Maps or Waze monthly		Commuter free or pre-tax parking (Employed only)		Commuter Sm Car/Vanpool or Bike subsidies Only	Overall	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Percent making any work trips in last week by walking	30%	38%	28%	35%	25%	27%	28%	27%	27%	28%	29%
Percent making any work trips in last week by bike	14%	28%	14%	31% A	19%	13%	13%	18%	18%	14%	15%
Percent making any work trips in last week by Capital Bikeshare	16%	38%	16%	29%	16%	14%	15%	16%	13%	19%	17%
Percent making any work trips in last week by bus	24%	56% A	20%	51% A	23%	19%	15%	27% A	23%	21%	22%
Percent making any work trips in last week by driving alone	52%	100% A	58%	69%	71% B	59%	70% B	51%	52%	65% A	59%
Percent making any work trips in last week by carpooling/driving with others	16%	78% A	17%	46% A	20%	12%	17%	19%	13%	22% A	19%
Percent making any work trips in last week by Metrorail	31%	38%	27%	42%	26%	23%	18%	35% A	36% B	21%	28%
Percent making any work trips in last week by taxi/uber	17%	61% A	18%	41% A	16%	15%	17%	18%	14%	21%	19%
Percent making any work trips in last week by VRE commuter rail	11%	28%	10%	34% A	13%	12%	9%	13%	15% B	8%	11%
Percent making any work trips in last week by working at home	61%	38%	61%	52%	52%	63% A	51%	67% A	66% B	55%	60%
Percent making any work trips in last week by other modes	15%	28%	13%	30% A	16%	13%	11%	16%	18% B	11%	14%

Table 53: Commute Trips by Employed Respondents via Transit in Previous Week by Travel Amenities

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Transit in Previous Week	private has bi vehicle(s)		House has bio		Use Google Maps or Waze monthly		Commute pre-tax (Employ		Commuter Sr Car/Vanpool o Bike subsidie On	Overall	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	35%	67%	31%	56% A	30%	29%	23%	41% A	38% B	29%	33%
Took transit AND walked on same day on any day in previous week	13%	5%	10%	3%	9%	9%	7%	13% A	11%	11%	10%
Took transit AND biked on same day on any day in previous week	0%	0%	1%	0%	0%	1%	1%	1%	0%	1%	1%
Took transit AND biked or walked on same day on any day in previous week	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 54: Question #3 by Travel Amenities

Comparing February 2020 (pre- pandemic closures) to this past month (September 2021), did your work- from-home habits change? (Percent of	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		Commute pre-tax (Employe	parking	Commuter Sr Car/Vanpool or Bike s (Employe	Overall	
respondents)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
I now work from home more days of the week	33%	39%	35%	48%	38%	31%	38%	33%	38%	33%	35%
Little or no change in the amount I work from home	27%	46%	30%	27%	32%	35%	32%	28%	18%	40% A	30%
I now work from home full time. I no longer commute	34%	0%	29%	14%	22%	32% A	24%	31%	36% B	21%	28%
I now work from home fewer days of the week	7%	15%	7%	11%	8% B	2%	6%	7%	8%	6%	7%

Table 55: Question #4 by Travel Amenities

Does your employer offer any of the following commuter benefits? (Select all that apply.)	Househ priv vehic	ate	has bicycle(s)		Use G Maps o mon	r Waze	Commute pre-tax (Employ		Commuter Sr Car/Vanpool o Bike subsidie On	Overall	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
SmartBenefits (Subsidized transit)	58%	42%	57%	35%	51%	49%	35%	81% A	94%	0%	55%
Free Parking	46%	58%	46%	52%	54%	46%	83%	0%	28%	74% A	47%
Pre-Tax Parking	9%	0%	10%	33% A	13%	13%	20%	0%	10%	14%	12%
Other	9%	29%	9%	11%	9%	6%	3%	16% A	1%	19% A	8%
Carpool of Vanpool Program	5%	29%	7%	6%	9%	7%	8%	5%	12%	0%	7%
Bikeshare/Dockless Mobility memberships or bicycle subsidies	7%	0%	6%	0%	3%	11% A	6%	5%	10%	0%	6%

Table 56: Question #5 by Travel Amenities

If you most often drive to get to work, which of the following are the main reasons? (Please select all that apply.)	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		Commute pre-tax (Employe	parking	Commuter Sn Car/Vanpool or Bike subsidi On	or Bikeshare es (Employed	Overall
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Quickest/most convenient	43%	76%	51%	66%	64%	54%	69% B	35%	36%	67% A	52%
Don't usually drive alone to get to work	43%	0%	35%	19%	20%	32% A	19%	48% A	50% B	18%	33%
Need/want to make stops/run errands on the way to/from work	22%	0%	26%	13%	29%	31%	36% B	16%	20%	32% A	26%
Irregular work schedule	17%	42%	21%	31%	24%	23%	28% B	16%	15%	27% A	22%
Need/want to come and go from the workplace during the day	14%	42%	16%	21%	18%	18%	25% B	8%	10%	22% A	16%
Too hard to get to work location from Metrorail station or bus stop	16%	17%	15%	18%	25% B	12%	23% B	8%	12%	18%	15%
Privacy	13%	42% A	15%	24%	16%	20%	23% B	7%	10%	20% A	15%
Too hard to get to Metrorail station or bus stop from home	11%	17%	13%	8%	15%	16%	13%	13%	13%	13%	13%
Bus or Metrorail is not available or inadequate	11%	0%	11%	2%	17% B	8%	14%	10%	11%	12%	12%
Personal reasons/commitments	13%	0%	11%	0%	13%	13%	16% B	6%	9%	13%	11%
Driving costs less	10%	42% A	10%	26% A	12%	13%	15% B	7%	7%	14% A	11%
Work reasons/commitments	9%	8%	9%	3%	14% B	7%	14% B	6%	6%	13% A	10%

If you most often drive to get to work, which of the following are the main reasons? (Please select all that apply.)	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		Commute pre-tax ((Employe	parking	Commuter Sm Car/Vanpool or Bike subsidi Onl	Overall	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	4%	0%	6%	9%	9%	7%	9% B	4%	3%	9% A	7%
Don't have shower at work if I walk or bike	6%	0%	6%	3%	8%	6%	12% B	0%	2%	10% A	6%
I take a child/children to and/or from school or child care on the way to/ from work	3%	0%	6%	0%	7%	5%	9% B	3%	9% B	3%	6%
Other modes are not safe	1%	0%	3%	3%	5%	2%	3%	2%	3%	3%	3%
Health or physical limitations	3%	0%	2%	0%	1%	2%	3%	2%	4%	1%	3%
Don't want to take a shower at work if bike or walk	2%	0%	2%	9% A	3%	3%	4% B	0%	1%	3%	2%

Table 57: Travel Mode for 7 Kinds of Trips by Travel Amenities

Percent of respondents using each mode to complete any of 7 kinds of trips (parks & recreation centers, grocery store, nongrocery errands, restaurants, fun or fitness,	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		Commuter free or pre-tax parking (Employed only)		Commuter SmartBenefits, Car/Vanpool or Bikeshare or Bike subsidies (Employed Only)		Overall
visit friends or family, other social	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
activities)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Percent who ever walk	85%	73%	85%	75%	89%	83%	87%	84%	91% B	81%	84%
Percent who ever bike	36%	60% A	38%	76% A	52% B	34%	43%	36%	43%	36%	41%
Percent who ever use Capital Bikeshare	27%	46%	27%	60% A	33%	26%	27%	28%	29%	26%	29%
Percent who ever bus	28%	15%	25%	28%	25%	28%	21%	27%	28%	21%	25%
Percent who ever drive	82% B	46%	88% B	63%	95% B	89%	94% B	84%	87%	89%	86%
Percent who ever carpool	33%	46%	37%	54% A	46%	42%	43%	37%	39%	40%	39%
Percent who ever use Metrorail	45%	62%	40%	59% A	46% B	36%	38%	42%	46% B	35%	41%
Percent who ever use a taxi/uber	40% B	9%	37% B	19%	39%	36%	39%	33%	40%	32%	36%
Percent who ever do something else	25%	49% A	24%	48% A	27%	23%	22%	25%	23%	24%	26%

Table 58: Question #7 by Travel Amenities

In the past month, how often did you use a GPS app like Google Maps or Waze to help determine your route to avoid traffic? (Percent daily or a	app like Google Maps or private vehicle(s) raffic? (Percent daily or a		11000	ehold cycle(s)		gle Maps monthly	Commute pre-tax (Employ		Commuter Sr Car/Vanpool or Bike s (Employ	Overall	
few times week)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Daily or Near Daily	28%	26%	31%	30%	100%	0%	39%	32%	33%	37%	31%
Few times per week	29%	16%	31%	21%	0%	100%	33%	32%	30%	35%	30%
Few times per month	20%	26%	20%	19%	0%	0%	15%	21%	23%	15%	20%
									В		
Never	20%	31%	16%	27%	0%	0%	11%	14%	13%	12%	16%
One time	3%	0%	3%	3%	0%	0%	1%	1%	1%	2%	3%

Table 59: Question #8 by Travel Amenities

In the past month, how many times, if ever, did you use any of these modes of transportation around Alexandria? (Percent daily or a few times week)	pri	nold has vate cle(s)	Household has bicycle(s)		Use Google Maps or Waze monthly		(Employ	parking ed only)	Commuter Sr Car/Vanpool o Bike subsidie On	r Bikeshare or s (Employed	Overall
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Walk	90%	96%	92% B	81%	94%	94%	92%	94%	95%	92%	92%
Bike	23%	63% A	25%	14%	34%	25%	30%	28%	31%	27%	26%
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter, escooter)	10%	44% A	12%	6%	15%	14%	14%	12%	15%	12%	12%
Drive alone	84%	87%	89%	85%	97%	96%	95% B	85%	88%	91%	89%
Private Vehicle – as driver	66%	71%	70%	65%	81% B	67%	77% B	64%	74%	66%	71%
Private Vehicle – as passenger	52%	100% A	55%	60%	60%	51%	59%	50%	60% B	49%	56%
Motorcycle, moped, motorized scooter	3%	0%	2%	3%	2%	4%	4% B	1%	2%	3%	2%
Taxi, other hired car service	22%	93% A	21%	42% A	22%	24%	21%	20%	15%	25% A	22%
Carshare (Zipcar, Hertz OnDemand)	4%	0%	3%	7%	3%	2%	4%	2%	2%	3%	3%
Transportation Network Company (TNC such as Uber, Lyft, Via)	50%	71%	49%	46%	54%	56%	54%	52%	51%	54%	49%
Rail (Metrorail, commuter rail)	49%	74%	43%	42%	48%	38%	38%	51% A	54% B	38%	43%
DASH Bus	24%	61% A	19%	35% A	16%	20%	12%	27% A	23%	18%	20%
Metrobus	22%	36%	18%	18%	14%	14%	11%	25% A	24% B	14%	18%

In the past month, how many times, if ever, did you use any of these modes of transportation around Alexandria? (Percent daily or a few times week)	pri	nold has vate cle(s)		ehold cycle(s)	Use G Maps o mon	r Waze	Commute pre-tax (Employ		Commuter Sr Car/Vanpool o Bike subsidie On	r Bikeshare or s (Employed	Overall
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Multiple transit systems	18%	27%	15%	14%	15%	16%	13%	20% A	20%	14%	16%
Carpool, Vanpool	9%	18%	14%	6%	17%	15%	15%	13%	9%	18% A	13%

Table 60: Question #9 by Travel Amenities

To what extent do you agree or disagree that each of the following would increase your use of public transportation (bus or metro) as a means of transportation: (Percent somewhat or strongly agree)	pri	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		ter free e-tax king ed only)	Comm SmartBe Car/Vanpool o or Bike su (Employe	Overall	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Services were more reliable	81%	84%	74%	78%	78%	80%	71%	83% A	81%	75%	75%
Services were more frequent	83%	82%	76%	83%	78%	81%	77%	81%	81%	77%	77%
There were more direct routes/fewer transfers to destinations	82%	92%	78%	84%	81%	83%	77%	84%	85% B	78%	78%
Services were less expensive	56%	53%	54%	70%	51%	62% A	54%	57%	51%	60%	55%
My travel time were less than if I used a personal vehicle	82%	100%	82%	89%	88%	86%	85%	85%	87%	83%	83%
There were routes that stop at my desired destinations	80%	100%	78%	88%	82%	82%	76%	85% A	82%	80%	78%

To what extent do you agree or disagree that each of the following would increase your use of public transportation (bus or metro) as a means of transportation: (Percent somewhat or strongly agree)	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		Commuter free or pre-tax parking (Employed only)		Comm SmartBe Car/Vanpool o or Bike su (Employe	Overall	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
There were routes that stop at or near my home	79%	100%	75%	96% A	77%	81%	70%	83% A	78%	77%	76%
I felt safer from crime while riding public transportation	52%	35%	51%	53%	48%	55%	48%	57%	52%	53%	51%
I felt safer from crime waiting at the station	53%	41%	52%	55%	50%	58%	49%	60% A	55%	56%	53%
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	55%	63%	51%	61%	54%	58%	56%	49%	48%	55%	52%
Children could ride free on Metro	42%	46%	41%	71% A	48%	41%	40%	43%	41%	42%	42%
I were in better health or more physically able to get to it and use it	29%	34%	25%	45% A	22%	27%	19%	24%	19%	23%	26%
I do not want to use public transportation	28%	20%	32%	38%	32%	30%	33%	25%	21%	34% A	32%

Table 61: Question #10 by Travel Amenities

In the last month, about how frequently have you done each of the following?	Househ priv vehic	ate	House has bic	ehold cycle(s)	Use G Maps o mon	r Waze	Waze pre-tax parking Car/Vanpool or Bikeshare or Bike subsidies (Employed Only)			Overall	
(Percent ever)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Ridden a bicycle or walked for fun or exercise	32%	56%	36% B	15%	37%	41%	41%	37%	40%	38%	35%
Ran or jogged for fun or exercise	88%	89%	89%	92%	88%	92%	93%	88%	95% B	87%	90%

