

2019 Regional Commuter Survey Technical Report

Georgia Commute Options



Atlanta Regional Commission



Technical Report

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prepared for

Atlanta Regional Commission

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Executive Summary

Purpose of the Regional Commute Survey

The Georgia Commute Options (GCO) program, managed by the Atlanta Regional Commission (ARC), provides Transportation Demand Management (TDM) services for the Atlanta metropolitan region. The central goals of the regional TDM program are to:

- Increase the use of travel modes other than single-occupant vehicles (SOV);
- Keep the Atlanta Region economically competitive; and
- Expand travel options and regional accessibility.

Effective implementation of GCO will result in dispersing or decreasing peak period congestion, decreasing the share of SOV trips, reducing vehicle miles traveled (VMT), and reducing emissions from mobile sources (passenger vehicles and trucks) throughout the region. The regional TDM program is comprised of seven Transportation Management Associations (TMAs), focused on key regional employment centers, and the regional GCO program, which covers participating employers and employees outside the TMAs.

The Regional Commuter Survey (RCS) has been conducted every three to four years since 2007 and was previously conducted in 2007, 2010, and 2014. This iteration of the RCS was conducted in 2018 and 2019. A pilot survey was completed in fall 2018 and the main survey was conducted in spring 2019.

The RCS serves several purposes. First, it documents trends in commuting patterns, such as commute mode shares and distance traveled, and the use of and prevalent attitudes about transportation services that are available in the region. Wherever possible, questions used in previous RCS surveys were replicated to allow for trend analysis. Second, the survey examines how commute alternative programs delivered through GCO and the TMAs and marketing efforts might influence commute travel behavior of workers in the region. Finally, the RCS examines the incentives for and barriers to alternative mode use.

Summary of the Survey Methodology

Survey sampling looked at the Origin-Destination flow patterns between resident counties and workplace locations (based on the TMAs and rest of the Atlanta region) using information from the Longitudinal Employer Household Dynamics (LEHD) and the American Community Survey (ACS), both U.S. Census Bureau products.

The survey used an address-based sample of residences of counties in the 19 county Atlanta region. An invitation to participate in the survey was sent out to 300,000 residents in two waves. For the pilot survey, 10,000 postcards were mailed in October 2018. In between the two main survey waves in spring 2019, participants of the 2017 National Household Travel Survey (NHTS) who agreed to participate in future survey efforts were contacted to participate in the survey.

Every household who agreed to participate were provided with two unique passwords to access the survey and respond to it via a web-based interface. In order to avoid biasing the survey against respondents who did not have access to the internet, provision was made for them to call in (however, the phone interview



option was not used by any respondents). In order to incentivize participation in the survey, \$250 Amazon gift cards were offered to fifty respondents based on a random drawing. The overall response rate for the survey was 1.6 percent.

The survey was expanded by region, age, and race to the employed residents in the region to correct for over- or under-representation of specific age or ethnic/race categories. The 19 counties were split into nine regions – Cobb, Clayton, DeKalb, Fulton, Gwinnett, Northeast (Barrow, Forsyth), Northwest (Cherokee, Paulding, Bartow), Southeast (Henry, Walton, Newton, Rockdale, Spalding), and Southwest (Coweta, Douglas, Fayette, Carroll). The expansion by age included 18 to 34, 35 to 44, 45 to 54, 55+, and the expansion by race included White Alone – Not Hispanic or Latino, African American Alone, Hispanic or Latino, and All Other Races.

Each table and figure in the results sections shows the raw number of respondents (e.g., n=__) who answered the question, while the percentage results presented in the tables and figures show percentages expanded to the total working population for the geographic areas referenced.

Note also that the term “respondent,” when used in the text of the document, refers to expanded data, unless otherwise noted. Other terms, such as “commuter,” “employee,” “worker,” and “resident” also are used, when it is necessary or helpful to distinguish subsets of the total surveyed population. The term “alternative mode” refers to any non-drive alone mode of travel, including public transit (bus, train), carpool, vanpool, bicycle/bike, and walk. In some analysis cases, telework and compressed work schedules also are considered alternative modes, because they eliminate the need to make commute trips.

Where we Live and Where we Work

The five core counties (Fulton, Gwinnett, Cobb, DeKalb, and Clayton) account for seven in ten origin or home locations for commuters. The remaining 14 counties account for three in ten origin or home locations for respondents in the survey. This finding indicates that the core counties dominate in terms of population and workers in the region.

12 percent of respondents identify their work location in the I-85 N Corridor. In terms of work locations generally representing TMA markets, Midtown shows the highest percentage (9 percent), while Perimeter and Downtown both come in at 8 percent. Areas representing the seven TMAs total 41 percent of all respondents work locations.

Except for Fulton and DeKalb county residents, most trips originating in the region are made outside of the TMAs. For Fulton and DeKalb counties 61 percent and 55 percent of commute trips are made to one of the TMAs respectively. There is a lot of geographic affinity between home and work locations. For example, for respondents living in Clayton County or the SE and SW regions, the AERO TMA (HJAIA) attracts the highest share of commuters (17 percent, 10 percent, and 11 percent respectively). Similarly, for respondents living in Gwinnett County or the NE and NW regions, Perimeter Connects TMA attracts the highest share of commuters from these regions (eight percent, 10 percent, and six percent respectively).

Work Schedule and Telework

Eight in ten respondents have a standard five-day work schedule. Around nine percent have a compressed work schedule (CWS) and for less than one percent the schedule varies by day or week. Another nine percent of respondents work part-time.



Around 40 percent of respondents telework. For the respondents who telework, 11 percent telework five or more days per week. 44 percent telework less than three times per month. One in five respondents teleworks once a week. Having a formal program influences participation in teleworking. Among respondents who telework, 43 percent reported having a formal telework program. Among respondents who did not telework, eight percent reported having a formal telework program. Further, among respondents who did not telework, 77 percent reported either the absence of a telework program or telework was prohibited.

Among respondents who did not telework either due to the absence of a telework program or because it was prohibited, 80 percent would be interested in teleworking if a formal program was offered by their employer or an informal arrangement could be reached with their supervisor. For respondents who did not telework, 10 percent said that they would be able to work remotely at home or another location other than their main workplace three or more days per week.

Atlanta Region Commuting Patterns and Opportunity

Commute Time and Distance

The average commute travel time is 39.3 minutes and the average commute distance is 19.0 miles. Both statistics are averages for the entire 19 county region. Across the nine origin regions the average travel time varies between 32.5 to 47.5 minutes and the average travel distance between 13.4 to 26.2 miles.

Mode Choice and Access to Alternative Modes

Commuters drove alone to work on 75 percent of their total workdays. They took transit for seven percent of their trips. Respondents carpooled to work on three percent of workdays and bicycled or walked for two percent of trips. About one percent of weekly commute trips were made by riding as a passenger in a taxi or ride-hail vehicle (Uber, Lyft). While 66 percent of respondents reported using no alternative mode, among those who reported using an alternative mode, telework was the most used followed by train or rail. Among motorized alternate modes, 4.4 percent prefer to carpool/vanpool, 3.8 percent prefer to take the bus, and 4.8 percent prefer to take the train.

The average carpool consists of 2.21 people and the average vanpool consists of 6.77 persons. Almost every respondent carpools with either a family or household member or a co-worker. This is reiterated by the fact that only 1.6 percent of respondents even considered using a carpool ride-matching service and of those 1.6 percent, only 2.6 percent of respondents matched with their current carpool partners through a ride matching service. Among respondents who carpool, 83.6 percent ride with one other person. Among respondents who vanpool, 52.3 percent rider with six other people.

Potential for Transit

Among non-transit riders (also includes commuters who said they did not have access to transit service or who were not sure if transit was available), 75 percent said they did not have any service available or did not know if they had service available for their trip to work. An additional one in ten (11 percent) respondents said some service was available but that they would never be able to use it, considering their work schedule and personal travel needs.

Five percent of commuters indicated they would be able to ride transit to work occasionally; either less than once per month (two percent) or one to three days per month (three percent). The remaining one in ten non-



riders would be able to ride transit to work one or two days per week (two percent) or three or more days per week (seven percent).

When only respondents who have available transit service are included, the potential use is high; 56 percent of non-transit riders with transit access could use transit at least occasionally. This potential for additional ridership is notable, when applied to the entire population of commuters. About 115,000 commuters would be able to ride transit occasionally and more than 230,000 would be able to use transit one or more days per week.

Potential for Ride Sharing

Respondents indicated far less potential for new carpool/vanpool use than they had for transit use. 56 percent of non-transit riders who had access to transit service said they could use it at least occasionally. By contrast, only 19 percent of respondents who did not rideshare at the time of the survey said they would be able to carpool or vanpool even occasionally.

Reasons for Using Alternative Modes

Potential and Influencing Benefits

Commuters base their choice of commute mode on many factors, including the time a trip will take, the cost of the trip, how convenient it is to use the mode, and other characteristics specific to each travel mode that make a mode more or less attractive to use. By offering commute services and benefits for alternative mode users, commute service organizations can make alternative modes more attractive than they otherwise would be, potentially influencing drive alone commuters to shift to an alternative mode.

78 percent of survey respondents reported they did not use an alternative mode at all for commuting or used it at most one day per week. These respondents were presented with a list of 10 commuter services and benefits that might encourage or assist them to use alternative modes. Respondents were asked to rate how much each service would influence them to try an alternative mode for commuting, using a 1 to 5 rating scale, where 1 meant the service would have no influence and 5 meant it would have a great deal of influence.

Overall, the services/benefits did not appear to be motivators for the respondents to increase their use of commute options. The highest average (mean) score on the 5-point scale was 3.2 and only three services had average scores of 3.0 or higher. The three services with the highest ratings were the program offering \$5 per day to switch from driving alone to an alternative mode, Guaranteed Ride Home, and the monthly \$40-\$60 gas cards for carpools. These services were rated as either a 4 or 5 (great deal of influence) by 48 percent, 46 percent, and 44 percent of respondents, respectively. A second tier of services included points redeemable for gift cards or merchandise and a discounted monthly transit pass. About one-third of respondents rated these two services as a 4 or 5.

Decision Factors

In considering the travel attributes that are important to choosing the type of transportation used to get to work, while cost of travel and using travel time productively was considered important, overwhelmingly, the dependability of transportation mode was extremely important



- Respondents identifying as female, African Americans, and respondents with a household income of less than \$60,000 consider cost of travel the most when deciding commuting mode;
- Just under half of White, non-Hispanic respondents let the ability to use travel time productively influence their mode choice, while it is much higher for other groups; and
- Across the board, respondents are looking for a dependable transportation mode that takes the least amount of time (both of those factors average 15 to 30 percent higher than travel cost).

Attitudes

Regardless of income, while all respondents perceive traffic congestion and air quality as serious problems, they perceive traffic congestion to be a more serious problem compared to air quality. Most of the respondents tend to strongly agree that traffic congestion is a serious problem in the Atlanta area, but agree only somewhat that air quality is a serious problem in the Atlanta area.

Respondents who self-identify as female agree more than male respondents that traffic congestion and air quality are a problem in the Atlanta area. While African-Americans and Whites, non-Hispanic agree more than Hispanic and Other ethnicities that traffic congestion is a serious problem in the Atlanta area, when it comes to the issue of air quality, African-Americans and Hispanics agree more that this is an issue compared to Whites, non-Hispanic and Other ethnicities. While there is almost unanimous agreement between the different age groups that congestion is problem, young people (18 to 24) feel more strongly compared to other age groups that air quality is a problem in the region.

Employer Services

Three in four respondents (74.4 percent) had free parking provided to all employees on-site. For those respondents who mentioned that their employer does not provide free parking, or they were unsure (15.8 percent of respondents), they were asked if the employer reimburses their cost of parking or was it their own expense. 79.7 percent mentioned that they would pay the entire cost of parking.

35 percent of respondents who work outside of a TMA mentioned that their employer does not offer any TDM service. Outside of telework and alternative work schedule, 12 to 17 percent of employers offer a subsidized or discounted transit pass. The Georgia Commute Options or the Guaranteed Ride Home (GRH) TDM service are offered by less than five percent of employers.

In looking at the number of TDM services offered by employers (besides telework and compressed work schedule), 65.9 percent of employers offer no TDM services to employees. 22.6 percent offer one or two TDM services to employees. Despite these lack of services, 43.3 percent of respondents have used at least one worksite program. This is reinforced by the fact that 73.7 percent of employees felt that it was important to have access to services and benefits that make it easier to carpool or ride transit to work.

Awareness of Transportation Demand Management Programs

Recall of Marketing and Impact

Respondents who recalled some advertising or news reports on transportation demand management programs were then asked what messages they recalled. They were not provided a list of messages, but



were asked an open-ended, unaided question to describe the message in their own words. About half (51 percent) who recalled advertising or reports could cite a specific message.

Use of Travel Applications

Use of individual applications varied substantially by age, with younger respondents typically using travel applications more than did older respondents. The only application that exhibited an increasing pattern with increasing age were traffic alert apps (such as Waze, Google Maps, etc...); 27 to 28 percent of respondents who were 55 years or older had used these applications, compared with 23 percent of respondents who were between 45 and 54 years old and less than two in ten respondents were 35 years old or younger.

Use of some individual apps, however, did vary substantially by commute mode. Use of traffic alerts was higher among commuters who drove alone (22 percent) and those who carpooled (19 percent) than among transit riders (14 percent) and bike/walk commuters (7 percent). Most other applications had higher use rates among alternative mode commuters. Transit and bike/walk commuters used ride-hailing and transit schedule arrival apps at much higher rates than did drive alone and carpool commuters. Use of wayfinding apps was high among both drive alone commuters and those who used alternative modes; two-thirds to three-quarters of respondents used this type of app.

Awareness and Participation (GCO)

Respondents first were asked, unaided, if they were aware of any programs, organizations, telephone numbers, or websites in the Atlanta region that provide information or resources to help with travel to work. One-third (35 percent) of respondents said they knew such an organization or resource existed, but only 11 percent could provide a name; 24 percent said they believed a resource was available but did not know the name. The remaining 65 percent said they did not know of any resources.

General awareness of regional commute information resources was slightly higher in 2019 (35 percent) than in 2014 (31 percent), but awareness of resources by name declined since 2014, when 26 percent of respondents could cite one or more organizations by name.

But when directly asked if they knew of GCO, 15 percent of commuters knew of the program. Three-quarters (76 percent) said they had not heard of the organization. The remaining 9 percent said they were not sure. The 15 percent awareness of GCO by name represented a drop of eight percentage points since 2014, when 23 percent knew the name. Note that the GCO program was relatively new in 2014. It is possible the higher awareness in 2014 reflected significant advertising and outreach conducted during the start-up period to acquaint commuters with the new name and the shift from the previous program.

Awareness and Participation (TMAs)

About 14 percent of respondents who worked in a TMA area had heard of the TMA that provided services in their work area. This was lower than the 21 percent who were aware of their work area TMA in 2014. However, several of the programs operated under different names in 2014. These included Livable Buckhead, which was named Buckhead Area Transportation Management Association (BATMA) in 2014, and Perimeter Connects, previously known as Perimeter Transportation and Sustainability Coalition. Downtown Connects also had a slight change; in 2014 it was known by both Central Atlanta Progress and the Downtown TMA.



Awareness of individual programs ranged from 6 percent to 20 percent of respondents who were asked about the organization. Two programs were known to at least two in ten of the target area respondents and three other programs were known to at least one in ten target area respondents. Figure 8.6 also shows the awareness percentages in 2014. While the figure appears to show declines in awareness for several of the programs, most of the drops are not statistically significant, given the sample sizes for each TMA area. Only Midtown Transportation experienced a statistically different awareness level in 2014. Note that the AERO organization did not exist in 2014, so the 2014 awareness is not applicable.

Awareness and Participation (Regional Incentives)

When asked if they knew of any programs in the Atlanta region that offered financial incentives for commuters who used alternative modes for commuting, 30 percent said they believed such a program existed, about the same percentage as reported some awareness of these programs in 2014 (26 percent). Most respondents could not name the program – only 8 percent of those who believed a program existed could provide the name. Three individual organizations were mentioned by one percent or more of respondents: 3.6 percent named Georgia Commute Options, 1.8 percent said “employer,” and 1.1 percent named Clean Air Campaign, the organization that provided regional incentives prior to Georgia Commute Options. All other programs, including regional incentive programs that do exist, were named individually by at most 0.3 percent of respondents.

Respondents had higher awareness of individual programs when presented a list of names. Overall 16 percent of respondents reported knowing one or more of the incentive programs listed. One in ten (9 percent) had heard of the regional Guaranteed Ride Home program. About one in twenty were aware of Carpool Rewards (5 percent), the \$25 Prize Program (4 percent), Gimme Five (4 percent), and the \$3 A Day Program. Three percent knew of the \$40/\$60 gas cards and 2 percent had heard of Commuter Prizes.



1.0 Introduction

1.1 Purpose of the Regional Commute Survey

The Georgia Commute Options (GCO) program, managed by the Atlanta Regional Commission (ARC), provides Transportation Demand Management (TDM) services for the Atlanta metropolitan region. The central goals of the regional TDM program are to:

- Increase the use of travel modes other than single-occupant vehicles (SOV);
- Keep the Atlanta Region economically competitive; and
- Expand travel options and regional accessibility.

Effective implementation of GCO will result in dispersing or decreasing peak period congestion, decreasing the share of SOV trips, reducing vehicle miles traveled (VMT), and reducing emissions from mobile sources (passenger vehicles and trucks) throughout the region. The regional TDM program is comprised of seven Transportation Management Associations (TMAs), focused on key regional employment centers, and the regional GCO program, which covers participating employers and employees outside the TMAs.

The Regional Commuter Survey (RCS) has been conducted every three to four years since 2007 and was previously conducted in 2007, 2010, and 2014. This iteration of the RCS was conducted in 2018 and 2019. A pilot survey was completed in fall 2018 and the main survey was conducted in spring 2019.

The RCS serves several purposes. First, it documents trends in commuting patterns, such as commute mode shares and distance traveled, and the use of and prevalent attitudes about transportation services that are available in the region. Wherever possible, questions used in previous RCS surveys were replicated to allow for trend analysis. Second, the survey examines how commute alternative programs delivered through GCO and the TMAs and marketing efforts might influence commute travel behavior of workers in the region. Finally, the RCS examines the incentives for and barriers to alternative mode use.

1.2 Summary of the Survey Methodology

Survey sampling looked at the Origin-Destination flow patterns between resident counties and workplace locations (based on the TMAs and rest of the Atlanta region) using information from the Longitudinal Employer Household Dynamics (LEHD) and the American Community Survey (ACS), both U.S. Census Bureau products.

The survey used an address based sample of residences of the 19 county Atlanta region (Figure 1.1) and an invitation to participate in the survey was sent out to 300,000 residents in two waves. For the pilot survey, 10,000 postcards were mailed in October 2018. In between the two main survey waves in spring 2019, participants of the 2017 National Household Travel Survey (NHTS) who agreed to participate in future survey efforts were contacted to participate in the survey.



Figure 1.1 Residence Counties

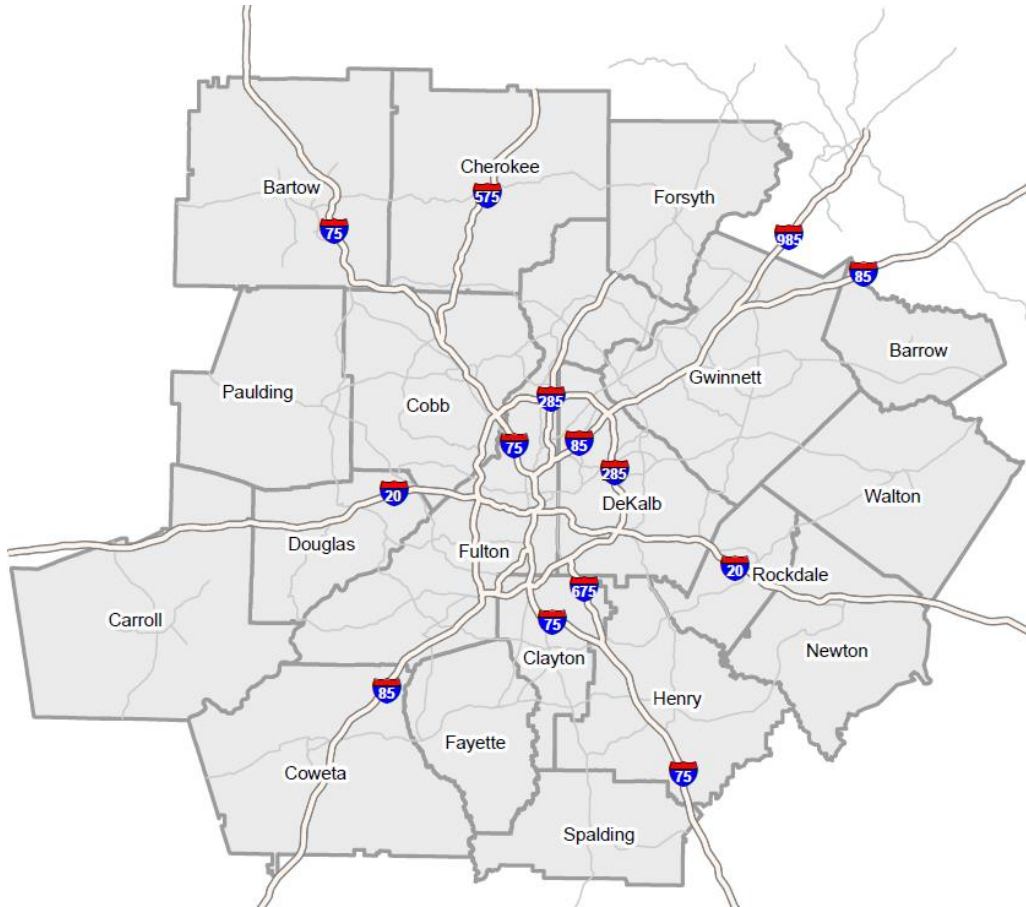


Table 1.1 shows the distribution of surveys by wave along with the response rate. Every household who agreed to participate were provided with two unique passwords to access the survey and respond to it via a web-based interface. In order to avoid biasing the survey against respondents who did not have access to the internet, provision was made for them to call in (however, the phone interview option was not used by any respondents). In order to incentivize participation in the survey, \$250 Amazon gift cards were offered to fifty respondents based on a random drawing.

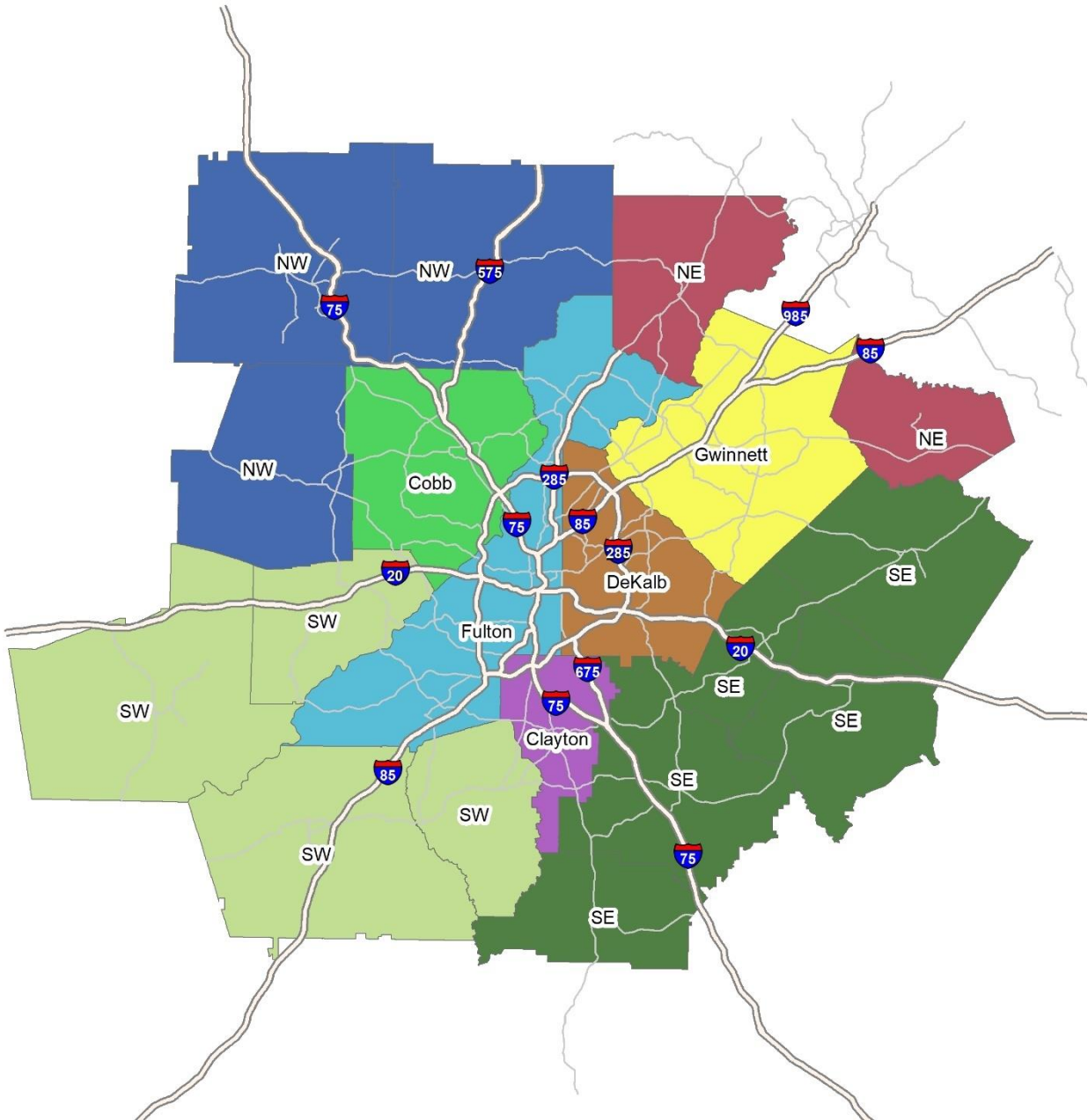
Table 1.1 Survey Distribution and Response Rate

Survey	Frequency	Percent of Total	Response Rate (Percent)
Wave 1	2,236	43.8	1.5
Wave 2 (NHTS Panel)	130	2.5	11.0
Wave 3	2,619	51.4	1.7
Pilot	115	2.3	1.2
Total	5,100	100.0	



The survey was expanded by region, age, and race to the employed residents in the region to correct for over- or under-representation of specific age or ethnic/race categories. The expansion by region is presented in Figure 1.2 (the 19 counties were split into nine regions – Cobb, Clayton, DeKalb, Fulton, Gwinnett, Northeast (Barrow, Forsyth), Northwest (Bartow, Cherokee, Paulding), Southeast (Henry, Newton, Rockdale, Spalding, Walton), and Southwest (Carroll, Coweta, Douglas, Fayette). The expansion by age included 18 to 34, 35 to 44, 45 to 54, 55+, and the expansion by race included White Alone – Not Hispanic or Latino, African American Alone, Hispanic or Latino, and All Other Races.

Figure 1.2 County Groupings



1.3 Conventions Used in Presentation of Results

The key findings of the survey are presented across nine unique sections within this report. As noted in the description of the survey weighting, the data were expanded to represent the number of employed residents of the region and to correct for under- or over-representation of some racial/ethnic groups and age groups in the sample. The expansion methodology allows the proper representation of employed residents in each of the 19 jurisdictions in the survey area and in the region. Each table and figure in the results sections shows the raw number of respondents (e.g., n=__) who answered the question, while the percentage results presented in the tables and figures show percentages expanded to the total working population for the geographic areas referenced.

Note also that the term “respondent,” when used in the text of the document, refers to expanded data, unless otherwise noted. Other terms, such as “commuter,” “employee,” “worker,” and “resident” also are used, when it is necessary or helpful to distinguish subsets of the total surveyed population. The term “alternative mode” refers to any non-drive alone mode of travel, including public transit (bus, train), carpool, vanpool, bicycle/bike, and walk. In some analysis cases, telework and compressed work schedules also are considered alternative modes, because they eliminate the need to make commute trips.

1.4 Organization of Survey Results

The remaining sections of the report present key survey findings. The report is divided into nine sections.

- Section 2: Work Locations and Schedule
- Section 3: Commute Patterns and Recent Commute Changes
- Section 4: Motivations and Barriers to Use of Alternative Modes
- Section 5: Ease of Commute
- Section 6: Mode Choice Decision Factors and Benefits of Alternative Modes
- Section 7: Awareness of Transportation/Commute Informational Messaging and Applications
- Section 8: Awareness/Use of Regional and TMA Commute Assistance Resources
- Section 9: Employer Commute Assistance
- Section 10: Demographic and Employment Characteristics of the Sample

Sections 2 through 9 present results on commute travel and respondents’ awareness, attitudes, and opinions on various transportation topics. Section 10 of the report details demographic characteristics of the survey sample. At the end of the survey, respondents were asked a series of questions about their age, race/ethnicity, sex, income, household size, vehicle ownership, home and work locations, type of employer, size of employer, and occupation. These sample characteristics are referenced throughout the findings of Sections 2 through 9 when the analysis indicated relevant differences among sub-groups of respondents.

Following these main sections are three appendices dealing with survey procedures and methodology:

- Appendix A – Survey and Sampling Methodology
- Appendix B – Survey Data Weighting and Expansion
- Appendix C – Survey Questionnaire



2.0 Work Location and Schedules

As a first step, it is necessary to determine the work locations and schedules of respondents. Doing so helps determine the travel behavior of commuters, in addition to other factors, the workplace location, schedule flexibility, and availability of flex work options such as telework and compressed work schedule.

2.1 Home and Work Locations

Figure 2.1 shows the home locations of respondents. As the figure shows, the five core counties (Fulton, Gwinnett, Cobb, DeKalb, and Clayton) account for seven in ten origin or home counties for commuters. The remaining 14 counties account for three in ten origin or home counties for respondents in the survey. This finding indicates that the core counties dominate in terms of population and workers in the region.

Figure 2.1 Home Location Distribution

(n=5,100)

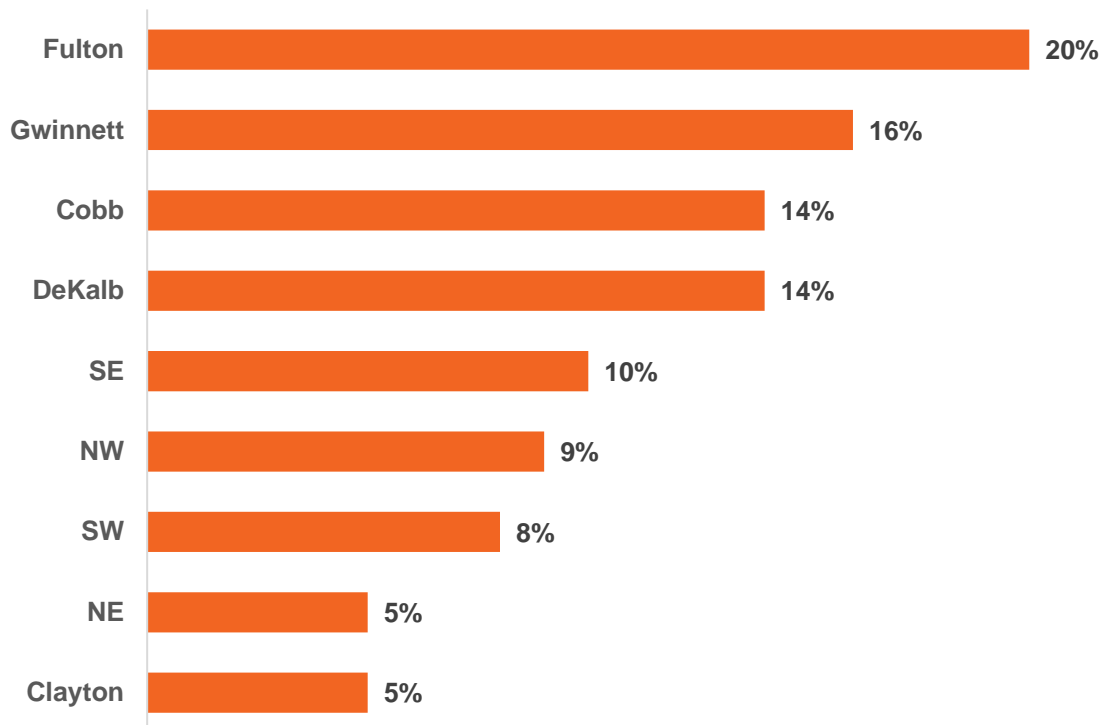


Figure 2.2 shows the work locations of respondents. As the figure shows, 12 percent of respondents identify their work location in the I-85 N Corridor. In terms of work locations generally representing TMA markets, Midtown shows the highest percentage (9 percent), while Perimeter and Downtown both are 8 percent. Areas representing the seven TMAs total 41 percent of all respondents work locations (see Figure 2.3 for major work locations in the Atlanta region).



Figure 2.2 Work Location Distribution

(n=5,100)

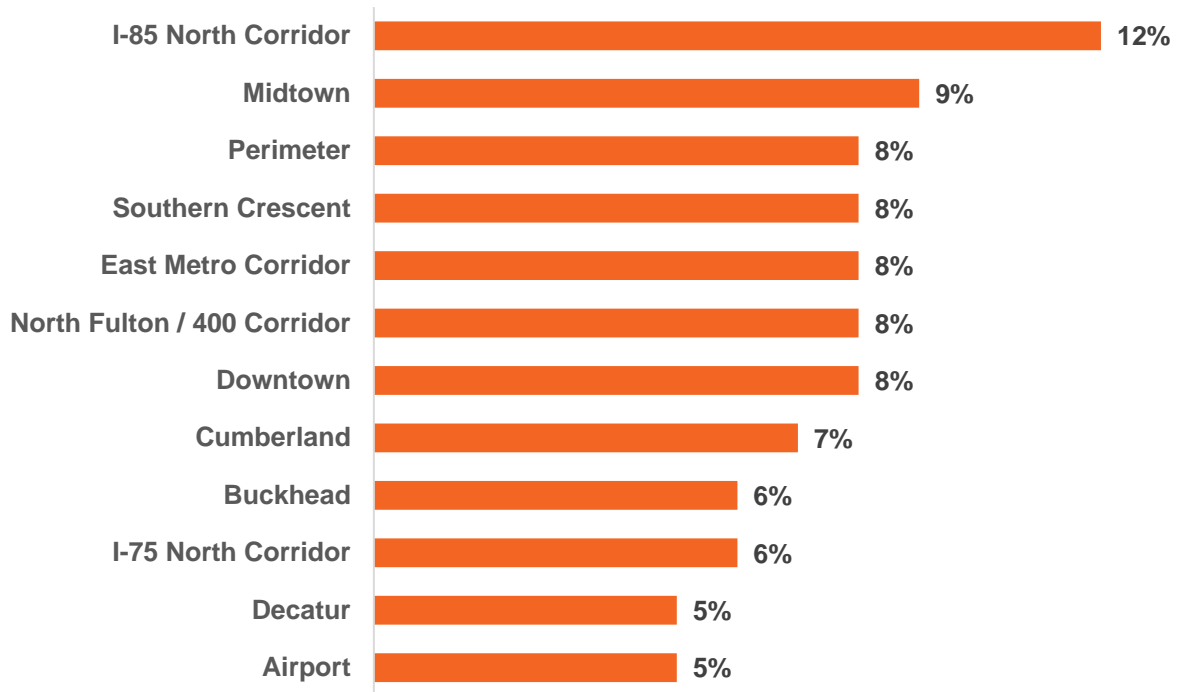
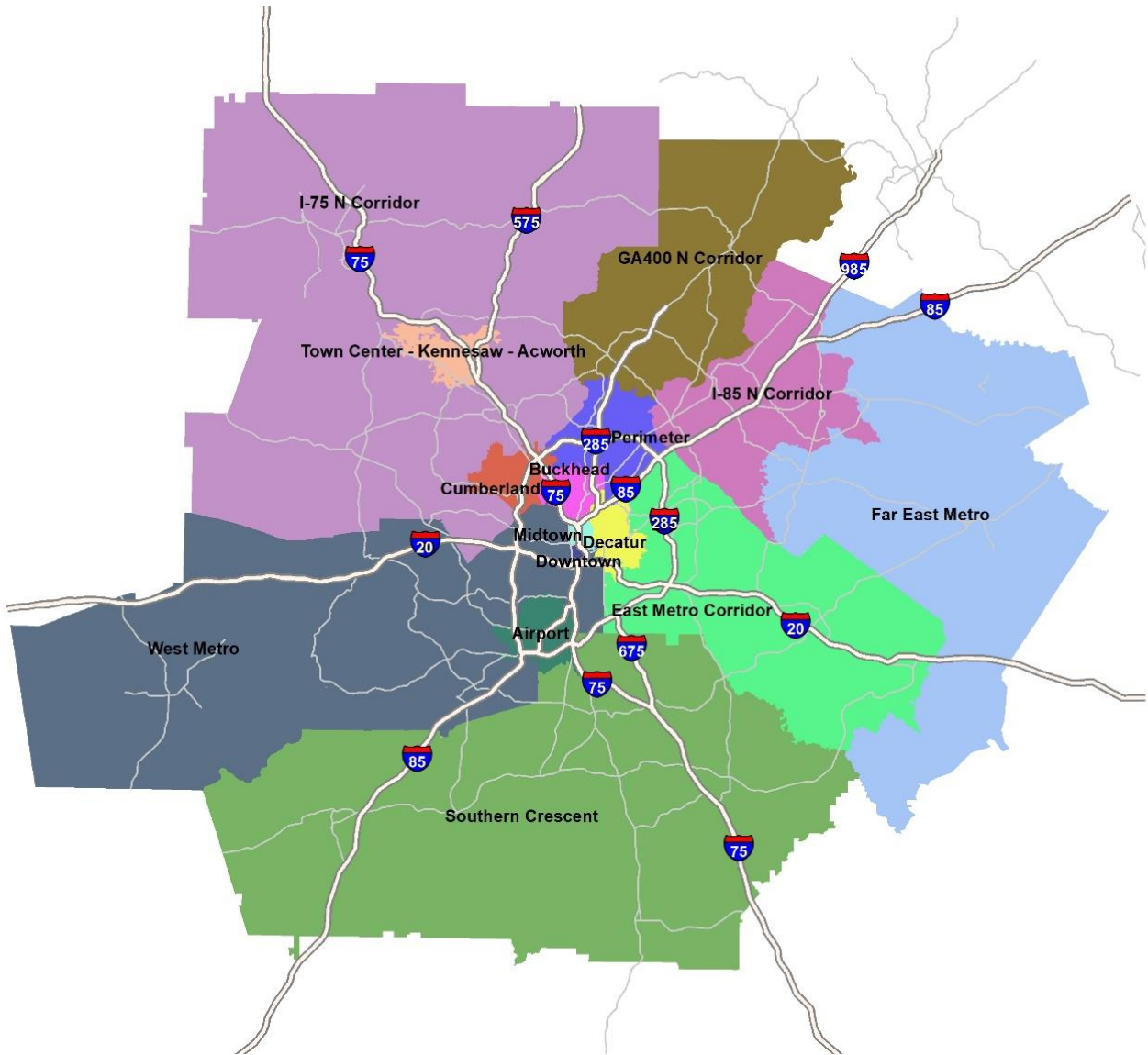


Figure 2.3 Work Locations



2.1.1 Commute Flows

Table 2.1 presents the commute flows between the origin regions and the TMAs. As the table shows, except for Fulton and DeKalb county residents, most trips originating in the region are made outside of the TMAs. For Fulton and DeKalb counties 61 percent and 55 percent of commute trips are made to one of the TMAs respectively. This table shows that there is a lot of geographic affinity between home and work locations. For example, for respondents living in Clayton County or the SE and SW regions, the AERO TMA attracts the highest share of commuters (17 percent, 10 percent, and 11 percent respectively). Similarly, for respondents living in Gwinnett County or the NE and NW regions, Perimeter Connects TMA attracts the highest share of commuters from these regions (eight percent, 10 percent, and six percent respectively).

In considering the commute flows between the regions and the TMAs by TMA as shown in Table 2.2, Fulton County has the highest share of respondents who work in TMAs except for Clifton Corridor TMA (39 percent of DeKalb respondents) and Perimeter Connects (23 percent of DeKalb respondents).



Table 2.3 expands the non-TMA regions (Table 2.1) and breaks down the commute flows from Origin Regions to the individual regions that are considered as not being part of the TMA areas within and outside the ARC Region. As the table shows, the majority of trips that are destined for a non-TMA area are within the particular region itself. Overall five percent of trips travel outside the ARC region.

Table 2.4 expands the non-TMA regions (Table 2.2) and breaks down the commute flows from Origin Regions to the individual regions that are considered as not being part of the TMA areas within and outside the ARC Region. Similar to Table 2.3, most of the trips are intraregional. Among all the trips that destined for outside the ARC region, one third (30 percent) originate in Cobb and Gwinnett counties.



