



**National Capital Region
Transportation Planning Board
COMMUTER CONNECTIONS PROGRAM**

**WASHINGTON DC METROPOLITAN REGION
GUARANTEED RIDE HOME (GRH) PROGRAM**

**2019 GRH APPLICANT SURVEY
Technical Survey Report**

Prepared for:

Metropolitan Washington Council of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4290

Prepared by:

LDA Consulting

In association with:

CIC Research, Inc.

September 17, 2019



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ABSTRACT

Commuter Connections Guaranteed Ride Home Program 2019 Applicant Survey Technical Report

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ABOUT COMMUTER CONNECTIONS

Commuter Connections, a program of the National Capital Region Transportation Planning Board at the Metropolitan Washington Council of Governments (COG), promotes bicycling to work, ridesharing, and other alternatives to drive alone commuting, provides ridematching for carpools and vanpools, incentive programs for alternative commuting, and offers the free Guaranteed Ride Home program. Commuter Connections is funded by the District of Columbia, Maryland, Virginia and U.S. Department of Transportation.

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EXECUTIVE SUMMARY

Introduction

This report presents the results of a Guaranteed Ride Home (GRH) survey of 2,066 commuters who currently participate or who have participated in the Commuter Connections Washington Regional Guaranteed Ride Home (GRH) Program operated by the Metropolitan Washington Council of Governments (MWCOG) for commuters who work in the metropolitan Washington region. MWCOG, through the National Capitol Region Transportation Planning Board (TPB), introduced the Commuter Connections GRH Program in 1997 to eliminate one barrier to using alternative modes, commuters' fear of being without transportation in the case of an emergency. The program provides up to four free rides home per year in a taxi, rental car, public transit, or a combination of these modes, in the event of an unexpected personal emergency or unscheduled overtime.

Commuter Connections undertook the survey described in this report for two purposes:

- Examine commute and demographic characteristics of commuters participating in GRH.
- Collect data needed to estimate reductions in vehicle trips, vehicle miles traveled, and emissions reduced as a result of commuters' participation in the GRH Program.

Interviews were conducted by Internet if the applicant had provided a contact email address. Telephone interviews were conducted with applicants who had not provided an email contact. For this reason, "past/Inactive" and "current/Active" participants were divided into Internet and telephone access groups, resulting in four sample groups: 1) Current-Telephone, 2) Past-Telephone, 3) Current-Internet, and 4) Past-Internet.

After all interviews were completed, the data were weighted to align the survey results with the total population of GRH participants during the evaluation period. The criterion used to weight the survey data was "type" of GRH participant. This variable denotes if the participant is currently registered for GRH or was registered in the past.

Following is a summary of results on the following topics:

- Program participation findings
- Impact of GRH on commute patterns
- Implications of results for travel and air quality assessment
- Program marketing findings

Program Participation Findings

Several results related to program participation are notable, as summarized below:

- The GRH program continued to attract participants but also retained many participants. About one-quarter (23%) of current registrants had been registered for one year or less, but six in ten (59%) had been participating for more than three years.
- About half (54%) of registrants who had participated in GRH during the past three years were no longer registered for the GRH program (past registrants). However, 60% of respondents whose registrants had expired and were listed as past registrants in the database thought they were still registered. Responses to a later question indicated that two in ten (21%) past registrants did not realize they needed to re-register each year, so assumed they were still eligible for the program
- Past registrants left the program for two types of reasons: reasons associated with characteristics of the program and reasons associated with personal circumstances of the registrants. The most frequently mentioned program reasons were that the respondents forgot to re-register or hadn't gotten around to it (29%) and that they didn't know they had to re-register (21%). These also were common reasons noted in 2016 and 2013, indicating it is still important to remind registrants that re-registration is required.

- Eight percent said they “had problems/difficulties re-registering.” This could be related to the use of the online system, which requires respondents to recall a password to make changes to their accounts. Only 4% were “dissatisfied with the program/had a bad experience.”

Impact of GRH on Commute Patterns

The GRH survey was designed to examine three key questions: Did the GRH Program encourage commuters who drive alone to work to use alternative modes, such as transit and carpool and did it encourage commuters who use alternative modes to use these modes more days per week?

- ***Types of Commute Shifts Made by Participants*** – The survey calculated three types of commute shifts that respondents might make: start using an alternative mode (driving alone pre-GRH), increase frequency of alternative mode use (alternative modes pre-GRH, increased frequency during GRH), and maintain alternative mode use (alternative mode pre-GRH and same number of alternative mode days during GRH).

About two in ten (24%) respondents started using alternative modes at the time they joined GRH. A small number of respondents (3%) increased the number of days they used alternative modes. The largest share of respondents (71%) said they maintained but did not increase use of alternative modes they were using before GRH. These percentages were similar to the results from surveys in 2010, 2013, and 2016.