Table 62: Question #11 by Travel Amenities

		Table	Z. Que	Stioii #1	T DY ITA	vei Aille	ilities				
To what extent do you agree or disagree that each of the following would increase your use of walking as a means of transportation: (Percent somewhat or	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		Commuter free or pre-tax parking (Employed only)		Commuter Sm Car/Vanpool o or Bike su (Employe	Overall	
strongly agree)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
There were more sidewalks	68%	74%	67%	78%	67%	73%	70%	67%	69%	67%	68%
There were more crosswalks	65%	58%	64%	80%	65%	70%	66%	66%	64%	67%	65%
If the sidewalks and paths were in better condition	67%	72%	67%	76%	69%	71%	73% B	62%	70%	64%	68%
There was more off-street walking or multi-use paths, trails	72%	65%	72%	84%	71%	78%	73%	74%	77%	71%	72%
There was more street lighting after dark	76%	72%	75%	89%	77%	79%	77%	76%	75%	77%	76%
I had access to public or workplace showers	29%	0%	30%	39%	40% B	28%	36%	30%	34%	32%	31%
I felt more safe from traffic while walking	65%	43%	63%	72%	64%	58%	61%	64%	69% B	58%	64%
I felt more safe from crime while walking	54%	43%	54%	55%	56%	47%	53%	53%	57%	50%	54%
I had better health or physical ability to do so	34%	0%	32%	38%	23%	34% A	25%	30%	25%	31%	32%
It didn't take longer to walk to my destinations than to drive	61%	57%	59%	72%	67%	60%	72% B	60%	62%	67%	60%
I do not want to walk as a means of transportation	25%	0%	27%	41%	24%	22%	24%	25%	19%	29% A	27%

Table 63: Question #12 by Travel Amenities

To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation: (Percent somewhat or	House has pi vehic	ivate	Household has bicycle(s)		Use Google Maps or Waze monthly		Commuter free or pre-tax parking (Employed only)		Commuter Sm Car/Vanpool or Bike su (Employe	or Bikeshare ubsidies	Overall
strongly agree)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
There were more on-street bike lanes	53%	86%	54%	84% A	64%	58%	56%	62%	63%	56%	56%
There was more off-street bike or multi- use paths, trails	64%	51%	65%	87% A	72%	72%	71%	70%	73%	68%	66%
There was more street lighting after dark	64%	51%	61%	89% A	67%	70%	67%	65%	66%	66%	63%
I had access to a bicycle	47%	22%	44%	82% A	44%	53%	46%	47%	45%	48%	45%
I had access to an electric/pedal assist bicycle	30%	22%	32%	68% A	34%	40%	28%	37%	35%	31%	33%
I had access to public or workplace showers	30%	0%	35%	38%	41%	41%	36%	40%	41%	36%	35%
I had a place to securely store a bicycle at work	43%	22%	45%	63%	51%	49%	50%	48%	53%	45%	46%
There were places to securely park a bicycle at other destinations	60%	22%	61%	82%	63%	73%	63%	65%	72% B	58%	61%
I felt more safe from traffic while riding a bicycle	66% B	0%	66%	77%	76%	73%	69%	76%	81% B	66%	67%
I felt more safe from crime while riding a bicycle	35%	0%	36%	50%	35%	41%	34%	42%	40%	36%	37%
I had better health or physical ability to do so	30%	0%	30%	37%	22%	40% A	24%	31%	30%	26%	30%
It didn't take longer to ride a bicycle to my destinations than to drive	47%	0%	48%	48%	52%	59%	52%	49%	50%	50%	48%
I knew how to ride a bike	20%	22%	16%	38% A	18%	19%	12%	17%	15%	14%	17%

To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation: (Percent somewhat or	Household has private vehicle(s)		Household has bicycle(s)		Use Google Maps or Waze monthly		Commuter free or pre-tax parking (Employed only)		Commuter Sr Car/Vanpool or Bike s (Employ	Overall	
strongly agree)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
If there were more Capital Bikeshare stations	32%	0%	30%	55% A	32%	33%	28%	33%	37% B	26%	30%
I do not want to use a bicycle as a means of transportation	43%	31%	44%	53%	33%	48% A	40%	42%	36%	46% A	45%

Table 64: Question #13 by Travel Amenities

Do you have school- aged children? (Percent yes)		old has rehicle(s)		old has cle(s)		r Waze monthly tax parking (Employer only)			parking (Employed only) Car/Vanpool or Bikeshare or Bike subsidies (Employed Only)				
	Yes (A)	No (B)	Yes (A)	No (B)	Yes (A)	No (B)	Yes (A)	No (B)	Yes (A)	No (B)	(A)		
No	92% B	60%	88%	82%	84%	87%	82%	88%	86%	85%	87%		
Yes	8%	40% A	12%	18%	16%	13%	18%	12%	14%	15%	13%		

Table 65: Question #14 by Travel Amenities

Please indicate how your child(ren) typically travel to/from school? (Please select all that apply.)	Househ priv vehic	ate	House has bio		Use G Maps o mon	r Waze	pre-tax	er free or parking ed only)	Car/Vanpool o Bike subsidie	Commuter SmartBenefits, Car/Vanpool or Bikeshare or Bike subsidies (Employed Only)		
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)	
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)		
School bus	56%	0%	39%	45%	43%	37%	47%	36%	29%	52%	41%	
Walk	26%	71%	44%	0%	37%	64% A	39%	44%	51%	34%	40%	
Carpool w/ family	38%	0%	41%	71%	47%	26%	38%	36%	48%	28%	39%	
Dropped off by driver	0%	29%	11%	15%	18%	13%	17%	9%	17%	10%	11%	
Drive themselves alone or with siblings	0%	0%	10%	0%	15%	7%	10%	9%	12%	8%	8%	
Carpool w/ nonfamily	12%	0%	6%	0%	0%	0%	0%	12%	0%	10%	5%	
Bike	3%	0%	4%	15%	0%	4%	4%	4%	6%	3%	5%	
Public transportation	5%	0%	3%	0%	2%	0%	1%	6%	3%	4%	3%	
Other	0%	0%	2%	0%	0%	0%	0%	3%	1%	2%	1%	

^{*}Only asked of those with a school-aged child or children

Table 66: Question #15 by Travel Amenities

If your children are driven to school or drive themselves, please indicate which, if any, of the following factors discourage you from using other modes of transportation for your child(ren) to/from school (please select all that apply):	House has pr vehic	ivate	House ha bicyc	is	Use G Maps o mon	r Waze	Commu or pro park (Employ	e-tax king	Comm SmartBe Car/Van Bikeshare subsidies (I Onl	enefits, pool or e or Bike Employed	Overall
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	(A)
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	
Distance to school	94%	71%	63%	83%	60%	52%	67%	57%	62%	62%	67%
Takes too long to use other modes	37%	0%	41%	0%	29%	40%	37%	43%	33%	46%	35%
Not safe	45%	29%	31%	17%	22%	30%	44%	18%	21%	42%	29%
Inconvenient to use other modes	30%	0%	33%	0%	25%	14%	28%	29%	15%	42% A	28%
Lack of sidewalks, bike lanes	20%	0%	13%	0%	11%	13%	14%	15%	12%	17%	12%
Cost	6%	0%	8%	0%	1%	17%	0%	15%	0%	15%	7%
Do not have access to public transportation	16%	0%	6%	0%	5%	0%	5%	6%	6%	5%	6%
Other	0%	0%	7%	0%	11%	0%	7%	8%	14%	0%	6%
Do not have access to a bicycle	10%	0%	6%	0%	3%	7%	7%	4%	3%	9%	5%

By Presence of School-age Children in Household and Respondent Age

Table 67: Question #1 by Children and Age

What is your employment status?	Have school-	age children	Age o	Overall		
	Yes	No	18-34	35-54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Employed full- or part-time	88%	78%	92%	95%	42%	79%
	В		С	С		
Not employed, not looking for work (retired, stay-at-home parent, etc.)	6%	16%	2%	4%	49%	16%
		A			АВ	
Currently not employed	5%	5%	6%	2%	9%	5%
			В		В	

Table 68: Work Commute Mode Share by Children and Age

Work Commute Mode Share	Have school-	age children	Age o	f Respond	ent	Overall
	Yes	No	18-34	35-54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Average percent of work trips made by walking	6%	7%	7%	7%	7%	7%
Average percent of work trips made by bike	2%	3%	4% C	2%	1%	3%
Average percent of work trips made by Capital Bikeshare	5% B	3%	2%	2%	5% A B	3%
Average percent of work trips made by bus	4%	5%	5%	5%	3%	5%
Average percent of work trips made by driving alone	32%	24%	24%	25%	30%	25%
Average percent of work trips made by carpooling/driving with others	5% B	3%	3%	3%	6% A B	3%
Average percent of work trips made Metrorail	4%	7%	7%	6%	5%	6%
Average percent of work trips made taxi/uber	4% B	3%	2%	3%	5% A	3%

Work Commute Mode Share	Have school-	age children	ildren Age of Respondent			
	Yes	No	18-34	35-54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Average percent of work trips made by VRE commuter rail	2%	2%	2%	2%	2%	2%
Average percent of work trips made by working at home	32%	41%	41%	41%	33%	40%
Average percent of work trips made by other modes	2%	3%	2%	3%	2%	3%

Table 69: Commute Trips by Employed Respondents via Each Mode in Previous Week by Children and Age

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Each Mode in Previous Week	Have scho	_	Age of	ndent	Overall	
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Percent making any work trips in last week by walking	30%	28%	27%	27%	33%	29%
Percent making any work trips in last week by bike	15%	16%	21% B C	13%	9%	15%
Percent making any work trips in last week by Capital Bikeshare	29% B	14%	12%	15%	29% A B	17%
Percent making any work trips in last week by bus	21%	22%	26%	22%	13%	22%
Percent making any work trips in last week by driving alone	76% B	56%	59%	58%	66%	59%
Percent making any work trips in last week by carpooling/driving with others	28% B	17%	17%	16%	30% A B	19%
Percent making any work trips in last week by Metrorail	22%	28%	29%	29%	20%	28%
Percent making any work trips in last week by taxi/uber	25%	17%	15%	18%	27%	19%
Percent making any work trips in last week by VRE commuter rail	12%	11%	13%	9%	11%	11%
Percent making any work trips in last week by working at home	60%	61%	56%	66%	57%	60%
Percent making any work trips in last week by other modes	17%	13%	14%	15%	12%	14%

Table 70: Commute Trips by Employed Respondents via Transit in Previous Week by Children and Age

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Transit in Previous Week		nool-age dren	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	30%	33%	36%	32%	25%	33%
Took transit AND walked on same day on any day in previous week	10%	11%	14%	9%	5%	10%
Took transit AND biked on same day on any day in previous week	1%	1%	1%	1%	0%	1%
Took transit AND biked or walked on same day on any day in previous week	0%	0%	0%	0%	0%	0%

Table 71: Question #3 by Children and Age

Comparing February 2020 (pre-pandemic closures) to this past month (September 2021), did your work-from-home habits change? (Percent of respondents)		nool-age dren	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
I now work from home more days of the week	36%	35%	36%	37%	29%	35%
Little or no change in the amount I work from home	36%	29%	27%	31%	34%	30%
I now work from home full time. I no longer commute	22%	29%	31%	26%	27%	28%
I now work from home fewer days of the week	6%	7%	6%	6%	10%	7%

Table 72: Question #4 by Children and Age

Does your employer offer any of the following commuter benefits? (Select all that apply.)	Have school	age children	Age o	Overall		
	Yes	No	18-34	35-54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
SmartBenefits (Subsidized transit)	45%	57%	58%	55%	44%	55%
Free Parking	53%	46%	45%	47%	52%	47%
Pre-Tax Parking	13%	11%	12%	12%	11%	12%
Other	16%	7%	9%	8%	9%	8%
	В					
Carpool of Vanpool Program	12%	6%	4%	9%	7%	7%
Bikeshare/Dockless Mobility memberships or bicycle subsidies	7%	6%	6%	7%	5%	6%

Table 73: Question #5 by Children and Age

If you most often drive to get to work, which of the following are the main reasons? (Please select all that apply.)	Have scho	•	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Quickest/most convenient	56%	52%	50%	53%	60%	52%
Don't usually drive alone to get to work	8%	37% A	42% C	30%	15%	33%
Need/want to make stops/run errands on the way to/from work	39% B	24%	18%	32% A	30%	26%
Irregular work schedule	29%	21%	14%	24%	41% A B	22%
Need/want to come and go from the workplace during the day	26% B	15%	13%	20%	15%	16%
Too hard to get to work location from Metrorail station or bus stop	15%	16%	16%	13%	17%	15%
Privacy	19%	15%	11%	21%	13%	15%
Too hard to get to Metrorail station or bus stop from home	17%	12%	19% B	5%	17% B	13%
Bus or Metrorail is not available or inadequate	9%	12%	14%	8%	14%	12%
Personal reasons/commitments	7%	12%	12%	9%	14%	11%
Driving costs less	6%	11%	14%	8%	11%	11%
Work reasons/commitments	12%	9%	9%	8%	14%	10%
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	11%	6%	6%	8%	4%	7%
Don't have shower at work if I walk or bike	14% B	5%	4%	8%	6%	6%
I take a child/children to and/or from school or child care on the way to/ from work	36% B	1%	1%	13% A C	2%	6%
Other modes are not safe	6%	3%	2%	4%	4%	3%
Health or physical limitations	2%	3%	1%	2%	8% A	3%
Don't want to take a shower at work if bike or walk	1%	3%	2%	2%	2%	2%

Table 74: Travel Mode for 7 Kinds of Trips by Children and Age

Percent of respondents using each mode to complete any of 7 kinds of trips (parks & recreation centers, grocery store, non-grocery errands, restaurants, fun or fitness, visit friends or family, other		nool-age dren	Age of	Overall		
social activities)	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Percent who ever walk	80%	86%	89% C	83%	80%	84%
Percent who ever bike	52% B	39%	41%	32%	51% B	41%
Percent who ever use Capital Bikeshare	38%	28%	30%	24%	34%	29%
Percent who ever bus	29%	24%	27%	25%	22%	25%
Percent who ever drive	88%	86%	87%	85%	84%	86%
Percent who ever carpool	33%	40%	51% B C	32%	32%	39%
Percent who ever use Metrorail	33%	43%	48% B	34%	43%	41%
Percent who ever use a taxi/uber	34%	37%	44% C	34%	27%	36%
Percent who ever do something else	26%	26%	26%	20%	34% B	26%