Table 2.1 Commute Trips between Regions and TMAs by Origin

Origin	Livable Buckhead (LBI)	Downtown Connects	Clifton Corridor TMA (CCTMA)	Midtown Transportation	Perimeter Connects (PTSC)	ASAP+	AERO (Airport)	Not a TMA <i>See Table 2.3</i>	Total
Clayton	3%	9%	2%	4%	3%	0.0%	17%	62%	100%
Cobb	6%	10%	3%	9%	8%	0.0%	3%	61%	100%
DeKalb	7%	10%	13%	9%	12%	0.3%	3%	45%	100%
Fulton	10%	12%	5%	17%	9%	0.3%	7%	39%	100%
Gwinnett	5%	5%	5%	6%	8%	0.0%	1%	71%	100%
NE	3%	6%	3%	2%	10%	0.4%	0%	77%	100%
NW	4%	4%	1%	3%	6%	0.0%	2%	79%	100%
SE	2%	10%	4%	5%	2%	0.2%	10%	66%	100%
SW	3%	6%	2%	8%	4%	0.1%	11%	65%	100%

Table 2.2 Commute Trips between Regions and TMAs by TMA

Origin	Livable Buckhead (LBI)	Downtown Connects	Clifton Corridor TMA (CCTMA)	Midtown Transportation	Perimeter Connects (PTSC)	ASAP+	AERO (Airport)	Not a TMA <i>See Table 2.4</i>
Clayton	3%	5%	1%	2%	2%	0%	15%	5%
Cobb	15%	16%	8%	15%	16%	0%	7%	14%
DeKalb	18%	17%	39%	16%	23%	32%	9%	11%
Fulton	34%	27%	20%	37%	22%	38%	25%	12%
Gwinnett	13%	9%	15%	11%	16%	0%	4%	19%
NE	2%	3%	3%	1%	6%	12%	0%	6%
NW	6%	5%	1%	4%	7%	0%	4%	12%
SE	3%	12%	9%	6%	3%	11%	18%	11%
SW	5%	6%	4%	8%	5%	7%	18%	9%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Table 2.3 Share of Non-TMA Commute Trips between Regions by Origin

Origin	Clayton	Cobb	DeKalb	Fulton	Gwinnett	NE	NW	SE	SW	Outside ARC	Total
Clayton	42%	9%	6%	11%	9%	0.0%	0.0%	10%	5%	8%	100%
Cobb	0.1%	73%	5%	8%	3%	0.4%	3%	0.3%	2%	5%	100%
DeKalb	5%	9%	41%	19%	15%	0.4%	1%	2%	1%	5%	100%
Fulton	4%	20%	14%	44%	9%	2%	1%	2%	2%	4%	100%
Gwinnett	1%	3%	12%	7%	69%	3%	0.0%	1%	0.3%	4%	100%
NE	0.0%	6%	3%	27%	30%	23%	1%	2%	0.0%	8%	100%
NW	0.0%	29%	1%	18%	3%	0.0%	44%	0.4%	1%	4%	100%
SE	6%	3%	9%	4%	15%	1%	0.0%	52%	5%	5%	100%
SW	3%	19%	3%	4%	1%	0.0%	7%	1%	59%	2%	100%

Table 2.4 Share of Non-TMA Commute Trips between Regions by Destination

Origin	Clayton	Cobb	DeKalb	Fulton	Gwinnett	NE	NW	SE	SW	Outside ARC
Clayton	48%	2%	3%	4%	2%	0.0%	0.0%	7%	4%	8%
Cobb	0.4%	49%	7%	8%	2%	2.4%	6%	0.6%	4%	15%
DeKalb	13%	5%	41%	14%	8%	1.8%	2%	4%	2%	12%
Fulton	11%	12%	15%	36%	5%	10%	1%	4%	4%	10%
Gwinnett	4%	3%	20%	9%	63%	20%	0.0%	2%	0.7%	15%
NE	0.0%	2%	2%	11%	9%	63%	1%	2%	0.0%	11%
NW	0.0%	17%	1%	14%	1%	0.0%	80%	0.6%	2%	11%
SE	16%	2%	9%	3%	8%	3%	0.0%	79%	7%	12%
SW	7%	9%	2%	2%	1%	0.0%	10%	1%	77%	5%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

2.2 Work Schedule

Per survey responses, 89.3 percent of respondents are employed full-time and 9.1 percent of respondents are employed part-time. Five percent of respondents said they never commuted to a work location outside their homes, that is, they worked all of their Monday through Friday workdays at home. Table 2.5 describes the work situation for all respondents. The largest share of respondents who work at home are respondents who work for an employer located outside the Atlanta region. Less than 0.1 percent of respondents who work at home have an atypical situation such as working online or teleworking for work outside of Georgia or being a company co-owner with no physical location.

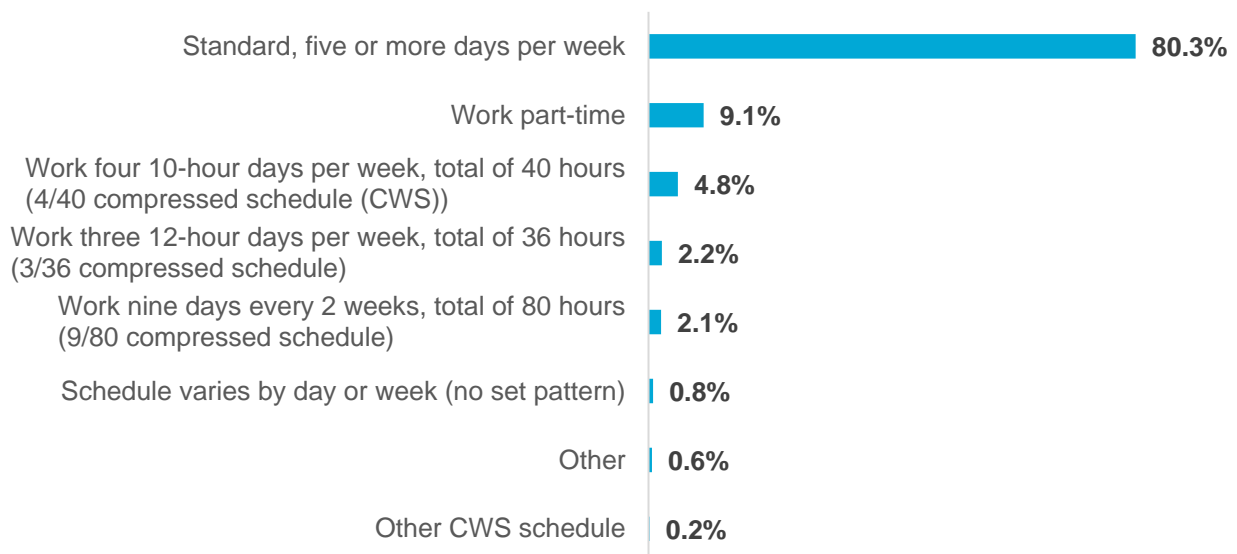
Table 2.5 Work at Home Situation

Work Situation	Frequency	Percent
Self-employed with my primary work location at home	32,272	1.1
Work for an employer located in the Atlanta region, but I telework all my workdays	42,073	1.4
Work for an employer located outside the Atlanta region, but I telework all my workdays	66,002	2.2
Other situation	2,561	0.1
Work Outside Home	2,803,221	95.1
Total	2,946,129	100

Figure 2.4 shows the work schedule for respondents. Eight in ten respondents have a standard five-day work schedule. Around nine percent have a compressed work schedule (CWS) and for less than one percent the schedule varies by day or week. Another nine percent of respondents work part-time.

Figure 2.4 Work Schedule

(n=4,938)

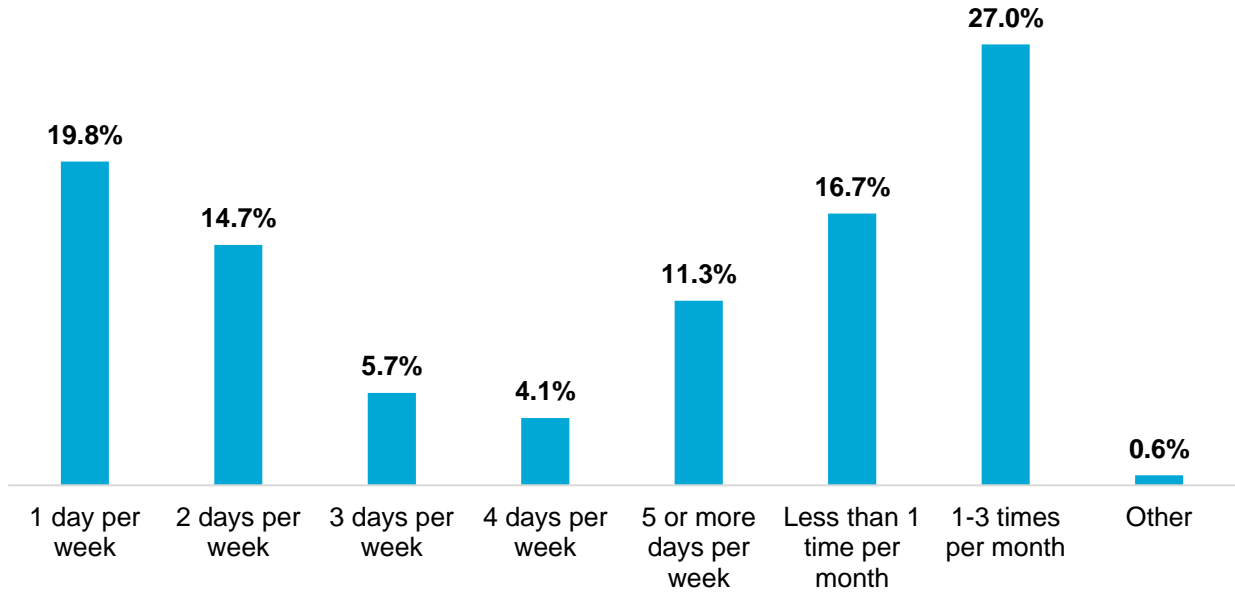


2.3 Telework

Around 40 percent of respondents telework. For the respondents who telework, 11 percent telework five or more days per week. 44 percent telework less than three times per month. One in five respondents teleworks once a week (Figure 2.5).

Figure 2.5 Telework Frequency

(n=2,177)



Having a formal program influences participation in teleworking (Table 2.6). Among respondents who telework, 43 percent reported having a formal telework program. Among respondents who did not telework, eight percent reported having a formal telework program. Further, among respondents who did not telework, 77 percent reported either the absence of a telework program or telework was prohibited.

Among respondents who did not telework either due to the absence of a telework program or because it was prohibited, 80 percent would be interested in teleworking if a formal program was offered by their employer or an informal arrangement could be reached with their supervisor. For respondents who do not telework 10 percent said that they would be able to work remotely at home or another location other than their main work place three or more days per week (Figure 2.6).

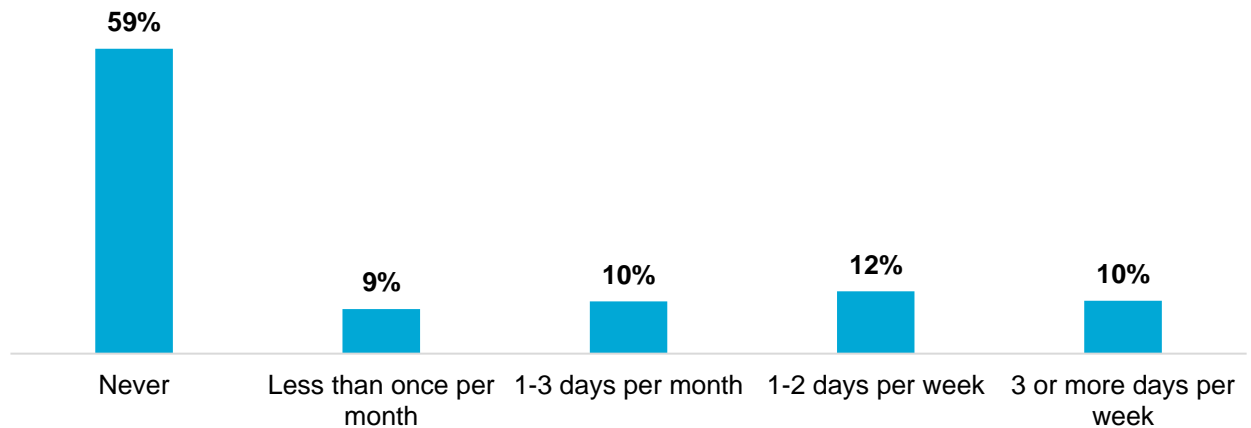


Table 2.6 Telework Arrangement

Telework Program	Respondents who Telework		Respondents who do not Telework	
	Frequency	Percent	Frequency	Percent
Formal Program	483,379	42.9	128,190	8.4
Informal arrangement with supervisor	642,782	57.1	228,942	14.9
No telework program / telework not allowed			1,177,844	76.7
Total	1,126,161		1,534,976	100.0

Figure 2.6 Telework Potential for Non-Teleworking Respondents

(n=2,630)



In examining the telework trends over time in the region, while 41 percent telework, even if only occasionally, this represents a 36 percent increase from 2014, a 66 percent increase from 2010, and an 83 percent increase from 2007. While this represents an increase in teleworking, looking at the trend in teleworking full time (5 or more days/week) shows that it peaked in 2014 and has reduced to 11 percent in 2019 (Table 2.7). This indicates that while more people are teleworking, on average, they are doing so less frequently.

Table 2.7 Telework Trends Over Time

Telework Days	2019	2014	2010	2007
Less than one time per month	17%	13%	13%	15%
1-3 times per month	27%	23%	29%	24%
1-2 days per week	35%	26%	30%	37%
3-4 days per week	10%	11%	9%	14%
5 or more days per week	11%	26%	17%	10%



3.0 Commute Patterns and Recent Commute Changes

Respondents were asked what modes they used to travel to work each weekday (Monday-Friday) during a typical work week. By asking about an entire week, rather than simply “usual” travel mode, the survey captures use of modes that are used just one or two days per week.

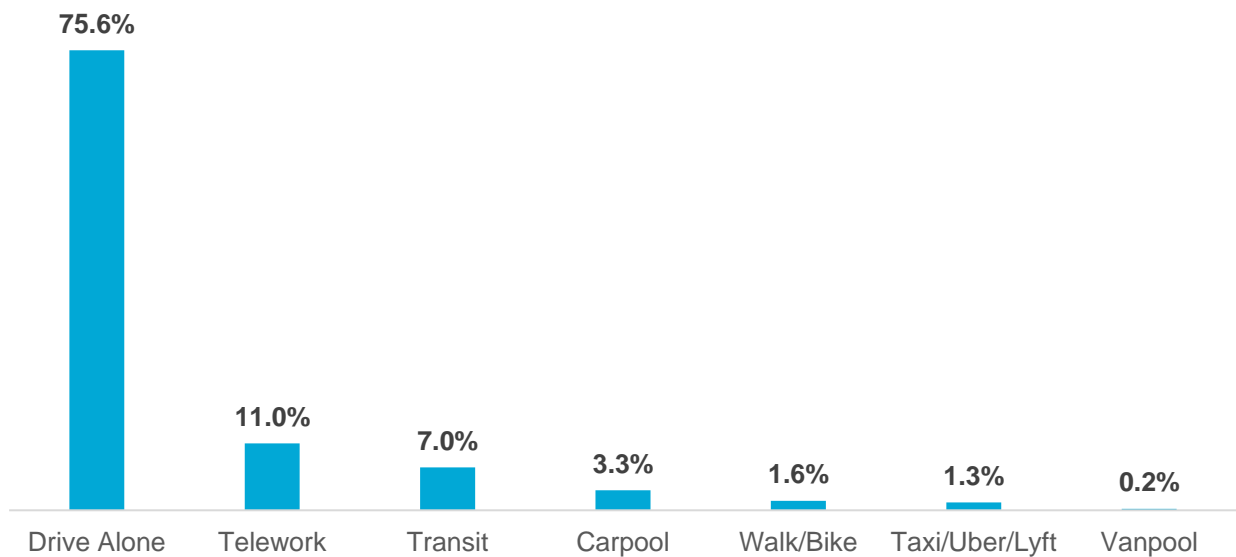
3.1 Weekly Workdays by Mode

Figure 3.1 presents mode shares as a percentage of commuters’ weekly work days for six “on the road” travel mode groups: drive alone (personal vehicle), train (MARTA rail), carpool/vanpool, bus (local bus, and commuter express bus), bike/walk, and taxi/ride-hail (e.g., Uber, Lyft). The figure also includes the mode share for telework. Telework is not actually a travel mode but is included to show the percentage of weekly work trips eliminated through use of these work schedule options.

Commuters drove alone to work on 76 percent of their total trips to and from work. They took transit for seven percent of their trips. Respondents carpooled to work on three percent of workdays and bicycled or walked for two percent of trips. About one percent of weekly commute trips were made by riding as a passenger in a taxi or ride-hail vehicle (Uber, Lyft).

Figure 3.1 Weekly Commute Trips by Mode

(n=4,937)



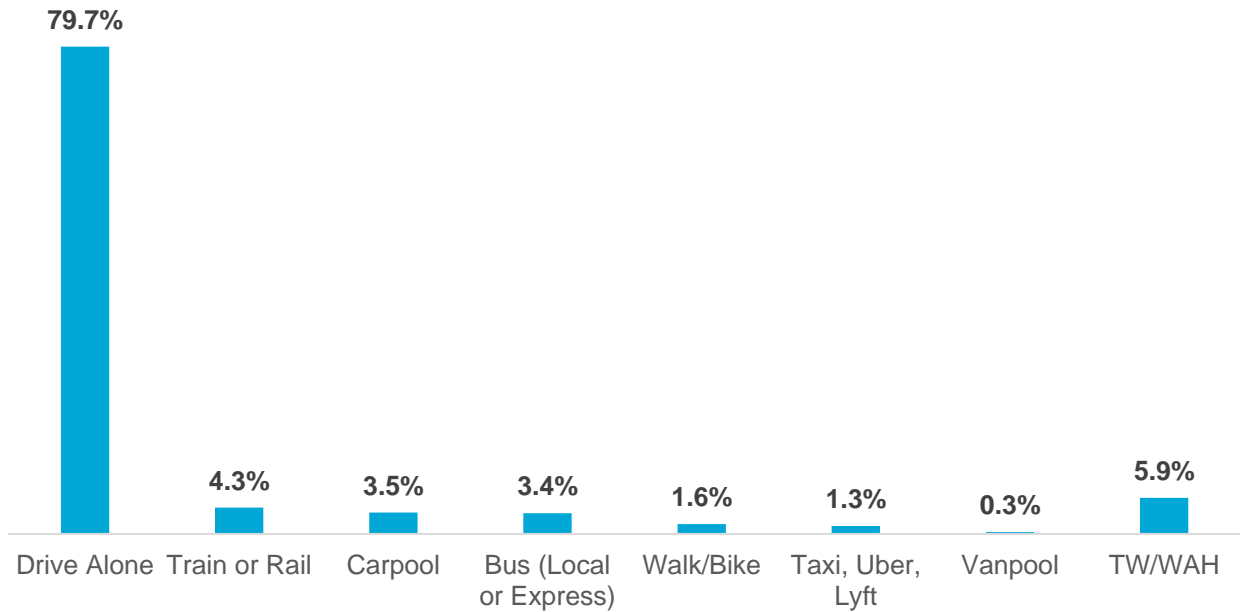
3.2 Frequency of Current Mode Use

Mode share also can be portrayed as the percentage of respondents who use each mode. Figure 3.2 presents the percentage of respondents who used a mode as their “primary” mode, defined as the mode used the greatest number of days per week. Most respondents worked five weekdays per week, so primary mode generally equated to use for three or more days per week. For a small percentage of respondents who worked fewer than five weekdays or who used more than two modes, the primary mode could be used just two days per week.



Figure 3.2 Primary Modes

(n=5,024)



As with mode split by weekly trips, the most common primary mode was drive alone, used by eight in ten (79.7 percent) respondents. The second most common primary mode, used by 4.3 percent of respondents, was train or rail (MARTA rail). 3.4 percent said they primarily rode a bus and 3.8 percent rode in a carpool or vanpool. 1.6 percent of respondents primarily biked or walked and 1.3 percent rode in a taxi or ride-hail vehicle. 5.9 percent primarily teleworked (TW) or worked at home (WAH).

Table 3.1 shows the frequency distribution of mode usage (consistent with the sample size noted in Figures 3.1 and 3.2). As shown in the “Total using mode” column, 80 percent of all respondents drove alone one or more days per week and 50 percent used this travel mode five days per week. Nine percent used public transit one or more days per week and 4 percent used transit five days per week. Carpool/vanpool walk/bike, and taxi/Uber/Lyft were used, respectively, by 5 percent, three percent, and two percent of all respondents. More than two in ten respondents teleworked, but use was predominately in the one-day and two-day categories, indicating that few respondents used this as a “primary” mode. Similarly, respondents who worked a compressed schedule had only one or two compressed schedule days off per week.



Table 3.1 Number of Days Each Mode Used

Commute Mode	Total Using Mode	Once a week	Two days a week	Three days a week	Four days a week	Five days a week
Drive Alone	80%	2%	3%	12%	14%	50%
Public Transit	9%	1%	1%	1%	2%	4%
Carpool/Vanpool	5%	0%	1%	1%	1%	2%
Walk/Bike	3%	0.6%	0.3%	0.6%	0.3%	0.6%
Taxi/Uber/Lyft	2%	0.8%	0.2%	0.6%	0.2%	0.5%
Telework	22%	9%	6%	2%	1%	4%
Compressed Work Schedule	6%	4%	2%	---	---	---

Table 3.2 shows the average number of weekdays each mode is used, including both respondents who used the mode as their primary mode and respondents who used it as a secondary mode (one-two days per week). Respondents who drove alone to work use the mode an average of 4.3 days per week, nearly all of their workdays. Public transit, carpool/vanpool, and walk all were used at least three days per week on average. Taxi/Uber/Lyft, bike, and telework were used slightly less often, 2.7, 2.6, and 2.3 days per week, respectively, suggesting they had a higher share of secondary use. Compressed schedule had the lowest average use, 1.4 days per week, but these days are days off, with most workers having one day off per week.

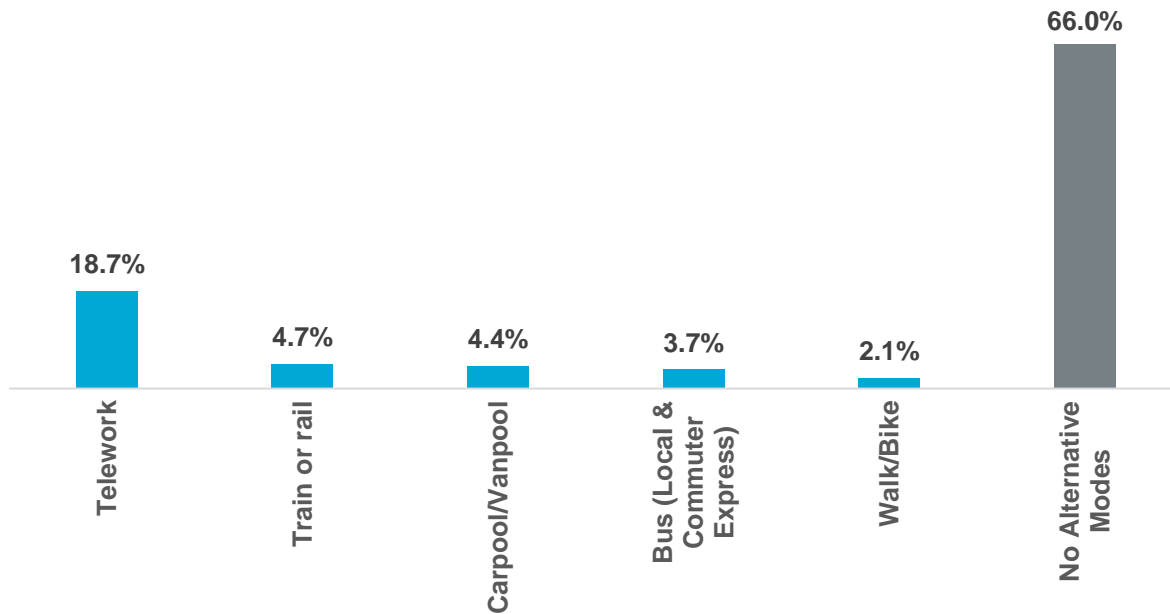
Table 3.2 Average Number of Days Mode is Used

Mode	Average Number of Days Used
Drive Alone (n = 4,077)	4.3
Public Transit (Bus/Train) (n = 472)	3.7
Carpool/Vanpool (n = 204)	3.6
Walk (n = 75)	3.3
Taxi, Uber, Lyft (n = 88)	2.7
Bike (n = 80)	2.6
Telework (n = 1,171)	2.3
Compressed Work Schedule (n = 268)	1.4

While 66 percent of respondents reported using no alternative mode, among those who reported using an alternative mode, telework was the most used (more than half of alternative mode use) (Figure 3.3). Among motorized alternative modes, 4.4 percent prefer to carpool/vanpool, 3.8 percent prefer to take the bus, and 4.8 percent prefer to take the train.

Figure 3.3 Primary Alternative Mode

(n=5,024)



3.3 Carpool and Vanpool Characteristics

The average carpool consists of 2.21 people and the average vanpool consists of 6.77 persons ride in a vanpool. Almost every respondent carpools with either a family or household member or a co-worker. This is reiterated by the fact that only 1.6 percent of respondents even considered using a carpool ride-matching service and of those 1.6 percent, only 2.6 percent of respondents matched with their current carpool partners through a ride matching service. Table 3.3 shows the carpool and vanpool size. Among respondents who carpool (n=183), 83.6 percent ride with one other person. Among respondents who vanpool (n=15), 52.3 percent rider with six other people.

Table 3.3 Carpool/Vanpool Ridership

Mode	Party Size	Frequency	Percent
Carpool	2	100,666	83.6
	3	15,074	12.5
	4	4,342	3.6
	5	362	0.3
	Total	120,444	100.0
Vanpool	6	3,184	35.4
	7	4,708	52.3
	8	1,108	12.3
	Total	9,000	100.0



3.3.1 Access to Carpool, Vanpool, Bus, or Train

When it comes to accessing the location from where respondents take their carpool, vanpool, bus or train, there is a distinct difference between the core (Clayton, Cobb, DeKalb, Fulton, and Gwinnett) counties and other counties. In the core counties, 11 to 32 percent of respondents walk to their carpool or vanpool pickup location or transit stop. On the other hand, for the non-core counties, at least half of the respondents drive alone to a park & ride lot or to a bus/train station to take carpool or vanpool or bus or train to commute to work. In the core counties, typically 1/3rd of respondents drive alone to carpool, vanpool, bus, or train to commute to work.

Table 3.4 Access Mode by Home Region

Access Mode	Clayton	Cobb	DeKalb	Fulton	Gwinnett	NE	NW	SE	SW
Bus	3%	5%	11%	18%				1%	
Drive alone to a central location, like park & ride or to bus/train station	31%	32%	34%	24%	48%	81%	50%	48%	42%
Drive alone to carpool/vanpool partner's home, then leave my car at driver's home			1%	1%	1%				
Dropped off by household members	8%	3%	5%	4%		3%		10%	8%
I always drive the carpool/ vanpool and pick up riders	11%	17%	0%	1%	4%		8%		1%
Picked up at home by carpool/vanpool or leave from home with household member	11%	23%	20%	14%	32%	16%	32%	32%	42%
Some days drive to carpool/vanpool partner's home, some days picked up by pool partner	2%	9%	1%	1%	4%		9%	4%	4%
Uber/Lyft			2%	2%					
Walk	28%	12%	25%	32%	11%			6%	

3.4 Commute Time and Distance

The average commute travel time and travel distance for the entire region is 39.3 minutes and 19 miles. Across the nine origin regions the average travel time varies between 32.5 to 47.5 minutes and the average travel distance between 13.4 to 26.2 miles. As expected, Fulton county has the lowest average commute distance and time. The NE region has the highest average travel time and the SE region has the longest average travel distance (Table 3.5). When translated to average speed, the speeds are lowest (all averaging below 30 mph) in Cobb, Dekalb, Fulton, Gwinnett and are highest (approach 35 mph) in the SE and SW region.



Table 3.5 Commute Time and Distance by Home Region

Region	Average Travel Time (Minutes)	Average Travel Distance (Miles)
Clayton	36.3	19.0
Cobb	37.9	16.9
DeKalb	35.9	14.5
Fulton	32.5	13.4
Gwinnett	41.8	19.3
NE	47.5	24.3
NW	43.1	22.9
SE	44.6	26.2
SW	44.4	25.4

Table 3.6 shows the average commute time and distance by home and work region, enabling a comparison to the averages for all commuting trips in Table 3.5. For example, while the average trip from Cobb County takes 38 minutes, for trips from Cobb to Downtown, the average trip is almost 49 minutes.

Table 3.6 Commute Time and Distance by Home and Work Region

	Livable Buckhead (LBI)	Downtown Connects	Clifton Corridor TMA (CCTMA)	Midtown Transportation	Perimeter Connects (PTSC)	ASAP+	AERO (Airport)	Not a TMA area
Home	Average Travel Time (Minutes)							
Clayton	52.0	39.1	44.0	59.3	53.6		22.5	36.0
Cobb	47.7	48.6	52.8	42.2	52.1		48.3	30.4
DeKalb	37.0	45.0	21.3	38.1	41.4	67.2	35.6	36.0
Fulton	36.5	30.0	35.1	31.3	37.8	18.3	31.0	31.7
Gwinnett	58.0	55.1	50.7	66.5	52.5		69.6	34.6
NE	63.8	95.2	85.2	65.1	59.1	40.0	88.2	40.0
NW	70.2	68.2	51.9	48.3	59.9		66.4	37.7
SE	57.2	61.8	58.5	65.0	69.0	121.0	42.5	38.3
SW	67.4	59.0	64.2	58.1	68.4		36.3	39.8
Home	Average Travel Distance (Miles)							
Clayton	25.1	20.0	29.7	20.8	29.6		12.0	19.5
Cobb	19.8	21.6	22.1	19.2	17.7		30.4	14.1
DeKalb	10.5	13.9	6.6	12.4	13.3	12.3	18.6	18.3
Fulton	14.1	11.5	9.6	9.7	13.8	7.7	14.5	16.0
Gwinnett	22.8	26.9	23.1	26.0	21.6		39.7	16.8
NE	31.2	40.7	41.3	43.3	25.7	40.0	60.0	21.5
NW	32.9	46.6	37.9	31.3	27.0		39.4	19.6
SE	34.5	32.4	33.8	33.0	38.9	27.0	27.7	23.3
SW	32.5	30.3	39.1	33.2	39.2		24.4	22.4



3.4.1 Length of Commute

Figures 3.4 and 3.5 presents average commute time and distance. Commuters in the sample had a wide range of commute distances, ranging from less than five miles to more than 40 miles, with an overall average of 19 miles. Close to one-third (27 percent) of respondents commuted fewer than 10 miles one-way. Another one-third (29 percent) traveled between 10 and 19 miles. Eight percent traveled 40 or more miles.

Survey respondents commuted, on average, about 39.3 minutes one-way. Close to three in ten (28 percent) respondents commuted 20 minutes or less and 43 percent commuted between 21 and 45 minutes. Slightly under one-third (29 percent) traveled more than 45 minutes, with 12 percent traveling more than one hour.

Figure 3.4 Commute Distance (miles)

(n=4,367)

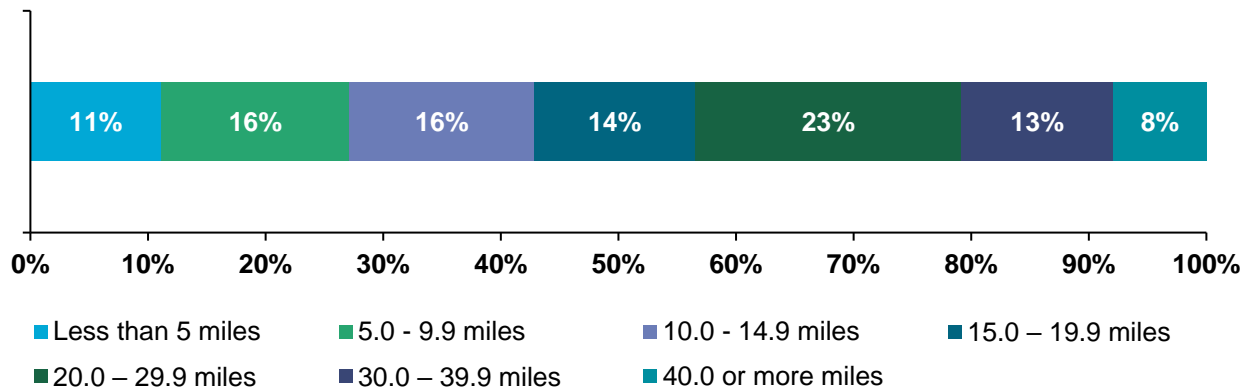
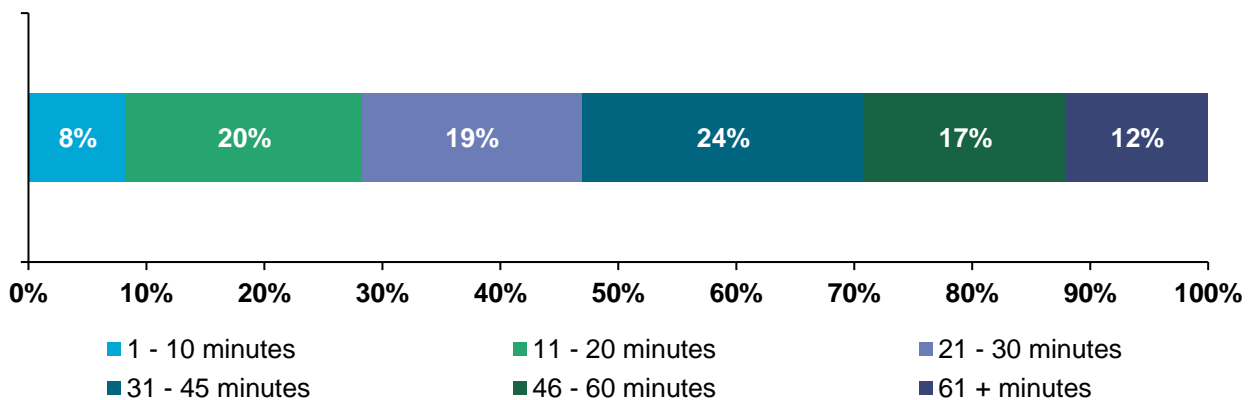


Figure 3.5 Commute Time (minutes)

(n=4,461)



4.0 Motivations for and Barriers to Alternative Mode Use

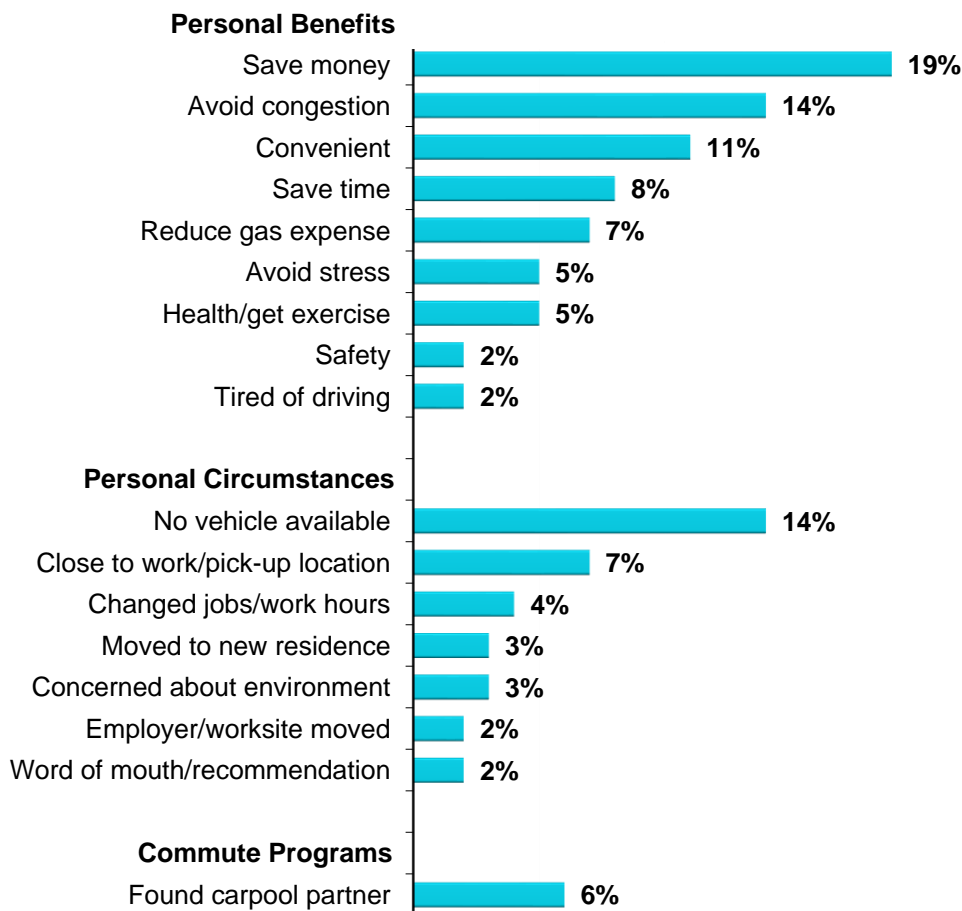
One purpose of the Regional Commuter Survey was to explore what motivates or influences commuters to choose one type of transportation over another. The RCS asked a series of questions to understand the reasons for using alternative modes.

Current alternative mode users who had been using an alternative mode for three years or less were asked why they began using those modes. The reasons are listed in Figure 4.1, divided into three broad categories of motivations:

- Personal benefits – benefits the respondent would expect to receive by using an alternative mode
- Personal circumstances – personal circumstances or changes experienced by the respondent
- Commute program – commute assistance services the respondent received that encouraged or assisted use of the alternative mode

Figure 4.1 Motivations to Start Using Current Alternative Mode

(n = 398, multiple responses permitted)



Personal Benefits – Current alternative mode users (who have been using the clean commute modes for three years or less – 398 respondents) cited motivations in each of the three categories. The most common personal benefit reason was financial; 19 percent said they chose their current alternative modes to save money and another seven percent said they wanted to reduce their gas expense. Other top personal benefit reasons were to avoid traffic congestion (14 percent) and for convenience, presumably for their work schedule and work location (11 percent). About one in ten respondents wanted to save time (8 percent) and one in twenty said they wanted to avoid stress (5 percent) or get exercise (5 percent).

Personal Circumstances – The top personal circumstance reason was that the respondent did not have a personal vehicle available, so choose a non-drive alone mode (14 percent). Note that this could include some respondents who had the financial means to own a vehicle but choose to be car-free. Seven percent of alternative mode respondents said their mode choice was motivated by living close to their work or close to a location where they could access transit or a carpool. Smaller shares of respondents said they were motivated by changing jobs or work hours (four percent), moving to a new residence (three percent), or concern about the environment (three percent).

Commute Programs – In the commute program category, 6 percent noted they were motivated to start their alternative mode by finding a carpool partner.

Alternative Mode Motivations by Mode Used – The motivations for choosing a mode varied by the mode used as presented in Table 4.1. For example, cost/expense of commuting, while a concern for all alternative mode users, was noted more by carpoolers (29 percent) and by transit riders (bus 23 percent, train 29 percent). Lack of a personal vehicle was far more common among carpoolers (21 percent), bus riders (25 percent), and commuters who walked to work (20 percent), than for train riders (five percent) and bicycle commuters (one percent). Shading indicates percentages that are statistically higher values for the motivation listed, at the 90% confidence level.

Table 4.1 Motivations for Choosing Alternative Mode – By Mode Used

(Multiple responses permitted)

Motivation	Carpool (n = 75)	Bus (n = 72)	Train (n = 141)	Walk (n = 44)	Bike (n = 38)
Cost/expense	29%	23%	29%	12%	13%
No vehicle available	21%	25%	5%	20%	1%
Convenient	7%	16%	16%	7%	8%
Traffic, congestion, tired of driving	5%	13%	30%	13%	17%
Close to work/pick-up location	1%	1%	13%	19%	0%
Health/exercise	0%	0%	1%	14%	42%

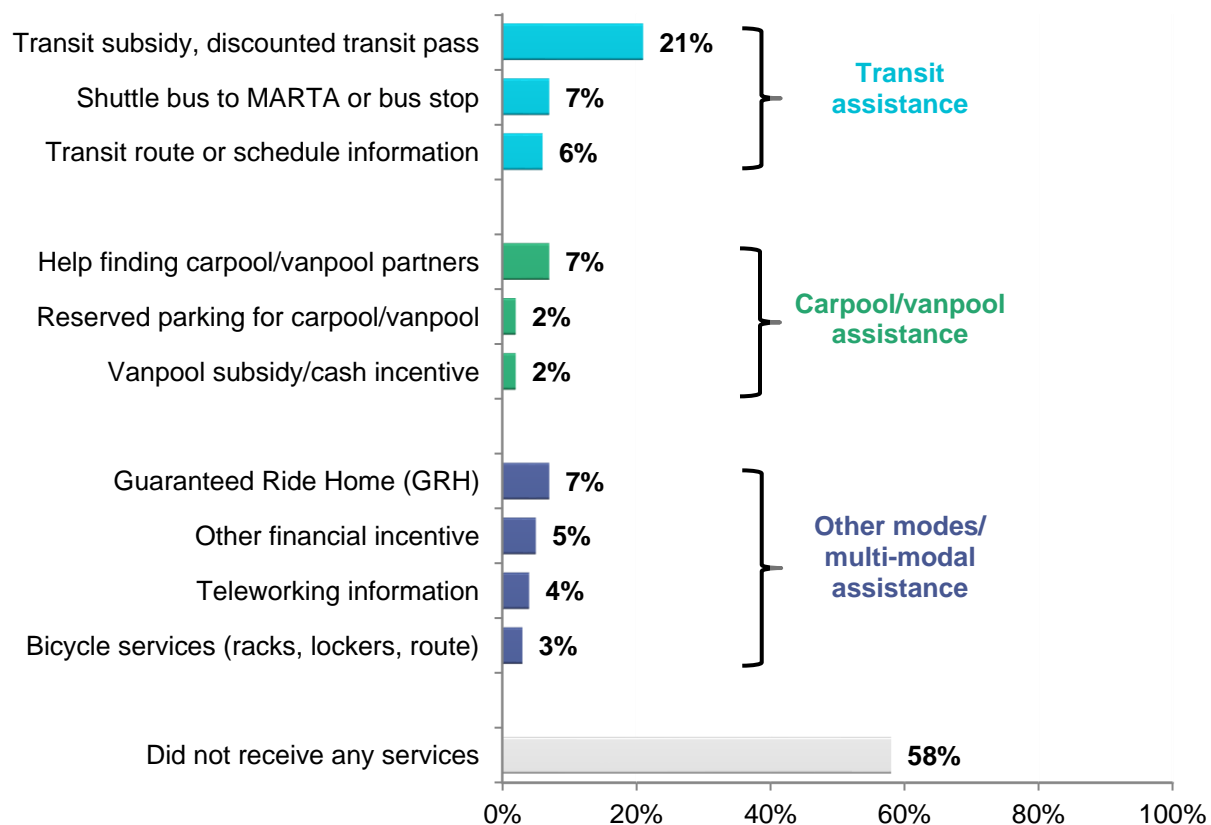
Convenience was noted primarily by transit riders (bus 16 percent, train 16 percent). Traffic or congestion was noted as a motivation by notably higher shares of bus riders (13 percent), train riders (30 percent), and by those who walked (13 percent) or bicycled (17 percent) to work, than by carpoolers (5 percent). Being close to work or to a transit pick-up location was mentioned only by train riders (13 percent) and walkers (19 percent). As might be expected, health and exercise were much stronger motivations for commuters who walked (14 percent) and those who bicycled (42 percent) than for other alternative mode users. There were not statistical differences among alternative modes for other motivations.