- ***Shifts from Drive Alone to Alternative Modes*** – The survey clearly showed that some commuters who registered for GRH were driving alone prior to joining the program. About 27% of respondents said they primarily drove alone to work before starting GRH. Seven in ten (72%) participants used alternative modes as their primary type of transportation before they joined the program. One percent primarily teleworked.
- ***Increase Use of Alternative Modes*** – It is difficult to draw definitive conclusions on the role of GRH in encouraging more frequent use of alternative modes, because only 48 of the total respondents increased the number of days they used alternative modes. The low respondent number is not necessarily indicative of GRH’s value for this type of change, however. Nearly all participants who were using an alternative pre-GRH already did so three or four days per week. In other words, a large majority of participants already were using alternative modes nearly full-time.

But among the small sample of respondents who did increase the number of days they used alternative modes, the results were notable; these respondents increased their alternative mode frequency from 2.8 days to 4.3 days, or about 1.5 days per week increase per respondent.

- ***Role of GRH in Motivating Change*** – The majority of respondents said that the GRH Program was important to their decision to start, maintain, or increase use of alternative modes. But conversely, the majority of respondents also said they were likely to have made the same commute decisions even if GRH were not available. This suggests that GRH was a useful and even valuable service, but not “the reason” that commuters choose alternative modes.

GRH seemed to have very modest impact in retaining respondents who were using an alternative pre-GRH and did not increase their alternative mode use. Only about 11% said they were “not at all likely” to have continued using these modes if GRH were not available. By contrast, 20% of respondents who started using a new alternative mode and 27% who increased alternative mode use said they were not likely to have made the change without GRH.

Half (50%) of all respondents said GRH was the only Commuter Connections service they received. But even among respondents who did receive other Commuter Connections services, most said GRH was the most important Commuter Connections service. Only 23% of respondents who started an alternative mode and the same share who increased alternative mode use reported a Commuter Connections service that was more important than GRH. Among those who maintained alternative mode use, with no changes, only 19% cited a service that was more important than GRH.

Implications of Results for Travel and Air Quality Impact Assessment

An important role of the survey was to collect data to support the upcoming Commuter Connections TDM evaluation, scheduled to be performed in the spring of 2020. Several of the findings have specific implications for the assessment of travel and air quality impacts of GRH in that evaluation. These findings include:

- A positive finding is that 59% of GRH registrants had been participating in GRH, and therefore using alternative modes, for more than three years. Further, the average length of time in GRH was about 41 months. This means that congestion mitigation and air quality improvement benefits of GRH extend longer than the three year evaluation period and that it is reasonable to carry over travel and air quality benefits of “retained” users, who started using alternative modes during the 2015-2017 evaluation period, into the current 2018-2020 evaluation period.
- Another finding related to impact assessment is that the benefit from participants who increased their use of alternatives is likely to be small. Although some benefit was achieved by this increase, only 3% of participants fell into this category. So even though the average increase was 1.5 days per week, the overall impact of their changes will be minimal.
- An interesting finding is that 63% of past registrants were still using alternative modes, even though they were no longer registered for GRH. Ten percent were still carpooling, 8% were vanpooling, 43% continued to use transit, and 3% were walking/biking to work. Thus, the region retained the air quality and congestion mitigation benefit of these participants, even after they left the program.
- Finally, GRH commuters travel much farther to work than do commuters region-wide. The average one-way distance for GRH respondents was 34.4 miles, considerably farther than the distance of 17.1 miles traveled by the average commuter in the region, as defined by the 2019 regional State of Commute survey. This indicates that alternative mode changes influenced or assisted by GRH reduce a disproportionate number of vehicle trips and VMT in the region.

Program Marketing Findings

Finally, several survey results relate to program marketing. These conclusions are summarized below:

- Program marketing seems to be an effective source of information for GRH. About six in ten (58%) respondents recalled hearing or seeing GRH advertisements. About half of these respondents said they heard or saw the ads before they registered for GRH and said they were influenced by the advertising to register. These respondents represented 31% of all the GRH respondents interviewed, indicating that GRH advertising was instrumental in both informing and persuading a substantial portion of registrants to join the program.
- The results showed the need for multiple outreach channels. Word of mouth continued to be the predominant method by which respondents learned of GRH, but radio, Internet, employer, and employer/employee survey, bus/train signs, and other rideshare/transit organizations all were noted by at least 3% of respondents as their first information source about GRH.
- While radio had declined since 2007 as an overall source of GRH information, it might continue to be a useful marketing tool to reach drive alone commuters and carpool/vanpool riders. Ten percent of respondents who drove alone and 13% of those who carpooled/vanpooled to work pre-GRH mentioned radio as their source of information. Registrants who carpooled or vanpooled before GRH also were more likely to note “word of mouth” as their source; 37% gave this as their source, compared with about three in ten other respondents.