Table 75: Question #7 by Children and Age

In the past month, how often did you use a GPS app like Google Maps or Waze to help determine your route to avoid traffic? (Percent daily or a few times week)	Have school-age children		Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Daily or Near Daily	37%	31%	43% C	33% C	16%	31%
Few times per week	29%	30%	34% C	34% C	19%	30%
Few times per month	26%	19%	15%	21%	25% A	20%
Never	8%	17%	7%	11%	32% A B	16%
One time	0%	3%	1%	1%	8% A B	3%

Table 76: Question #8 by Children and Age

In the past month, how many times, if ever, did you use any of these modes of transportation around Alexandria? (Percent daily or a few times week)	Have sch	•	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Walk	93%	92%	95% C	93% C	85%	92%
Bike	41% B	24%	30%	25%	21%	26%
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter, escooter)	16%	11%	18% C	11%	2%	12%
Drive alone	96% B	89%	89%	89%	91%	89%
Private Vehicle – as driver	76%	70%	66%	71%	77%	71%
Private Vehicle – as passenger	58%	56%	58%	54%	58%	56%
Motorcycle, moped, motorized scooter	3%	2%	2%	2%	5%	2%
Taxi, other hired car service	24%	22%	18%	21%	27%	22%
Carshare (Zipcar, Hertz OnDemand)	0%	3%	2%	3%	4%	3%
Transportation Network Company (TNC such as Uber, Lyft, Via)	43%	50%	66% B C	45% C	30%	49%
Rail (Metrorail, commuter rail)	25%	46% A	57% B C	38%	30%	43%
DASH Bus	20%	20%	19%	22%	17%	20%
Metrobus	10%	19%	21%	17%	12%	18%
Multiple transit systems	10%	17%	20% C	14%	9%	16%
Carpool, Vanpool	11%	13%	17%	12%	10%	13%

Table 77: Question #9 by Children and Age

To what extent do you agree or disagree that each of the following would increase your use of public transportation (bus or metro) as a means of transportation: (Percent somewhat or strongly agree)	Have sch	_	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Services were more reliable	71%	76%	91% B C	74% C	54%	75%
Services were more frequent	70%	78%	93% B C	75% C	57%	77%
There were more direct routes/fewer transfers to destinations	78%	79%	90% B C	79% C	60%	78%
Services were less expensive	56%	54%	67% B C	49%	43%	55%
My travel time were less than if I used a personal vehicle	83%	83%	93% B C	80%	71%	83%
There were routes that stop at my desired destinations	69%	80% A	92% B C	75%	65%	78%
There were routes that stop at or near my home	70%	76%	88% B C	71%	65%	76%
I felt safer from crime while riding public transportation	45%	52%	62% B C	47%	44%	51%
I felt safer from crime waiting at the station	42%	54%	61% C	51%	45%	53%
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	48%	53%	60% C	50%	46%	52%
Children could ride free on Metro	62% B	38%	48%	41%	36%	42%
I were in better health or more physically able to get to it and use it	21%	26%	22%	23%	34%	26%
I do not want to use public transportation	34%	31%	30%	25%	44% A B	32%

Table 78: Question #10 by Children and Age

In the last month, about how frequently have you done each of the following? (Percent ever)	Have sch	_	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
Ridden a bicycle or walked for fun or exercise	41%	35%	42% C	35%	28%	35%
Ran or jogged for fun or exercise	90%	90%	94% C	90%	84%	90%

Table 79: Question #11 by Children and Age

To what extent do you agree or disagree that each of the following would increase your use of walking as a means of transportation: (Percent somewhat or strongly agree)	Have sch	_	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
There were more sidewalks	60%	69%	79% B C	65%	59%	68%
There were more crosswalks	56%	66%	76% B C	62%	55%	65%
If the sidewalks and paths were in better condition	65%	68%	74% C	69%	58%	68%
There was more off-street walking or multi-use paths, trails	69%	73%	87% B C	67%	61%	72%
There was more street lighting after dark	67%	77%	85% B C	73%	69%	76%
I had access to public or workplace showers	50% B	28%	37% C	36% C	16%	31%
I felt more safe from traffic while walking	62%	64%	71%	61%	59%	64%
I felt more safe from crime while walking	44%	56%	54%	54%	54%	54%

To what extent do you agree or disagree that each of the following would increase your use of walking as a means of transportation: (Percent somewhat or strongly agree)	Have schild	nool-age dren	Age of Respondent			Overall
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
I had better health or physical ability to do so	27%	33%	28%	28%	44% A B	32%
It didn't take longer to walk to my destinations than to drive	65%	60%	64%	66%	48%	60%
			С	С		
I do not want to walk as a means of transportation	36%	26%	24%	25%	34%	27%

Table 80: Question #12 by Children and Age

To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation: (Percent somewhat or strongly agree)	Have sch	•	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
There were more on-street bike lanes	57%	56%	73% B C	52% C	38%	56%
There was more off-street bike or multi-use paths, trails	66%	66%	81% B C	63% C	49%	66%
There was more street lighting after dark	60%	63%	77% B C	63% C	43%	63%
I had access to a bicycle	48%	45%	57% C	48% C	24%	45%
I had access to an electric/pedal assist bicycle	43%	31%	42% C	33% C	19%	33%
I had access to public or workplace showers	56% B	32%	44% C	40% C	13%	35%
I had a place to securely store a bicycle at work	57% B	44%	58% C	48% C	24%	46%

To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation: (Percent somewhat or strongly agree)		nool-age dren	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
There were places to securely park a bicycle at other destinations	61%	61%	73% C	63% C	40%	61%
I felt more safe from traffic while riding a bicycle	66%	67%	80% B C	68% C	47%	67%
I felt more safe from crime while riding a bicycle	36%	37%	38%	40%	28%	37%
I had better health or physical ability to do so	29%	31%	34%	27%	31%	30%
It didn't take longer to ride a bicycle to my destinations than to drive	47%	48%	56% C	51% C	32%	48%
I knew how to ride a bike	20%	16%	19%	14%	18%	17%
If there were more Capital Bikeshare stations	29%	30%	39% C	31% C	16%	30%
I do not want to use a bicycle as a means of transportation	37%	45%	45%	41%	51%	45%

Table 81: Question #13 by Children and Age

Do you have school-aged children? (Percent yes)	Have school-	age children	Age	Overall		
	Yes	No	18-34	35-54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
No	0%	100%	97%	72%	94%	87%
			В		В	ı
Yes	100%	0%	3%	28%	6%	13%
				A C		

Table 82: Question #14 by Children and Age

Please indicate how your child(ren) typically travel to/from school? (Please select all that apply.)	Have scho childr	_	Age of	Overall		
	Yes	No	18- 34	35- 54	55+	(A)
	(A)	(B)	(A)	(B)	(C)	
School bus	42%	0%	100%	35%	53%	41%
Walk	41%	0%	45%	44%	19%	40%
Carpool w/ family	40%	0%	55%	42%	20%	39%
Dropped off by driver	12%	0%	0%	12%	5%	11%
Drive themselves alone or with siblings	8%	0%	0%	7%	23%	8%
Carpool w/ nonfamily	5%	0%	0%	6%	0%	5%
Bike	4%	0%	0%	4%	15%	5%
Public transportation	3%	0%	0%	1%	15%	3%
					В	
Other	1%	0%	0%	1%	6%	1%

^{*}Only asked of those with a school-aged child or children

Table 83: Question #15 by Children and Age

If your children are driven to school or drive themselves, please indicate which, if any, of the following factors discourage you from using other modes of transportation for your child(ren)		ool-age en	Age of	Overall		
to/from school (please select all that apply):	Yes	No	18- 34	35- 54	55+	(A)
		(B)	(A)	(B)	(C)	
Distance to school	67%	0%	55%	70%	65%	67%
Takes too long to use other modes	35%	0%	0%	38%	49%	35%
Not safe	29%	0%	0%	27%	52%	29%
Inconvenient to use other modes	28%	0%	0%	27%	56%	28%
Lack of sidewalks, bike lanes	12%	0%	0%	10%	34%	12%
Cost	7%	0%	45%	0%	17%	7%
Do not have access to public transportation	6%	0%	0%	6%	14%	6%
Other	6%	0%	0%	8%	0%	6%
Do not have access to a bicycle	5%	0%	0%	2%	26% B	5%

By Respondent Gender, Race, and Ethnicity

Table 84: Question #1 by Respondent Gender, Race and Ethnicity

		Table of Automotive Tay to Sport and Control of Taylor and Control												
What is your employment status?	Gender			Rad	ce	Ethnic	Overall							
	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)						
	(A)	(B)	(A)	(B)	(C)	(A)	(B)							
Employed full- or part-time	83%	78%	78%	82%	86%	77%	94%	79%						
							Α							
Not employed, not looking for work (retired, stay-at-home parent,	14%	16%	18%	9%	11%	17%	4%	16%						
etc.)						В								
Currently not employed	4%	7%	4%	9%	3%	6%	2%	5%						

Table 85: Work Commute Mode Share by Respondent Gender, Race and Ethnicity

Work Commute Mode Share	Ge	nder		Rad	ce	Ethnic	ity	Overall
	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Average percent of work trips made by walking	8%	6%	6%	8%	8%	7%	5%	7%
Average percent of work trips made by bike	2%	3% A	3%	1%	3%	2%	5% A	3%
Average percent of work trips made by Capital Bikeshare	3%	3%	3%	4%	2%	3%	2%	3%
Average percent of work trips made by bus	4%	5%	4%	6%	5%	4%	7% A	5%
Average percent of work trips made by driving alone	28%	23%	25%	25%	33%	25%	28%	25%
Average percent of work trips made by carpooling/driving with others	3%	4%	3%	3%	4%	3%	4%	3%
Average percent of work trips made Metrorail	6%	7%	6%	6%	8%	5%	9% A	6%
Average percent of work trips made taxi/uber	3%	3%	3%	4%	2%	3%	2%	3%
Average percent of work trips made by VRE commuter rail	2%	2%	2%	1%	2%	2%	4% A	2%
Average percent of work trips made by working at home	40%	40%	42%	37%	32%	42%	33%	40%
Average percent of work trips made by other modes	3%	3%	2%	3%	2%	3%	3%	3%

Table 86: Commute Trips by Employed Respondents via Each Mode in Previous Week by Respondent Gender, Race and Ethnicity

Percent of Employed Respondents Who Made at Least One Work	Ge	nder		Rad	ce	Ethni	city	Overall
Commute Trip via Each Mode in Previous Week	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Percent making any work trips in last week by walking	30%	27%	26%	32%	30%	30%	19%	29%
Percent making any work trips in last week by bike	12%	19% A	18% B	7%	16%	14%	24% A	15%
Percent making any work trips in last week by Capital Bikeshare	16%	16%	15%	19%	11%	17% B	7%	17%
Percent making any work trips in last week by bus	19%	25%	21%	24%	27%	19%	36% A	22%
Percent making any work trips in last week by driving alone	60%	59%	60%	57%	66%	56%	73% A	59%
Percent making any work trips in last week by carpooling/driving with others	16%	21%	18%	18%	21%	19%	15%	19%
Percent making any work trips in last week by Metrorail	27%	29%	29%	27%	24%	25%	41% A	28%
Percent making any work trips in last week by taxi/uber	17%	20%	17%	24%	12%	18%	14%	19%
Percent making any work trips in last week by VRE commuter rail	9%	13%	13%	7%	10%	9%	22% A	11%
Percent making any work trips in last week by working at home	63%	58%	61%	61%	55%	63%	53%	60%
Percent making any work trips in last week by other modes	12%	17%	16%	9%	14%	13%	17%	14%

Table 87: Commute Trips by Employed Respondents via Transit in Previous Week by Respondent Gender, Race and Ethnicity

Percent of Employed Respondents Who Made at Least One Work	Ge	nder		Rac	ce	Ethni	Overall	
Commute Trip via Transit in Previous Week	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	31%	35%	33%	31%	40%	29%	50% A	33%
Took transit AND walked on same day on any day in previous week	11%	10%	10%	11%	16%	10%	12%	10%
Took transit AND biked on same day on any day in previous week	0%	1%	1%	0%	0%	1%	0%	1%
Took transit AND biked or walked on same day on any day in previous week	0%	0%	0%	0%	0%	0%	0%	0%

Table 88: Question #3 by Respondent Gender, Race and Ethnicity

Comparing February 2020 (pre-pandemic closures) to this past		ender		Rac	ce	Ethni	Overall	
month (September 2021), did your work-from-home habits change? (Percent of respondents)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
I now work from home more days of the week	34%	37%	39% B	22%	40%	37%	29%	35%
Little or no change in the amount I work from home	33%	27%	28%	34%	30%	28%	39% A	30%
I now work from home full time. I no longer commute	28%	28%	26%	35%	25%	29%	26%	28%
I now work from home fewer days of the week	5%	8%	6%	9%	4%	7%	6%	7%

Table 89: Question #4 by Respondent Gender, Race and Ethnicity

Does your employer offer any of the following commuter benefits:	Ge	ender		Rad	ce	Ethnic	city	Overall
(Select all that apply.)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
SmartBenefits (Subsidized transit)	48%	61% A	58%	51%	37%	55%	55%	55%
Free Parking	52%	42%	50%	38%	44%	49%	36%	47%
Pre-Tax Parking	12%	12%	12%	6%	12%	10%	21% A	12%
Other	8%	8%	5%	14% A	29% A	7%	11%	8%
Carpool of Vanpool Program	9% B	4%	7%	6%	4%	6%	10%	7%
Bikeshare/Dockless Mobility memberships or bicycle subsidies	5%	7%	7%	3%	4%	6%	8%	6%