4.1 Assistance in Starting Alternative Modes

Commuters in the Atlanta region have numerous services that might encourage or assist them to use alternative modes. When asked about such services, 42 percent of alternative mode commuters who started using these modes within the past three years indicated they had received at least one of the services listed (Figure 4.2). The most common service, by a sizeable margin, was a transit subsidy or discounted transit pass, noted by 21 percent of alternative mode users. About one in twenty named help finding a carpool or vanpool partner (7 percent), Guaranteed Ride Home (7 percent), shuttle bus to MARTA or a bus stop (7 percent), transit route or schedule information (6 percent), a financial incentive other than for transit or vanpooling (5 percent), and teleworking information (4 percent).

Figure 4.2 Services that Helped Commuter Start Using Alternative Mode

(n = 421, multiple responses permitted)



Except for Guaranteed Ride home, which is offered to all alternative mode commuters in the region, each of these services is specific to a particular mode. Figure 4.2 divides the services into mode-support groupings. The figure illustrates that commuters made use of a variety of services, covering multiple alternative modes.

4.1.1 Potential for Additional Public Transit Service

The previous discussion related to current use of alternative modes. Many commuters in the Atlanta region, however, were driving alone to work at the time of the survey or were using alternative modes only infrequently. For these commuters, the RCS included questions to examine the potential to expand regional



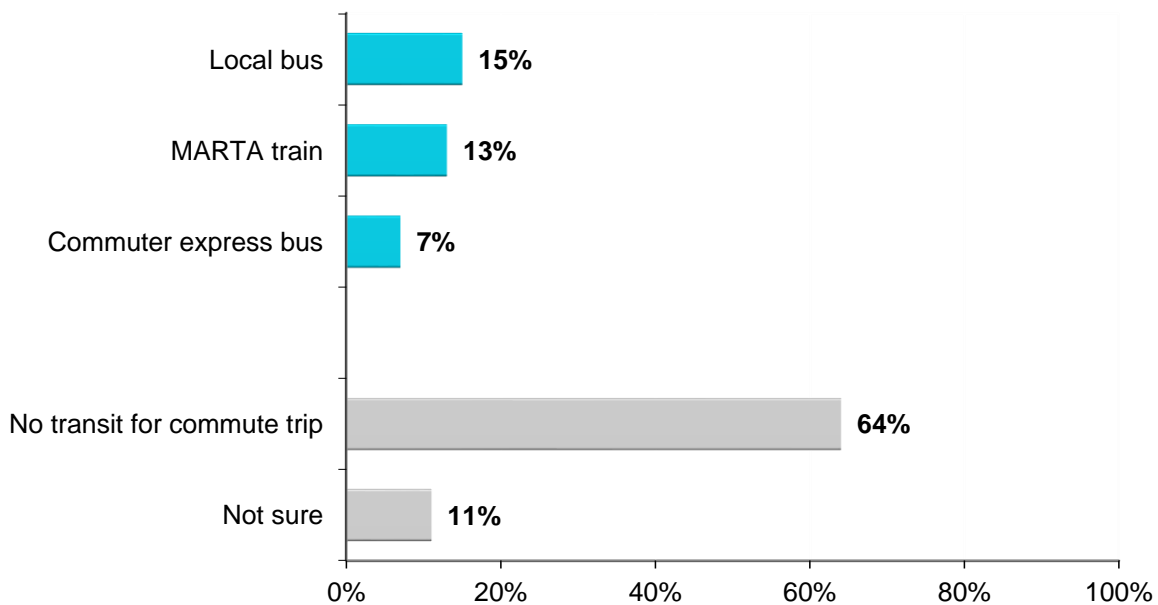
use of transit and carpooling/vanpooling, the barriers to use of these modes, and commute services and initiatives that could encourage non-users to start using them.

Transit Service Availability

At the time of the survey nine percent of respondents said they were using a bus or train to get to work at least one day per week. Respondents who did not use transit at all were asked if any public transit operators offered service they could use for their commute. About two-thirds (64 percent) said no public transit offered service they could use for their trip to work (this response was not checked by actually looking at respondent residence location and transit routes, although this analysis could be completed at a later date). Another one in ten (11 percent) were not sure if transit was available. The remaining 26 percent said at least one type of transit was a possible travel option for their commute (Figure 4.3).

Figure 4.3 Transit Service Available for Travel to Work – Non-Transit Riders

(Base is commuters who did not use transit; n = 4,198; multiple responses permitted for service types)



About 15 percent of non-transit riders said local bus service was available for their trip to work. A similar share (13 percent) said a MARTA train route was available for their commute. Commuter express bus was less available; seven percent of non-transit riders said an express route offered service they could use for commuting.

Potential Additional Transit Frequency of Use

Respondents who said at least one type of public transit was available were asked how often they might be able to use transit to get to work, considering their work and personal schedules. Across all non-riders, about two in ten would be able to use transit occasionally/infrequently and four in ten would be able to use transit one or more days per week. The remaining four in ten would not be able to use transit at all or were not sure of their feasible frequency.



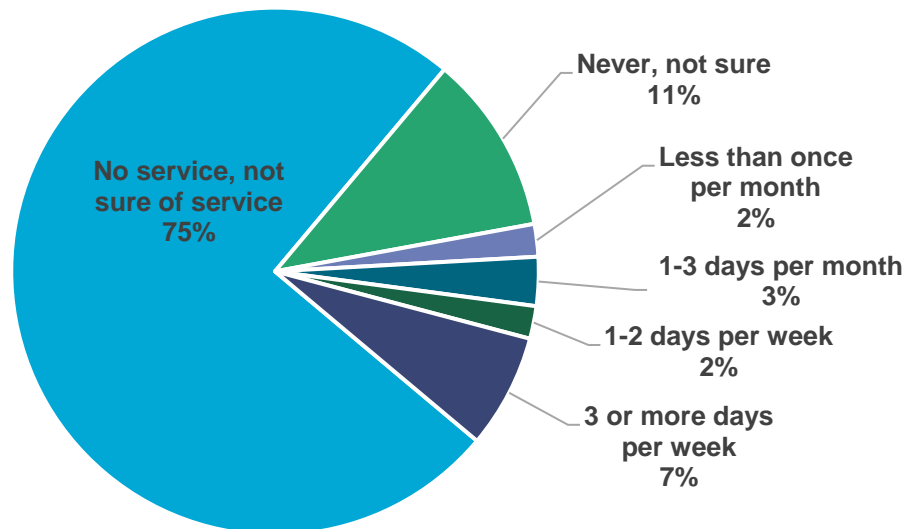
Figure 4.4 presents potential transit frequency among non-transit riders but includes commuters who said they did not have access to transit service or who were not sure if transit was available. This presents a more accurate portrayal of the transit use potential. As noted, before, 75 percent of commuters who did not use transit to commute said they did not have any service available or did not know if they had service available for their trip to work. An additional one in ten (11 percent) respondents said some service was available but that they would never be able to use it, considering their work schedule and personal travel needs.

Five percent of commuters indicated they would be able to ride transit to work occasionally; either less than once per month (two percent) or one to three days per month (three percent). The remaining one in ten non-riders would be able to ride transit to work one or two days per week (two percent) or three or more days per week (seven percent).

Note that Figure 4.4 includes a large group of respondents who did not know of any available transit service. When only respondents who have transit available are included, the potential use is high; more than half of non-transit riders with transit access could use transit at least occasionally (14% of 25% with transit available). This potential for additional ridership is notable, when applied to the entire population of commuters. About 115,000 commuters would be able to ride transit occasionally and more than 230,000 would be able to use transit one or more days per week.

Figure 4.4 Potential Transit Frequency – All Non-Riders

(n = 4,194)



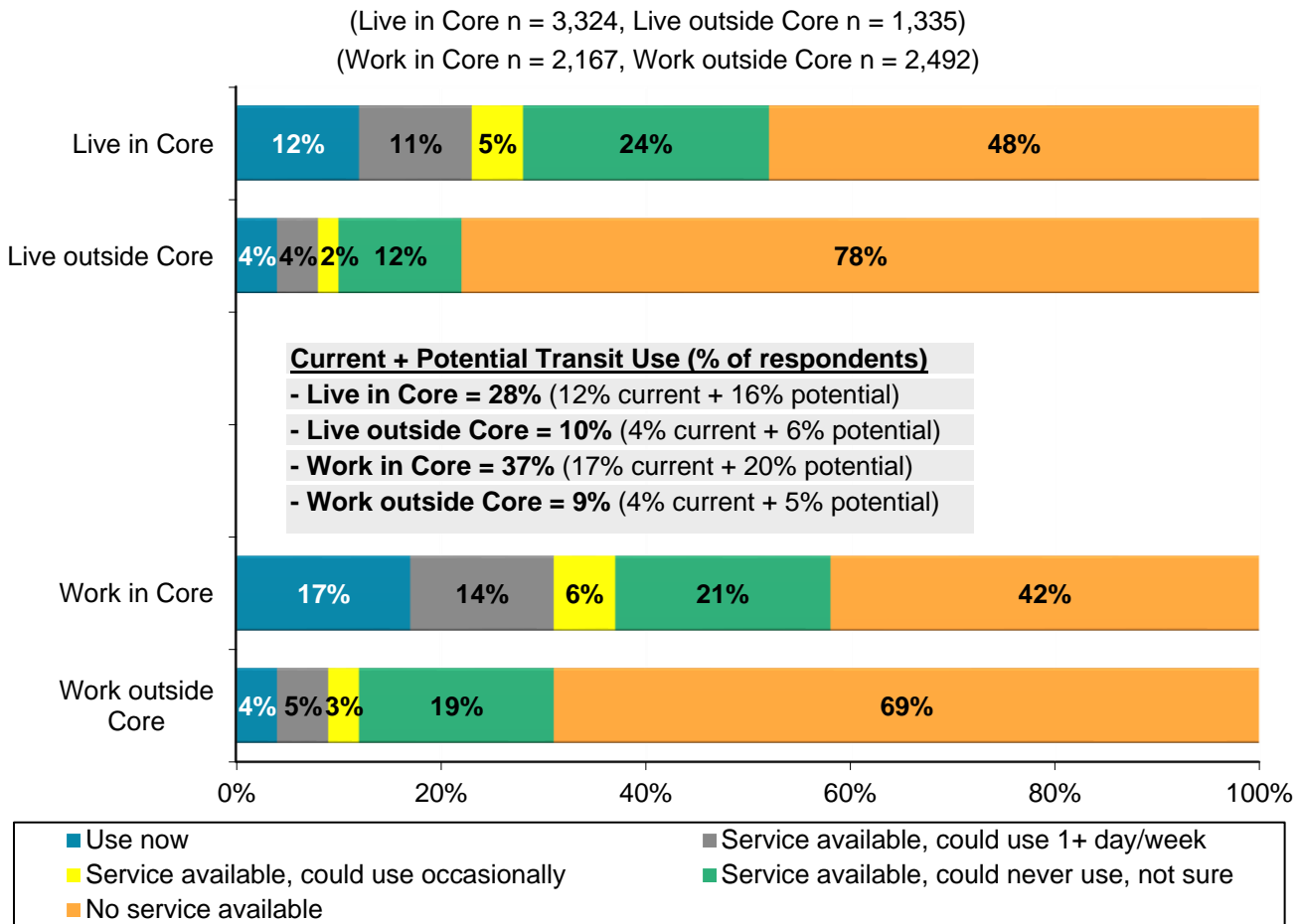
Feasible Transit Commute Frequency by Home and Work Location – Figure 4.5 presents potential transit use frequencies by where respondents lived and worked. The figure shows five categories of transit availability/use: (1) Respondent currently uses transit; (2) Transit is available and respondent could use one or more days per week; (3) Transit is available and respondent could use occasionally, but less than once per week; (4) Transit is available, but respondent never could use it; and (5) Transit service is not available for work trip.

The top two bars of the figure show transit potential for respondents who lived in one of the five core counties of the region and for respondents who lived outside these core counties. Not surprisingly both current transit use and potential for additional transit use are higher among respondents who lived in the five core counties.

More than one in ten (12 percent) respondents who lived in the core used transit at least one day per week at the time of the survey and an additional 16 percent of respondents who lived in this area said they could use transit at least occasionally. This would result in a total potential of 28 percent of core county resident workers. Among respondents who lived outside the core, the overall potential was 10 percent, comprised of 4 percent current users and an additional 6 percent who could use transit at least occasionally.

The bottom section of the figure shows current and potential use by where respondents worked. The result for respondents who worked outside the core was essentially the same as for those who lived outside the core; the overall potential was 9 percent comprised of 4 percent current and 5 percent potential use). But the potential among respondents who worked in the core was much higher, at 37 percent, comprised of 17 percent current transit users and 20 percent potential users.

Figure 4.5 Potential Transit Commute Frequency by Home Area and Work Area



As is also clear from Figure 4.5, a large part of the difference in potential for the core and outside the core areas is due to the availability of transit. Half (52 percent) of respondents who lived in the core said some type of transit service was available, compared with just 22 percent of respondents who lived outside the core. The result was similar for respondents' work locations; 58 percent who worked in the core said transit service was available, compared with 31 percent whose work location was outside the core counties.



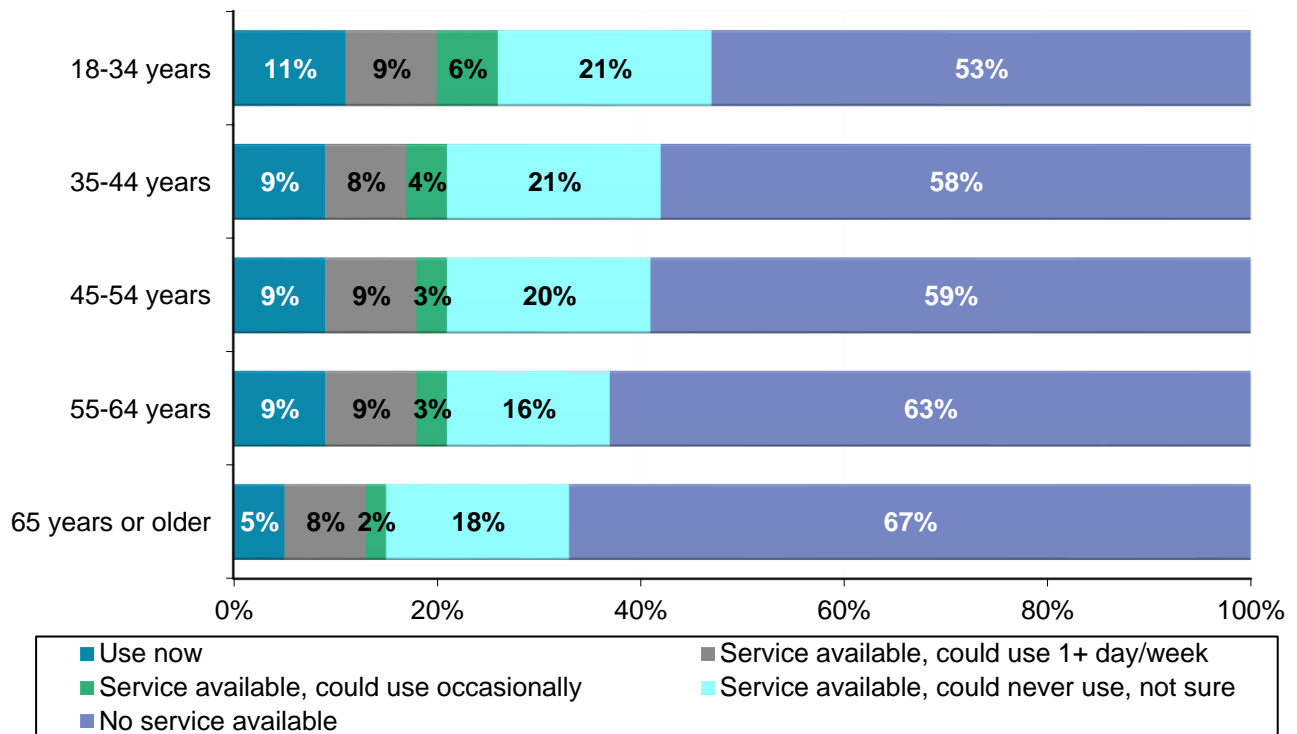
Feasible Transit Commute Frequency by Respondent Demographics – The analysis examined potential transit use by demographic characteristics. There were no statistical differences in transit potential between men and women; their current plus potential transit use was the same. Similarly, overall transit potential did not show any notable relationship with income, with the exception of the small share (10 percent) of respondents whose annual household incomes were under \$40,000; these respondents used transit at a higher rate at the time of the survey than did respondents with higher incomes, but their additional transit use potential was not statistically different than for higher income respondents.

Ethnicity/race and age did show some differences in potential transit use. Nearly one-third of African American/Black respondents reported either current or potential transit use (32 percent total – 14 percent current, 18 percent potential). This was notably higher than the potential use by Asian respondents (24 percent total - 14 percent current, 10 percent potential), Hispanic respondents (19 percent total - 6 percent current, 13 percent potential), or Non-Hispanic White respondents (17 percent total - 6 percent current, 11 percent potential).

Potential overall use of transit also varied by age, with younger respondents having higher rates of both current and potential additional use than older respondents (Figure 4.6). More than one-quarter of respondents who were between 18 and 34 years of age reported current or potential transit use (26 percent total – 11 percent current, 15 percent potential). Among respondents who were between 35 and 64 years, the potential was the same (21 percent total – 9 percent current, 12 percent potential). Respondents who were 65 or older reported both lower current transit use (5 percent) and lower potential transit use (10 percent), so that overall potential for this age group was just 15 percent.

Figure 4.6 Possible Transit Commute Frequency by Age

(18-34 n = 789, 35-44 n = 907, 45-54 n = 1,081, 55-64 n = 1,065, 65+ n = 339)



Reasons for Not Using Transit – Table 4.2 shows respondents’ barriers to transit use, grouped in two reason categories: service characteristics and personal preferences or needs. Note that this table excludes respondents who said transit service was not available. Thus, these barriers reflect characteristics of transit service and personal travel that make transit difficult or unattractive when transit service exists.

The overwhelming transit barrier was that transit would take too much time; 60 percent of non-riders who said transit service was available noted this concern. Large shares of respondents mentioned three other transit service characteristics as barriers. Three in ten (29 percent) said the bus/train didn’t operate close enough to their home and/or work, making access to transit a barrier. One-quarter (26 percent) said the bus/train schedule was not compatible with their work schedule. This would include respondents whose work hours started or ended outside the normal bus/train operation time, as well as respondents whose transit options operated infrequently, requiring them to arrive at work much earlier than they preferred or leave much later. Another one-quarter (26 percent) cited the need to transfer buses or trains as a reason not to use transit. Transit cost was a minor barrier; only 8 percent of non-riders mentioned this as a reason not to use transit for commuting.

Table 4.2 Reasons for Not Using Transit to Work – Respondents with Transit Service Available

(n = 1,138; multiple responses permitted)

Reasons for Not Using Transit to Commute	Percentage
Transit Service Characteristics	
Would take too much time	60%
Bus/train doesn’t operate close enough to home/work	29%
Not compatible with work hours/schedule	26%
Would have to transfer buses/trains	26%
Would cost too much	8%
Bus/train could be unreliable/late	2%
Personal Preferences/Needs	
Prefer my current type of transportation	29%
Need car before/after work	21%
Live too close to work	10%
Need my car for work	8%
Trip is too long/distance too far	7%
Other	2%

Non-riders also noted reasons related to personal preferences or personal travel needs. Common reasons in this category included preferring their current type of transportation, noted by 29 percent, needing a vehicle before or after work for personal trips (21 percent) or needing a vehicle for work purposes (8 percent). One in ten (10 percent) respondents said they lived too close to work to make transit a reasonable option; it is likely some of these respondents walked or bicycled to work. And 7 percent said the trip was too long or the distance was too far.



Reasons for Not Using Transit by Alternative Mode – The reasons noted in Table 4.2 above reflect reasons given by all commuters who did not ride transit to work. But their reasons differed for commuters who primarily drove alone to work and those who used carpool/vanpool or bike/walk (Table 4.3). Drive alone commuters reported most reasons as greater barriers to transit use than did either carpool/vanpool commuters or bike/walk commuters. Drive alone commuters particularly were concerned that transit would take too long; nearly two-thirds (64 percent) of drive alone users mentioned this reason. But at least one-quarter also said that transit was too far home or work, they preferred driving alone, they needed a car for work or before or after work, that transit schedules were not compatible with their work schedule, and the need to transfer buses or trains on the trip.

Respondents who primarily carpooled/vanpooled also said transit would take too long; 55 percent of carpools/vanpoolers gave this reason. They also were similarly concerned to that of drive alone commuters with most of the other reasons. The single reason they did not report in high numbers was needing a personal car.

Table 4.3 Reasons for Not Using Transit to Work – By Primary Commute Mode

(Shaded percentages indicate statistically higher values for reasons; note that the small sample sizes for carpool/vanpool and bike/walk affect statistical significance in percentage differences)

Reasons	Drive Alone	Carpool/Vanpool	Bike/Walk (n=95)
Would take too long/distance is too far	64%	55%	44%
Transit is too far from home/work	30%	28%	13%
Prefer current mode, don't want to ride with strangers	29%	29%	37%
Need car for work/before/after work or for emergencies	29%	9%	3%
Not compatible with work hours/schedule	26%	25%	7%
Would have to transfer buses/trains	26%	34%	13%

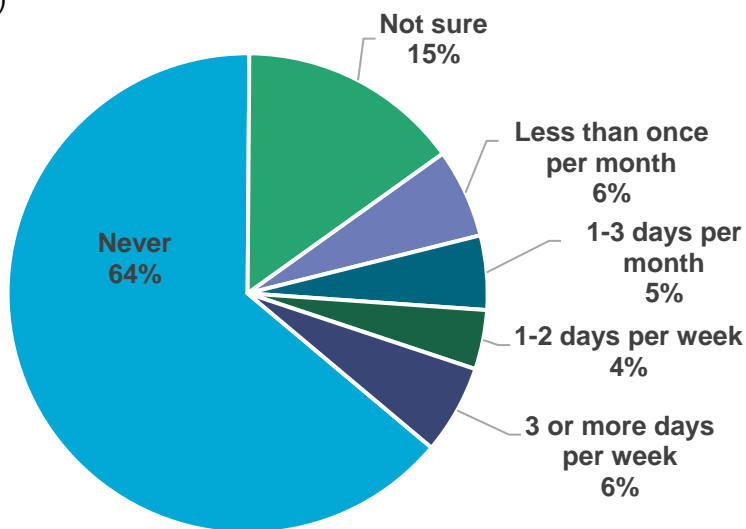
Only two of the reasons noted were mentioned by substantial numbers of bike and walk commuters. They said transit would take too long or that their travel distance was too far, reasons that were prominent for other mode users. They also said they preferred their current mode. They were far less likely than were other mode users to report other reasons for not using transit.

4.1.2 Potential for Carpool/Vanpool Use

Respondents who did not use carpool or vanpool to commute at the time of the survey were asked how often they might be able to use one of these modes to get to work, considering their work and personal schedules. Respondents indicated far less potential for new carpool/vanpool use than they had for transit use. As noted in Figure 4.4, 56 percent of non-transit riders who had access to transit service said they could use it at least occasionally. By contrast, only 21 percent of respondents who did not rideshare at the time of the survey said they would be able to carpool or vanpool even occasionally (refer to Figure 4.7).

Figure 4.7 Potential Carpool/Vanpool Frequency – Non-Users

(n = 4,476)



Nearly two-thirds (64 percent) of non-ridesharers said they could never carpool or vanpool. One in ten said they would be able to carpool or vanpool infrequently; 6 percent less than one day per month and 5 percent one to three days per month. One in ten would be able to carpool or vanpool to work one or more days per week; 4 percent one or two days per week and 6 percent three or more days per week. The remaining 15 percent were unsure how often they could carpool or vanpool.

Feasible Carpool/Vanpool Frequency by Home and Work Location – Figure 4.8 presents potential carpool/vanpool use frequencies by where respondents lived and worked. The figure shows five categories of carpool/vanpool use:

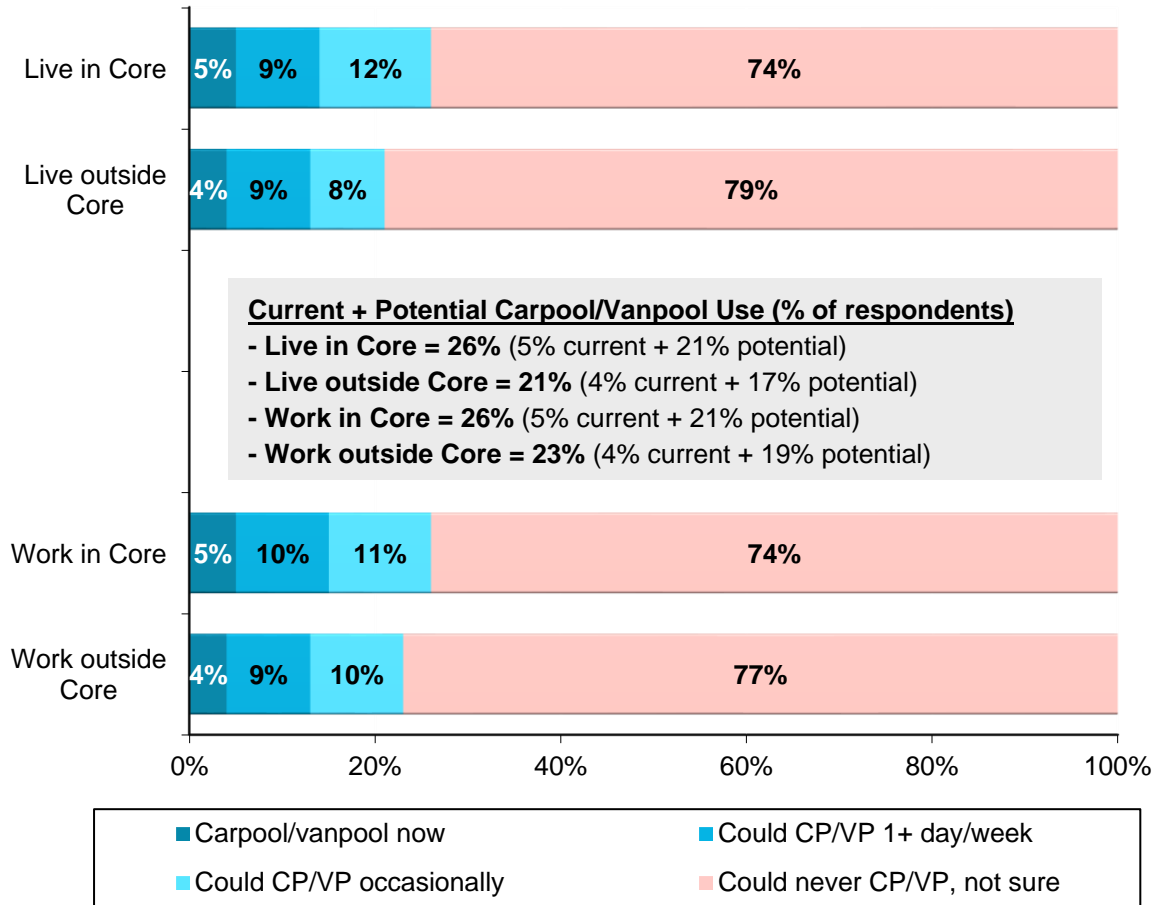
- Respondent currently carpools/vanpools
- Respondent could carpool/vanpool one or more days per week
- Respondent could carpool/vanpool occasionally, but less than once per week
- Respondent never could carpool/vanpool, not sure if carpool/vanpool would be a feasible option

The top two bars of the figure show carpool/vanpool potential for respondents who lived in one of the five core counties of the region and for respondents who lived outside the five core counties.



Figure 4.8 Potential Carpool/Vanpool Frequency by Home Area and Work Area

(Live in Core n = 3,399, Live outside Core n = 1,348)
 (Work in Core n = 2,226, Work outside Core n = 2,521)



Unlike for the transit potential described earlier, overall carpool/vanpool potential was not substantially different for the two home areas. Five percent of respondents who lived in the core carpooled or vanpooled at least one day per week at the time of the survey and an additional 21 percent of respondents who lived in this area said they could carpool/vanpool at least occasionally. This would result in a potential of 26 percent of core county resident workers. Among respondents who lived outside the core, the overall potential was slightly lower, at 21 percent, comprised of 4 percent current users and an additional 17 percent who could carpool or vanpool at least occasionally.

The bottom section of the figure shows current and potential carpool/vanpool use by where respondents worked. The result for respondents who worked in the core counties was identical to that for those who live in the core counties; the overall potential was 26 percent comprised of 5 percent current and 21 percent potential use). And the potential among respondents who worked outside the core also was essentially the same, at 23 percent, comprised of 4 percent current carpool/vanpool users and 19 percent potential users. The similarity of both the current use and the overall potential reflects the fact that carpooling and vanpooling are adaptable to many situations.



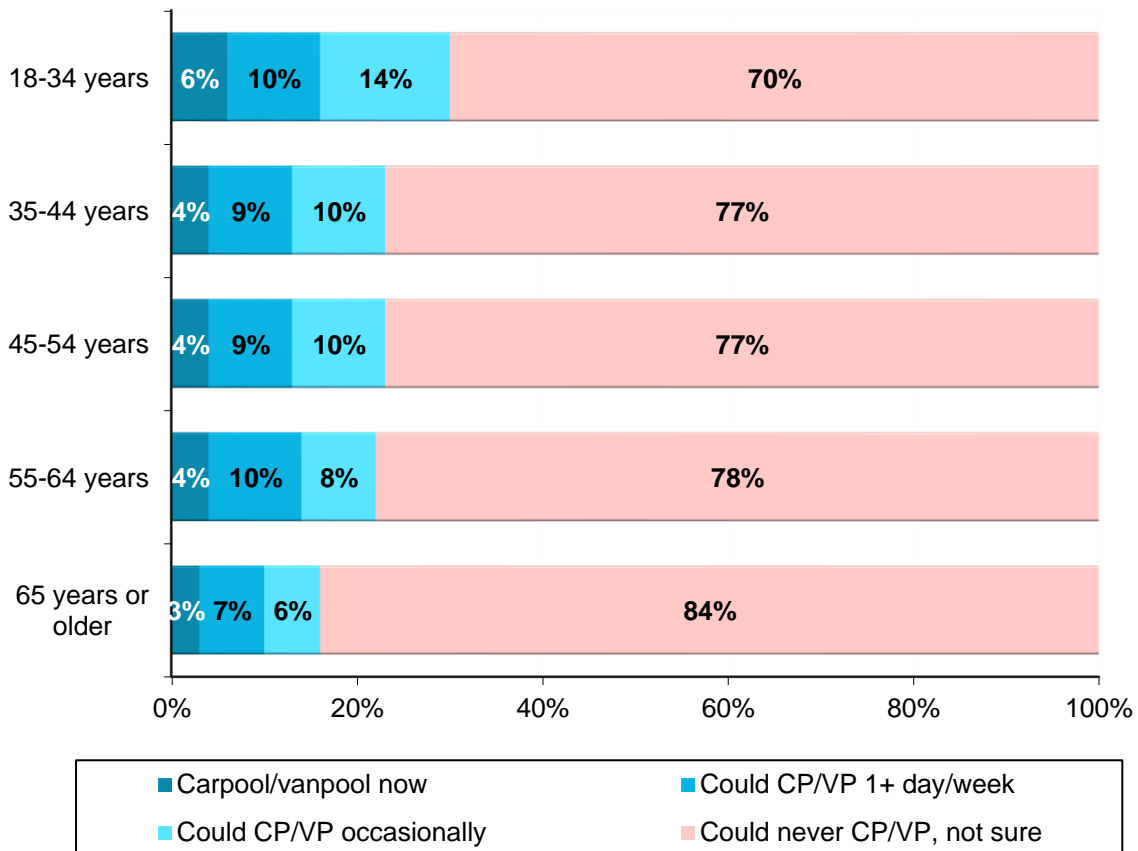
Feasible Carpool/Vanpool Commute Frequency by Respondent Demographics – The analysis examined potential carpool/vanpool use by demographic characteristics. There were no statistical differences in either current use or potential use between men and women. Similarly, overall carpool/vanpool potential did not show any notable relationship with income, except for the 5 percent of respondents with very low annual household incomes, of under \$20,000.

Ethnicity/race and age did show some differences in potential use of carpool/vanpool. One in three Asian respondents reported either current or potential carpool/vanpool use (31 percent total – 11 percent current, 20 percent potential). African American/Black respondents also reported higher than average carpool/vanpool potential (27 percent overall – 4 percent current, 23 percent potential). These results were higher than the potential use for Hispanic respondents (23 percent total - 5 percent current, 18 percent potential) and Non-Hispanic White respondents (22 percent total - 4 percent current, 18 percent potential).

Potential overall carpool/vanpool use followed the same age-related pattern observed for transit use, with younger respondents having higher rates of current and potential additional carpool/vanpool use than older respondents (Figure 4.9). Three in ten respondents who were between 18 and 34 years of age reported current or potential carpool/vanpool use (30 percent total – 6 percent current, 24 percent potential). Among respondents who were between 35 and 64 years, the potential was about the same (22 percent-23 percent total – 4 percent current, 18 percent-19 percent potential). Respondents who were 65 or older reported both similar current carpool/vanpool use (3 percent) as did those who were between 35 and 64 years old, but lower potential transit use (13 percent), so that overall potential for this age group was just 16 percent.

Figure 4.9 Potential Carpool/Vanpool Frequency by Age

(18-34 n = 813, 35-44 n = 925, 45-54 n = 1,100, 55-64 n = 1,082, 65+ n = 341)



Reasons for Not Using Carpool/Vanpool – At the time of the survey, slightly more than 4 percent of respondents traveled to work by carpool, casual carpool, or vanpool at least one day per week. Respondents who did not carpool or vanpool to work were asked why they did not use these modes. Table 4.4 lists respondents' barriers to rideshare use, grouped into the same categories as were shown for transit barriers: service characteristics and personal preferences/needs.

The most common reason overall, cited by nearly half (49 percent) of all respondents, was that carpooling and vanpooling would not be compatible with their work hours or schedule. This reason also was noted in the section on transit barriers, but work hours as a carpool/vanpool barrier likely reflects respondents whose work hours or workdays vary across the week. About two in ten (18 percent) respondents said they did not know how to find a carpool or vanpool partner. Sixteen percent said carpooling or vanpooling would take too long, compared with their current type of transportation.

Table 4.4 Reasons for Not Using Carpool or Vanpool to Work

(n = 4,480; multiple responses permitted)

Reasons	Percentage
Service Characteristics	
Not compatible with work hours/schedule	49%
Don't know how to find carpool/vanpool partner	18%
Would take too long	16%
Would cost too much	5%
Personal Preferences/Needs	
Prefer my current type of transportation	32%
Need car before/after work or for emergencies	21%
Need my car for work	11%
Live close to work	10%
Trip is too long/distance too far	7%
Other	2%

Respondents also expressed carpool/vanpool barriers related to personal preferences and travel needs. The most common reason was that they preferred their current methods of getting to work; 32 percent of respondents gave this answer. Other common reasons in this category included needing a vehicle before or after work for personal trips or in the case of an emergency (21 percent) or needing a vehicle for work purposes (11 percent). One in ten (10 percent) respondents said they lived too close to work to make transit a reasonable option and 7 percent said the trip was too long or the distance was too far.

Reasons for Not Carpooling/Vanpooling by Alternative Mode – The reasons noted in Table 4.4 above reflect reasons given by all commuters who did not carpool or vanpool. But the reasons for not carpooling/vanpooling differed for commuters who primarily drove alone to work and those whose primary mode was transit or bike/walk (Table 4.5). Drive alone were most concerned with not wanting to ride with strangers,



issues related to work hour compatibility, and needing a car for work or for personal travel before or after work or for emergencies.

Respondents who primarily rode transit also noted preferring their current mode and having schedule-related issues. In contrast to drive alone commuters, however, needing a car was not a barrier. Rather, they had greater concern than did drive alone commuters in finding a carpool/vanpool partner and being concerned about the travel time or travel distance involved.

Bike and walk commuters also said they preferred their current mode, but their primary reason was that they lived too close to work to make carpooling/vanpooling a feasible option. They were far less likely than were other mode users to report other reasons for not ridesharing.

Table 4.5 Reasons for Not Using Carpool or Vanpool to Work – By Primary Commute Mode

(Shaded percentages indicate statistically higher values for reasons)

Reasons	Drive Alone (n=3,934)	Transit (n=409)	Bike/Walk (n=104)
Prefer current mode, don't want to ride with strangers	30%	41%	33%
Not compatible with work hours/schedule	29%	22%	4%
Need car for work/before/after work or for emergencies	23%	8%	1%
Don't know how to find carpool/vanpool partner	6%	10%	3%
Would take too long/distance too far	4%	9%	7%
Live too close to work	3%	1%	39%
Would cost too much	1%	4%	1%

4.1.3 Services and Benefits that Might Influence Greater Use of Alternative Modes

Commuters base their choice of commute mode on many factors, including the time a trip will take, the cost of the trip, how convenient it is to use the mode, and other characteristics specific to each travel mode that make a mode more or less attractive to use. By offering commute services and benefits for alternative mode users, commute service organizations can make alternative modes more attractive than they otherwise would be, potentially influencing drive alone commuters to shift to an alternative mode.

In the 2019 survey, 78 percent of survey respondents reported they did not use an alternative mode at all for commuting or used it at most one day per week. These respondents were presented with a list of 10 commuter services and benefits that might encourage or assist them to use alternative modes. Respondents were asked to rate how much each service would influence them to try an alternative mode for commuting, using a 1 to 5 rating scale, where 1 meant the service would have no influence and 5 meant it would have a great deal of influence. Figure 4.10 displays the percentage ratings for each service/benefit.

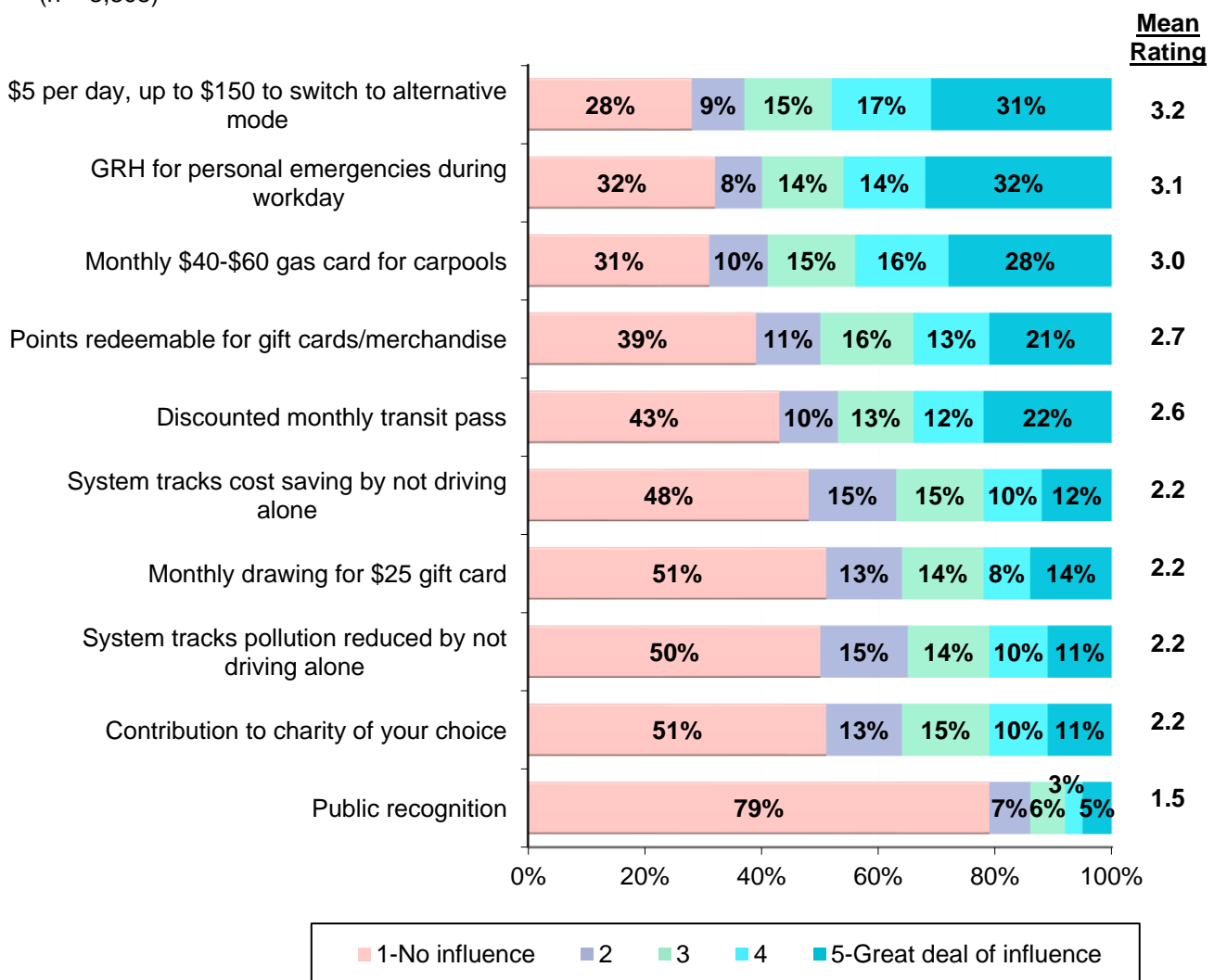


Overall, the services/benefits did not appear to be motivators for the respondents to increase their use of commute options. The highest average (mean) score on the 5-point scale was 3.2 and only three services had average scores of 3.0 or higher. The three services with the highest ratings were the program offering \$5 per day to switch from driving alone to an alternative mode, Guaranteed Ride Home, and the monthly \$40-\$60 gas cards for carpools. These services were rated as either a 4 or 5 (great deal of influence) by 48 percent, 46 percent, and 44 percent of respondents, respectively. A second tier of services included points redeemable for gift cards or merchandise and a discounted monthly transit pass. About one-third of respondents rated these two services as a 4 or 5.