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SECTION 1 INTRODUCTION

This report presents the results of a Guaranteed Ride Home (GRH) survey of 2,066 commuters who currently participate or who have participated in the Commuter Connections Washington Regional Guaranteed Ride Home (GRH) Program operated by the Metropolitan Washington Council of Governments (MWCOG) for commuters who work in the metropolitan Washington region. MWCOG, through the National Capitol Region Transportation Planning Board (TPB), introduced the Commuter Connections GRH Program in 1997 to eliminate one barrier to using alternative modes, commuters' fear of being without transportation in the case of an emergency. The program provides up to four free rides home per year in a taxi, rental car, public transit, or a combination of these modes, in the event of an unexpected personal emergency or unscheduled overtime.

Commuter Connections undertook the survey described in this report for two purposes:

- Examine commute and demographic characteristics of commuters participating in GRH.
- Collect data needed to estimate reductions in vehicle trips, vehicle miles traveled, and emissions reduced as a result of commuters' participation in the GRH Program.

This report focuses on the first objective: how the survey was conducted and what results were obtained. The second objective, the estimate of travel and air quality impacts of the program, will be addressed in a spring 2020 evaluation, assessing impacts of GRH and other Transportation Demand Management (TDM) programs administered by Commuter Connections.

This report is divided into two sections following this introduction:

- Section 2 – Description of the survey and sampling methodology
- Section 3 – Presentation of the survey results

Following these main sections are four appendices, including:

- Appendix A – Survey questionnaire
- Appendix B – Respondent alert letters
- Appendix C – Disposition of final dialing results
- Appendix D – Results from 2019, 2016, 2013, 2010, and 2007 GRH Surveys – Comparison on Key Questions

SECTION 2 – SURVEY AND SAMPLING METHODOLOGY

Survey Goals

The primary goal of the GRH survey is to examine characteristics of GRH Program participants. Commuter Connections introduced GRH in January 1997. Since that time, Commuter Connections has collected data on GRH applicants through periodic surveys conducted to assess travel and air quality impacts of GRH participants. The 2019 GRH survey is the seventh such survey; previous GRH surveys were conducted in 2001, 2004, 2007, 2010, 2013, and 2016.

The survey is designed to examine three key research questions regarding potential travel changes that might be influenced or assisted by the GRH program. Specifically, the survey explores if the GRH program:

- Encourages commuters who drive alone to work to shift to alternative modes
- Encourages commuters who use alternative modes to use these modes more days per week
- Encourages commuters who use alternative modes to use them for a longer period of time

Sample Selection Process

The set of eligible respondents for this survey included any commuter who registered or participated in the GRH program between March 16, 2016 and March 15, 2019. Commuters who had active and valid registration status at the time of the survey were considered “current or Active registrants.” But some commuters who had participated in the program during the sample period had let their registrations expire and a small number had their registrations cancelled by Commuter Connections. These registrants were considered to be “past or Inactive registrants.”

A very small percentage of commuters in the database never registered, but participated in the program under a “one-time exception” rule that allows commuters who otherwise meet the program requirements to receive one GRH trip without prior registration. These participants were designated “one-time exception” users. All three groups of participants were eligible for the survey.

In March 2019, the consultants received the GRH database from Commuter Connections for the designated survey period. To prepare the database for the survey, CIC Research first removed duplicate records for commuters who re-registered for the program at the end of a year and were given a new status code and a new record. CIC also observed duplicate records with slight differences in name, but with the same telephone number or address. Records also were removed for commuters who had home addresses in which a respondent completed a 2019 State of the Commute (SOC) survey interview. While the GRH registrant might not have been the person at that address who completed the SOC interview, this step was taken to avoid the possibility of survey overload. Finally, CIC also removed a few records for GRH registrants who had not provided any contact information. At the end of this database cleaning process, the database contained 20,422 records for the survey.

For GRH surveys administered prior to 2010, applicants were sampled randomly from among all applicants who entered in the database during the evaluation period, and telephone interviews were then conducted. In 2010, 2013, 2016, and 2019, Commuter Connections’ opted to conduct interviews by Internet if the applicant had provided an email address for contact and to conduct telephone interviews only with applicants who had not provided an email contact. For this reason, “past/Inactive” and “current/Active” participants were divided into Internet and telephone access groups, resulting in four sample groups.

- 1) Current-Telephone
- 2) Past-Telephone
- 3) Current-Internet
- 4) Past-Internet

Table 1 shows a summary of the populations for the four sample groups.