Table 90: Question #5 by Respondent Gender, Race and Ethnicity

If you most often drive to get to work, which of the following are	Ge	nder		Rad	ce	Ethni	Overall	
the main reasons? (Please select all that apply.)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Quickest/most convenient	60% B	46%	53%	55%	37%	54%	45%	52%
Don't usually drive alone to get to work	29%	37%	37%	25%	28%	32%	39%	33%
Need/want to make stops/run errands on the way to/from work	27%	25%	26%	23%	26%	24%	34%	26%
Irregular work schedule	26%	19%	22%	18%	30%	23%	16%	22%
Need/want to come and go from the workplace during the day	16%	17%	16%	18%	15%	17%	15%	16%
Too hard to get to work location from Metrorail station or bus stop	14%	16%	15%	11%	22%	15%	13%	15%
Privacy	17%	13%	14%	14%	27%	14%	25% A	15%
Too hard to get to Metrorail station or bus stop from home	14%	11%	11%	15%	13%	9%	27% A	13%
Bus or Metrorail is not available or inadequate	12%	11%	11%	11%	11%	11%	10%	12%
Personal reasons/commitments	11%	12%	11%	17%	2%	12%	4%	11%
Driving costs less	13%	9%	10%	14%	15%	11%	9%	11%
Work reasons/commitments	11%	9%	10%	8%	5%	11% B	1%	10%
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	5%	8%	7%	4%	10%	7%	7%	7%
Don't have shower at work if I walk or bike	9% B	4%	8%	0%	2%	5%	7%	6%
I take a child/children to and/or from school or child care on the way to/ from work	7%	6%	7%	2%	8%	6%	6%	6%
Other modes are not safe	1%	4%	3%	0%	6%	4%	1%	3%
Health or physical limitations	1%	4%	2%	2%	0%	3%	1%	3%
Don't want to take a shower at work if bike or walk	2%	2%	2%	2%	6%	3%	0%	2%

Table 91: Travel Mode for 7 Kinds of Trips by Respondent Gender, Race and Ethnicity

Percent of respondents using each mode to complete any of 7 kinds	Ge	nder		Rad	ce	Ethni	icity	Overall
of trips (parks & recreation centers, grocery store, non-grocery errands, restaurants, fun or fitness, visit friends or family, other	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
social activities)	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Percent who ever walk	86%	84%	87%	79%	79%	84%	86%	84%
Percent who ever bike	41%	41%	42%	35%	38%	40%	36%	41%
Percent who ever use Capital Bikeshare	24%	33%	29%	30%	24%	29%	27%	29%
		A						
Percent who ever bus	22%	29%	24%	32%	17%	25%	24%	25%
Percent who ever drive	87%	84%	90%	72%	85%	86%	85%	86%
			В					
Percent who ever carpool	39%	37%	40%	34%	41%	35%	57%	39%
							A	
Percent who ever use Metrorail	39%	43%	42%	37%	47%	38%	51%	41%
							A	
Percent who ever use a taxi/uber	35%	37%	37%	36%	27%	36%	34%	36%
Percent who ever do something else	21%	30%	27%	26%	21%	26%	25%	26%
		A						

Table 92: Question #7 by Respondent Gender, Race and Ethnicity

In the past month, how often did you use a GPS app like Google	Ge	ender		Rad	ce	Ethni	city	Overall
Maps or Waze to help determine your route to avoid traffic? (Percent daily or a few times week)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Daily or Near Daily	35%	29%	33%	26%	39%	31%	35%	31%
Few times per week	29%	32%	28%	39% A	29%	30%	34%	30%
Few times per month	20%	21%	22%	17%	17%	21%	19%	20%
Never	15%	15%	15%	16%	14%	15%	13%	16%
One time	2%	3%	3%	1%	1%	3%	0%	3%

Table 93: Question #8 by Respondent Gender, Race and Ethnicity

In the past month, how many times, if ever, did you use any of these modes	Ge	nder		Rad	ce	Ethni	city	Overall
of transportation around Alexandria? (Percent daily or a few times week)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Walk	95% B	90%	92% C	93% C	80%	92%	89%	92%
Bike	33% B	21%	29% B	15%	33%	26%	27%	26%
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter, escooter)	14%	11%	12%	14%	10%	12%	13%	12%
Drive alone	88%	91%	91%	86%	86%	90%	87%	89%
Private Vehicle – as driver	70%	72%	74% B	58%	66%	73% B	59%	71%
Private Vehicle – as passenger	59%	55%	61% B	43%	50%	56%	58%	56%
Motorcycle, moped, motorized scooter	3%	2%	3%	2%	1%	2%	3%	2%
Taxi, other hired car service	21%	23%	21%	23%	29%	22%	20%	22%
Carshare (Zipcar, Hertz OnDemand)	4%	3%	3%	3%	4%	3%	4%	3%
Transportation Network Company (TNC such as Uber, Lyft, Via)	51%	49%	48%	59%	46%	48%	56%	49%
Rail (Metrorail, commuter rail)	46%	42%	44%	44%	48%	43%	46%	43%
DASH Bus	19%	20%	14%	38% A	23%	20%	19%	20%
Metrobus	15%	20%	14%	27% A	27%	17%	19%	18%
Multiple transit systems	17%	14%	12%	23% A	31% A	15%	16%	16%
Carpool, Vanpool	16%	12%	11%	23% A	12%	12%	24% A	13%

Table 94: Question #9 by Respondent Gender, Race and Ethnicity

To what extent do you agree or disagree that each of the following	Ge	ender		Rad	ce	Ethn	icity	Overall
would increase your use of public transportation (bus or metro) as a means of transportation: (Percent somewhat or strongly agree)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Services were more reliable	77%	75%	73%	85% A	70%	72%	90% A	75%
Services were more frequent	77%	78%	76%	81%	72%	74%	91% A	77%
There were more direct routes/fewer transfers to destinations	77%	80%	78%	81%	75%	77%	87% A	78%
Services were less expensive	55%	55%	51%	71% A C	47%	50%	72% A	55%
My travel time were less than if I used a personal vehicle	81%	84%	84%	81%	81%	82%	87%	83%
There were routes that stop at my desired destinations	79%	80%	79%	80%	77%	76%	91% A	78%
There were routes that stop at or near my home	77%	75%	74%	83%	78%	74%	87% A	76%
I felt safer from crime while riding public transportation	53%	50%	48%	63% A	55%	49%	62% A	51%
I felt safer from crime waiting at the station	55%	51%	48%	70% A	49%	51%	63% A	53%
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	48%	57% A	48%	65% A	63%	50%	65% A	52%
Children could ride free on Metro	38%	47% A	36%	63% A	45%	37%	65% A	42%
I were in better health or more physically able to get to it and use it	22%	28%	20%	45% A	28%	24%	32%	26%
I do not want to use public transportation	28%	35%	29%	38%	29%	33%	26%	32%

Table 95: Question #10 by Respondent Gender, Race and Ethnicity

In the last month, about how frequently have you done each of the	Gender Race			ce	Ethnicity		Overall	
following? (Percent ever)	Male	Female	White	Black	Multi/Other	Not	Hispanic	(A)
						Hispanic		
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Ridden a bicycle or walked for fun or exercise	39%	32%	37%	32%	39%	34%	40%	35%
Ran or jogged for fun or exercise	89%	91%	93% B	79%	91%	91%	86%	90%

Table 96: Question #11 by Respondent Gender, Race and Ethnicity

To what extent do you agree or disagree that each of the following	Ge	ender		Rad	ce	Ethni	icity	Overall
would increase your use of walking as a means of transportation: (Percent somewhat or strongly agree)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
There were more sidewalks	63%	72% A	65%	75%	77%	68%	70%	68%
There were more crosswalks	62%	67%	61%	74% A	74%	63%	74%	65%
If the sidewalks and paths were in better condition	64%	70%	66%	73%	72%	70% B	58%	68%
There was more off-street walking or multi-use paths, trails	70%	74%	70%	77%	85%	72%	74%	72%
There was more street lighting after dark	70%	81% A	75%	77%	78%	76%	78%	76%
I had access to public or workplace showers	34%	29%	30%	33%	45%	28%	43% A	31%
I felt more safe from traffic while walking	58%	68% A	64%	58%	76%	64%	64%	64%
I felt more safe from crime while walking	50%	56%	54%	44%	73% A B	54%	52%	54%
I had better health or physical ability to do so	33%	31%	25%	53% A	39%	28%	52% A	32%

To what extent do you agree or disagree that each of the following		Gender		Rad	ce	Ethnicity		Overall
would increase your use of walking as a means of transportation: (Percent somewhat or strongly agree)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
It didn't take longer to walk to my destinations than to drive	62%	61%	63%	53%	73%	58%	78% A	60%
I do not want to walk as a means of transportation	20%	31% A	23%	33%	37%	24%	40% A	27%

Table 97: Question #12 by Respondent Gender, Race and Ethnicity

To what extent do you agree or disagree that each of the following	Ge	ender		Rad	ce	Ethni	icity	Overall
would increase your use of a bicycle as a means of transportation: (Percent somewhat or strongly agree)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
There were more on-street bike lanes	58%	55%	56%	57%	65%	51%	81% A	56%
There was more off-street bike or multi-use paths, trails	67%	66%	69%	57%	72%	62%	88% A	66%
There was more street lighting after dark	61%	66%	63%	64%	64%	58%	90% A	63%
I had access to a bicycle	43%	48%	41%	58% A	59%	41%	70% A	45%
I had access to an electric/pedal assist bicycle	34%	32%	29%	42% A	45%	28%	56% A	33%
I had access to public or workplace showers	37%	35%	35%	39%	30%	31%	58% A	35%
I had a place to securely store a bicycle at work	45%	47%	45%	46%	62%	42%	67% A	46%
There were places to securely park a bicycle at other destinations	58%	65%	62%	60%	68%	58%	80% A	61%
I felt more safe from traffic while riding a bicycle	69%	66%	69%	59%	75%	63%	88% A	67%

To what extent do you agree or disagree that each of the following	Ge	ender		Rac	ce	Ethni	icity	Overall
would increase your use of a bicycle as a means of transportation: (Percent somewhat or strongly agree)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	-
I felt more safe from crime while riding a bicycle	33%	40%	35%	33%	65% A B	35%	49% A	37%
I had better health or physical ability to do so	29%	32%	25%	46% A	33%	27%	53% A	30%
It didn't take longer to ride a bicycle to my destinations than to drive	44%	52%	50%	42%	59%	47%	59%	48%
I knew how to ride a bike	15%	19%	11%	29% A	36% A	16%	22%	17%
If there were more Capital Bikeshare stations	27%	34%	28%	41% A	28%	29%	39%	30%
I do not want to use a bicycle as a means of transportation	39%	50% A	43%	49%	46%	44%	47%	45%

Table 98: Question #13 by Respondent Gender, Race and Ethnicity

1 4510 501 4410		- /						
Do you have school-aged children? (Percent yes)	Ge	ender		Rac	e	Ethnici	Overall	
	Male	Female	White	e Black Multi/Other		Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
No	85%	88%	90%	82%	73%	87%	84%	87%
			ВС					
Yes	15%	12%	10%	18%	27%	13%	16%	13%
				Α	A			

Table 99: Question #14 by Respondent Gender, Race and Ethnicity

Please indicate how your child(ren) typically travel to/from school?	Ge	nder		Rac	ce	Ethnic	city	Overall
(Please select all that apply.)	Male	Female	White	Black	Multi/Other	Not Hispanic	Hispanic	(A)
	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
School bus	32%	54%	25%	59%	63%	39%	58%	41%
		А		Α	A			
Walk	51%	30%	50%	31%	38%	45%	30%	40%
Carpool w/ family	35%	43%	49%	25%	36%	39%	46%	39%
Dropped off by driver	10%	11%	18%	0%	7%	9%	18%	11%
Drive themselves alone or with siblings	8%	9%	15%	0%	5%	10%	5%	8%
Carpool w/ nonfamily	0%	11%	0%	17%	0%	6%	0%	5%
Bike	4%	6%	5%	0%	16%	5%	0%	5%
Public transportation	1%	5%	1%	4%	7%	1%	6%	3%
Other	2%	1%	0%	0%	8%	1%	5%	1%

^{*}Only asked of those with a school-aged child or children

Table 100: Question #15 by Respondent Gender, Race and Ethnicity

If your children are driven to school or drive themselves, please indicate	Ge	nder		Race		Ethn	icity	Overall
which, if any, of the following factors discourage you from using other modes of transportation for your child(ren) to/from school (please select	Male	Female	White	Black	Multi/ Other	Not Hispanic	Hispanic	(A)
all that apply):	(A)	(B)	(A)	(B)	(C)	(A)	(B)	
Distance to school	75%	64%	74%	79%	41%	71%	55%	67%
Takes too long to use other modes	44%	25%	36%	45%	16%	38%	25%	35%
Not safe	27%	29%	38%	8%	17%	29%	20%	29%
Inconvenient to use other modes	35%	19%	34%	25%	6%	28%	25%	28%
Lack of sidewalks, bike lanes	11%	14%	11%	8%	24%	10%	12%	12%
Cost	0%	14%	0%	8%	28%	1%	20%	7%
							Α	
Do not have access to public transportation	5%	8%	8%	0%	7%	9%	0%	6%
Other	3%	9%	8%	0%	8%	2%	19%	6%
							A	
Do not have access to a bicycle	6%	4%	5%	8%	0%	4%	0%	5%

Appendix E: Selected Survey Responses by Year

The tables in this Appendix display survey results by year. An explanation of how to interpret statistical differences can be found in *Appendix C: Selected Survey Responses by Area of Residence* on page 45.