About two in ten respondents gave high influence ratings for four of the services/benefits: system that tracks the cost saving from a commuter’s use of alternative modes (22 percent), monthly drawing for \$25 gift card (22 percent), system that tracks the pollution reduced by a commuter’s use of alternative modes (21 percent), and financial contribution made to a charity of the commuter’s choice (21 percent). The final service/benefit, public recognition for making the socially beneficial choice of an alternative mode, was rated as influential by only 8 percent of all respondents.

Figure 4.10 Service/Benefits to Motivate Alternative Mode Use Among Non-Users

(n = 3,808)



The 2014 RCS also included this question, with the same service/benefit options. Table 4.6 presents a comparison of the mean ratings for each of the services/benefits in 2019 and 2014. The mean scores were generally consistent from 2014 to 2019.

Three services received notably higher ratings in 2019 than 2014. The rating for the \$5 per day program increased by 0.4 points, from 2.8 in 2014 to 3.2 in 2019. Note, however, that the 2014 survey asked about a \$3 per day program, so some of the increase could be due to the higher value of the benefit. Discounted monthly transit passes also increased by 0.4 points, from 2.2 to 2.6. Points redeemable for gift cards or merchandise increased by 0.3 points from an average rating of 2.4 in 2014 to 2.7 in 2019. One service/benefit, financial contribution to a charity of the commuter’s choice, showed a notable decrease in rating; the mean rating for this service/benefit declined by 0.4 points, from 2.6 in 2014 to 2.2 in 2019.

Table 4.6 Services/Benefits to Motivate Alternative Mode Use – Mean Rating in 2019 and 2014

(2019 n = 3,808, 2014 n = 706; multiple responses permitted)

Service/Benefit	2019 Mean Rating	2014 Mean Rating
\$5 per day, up to \$150 to switch to alternative mode*	3.2	2.8
GRH for personal emergencies during workday	3.1	3.1
Monthly \$40-\$60 gas card for carpools	3.0	3.1
Points redeemable for gift cards/merchandise	2.7	2.4
Discounted monthly transit pass	2.6	2.2
System tracks cost saving by not driving alone	2.2	2.2
Monthly drawing for \$25 gift card	2.2	2.0
System tracks pollution reduced by not driving alone	2.2	2.4
Contribution to charity of your choice	2.2	2.6
Public recognition	1.5	1.5

* - Note that this benefit was \$3 per day, up to \$100 in the 2014 survey



5.0 Commute Perceptions and Location Choices

This section compares the respondent's perceptions and attitudes about the ease of their commute over the last year. It also looks at how changes in the work or home location impacts commuting and the role commuting played in influencing location choices.

5.1 Commute Perceptions

Half of the respondents (47 percent) felt that compared to a year ago, their trip to work was about the same. One in three respondents (33 percent) found their commute to be more difficult. Only 12.8 percent of respondents found their commute to be easier compared to a year ago. 3.8 percent of respondents did not live in Atlanta or did not commute a year ago (Table 5.1).

Table 5.1 Commute Perception Over One Year

Compared to one year ago, trip to work is	Frequency	Percent
Easier	351,822	12.8
More difficult	906,375	33.0
About the same	1,385,175	50.4

Note: Does not add up to 100 since respondents who did not commute or live in Atlanta a year ago are not included.

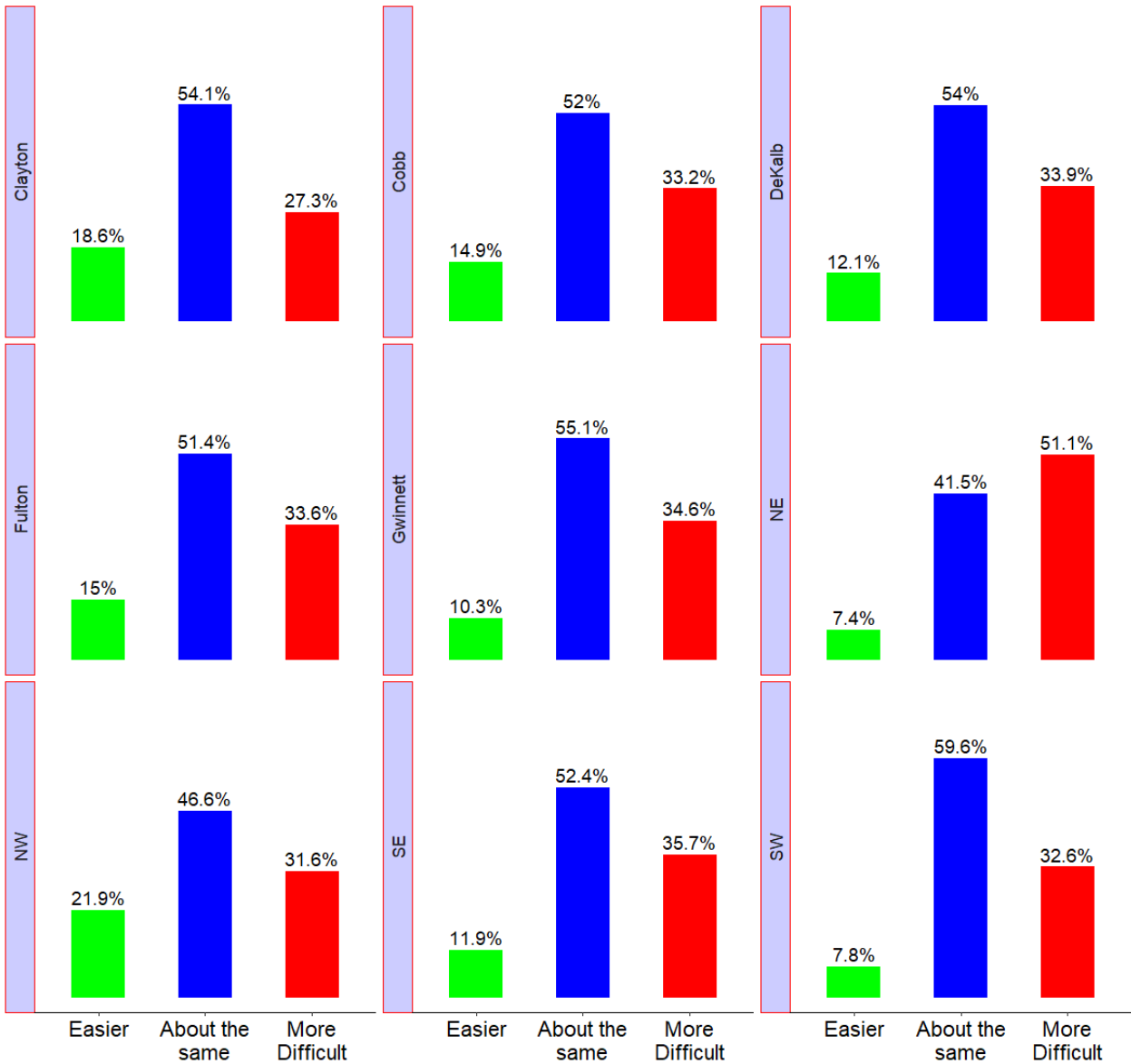
Figure 5.1 looks at the commute perceptions by home region. 40 to 60 percent of respondents felt that their trip to work was about the same as last year. Respondents from the NE were among the lowest who felt this (41.5 percent) while respondents from the SW were the highest who felt this (59.6 percent). While half of the respondents from the NE felt that their commute had gotten more difficult over the year, only 27.3 percent of Clayton residents felt the same way. Close to three times as many respondents from the NW (21.9 percent) compared to the SW (7.8 percent) felt that their commute had gotten easier over the last year.

Figure 5.2 looks at the commute perceptions by work region 40 to 60 percent of respondents felt that their trip to work was about the same as last year. Respondents who worked in the Perimeter Connects (PSTC) TMA were among the lowest who felt this (42.2 percent) while respondents who did not work in a TMA were the highest who felt this (55.7 percent). Overall one third to under half of respondents felt that their trip to work had gotten more difficult in the last year. 40 to 50 percent of respondents who worked in the Livable Buckhead (Buckhead), Clifton Corridor TMA (CCTMA), and PSTC TMA felt that their commute had gotten more difficult.



Figure 5.1 Commute Perception Over One Year by Home Region

(n=4,570)

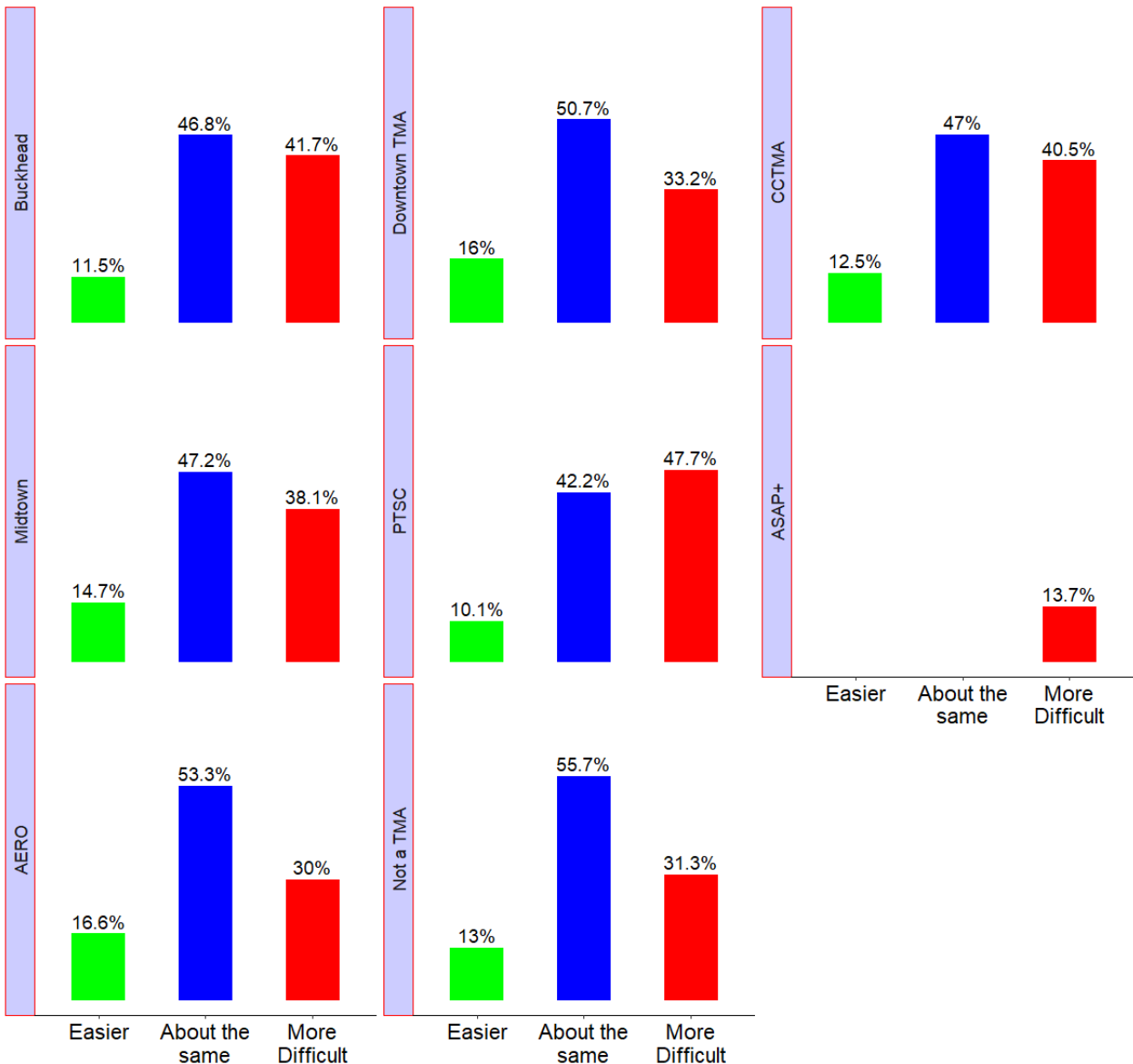


Compared to last year, the trip to work is:



Figure 5.2 Commute Perception Over One Year by Work Region

(n=4,570)



Compared to last year, the trip to work is:

Table 5.2 looks at the ways in which the commute got easier or more difficult. The highest reasons given can be attributed to travel time, distance, and congestion. For respondents who said the commute got more difficult, 40 percent found the commute more stressful and 35.6 percent attributed that to more construction along the commute route. Less than ten percent of respondents found the commute easier due to alternatives such as carpooling or vanpooling to work, using transit, walk or bike, and teleworking more.



Table 5.2 Ways in Which the Commute is Easier or More Difficult

(multiple responses permitted)

Commuter is easier	Percent	Commuter is more difficult	Percent
Commuter is shorter distance	47.2	Commuter is longer distance	20.7
Commuter trip is faster, takes less time	49.5	Commuter trip is slower, takes more time	68.1
Commuter route is less congested	42.0	Commuter route is more congested	80.0
Started carpooling/vanpooling to work	4.9	Started carpooling/vanpooling to work	0.9
Started using bus, train to work	7.7	Started using bus, train to work	2.7
Started driving alone to work	5.6	Started driving alone to work	1.5
Started walking or bicycling to work	3.0	Started walking or bicycling to work	1.0
Commuter is less stressful	30.3	Commuter is more stressful	40.0
Peach Pass/Express Lane/Toll roads	9.0	Construction along commuter route	35.6
Added lines on route	1.4	MARTA operational issues, unreliable, too far away	1.3
New bike lanes	0.5	Poor road conditions-potholes, road repairs needed	0.4
Beltline	0.1	Not sure	1.3
Telework more	0.6		
Not sure	2.1		

5.2 Location Choices

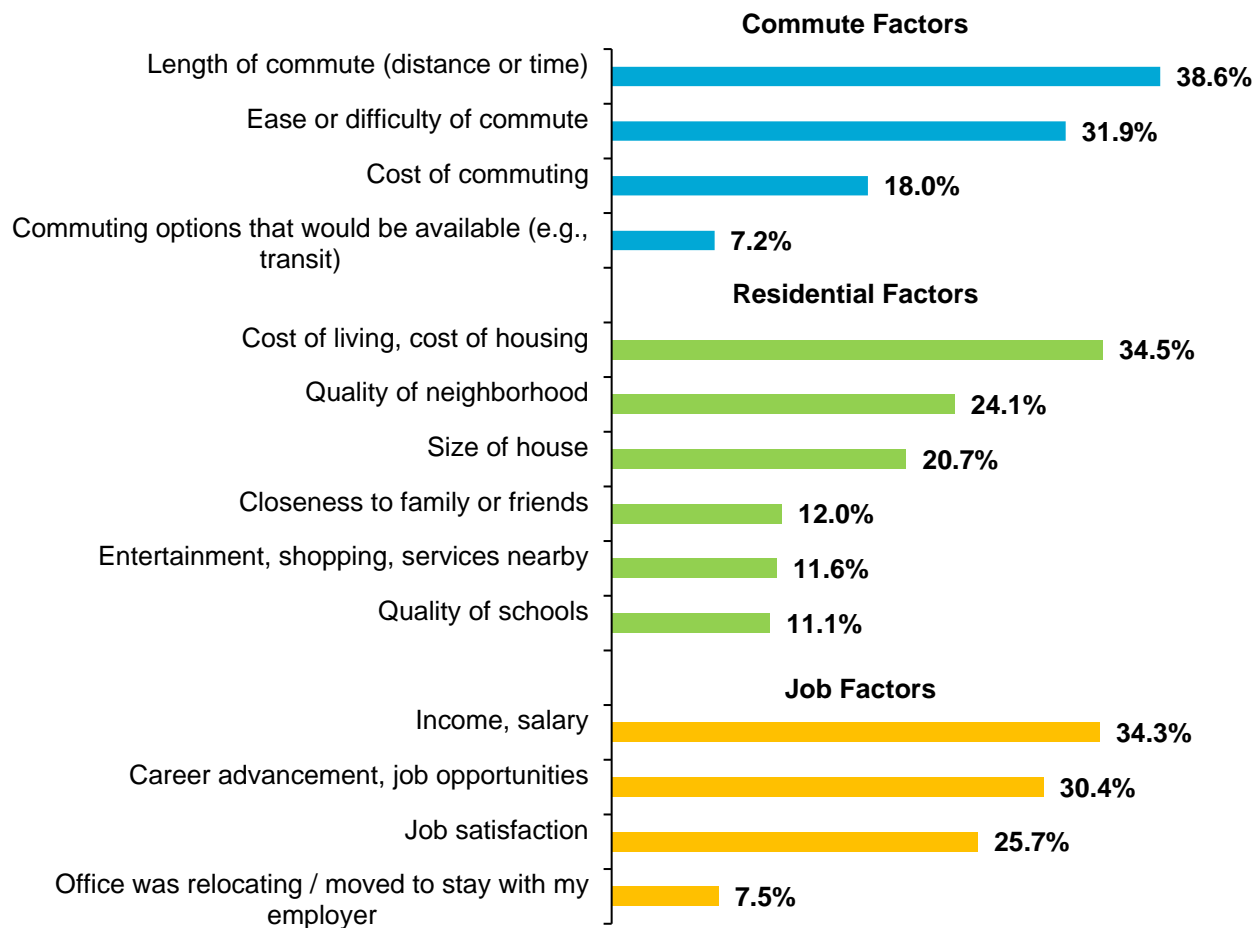
Over the past year, seven in ten respondents (71.9 percent) did not change either their home or work location. Among the respondents who did change, one in ten (9.6 percent) respondents changed their home location, 14.1 percent changed their work location, and 4.3 percent changed both home and work location. Among those respondents who changed their location (home or work or both), three out of four (73.8 percent) moved within the Atlanta metropolitan area. Two in ten (20.1 percent) moved from Georgia but outside the Atlanta metropolitan area and 6.1 percent moved from outside Georgia.

Figure 5.3 shows that among the reasons to change home and/or work location, the most cited reason was length of commute (38.6 percent) followed by cost of living/housing and changes in income and salary (both at 34 percent). Only 7.2 percent of respondents mentioned the availability of commuting options as a factor in changing home and/or work location.



Figure 5.3 Location Change Factors

(n=1,063)

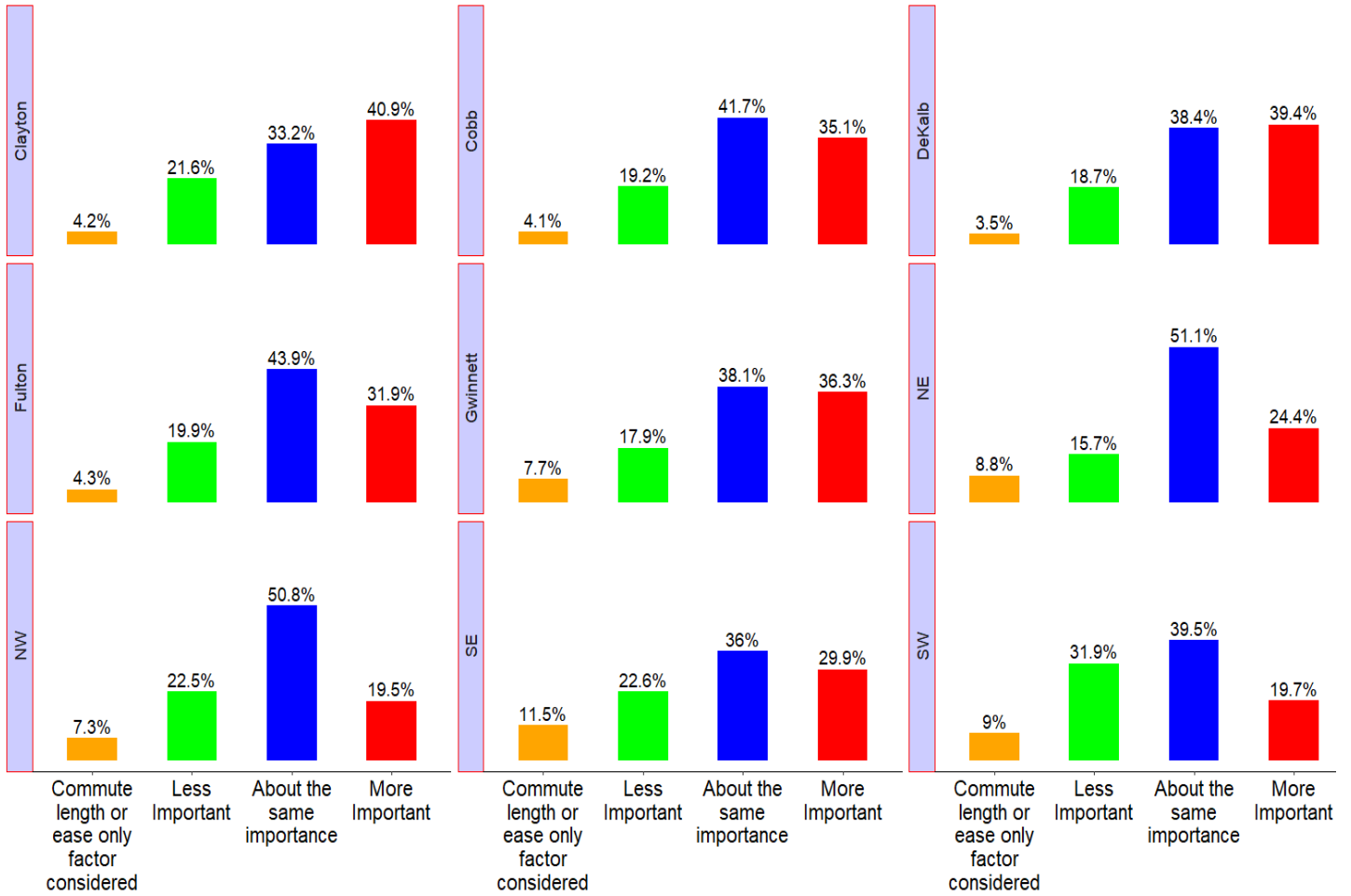


Among respondents who mentioned length and/or ease/difficulty of commute as a factor for changing home/work location, two in ten respondents (20.5 percent) mentioned that this factor was less important compared to other factors for their location change. 73.5 percent felt that the length and ease of commute was equally or more important for changing their home and/or work location. Six percent of respondents cited length and ease of commute as the only factor for changing their home/work location.

In looking at the home regions of respondents, around 40 percent of respondents from Clayton and DeKalb Counties considered the importance of ease and length of commute as more critical in deciding to relocate or change employment. One in ten respondents (11.5 percent) from the SW region considered commute ease and length as the only factor to change home and/or work location. Half of the NE and NW respondents gave about the same importance to commute length and ease as a factor for changing home and/or work location (Figure 5.4).

Figure 5.4 Importance of Commute Length and Ease on Location Choices

(n=1,019)



How important was commute length and ease in deciding to relocate:



6.0 Mode Choice Decision Factors and Benefits of Alternative Modes

In this section we quantify the attitudes and responses of commuters about their concerns regarding traffic congestion, air quality, benefits of using alternative modes for themselves and society at large, and travel attributes important to commute mode choice.

6.1 Attitudes towards Congestion and Air Quality

While 97.5 percent of respondents agreed that traffic congestion is a serious problem in Atlanta area, only 76 percent agreed that air quality is a serious problem in the Atlanta area. This points to a disconnect regarding the impacts of traffic congestion on air quality.

6.1.1 Demographic Characteristics of Attitudes Towards Congestion and Air Quality

Respondents were presented with two statements. Respondents were first presented with the statement – “Traffic congestion is a serious problem in the Atlanta area” followed by “Air quality is a serious problem in the Atlanta area. For these statements, respondents were asked to choose how strongly they agreed or disagreed with this statement with 1 being strongly agree with the statement, and 5 being strongly disagree with the statement.

Table 6.1 shows the results of their attitudes towards congestion and air quality broken down by demographic characteristics. Respondents who self-identify as female agree more than male respondents that traffic congestion and air quality are a problem in the Atlanta area. While African-Americans and Whites, non-Hispanic agree more than Hispanic and Other ethnicities that traffic congestion is a serious problem in the Atlanta area, when it comes to the issue of air quality, African-Americans and Hispanics agree more that this is an issue compared to Whites, non-Hispanic and Other ethnicities. While there is almost unanimous agreement between the different age groups that congestion is problem, young people (18 to 24) feel more strongly compared to other age groups that air quality is a problem in the region.

Table 6.2 shows the attitudes towards traffic congestion and air quality by income. Irrespective of income, while all respondents perceive traffic congestion and air quality as serious problems, they perceive traffic congestion to be a more serious problem compared to air quality. Most of the respondents tend to strongly agree that traffic congestion is a serious problem in the Atlanta area, but agree only somewhat that air quality is a serious problem in the Atlanta area.



Table 6.1 Demographic Characteristics of Attitudes Towards Congestion & Air Quality – Sex, Race, and Age

	Characteristic	Number of Observations	Traffic Congestion Is A Serious Problem	Air Quality Is A Serious Problem
Sex	Female	2,209	1.13	1.77
	Male	2,270	1.20	2.10
	Other	36	1.17	2.36
Race	African American	1,222	1.13	1.75
	White, non-Hispanic	2,872	1.16	2.03
	Other	351	1.27	2.10
	Hispanic	183	1.19	1.94
Age Group	18 - 24	95	1.16	1.82
	25 - 34	686	1.15	2.00
	35 - 44	896	1.17	1.90
	45- 54	1,080	1.14	1.88
	55 - 64	1,063	1.13	1.91
	65 – 74	297	1.13	1.98
	75 or older	39	1.16	2.01

Note: The lower the number (closer to 1.00), the stronger the agreement with the statement. Within the survey, the respondent's attitudes were recorded on a scale of 1 (strongly agree) to 5 (strongly disagree).

Table 6.2 Demographic Characteristics of Attitudes Towards Congestion & Air Quality – Income

Income Group	Number of Observations	Traffic Congestion Is A Serious Problem	Air Quality Is A Serious Problem
Less than \$10,000	76	1.25	2.13
\$10,000 to \$19,999	120	1.20	1.83
\$20,000 to \$29,999	206	1.17	1.78
\$30,000 to \$39,999	251	1.15	1.92
\$40,000 to \$49,999	317	1.15	1.88
\$50,000 to \$59,999	380	1.20	1.88
\$60,000 to \$79,999	579	1.16	1.83
\$80,000 to \$99,999	536	1.12	1.98
\$100,000 to \$119,999	473	1.15	1.91

Income Group	Number of Observations	Traffic Congestion Is A Serious Problem	Air Quality Is A Serious Problem
\$120,000 to \$139,999	371	1.14	1.87
\$140,000 to \$159,999	240	1.10	1.94
\$160,000 or more	751	1.17	2.10

Note: The lower the number (closer to 1.00), the stronger the agreement with the statement. Within the survey, the respondent’s attitudes were recorded on a scale of 1 (strongly agree) to 5 (strongly disagree).

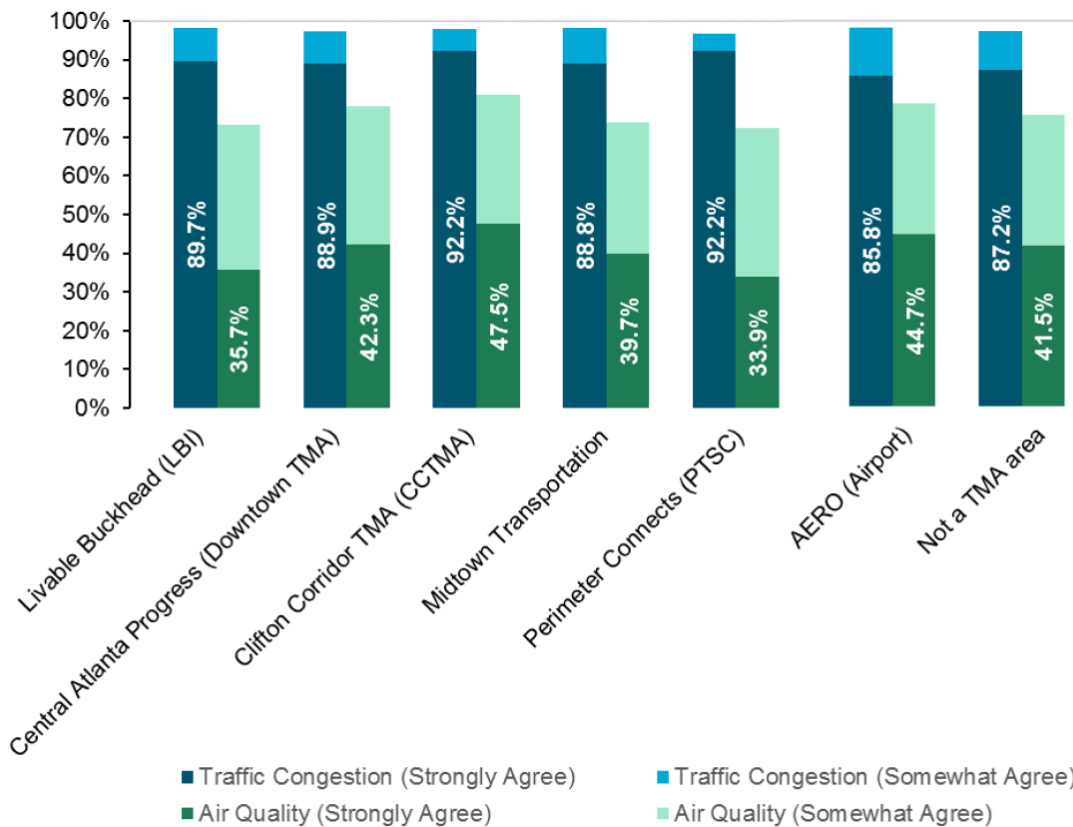
6.1.2 Geographic Characteristics of Attitudes towards Congestion and Air Quality

While nearly all respondents working in the different TMA territories strongly or somewhat agree that traffic congestion is a problem, compared to the other TMAs, respondents who work in the CCTMA and the AERO TMA agree the most with the statement that air quality is a major problem in the Atlanta area (

Figure 6.1). ASAP+ data is not included as the number of responses to this question are too low to report a significant result.

Figure 6.1 Congestion and Air Quality Attitudes by TMA Territory

(n=4,628)



6.2 Travel Attributes Important to Commute Mode Choice

In considering the travel attributes that are important to choosing the type of transportation used to get to work, while cost of travel and using travel time productively was considered important, overwhelmingly, the dependability of transportation mode was extremely important (Table 6.3).

Table 6.3 Factors that Influence Travel Mode

Mode Choice Influence Factor	Average Importance
Cost of travel	3.78
Travel comfort	4.07
Flexibility in when you travel	4.46
Total time to make the trip	4.49
Dependability	4.66
Avoiding travel stress	4.22
Using travel time productively	3.75

Note: The higher the number (closer to 5.00), the more important that factor on a scale of 1 to 5.

- In breaking down the choice of mode by gender, race, and household income, the following observations can be made (Table 6.4);
- Across the seven factors, and the different characteristics, there is the most consistency regarding travel flexibility, travel time, and dependability (most people value those factors similarly);
- Across the seven factors, and the different characteristics, there is the most inconsistency regarding cost of travel and using travel time productively (most people value those factors differently);
- Respondents identifying as female, African Americans, and respondents with a household income of less than \$60,000 consider cost of travel the most when deciding commuting mode;
- Just under half of White, non-Hispanic respondents let the ability to use travel time productively influence their mode choice, while it is much higher for other groups; and
- Across the board, respondents are looking for a dependable transportation mode that takes the least amount of time (both of those factors average 15 to 30 percent higher than travel cost).



Table 6.4 Factors that Influence Travel Mode by Demographics

	Characteristic	Cost of Travel	Travel Comfort	Flexibility in when you travel	Total Time to Make Trip	Dependability	Avoid Travel Stress	Using travel time productively
Sex	Female	66.7%	78.0%	89.1%	90.7%	94.8%	82.2%	67.8%
	Male	61.4%	70.2%	83.2%	86.5%	90.9%	73.2%	56.4%
	Other	63.5%	61.9%	75.1%	89.6%	88.8%	82.4%	45.3%
Race	African American	76.5%	82.6%	87.4%	90.4%	94.1%	86.3%	75.1%
	White, non-Hispanic	53.1%	68.1%	84.8%	86.2%	92.8%	71.7%	49.9%
	Other	64.7%	72.9%	88.5%	91.0%	93.0%	76.5%	68.8%
	Hispanic	71.0%	75.4%	85.7%	91.3%	88.9%	79.5%	66.6%
Household Income in 2017	Less than \$60,000	76.0%	76.2%	82.8%	87.9%	91.3%	81.8%	70.5%
	More than \$60,000	57.3%	72.6%	88.2%	89.2%	94.0%	75.8%	57.3%

6.3 Benefits of Transportation Alternatives

When considering alternatives to driving alone, the benefits accrued by society is different from the benefits accrued by the individual. While one in three respondents (33.6 percent) were not sure what benefits society accrued when considering transportation alternatives, when it came to their personal benefits, only 7.7 percent were not sure. While three in four respondents (74.8 percent) felt that reduction in traffic and air pollution are the greatest societal benefits, 66.9 percent of respondents said that at a personal level, saving money and avoiding stress were the greatest benefits from choosing a transportation alternative. Table 6.5 shows the top ten societal and individual benefits when using transportation alternatives.

Table 6.5 Benefits of Transportation Alternatives

Societal Benefit	Percent	Personal Benefit	Percent
Less traffic, less congestion	44.8	Avoid stress	34.3
Reduce air pollution, help the environment	29.9	Save money	32.6
Less stress, less road rage	8.0	Use travel time productively (e.g., read, work, sleep)	16.7
Saves money, cost savings	5.1	Get exercise, health benefits	15.3
Companionship/Socialization/ Sense of community	4.6	Less traffic/congestion/don't have to deal with it	11.7
Reduce accidents, improve travel safety	4.6	Less wear and tear on car	9.6
Shorter commute time, quicker	3.2	Faster, saves time	9.3
Better quality of life/more transit options	2.6	Have companionship when they travel	7.1
Reduce greenhouse gases, reduce carbon footprint	2.4	Don't have to park, look for parking, worry about parking	3.3
Economy/creates jobs	1.9	Flexibility with travel time, comes frequently, always running, reliable	3.3



7.0 Awareness of Transportation/Commute Informational Messaging and Applications

7.1 Recall of Commute Advertising and News Reports

Commuters in the Atlanta region can learn about commute issues and information resources in a variety of ways. One method is through commute information advertising and news reports disseminated through media channels. The RCS included a series of questions to inquire about respondents' awareness of such advertising and media outreach.

Just under three in ten (28 percent) respondents said they saw or heard advertising or news reports about transportation in the Atlanta region in the year prior to the survey. This was slightly lower percentage than the 32 percent who recalled advertising or news reports in the 2014 survey. A notable difference in the two years, however, is the much higher share of 2019 respondents who were not sure if they had heard or seen any ads or reports; in 2019, 16 percent were not sure, compared with 2 percent who were not sure in 2014.

7.1.1 Message Recall

Respondents who recalled some advertising or news report were then asked what messages they recalled. They were not provided a list of messages, but were asked an open-ended, unaided question to describe the message in their own words. About half (51 percent) who recalled advertising or reports could cite a specific message. Figure 7.1 lists messages that respondents mentioned, divided into three categories: general rideshare messages, commute services messages, and regional infrastructure initiatives. Responses named by less than 1 percent of respondents are not shown.

General Commute Alternatives Messages – The top message noted in the general rideshare category was to *consider or try using a carpool, vanpool, or public transit*; this message was recalled by 8 percent of respondents. A close second was the general message of *public transit, MARTA, or another bus/train*, cited by 6 percent of respondents. Four percent said they recalled a message that *travel options are available*.

Commute Service Messages – The most common message recalled in the commute services category was for *help finding a carpool or vanpool partner*. This was cited by 7 percent of respondents. Three percent of respondents mentioned one of the *Commuter Rewards subsidy programs*, which include the \$25 Commuter Prizes program and the \$40-\$60 Carpool Rewards gas cards. Two percent mentioned a message about *transit subsidies*, 1 percent recalled a message about the *Cash for Commuters \$5 per day program*, and 1 percent mentioned a message about *contacting Georgia Commute Options*.

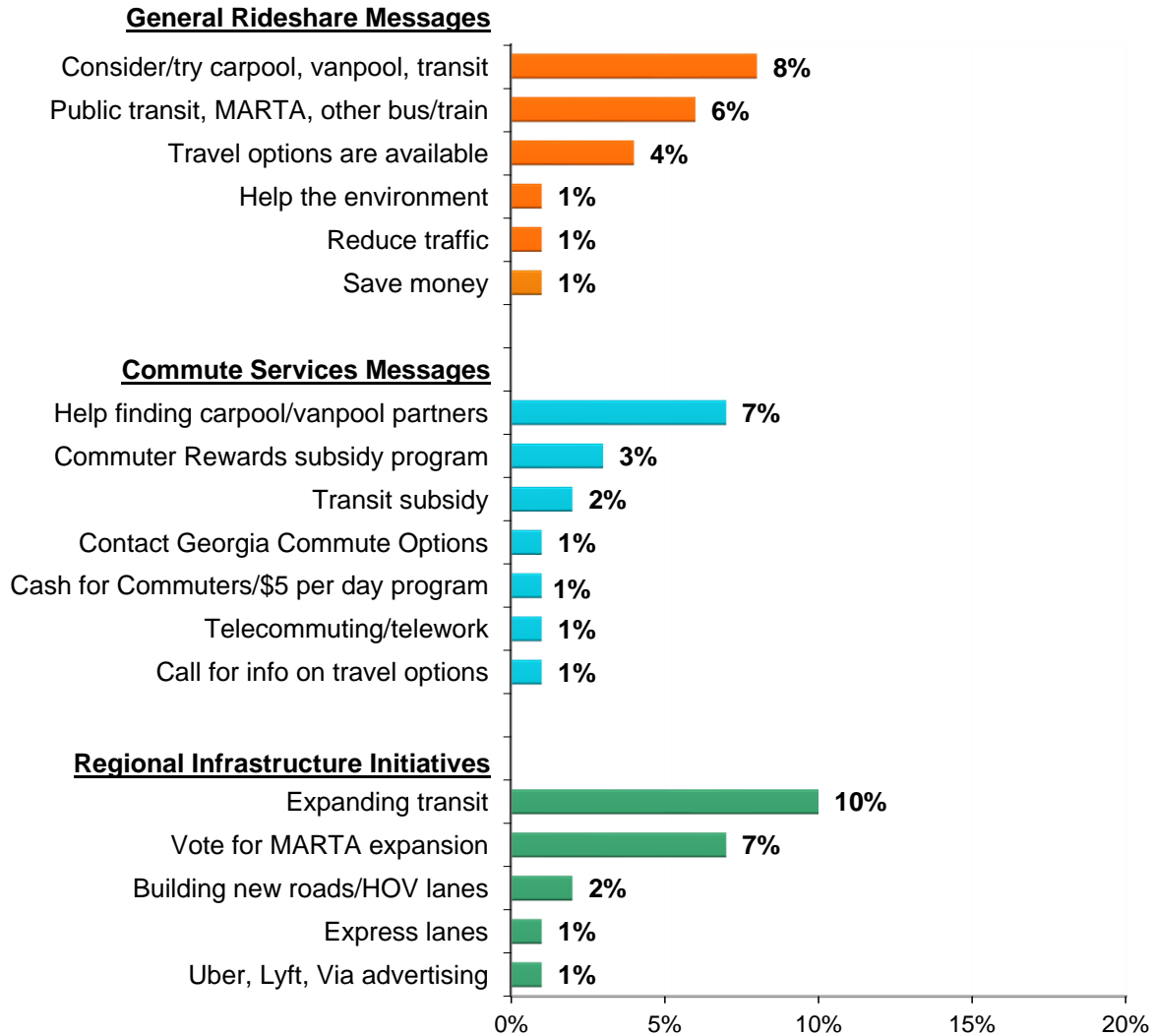
Regional Infrastructure Initiatives – The third category, related to regional infrastructure, garnered the highest message recall. One in ten (10 percent) respondents recalled a general message about *expanding transit in the region* and another 7 percent mentioned the specific message to *vote for MARTA expansion*. Two percent mentioned messages about *building new roads or HOV lanes*, 1 percent cited a message about *Express lanes*, and 1 percent saw or heard an *advertisement for Uber, Lyft, or Via ride-hailing services*.



Figure 7.1 Transportation Service or Information Advertising/News Report Messages Recalled

Note: Scale extends only to 20 percent to highlight difference in responses

(n = 1,335; multiple responses permitted)



7.1.2 Advertising and News Report Sources/Media

Table 7.1 presents the primary sources or media through which respondents heard or saw transportation information advertising or news reports. The most common 2019 source was radio, named by nearly half (48 percent) of all respondents. The other top sources, named by about three in ten, were television (31 percent) and social media (28 percent). Two in ten (21 percent) saw the ad on a billboard, 15 percent named a website as the source, and 14 percent said they saw the ad or news report in a newspaper. One in ten cited email (11 percent), Employer break room poster (9 percent), or Employer Intranet (9 percent) as the source and 6 percent mentioned Pandora or Waze.



Table 7.1 Advertising and News Report Sources/Media – 2014 and 2019

(Shaded percentages indicate statistically higher percentages between 2014 and 2019 for sources named; multiple responses permitted)

Source/Media	2019	2014
Radio	48%	41%
Television	31%	39%
Social media	28%	1%
Billboard	21%	12%
Website	15%	4%
Newspaper	14%	7%
Email	11%	3%
Employer/break room poster	9%	6%
Employer Intranet	9%	1%
Pandora/Waze	6%	0%
Video (YouTube or promotional video)	2%	0%
On bus/train, public transit	1%	8%
Other *	2%	2%

* Each response in the “Other category” mentioned by less than one percent of respondents.

Table 7.1 also shows sources named in the 2014 RCS. Nearly all sources were named substantially more in 2019 than in 2014. Note, however, that in the 2014 telephone survey, respondents were asked an open-ended question and telephone interviewers recorded the responses. In 2019, when the survey was conducted as a self-administered Internet survey, respondents were shown the list of sources and asked to check as many as applied. This change in methodology affected the increase in some of these sources.