Table 101: Question #1 by Year

What is your employment status?	2021	2016
	(A)	(B)
Employed full- or part-time	79%	84% A
Not employed, not looking for work (retired, stay-at-home parent, etc.)	16%	14%
Currently not employed	5% B	2%

Table 102: Work Commute Mode Share by Year

Work Commute Mode Share	2021	2016
	(A)	(B)
Average percent of work trips made by walking	7%	12% A
Average percent of work trips made by bike	3%	3%
Average percent of work trips made by Capital Bikeshare	3% B	0%
Average percent of work trips made by bus	5%	8% A
Average percent of work trips made by driving alone	25%	48% A
Average percent of work trips made by carpooling/driving with others	3%	5%
Average percent of work trips made Metrorail	6%	14% A
Average percent of work trips made taxi/uber	3% B	2%
Average percent of work trips made by VRE commuter rail	2% B	0%
Average percent of work trips made by working at home	40% B	6%
Average percent of work trips made by other modes	3% B	1%

Table 103: Commute Trips by Employed Respondents via Each Mode in Previous Week by Year

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Each Mode in Previous Week	2021	2016
	(A)	(B)
Percent making any work trips in last week by walking	29%	28%
Percent making any work trips in last week by bike	15% B	6%
Percent making any work trips in last week by Capital Bikeshare	17% B	1%
Percent making any work trips in last week by bus	22%	20%
Percent making any work trips in last week by driving alone	59%	61%
Percent making any work trips in last week by carpooling/driving with others	19% B	11%
Percent making any work trips in last week by Metrorail	28%	34% A
Percent making any work trips in last week by taxi/uber	19% B	10%
Percent making any work trips in last week by VRE commuter rail	11% B	1%
Percent making any work trips in last week by working at home	60% B	16%
Percent making any work trips in last week by other modes	14% B	3%

Table 104: Commute Trips by Employed Respondents via Transit in Previous Week by Year

nt of Employed Respondents Who Made at Least One Work Commute Trip via Transit in Previous Week		2016
	(A)	(B)
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	33%	39%
		Α
Took transit AND walked on same day on any day in previous week	10%	20%
		Α
Took transit AND biked on same day on any day in previous week	1%	0%
Took transit AND biked or walked on same day on any day in previous week	0%	0%

Table 105: Question #3 by Year

Comparing February 2020 (pre-pandemic closures) to this past month (September 2021), did your work-from-home habits change?		2016
(Percent of respondents)	(A)	(B)
I now work from home more days of the week	35%	
Little or no change in the amount I work from home	30%	
I now work from home full time. I no longer commute	28%	
I now work from home fewer days of the week	7%	

Table 106: Question #4 by Year

Does your employer offer any of the following commuter benefits? (Select all that apply.)		2016
	(A)	(B)
SmartBenefits (Subsidized transit)	55%	
Free Parking	47%	
Pre-Tax Parking	12%	
Other	8%	
Carpool of Vanpool Program	7%	
Bikeshare/Dockless Mobility memberships or bicycle subsidies	6%	

Table 107: Question #5 by Year

If you most often drive to get to work, which of the following are the main reasons? (Please select all that apply.)	2021	2016
	(A)	(B)
Quickest/most convenient	52%	64%
		А
Need/want to make stops/run errands on the way to/from work	26%	24%
Don't usually drive alone to get to work	33%	18%
	В	
Irregular work schedule	22%	23%
Too hard to get to work location from Metrorail station or bus stop	15%	18%
Bus or Metrorail is not available or inadequate	12%	17%
		Α
Privacy	15%	13%
Need/want to come and go from the workplace during the day	16%	12%
Too hard to get to Metrorail station or bus stop from home	13%	12%
Personal reasons/commitments	11%	13%
Work reasons/commitments	10%	12%
I take a child/children to and/or from school or child care on the way to/ from work	6%	11%
		А
Don't have shower at work if I walk or bike	6%	5%
Driving costs less	11%	0%
Don't want to take a shower at work if bike or walk	2%	4%
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	7%	0%
Other modes are not safe	3%	2%
Health or physical limitations	3%	0%

Table 108: Travel Mode for 7 Kinds of Trips by Year

Percent of respondents using each mode to complete any of 7 kinds of trips (parks & recreation centers, grocery store, non-grocery errands, restaurants, fun or fitness, visit friends or family, other social activities)		2016
		(B)
Percent who ever walk	84%	69%
	В	
Percent who ever bike	41%	17%
	В	
Percent who ever use Capital Bikeshare	29%	2%
	В	
Percent who ever bus	25%	11%
	В	
Percent who ever drive	86%	92%
		Α
Percent who ever carpool	39%	31%
	В	
Percent who ever use Metrorail	41%	31%
	В	
Percent who ever use a taxi/uber	36%	6%
	В	
Percent who ever do something else	26%	

While the comparison to 2016 is shown, it should be noted that "carpool" was added to the list of travel mode options in the 2021 survey and "Drove" was changed to "Drove alone". Therefore, trend line comparisons related to driving should be used with caution.

Table 109: Question #7 by Year

14410 2001 44001011 117 107 1041		
In the past month, how often did you use a GPS app like Google Maps or Waze to help determine your route to avoid traffic? (Percent		2016
daily or a few times week)	(A)	(B)
Daily or Near Daily	31%	
Few times per week	30%	
Few times per month	20%	
Never	16%	
One time	3%	

Table 110: Question #8 by Year

In the past month, how many times, if ever, did you use any of these modes of transportation around Alexandria? (Percent daily or a few		2016
times week)	(A)	(B)
Walk	92%	
Bike	26%	
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter, escooter)	12%	
Drive alone	89%	
Private Vehicle – as driver	71%	
Private Vehicle – as passenger	56%	
Motorcycle, moped, motorized scooter	2%	
Taxi, other hired car service	22%	
Carshare (Zipcar, Hertz OnDemand)	3%	
Transportation Network Company (TNC such as Uber, Lyft, Via)	49%	
Rail (Metrorail, commuter rail)	43%	
DASH Bus	20%	
Metrobus	18%	
Multiple transit systems	16%	
Carpool, Vanpool	13%	

Table 111: Question #9 by Year

To what extent do you agree or disagree that each of the following would increase your use of public transportation (bus or metro) as a		2016
means of transportation: (Percent somewhat or strongly agree)	(A)	(B)
Services were more reliable	75%	80% A
Services were more frequent	77%	81% A
There were more direct routes/fewer transfers to destinations	78%	78%
Services were less expensive	55%	62% A
My travel time were less than if I used a personal vehicle	83%	85%
There were routes that stop at my desired destinations	78%	74%
There were routes that stop at or near my home	76% B	69%
I felt safer from crime while riding public transportation	51%	46%
I felt safer from crime waiting at the station	53%	48%
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	52% B	27%
Children could ride free on Metro	42%	
I were in better health or more physically able to get to it and use it	26%	
I do not want to use public transportation	32%	

Table 112: Question #11 by Year

To what extent do you agree or disagree that each of the following would increase your use of walking as a m	neans of transportation: 2021	021 201
(Percent somewhat or strongly agree)	(A)	(B)
There were more sidewalks	68%	579
	E	
There were more crosswalks	65%	55%
	E	•
If the sidewalks and paths were in better condition	68%	57%
	E	-
There was more off-street walking or multi-use paths, trails	72%	65%
	E	
There was more street lighting after dark	76%	73%
I had access to public or workplace showers	31%	279
I felt more safe from traffic while walking	64%	58%
	E	
I felt more safe from crime while walking	54%	529
I had better health or physical ability to do so	32%	279
It didn't take longer to walk to my destinations than to drive	60%	54%
	E	
I do not want to walk as a means of transportation	27%	29%

Table 113: Question #12 by Year

To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation:		2016
(Percent somewhat or strongly agree)	(A)	(B)
There were more on-street bike lanes	56%	55%
There was more off-street bike or multi-use paths, trails	66%	65%
There was more street lighting after dark	63%	59%
I had access to a bicycle	45% B	36%
I had access to an electric/pedal assist bicycle	33%	30%
I had access to public or workplace showers	35%	42% A
I had a place to securely store a bicycle at work	46%	56% A
There were places to securely park a bicycle at other destinations	61%	61%
I felt more safe from traffic while riding a bicycle	67% B	36%
I felt more safe from crime while riding a bicycle	37% B	25%
I had better health or physical ability to do so	30%	44% A
It didn't take longer to ride a bicycle to my destinations than to drive	48% B	15%
I knew how to ride a bike	17%	25% A
If there were more Capital Bikeshare stations	30%	43% A
I do not want to use a bicycle as a means of transportation	45%	

Table 114: Question #13 by Year

Do you have school-aged children? (Percent yes)	2021	2016
	(A)	(B)
No	87%	85%
Yes	13%	15%

Table 115: Question #14 by Year

Please indicate how your child(ren) typically travel to/from school? (Please select all that apply.)		2016
	(A)	(B)
School bus	41%	31%
Driven by caregiver (2016 Carpool w/ family)	39%	30%
Walk	40%	24%
	В	
Driven by taxi, Uber, Lyft, etc. (2016 Dropped off by driver)	11%	8%
Drive themselves alone (2016 Drive themselves alone or with siblings)	8%	8%
Carpool (2016 Carpool w/ nonfamily)	5%	34%
		A
Bike	5%	3%
Public transportation	3%	2%
Other	1%	3%

^{*}Only asked of those with a school-aged child or children

Table 116: Question #15 by Year

If your children are driven to school or drive themselves, please indicate which, if any, of the following factors discourage you from using		2016
other modes of transportation for your child(ren) to/from school (please select all that apply):	(A)	(B)
Distance to school	67%	46%
	В	
Takes too long to use other modes	35%	45%
Inconvenient to use other modes	28%	44%
		Α
Not safe	29%	19%
Cost	7%	20%
		Α
Lack of sidewalks, bike lanes	12%	12%
Other	6%	13%
Do not have access to public transportation	6%	3%
Do not have access to a bicycle	5%	2%

Appendix F: Results by Outreach Type (Addressed-Based Sample versus Open Participation)

The tables in this Appendix display survey results by outreach type. An explanation of how to interpret statistical differences can be found in *Appendix C: Selected Survey Responses by Area of Residence* on page 45.

Table 117: Question #1 by Sample Type

What is your employment status?	Address-based	Open Participation
	(A)	(B)
Employed full- or part-time	79%	86% A
Not employed, not looking for work (retired, stay-at-home parent, etc.)	16% B	10%
Currently not employed	5%	4%

Table 118: Work Commute Mode Share by Sample Type

Work Commute Mode Share	Address-based	Open Participation
	(A)	(B)
Average percent of work trips made by walking	7%	9%
Average percent of work trips made by bike	3%	3%
Average percent of work trips made by Capital Bikeshare	3% B	1%
Average percent of work trips made by bus	5%	7% A
Average percent of work trips made by driving alone	25%	21%
Average percent of work trips made by carpooling/driving with others	3%	5%
Average percent of work trips made Metrorail	6%	5%
Average percent of work trips made taxi/uber	3% B	0%
Average percent of work trips made by VRE commuter rail	2% B	0%
Average percent of work trips made by working at home	40%	49% A
Average percent of work trips made by other modes	3% B	0%

Table 119: Commute Trips by Employed Respondents via Each Mode in Previous Week by Sample Type

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Each Mode in Previous Week		Open Participation	
	(A)	(B)	
Percent making any work trips in last week by walking	29%	29%	
Percent making any work trips in last week by bike	15% B	8%	
Percent making any work trips in last week by Capital Bikeshare	17% B	8%	
Percent making any work trips in last week by bus	22%	25%	
Percent making any work trips in last week by driving alone	59% B	39%	
Percent making any work trips in last week by carpooling/driving with others	19% B	13%	
Percent making any work trips in last week by Metrorail	28%	22%	
Percent making any work trips in last week by taxi/uber	19% B	3%	
Percent making any work trips in last week by VRE commuter rail	11% B	0%	
Percent making any work trips in last week by working at home	60%	73% A	
Percent making any work trips in last week by other modes	14% B	1%	

Table 120: Commute Trips by Employed Respondents via Transit in Previous Week by Sample Type

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Transit in Previous Week	Address-based	Open Participation	
	(A)	(B)	
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	33%	31%	
Took transit AND walked on same day on any day in previous week	10%	19%	
		A	
Took transit AND biked on same day on any day in previous week	1%	2%	
Took transit AND biked or walked on same day on any day in previous week	0%	0%	

Table 121: Question #3 by Sample Type

Comparing February 2020 (pre-pandemic closures) to this past month (September 2021), did your work-from-home habits change? (Percent of respondents)	Address- based	Open Participation
	(A)	(B)
I now work from home more days of the week	35%	45% A
Little or no change in the amount I work from home	30% B	23%
I now work from home full time. I no longer commute	28%	22%
I now work from home fewer days of the week	7%	10%

Table 122: Question #4 by Sample Type

Does your employer offer any of the following commuter benefits? (Select all that apply.)	Address-based	Open Participation	
	(A)	(B)	
SmartBenefits (Subsidized transit)	55%	67% A	
Free Parking	47% B	36%	
Bikeshare/Dockless Mobility memberships or bicycle subsidies	6%	24% A	
Pre-Tax Parking	12%	8%	
Other	8%	10%	
Carpool of Vanpool Program	7%	11%	

Table 123: Question #5 by Sample Type

If you most often drive to get to work, which of the following are the main reasons? (Please select all that apply.)	Address-based	Open Participation
	(A)	(B)
Quickest/most convenient	52%	30%
	В	
Don't usually drive alone to get to work	33%	55%
		A
Need/want to make stops/run errands on the way to/from work	26%	17%
	В	
Irregular work schedule	22%	16%
Too hard to get to work location from Metrorail station or bus stop	15%	12%
Need/want to come and go from the workplace during the day	16%	8%
	В	
Bus or Metrorail is not available or inadequate	12%	12%
Too hard to get to Metrorail station or bus stop from home	13%	9%
Personal reasons/commitments	11%	13%
Privacy	15%	2%
	В	
Driving costs less	11%	8%
Work reasons/commitments	10%	5%
	В	
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	7%	8%
I take a child/children to and/or from school or child care on the way to/ from work	6%	6%
Don't have shower at work if I walk or bike	6%	3%
Other modes are not safe	3%	2%
Don't want to take a shower at work if bike or walk	2%	2%
Health or physical limitations	3%	0%

Table 124: Travel Mode for 7 Kinds of Trips by Sample Type

Percent of respondents using each mode to complete any of 7 kinds of trips (parks & recreation centers, grocery store, non-grocery errands, restaurants, fun or fitness, visit friends or family, other social activities)		Open Participation	
	(A)	(B)	
Percent who ever walk	84%	87%	
Percent who ever bike	41%	29%	
	В		
Percent who ever use Capital Bikeshare	29%	16%	
	В		
Percent who ever bus	25%	37%	
		Α	
Percent who ever drive	86%	78%	
	В		
Percent who ever carpool	39%	24%	
	В		
Percent who ever use Metrorail	41%	37%	
Percent who ever use a taxi/uber	36%	34%	
Percent who ever do something else	26%	6%	
	В		

Table 125: Question #7 by Sample Type

In the past month, how often did you use a GPS app like Google Maps or Waze to help determine your route to avoid traffic? (Percent daily or a few times week)	Address- based	Open Participation
	(A)	(B)
Daily or Near Daily	31%	32%
Few times per week	30%	27%
Few times per month	20%	23%
Never	16%	14%
One time	3%	3%

Table 126: Question #8 by Sample Type

the past month, how many times, if ever, did you use any of these modes of transportation around Alexandria? ercent daily or a few times week)	Address- based	Open Participation
	(A)	(B)
Walk	92%	96% A
Bike	26%	35% A
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter, escooter)	12%	29% A
Drive alone	89% B	80%
Private Vehicle – as driver	71%	68%
Private Vehicle – as passenger	56%	61%
Motorcycle, moped, motorized scooter	2%	7% A
Taxi, other hired car service	22%	27%
Carshare (Zipcar, Hertz OnDemand)	3%	8% A
Transportation Network Company (TNC such as Uber, Lyft, Via)	49%	61% A
Rail (Metrorail, commuter rail)	43%	52% A
DASH Bus	20%	45% A
Metrobus	18%	29% A
Multiple transit systems	16%	32% A
Carpool, Vanpool	13%	17%

Table 127: Question #9 by Sample Type

o what extent do you agree or disagree that each of the following would increase your use of public transportation bus or metro) as a means of transportation: (Percent somewhat or strongly agree)		Open Participation	
	(A)	(B)	
Services were more reliable	75%	86%	
		A	
Services were more frequent	77%	84%	
		A	
There were more direct routes/fewer transfers to destinations	78%	86% A	
Services were less expensive	55%	49%	
My travel time were less than if I used a personal vehicle	83%	80%	
There were routes that stop at my desired destinations	78%	85%	
		Α	
There were routes that stop at or near my home	76%	82%	
		A	
I felt safer from crime while riding public transportation	51%	36%	
	В		
I felt safer from crime waiting at the station	53%	37%	
	В		
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	52%	53%	
Children could ride free on Metro	42%	36%	
I were in better health or more physically able to get to it and use it	26%	21%	
I do not want to use public transportation	32%	19%	
	В		

Table 128: Question #10 by Sample Type

In the last month, about how frequently have you done each of the following? (Percent ever)	Address-based	Open Participation
	(A)	(B)
Ridden a bicycle or walked for fun or exercise	35%	52%
		Α
Ran or jogged for fun or exercise	90%	86%

Table 129: Question #11 by Sample Type

To what extent do you agree or disagree that each of the following would increase your use of walking as a means of transportation: (Percent somewhat or strongly agree)	Address- based	Open Participation
	(A)	(B)
There were more sidewalks	68%	82% A
There were more crosswalks	65%	82% A
If the sidewalks and paths were in better condition	68%	80% A
There was more off-street walking or multi-use paths, trails	72%	76%
There was more street lighting after dark	76%	81%
I had access to public or workplace showers	31%	28%
I felt more safe from traffic while walking	64%	83% A
I felt more safe from crime while walking	54%	50%
I had better health or physical ability to do so	32% B	18%
It didn't take longer to walk to my destinations than to drive	60%	57%
I do not want to walk as a means of transportation	27% B	9%

Table 130: Question #12 by Sample Type

o what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of ransportation: (Percent somewhat or strongly agree)		Open Participation
	(A)	(B)
There were more on-street bike lanes	56%	55%
There was more off-street bike or multi-use paths, trails	66%	64%
There was more street lighting after dark	63%	62%
I had access to a bicycle	45% B	24%
I had access to an electric/pedal assist bicycle	33%	30%
I had access to public or workplace showers	35%	44% A
I had a place to securely store a bicycle at work	46%	43%
There were places to securely park a bicycle at other destinations	61%	55%
I felt more safe from traffic while riding a bicycle	67%	80% A
I felt more safe from crime while riding a bicycle	37% B	28%
I had better health or physical ability to do so	30%	24%
It didn't take longer to ride a bicycle to my destinations than to drive	48% B	39%
I knew how to ride a bike	17%	14%
If there were more Capital Bikeshare stations	30%	41% A
I do not want to use a bicycle as a means of transportation	45% B	29%

Table 131: Question #13 by Sample Type

Do you have school-aged children? (Percent yes)	Address-based	Open Participation
	(A)	(B)
No	87%	78%
	В	
Yes	13%	22%
		A

Table 132: Question #14 by Sample Type

Please indicate how your child(ren) typically travel to/from school? (Please select all that apply.)	Address-based	Open Participation
	(A)	(B)
School bus	41%	49%
Walk	40%	40%
Carpool w/ family	39%	41%
Dropped off by driver	11%	4%
Drive themselves alone or with siblings	8%	3%
Bike	5%	6%
Public transportation	3%	3%
Carpool w/ nonfamily	5%	0%
Other	1%	3%

^{*}Only asked of those with a school-aged child or children

Table 133: Question #15 by Sample Type

If your children are driven to school or drive themselves, please indicate which, if any, of the following factors discourage you from using other modes of transportation for your child(ren) to/from school (please select all that apply)	Address- based	Open Participation
	(A)	(B)
Distance to school	67%	43%
	В	
Takes too long to use other modes	35%	57%
		Α
Inconvenient to use other modes	28%	24%
Not safe	29%	20%
Lack of sidewalks, bike lanes	12%	22%
Do not have access to public transportation	6%	6%
Cost	7%	0%
Other	6%	0%
Do not have access to a bicycle	5%	1%

Appendix G: Complete Set of Responses for the Open Participation Survey

Table 134: Question #1 (Open Participation Survey)

What is your employment status?	Percent	Number
Employed full- or part-time	86%	N=241
Not employed, not looking for work (retired, stay-at-home parent, etc.)	10%	N=29
Currently not employed	4%	N=12
Total	100%	N=282

Table 135: Work Commute Mode Share (Open Participation Survey)

Work Commute Mode Share	Average percent of work trips	Number
Average percent of work trips made by walking	9%	N=282
Average percent of work trips made by bike	3%	N=282
Average percent of work trips made by Capital Bikeshare	1%	N=282
Average percent of work trips made by bus	7%	N=282
Average percent of work trips made by driving alone	21%	N=282
Average percent of work trips made by carpooling/driving with others	5%	N=282
Average percent of work trips made Metrorail	5%	N=282
Average percent of work trips made taxi/uber	0%	N=282
Average percent of work trips made by VRE commuter rail	0%	N=282
Average percent of work trips made by working at home	49%	N=282
Average percent of work trips made by other modes	0%	N=282

Table 136: Commute Trips by Employed Respondents via Each Mode in Previous Week (Open Participation Survey)

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Each Mode in Previous Week Percent		
restent of Employed Respondents who made at least one work Commute Trip via Each Mode in Previous Week	reiteiit	Number
Percent making any work trips in last week by walking	29%	N=282
Percent making any work trips in last week by bike	8%	N=282
Percent making any work trips in last week by Capital Bikeshare	8%	N=282
Percent making any work trips in last week by bus	25%	N=282
Percent making any work trips in last week by driving alone	39%	N=282
Percent making any work trips in last week by carpooling/driving with others	13%	N=282
Percent making any work trips in last week by Metrorail	22%	N=282
Percent making any work trips in last week by taxi/uber	3%	N=282
Percent making any work trips in last week by VRE commuter rail	0%	N=282
Percent making any work trips in last week by working at home	73%	N=282
Percent making any work trips in last week by other modes	1%	N=282

Table 137: Commute Trips by Employed Respondents via Transit in Previous Week (Open Participation Survey)

Percent of Employed Respondents Who Made at Least One Work Commute Trip via Transit in Previous Week	Percent of respondents	Number
Took transit (bus, Metrorail and/or VRE commuter rail) any day in previous week	31%	N=282
Took transit AND walked on same day on any day in previous week	19%	N=282
Took transit AND biked on same day on any day in previous week	2%	N=282
Took transit AND biked or walked on same day on any day in previous week	0%	N=282

Table 138: Question #2 (Open Participation Survey)

Monday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	11%	N=282
Bike	2%	N=282
Capital Bikeshare	5%	N=282
Bus	5%	N=282
Drove alone	19%	N=282
Carpool (drove or rode in a car with others	5%	N=282
Metrorail	6%	N=282
Taxi/ Uber	1%	N=282
VRE commuter rail	0%	N=282
Worked at home	63%	N=282
I did not work	3%	N=282
Other	0%	N=282

Table 139: Question #2 (Open Participation Survey)

Tuesday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	10%	N=282
Bike	3%	N=282
Capital Bikeshare	0%	N=282
Bus	14%	N=282
Drove alone	20%	N=282
Carpool (drove or rode in a car with others	8%	N=282
Metrorail	3%	N=282
Taxi/ Uber	2%	N=282
VRE commuter rail	0%	N=282
Worked at home	54%	N=282
I did not work	5%	N=282
Other	0%	N=282

Table 140: Question #2 (Open Participation Survey)

Wednesday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	14%	N=282
Bike	2%	N=282
Capital Bikeshare	0%	N=282
Bus	12%	N=282
Drove alone	24%	N=282
Carpool (drove or rode in a car with others	12%	N=282
Metrorail	9%	N=282
Taxi/ Uber	0%	N=282
VRE commuter rail	0%	N=282
Worked at home	52%	N=282
I did not work	6%	N=282
Other	1%	N=282

Table 141: Question #2 (Open Participation Survey)

Thursday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	10%	N=282
Bike	2%	N=282
Capital Bikeshare	3%	N=282
Bus	9%	N=282
Drove alone	24%	N=282
Carpool (drove or rode in a car with others	8%	N=282
Metrorail	7%	N=282
Taxi/ Uber	1%	N=282
VRE commuter rail	0%	N=282
Worked at home	55%	N=282
I did not work	2%	N=282
Other	0%	N=282

Table 142: Question #2 (Open Participation Survey)

Friday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	10%	N=282
Bike	4%	N=282
Capital Bikeshare	0%	N=282
Bus	11%	N=282
Drove alone	18%	N=282
Carpool (drove or rode in a car with others	5%	N=282
Metrorail	4%	N=282
Taxi/ Uber	0%	N=282
VRE commuter rail	0%	N=282
Worked at home	53%	N=282
I did not work	8%	N=282
Other	0%	N=282

Table 143: Question #2 (Open Participation Survey)

Saturday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	13%	N=282
Bike	2%	N=282
Capital Bikeshare	0%	N=282
Bus	8%	N=282
Drove alone	11%	N=282
Carpool (drove or rode in a car with others	1%	N=282
Metrorail	8%	N=282
Taxi/ Uber	0%	N=282
VRE commuter rail	0%	N=282
Worked at home	3%	N=282
I did not work	72%	N=282
Other	0%	N=282

Table 144: Question #2 (Open Participation Survey)

Sunday (Percent of respondents who used each mode)	Percent of respondents	Number
Walk	9%	N=282
Bike	1%	N=282
Capital Bikeshare	0%	N=282
Bus	8%	N=282
Drove alone	12%	N=282
Carpool (drove or rode in a car with others	1%	N=282
Metrorail	8%	N=282
Taxi/ Uber	0%	N=282
VRE commuter rail	0%	N=282
Worked at home	3%	N=282
I did not work	75%	N=282
Other	0%	N=282

Table 145: Question #3 (Open Participation Survey)

Comparing February 2020 (pre-pandemic closures) to this past month (September 2021), did your work-from-home habits change? (Percent of respondents)		Number
I now work from home more days of the week	45%	N=108
Little or no change in the amount I work from home	23%	N=55
I now work from home full time. I no longer commute	22%	N=54
I now work from home fewer days of the week	10%	N=24
Total	100%	N=241

Table 146: Question #4 (Open Participation Survey)

Does your employer offer any of the following commuter benefits? (Select all that apply.)	Percent	Number
SmartBenefits (Subsidized transit)	67%	N=114
Free Parking	36%	N=60
Bikeshare/Dockless Mobility memberships or bicycle subsidies	24%	N=41
Carpool of Vanpool Program	11%	N=19
Other	10%	N=17
Pre-Tax Parking	8%	N=13
Total	100%	N=169

Table 147: Question #5 (Open Participation Survey)

If you most often drive to get to work, which of the following are the main reasons? (Please select all that apply.)	Percent	Number
Don't usually drive alone to get to work	55%	N=122
Quickest/most convenient	30%	N=66
Need/want to make stops/run errands on the way to/from work	17%	N=38
Irregular work schedule	16%	N=36
Personal reasons/commitments	13%	N=28
Bus or Metrorail is not available or inadequate	12%	N=27
Too hard to get to work location from Metrorail station or bus stop	12%	N=26
Too hard to get to Metrorail station or bus stop from home	9%	N=20
Driving costs less	8%	N=18
I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.)	8%	N=17
Need/want to come and go from the workplace during the day	8%	N=17
I take a child/children to and/or from school or child care on the way to/ from work	6%	N=13
Work reasons/commitments	5%	N=11
Don't have shower at work if I walk or bike	3%	N=7
Other modes are not safe	2%	N=5
Privacy	2%	N=4
Don't want to take a shower at work if bike or walk	2%	N=4
Health or physical limitations	0%	N=1
Total	100%	N=220

Table 148: Travel Mode for 7 Kinds of Trips (Open Participation Survey)

Percent of respondents using each mode to complete any of 7 kinds of trips (parks & recreation centers, grocery store, non-grocery errands, restaurants, fun or fitness, visit friends or family, other social activities)	Percent of respondents	Number
Percent who ever walk	87%	N=282
Percent who ever bike	29%	N=282
Percent who ever use Capital Bikeshare	16%	N=282
Percent who ever bus	37%	N=282
Percent who ever drive	78%	N=282
Percent who ever carpool	24%	N=282
Percent who ever use Metrorail	37%	N=282
Percent who ever use a taxi/uber	34%	N=282
Percent who ever do something else	6%	N=282

Table 149: Question #6 (Open Participation Survey)

Parks & recreation centers	Percent of respondents	Number
I did not do this activity	29%	N=282
Walk	59%	N=282
Bike	21%	N=282
Capital Bikeshare	12%	N=282
Bus	27%	N=282
Drove alone	25%	N=282
Carpool	8%	N=282
Metrorail	10%	N=282
Taxi/ Uber	7%	N=282
Other	1%	N=282

Table 150: Question #6 (Open Participation Survey)

Grocery store	Percent of respondents	Number
I did not do this activity	0%	N=282
Walk	59%	N=282
Bike	11%	N=282
Capital Bikeshare	8%	N=282
Bus	16%	N=282
Drove alone	73%	N=282
Carpool	3%	N=282
Metrorail	0%	N=282
Taxi/ Uber	4%	N=282
Other	2%	N=282