Growth was particularly noted for social media; 28 percent of respondents mentioned this source in 2019, compared with only 1 percent in 2014, and for other digital media (website, email, Employer Intranet, Pandora/Waze). Given the general expansion in use of digital media over the past five years, some growth in visibility and use of these sources seems logical, even accounting for the change in survey method. Two sources were named by fewer respondents in 2019 than 2014. Television was named by 31 percent of 2019 respondents, a drop of eight percentage points since 2014 (39 percent). Fewer respondents cited signs on transit vehicles as the source. 1 percent of mentioned this in 2019, compared with 8 percent in 2014.

7.2 Transportation Messaging Impact

7.2.1 Commute Actions Taken After Hearing or Seeing Transportation Messaging

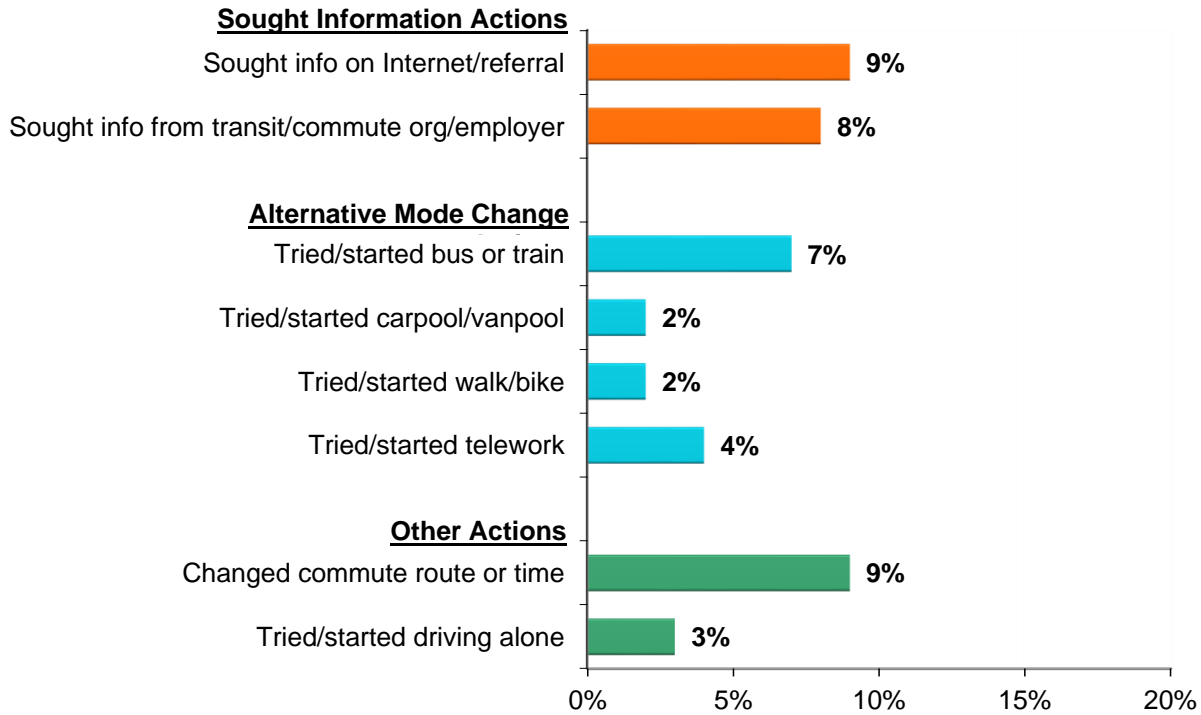
Respondents who recalled specific transportation messaging were asked if they had taken any actions to try to change how they traveled around the Atlanta region after seeing or hearing the messages. Three in ten (30 percent) of these respondents, equating to about 9 percent of all regional commuters, said they took one of the actions listed.



For most respondents, the action they took was to seek more information on commuting options or services (Figure 7.2). One in ten (9 percent) sought information on the Internet or through a referral from a family member, friend, or co-worker. Eight percent sought information from a transit agency, commute service organization, or from their employer.

Figure 7.2 Travel Change Actions Taken After Hearing/Seeing Transportation Messaging

(Base is commuters who recalled messaging; n = 1,470; multiple responses permitted)



Twelve percent of the respondents who recalled messages (163 respondents) said they tried or started using one or more alternative modes. Seven percent started or tried riding a bus or train, 2 percent tried or started carpooling or vanpooling, and 2 percent tried or started bicycling or walking. Four percent tried or started teleworking. While these respondents equaled just 3.7 percent of all regional respondents, they represent more than 103,000 commuter’s regionwide.

Note, however, that the question asked only about “travel around the Atlanta area.” Analysis of the primary commute modes for respondents who answered this question showed that 80 percent of commuters who sought travel information and 72 percent of commuters who said they tried or started using an alternative mode were primarily driving alone to work at the time of the survey. Thus, some information actions and some new or increased use of alternative modes could have been for non-commuting trips or for occasional use of alternative modes for commuting.

Some respondents said they made a travel change that did not necessarily include use of an alternative mode. Three percent said they tried or started driving alone. One in ten (9 percent) changed the route or time that they traveled to work. Some of the respondents who changed their route or time might have done so to use transit or carpool, but 90 percent of respondents who reported making this change primarily drove alone to work, thus it seems more likely that these route and time changes were made to avoid congested routes or times of day.



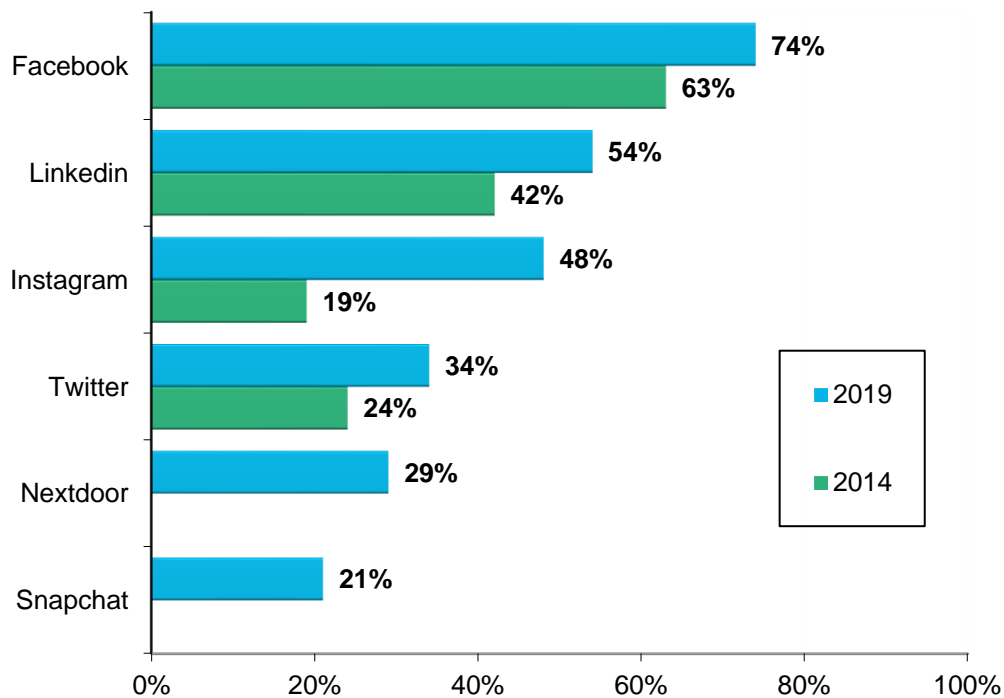
7.3 Social Networking

The 2019 survey asked several questions to examine the growing use of social networking and traveler information applications. As defined in this report “applications” refers to mobile applications, but also websites, desktop, and other forms of the technology services. Use of social networking applications has become a daily part of life for many people and the networking apps have become a common source of information. Survey respondents were shown a list of six applications and asked to indicate those with which they had accounts.

Nearly nine in ten (87 percent) of all respondents said they had an account with at least one of the six applications (Figure 7.3). The most common application was Facebook, used by three-quarters (74 percent) of respondents. LinkedIn, used primarily for work-related/professional interactions, was noted by 54 percent of respondents. Almost half (48 percent) had an account with Instagram and 34 percent had a Twitter account. Three in ten (29 percent) mentioned having a Nextdoor account and 21 percent had a Snapchat account.

Figure 7.3 Social Networking Applications – Percentage with Accounts in 2019 and 2014

(2019 n = 5,079, 2014 n = 4,814)



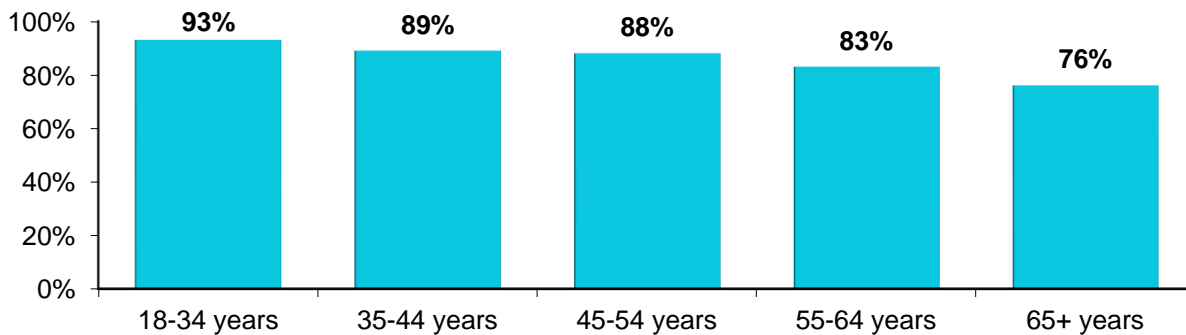
Use of social networking applications had increased from 2014, when the social networking question was first asked. In that survey, 78 percent of respondents reported having at least one account. As illustrated in Figure 7.3, use of all applications had increased since 2014. Nextdoor and Snapchat were not in common use in 2014.

7.3.1 Use of Social Networking Applications by Respondent Characteristics

Use of social networking applications declined with increasing respondent age (Figure 7.4). Ninety-three percent of respondents who were younger than 35 years had accounts, compared with 88 to 89 percent of respondents who were between 35 and 54 years old. Use of the apps dropped further among respondents who were between 55 and 64 years (83 percent) and respondents who were 65 years or older (76 percent).

Figure 7.4 Use of Social Networking Applications by Respondent Age

(18-34 n = 852, 35-44 n = 971, 45-54 n = 1,180, 55-64 n = 1,179, 65 and older n = 384)



Differences in Use by Demographics – There were few other differences in use of social networking apps by other respondent characteristics. A higher share of female respondents (90 percent) used social networking than did male respondents (86 percent). But there was no distinct pattern of social networking by respondents’ annual household income. Race/ethnicity also did not appear to have an influence.

Differences in Use by Home and Work Location – Respondents who lived in one of the five core counties of the region were slightly more likely to use a social networking application than were other respondents; 89 percent of core resident respondents had an account with at least one application, compared with 84 percent of respondents who lived outside the core counties. Use also was slightly higher among respondents who worked in a core county; 89 percent of core workers had a social networking application account, compared with 84 percent of respondents who worked outside the core counties.

7.4 Travel/Trip Information Applications

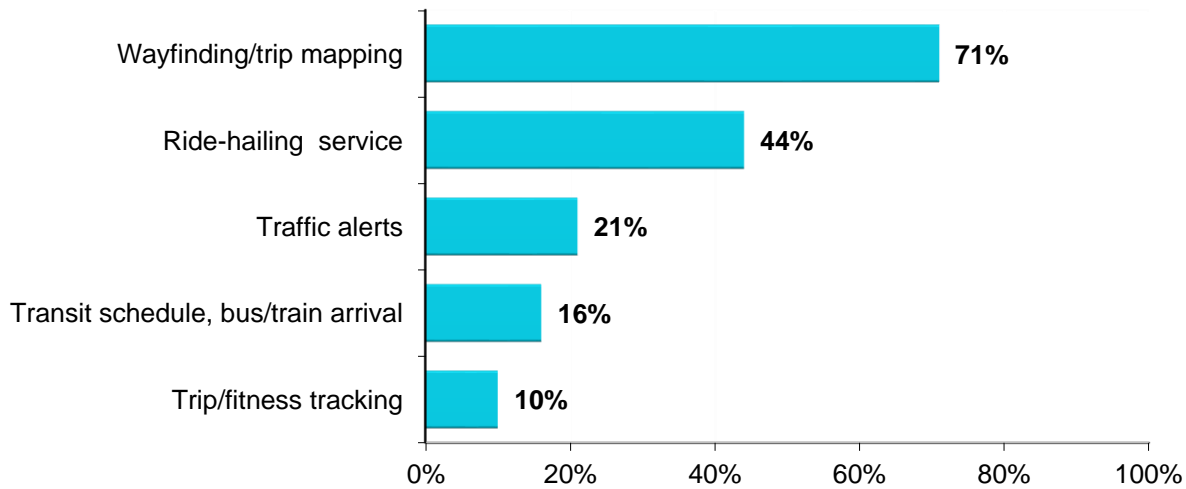
The wide-scale availability of smartphones and other mobile devices has created an opportunity for commute information and service organizations to deliver an extensive range of information via mobile applications, enhancing commuters’ access to travel information in real time and before and during a trip. The 2019 RCS added a new question to identify applications that regional commuters used. Survey respondents were shown a list of five applications and asked to indicate those they had used.

Eighty-four percent of all respondents said they had used at least one of the listed applications (Figure 7.5). The most common application was for wayfinding or mapping applications, such as Google maps and Waze; 71 percent of respondents had used this type of application. About four in ten (44 percent) had used an application for a ride-hail service such as Uber, Lyft, or Via. Traffic alerts delivered via text message or other means had been used by 21 percent of respondents and 16 percent had used an application that tracked transit schedules or provided “next bus/train” information on arrival time. About one in ten (10 percent) had used a trip or fitness tracking app.



Figure 7.5 Travel/Trip Information Applications – Percent Use in 2019

(n = 5,071)

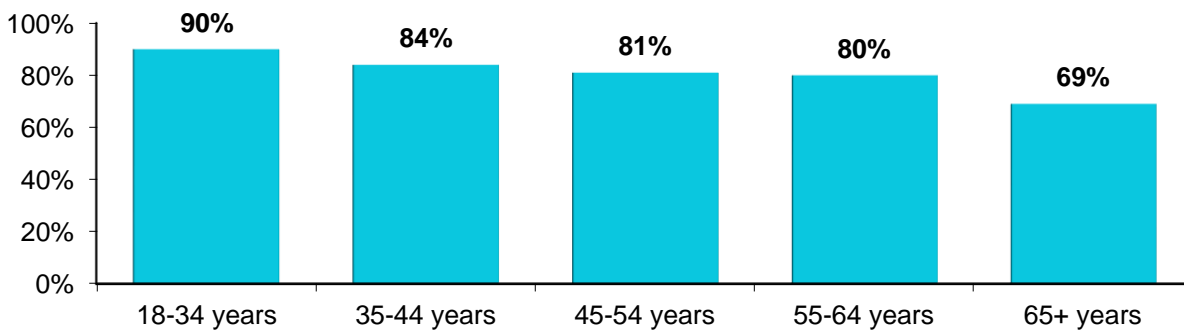


7.4.1 Use of Travel/Trip Information Applications Among Respondent Sub-Groups

Use of Travel/Trip Information Applications by Age – As was noted for use of social networking app, use of travel/trip information applications also declined with increasing age (Figure 7.6). Nine in ten respondents who were younger than 35 years had accounts, compared with about 80 to 84 percent of respondents who were between 35 and 64 years. Use of the apps dropped further among respondents who were 65 years or older (69 percent).

Figure 7.6 Use of Travel/Trip Information Applications by Respondent Age

(18-34 n = 852, 35-44 n = 971, 45-54 n = 1,180, 55-64 n = 1,179, 65 and older n = 384)



Use of individual applications varied substantially by age, with younger respondents typically using the apps more than did older respondents (Table 7.2). The only application that exhibited an increasing pattern with increasing age was traffic alert; 27 to 28 percent of respondents who were 55 years or older had used this application, compared with 23 percent of respondents who were between 45 and 54 years old and less than two in ten respondents were 35 years old or younger.



Table 7.2 Use of Travel/Trip Information Applications by Respondent Age

Trip/Travel Application	Respondent Age				
	18-34 years	35-44	45-54	55-64	65+ years
Use any trip/travel info app	90%	84%	81%	80%	69%
Wayfinding	79%	73%	68%	66%	52%
Ride-hailing service	60%	49%	38%	32%	19%
Transit schedule arrival	21%	16%	13%	18%	14%
Traffic alerts	16%	19%	23%	28%	27%
Trip/fitness tracking	11%	13%	9%	8%	4%

Use of Travel/Trip Information Applications by Other Demographics – Differences in use of the apps by demographic characteristics were small. Non-Hispanic White respondents (85 percent) and African American/Black respondents (84 percent) reported higher use of apps than did either Asian (81 percent) or Hispanic (80 percent) respondents. Use of the apps were marginally related to income; 91 percent of respondents with annual household incomes of at least \$140,000 had used one of the apps, compared with 85 percent of respondents with incomes between \$80,000 and \$139,999, and 80 percent of respondents with incomes below \$80,000. Female and male respondents were equally likely to report using one or more app.

Use of Travel/Trip Information Applications by Home and Work Location – A higher share of respondents who lived in the five core counties (85 percent) had used a travel/trip information app, compared with 78 percent of respondents who lived outside the core counties. A larger share of respondents who worked in the core counties (88 percent) used these applications than did respondents who worked outside these core counties (80 percent). The propensity of core resident and worker respondents to use applications likely is related to the age profiles of each area, but also to the wide availability of non-driving services, such as ride-hailing and transit schedule information, that were the subject of some of the apps.

Use of Travel/Trip Information Applications by Commute Mode and Commute Distance – Overall use of travel/trip information apps was high among respondents of all commute distance groups and among all commute mode groups (Table 7.3). The applications listed for the question covered all travel modes and the question did not ask if respondents had used the applications for commuting. Thus, the question covered a broad range of app types and situations.

Use of some individual apps, however, did vary substantially by commute mode. Use of traffic alerts was higher among commuters who drove alone (22 percent) and those who carpooled (19 percent) than among transit riders (14 percent) and bike/walk commuters (7 percent). Most other applications had higher use rates among alternative mode commuters. Transit and bike/walk commuters used ride-hailing and transit schedule arrival apps at much higher rates than did drive alone and carpool commuters. Use of wayfinding apps was high among both drive alone commuters and those who used alternative modes; two-thirds to three-quarters of respondents used this type of app.



Table 7.3 Use of Travel/Trip Information Applications by Primary Commute Mode

Trip/Travel Application	Primary Commute Mode			
	Drive Alone	Carpool	Transit	Bike/Walk
Use any trip/travel info app	83%	79%	90%	93%
Wayfinding	73%	66%	64%	74%
Ride-hailing service	42%	53%	58%	62%
Traffic alerts	22%	19%	14%	7%
Transit schedule arrival	11%	22%	65%	45%
Trip/fitness tracking	9%	12%	12%	28%



8.0 Awareness and Use of Regional and TMA Commute Assistance Resources

Commuters in the Atlanta region have access to many organizations and services that help with finding travel options for commuting. The survey explored respondents' awareness of such organizations and services, through both unaided and aided questions. All respondents were asked an unaided question about regionally available organizations or resources that provided commute information. They then were asked if they had heard of Georgia Commute Options (GCO), the organization that provides regional incentives and other commute services throughout the Atlanta metropolitan region. Finally, respondents also were asked about local commute information organizations that provided services in the areas where they worked.

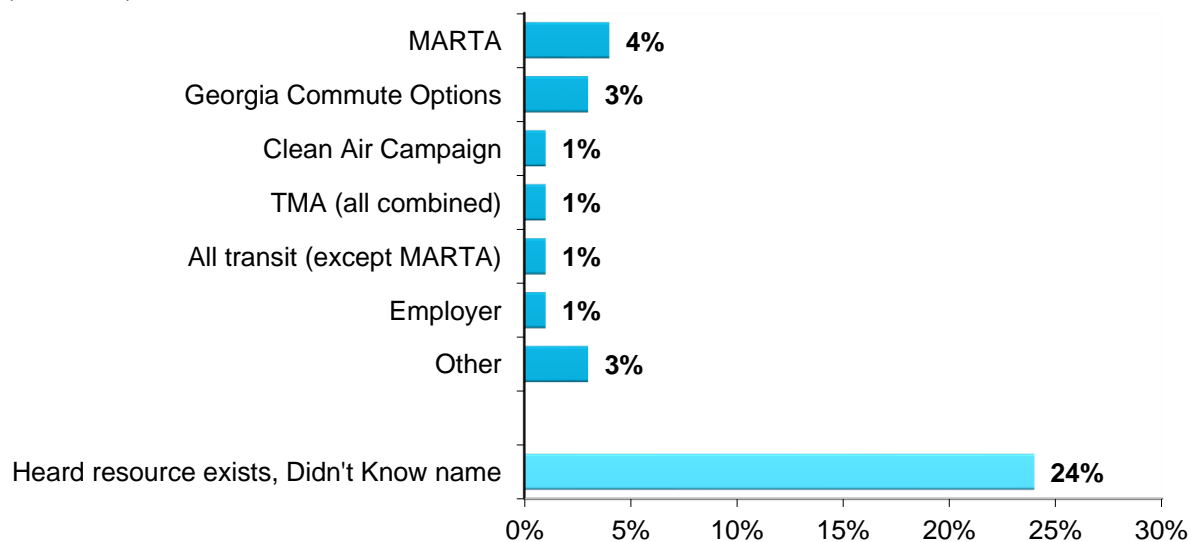
8.1 Unaided Awareness of Commute Assistance Resources

Respondents first were asked, unaided, if they were aware of any programs, organizations, telephone numbers, or websites in the Atlanta region that provide information or resources to help with travel to work. One-third (35 percent) of respondents said they knew such an organization or resource existed, but only 11 percent could provide a name; 24 percent said they believed a resource was available but did not know the name. The remaining 65 percent said they did not know of any resources.

General awareness of regional commute information resources was slightly higher in 2019 (35 percent) than in 2014 (31 percent), but awareness of resources by name declined since 2014, when 26 percent of respondents could cite one or more organizations by name. Figure 8.1 presents awareness of individual resources named in 2019.

Figure 8.1 Unaided Awareness of Regional Commute Information Resources

(n = 5,047)



Commuters named 26 separate services and organizations, suggesting they seek information from a wide range of regional and local resources. But only three individually garnered one percent or more of total responses. MARTA, the regional transit agency, and Georgia Commute Options (GCO), the regional commute information and assistance program, were named by 4 percent and 3 percent of all respondents,

respectively. One percent mentioned Clean Air Campaign, the commute information organization that preceded Georgia Commute Options. One percent cited one of the seven local transportation management agencies (TMAs) that provide commute assistance services in defined employment areas.

8.2 Awareness and Use of Georgia Commuter Options (GCO)

Following the unaided question on regional commute services, the survey asked an aided question; “Have you heard of a program in the Atlanta region called Georgia Commute Options?” As noted earlier, some commuters named GCO as a regional information source that they had used without being prompted with the organization’s name. But when directly asked if they knew of GCO, 15 percent of commuters knew of the program. Three-quarters (76 percent) said they had not heard of the organization. The remaining 9 percent said they were not sure. The 15 percent awareness of GCO by name represented a drop of eight percentage points since 2014, when 23 percent knew the name. Note that the GCO program was relatively new in 2014. It is possible the higher awareness in 2014 reflected significant advertising and outreach conducted during the start-up period to acquaint commuters with the new name and the shift from the previous program.

8.2.1 Referral Sources for Georgia Commute Options

The most common source for respondents to learn about GCO was the radio; nearly half (45 percent) of respondents who knew of GCO cited this source (Figure 8.2). About one-quarter (26 percent) said they learned of GCO from their employer and 17 percent named another referral source, such as a friend, family member, or co-worker. Fourteen percent heard or saw a reference to GCO on television. Other common sources included the Internet (9 percent), a sign or billboard (7 percent), and social media (5 percent).

Figure 8.2 Aided Awareness of Georgia Commute Options

(n = 778)

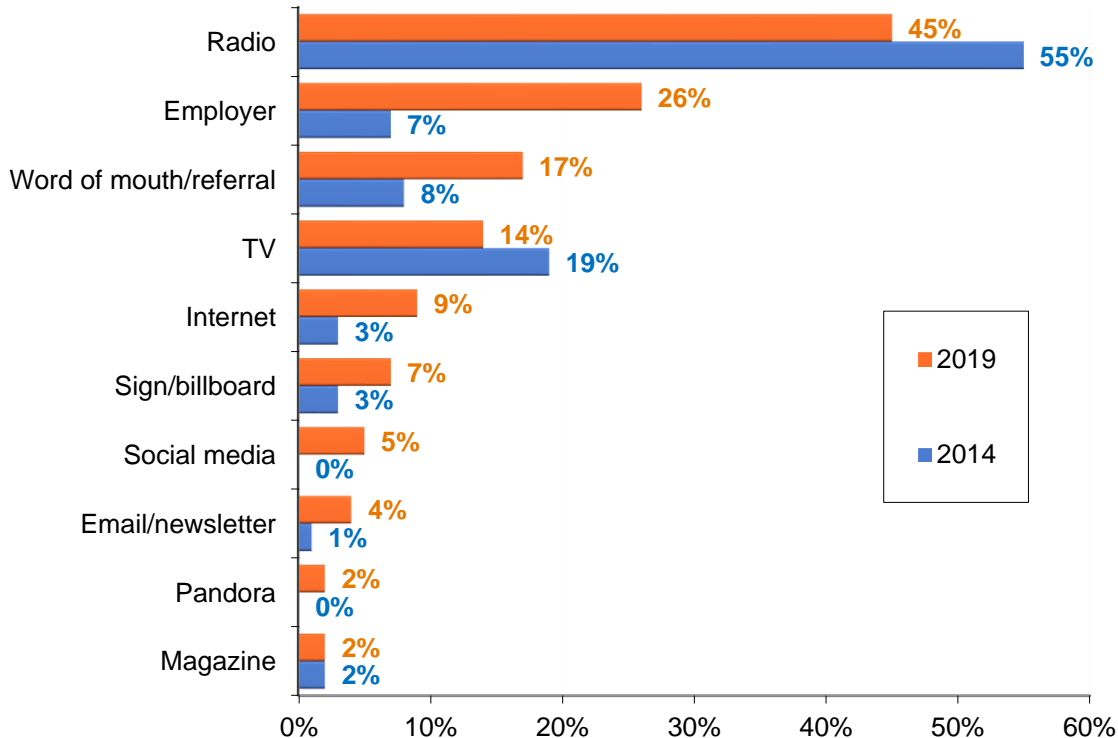


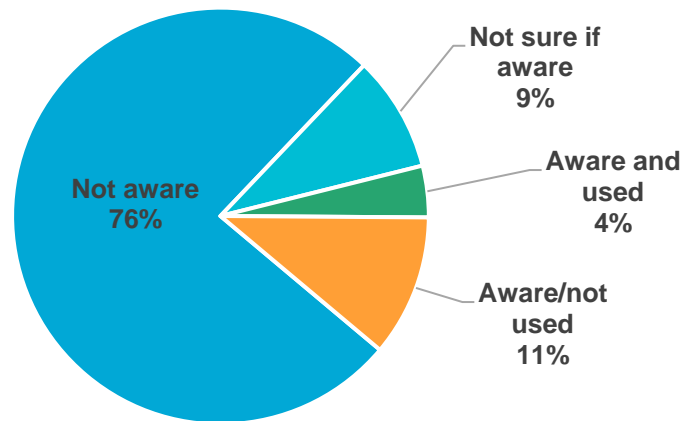
Figure 8.2 also shows the sources named by respondents in the 2014 RCS. In 2019, the two traditional media sources of radio and television both declined as referral sources, while employer, word of mouth referrals, and digital media (Internet, social media, email, and Pandora) all increased.

8.2.2 Use of GCO Services

Respondents who had heard of GCO were asked if they had used any GCO services. One-quarter (25 percent) of these respondents had used a GCO service. These commuters represented about 4 percent of all regional commuters. Figure 8.3 summarizes awareness and use of GCO across all Atlanta area commuters. About 4 percent of commuters were aware of GCO and had used GCO services. Another 11 percent were aware of the organization but had not use services. Three-quarters (76 percent) were not aware of the organization and 9 percent were not sure if GCO existed.

Figure 8.3 Summary of Awareness and Use of Georgia Commute Options

(n = 5,091)

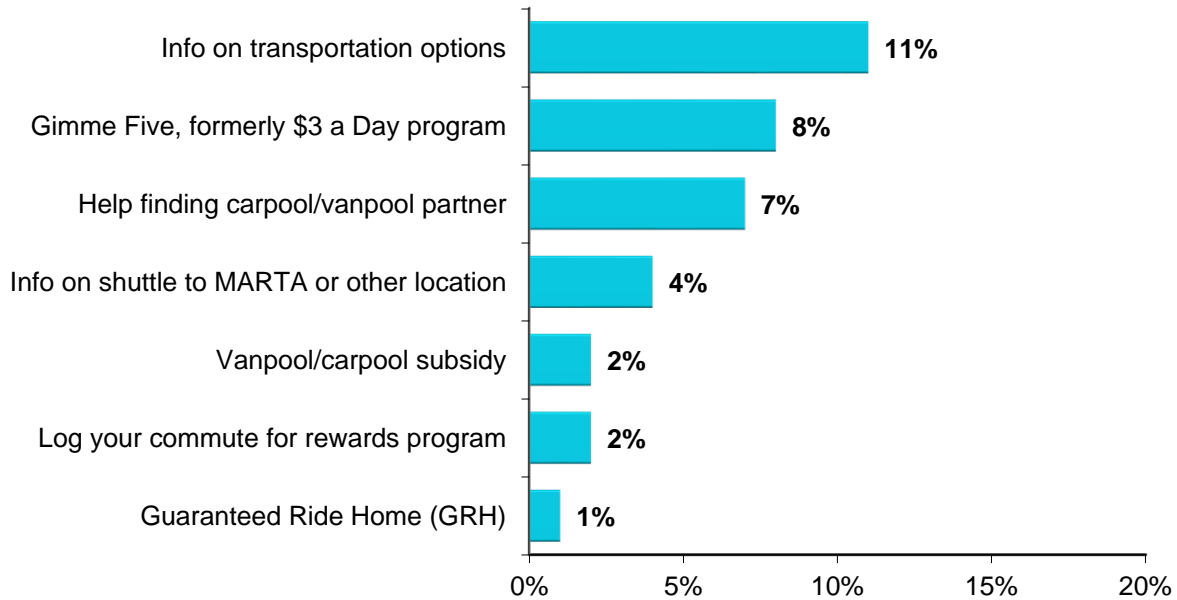


Georgia Commute Options Services Used – Figure 8.4 lists the Georgia Commute Options services that respondents mentioned using. The top GCO service was information on transportation options the commuter could use; 11 percent of commuters who knew of GCO had used this service. Eight percent had used the “Gimme Five” rewards program, which offered \$5 for each day a drive alone commuters switched to an alternative mode. This program previously had offered \$3 per day, so that program was referenced in the survey as well. Seven percent of respondents who knew GCO had used a “ridematching” service to help find a carpool or vanpool partner.

Smaller percentages of respondents mentioned receiving information on shuttle bus services to MARTA or other transit agency stations or stops (4 percent), a vanpool or carpool subsidy (2 percent), a trip tracking system that logged commute trips made in alternative modes and provided rewards for trips accumulated (2 percent), and Guaranteed Ride Home (1 percent).

Figure 8.4 Georgia Commute Options Services Used – Among Respondents Who Knew of GCO

(n = 764, multiple responses permitted for use of services;
 Note, scale extends only to 20% to highlight service percentages)



Satisfaction with Georgia Commute Options Services – Respondents who had used a GCO service were asked if the service was satisfactory. Nine in ten were satisfied with the service; 55 percent were very satisfied, and 34 percent were somewhat satisfied. One in ten (9 percent) were somewhat unsatisfied and 2 percent were not satisfied.

The reasons given by the 17 unsatisfied respondents included the following:

- Information was not targeted to my needs (7 respondents)
- Did not receive any carpool/vanpool rideshares (6 respondents)
- Did not qualify for an incentive program (4 respondents)
- Took too long to receive information or get a response (3 respondents)
- People listed on match lists did not want to carpool or add riders to their vanpool (3 respondents)
- Did not receive follow-up assistance (from GCO) (2 respondents)
- Was not able to access information or assistance by email/Internet (2 respondents)



8.3 Awareness and Use of Local Commuter Assistance Programs

Many of the commute services offered in the Atlanta region are promoted, supported, or administered by local commute program organizations. Seven organizations, referred to generally as “transportation management associations” or “TMAs,” operate as independent commute organizations, each serving a separate area of Atlanta or an employment center outside the City. They also partner with Georgia Commute Options to offer or promote some services, such as the regional GRH program and several financial incentives, such as the Gimme Five rewards program.

To test awareness and use of these TMA organizations, respondents who worked in one of the organization’s service area were asked if they had heard of the organization and if they had used any services of the program. Commuters who worked in areas outside of these TMA service areas receive commute assistance from Georgia Commute Options and were not asked about any of the seven local commute organizations. Figure 8.5 shows the general service area of each of the TMAs within the Atlanta region: Livable Buckhead (Buckhead), Downtown Connects (Downtown), Clifton Corridor Transportation Management Association (Decatur), Airport Employee Ride Options (Airport), Midtown Transportation (Midtown), and Perimeter Connects (Perimeter).

Figure 8.5 GCO Program Area and Transportation Management Associations



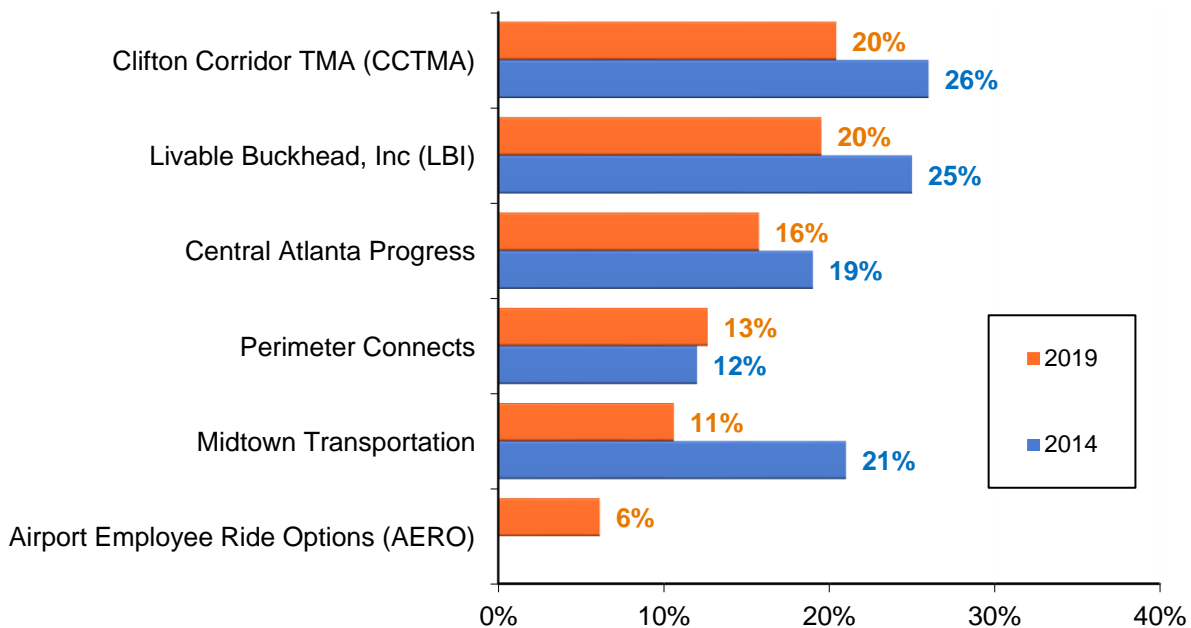
8.3.1 Awareness of Local Commute Organizations/TMAs

Four in ten (39 percent) respondents worked in one of the seven TMA areas. Figure 8.6 presents the percentage of respondents who said they had heard of the organization that served their work area, when prompted with that organization’s name. About 14 percent of respondents who worked in a TMA area had heard of the TMA that provided services in their work area. This was lower than the 21 percent who were aware of their work area TMA in 2014. However, several of the programs operated under different names in 2014. These included Livable Buckhead, which was named Buckhead Area Transportation Management Association (BATMA) in 2014, and Perimeter Connects, previously known as Perimeter Transportation and Sustainability Coalition. Downtown Connects also had a slight change; in 2014 it was known by both Central Atlanta Progress and the Downtown TMA.

Awareness of individual programs ranged from 6 percent to 20 percent of respondents who were asked about the organization. Two programs were known to at least two in ten of the target area respondents and three other programs were known to at least one in ten target area respondents. Figure 8.6 also shows the awareness percentages in 2014. While the figure appears to show declines in awareness for several of the programs, most of the drops are not statistically significant, given the sample sizes for each TMA area. Only Midtown Transportation experienced a statistically different awareness level in 2014. Note that the AERO organization did not exist in 2014, so the 2014 awareness is not applicable.

Figure 8.6 Awareness of Local Commute Assistance Program

(Clifton Corridor TMA n = 265; Livable Buckhead n = 300, Central Atlanta Progress n = 441, Perimeter Connects n = 373, Midtown Transportation n = 514, Airport Employee Ride Options n = 278; Note: Atlantic Station is excluded from the figure due to very small sample size of n = 8)



8.3.2 Use of Local Commute Organizations/TMAs

About 12 percent of respondents who knew of a TMA had used a TMA service. This equated to about 2 percent of respondents who worked in a TMA service area. Figure 8.7 lists the TMA services that

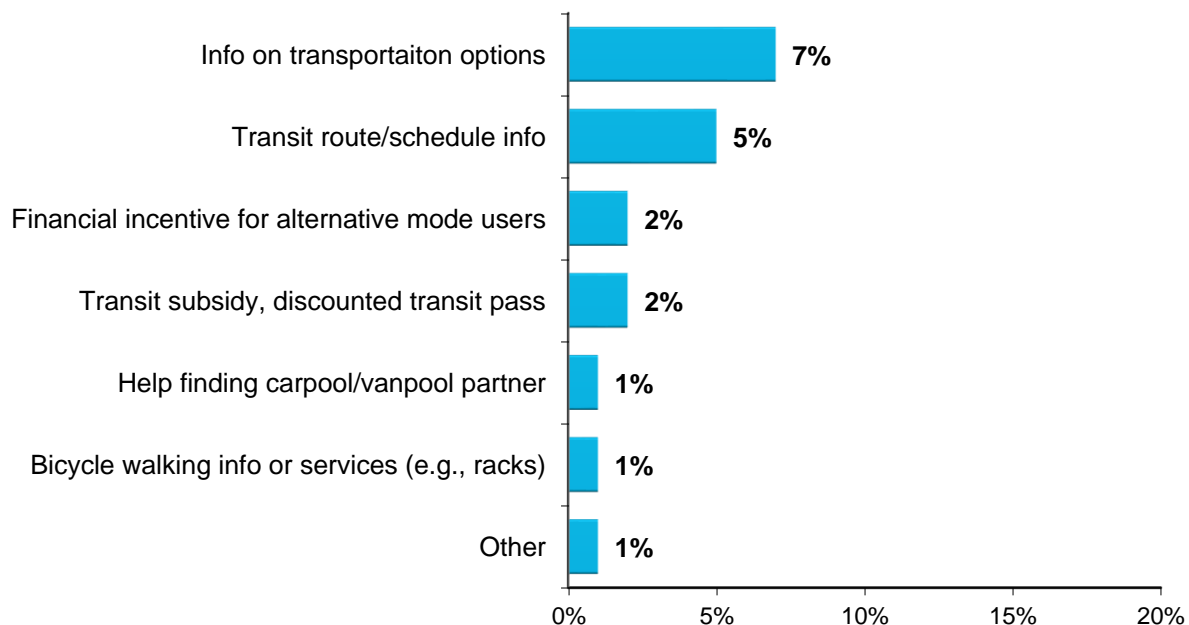


respondents mentioned using. The top TMA service was information on transportation options the commuter could use; 7 percent of commuters who knew of a TMA had used this service. Five percent obtained transit route or schedule information. Two percent said they obtained a financial incentive offered to commuters who don't drive alone to work, and 2 percent received a transit subsidy or discounted transit pass. One percent mentioned help finding a carpool or vanpool partner and information or a service to facilitate commuting by bicycle or walking.

Satisfaction with TMA Services – Respondents who had used a TMA service were asked if the service was satisfactory. Nearly all were satisfied; 44 percent were very satisfied, and 53 percent were somewhat satisfied. Only 3 percent were either somewhat unsatisfied (2 percent) or not satisfied (1 percent).

Figure 8.7 Local Commute Organization (TMA) Services Used – Among Respondents Who Knew of a TMA

(n = 364 respondents who knew of a TMA, multiple responses permitted for use of services;
Note, scale extends only to 20% to highlight service percentages)



Co-branding and Service Coordination Between Georgia Commute Options and TMAs – In interpreting the above results, it is important to note that TMA name recognition and recall of TMA services used might be complicated by the interwoven nature of TMA services with those of Georgia Commute Options. Additionally, many of the commuter-focused services that TMAs promote (e.g., regional rideshare matching, Guaranteed Ride Home, Biketober Bike Challenge, financial incentives for alternate mode users), are branded as and administered through GCO. So, while each of the TMA offers independently sponsored services, some of their most visible services would be most associated with GCO. Note, employees using services offered through a TMA or GCO at an employer site might not be aware they originate with the TMA/GCO. They may only be aware of these services and/or benefits as coming from their employer.

The [Atlanta Regional TDM Plan](#) acknowledged this issue, citing the need to “coordinate Georgia Commute Options brand marketing with individual TMA brands. While efforts are underway to integrate marketing messages, it may be difficult for a customer to identify the connection between the TMAs and the Georgia Commute Options program. The TDM Program Manager should require co-branding for regional programs to



align with the Georgia Commute Options branding guidelines. Additionally, the Georgia Commute Options branding should recognize the TMA brands when applicable.”