Table 151: Question #6 (Open Participation Survey)

Non-grocery errands	Percent of respondents	Number
I did not do this activity	0%	N=282
Walk	57%	N=282
Bike	15%	N=282
Capital Bikeshare	9%	N=282
Bus	31%	N=282
Drove alone	73%	N=282
Carpool	6%	N=282
Metrorail	24%	N=282
Taxi/ Uber	17%	N=282
Other	1%	N=282

Table 152: Question #6 (Open Participation Survey)

Restaurants	Percent of respondents	Number
I did not do this activity	4%	N=282
Walk	64%	N=282
Bike	11%	N=282
Capital Bikeshare	6%	N=282
Bus	26%	N=282
Drove alone	58%	N=282
Carpool	9%	N=282
Metrorail	20%	N=282
Taxi/ Uber	16%	N=282
Other	1%	N=282

Table 153: Question #6 (Open Participation Survey)

Fun or fitness	Percent of respondents	Number
I did not do this activity	4%	N=282
Walk	72%	N=282
Bike	23%	N=282
Capital Bikeshare	12%	N=282
Bus	23%	N=282
Drove alone	42%	N=282
Carpool	14%	N=282
Metrorail	16%	N=282
Taxi/ Uber	10%	N=282
Other	3%	N=282

Table 154: Question #6 (Open Participation Survey)

Visit friends or family	Percent of respondents	Number
I did not do this activity	4%	N=282
Walk	45%	N=282
Bike	13%	N=282
Capital Bikeshare	7%	N=282
Bus	24%	N=282
Drove alone	56%	N=282
Carpool	16%	N=282
Metrorail	24%	N=282
Taxi/ Uber	19%	N=282
Other	5%	N=282

Table 155: Question #6 (Open Participation Survey)

Other social activities	Percent of respondents	Number
I did not do this activity	16%	N=282
Walk	43%	N=282
Bike	14%	N=282
Capital Bikeshare	8%	N=282
Bus	21%	N=282
Drove alone	52%	N=282
Carpool	13%	N=282
Metrorail	29%	N=282
Taxi/ Uber	26%	N=282
Other	3%	N=282

Table 156: Question #7 (Open Participation Survey)

In the past month, how often did you use a GPS app like Google Maps or Waze to help determine your route to avoid traffic? (Percent daily or a few times week)	Percent	Number
Daily or Near Daily	32%	N=91
Few times per week	27%	N=76
Few times per month	23%	N=65
Never	14%	N=41
One time	3%	N=9
Total	100%	N=282

Table 157: Question #8 (Open Participation Survey)

In the past month, how many times, if ever, did you use any of these modes of transportation around Alexandria? (Percent daily or a few	· ·	Daily or Near Daily		Few times per week		mes per onth	One time		Never	
times week)	%	N	%	N	%	N	%	N	%	N
Walk	59%	N=148	20%	N=50	16%	N=41	2%	N=4	4%	N=9
Bike	5%	N=14	9%	N=22	14%	N=35	7%	N=18	65%	N=168
Bikeshare (Capital Bike Share, dockless bikeshare, dockless scooter/escooter)	0%	N=0	9%	N=23	11%	N=28	8%	N=19	71%	N=175
Drive alone	26%	N=72	36%	N=99	16%	N=44	2%	N=6	20%	N=56
Private Vehicle – as driver	24%	N=64	28%	N=77	15%	N=40	1%	N=2	32%	N=88
Private Vehicle – as passenger	5%	N=11	20%	N=48	24%	N=59	13%	N=31	39%	N=94
Motorcycle/moped/motorized scooter	0%	N=1	0%	N=0	5%	N=12	2%	N=6	93%	N=231
Taxi, other hired car service	0%	N=0	3%	N=8	8%	N=21	15%	N=38	73%	N=182
Carshare (Zipcar, Hertz OnDemand)	0%	N=0	0%	N=0	4%	N=9	5%	N=10	92%	N=210
Transportation Network Company (TNC such as Uber, Lyft, Via)	0%	N=0	7%	N=16	32%	N=78	23%	N=56	39%	N=97
Rail (Metrorail, commuter rail)	1%	N=2	23%	N=57	19%	N=47	10%	N=26	48%	N=122
DASH Bus	8%	N=19	20%	N=49	12%	N=30	6%	N=16	55%	N=139
Metrobus	8%	N=19	5%	N=12	10%	N=25	6%	N=14	71%	N=173
Multiple transit systems	7%	N=18	9%	N=22	14%	N=35	2%	N=6	68%	N=170
Carpool/Vanpool	0%	N=0	2%	N=5	14%	N=32	1%	N=3	83%	N=194

Table 158: Question #9 (Open Participation Survey)

To what extent do you agree or disagree that each of the following would increase your use of public transportation (bus or metro) as a means of transportation:		ongly gree	Somewhat Agree		Somewhat Disagree		Strongly Disagree	
(Percent somewhat or strongly agree)	%	N	%	N	%	N	%	N
Services were more reliable	51%	N=133	34%	N=89	3%	N=8	11%	N=29
Services were more frequent	59%	N=155	25%	N=66	7%	N=18	9%	N=24
There were more direct routes/fewer transfers to destinations	53%	N=142	34%	N=92	5%	N=13	9%	N=24
Services were less expensive	23%	N=62	26%	N=70	20%	N=54	31%	N=83
My travel time was less than if I used a personal vehicle	55%	N=148	25%	N=68	7%	N=19	13%	N=34
There were routes that stop at my desired destinations	46%	N=124	39%	N=104	7%	N=18	8%	N=21
There were routes that stop at or near my home	47%	N=123	35%	N=90	8%	N=20	10%	N=26
I felt safer from crime while riding public transportation	15%	N=41	20%	N=55	36%	N=97	28%	N=76
I felt safer from crime waiting at the station	16%	N=44	21%	N=56	35%	N=96	28%	N=75
I had somewhere to put my things (luggage, groceries, other purchases, etc.)	9%	N=23	45%	N=120	31%	N=82	16%	N=43
Children could ride free on Metro	11%	N=28	25%	N=64	22%	N=56	42%	N=110
I were in better health or more physically able to get to it and use it	8%	N=23	12%	N=33	16%	N=43	64%	N=172
I do not want to use public transportation	11%	N=29	8%	N=22	11%	N=31	70%	N=192

Table 159: Question #10 (Open Participation Survey)

In the last month, about how frequently have you done each of the following? (Percent ever)	N	ever	1-10 times a month		11-20 times a month		More than 20 times a month	
	%	N	%	N	%	N	%	N
Ridden a bicycle for fun or exercise	48%	N=133	43%	N=119	5%	N=14	4%	N=10
Walked, ran, or jogged for fun or exercise	14%	N=40	28%	N=78	21%	N=59	36%	N=101

Table 160: Question #11 (Open Participation Survey)

To what extent do you agree or disagree that each of the following would increase your use of walking as a means of transportation: (Percent somewhat or strongly agree)		ongly gree	Somewhat Agree		Somewhat Disagree		Strongly Disagree	
		N	%	N	%	N	%	N
There were more sidewalks	56%	N=154	26%	N=72	8%	N=22	10%	N=26
There were more crosswalks	50%	N=136	32%	N=87	8%	N=22	10%	N=26
If the sidewalks and paths were in better condition	60%	N=158	20%	N=53	11%	N=30	9%	N=24
There were more off-street walking or multi-use paths/trails	41%	N=110	34%	N=91	19%	N=51	5%	N=14
There was more street lighting after dark	36%	N=92	45%	N=114	10%	N=25	9%	N=24
I had access to workplace showers	7%	N=19	21%	N=54	36%	N=93	36%	N=94
I felt more safe from traffic while walking	54%	N=145	29%	N=78	8%	N=22	9%	N=24
I felt more safe from crime while walking	27%	N=75	23%	N=62	32%	N=88	18%	N=50
I had better health or physical ability to do so	2%	N=5	16%	N=43	28%	N=73	54%	N=142
It didn't take longer to walk to my destinations than to drive	26%	N=66	31%	N=81	21%	N=53	23%	N=58
I do not want to walk as a means of transportation	6%	N=16	4%	N=10	24%	N=67	66%	N=183

Table 161: Question #12 (Open Participation Survey)

To what extent do you agree or disagree that each of the following would increase your use of a bicycle as a means of transportation: (Percent somewhat or strongly		ongly gree	Somewhat Agree		Somewhat Disagree		Strongly Disagree	
agree)	%	N	%	N	%	N	%	N
There were more on-street bike lanes	33%	N=88	22%	N=59	22%	N=58	23%	N=61
There were more off-street bike or multi-use paths/trails	50%	N=134	14%	N=36	15%	N=39	21%	N=56
There was more street lighting after dark	32%	N=83	29%	N=75	15%	N=39	23%	N=60
I had access to a bicycle	11%	N=29	13%	N=33	24%	N=62	51%	N=131
I had access to an electric/pedal assist bicycle	14%	N=35	17%	N=42	26%	N=66	44%	N=113
I had access to workplace showers	11%	N=28	33%	N=84	23%	N=59	33%	N=83
I had a place to securely store a bicycle at work	17%	N=43	26%	N=65	17%	N=43	40%	N=101
There were places to securely park a bicycle at other destinations	24%	N=63	31%	N=79	20%	N=51	25%	N=65
I felt more safe from traffic while riding a bicycle	53%	N=136	27%	N=70	9%	N=24	10%	N=26
I felt more safe from crime while riding a bicycle	12%	N=31	16%	N=41	32%	N=82	40%	N=103
I had better health or physical ability to do so	12%	N=30	12%	N=31	32%	N=81	45%	N=116
It didn't take longer to ride a bicycle to my destinations than to drive	13%	N=34	26%	N=66	35%	N=91	26%	N=66
I knew how to ride a bike	4%	N=11	10%	N=25	5%	N=14	80%	N=204
If there were more Capital Bikeshare stations	19%	N=49	22%	N=56	23%	N=60	36%	N=92
I do not want to use a bicycle as a means of transportation	15%	N=41	14%	N=37	23%	N=64	48%	N=133

Table 162: Question #13 (Open Participation Survey)

Do you have school-aged children? (Percent yes)	Percent	Number
No	78%	N=219
Yes	22%	N=61
Total	100%	N=281

Table 163: Question #14 (Open Participation Survey)

Please indicate how your child(ren) typically travel to/from school? (Please select all that apply.)	Percent	Number
School bus	49%	N=30
Carpool w/ family	41%	N=25
Walk	40%	N=25
Bike	6%	N=4
Dropped off by driver	4%	N=3
Other	3%	N=2
Public transportation	3%	N=2
Drive themselves alone or with siblings	3%	N=2
Carpool w/ nonfamily	0%	N=0
Total	100%	N=61

^{*}Only asked of those with a school-aged child or children

Table 164: Question #15 (Open Participation Survey)

If your children are driven to school or drive themselves, please indicate which, if any, of the following factors discourage you from using other modes of transportation for your child(ren) to/from school (please select all that apply):	Percent	Number
Takes too long to use other modes	57%	N=17
Distance to school	43%	N=13
Inconvenient to use other modes	24%	N=7
Lack of sidewalks, bike lanes	22%	N=6
Not safe	20%	N=6
Do not have access to public transportation	6%	N=2
Do not have access to a bicycle	1%	N=0
Other	0%	N=0
Cost	0%	N=0
Total	100%	N=29

Appendix H: Survey Methodology

Survey Purpose

The City of Alexandria's Department of Transportation and Environmental Services contracted with the National Research Center, Inc. (NRC) team at Polco to conduct a survey on City-wide multimodal transportation trends and preferences. The City initially worked with NRC to conduct the baseline survey in 2016 and this 2021 survey serves to add data to the trend line to help assess the impact of polices, programs and plans.

Developing the Questionnaire

The roughly three-page questionnaire was developed through an iterative process between the staff of the City of Alexandria's Department of Transportation and Environmental Services and NRC. The base of the 2021 survey was the 2016 questions, to ensure comparisons could be made. Most 2016 questions were kept as is, a few received small updates and a couple were replaced with more timely topics. The goal was to craft a survey instrument that would be easy to complete by recipients and provide the City with the information needed for the various purposes stated above. A copy of the questionnaire can be found in *Appendix I: Survey Questions*.

Selecting Survey Recipients

"Sampling" refers to the method by which survey recipients are chosen. The "sample" refers to all those who were given a chance to participate in the survey. Ideally, the chosen survey recipients should be representative of all eligible survey recipients. Randomly selecting survey recipients ensures that this will occur.

All households located in the Alexandria city limits were eligible to be a part the survey; 4,200 were selected at random to receive the survey. Because local governments generally do not have inclusive lists of all the residences in the jurisdiction (tax assessor and utility billing databases often omit rental units), lists from the United States Postal Service (USPS), updated every three months, usually provide the best representation of all households in a specific geographic location. NRC used the USPS data to select the sample of households. Addresses from the zip codes serving the city were geocoded (mapped to a specific latitude and longitude). Addresses outside the city limits were excluded, while addresses within each of eight areas (West End, Central, North Ridge, Arlandria, Potomac Yard, Del Ray, Old Town and Carlyle) were coded to permit results to be compared geographically.

Administering the Survey

The database of selected household addresses was processed for certification and verification, using use CASS™/NCOA software that relies on the USPS National Directory information to verify and standardize the address elements and assign each a complete, nine-digit zip code where possible.

A total of 4,200 household addresses were randomly selected from a US Postal Service (USPS) list of all residential addresses in the City to receive a mailed survey or a mailed invitation to an online survey on Polco. Mailings were sent over a three-week period starting September 28^{th,} 2021, and data collection was closed November 17th, 2021.

• 1,800 selected households were contacted two times over two weeks with a postcard invitation to complete the survey online (using the provided URL).

• 2,400 selected households received three mailings over three weeks, a postcard invitation to complete the survey online, followed by two mailing of a paper survey, with a postage-paid reply envelope for returning the completed survey.

Additionally, a second online survey was programmed (with the same questions as the sampled survey) and invitations were made available to residents via City social media and other communication channels. This open participation effort was conducted in October and November 2021.

Overall, there were 617 responses to the mailed invitations/surveys in the sampled outreach effort. Additionally, 280 residents responded to the open participation outreach effort.

A total of 194 completed surveys were returned by mail and 423 surveys were completed online, for a total of 617 responses. Of the 4,200 households mailed surveys, 143 were determined to be vacant or otherwise undeliverable by the post office. Thus, the response rate from the 4,067 households who received a survey was 18%. This is a good response rate; typical response rates for a survey of this type range from 12% to 24%.

The 95% confidence interval (or "margin of error") quantifies the "sampling error" or precision of the estimates made from the survey results. A 95% confidence interval can be calculated for any sample size and indicates that in 95 of 100 surveys conducted like this one, for a particular item, a result would be found that is within a certain range if everyone in the population of interest was surveyed. The practical difficulties of conducting any resident survey may introduce other sources of error in addition to sampling error. Despite the best efforts to boost participation and ensure potential inclusion of all households, some selected households will decline participation in the survey (referred to as non-response error) and some eligible households may be unintentionally excluded from the listed sources for the sample (referred to as coverage error). Coverage error is very low for this survey, as the USPS delivery sequence file is used to select addresses, which has nearly complete coverage of all households. For this survey, with 617 responses, the 95% confidence interval is plus or minus 4 percentage points.

The 95% confidence interval is lower for respondent subgroups. As an example, the table below shows the 95% confidence interval for results from the various geographic areas within the city; overall, the margin of error for comparisons between respondents based on geographic area was 9%. (Four of these areas were combined for analysis, as they number of responses for each was less than 100.) In the appendices with cross-tabulations by area or other household and respondent characteristics, statistical differences are noted with a lettering system explained on page 45 of *Appendix C: Selected Survey Responses by Area of Residence*

Area	Number of responses	95% confidence interval (plus or minus)
West End	109	9.4%
Central	155	7.9%
North Ridge/Arlandria/Potomac Yard/Carlyle	128	8.7%
Del Ray	69	11.8%
Old Town	149	8.0%
Total	109	9.4%

Survey Processing (Data Entry)

Mailed surveys were returned to NRC directly via postage-paid business reply envelopes. Once received, staff assigned a unique identification number to each questionnaire. Additionally, each survey was reviewed and "cleaned" as necessary. For example, a question may have asked a respondent to pick two items out of a list of five, but the respondent checked three; two of the three selected items would be randomly chosen to be entered in the dataset.

Once all surveys were assigned a unique identification number, they were entered into an electronic dataset. This dataset was subject to a data entry protocol of "key and verify," in which survey data were entered twice into an electronic dataset and then compared. Discrepancies were evaluated against the original survey form and corrected. Range checks as well as other forms of quality control were also performed.

Analyzing the Results

One of the first steps in the data analysis was to statistically adjust the survey results so that the demographic profile of the respondents mirrored that of the population as a whole. This process is known as "weighting" the data. The primary objective of weighting survey data is to make the survey sample reflective of the larger population of the community. This is done by: 1) reviewing the sample demographics and comparing them to the population norms from the most recent sources and 2) comparing the responses to different questions for demographic subgroups. The demographic characteristics that are least similar to the known demographic profile and yield the most different results are the best candidates for data weighting. For this project, the population norms came from the US Census and American Community Survey data for the city of Alexandria. The results of the weighting scheme are presented in the table on the next page.

The electronic dataset was analyzed using the Statistical Package for the Social Sciences (SPSS). For the most part, frequency distributions and average (mean) ratings are presented in the body of the report. A complete set of frequencies for each survey question is presented in *Appendix A: Complete Set of Responses*. Chi-square or ANOVA tests of significance were applied to these breakdowns of selected survey questions. A "p-value" of 0.05 or less indicates that there is less than a 5% probability that differences observed between groups are due to chance; or in other words, a greater than 95% probability that the differences observed in the selected categories of the sample represent "real" differences among those populations.

Table 165: Weighting Table

Table 103. Weighting Table												
			Address-	based	Open Parti	cipation						
		Census	Unweighted	Weighted	Unweighted	Weighted						
Type of Housing Unit	Detached	15%	19%	15%	38%	17%						
	Attached	85%	81%	85%	62%	83%						
Tenure (Own or Rent)	Own	43%	63%	45%	88%	46%						
	Rent	57%	37%	55%	12%	54%						
Ethnicity	Not Hispanic	85%	92%	85%	96%	85%						
	Hispanic	15%	8%	15%	4%	15%						
Gender of Respondent	Male	48%	46%	47%	39%	48%						
	Female	52%	54%	53%	61%	52%						
Age of Respondent	18-34	38%	18%	34%	13%	34%						
	35-54	37%	34%	38%	46%	39%						
	55+	24%	47%	28%	41%	26%						

Appendix I: Survey Questions

☐ Don't want to take a shower at work if bike or walk

The mailed survey was formatted to fit on three pages. The survey questions below are formatted less densely to fit this report structure.

City of Alexandria Transportation Needs Assessment Survey

Please complete this questionnaire if you are the adult (age 18 or older) in the household who most recently had a birthday. Your responses are completely confidential and no identifying information will be shared.

1.	What is your employment status?												
		tly not	empl	art-time oyed → skip to looking for wo	-		-at-home par	ent, etc	:.) → sl	kip to questi	on 6		
2.	day (plea	se sel	ect all	ou worked, ple that apply). F you would se	or exam	ple, if y	ou rode Capit	al Bike	share t	o the metro	and then	walked	
		Walk	Bike	Capital Bikeshare/ dockless scooters/ <u>e-bikes</u>	<u>Bus</u>	Drove alone	Carpool (drove or rode in a car with <u>others</u>)	Metro <u>rail</u>	Taxi/ <u>Uber</u>	VRE commuter <u>rail</u>	Worked at home	I did not <u>work</u>	<u>Other</u>
ſ	Monday												
٦	Гuesday												
١	Wednesday												
1	Γhursday												
F	riday												
9	Saturday												
9	Sunday												
3.	habits ch O Little	ange? or no d	change	20 (pre-pande e in the amoun ome more day	t I work	from ho	ome Olno	ow wor	k from	oer 2021), di home full tir home fewer	ne. I no lo	onger co	mmute
4.	Does your e	emplo	yer of	fer any of the	followir	ng comn	nuter benefits	? (Sele	ct all tl	nat apply.)			
	O Free p O Pre-ta	_	•	O SmartBene O Carpool of	-					ockless mob os or bicycle	•		Other
5.	If you typic	ally dr	ive ald	one to get to v	vork, wl	nich of t	he following	are the	main r	easons? (Se	lect all th	at apply	/ ·)
	 If you typically drive alone to get to work, which of the following are the main reasons? (Select all that apply.) Don't usually drive alone to get to work Quickest/most convenient Privacy Irregular work schedule I take a child/children to and/or from school or child care on the way to/ from work Need/want to make stops/run errands on the way to/from work Need/want to come and go from the workplace during the day Personal reasons/commitments Work reasons/commitments Don't have shower at work if I walk or bike 												

 □ Too hard to get to work location from Metrorail station or bus stop □ Too hard to get to Metrorail station or bus stop from home □ Bus or Metrorail is not available or inadequate □ Driving costs less □ Other modes are not safe □ I need somewhere to store larger/multiple things (luggage, groceries, other purchases, etc.) □ Health or physical limitations □ Other: 										
6. Please check all the mod	e(s) you	used in	the last	month to access o	r do ea	ach of t	he followin	ıg. (Selec	t all that	apply.)
	Did not do this activity	<u>Walk</u>	<u>Bike</u>	Capital Bikeshare/ dockless scooters/e-bikes	<u>Bus</u>	Drove alone	<u>Carpool</u>	Metro <u>rail</u>	Taxi/ <u>Uber</u>	<u>Other</u>
Parks & recreation centers				٥						
Grocery store										
Non-grocery errands										
Restaurants										
Fun or fitness					_					
Visit friends or family										
Other non-work commute						_		_		
trips										
7. In the past month, how on avoid traffic?	often did	you us	e a GPS a	app like Google Ma	aps or	Waze to	o help dete	ermine yo	our route	to
O Daily/nearly daily	O Few t	imes pe	er week	• Few times po	er mon	ith	O 1 time	O Nev	er	
3. In the past month, how i	many tim	es. if ev	ver. did v	ou use any of the	se mod	les of ti	ransportati	on arour	nd Alexan	dria?
in the past month, now i	many cm	103, 11 0	, ci, aia ,	, ou use any or the			•			aria.
					Daily	-	w times F			
VA / = II .						daily po	<u>er week</u> <u>p</u>			
Walk							2	3	4	5
Bike					⊥		2	3	4	5
Bikeshare (Capital Bik dockless scooter /es					1		2	3	4	5
Drive alone							2	3	4	5
Private Vehicle – as d							2	3	4	5
Private Vehicle – as pa							2	3	4	5
Motorcycle/moped/n	•						2	3	4	5
Taxi, other hired car s							2	3	4	5
Carshare (Zipcar, Hert							2	3	4	5
Transportation Netwo		-					2	3	4	5
Rail (Metrorail, comm		-					2	3	4	5
DASH Bus							2	3	4	5
Metrobus							2	3	4	5
Multiple transit system							2	3	4	5
Carpool/Vanpool							2	3	4	5

9. To what extent do you agree or disagree that each of the following would increase your use of <u>public transportation</u> (bus or metro):

	Strongly <u>agree</u>	Somewhat <u>agree</u>	Somewhat disagree	Strongly disagree
Services were more reliable	1	2	3	4
Services were more frequent	1	2	3	4
There were more direct routes/fewer transfers to destinations	1	2	3	4
Services were less expensive	1	2	3	4
My travel time was less than if I used a personal vehicle	1	2	3	4
There were routes that stop at my desired destinations	1	2	3	4
There were routes that stop at or near my home	1	2	3	4
I felt safer from crime while riding public transportation	1	2	3	4
I felt safer from crime waiting at the station	1	2	3	4
I had somewhere to put my things (luggage, groceries,				
other purchases, etc.)	1	2	3	4
Children could ride free on Metro	1	2	3	4
I were in better health or more physically able to get to it and use	e it 1	2	3	4
I do not want to use public transportation	1	2	3	4

10. In the last month, about how frequently have you done each of the following?

		1-10 times	11-20 times	More than 20
	<u>Never</u>	<u>a month</u>	<u>a month</u>	times a month
Ridden a bicycle for fun or exercise	1	2	3	4
Walked, ran, or jogged for fun or exercise	1	2	3	4

11. To what extent do you agree or disagree that each of the following would increase your use of <u>walking</u> as a means of transportation:

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
There were more sidewalks		2	3	4
There were more crosswalks	1	2	3	4
If the sidewalks and paths were in better condition	1	2	3	4
There were more off-street walking or multi-use paths/trails	1	2	3	4
There was more street lighting after dark	1	2	3	4
I had access to workplace showers	1	2	3	4
I felt more safe from traffic while walking	1	2	3	4
I felt more safe from crime while walking	1	2	3	4
I had better health or physical ability to do so	1	2	3	4
It didn't take longer to walk to my destinations than to drive	1	2	3	4
I do not want to walk as a means of transportation	1	2	3	4

17. Is your home...

O Rented

Owned

12. To what extent do you agree or disagree that each of the following would increase your use of a <u>bicycle</u> as a means of transportation:

	·		Strongly	Somewhat	Somewhat	Strongly
			agree	<u>agree</u>	<u>disagree</u>	disagree
	There were more on-street bike la	nes	1	2	3	4
	There were more off-street bike o	r multi-use paths/trails	1	2	3	4
	There was more street lighting aft	er dark	1	2	3	4
	I had access to a bicycle		1	2	3	4
	I had access to an electric/pedal as	ssist bicycle	1	2	3	4
	I had access to workplace showers	3	1	2	3	4
	I had a place to securely store a bi	cycle at work	1	2	3	4
	There were places to securely parl	k a bicycle at other destinat	ions1	2	3	4
	I felt more safe from traffic while i	riding a bicycle	1	2	3	4
	I felt more safe from crime while r	iding a bicycle	1	2	3	4
	I had better health or physical abil	ity to do so	1	2	3	4
	It didn't take longer to ride a bicyc			2	3	4
	I knew how to ride a bike			2	3	4
	If there were more Capital Bikesha	are stations	1	2	3	4
	I do not want to use a bicycle as a	means of transportation	1	2	3	4
13.	Do you have school-aged children?					
	O Yes → go to question 14	O No → skip to question 1	6			
14.	How do your child(ren) typically tra-	vel to/from school? (Select	all that apply.)			
	☐ Walk	☐ Bike	☐ School bu	IS		
	Driven by caregiver	☐ Carpool	Drive the	mselves alone	9	
	☐ Driven by taxi, Uber, Lyft, etc.	•	Other			
15.	If your children are driven to school from walking, biking, or taking scl					
	☐ Distance to school		☐ Cost			
	☐ Takes too long to use other mo	des	☐ Do not hav	e access to a	bicycle	
	☐ Inconvenient to use other mod		☐ Do not hav		•	rtation
	☐ Not safe		☐ Lack of sid	•	•	
	☐ Other					
	Our loot guestiene ere cheut veu e	nd vous boundald Ameina	all of vour roa	nanasa ta ti	hio oumvov om	
	Our last questions are about you a completely confidential and no ide	•	•	•		
16.	Which best describes the building ye	ou live in?				
	○ Single-family detached house					
	O Duplex, townhouse					
	• Apartment or condominium					
	Other					

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18.	How many	of the	following	does	your	household	have?
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None	One	Two+
(0)	(1)	(2+)
Passenger vehicles (cars, SUVs, etc.)0	1	2+
Motorcycles, scooters, etc 0	1	2+
Useable bicycles0	1	2+
Electric-assist bicycles0	1	2+

19. Are you Hispanic, Latino/a/x, Spanish origin?

21.

22.

0	No, not of Hispanic, Latino/a/x, Spanish origin
O	Yes, I consider myself to be of Hispanic, Latino/a/x, Spanish origin

u consider yourself to be.) 20.

What is your race? (Mark one or more races to in	ndicate what race you
 □ American Indian or Alaskan Native □ Asian □ Black or African American □ Native Hawaiian or other Pacific Islander □ White □ A race not listed 	
What is your gender?	
O Female O Male O Identify another	way
In which category is your age?	
 18-24 years 25-34 years 35-44 years 65-74 years 	ears or older

Thank you for completing this survey. Please return the completed survey in the postage-paid envelope to: National Research Center, Inc.