Finally, TMAs provide some of their services through or in conjunction with employers. Thus, it is possible some commuters who receive services that are delivered by a TMA could believe the services are provided by their employer, not recognizing the TMA’s role in the service delivery.

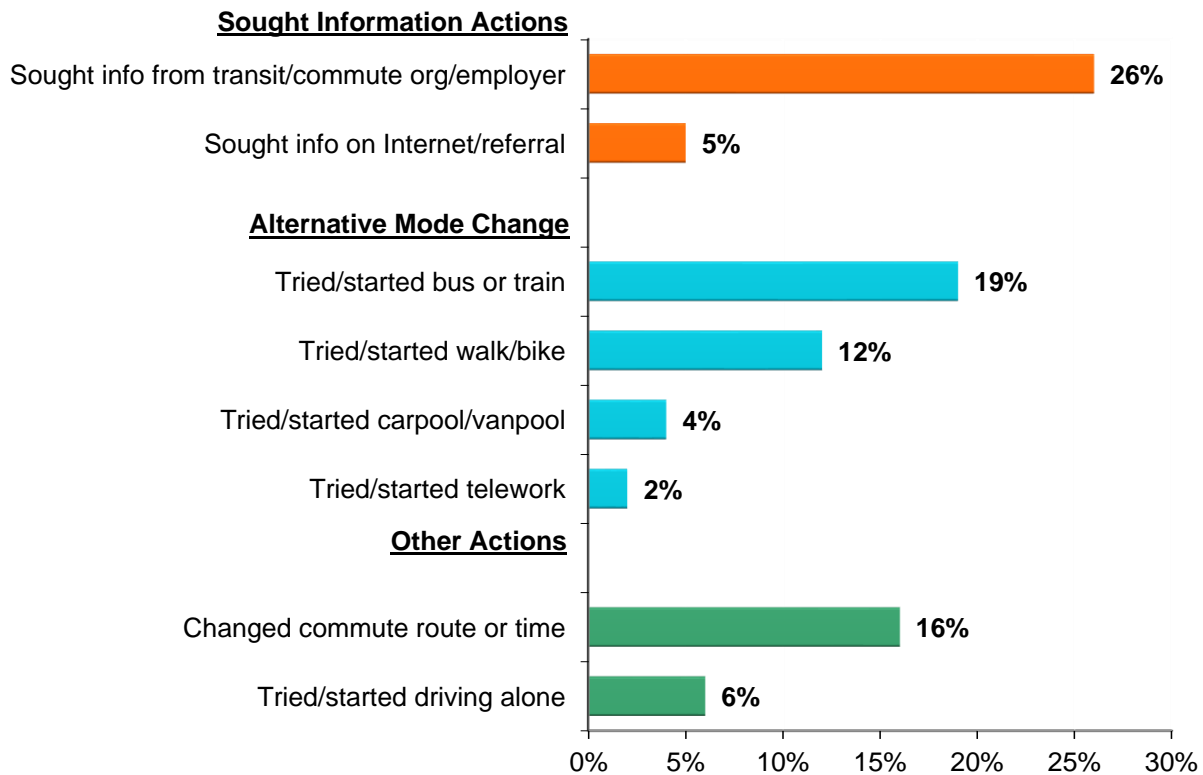
8.3.3 Commute Actions Taken After Receiving Service from GCO/TMA

Respondents who had received any services from either Georgia Commute Options or a TMA were asked if they had taken any actions to try to change how they traveled to work, after receiving the service. Note that this question asked only about changes in commute travel. A previous question asked of respondents who recalled hearing or seeing transportation advertising or news reports had asked about actions to change any travel around the Atlanta region.

Nearly two-thirds (64 percent) of these respondents said they took one of the actions listed. About three in ten respondents sought more information on commuting options or services (Figure 8.8). One-quarter (26 percent) sought information from a transit agency, commute service organization, or from their employer and 5 percent looked on the Internet or through a referral from a family member, friend, or co-worker.

Figure 8.8 Commute Change Actions Taken After Receiving GCO/TMA Services

(Base is commuters who received GCO or TMA service; n = 39; multiple responses permitted)



While the sample size for this question was small (39 respondents), a notable share of respondents said they tried or started using alternative modes. Two in ten (19 percent) tried or started riding a bus or train, 12 percent tried or started bicycling or walking, and 4 percent tried or started carpooling or vanpooling. Two percent tried or started teleworking.

Some respondents said they made a commute change that did not necessarily include use of an alternative mode. Three percent said they tried or started driving alone to work. One in ten (9 percent) changed the route or time that they traveled to work.

8.4 Awareness and Use of Regional Incentive Programs

Several organizations in the Atlanta region offer financial incentives to commuters who use alternative modes for commuting. Some of the programs are available only to commuters who switch from driving alone to alternative modes, while others are offered to both new and existing alternative mode users. These programs are promoted by Georgia Commute Options, which administers most of the services, but also by TMAs, MARTA, the Atlanta Regional Commission, and other organizations that have contact with commuters. The RCS asked a series of questions about incentive programs to explore general unaided awareness of any programs, aided awareness of a specific list of programs, and program participation.

8.4.1 Unaided and Aided Awareness of Incentive Programs

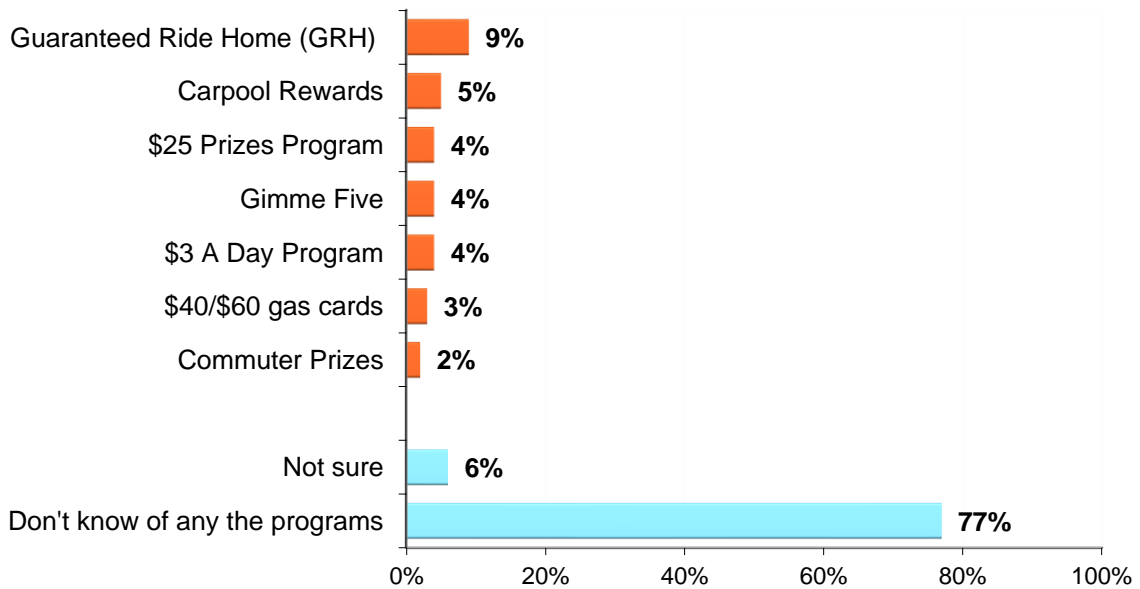
When asked if they knew of any programs in the Atlanta region that offered financial incentives for commuters who used alternative modes for commuting, 30 percent said they believed such a program existed, about the same percentage as reported some awareness of these programs in 2014 (26 percent). Most respondents could not name the program – only 8 percent of those who believed a program existed could provide the name. Three individual organizations were mentioned by one percent or more of respondents: 3.6 percent named Georgia Commute Options, 1.8 percent said “employer,” and 1.1 percent named Clean Air Campaign, the organization that provided regional incentives prior to Georgia Commute Options. All other programs, including regional incentive programs that do exist, were named individually by at most 0.3 percent of respondents.

Respondents had higher awareness of individual programs when presented a list of names (Figure 8.9). Overall 16 percent of respondents reported knowing one or more of the incentive programs listed. One in ten (9 percent) had heard of the regional Guaranteed Ride Home program. About one in twenty were aware of Carpool Rewards (5 percent), the \$25 Prize Program (4 percent), Gimme Five (4 percent), and the \$3 A Day Program. Three percent knew of the \$40/\$60 gas cards and 2 percent had heard of Commuter Prizes.



Figure 8.9 Aided Awareness of Regional Financial Incentive Programs

(n = 5,081)

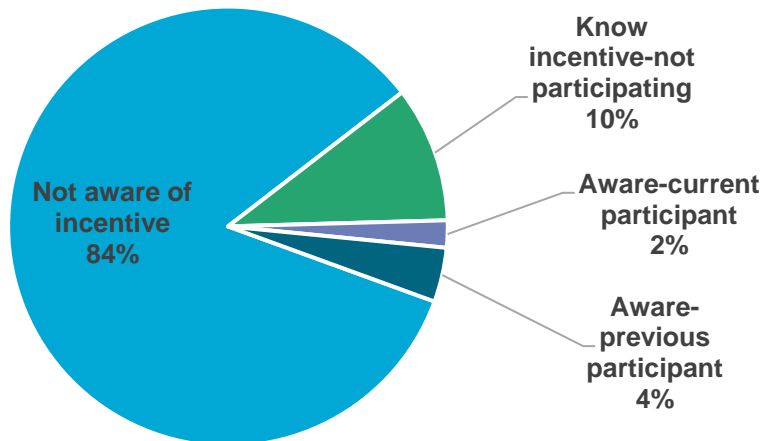


8.4.2 Participation in Regional Incentives

About four in ten (39 percent) respondents who had heard of any of the incentives said they currently or had previously participated in one of the programs. These commuters represented about 6 percent of all regional commuters. Figure 8.10 summarizes awareness and participation in regional incentives across all Atlanta area commuters. Two percent of all regional commuters said they were currently participating in a regional incentive and 4 percent said they previously participated. Another 10 percent were aware of the incentives but had not ever participated in any of them. Eighty-four percent were not aware of any of the incentive programs listed.

Figure 8.10 Awareness and Participation in Regional Financial Incentive Programs

(n = 5,084)



8.4.3 Why Not Participate in Incentive Programs?

Respondents who knew of incentives but had not participated gave a variety of reasons for not registering (Figure 8.11). The reasons, which were reported in an open-ended format, could be grouped into three broad categories: issues related to personal travel needs or situations, issues or personal preferences the respondent had with use of alternative modes, and issues related directly to incentive characteristics of the incentive programs.

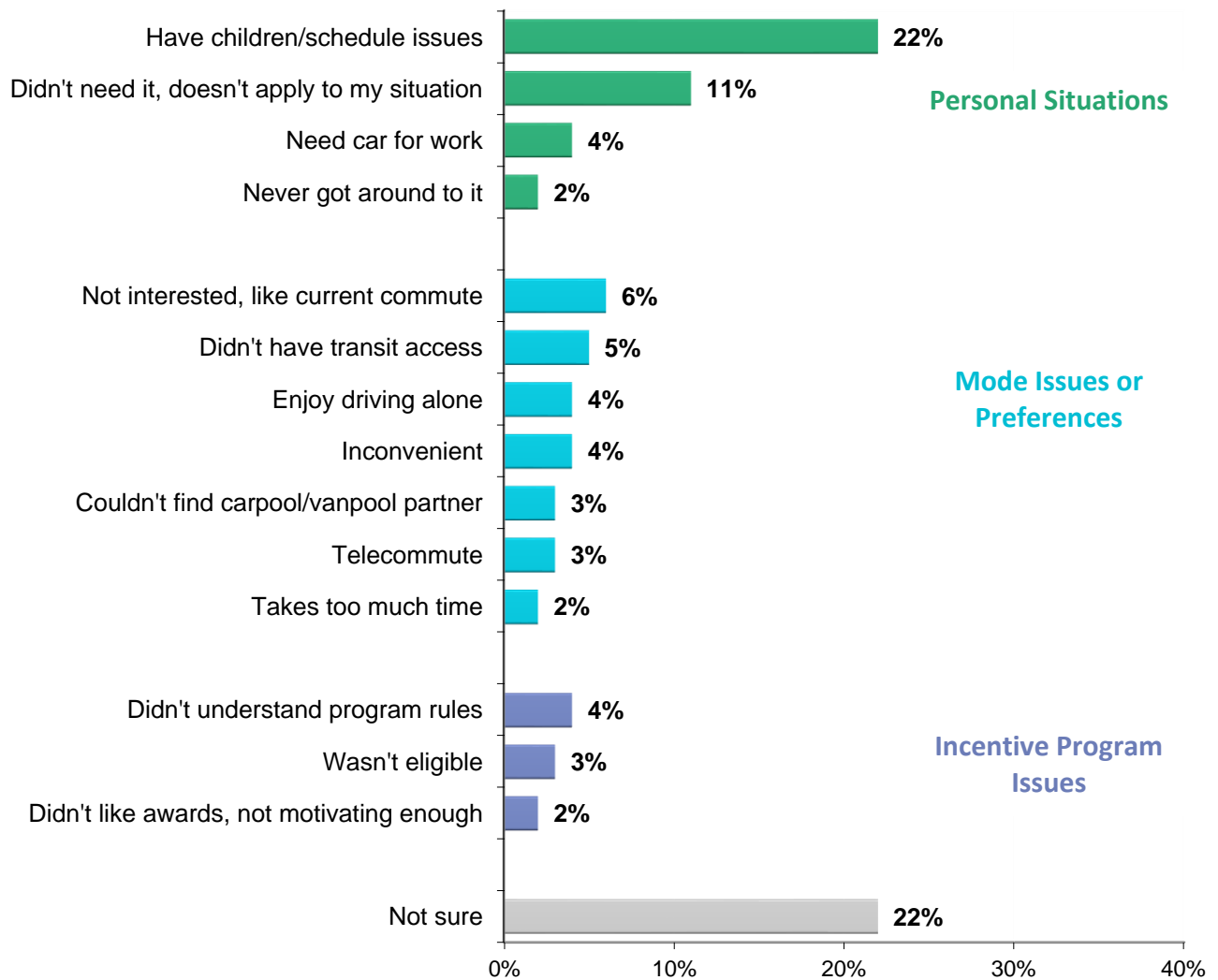
22 percent of respondents cited childcare or other schedule constraints as a limitation for participation. About one in ten (11 percent) said they didn't need the incentive or that it did not apply to the respondent's personal travel situation. Four percent could not use an alternative mode because they needed a car for work and 2 percent might have been interested but "never got around to" registering.

Respondents also mentioned issues related to barriers or preferences regarding use of commute modes. Six percent said they liked their current commute and an additional 4 percent specifically said liked driving alone. Five percent did not have access to transit and 3 percent said they couldn't find a carpool or vanpool partner, so these alternative modes were not available to them. Three percent said they telecommuted, so did not commute to an outside work location and 2 percent thought alternative modes took too much time. Only a small share of respondents mentioned reasons related to characteristics of the incentive programs. Four percent did not understand the rules of the program, 3 percent said they were not eligible under the rules, and 2 percent said they did not find the awards motivating enough.



Figure 8.11 Reasons for Not Participating in Regional Financial Incentive Programs

(n = 544)



9.0 Employer Commute Assistance

The RCS survey also inquired about commute assistance services and benefits that might be offered to employees at their worksites, either by employers or a building management company. Respondents were asked about two types of services:

- Alternative mode support benefits and services
- Parking facilities and services

This section presents results regarding respondents' availability and use of these services in 2019.

9.1 Employer Provided Services

Three in four respondents (74.4 percent) had free parking provided to all employees on-site. For those respondents who mentioned that their employer does not provide free parking, or they were unsure (15.8 percent of respondents), they were asked if the employer reimburse their cost of parking or was it their own expense. 79.7 percent mentioned that they would pay the entire cost of parking.

When considering by TMA area, Downtown Connects and Midtown Transportation are the ones that offer free or subsidized parking for less than half to one third parking to employees. Further, 13 percent of employees share parking costs (Table 9.1).

Table 9.1 Employer Services by TMA

TMA	Free parking for all employees	Free parking some employees	Employer and employee share parking cost	Employee pays all parking cost	Not Sure/ Unknown
Livable Buckhead (LBI)	78%	4%	4%	13%	2%
Downtown Connects	31%	3%	13%	49%	4%
Clifton Corridor TMA (CCTMA)	69%	6%	2%	20%	4%
Midtown Transportation	49%	3%	8%	37%	3%
Perimeter Connects (PTSC)	97%	0%	0%	2%	0%
ASAP+	31%	18%	26%	24%	0%
AERO (Airport)	87%	3%	4%	4%	1%

9.2 Employer Offered TDM Services

Outside of the TMAs, less than half of the employers offer TDM services compared to an average around 70 percent for employers within TMAs. Among the employers within TMAs that offer service, 81.1 percent of employers in the Midtown Transportation TMA offer TDM services whereas in the AERO TMA only 52.8 percent of employers offer TDM services (Figure 9.1).

Figure 9.1 Percent of Employers Offering TDM Programs

(n=4,757)

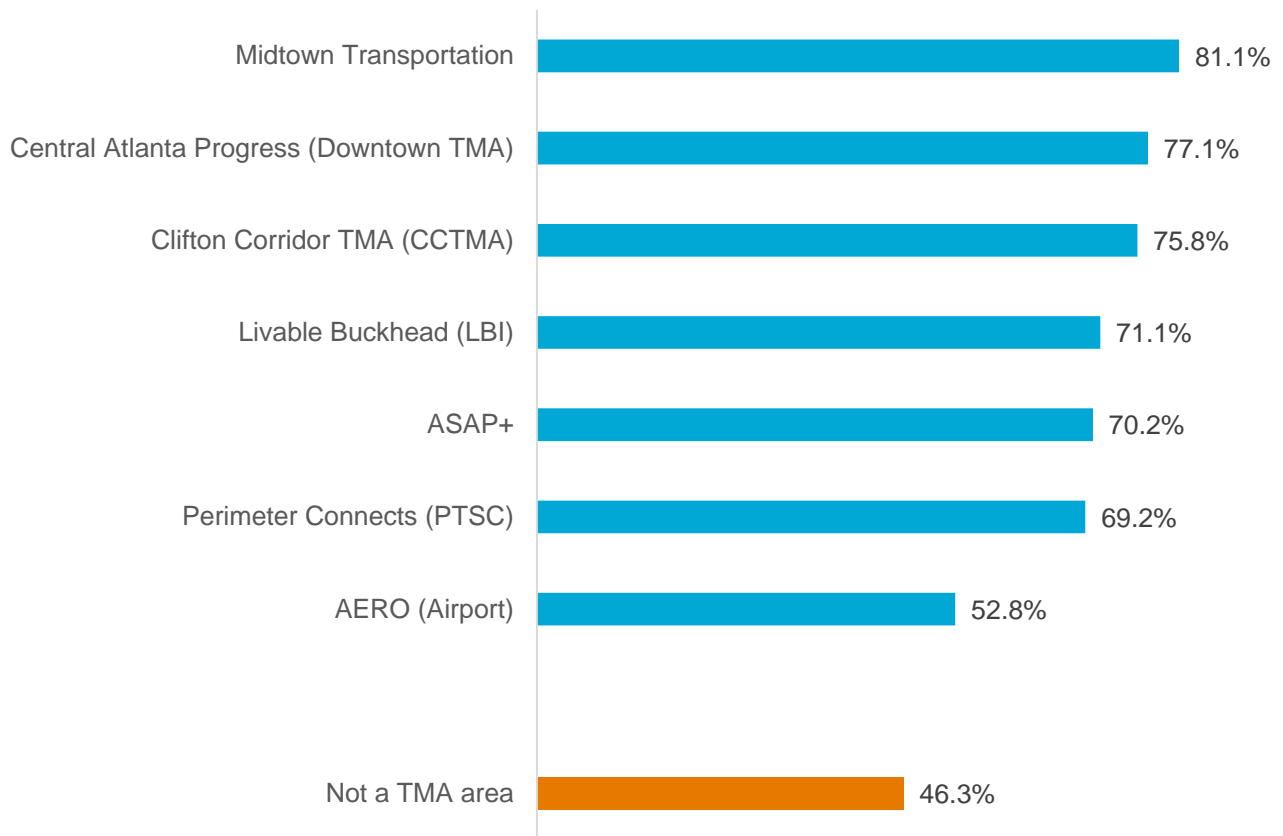


Table 9.2 shows the TDM services offered by employers by TMA territory as recalled by respondents. 35 percent of respondents who work outside of a TMA mentioned that their employer does not offer any TDM service. Outside of telework and alternative work schedule, 12 to 17 percent of employers offer a subsidized or discounted transit pass. The Georgia Commute Options or the Guaranteed Ride Home (GRH) TDM service are offered by less than five percent of employers.

In looking at the number of TDM services offered by employers (besides telework and compressed work schedule), 65.9 percent of employers offer no TDM services to employees. 22.6 percent offer one or two TDM services to employees (Figure 9.2). Despite these lack of services, 43.3 percent of respondents have used at least one worksite program. This is reinforced by the fact that 73.7 percent of employees felt that it was important to have access to services and benefits that make it easier to carpool or ride transit to work.



Table 9.2 TDM Programs Offered by Employers

	Help finding carpool or vanpool partner	Georgia Commute Options incentive	Subsidy or discounted transit pass	GRH	Information on types of transportation	Transit route or schedule info	Telework	Vanpool subsidy	Alternative work schedule
TMA									
Livable Buckhead (LBI)	6%	2%	12%	4%	8%	11%	25%	2%	15%
Downtown Connects	5%	4%	17%	5%	10%	11%	21%	4%	14%
Clifton Corridor TMA (CCTMA)	12%	4%	12%	5%	11%	10%	18%	6%	13%
Midtown Transportation	7%	4%	16%	5%	11%	10%	22%	4%	13%
Perimeter Connects (PTSC)	4%	4%	14%	4%	10%	11%	23%	2%	13%
ASAP+	0%	0%	17%	0%	15%	7%	37%	0%	5%
AERO (Airport)	6%	3%	5%	5%	8%	10%	14%	4%	15%
Not a TMA Area	6%	2%	4%	3%	6%	6%	21%	2%	14%

Figure 9.2 Number of TDM Services Offered by Employers

(n=4,757)

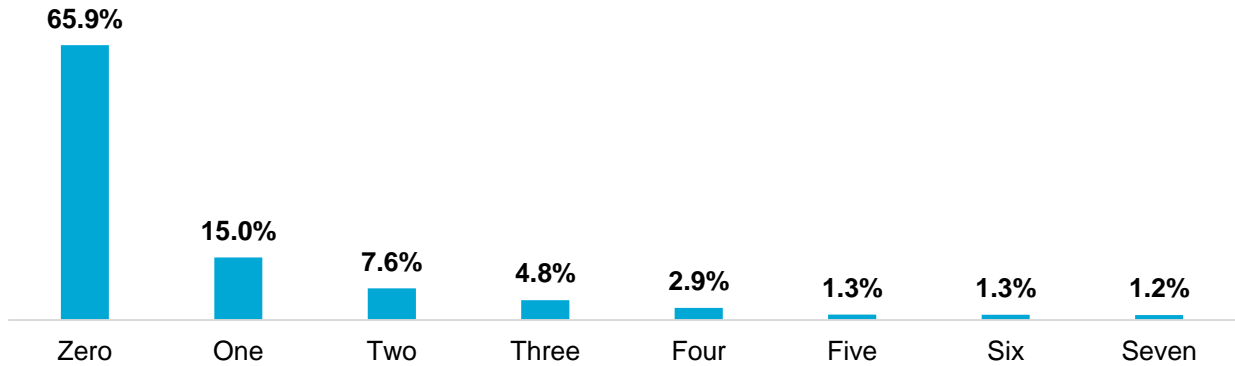
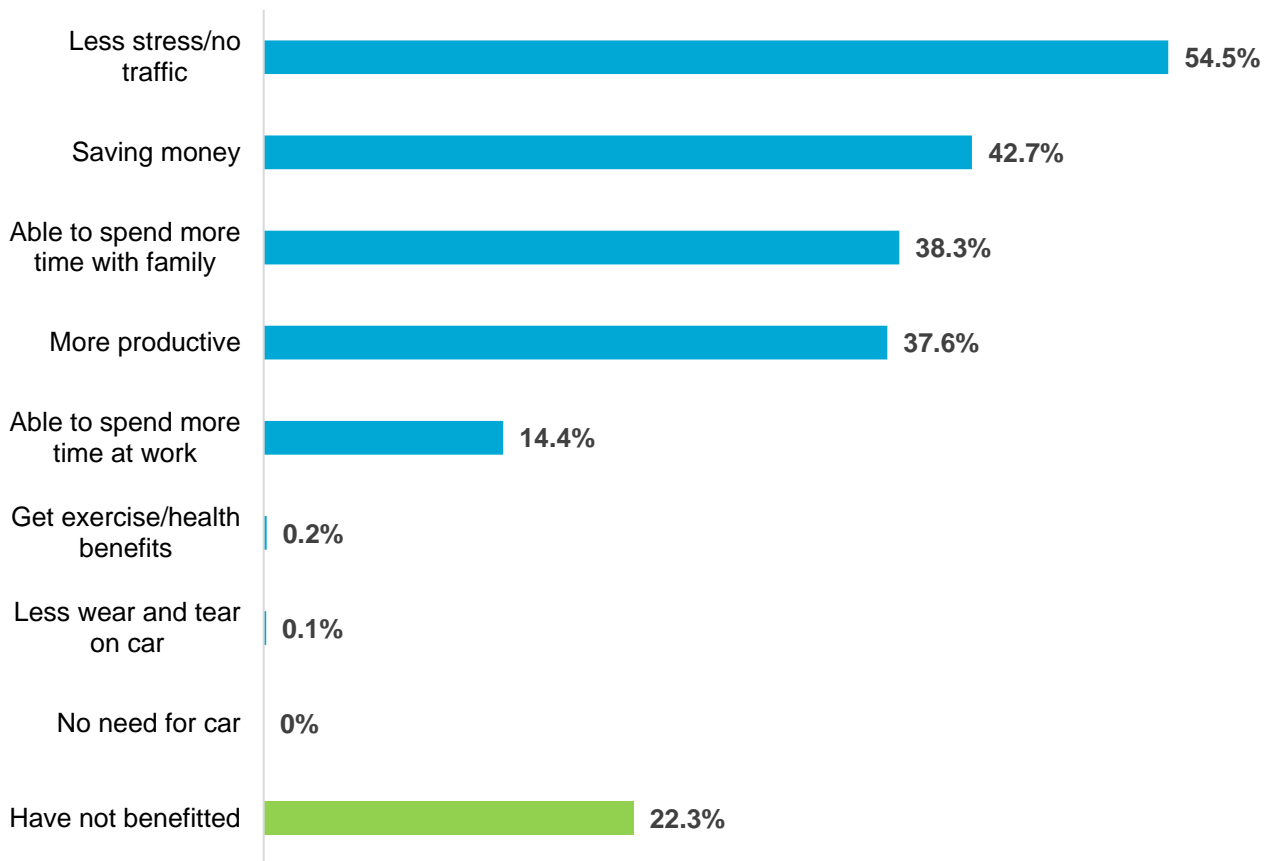


Figure 9.3 shows the benefits of participating in TDM services. One in two (54.5 percent) respondents felt that best benefit was to have a less stressful commute. Saving money was second on the benefits of participation. While 22.3 percent said that they did not benefit, it must be noted that half of their employers did not participate in the TDM program.

Figure 9.3 Benefits of Using TDM Services

(n=2,175)



10.0 Demographics of the Sample

This section provides the demographics of the 2019 RCS sample.

10.1 Sample Demographics

Figure 10.1 shows the demographic profile of respondents. Women are slightly more than half, while 28.4 percent of respondents are between 25 to 34 years old. White, non-Hispanic and African Americans' make up more than 75 percent of the sample.

Figure 10.1 Demographic Profile

(n=5,070)

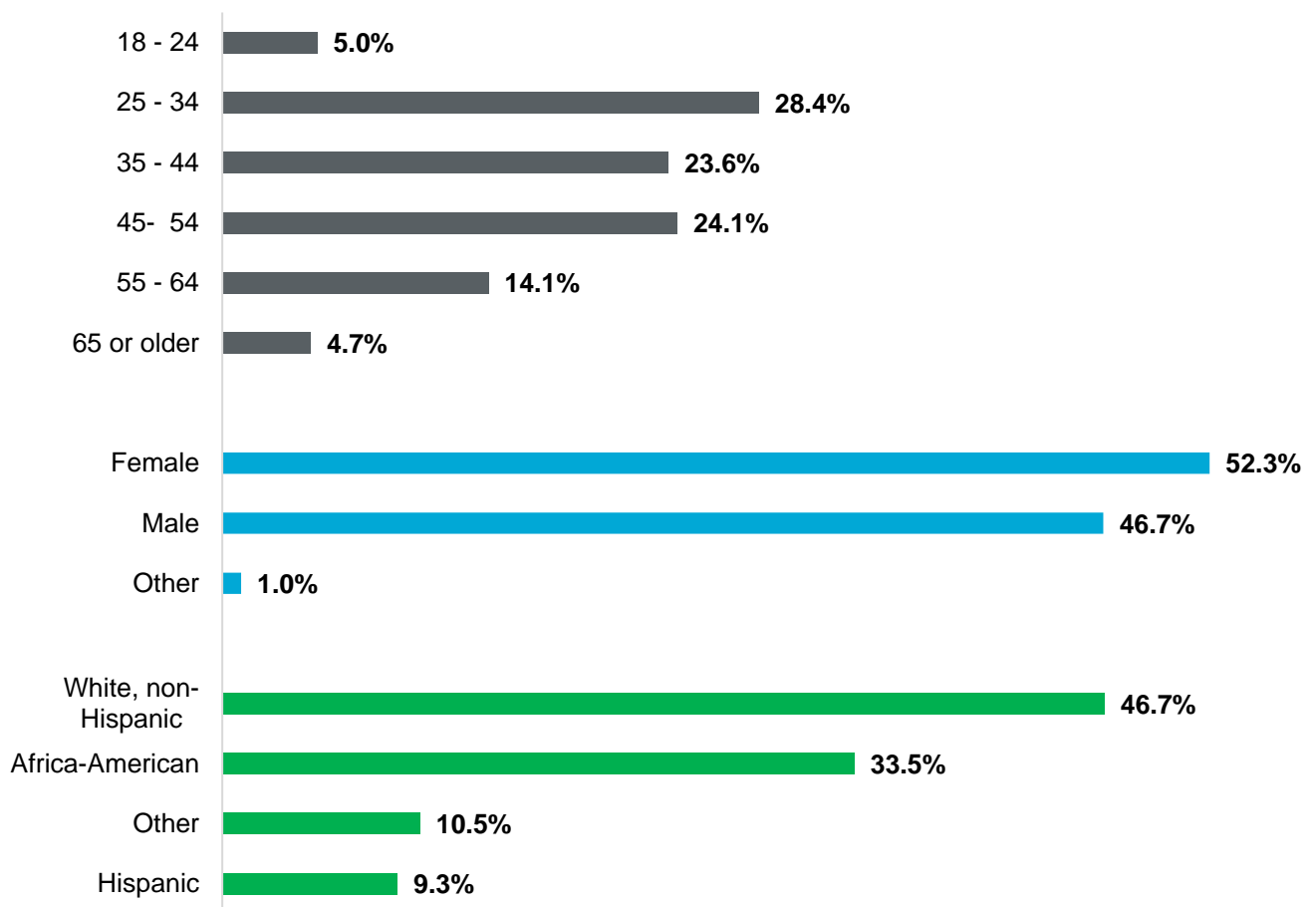
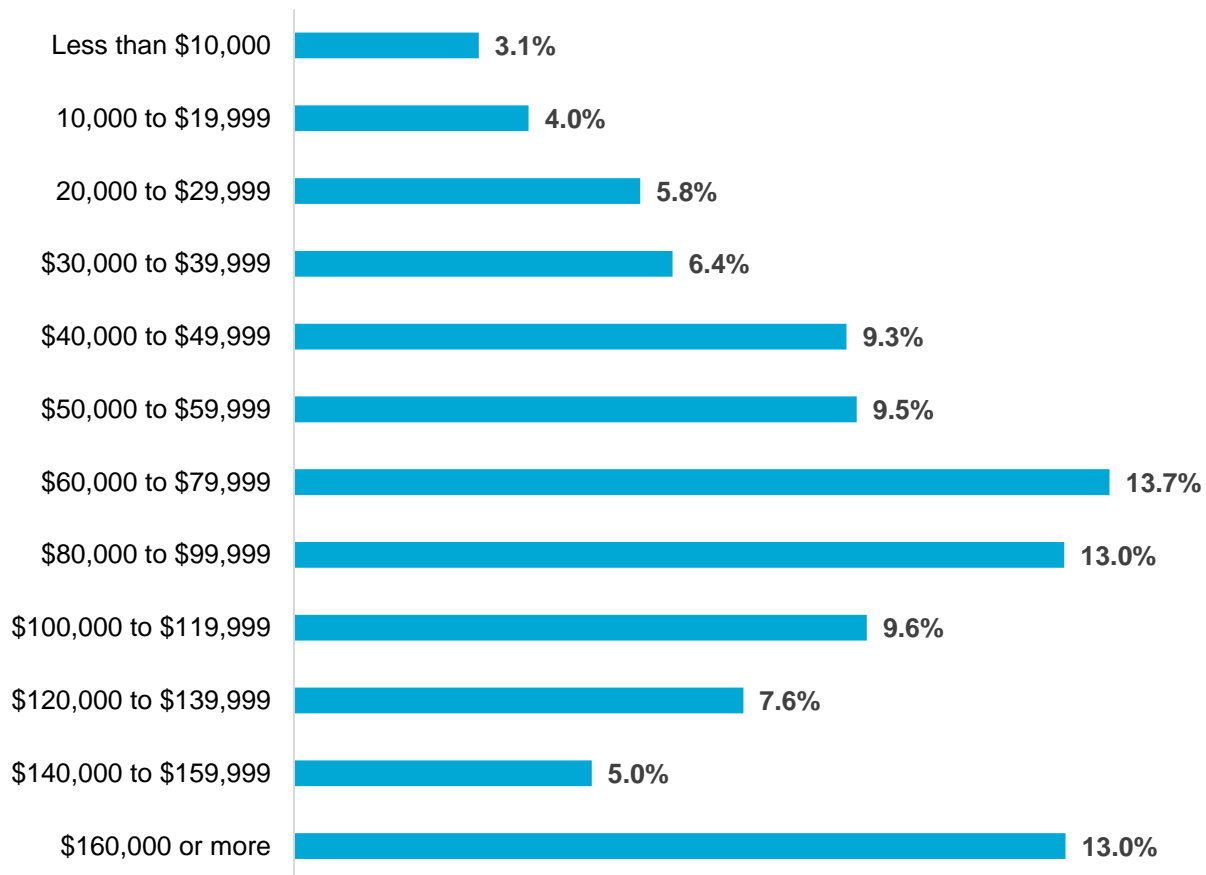


Figure 10.2 shows the income profile of respondents. 28.6 percent of respondents have a household income less than \$50,000, 36.2 percent of respondents have a household income between \$50,000 to \$100,000, and another 35.2 percent have a household income more than \$100,000.

Figure 10.2 Household Income Distribution

(n=4,729)



The average household size is 2.73. The average number of adults (over 18 years old) within each household is 2.11 and the average number of employed household members is 1.82.

10.2 Employment Characteristics

Figure 10.3 presents employer type. Seven in ten respondents (71.5 percent) work for a private company. The next highest employer is State or local government agency at 14.1 percent. Figure 10.4 shows the distribution of employee worksite. One in four respondents (26.8 percent) works at a worksite with one to 25 employees. Two in five respondents (19.4 percent) work at a worksite with 1,000 or more employees. This is not truly representative of the region as shown in comparison with the 2017 County Business Patterns (CBP) data. One caveat for the CBP data is that for 500 and more employer category, the data is suppressed and assumptions about at least two establishments with employment of these sizes were present was made. However, since the weighting is done on the resident end, this mismatch on employer size is not surprising. The survey can capture larger employers much better than the CBP. One in four (24.2 percent) is professional employed while one in three respondents (31 percent) work in general business. Around seven percent each report working as a teacher/educator (7.1 percent) or in the services industry (7.3 percent).



Figure 10.3 Type of Employer

(n=5,008)

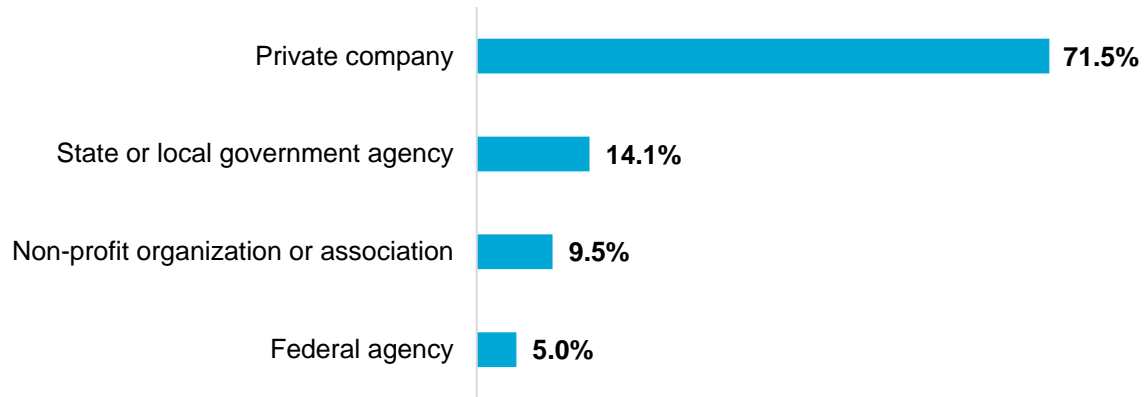
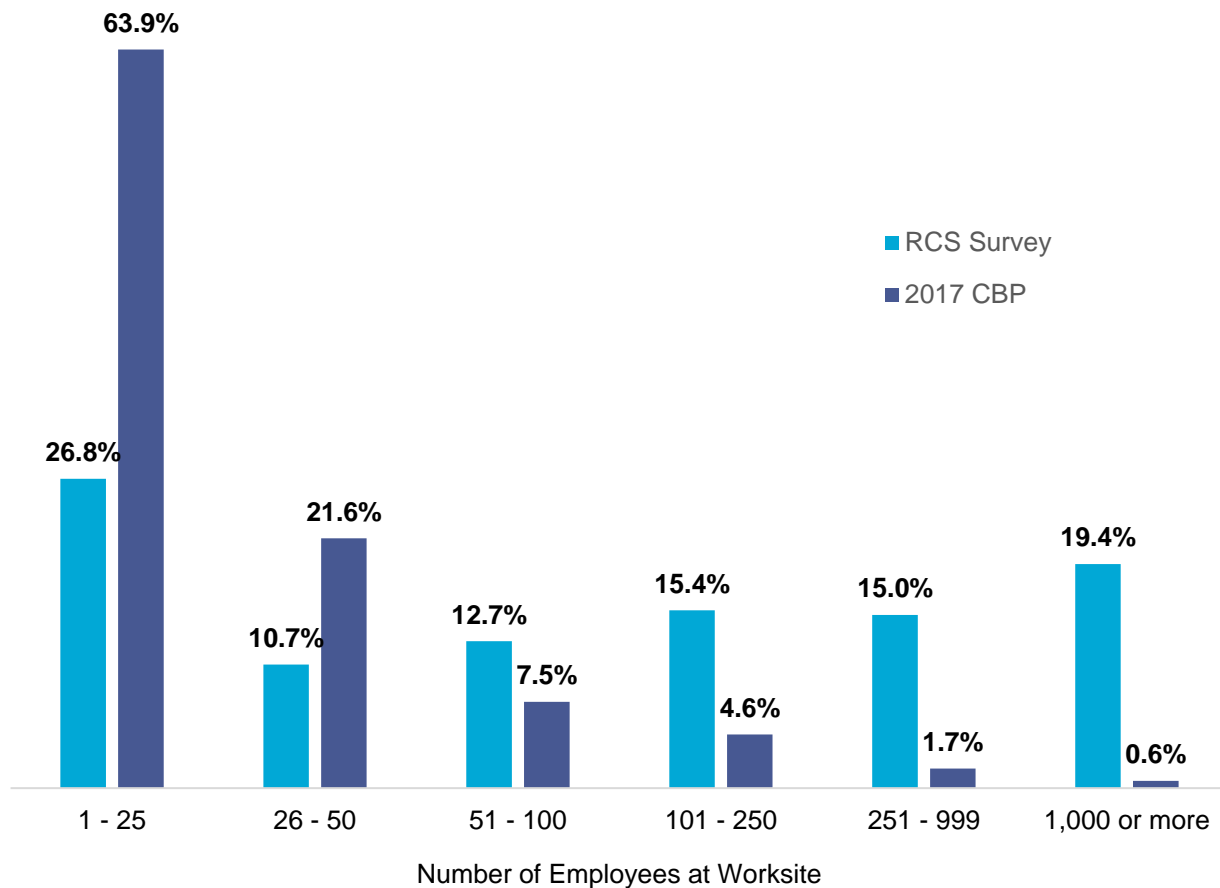


Figure 10.4 Employer Size

(n=4,562)



10.3 Social Media and Trip Application Usage

While one in eight respondents (12.5 percent) don't use any social media, among those who use it, Facebook, Instagram, and LinkedIn are the most used social media platforms (Figure 10.5). Among travel or trip applications, wayfinding apps like Google maps and Waze are used overwhelmingly (Figure 10.6).

Figure 10.5 Social Media Usage

(n=5,100)

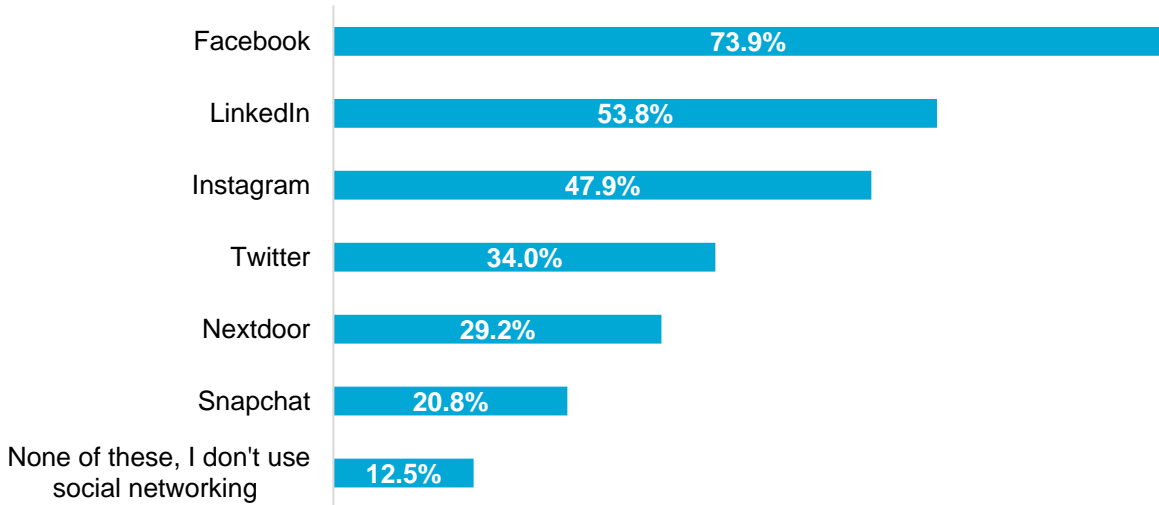
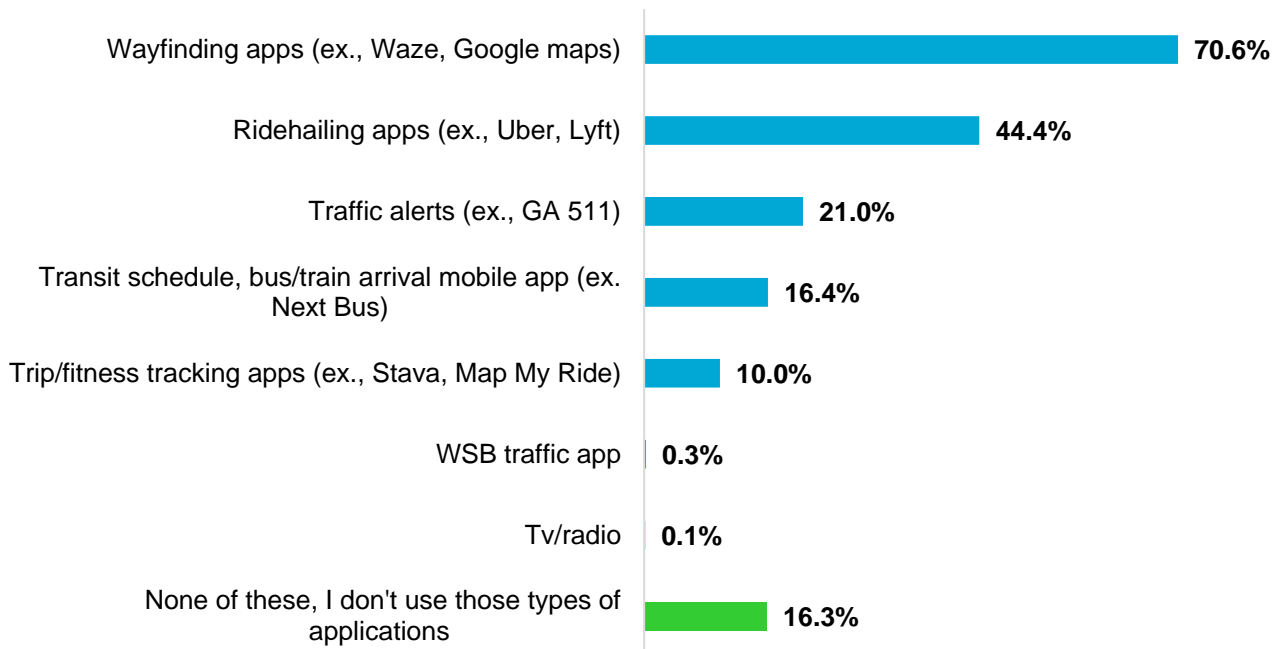


Figure 10.6 Travel App Usage

(n=5,100)



Appendix A. Survey and Sampling Methodology

A.1 Overview

The 2019 survey was conducted as a web-based survey of the 19 county ARC region. This component used an address-based sampling (ABS) method to select the sample of potential respondents, a postcard survey invitation sent through postal mail to selected addresses, and an Internet interview format for respondents to complete the survey. The survey was conducted with employed adult residents. The survey sample plan set a minimum target of 5,000 region-wide, with separate targets for individual jurisdictions in the study area. Due to higher-than-anticipated response to the Internet survey, a total of 5,100 interviews were completed for the survey. Upon completion of the interviews, responses were expanded to represent the commute patterns of residents in the counties that make up the ARC region.

The survey was designed to meet multiple objectives, including commute trend analysis and evaluation of Transportation Demand Management (TDM) services administered by ARC's Georgia Commute Options Program. Wherever possible, questions used in previous regional commute surveys (RCS) were replicated to allow for trend analysis.

A.2 Questionnaire Design

The research team and ARC staff prepared the survey questionnaire. The 2019 RCS questionnaire was based on the questionnaire used in the 2014 RCS survey. Wherever possible, the study team retained the 2014 questions to allow trend analysis, but changes were made when the revisions were expected to add substantially to the accuracy of the data or to update question or response language for 2019. A small number of questions were deleted from the 2014 survey to make room for new questions of current topical interest, such as use of ride-hailing services, and trip/travel information applications.

The research team developed an online questionnaire using Voxco's Computer Aided Web Interviewing (CAWI) software. The online questionnaire was thoroughly tested by the research team and ARC staff to ensure correct programming. When the questionnaire was finalized, it was translated into Spanish. The Spanish version of the questionnaire was made available to respondents by a toggle switch in the introduction to the online survey. To answer any queries regarding the survey, provision was made for contacting the research team to answer any concerns or questions regarding the survey.

A.3 Sample Areas and Sampling Methodology

The survey was conducted using a random selection of residents of the 19 counties in the ARC region. Eligible respondents were at least 18 years old, employed, and living within the study area. The research team set a minimum target of 50 completions for each of the 19 jurisdictions, with a total across the region of 4,814. The final jurisdiction targets were broken down by two sub-regions:

- Inner Core area (Clayton, Cobb, DeKalb, Fulton, and Gwinnett) – Minimum of 300 completed inter-views in each of these jurisdictions, for a minimum sub-region total of 3,100
- Outer area (NE (Barrow, Forsyth), NW (Bartow, Cherokee, Paulding), SE (Henry, Newton, Rockdale, Spalding, Walton), SW(Carroll, Coweta, Douglas, Fayette)) – Minimum of 300 completed interviews in each of these jurisdictions, for a minimum sub-region total of 1,714



Conservatively, the intended sample size of 4,814 completed surveys represented the same number of completed surveys from the 2014 RCS. The intent for doing so was to ensure that a minimum the research team met the targets from the 2014 RCS. The final number of completed valid surveys were 5,100. This represented an increase of six percent in the number of completed surveys.

In addition to breaking it down by residence counties, the research team also took workplace into account (from the LEHD) and developed survey completion requirements for each of the TMAs as well as work destinations outside the TMAs. This was done to identify the minimum viable number of completions for each TMA and ensure that sample selection process was able to meet the same.

A.3.1 Internet Survey

Potential Internet survey respondents were requested to participate in the survey through a postcard, sent through the U.S. mail service. The postcard described the survey and requested their participation, provided the URL address for the survey website and two entry passwords. The postcard also informed residents that ARC was offering a drawing for fifty \$250.00 Amazon gift cards to residents completed the survey.

To achieve a balanced sample of responses throughout the region as well as to meet the jurisdictional targets, the consultants used an address-based method to select a random sample of households to receive the survey invitation. The address-based list included both physical mailing addresses and post-office box addresses for residents who receive their mail at central post office locations. Household addresses were chosen randomly by jurisdiction from the ABS database maintained by Marketing Systems Group (MSG). The total number of addresses needed was determined by dividing the desired final sample by the anticipated response rate of two percent. The survey was conducted in three waves along with a pilot survey. The pilot survey was conducted with a postcard mailing of 10,000. Wave 1 was the main survey with a postcard mailing of 150,000 and Wave 3 with a postcard mailing of 150,000.

Between the first and the third wave, wave 2 was conducted. As part of wave 2, residents of the region who had participated in the 2017 National Household Travel Survey (NHTS) Georgia add-on and agreed to participate in future data collection efforts were contacted via email and invited to participate in the internet survey. The participation of these respondents helped achieve the survey targets.

A.4 Survey Administration

Preparation for the Internet survey included design and printing of high-quality, two-color 4.25" x 6" survey invitation postcards. The wording on the postcards invited employed persons 18 years of age or older to participate in the survey by accessing the survey website link, www.RegionalCommuterSurvey.com and entering one of the two passwords printed on the card. Two passwords were provided to permit two adults in the household to take the survey. The invitation to take the survey was also printed in Spanish. To reduce postal costs, ARC staff used its non-profit postal rates and arranged for printing and mailing of the postcards by a local firm.

Because response rates could differ by jurisdiction, the mailing of the Internet survey invitation was accomplished in two waves. An initial order of 149,350 postcards was mailed out on March 6, 2019. Based upon the sampling plan, 112,820 post cards were mailed to households in the Inner Core area; and 36,530 were mailed to the Outer area.



The pilot survey was conducted in 2018 which was a full-scale effort and involved mailing out 10,000 postcards. The results of the pilot survey resulted in 114 completed surveys which were included in the main survey.

The data collection period for Wave 1 began on March 7, 2019 and ended on March 31, 2019. On April 1, the first wave results were tallied and yielded 2,176 completed surveys. Although Wave 1 postcards cited March 31 as the survey end date, the survey website remained open throughout Wave 2, so Wave 1 respondents were able to complete surveys after March 31. An additional 61 Wave 1 respondents completed the survey, for a total of 2,237 Wave 1 surveys, and an overall response rate of 1.5 percent.

The Wave 2 respondents were contacted via email towards the end of March and invited to participate in the survey. Their responses kept coming over April and May leading to 130 completions.

Before purchasing addresses from MSG for Wave 3, the distribution of completed interviews from Wave #1 was analyzed to account for varying response rates by jurisdiction. The Wave 3 mailing would adjust the distribution of postcards mailed to increase the percentage of postcards sent to low-response areas and decrease the percentage sent to high-response areas. The Wave 1 response rates were used as an indicator of Wave 3 completion rates.

Wave 3 targets were set and a total of 149,554 unique, de-duplicated, addresses were purchased with a distribution of 99,720 to the Inner Core area, and 49,834 postcards to the Outer area. Wave 3 postcards were printed and distributed by postal mail on June 3rd. The Wave 3 data collection period extended from June 3, 2019 through June 30, 2019. By the Wave 3 cut-off date of June 30, a total of 2,619 interviews were completed for a Wave 3 response rate of 1.75 percent.

Wave 1 and Wave 3 combined produced 4,856 completed Internet interviews. On the postcard base of 316,928, this resulted in an overall response rate 1.62 percent. As noted earlier, to boost survey response rates, survey respondents were offered the opportunity to participate in a random drawing for one of fifty \$250 Amazon gift cards. Following each survey wave, 25 names were drawn from respondents who had completed the survey and agreed to participate in the gift card drawing. Each winner was emailed a gift card voucher.

A.5 Weighting of the Survey Data

Because the jurisdiction-level samples were not collected proportionately, the internet survey results were expanded at the jurisdiction level to match counts of employed residents in each sample jurisdictions. The results also were adjusted to align survey results to known race/ethnicity and age distributions. The age distribution in the 2019 survey over-represented older respondents and under-represented young respondents.

Population statistics from the U.S. Census Bureau's American Community Survey (ACS) for combinations of employment status, race/ethnicity, and age by jurisdiction were used to calculate expansion values for each jurisdiction in the survey sample. Age categories included 18-34 years, 35-44 years, 45-54 years, and 55 years and older. Race/ethnicity categories included Hispanic, Non-Hispanic Black, Non-Hispanic White, and Other. Details of the weighting/expansion process are found in Appendix B.



Appendix B. Survey Data Weighting and Expansion

The 2019 RCS Survey was conducted using an address-based sample (ABS), distributed to residential addresses in the 19 county ARC area. Survey responses were expanded numerically by jurisdiction-level expansion factors to align them with published employment, race/ethnicity and age group statistics for the region and individual jurisdictions in the study area. The procedure for the expansion is detailed below.

The first step in the expansion process was to align the counts of persons interviewed in each jurisdiction with the total number of employed persons in those jurisdictions. Table B.1 shows the number of employed workers living in each of the 9 areas and the number of employed persons interviewed. These figures were used in computing the initial expansion factors applied to each survey response. The U.S. Census American Community Survey (ACS) data were used to calculate the expansion factor of employed persons by race/ethnicity and by age group. Dividing the ACS estimate for employed residents by the number of interviews yields the expansion factor by jurisdiction. These factors were then applied to each survey response, allowing the survey results to be expanded to the employment totals for each of the 9 regions.

Table B.1 Estimate of Workers by Survey Area and Expansion Factors

Region	Estimated Employed Workers Total from 2013 – 2017 ACS	Number of Employed Persons Surveyed	Initial Adjustment and Expansion Factors
Clayton	129,731	327	396.73
Cobb	402,521	628	640.96
DeKalb	375,922	750	501.23
Fulton	511,730	1,425	359.11
Gwinnett	478,832	519	922.61
NE	140,337	330	425.26
NW	245,347	356	689.18
SE	253,979	392	647.91
SW	240,419	373	644.55
Total	2,778,818	5,100	544.87

The research team carried out a series of chi-squared statistical analysis calculations to test the survey sample distribution for race/ethnicity and age groups against published statistics for these groupings. The majority of race/ethnicity and age distributions by jurisdictions were found to be significantly different when compared to the published ACS tables. Based upon these results, adjustments to account for race/ethnicity and age groups were added to the initial expansion factors applied to the survey results to expand the survey responses to the employed population of the region.

Three tables from ACS were used for the development of expansion factors: Tables B01001, B23002, and C23002. Table B01001 contained more complete information for all jurisdiction residents by race/ethnicity and by age groups for persons 18 year of age and older, however not by employed persons. Table B23002 contained information for employed residents for persons 16 years of age and older, and race/ethnicity broken down by age groups, but some race/ethnicity groups were missing, and age categories were not completely broken down into the desired age groups. By using a third table, Table C23002, some missing data was infilled for race/ethnicity and age categories. Using Table B01001 as the base, a percentage of employment was developed from Tables B23002 and C23002 for each race/ethnicity by age groups by jurisdiction and applied to Table B01001 counts. The resulting estimates of employment for residents 18 years of age and over by race/ethnicity were finalized and applied to the RCS responses. The final expansion factors are shown in Table B-2 below.

Table B.2 Race/Ethnicity and Age Weighting Factors by Survey Area

Region	Race	18 – 34	35 – 44	45 – 54	55+
Clayton	African American	770.67	399.63	361.62	214.11
Cobb	African American	2,056.14	1,027.79	695.30	402.83
DeKalb	African American	2,056.14	766.58	674.08	501.96
Fulton	African American	1,087.99	617.06	586.59	401.87
Gwinnett	African American	2,056.14	1,087.38	827.18	573.29
NE	African American	750.33	247.56	274.29	169.67
NW	African American	2,056.14	1,526.00	505.29	630.17
SE	African American	1,378.56	707.71	566.27	366.70
SW	African American	2,056.14	623.54	954.71	360.71
Clayton	Hispanic	2,361.37	1,934.08	1,061.56	721.22
Cobb	Hispanic	2,361.37	1,934.08	1,061.56	721.22
DeKalb	Hispanic	2,361.37	1,934.08	1,061.56	721.22
Fulton	Hispanic	979.63	748.71	434.38	317.09
Gwinnett	Hispanic	2,361.37	1,934.08	1,061.56	721.22
NE	Hispanic	2,361.37	1,934.08	1,061.56	721.22
NW	Hispanic	2,361.37	1,934.08	1,061.56	721.22
SE	Hispanic	2,361.37	1,934.08	1,061.56	721.22
SW	Hispanic	2,361.37	1,934.08	1,061.56	721.22
Clayton	Other	2,420.24	673.67	1,072.00	1,283.50
Cobb	Other	1,430.77	1,334.60	805.64	502.90
DeKalb	Other	1,120.47	620.00	449.93	374.20
Fulton	Other	637.78	363.41	437.69	245.96



Region	Race	18 – 34	35 – 44	45 – 54	55+
Gwinnett	Other	2,420.24	1,967.69	1,108.00	979.80
NE	Other	2,420.24	482.57	371.11	233.71
NW	Other	2,420.24		362.71	266.00
SE	Other	2,420.24	539.17	1,471.00	505.60
SW	Other	2,420.24	1,967.69	1,211.67	264.00
Clayton	White	592.17	165.54	189.31	144.06
Cobb	White	1,004.43	529.35	480.33	292.24
DeKalb	White	470.41	338.32	294.40	191.09
Fulton	White	332.89	278.81	264.36	194.38
Gwinnett	White	1,142.30	827.40	746.66	356.46
NE	White	933.03	526.50	374.11	237.69
NW	White	1,465.68	799.55	620.95	367.26
SE	White	1,600.26	1,137.00	814.84	376.90
SW	White	1,600.26	725.75	632.16	307.22

Appendix C. Survey Questionnaire

The Atlanta Regional Commission is conducting this online survey of residents of the 19-county Atlanta metropolitan region about their travel to work. Your responses will be kept completely confidential and will be used only together with those of other respondents.

ARC is offering a drawing for twenty-five \$250 Amazon gift cards for residents who complete the survey. If you would like to be entered into the drawing for one of the gift cards, please provide your name and email address at the end of the survey.

To begin the survey, please enter the 6-digit Password shown on the postcard that was mailed to your household, then click "SUBMIT" to begin the survey. If there is more than one person 18 years or older in your household, a second household member may use the second password.

PASSWORD _____

SUBMIT

Thank you for your participation.



S1 Are you an employed person who is 18 years of age or older? By employed, we mean a wage or salaried employee, military, or self-employed.

- 1 Yes (**CONTINUE TO S3**)
- 2 No (**THANK AND TERMINATE**)

S3 Which of the following best describes your employment status? If you work more than one job, please respond for your primary job.

- 1 Employed full-time
- 2 Employed part-time
- 4 Not employed, retired, keeping house, or otherwise not employed outside the home (**THANK AND TERMINATE**)
- 5 Other (**SPECIFY**) _____
- 8 Not sure
- 9 Left blank (**THANK AND TERMINATE**)

S4a What is your home zip code?

99999 Not sure (**ASK S5**)

AUTOCODE Q S5 HOME COUNTY FROM QS 4a HOME ZIP CODE

S5 In what county do you live?

- 1 Barrow
- 2 Bartow
- 3 Carroll
- 4 Cherokee
- 5 Clayton
- 6 Cobb
- 7 Coweta
- 8 DeKalb
- 9 Douglas
- 10 Fayette
- 11 Forsyth
- 12 Fulton
- 13 Gwinnett
- 14 NA (**DO NOT SHOW ON SCREEN**)
- 15 Henry
- 16 Newton
- 17 Paulding
- 18 Rockdale
- 19 Spalding
- 20 Walton
- 97 Other _____ (**THANK AND TERMINATE**)



S6 What is your zip code at work? If you work in multiple locations, please report the zip code where you work most days.

 99999 Not sure **(SKIP TO S7)**

S7 And, which of the following best describes the area where you work? If you need more detail about an area, click on the "I" by the area.

- 1 BUCKHEAD (Includes Buckhead, areas near Lenox Mall and Phipps Plaza, and areas along Peachtree Street to Piedmont Hospital)
- 2 DOWNTOWN (Includes Downtown, CNN Center, Centennial Olympic Park, Federal/State Office Buildings, Georgia State University, The Capitol, 5 Points, Underground and Peachtree Center)
- 3 DECATUR (Includes Clifton, Emory, Decatur, Druid Hills, Inman Park, Little 5-Points, Oakhurst and Virginia Highlands)
- 4 TOWN CENTER (Includes Town Center, Acworth and Kennesaw)
- 5 CUMBERLAND (Includes Cumberland, Galleria, Vinings, Windy Hill, Powers Ferry)
- 6 AIRPORT (Includes Hartsfield-Jackson Airport, College Park, Forest Park, East Point, and Hapeville)
- 7 MIDTOWN (Includes Midtown, Georgia Tech, and Colony Square)
- 8 PERIMETER (Includes Perimeter, Dunwoody, Sandy Springs, Brookhaven, and areas near Perimeter Mall, I-285, and GA 400)
- 9 NORTH FULTON/ 400 CORRIDOR (Includes Roswell, Alpharetta, Crabapple and Mountain Park)
- 10 I-85 NORTH CORRIDOR (Includes Lawrenceville, Duluth, Snellville, Mountain Park, Sugar Hill, Lilburn, and Buford)
- 11 EAST METRO CORRIDOR (Includes Tucker, Stone Mountain, Decatur, Conyers, and Covington)
- 12 SOUTHERN CRESCENT (Includes Coweta, Clayton, Fayette, Spalding, and Henry Counties)
- 13 WEST METRO (Includes South Fulton, Douglas, and Carroll Counties)
- 14 I-75 NORTH CORRIDOR (Includes Cobb, Paulding, Cherokee, and Bartow Counties)
- 15 ATLANTIC STATION
- 97 OTHER [SPECIFY:] _____
- 98 Not sure
- 99 Left blank



WORK SCHEDULE AND WORK DAYS

Now, please answer some questions about your commute to and from work. If you have more than one job, answer for your primary job.

1 First, in a TYPICAL week, how many days are you assigned to work? If your work schedule varies from week to week, please indicate the number of days that is most typical.

- 1 1 day
- 2 2 days
- 3 3 days
- 4 4 days
- 5 5 days
- 6 6 days
- 7 7 days
- 0 0 days, not currently working (**THANK AND TERMINATE**)
- 9 Left blank (**THANK AND TERMINATE**)

1a How many of those days are weekdays (Monday-Friday)?

- 1 1 day
- 2 2 days
- 3 3 days
- 4 4 days
- 5 5 days
- 0 0 (work only on weekends) (**SKIP TO DEFINE SURVTYPE**)
- 9 Left blank (**THANK AND TERMINATE**)

2 And how many of those weekdays do you go to a work location outside your home? If the number of days varies by week, please indicate what would be most typical.

- 1 1 day
- 2 2 days
- 3 3 days
- 4 4 days
- 5 5 days
- 0 0 days (work all work days AT HOME)
- 9 Left blank

IF Q2 = 0 OR 9, CONTINUE WITH Q3

IF Q2 = 1, 2, 3, 4, OR 5, SKIP TO DEFINE SURVEY TYPE

3 To clarify, you work at home every day you work. Is that right?

- 1 Yes (**SKIP TO Q3b**)
- 2 No, I do typically commute to a work location outside my home one or more days. (**CONTINUE TO Q3a**)
- 9 Left blank) (**CONTINUE TO Q3a**)



3a In a typical week, how many weekdays do you go to a work location outside your HOME? If the number varies by week, please indicate what would be most typical.

- 1 1 day
- 2 2 days
- 3 3 days
- 4 4 days
- 5 5 days
- 9 Left blank

SKIP TO DEFINE SURVEY TYPE

3b Which of the following best describes your work situation?

- 1 Self-employed with my primary work location at home
- 2 Work for an employer located in the Atlanta region, but I telework all of my workdays
- 3 Work for an employer located outside the Atlanta region, but I telework all of my workdays
- 4 Other situation (please describe) _____
- 9 Left blank

DEFINE SURVEY TYPE (SURVTYPE) – Used for branching with telework, work at home, termination

- 1 REGULAR – commuter, work outside home some or all days
- 2 TELEALL – full-time telework
- 3 HOMEALL – self-employed work at home
- 4 HOMEOTHER – work at home; other/unknown reason
- 5 SEUNK – Self-employed, unknown if home only (**RESERVE CODE FOR POST-PROCESSING**)
- 6 WKALL – all work days on weekends
- 9 UNKNOWN – unknown work arrangement

IF Q2 = 1, 2, 3, 4, OR 5, CODE SURVTYPE = REGULAR (1)
IF Q3a = 1, 2, 3, 4, OR 5, CODE SURVTYPE = REGULAR (1)

IF Q3b = 2 OR 3, CODE SURVTYPE = TELEALL (2)
IF Q3b = 1, CODE SURVTYPE = HOMEALL (3)
IF Q3b = 4 or 9, CODE SURVTYPE = HOMEOTHER (4)
IF Q1a = 0 (zero), CODE SURVTYPE = WKALL (6)

IF Q3a = 9, CODE SURVTYPE = UNKNOWN (9)

BRANCHING INSTRUCTIONS BEFORE Q5

IF SURVTYPE = 9 (UNKNOWN), THANK AND TERMINATE

IF SURVTYPE = 3 (HOMEALL), SKIP TO INSTRUCTIONS BEFORE Q20
IF SURVTYPE = 4 (HOMEOTHER), SKIP TO INSTRUCTIONS BEFORE Q20
IF SURVTYPE = 6 (WKALL), SKIP TO Q55

IF QS3 = 2 (part-time) AND SURVTYPE = 1 (REGULAR) OR 2 (TELEALL), AUTOCODE Q6a = 6, THEN SKIP TO INSTRUCTIONS BEFORE Q7
IF QS3 = 1, 5, OR 8 (full-time, other, or DK) AND SURVTYPE = 1 (REGULAR) OR 2 (TELEALL), CONTINUE TO Q6a



- 6a Which of the following best reflects your work schedule? Please select only one.
- 1 Standard, five or more days per week
 - 2 Work four 10-hour days per week, total of 40 hours (4/40 compressed schedule)
 - 3 Work nine days every 2 weeks, total of 80 hours (9/80 compressed schedule)
 - 4 Work three 12-hour days per week, total of 36 hours (3/36 compressed schedule)
 - 5 Other **(SPECIFY)** _____
 - 6 *Work part-time (AUTOCODE ONLY, DON'T SHOW ON SCREEN)*
 - 8 Not sure
 - 9 Left blank

Define Check Q20 Days

IF Q6a = 2, 3, OR 4, SET CHECK Q20 DAYS = 5

IF Q6a = 1, 5, 6, 8, OR 9, SET CHECK Q20 DAYS = Q1a

TELEWORK

INSTRUCTIONS BEFORE Q7

IF TELEALL (SURVTYPE = 2), AUTOCODE Q7 = 1, THEN SKIP TO INSTRUCTIONS BEFORE Q8

- 7 Next, please answer a few questions about telework. For purposes of this survey, telework means working a regular work day at home for the entire work day, instead of traveling to your regular work place. Based on this definition, do you telework, even if only occasionally?
- 1 Yes
 - 2 No **(SKIP TO Q15)**
 - 8 Not sure **(SKIP TO Q15)**
 - 9 Left blank **(SKIP TO Q15)**

INSTRUCTIONS BEFORE Q8

IF TELEALL AND Q1 = 1, AUTOCODE Q8 = 1, THEN SKIP TO Q10
IF TELEALL AND Q1 = 2, AUTOCODE Q8 = 2, THEN SKIP TO Q10
IF TELEALL AND Q1 = 3, AUTOCODE Q8 = 3, THEN SKIP TO Q10
IF TELEALL AND Q1 = 4, AUTOCODE Q8 = 4, THEN SKIP TO Q10
IF TELEALL AND Q1 = 5, 6, OR 7, AUTOCODE Q8 = 5, THEN SKIP TO Q10

- 8 How often do you usually telework? If you occasionally work at home in the evening or on weekends, but not during your assigned work hours, please do NOT count these days as telework days. **(SHOW RESPONSES 1-7 AND 97)**
- 6 Less than 1 time per month
 - 7 1-3 times per month
 - 1 1 day per week
 - 2 2 days per week
 - 3 3 days per week
 - 4 4 days per week
 - 5 5 or more days per week
 - 97 Other (SPECIFY) _____
 - 99 Left blank



10 Does your employer have a formal teleworking program at your workplace or do you telework under an informal arrangement between you and your supervisor?

- 1 Formal program
- 2 Informal arrangement with supervisor
- 3 N/A (**DO NOT SHOW ON SCREEN**)
- 8 Not sure

SKIP TO INSTRUCTIONS BEFORE Q20

Non-teleworker follow-up

15 Does your employer have a formal teleworking program at your workplace or permit employees to telework under an informal arrangement with the supervisor?

- 1 Formal program
- 2 Informal arrangement with supervisor
- 3 No telework program / telework not allowed
- 8 Not sure
- 9 Left blank

16 Considering your job responsibilities and assuming your employer would permit it, how often would you be able to work remotely at home or another location other than your main work place?

- 1 Never (**SKIP TO INSTRUCTIONS BEFORE Q20**)
- 2 Less than once per month
- 3 1-3 days per month
- 4 1-2 days per week
- 5 3 or more days per week
- 8 Not sure (**SKIP TO INSTRUCTIONS BEFORE Q20**)
- 9 Left blank (**SKIP TO INSTRUCTIONS BEFORE Q20**)

17 Would you be interested in teleworking?

- 1 Yes
- 2 No (**SKIP TO INSTRUCTIONS BEFORE Q20**)
- 8 Not sure (**SKIP TO INSTRUCTIONS BEFORE Q20**)
- 9 Left blank (**SKIP TO INSTRUCTIONS BEFORE Q20**)



COMMUTE TRAVEL PATTERNS

INSTRUCTIONS BEFORE Q20

HOMEALL - IF SURVTYPE = 3, DON'T ASK Q20. AUTOFILL Q20, RESPONSE 12 (SEWAH) FOR MON, TUES, WED, THURS, FRI UNTIL Q20 DAYS = Q1a WEEKDAYS WORKED. CODE ANY REMAINING DAYS AS RESPONSE 11. THEN SKIP TO DEFINE Q20 MODES

HOMEOETHER - IF SURVTYPE = 4, DON'T ASK Q20. AUTOFILL Q20, RESPONSE 12 (SEWAH) FOR MON, TUES, WED, THURS, FRI UNTIL Q20 DAYS = Q1a WEEKDAYS WORKED. CODE ANY REMAINING DAYS AS RESPONSE 11. THEN SKIP TO DEFINE Q20 MODES

TELEALL - IF SURVTYPE = 2, DON'T ASK Q20. AUTOFILL Q20, RESPONSE 2 (telework) FOR MON, TUES, WED, THURS, FRI UNTIL Q20 DAYS = Q1a WEEKDAYS WORKED. CODE ANY REMAINING DAYS AS RESPONSE 11. THEN SKIP TO DEFINE Q20 MODES

**IF Q6a = 2, 3, OR 4 (CWS schedule), INCLUDE "or compressed schedule (e.g., 4/40, 9/80) day off" IN Q20, THIRD BULLET
IF Q8 = 1, 2, 3, 4, OR 5 (telework 1+ days per week), SHOW THIRD BULLET: "If you typically telework one or more days per week, check telework for those days" IN Q20**

Next, please answer a few questions about your trip to work.

20 *In a typical week, what type of transportation do you use on each of the weekdays (Monday-Friday) that you work? If your travel to work varies from week to week, report for travel for the MOST TYPICAL week.*

- If you use more than one type of transportation on a single day, check only the type you use for the LONGEST DISTANCE part of your trip.
- For any days you do not work, check regular day off [*or compressed schedule (e.g., 4/40, 9/80) day off*]
- If you typically telework one or more days per week, check telework for those days

ALLOW ONLY ONE MODE RESPONSE FOR EACH DAY



IF Q6a = 2, 3, OR 4 AND RESPONDENT DOES NOT CHECK "CWS day off" (RESPONSE 1) FOR ANY DAY, SHOW MESSAGE: "You said you typically work a compressed work schedule. How many compressed schedule days do you typically have off in a week?" **(ACCEPT 0 AS A RESPONSE)**

IF Q8 = 1, 2, 3, 4, OR 5 AND RESPONDENT DOES NOT CHECK "Telework" (RESPONSE 2), SHOW MESSAGE: "You said you typically telework. How many weekdays, Monday through Friday, do you telework in a typical week? **(ACCEPT 0 AS A RESPONSE)**

(Prompt if respondent enters too few travel mode days; total Q20 days is less than CHECK Q20 DAYS weekdays worked)

IF (Q20, SUM OF MON-FRI RESPONSES 1-10, 15-16) < CHECK Q20 DAYS, SHOW PROMPT, "Please report for a total of [CHECK Q20 DAYS] work days, Monday through Friday. If you typically telework or have a compressed schedule day off, please count those as work days"

(Prompt if respondent enters too many travel mode days; total Q20 days is more than CHECK Q20 DAYS weekdays worked)

IF (Q20, SUM OF MON-FRI RESPONSES 1-10, 15-16) > CHECK Q20 DAYS, SHOW PROMPT, "Please report how you travel ONLY on the [CHECK Q20 DAYS] days that you work Monday through Friday. If you typically telework or have a compressed schedule day off, please count those as work days." For all other days, indicate "regular day off."

SHOW MODES IN MON-FRI GRID FORMAT IN THE ORDER SHOWN

Type of transportation	Check one Button for Each Column (Day)				
	Mon	Tues	Wed	Thur	Fri
3 Drive alone in a car, truck, SUV, van, or motorcycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 Ride alone in a taxi, Uber, Lyft	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Carpool with other people 16 years or older, including w/family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Vanpool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Ride a commuter express bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Ride a local bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Ride a train or rail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Walk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Bicycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Telework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16 Other (Specify) _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1 Compressed schedule day off	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11 Regular day off (not compressed schedule)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 SE-WAH days, other than telework (AUTOCODE ONLY)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13 NA (DO NOT SHOW ON SCREEN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DEFINE Q20 MODES USED (ALLOW MULTIPLE MODES) – AUTOCODE ONLY:

- CCW = SUM OF Q20, RESPONSE 1
- CTW = SUM OF Q20, RESPONSE 2
- CDA = SUM OF Q20, RESPONSE 3
- CCP = SUM OF Q20, RESPONSE 4
- CVP = SUM OF Q20, RESPONSE 5



CEB = SUM OF Q20, RESPONSE 6
CLB = SUM OF Q20, RESPONSE 7
CMT = SUM OF Q20, RESPONSE 8
CWK = SUM OF Q20, RESPONSE 9
CBK = SUM OF Q20, RESPONSE 10
CTX = SUM OF Q20, RESPONSE 15
COT = SUM OF Q20, RESPONSE 16
CSE = SUM OF Q20, RESPONSE 12

IF CCW > 0, Q20 MODE = 1 COMPRESSED SCHEDULE
IF CTW > 0, Q20 MODE = 2 TELEWORK
IF CDA > 0, Q20 MODE = 3 DRIVE ALONE
IF CCP > 0, Q20 MODE = 4 CARPOOL
IF CVP > 0, Q20 MODE = 5 VANPOOL
IF CEB > 0, Q20 MODE = 6 EXPRESS BUS
IF CLB > 0, Q20 MODE = 7 LOCAL BUS
IF CMT > 0, Q20 MODE = 8 MARTA TRAIN
IF WK > 0, Q20 MODE = 9 WALKING
IF CBK > 0, Q20 MODE = 10 BICYCLE
IF CTX > 0, Q20 MODE = 15 TAXI
IF COT > 0, Q20 MODE = 16 OTHER
IF CSE > 0, Q20 MODE = 12 SELF-EMPLOYED, WORK AT HOME

DEFINE PRIMARY MODE AND CURRENT ALT DAYS – AUTOCODE ONLY:

SET CPMODE = Q20 MODE WITH HIGHEST NUMBER OF DAYS (EXCLUDING OTHER (16) AND CWS (1)). IF TIE FOR HIGHEST NUMBER, CHOOSE PRIMARY MODE IN THIS PRIORITY ORDER: 5 (VANPOOL), 4 (CARPOOL), 8 (MARTA TRAIN), 6 (EXPRESS BUS), 7 (LOCAL BUS), 10 (BICYCLE), 9 (WALKING), 2 (TELEWORK), 3 (DRIVE ALONE), 15 (TAXI). DO NOT SELECT COMPRESSED SCHEDULE (1) OR OTHER (16) AS PRIMARY MODE. IF OTHER (16) IS THE ONLY Q20 MODE, SET CPMODE = UNKNOWN (99)

DEFINE CALTDAYS = CCP + CVP + CEB + CLB + CMT + CWK + CBK

IF SURVTYPE = 2 (TELEALL), SKIP TO Q55

IF SURVTYPE = 3 (HOMEALL), SKIP TO Q55

IF SURVTYPE = 4 (HOMEOTHER), SKIP TO Q55

IF SURVTYPE = 99 (UNKNOWN), SKIP TO Q45

INSTRUCTIONS BEFORE Q21

IF CCP = 0 AND CVP = 0, SKIP TO INSTRUCTIONS BEFORE Q27
IF CCP = 0 AND CVP > 0, SKIP TO INSTRUCTIONS BEFORE Q25
IF CCP > 0, ASK Q21

- 21 You said you typically carpool to work one or more days per week. Including yourself, how many people usually ride in your carpool?
_____ total people in carpool (2-5 people)



- 22 Does your carpool include a family or household member 16 years or older AND/OR a co-worker? Please select all that apply. **(ALLOW MULTIPLE RESPONSE FOR 1-2, DO NOT ALLOW MULTIPLES FOR 3 OR 9).**
- 1 Family or household member 16 years or older
 - 2 Co-worker
 - 3 Neither family/household member NOR co-worker
 - 8 Not sure

IF Q22 = 2 OR 3, ASK Q23, OTHERWISE, SKIP TO INSTRUCTIONS BEFORE Q25

- 23 Did you use any carpool ridematch service to find your current carpool partner(s)?
- 1 Yes
 - 2 No
 - 8 Not sure

INSTRUCTIONS BEFORE Q25

IF CVP = 0, SKIP TO INSTRUCTIONS BEFORE Q27

IF CVP > 0, ASK Q25

- 25 You said you typically vanpool to work. Including yourself, how many people usually ride in your vanpool?

_____ total people in vanpool (6-15 people)

INSTRUCTIONS BEFORE Q27

IF (CCP = 0 AND CVP = 0 AND CEB = 0 AND CLB = 0 AND CMT = 0), SKIP TO Q28

IF (CCP > 0 OR CVP > 0 OR CEB > 0 OR CLB > 0 OR CMT > 0), ASK Q27, USING THE Q20 ALTERNATIVE MODE WITH MOST DAYS USED. IF TIE FOR MOST DAY USED, SELECT IN THIS ORDER: 5 (VANPOOL), 4 (CARPOOL), 8 (MARTA TRAIN), 6 (EXPRESS BUS), 7 (LOCAL BUS)

IF Q20 MODE NAMED IN Q27 = BUS OR TRAIN, DO NOT SHOW Q27 RESPONSES 1 - 4 ON THE SCREEN - SHOW ONLY 5 - 9 AND 97. IF Q20 MODE NAMED IN Q27 = CARPOOL OR VANPOOL, SHOW ALL RESPONSES 1-9 AND 97.

- 27 How do you typically get from home to where you meet your carpool, vanpool, bus, or train (FROM Q20)? If you use different options on different days, please select the option you use most often.
- 1 Picked up at home by carpool/vanpool or leave from home with household member **(SKIP TO Q28)**
 - 2 I always drive the carpool/vanpool and pick up riders **(SKIP TO Q28)**
 - 3 Drive alone to carpool/vanpool partner's home, then leave my car at driver's home
 - 4 Some days drive to carpool/vanpool partner's home, some days picked up by pool partner (alternate driving with pool partner)
 - 5 Drive alone to a central location, like park & ride or to bus/train station
 - 6 Dropped off by household members **(SKIP TO Q28)**
 - 7 Bicycle **(SKIP TO Q28)**
 - 8 Walk **(SKIP TO Q28)**
 - 9 Bus **(SKIP to Q28)**
 - 97 Other (SPECIFY) _____
 - 99 Left blank



27a How many miles is it one way from your home to where you meet your carpool, vanpool, bus, or train <Q20 MODE>? Please enter numeric value only. **(ALLOW 1 DECIMAL)**

_____ miles
 888 Not sure
 999 Left blank

28 How many miles is it one-way from your home to your usual work location? Please enter numeric value only. **(ALLOW 1 DECIMAL)**

Number of miles _____
 888 Not sure
 999 Left blank

29 How many minutes does it typically take to make this trip from home to work? If the time varies from day to day, enter what would be most typical. Please enter numeric value only.

Number of minutes _____
 888 Not sure
 999 Left blank

MODE DURATION, RECENT CHANGES, AND COMMUTE MOTIVATIONS

**IN Q30, <Q20 MODE> = ALL MODES drive alone, carpool, vanpool, commuter express bus, local bus, MARTA train, walk, bike, taxi NAMED IN Q20 (EXCLUDE CCW, CSE, COT, AND CTW)
 IF ONLY <Q20 MODE> = 16 (OTHER), SKIP TO Q45**

IN Q30, LIST ONLY MODES REPORTED IN Q20 (with additional changes shown); USE THE MODE NAMES SHOWN;

30 How long have you been using the types or types of transportation shown below to get to work?

SHOW RESPONSES IN THIS ORDER

Type of transportation	Number of Months Using Type of Transportation					
	1-12 months (1)	13-24 months (2)	25-36 months (3)	37-60 months (4)	More than 60 months (More than 5 years) (5)	Don't recall (8)
3 Driving alone in a car, truck, SUV, van, motorcycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Carpooling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Vanpooling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Riding a commuter express bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Riding a local bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Riding a train or rail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Bicycling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 Riding alone in a taxi, Uber, Lyft	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



DEFINE Q30 RECENT AND Q30 RECENT AM

DEFINE Q30 RECENT

IF Q30 = 8 FOR ALL Q30 MODES, SET Q30 RECENT = NONE

IF Q30 = 1, 2, 3, 4, OR 5 FOR ANY MODE, SET Q30 RECENT = Q30 MODE WITH FEWEST MONTHS. IF TIE FOR Q30 RECENT, DESIGNATE BOTH MODES AS Q30 RECENT

DEFINE Q30 RECENT AM = Q30 ALT MODE: CARPOOL, VANPOOL, COMMUTER EXPRESS BUS, LOCAL BUS, MARTA TRAIN, WALK, BIKE, WITH FEWEST MONTHS. IF NONE OF THESE MODES ARE Q30 RECENT, SET Q30 RECENT AM = NONE.

Skip follow-up questions if respondent did not report duration of modes

IF Q30 RECENT = NONE (unknown duration for all modes), SKIP TO Q40

Skip follow-up questions if respondent's most recent mode was only drive alone

IF Q30 RECENT AM = NONE (only drive alone), SKIP TO Q40

Skip follow-up questions if RECENT MODE duration is more than 3 years

IF Q30 = 4 OR 5 FOR ALL Q30 RECENT MODES, SKIP TO Q40

IF Q30 = 1, 2, OR 3 FOR ANY Q30 RECENT AM (CCP, CVP, CEB, CLB, CMT, CWK, OR CBK), ASK Q31

INSTRUCTIONS BEFORE Q31

IF MORE THAN ONE Q30 RECENT AM, CHOOSE ONLY ONE FOR Q31 AND Q32, USING THE MODE WITH MOST Q20 DAYS. IF TIE FOR Q20 DAYS, CHOOSE USING THE FOLLOWING PRIORITY: bike, walk, vanpool, MARTA, bus, carpool.

- 31 What prompted you to start <Q30 RECENT AM: carpooling, vanpooling, riding a bus, riding MARTA, walking, or biking> for your trip to work?

OPEN-ENDED RESPONSE – CODE IN POST-PROCESSING INTO THE FOLLOWING CATEGORIES; ADD OTHERS AS NECESSARY)

- 1 Changed jobs/work hours, spouse started new job
- 2 Moved to a different residence
- 3 Employer or worksite moved
- 4 Save money
- 5 Reduce gas expense, high gas prices
- 6 Save time
- 7 Tired of driving
- 8 Safety
- 9 No vehicle available
- 12 Avoid congestion, traffic was worse
- 13 Always used
- 14 Close to work or transportation pick up/ drop off location
- 15 Stress
- 17 Convenient
- 20 Found carpool / vanpool partner
- 39 Word of mouth/recommendation
- 40 Concerned about the environment, reduce carbon footprint
- 41 Avoid construction



- 97 Other (SPECIFY) _____
- 98 Not sure
- 99 Left blank

- 32 Did you receive any of the following information or service from your employer or from an organization that provides commute assistance to help you start <Q30 RECENT AM carpooling, vanpooling, riding a bus, riding MARTA, walking, or biking>?
- 1 No, did not receive any information or service

Information or Services Received

- 2 Help finding carpool / vanpool partner, ridematch assistance, matchlist
- 3 Transit route or schedule information
- 4 Transit subsidy, discounted transit pass
- 5 Vanpool subsidy or cash incentive
- 6 Other financial incentive
- 7 Reserved parking for carpools or vanpools
- 8 Bicycle services, e.g., racks, lockers, route information
- 9 Guaranteed ride home (GRH)
- 10 Shuttle bus to MARTA or bus stop
- 11 Teleworking information
- 12 Other commuter service or program (SPECIFY) _____
- 98 Not sure
- 99 Left blank

- 33 Before starting to [RECENT AM: *carpool, vanpool, ride a bus, ride a MARTA train, walk, bicycle*] to work, what type or types of transportation were you using to get to work? Select all that apply. If you were not working then or if you worked in a different region then, check “did not work then” (**ALLOW MULTIPLE MODES 1 – 15 AND 19. DO NOT ACCEPT MULTIPLES FOR 21**)

SHOW RESPONSES IN THIS ORDER

- 80 Did not work then, worked outside Atlanta region then
- 81 No other type, never used any other type of transportation
- 3 *Drive alone in a car, truck, SUV, van, motorcycle*
- 15 *Taxi, Uber, Lyft*
- 4 *Carpool*
- 5 *Vanpool*
- 6 *Commuter express bus*
- 7 *Local bus*
- 8 *Train or rail*
- 9 *Walk*
- 10 *Bicycle*



- 2 Telework
- 1 Compressed work schedule
- 98 Not sure
- 99 Left blank

INSTRUCTIONS BEFORE Q40**IF CEB > 0 OR CLB > 0 OR CMT > 0, SKIP TO INSTRUCTIONS BEFORE Q42a****IF CEB = 0 AND CLB = 0 AND CMT = 0, ASK Q40**

- 40 You didn't mention using bus or train to get to work. Do any of the following public transportation operators offer service you could use for this trip? Check all that apply. **(ALLOW MULTIPLES FOR 1-3, DO NOT ALLOW MULTIPLES FOR 4, 8, OR 9)**
- 1 Commuter express bus **(ASK Q40a)**
 - 2 Local bus **(ASK Q40a)**
 - 3 MARTA train **(ASK Q40a)**
 - 4 No public transportation offers service that I could use for my trip to work **(SKIP TO INSTRUCTIONS BEFORE Q42a)**
 - 8 Not sure **(SKIP TO INSTRUCTIONS BEFORE Q42a)**
 - 9 Left blank **(SKIP TO INSTRUCTIONS BEFORE Q42a)**
- 40a Considering your work and personal schedules, how often might you be able to use a bus or train to get to work?
- 1 Never
 - 2 Less than once per month
 - 3 1 to 3 days per month
 - 4 1 to 2 days per week
 - 5 3 or more days per week
 - 8 Not sure
 - 9 Left blank
- 40b What reasons keep you from using a bus or train for your trip to work? Select up to three reasons. **(ALLOW MULTIPLES FOR 2 – 97. DON'T ALLOW MULTIPLES FOR 98, 99)**
- 1 NA (DON'T SHOW ON SCREEN)
 - 2 Not compatible with work hours or schedule, work schedule varies
 - 3 Would take too long
 - 4 Would cost too much
 - 5 Need a car for work
 - 6 Need a car before/after work or for emergencies
 - 7 NA (DON'T SHOW ON SCREEN)
 - 8 Prefer my current type of transportation
 - 9 NA (DON'T SHOW ON SCREEN)
 - 10 NA (DON'T SHOW ON SCREEN)
 - 11 NA (DON'T SHOW ON SCREEN)
 - 13 Live too close to work
 - 15 NA (DON'T SHOW ON SCREEN)
 - 16 NA (DON'T SHOW ON SCREEN)
 - 17 NA (DON'T SHOW ON SCREEN)
 - 18 NA (DON'T SHOW ON SCREEN)
 - 19 Bus/train doesn't operate close enough to work/home
 - 20 Would have to transfer buses/trains

- 21 Trip is too long/distance too far
- 97 Other (SPECIFY) _____
- 98 Not sure
- 99 Left blank

INSTRUCTIONS BEFORE Q42a

IF CCP > 0 OR CVP > 0, SKIP TO INSTRUCTIONS BEFORE Q44

IF CCP = 0 AND CVP = 0 = 0, ASK Q42a

42a You didn't mention using a carpool or vanpool to get to work. Considering your work and personal schedules, how often might you be able to one of these options to get to work?

- 1 Never
- 2 Less than once per month
- 3 1 to 3 days per month
- 4 1 to 2 days per week
- 5 3 or more days per week
- 8 Not sure
- 9 Left blank

42b What reasons keep you from using a carpool or vanpool for your trip to work? Select up to three reasons.
(ALLOW MULTIPLES FOR 2 – 97. DON'T ALLOW MULTIPLES FOR 98, 99)

- 1 NA (DON'T SHOW ON SCREEN)
- 2 Not compatible with work hours or schedule, work schedule varies
- 3 Would take too long
- 4 Would cost too much
- 5 Need a car for work
- 6 Need a car before/after work or for emergencies
- 7 NA (DON'T SHOW ON SCREEN)
- 8 Prefer my current type of transportation
- 9 NA (DON'T SHOW ON SCREEN)
- 10 NA (DON'T SHOW ON SCREEN)
- 11 NA (DON'T SHOW ON SCREEN)
- 13 Live too close to work
- 15 NA (DON'T SHOW ON SCREEN)
- 16 NA (DON'T SHOW ON SCREEN)
- 17 NA (DON'T SHOW ON SCREEN)
- 18 NA (DON'T SHOW ON SCREEN)
- 19 Don't know how to find a carpool/vanpool partner
- 21 Trip is too long/distance too far
- 97 Other (SPECIFY) _____
- 98 Not sure
- 99 Left blank

INSTRUCTIONS BEFORE Q44

IF CALTDAYS < 2 (0 or 1 alt mode days), ASK Q44

OTHERWISE, SKIP TO Q45



44 The table below shows several benefits that might encourage or assist you to use transportation options other than driving alone for your trip to work. Using a scale from 1 to 5, please indicate how much each service would influence you to try another type of transportation for your trip to work. A rating of 1 means the service would have no influence for you and 5 means it would have a great deal of influence.

Benefits	Encourage/assist you to try another type of transportation					
	1 - No influence	2	3	4	5 - A great deal of influence	Not sure (8)
1 You could accumulate points redeemable for gift cards and merchandise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Discounted monthly transit pass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Public recognition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Guaranteed ride home if you have a personal emergency during the workday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Entry into a monthly drawing for \$25 gift card	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Financial contribution to a charity of your choice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Monthly \$40-\$60 gas cards for carpools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 System that tracks the pollution you reduce by not driving alone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 \$5 per day, up to \$150, to switch from driving alone to another type of transportation for travel to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 System that tracks your financial savings when you chose not to drive alone to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45 Next, please provide your opinions on some transportation issues. First, would you say your trip to work is easier, more difficult, or about the same now as it was one year ago?

- 1 Easier
- 2 More difficult (SKIP TO Q47)
- 3 About the same (SKIP TO Q47a)
- 4 Not applicable, didn't work/live in Atlanta then, didn't commute then (SKIP TO Q48)

8 **Not sure** (SKIP TO Q47a)

9 **Left blank** (SKIP TO Q47a)

46 In what way is it easier? Select all that apply.

- 1 Commute is shorter distance
- 2 Commute trip is faster, takes less time
- 3 Commute route is less congested
- 4 Started carpooling/vanpooling to work
- 5 Started using bus, train to work



- 6 Started driving alone to work
- 7 Started walking or bicycling to work
- 8 Commute is less stressful
- 97 Other (SPECIFY) _____
- 98 Not sure

99 Left blank

SKIP TO Q47a

47 In what way is it more difficult? Select all that apply.

- 1 Commute is longer distance
- 2 Commute trip is slower, takes more time
- 3 Commute route is more congested
- 4 Started carpooling/vanpooling to work
- 5 Started using bus, train to work
- 6 Started driving alone to work
- 7 Started walking or bicycling to work
- 8 Commute is more stressful
- 9 Construction along commute route
- 97 Other (SPECIFY) _____
- 98 Not sure

99 Left blank

47a In the past year, have you changed either your work or home location?

- 1 Yes, changed home location
- 2 Yes, changed work location
- 3 Yes, changed both home and work locations
- 4 No, did not change either home or work location **(SKIP TO Q48)**
- 8 Not sure **(SKIP TO Q48)**
- 9 Left blank **(SKIP TO Q48)**

47b Was your previous location also in the Atlanta metropolitan region or somewhere else?

- 1 In the Atlanta metropolitan region
- 2 In Georgia, but outside the Atlanta metropolitan region
- 3 Outside Georgia

8 Not sure

9 Left blank

47c What factors did you consider in your decision to make this work/home location change?
(ALLOW MULTIPLE RESPONSES FOR 1-12)

Commute Factors



- 1 Length of commute (distance or time)
- 2 Ease or difficulty of commute
- 3 Cost of commuting
- 4 Commuting options that would be available (e.g., transit)

Residential Factors

- 5 Cost of living, cost of housing
- 6 Size of house
- 7 Quality of neighborhood
- 8 Closeness to family or friends
- 9 Entertainment, shopping, services nearby
- 10 Quality of schools

Job Factors

- 11 Income, salary
- 12 Job satisfaction
- 13 Career advancement, job opportunities
- 14 Office was relocating – moved to stay with my employer

- 97 Other (SPECIFY) _____
- 98 Not sure
- 99 Left blank

IF Q47c ONLY RESPONSE = 1 AND/OR 2 (ease, length of commute), AUTOCODE Q47d = 4, THEN SKIP TO Q48

47d How important to your decision was the length or ease of your trip to work compared with the other factors you just mentioned?

- 1 Less important
- 2 More important
- 3 About the same importance
- 4 Commute ease/difficulty, length of commute was the only factor mentioned **(AUTOCODE ONLY – DO NOT SHOW ON SCREEN)**
- 8 Not sure

48 How strongly do you agree with the statement: “Traffic congestion is a serious problem in the Atlanta area.”

- 1 Strongly agree
- 2 Somewhat agree
- 3 Neither agree nor disagree
- 4 Somewhat disagree
- 5 Strongly disagree
- 8 Not sure

9 Left blank

49 And how strongly do you agree with the statement: “Air quality is a serious problem in the Atlanta area.”

- 1 Strongly agree



- 2 Somewhat agree
 - 3 Neither agree nor disagree
 - 4 Somewhat disagree
 - 5 Strongly disagree
 - 8 Not sure
 - 9 Left blank
- 50 How important is each of the following travel attributes to you in choosing the type of transportation you use to get to work.

	1 - Not at all important	2	3	4	5 - Extremely important	Not Sure (8)
1 Cost of travel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Travel comfort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Flexibility in when you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Total time to make the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Dependability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Avoiding travel stress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Using travel time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 52 Next, consider the benefits of traveling by carpool, vanpool, bus, or train. What impact or benefit does a community or region receive when people use these types of transportation?

OPEN-ENDED RESPONSE – CODE IN POST-PROCESSING INTO THE FOLLOWING CATEGORIES; ADD OTHERS AS NECESSARY)

- 1 Less traffic, less congestion
- 2 Reduce air pollution, help the environment
- 3 Reduce greenhouse gases, reduce carbon footprint
- 4 Save energy
- 5 Less wear and tear on roads
- 6 Reduce accidents, improve travel safety
- 7 Reduce government costs
- 8 Less stress, less road rage
- 97 Other (specify) _____
- 95 No benefits
- 98 Not sure
- 99 Left blank

INSTRUCTIONS BEFORE Q53

IF CALTDAYS = 0, SKIP TO Q55

IF CWK > 0, ASK Q53, INSERTING “bicycle”

IF CBK > 0, ASK Q53, INSERTING “walk”



IF CCP > 0, ASK Q53, INSERTING "carpool"

IF CVP > 0, ASK Q53, INSERTING "vanpool"

IF CLB > 0 OR CEB > 0 OR CMT > 0, ASK Q53 INSERTING "ride public transportation"

IF MULTIPLE ALT MODES ARE USED IN Q20, SELECT THE ALT MODE WITH THE GREATEST NUMBER OF DAYS;
IN THE CASE OF A TIE, USE THE FOLLOWING PRIORITY: bicycle, walk, vanpool, ride public transportation,
carpool

53 You said you [bicycle, walk, carpool, vanpool, ride public transportation] to work some days. What benefits have you personally received from traveling to work this way?

OPEN-ENDED RESPONSE – CODE IN POST-PROCESSING INTO THE FOLLOWING CATEGORIES; ADD OTHERS AS NECESSARY)

- 1 Save money
- 2 Avoid stress
- 3 Not need to have a car
- 4 Less wear and tear on car
- 5 Use travel time productively (e.g., read, work, sleep)
- 6 Have companionship when they travel
- 7 Arrive at work on time, less likely to be late
- 8 Get exercise, health benefits
- 9 Help the environment
- 10 Reduce greenhouse gases, reduce carbon footprint
- 11 Can use HOV lane
- 97 Other (specify) _____
- 95 No benefits
- 98 Not sure
- 99 Left blank

Communication / AD MESSAGE AWARENESS

55 Next, do you recall seeing or hearing any advertising or news reports in the Atlanta region in the past year about transportation services or information that could assist you with your travel to and from work?

- 1 Yes
- 2 No (**SKIP TO Q60**)
- 8 Not sure (**SKIP TO Q60**)
- 9 Left blank (**SKIP TO Q60**)

55a Where did you hear or see the advertising or news report? Select all that apply

- 1 Social media
- 2 NA (DON'T SHOW ON SCREEN)
- 3 Radio
- 4 Billboard
- 5 Email
- 6 Website
- 7 Video (YouTube or promotional video)
- 8 Newspaper
- 9 Employer/Break room poster



- 10 Employer intranet
- 11 TV News Report
- 12 Pandora or Waze
- 97 Other (Specify): _____
- 98 Not sure
- 99 Left blank

Deleted Q55b

- 56 What did the advertising or news report say, or what messages do you recall?
SHOW OPEN-ENDED TEXT BOX AND 98 CHECK BOX RESPONSES

98 Not sure

- 99 Left blank (DO NOT SHOW ON SCREEN)

**CODE OPEN ENDED RESPONSES IN POST-PROCESSING INTO THE FOLLOWING CATEGORIES;
ADD OTHERS AS NECESSARY)**

- 1 Consider, try carpool, vanpool, rideshare, transit
- 2 Travel options are available (carpool, vanpool, transit)
- 3 Call for information on travel options, carpool, vanpool, transit
- 4 Save money
- 5 Save time
- 6 Reduce stress
- 7 Help the environment
- 8 Reduce traffic
- 10 Help finding carpool / vanpool partners, forming carpool / vanpool
- 11 Guaranteed ride home (GRH)
- 12 Transit subsidy
- 13 Cash for Commuters/\$3 A Day subsidy program
- 14 Commuter Rewards subsidy program (\$25 Prizes/Commuter Prizes, \$40-60 Gas Cards/Carpool Rewards)
- 16 Public transit, MARTA, other bus or train



- 17 Telecommuting/Teleworking
- 19 Contact 1-87-RIDEFIND
- 20 Contact MARTA
- 21 Contact Clean Air Campaign, 1-877-CLEANAIR
- 22 Contact Buckhead Area TMA (BATMA)
- 23 Contact Central Atlanta Progress, Contact Downtown TMA (DTMA, CAP)
- 24 Contact Clifton Corridor TMA (CCTMA)
- 28 Contact Midtown Transportation
- 29 Contact Perimeter Transportation and Sustainability Coalition (PTSC)
- 32 Contact Atlantic Station/ASAP+
- 33 Contact RideSmart
- 34 Expanding Transit
- 35 Building new roads and/or HOV lanes
- 36 Contact Georgia Commute Options, 1-877-9GA-OPTIONS
- 37 Contact AERO, Airport Employee Ride Options
- 97 Other (SPECIFY) _____
- 98 Not sure
- 99 Left blank

IF SURVTYPE = 3 (HOMEALL), SKIP TO Q60

IF SURVTYPE = 2 (TELEALL), SKIP TO Q60

IF SURVTYPE = 6 (WKALL), SKIP TO Q60

57 After seeing or hearing this ad or news report, did you take any of the following actions to try to change how you travel around the Atlanta area? Select all that apply. (ALLOW MULTIPLE RESPONSES WITH 2-97, DO NOT ALLOW MULTIPLES WITH 1, 98, OR 99)

- 2 Tried or started driving alone



- 3 Changed commuting route or time (e.g., started going to work earlier)
- 4 Sought more travel information from internet or referral from friend/family
- 5 Sought more travel information from transit agency, commute organization, or employer
- 6 Tried, started, increased use of carpooling or vanpooling
- 7 Tried, started, increased use of bus or train
- 8 Tried, started, increased use of bicycling or walking
- 9 Tried, started, or increased use of telecommuting/teleworking
- 97 Other action (SPECIFY) _____
- 1 Didn't take any of these actions
- 98 Not sure
- 99 Left blank

Transportation Support Organizations and Programs

60 Do you know of any programs, organizations, phone numbers, or websites in the Atlanta region that provide information or resources to help with travel to work?

SHOW OPEN-ENDED TEXT BOX AND 1, 98 CHECK BOX RESPONSES

- Name of resource (PLEASE SPECIFY): _____
- 1 Don't know of any program, organization, phone number, or website
- 98 Have heard that such a resource exists, but don't know the name
- 99 Left blank (DO NOT SHOW ON SCREEN)

**CODE OPEN ENDED RESPONSES IN POST-PROCESSING INTO THE FOLLOWING CATEGORIES;
ADD OTHERS AS NECESSARY)**

- 1 **Don't know any** (DO NOT ALLOW OTHER RESPONSES)
- 2 Employer
- 3 NA
- 4 NA
- 5 NA
- 6 1-87-RIDEFIND



7 MARTA

8 Clean Air Campaign, 1-877-CLEANAIR

9 Buckhead Area Transportation Management Association (BATMA)

10 Central Atlanta Progress (Downtown TMA)

11 Clifton Corridor Transportation Management Association (CTMA)

12 CobbRides/LocalZoom

13 Commuter Club

14 NA

15 Midtown Transportation

16 Perimeter Transportation and Sustainability Coalition

17 RideSmart

18 Atlantic Station/ASAP+

19 Georgia Department of Transportation

20 Atlanta Regional Commission

21 Georgia Regional Transportation Authority (GRTA) [pronounced greta]

22 XPRESS

23 Gwinnett County Transit (GCT)

25 Cobb Community Transit (CCT)

26 Douglas County Rideshare

27 Georgia Navigator (website)

28 Georgia Commute Options, 1-877-9GA-OPTIONS

97 Other (SPECIFY) _____

98 Don't Know Specific (I.E., If they say that they know of some, but can't think of the specifics)

99 Left blank

62 Do you know of any programs in the Atlanta region that offer financial incentives to commuters who carpool, vanpool, ride a train or bus, or walk or bicycle to work?

SHOW OPEN-ENDED TEXT BOX AND 1, 2, 98 CHECK BOX RESPONSES

1 Yes (PLEASE SPECIFY) : _____

2 Don't know of any program

98 Have heard that such a program exists, but don't know the name

99 Left blank (DO NOT SHOW ON SCREEN)



**CODE OPEN ENDED RESPONSES IN POST-PROCESSING INTO THE FOLLOWING CATEGORIES;
ADD OTHERS AS NECESSARY)**

- 1 Cash for Commuters/\$3 A Day Program
- 2 Commuter Rewards
- 3 Commuter Prizes/\$25 Prizes Program
- 4 Carpool Rewards/\$40-\$60 Gas Cards Program
- 5 MARTA transit pass
- 6 Clean Air Campaign
- 7 Georgia Commute Options
- 8 Gimme Five (\$5 A Day program)
- 97 Other (Specify)
- 98 Have heard that such a program exists, but don't know the name
- 99 Left blank

63a Have you heard of any of the following incentive programs? Select all that apply. **ALLOW MULTIPLES FOR RESPONSES 1-4. DO NOT PERMIT MULTIPLES WITH 6, 8, OR 9**

- 1 Gimme Five
- 3 \$25 Prizes
- 4 \$40/\$60 Gas Cards
- 5 Guaranteed Ride Home program (GRH)
- 6 \$3 A Day program
- 7 Commuter Prizes
- 8 Carpool Rewards
- 9 No, have not heard of any of these programs
- 88 Not sure
- 99 Left blank

IF Q63a = ANY OF 1, 3, 4, 5, 6, 7, 8, ASK Q63b

IF Q63a = 9, 88, OR 99, SKIP TO Q66

63b Are you currently participating or did you previously participate in any of these programs?

- 1 Currently participating in one or more of the programs
- 3 Not currently participating but previously participated in one or more of the programs
- 3 No, never participated in any of the programs
- 8 Not sure
- 9 Left blank

IF Q63a = ANY OF 1-4 AND Q63b = 3, ASK Q63c, OTHERWISE SKIP TO Q66





63c You said you were aware of these programs but never participated. For what reasons didn't you participate?

Open-ended (CODE IN POST PROCESSING)

- 1 Application was too cumbersome to fill out
- 2 I was denied from acceptance in to the program
- 3 I have kids/scheduling issues
- 4 I enjoy driving alone
- 5 Language barrier
- 6 Didn't understand rules of the program
- 7 Wasn't eligible
- 8 No access to a computer
- 9 Website blocked at work
- 10 Didn't like the awards offered, incentives not motivating
- 11 Couldn't find carpool/vanpool partner
- 12 No transit access
- 13 Takes too much time
- 14 Too much personal information needed
- 97 Other (Specify): _____
- 98 Not sure
- 99 Left blank

66 Have you heard of a program in the Atlanta region called Georgia Commute Options or GCO?

- 1 Yes
- 2 No (**SKIP TO INSTRUCTIONS BEFORE Q72**)
- 8 Not sure (**SKIP TO INSTRUCTIONS BEFORE Q72**)
- 9 Left blank (**SKIP TO INSTRUCTIONS BEFORE Q72**)



67 How did you learn about Georgia Commute Options? Select all that apply.

- 1 TV
- 2 Magazine or newspaper ad or article
- 5 Sign/billboard
- 9 Radio
- 10 Employer
- 13 Word of mouth (family, friend, co-worker)
- 14 Internet/Web/table or smart phone text
- 18 Commuter assistance organization (Please specify name): _____
- 21 Social media (Facebook, Twitter, etc.)
- 22 Email, newsletter
- 23 Pandora
- 97 Other (Specify) _____
- 98 Not sure
- 99 Left blank

69 Have you used any services from Georgia Commute Options?

- 1 Yes
- 2 No
- 98 Not sure
- 99 Left blank

IF Q69 = 2, AUTOCODE Q69a = 1, THEN SKIP TO INSTRUCTIONS BEFORE Q72
IF Q69 = 98 OR 99, AUTOCODE Q69a = 98, THEN SKIP TO INSTRUCTIONS BEFORE Q72
IF Q69 = 1, ASK Q69a

69a What services have you used from Georgia Commute Options? Select all that apply. **(ALLOW MULTIPLES FOR RESPONSES 2 – 97; DO NOT ALLOW MULTIPLES WITH 1, 98, 99)**

SHOW RESPONSES 2 - 98

- 1 No, did not use any services **(AUTOCODE ONLY, THEN SKIP TO INSTRUCTIONS BEFORE Q72)**
- 2 Information on transportation options I could use
- 3 Help finding carpool or vanpool partner, ridematching assistance, matchlist
- 5 Gimme Five, formerly \$3 A Day program
- 8 Vanpool or carpool subsidy
- 12 Information on shuttle bus to MARTA or other location
- 97 Other (SPECIFY) _____
- 98 Not sure **(SKIP TO INSTRUCTIONS BEFORE Q72)**
- 99 Left blank **(SKIP TO INSTRUCTIONS BEFORE Q72)**

70 Overall, how satisfied were you with the services and/or information you received? Would you say you were very satisfied, somewhat satisfied, somewhat unsatisfied, or not satisfied?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Somewhat unsatisfied
- 4 Not satisfied
- 8 Not sure



9 Left blank

IF Q70 = 3 OR 4, ASK Q70a OTHERWISE SKIP TO INSTRUCTIONS BEFORE Q72

70a Why were you not satisfied? Select all that apply (**SHOW RESPONSES 1-98**)

- 1 Did not receive any matches
- 3 Unfriendly/unhelpful staff
- 4 Took too long to receive information, get a response
- 5 Information was not useful or not targeted to my needs
- 6 People listed on match list did not want to carpool or add riders to their vanpool
- 7 No follow-up assistance
- 8 Was not able to access information/assistance by email/Internet
- 9 Did not receive transit information
- 10 Did not qualify for an incentive program
- 97 Other (SPECIFY)_____
- 98 Not sure
- 99 Left blank

INSTRUCTIONS BEFORE Q72

IF SURVTYPE = 3 (HOMEALL), SKIP TO INTRO TO DEMOGRAPHICS (BEFORE Q90a)

IF SURVTYPE = 4 (HOMEOTHER), SKIP TO INTRO TO DEMOGRAPHICS (BEFORE Q90a)

IF SURVTYPE = 2 (TELEALL), SKIP TO INTRO TO DEMOGRAPHICS (BEFORE Q90a)

IF SURVTYPE = 6 (WKALL), SKIP TO INTRO TO DEMOGRAPHICS (BEFORE Q90a)

IF S7 ≠ 1, 2, 3, 6, 7, 8, AND 15, SKIP TO Q80

SELECT ORGANIZATION NAME FOR USE IN Q72

IF S7 = 1, INSERT "Livable Buckhead, Inc (LBI)" AS <Q72 ORGANIZATION> IN Q72

IF S7 = 2, INSERT "Central Atlanta Progress" AS <Q72 ORGANIZATION> IN Q72

IF S7 = 3, INSERT "Clifton Corridor Transportation Management Association" AS <Q72 ORGANIZATION> IN Q72

IF S7 = 6, INSERT "AERO or Airport Employee Ride Options" AS <Q72 ORGANIZATION> IN Q72

IF S7 = 7, INSERT "Midtown Transportation" AS <Q72 ORGANIZATION> IN Q72

IF S7 = 8, INSERT "Perimeter Connects" AS <Q72 ORGANIZATION> IN Q72

IF S7=15, INSERT "ASAP+" AS <Q72 ORGANIZATION> IN Q72



72 Have you heard of an organization called <Q72 ORGANIZATION>, which provides transportation information and assistance in the area where you work?

97 Yes

1 No

98 Not Sure

99 Left blank

IF NO, CODE RESPONSE 1

IF Q72 = 97 (YES), CODE THE APPROPRIATE ORGANIZATION NAME RESPONSE 2 – 7 IN POST-PROCESSING

1 No, don't know <F9 ORGANIZATION>

2 Livable Buckhead, Inc (LBI)

3 Central Atlanta Progress

4 Clifton Corridor Transportation Management Association (CCTMA)

5 Midtown Transportation

6 Perimeter Connects

7 Atlantic Station/ASAP+

8 Airport Employee Ride Options (AERO)

98 Not sure

99 Left blank

IF Q72 = 1, 98, OR 99, SKIP TO Q80

73 Have you used any services from this organization/program in the past year?

1 Yes

2 No

8 Not sure

9 Left blank

IF Q73 = 2, AUTOCODE Q73a = 1, THEN SKIP TO Q80

IF Q73 = 98 OR 99, AUTOCODE Q73a = 98, THEN SKIP TO Q80

IF Q73 = 1, ASK Q73a



73a What services have you used from this organization/program? Select all that apply. **(ALLOW MULTIPLES FOR RESPONSES 2 – 97; DO NOT ALLOW MULTIPLES WITH 1, 98, 99)**

- 1 No, did not use any of these services (AUTOCODE ONLY, THEN SKIP TO Q80)
- 2 Information on transportation options I could use
- 3 Help finding carpool or vanpool partner, ridematching assistance, matchlist
- 4 Transit route or schedule information
- 5 NA (DON'T SHOW ON SCREEN)
- 6 NA (DON'T SHOW ON SCREEN)
- 7 Transit subsidy, discounted transit pass
- 8 NA (DON'T SHOW ON SCREEN)
- 9 NA (DON'T SHOW ON SCREEN)
- 10 Bicycle, walking information or services, e.g., racks, lockers, route information
- 11 NA (DON'T SHOW ON SCREEN)
- 12 NA (DON'T SHOW ON SCREEN)
- 13 Teleworking information
- 14 Park & Ride lot information, parking information
- 15 Financial incentive for commuters who don't drive alone to work
- 97 Other commuter service or program (SPECIFY) _____
- 98 Not sure
- 99 Left blank

IF Q73a = ANY OF 2 - 97, CONTINUE,

IF Q73a = 1, 98, or 99, SKIP TO Q80

74 Overall, how satisfied were you with the information and services you received?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Somewhat unsatisfied
- 4 Not satisfied
- 8 Not sure
- 9 Left blank

Actions Taken After Using Information or Services

INSTRUCTIONS BEFORE Q75

IF (Q69a = ANY OF 2-15) AND/OR (Q73a = ANY OF 2-15), ASK Q75,

IF (Q69a = 1, 98, OR 99) AND (Q73a = 1, 98, OR 99), SKIP TO Q80

75 After using the transportation services or information you mentioned, did you take any of the following actions to try to change how you travel to work? Select all that apply. (ALLOW MULTIPLES FOR RESPONSES 2 – 97; DO NOT ALLOW MULTIPLES WITH 1, 98, 99)

- 1 Didn't take any of these action
- 2 Tried or started driving alone
- 3 Changed commuting route or time (e.g., started going to work earlier)



- 4 Sought more travel information from internet or referral from friend/family
- 5 Sought more travel information from transit agency, commute organization, or employer
- 6 Tried, started, increased use of carpooling or vanpooling
- 7 Tried, started, increased use of bus or train
- 8 Tried, started, increased use of bicycling or walking
- 9 Tried, started, increased telecommuting/teleworking
- 97 Other action (SPECIFY) _____
- 98 Not sure
- 99 Left blank

Employer Provided Services

80 Finally, please answer a few questions about commute services or benefits that your employer might make available to you. Does your employer make free on-site parking available to all employees at your worksite?

- 1 Yes
- 2 No
- 8 Not sure
- 9 Left blank

IF Q80 = 1, AUTOCODE Q80a = 1, THEN SKIP TO Q83

80a Does your employer make free on-site parking available to you?

- 1 Yes **(SKIP TO Q83)**
- 2 No
- 8 Not sure
- 9 Left blank

81 Does your employer pay or reimburse part of your parking cost or do you or would you have to pay the entire cost if you drove to work? **(SHOW RESPONSES 2, 3, 8 ONLY)**

- 1 NA
- 2 I pay/would pay the entire cost of parking
- 3 Employer pays part of cost
- 8 Not sure
- 9 **Left blank**



83 Shown below are some other services or benefits that your employer might make available to help you with your commute. For each service, please indicate if:

- It is available and you have used it
- It is available and you have NOT used it
- It is NOT available

(ROTATE 1-9)

Employer service	1 – Available and USED	2 – Available but NOT USED	3 - Not Available	9 – Not sure
1 Help finding a carpool or vanpool partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Georgia Commute Options Financial Incentives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Subsidy or discounted transit pass for employees who ride a bus or train to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Guaranteed ride home (GRH) in case of an emergency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Information on types of transportation you could use to get to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Transit route or schedule information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Teleworking (opportunity to work at home occasionally or regularly, instead of traveling to your regular work place)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Cash or other financial subsidy for employees who vanpool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Alternative Work Schedule, allowing employees to work non-standard or compressed week schedules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IF Q83 = 2, 3, 9 OR BLANK FOR ALL SERVICES, SKIP TO Q86

IF Q83 = 1 FOR ANY SERVICE, ASK Q85

85 In what ways have you benefited personally or professionally from using these services offered by your employer? Select all that apply. (ACCEPT MULTIPLES FOR RESPONSES 1-87, DO NOT ACCEPT MULTIPLES FOR 89, 98, 99).

- 1 Able to spend more time with family
- 2 Able to spend more time at work
- 3 Saving money
- 4 More productive
- 5 Less stress/no traffic

97 Other (SPECIFY _____)

89 Have not benefited



- 98 Not sure
- 99 Left blank
- 86 How important do you think it is for employees to have access to services and benefits that make it easier to carpool or ride transit to work?
- 1 Not at all important
- 2 2
- 3 3
- 4 4
- 5 Very important
- 8 Not sure
- 9 Left blank
- 86a How important do you think it is for employers to offer these types of services and benefits to their employees?
- 1 Not at all important
- 2 2
- 3 3
- 4 4
- 5 Very important
- 8 Not sure
- 9 Left blank

Demographics -ASK ALL RESPONDENTS

INTRO TO DEMOGRAPHICS: The last few questions are for classification purposes only. They will not be used to identify you in any way.

- Q90a Which of the following social networking applications do you currently have an account with?
Select all that apply.
- 1 Facebook
- 2 Twitter



- 3 LinkedIn
- 4 NA
- 5 NA
- 6 Instagram
- 7 Snapchat
- 8 Nextdoor
- 77 None of these, I don't use social networking
- 99 Left blank



Q90b Which of the following types of travel or trip applications have you used? Select all that apply.

- 1 Traffic alerts (ex., GA 511)
- 2 Ridehailing apps (ex., Uber, Lyft)
- 3 Wayfinding apps (ex., Waze, Google maps)
- 4 Trip/fitness tracking apps (ex., Strava, Map My Ride)
- 5 Transit schedule, bus/train arrival mobile app (ex. Next Bus)
- 97 Other (Please specify) _____
- 77 None of these, I don't use those types of applications
- 99 Left blank

91 In total, how many motor vehicles, in working condition, including automobiles, trucks, vans, and highway motorcycles are owned or leased by members of your household?

- _____
- 88 Not sure
 - 99 Left blank

91a Including yourself, how many persons live in your home? Please count yourself, family and friends, and anyone who may be unrelated to you such as live-in housekeepers, roommates, or boarders.

- _____ persons
- 88 Not sure
 - 99 Left blank

IF Q91a = 88 OR 99, SKIP TO Q92

IF Q91a = 1, AUTOCODE Q91b = 1, AUTOCODE Q91c = 1, THEN SKIP TO Q92

IF Q91a > 1, ASK Q91b

91b Including yourself, how many household members are 18 or older?

- _____ household members
- 888 Not sure
 - 999 Left blank

IF Q91b = 88 OR 99, SKIP TO Q92

IF Q91b = 1, AUTOCODE Q91c = 1, THEN SKIP TO Q92

IF Q91b > 1, ASK Q91c

91c Including yourself, how many household members 18 years or older are employed, either full-time or part-time?

- _____ Employed household members
- 888 Not sure
 - 999 Left blank



92 What is your occupation?

Open-ended (CODE IN POST PROCESSING)

- 1 Agricultural/Farmer
- 2 Artistic/Crafts
- 3 General Business (middle management, analyst, programmer, etc.)
- 4 Government/Public Services
- 5 Healthcare - Medical Services and Products
- 6 Laborer (hourly worker, machine operator, etc.)
- 7 Office Worker (clerical, secretary, word processor, data entry, etc.)
- 8 Manufacturing - Consumer/Industrial Goods
- 9 Professional/Technical
- 10 Real Estate Services/Property Management
- 11 Sales (salesperson, broker, etc.)
- 12 Services (retail sales, clerk, etc.)
- 13 Skilled Trade (electrician, plumber, construction, etc.)
- 14 Teacher/Educator
- 15 Transportation Services
- 16 Utilities/Energy
- 17 Other (Specify)
- 99 Left blank (DO NOT SHOW ON SCREEN)

IF SURVTYPE = 3 (HOMEALL),, AUTOCODE Q93 = 4, THEN SKIP TO Q95

93 For what type of employer do you work?

- 1 Federal agency
- 2 State or local government agency
- 3 Non-profit organization or association
- 4 Private company
- 5 NA (DO NOT SHOW ON SCREEN)
- 97 Other (SPECIFY) _____
- 98 Not sure
- 99 Left blank (DO NOT SHOW ON SCREEN)

IF SURVTYPE = 2 (TELEALL), SKIP TO Q95

94 About how many employees work at your worksite?

- 1 1-25
- 2 26-50
- 3 51-100
- 4 101-250
- 5 251-999
- 6 1,000 or more
- 8 Not sure
- 9 Left blank (DO NOT SHOW ON SCREEN)

95 In what year were you born?

- 9 Left blank (DO NOT SHOW ON SCREEN)



- 96 Are you female or male?
- 1 Female
 - 2 Male
 - 3 Other
 - 9 Left blank (DO NOT SHOW ON SCREEN)
- 97 Which one of the following best describes your racial background?
- 1 African-American or Black
 - 2 American Indian or Alaska Native
 - 3 Asian
 - 4 Hispanic
 - 5 Native Hawaiian or Other Pacific Islander
 - 6 White, non-Hispanic
 - 7 Other (SPECIFY) _____
 - 9 Left blank (DO NOT SHOW ON SCREEN)
- 98 In 2017, was your approximate annual household income less than \$60,000 or \$60,000 or more?
- 1 Less than \$60,000 (**ASK Q98a**)
 - 2 \$60,000 or more (**SKIP TO Q98b**)
 - 3 Left blank (DO NOT SHOW ON SCREEN) (**SKIP TO Q99**)

Q98a Which category includes your annual household income (for 2017). (READ CHOICES)

- 1 Less than \$10,000
- 2 \$10,000 to \$19,999
- 3 \$20,000 to \$29,999
- 4 \$30,000 to \$39,999
- 5 \$40,000 to \$49,999
- 6 \$50,000 to \$59,999
- 9 Left blank (DO NOT SHOW ON SCREEN)

SKIP TO Q99

Q98b Which category includes your annual household income (for 2017). (READ CHOICES)

- 1 \$60,000 to \$79,999
- 2 \$80,000 to \$99,999
- 3 \$100,000 to \$119,999
- 4 \$120,000 to \$139,999
- 5 \$140,000 to \$159,999
- 6 \$160,000 or more
- 9 Left blank (DO NOT SHOW ON SCREEN)

102 **THANK YOU FOR YOUR PARTICIPATION!** The Atlanta Regional Council is offering a drawing for twenty-five \$250 Amazon gift cards. If you would like to be entered into the drawing for one of these gift cards, please provide your name and email address. Please be assured that we will not sell or use your information for anything other than entering you in the drawing. Would you like to participate in the drawing?

- 1 Yes, I would like to participate in the drawing (ASK Q102a)



- 2 No, I do not want to participate in the drawing (SKIP TO Q103-PANEL QUESTION)
- 9 Left blank (SKIP TO Q103-PANEL QUESTION)
- 102a Please provide your name and email address so we can contact you if you are one of the 25 winners.
- First Name:
Last Name:
Email Address:
- 103 The Atlanta Regional Commission is continually striving to improve transportation services in the Atlanta region. You can be part of this important process by joining a panel of residents who share their opinions with ARC through brief email surveys on topics of current interest. ARC would NOT use your email for any other purpose – just occasional resident feedback – and would not ask you to complete more than two surveys per year. Would you be interested in participating on such a panel?
- 1 Yes
2 No (SKIP TO SURVEY END)
9 Left blank (SKIP TO SURVEY END)

IF Q103 = 1 (yes) AND RESPONDENT PROVIDED NAME/EMAIL IN Q102a, SHOW: Thank you for your willingness to help ARC. We will add you to the panel. **THEN SKIP TO SURVEY END.**

IF Q103 = 1 (yes) AND RESPONDENT DID NOT PROVIDE NAME/EMAIL IN Q102a, ASK Q103a

- 103a Thank you for your willingness to help ARC. Please provide your name and email address below so we can add you to the panel.
- First Name:
Last Name:
Email Address:

SURVEY END – SUBMIT

**Thank you for taking the time to fill out our survey.
Click on “SUBMIT” to submit your last answers.**