Table 1
Sample Frame by Contact Method and GRH Program Status

Sample Group	Population	Percentage
Telephone Administration		
Current (Active) Participants	323	1.6%
Past (Inactive) Participants	1,124	5.5%
Internet Administration		
Current (Active) Participants	9,179	44.9%
Past (Inactive) Participants	9,796	48.0%
TOTAL – All Groups	20,422	100.0%

Questionnaire Design

LDA Consulting, with input from COG/TPB staff, CIC Research, Media Beef, and the Commuter Connections TDM Evaluation Group, designed both the Internet and telephone questionnaires used in the survey. The questionnaires collected data on the following major topics:

- Registration status
- Current commute patterns
- Commute patterns before participating in GRH (Pre-GRH)
- Commute patterns while participation in GRH (During-GRH)
- Influence of GRH on commute choices
- Use of other, non-GRH services provided by Commuter Connections and other organizations
- Use of and satisfaction with GRH trips and the GRH Program
- Use of social networking and travel/trip information applications
- Participant demographics

The questionnaire was designed for two forms of administration: telephone and Internet. The full set of questions was included in each form, but minor wording and format changes were made to the Internet version for visual administration. A copy of the final Internet questionnaire is presented in Appendix A.

Survey Administration

Internet Interviews

After finalizing the Internet questionnaire and survey sample for the project, CIC sent two lists and two letters of introduction to COG for distribution. One list contained the names and contact information for 9,179 current (Active) GRH participants. COG staff merged the survey sample with the alert letter for these participants, and then distributed the letters electronically, accompanied by a link to COG's server. The other list contained the names and contact information for 9,796 past (Inactive) GRH participants. These also were prepared and distributed electronically; these letters referenced the link to CIC's server. Copies of the emails can be found in Appendix B.

Three reminder letters were sent to current participants who had not yet responded to the survey on COG's server. A total of 964 current participants were interviewed via the Internet site located on COG server. Past participants also received an initial invitation and three reminders. A total of 950 Internet interviews were completed and submitted to the CIC server.

Telephone Interviews

COG/TPB staff also sent a survey introduction letter, by postal mail, to the 1,447 past and current participants who had not provided an email address. These participants were included in the telephone survey. A copy of this letter can be found in Appendix B. Commuter Connections received invalid/undeliverable postal returns for 172 addresses out of the 1,447 letters mailed. Most of these respondents had a valid telephone number, however, so were able to be contacted.

Interviews were conducted in CIC's telephone survey facilities, using the CATI (computer-assisted telephone interviewing) system and Voxco software. Prior to beginning the full telephone survey effort, interviewer-training sessions were held, covering the following topics:

- An explanation of the purpose of the study and the group to be sampled
- Overview of COG and its function
- Verbatim reading of the questionnaire
- Review of the definition and instruction sheet to familiarize interviewers with the terminology
- Review of skip-patterns to familiarize interviewers with questionnaire flow
- Practice session on CATI systems in full operational mode

Telephone calls were made between April 15 and May 9, 2019 on weekdays from 12:15 pm to 8:45 pm EDT. Calls were first directed to the respondent's work number. If contact at work was unsuccessful, the respondent was called at home. Interviews were conducted while respondents were at work or at home, depending on their preferences. If the call was answered by an answering machine, at least three more attempts were made to contact the respondent. A minimum of four attempts were made to contact each "live" sample point.

All interviewing was conducted at CIC's offices with survey supervisors present. Survey supervisors were responsible for overseeing the CATI server, checking quotas, editing call-back appointment times, monitoring interviews, answering questions, and reviewing completed surveys. To ensure data quality, the survey supervisors conducted periodic random monitoring. Other quality assurance checks were done once the data was collected.

The telephone effort resulted in 236 completed interviews. Of the completed interviews, 129 were from the telephone only sample group and 107 were telephone follow-up calls to participants who received the email invitation and did not complete the survey via the Internet. The telephone survey had a refusal rate of 2.6%.¹ An average of 24.3 call attempts was made for each completed interview. A disposition of telephone dialing results can be found in Appendix C.

Removal of Non-Working Respondents

After performing the initial post-processing, 84 interviews of respondents who were not currently working were removed from the survey data. In past GRH surveys, these respondents were screened out in an early survey question. But because the 2019 survey offered a gift card drawing, these respondents were skipped to the end of the survey and permitted to enter their name in the drawing. For gift card purposes, they were considered to be completed interviews, but for consistency with past surveys, they were removed prior to beginning further analysis. With these removed, a total of 2,066 interviews were collected.

Weighting of Survey Data

After all interviews were completed, the data were weighted to align the survey results with the total population of GRH participants during the evaluation period. The criterion used to weight the survey data was "type" of GRH participant. This variable denotes if the participant was a current or past participant.

¹ Refusal rates are calculated as the number of initial refusals, plus the number terminated during the interview, divided by the total sample. See Appendix C.

Table 2 shows the relationship between the sample and the total participation group for the weighting variable. The differences between these groups tested as statistically significant, thus were weighted to realign participant responses to the population groups. As anticipated, the sample group contained a higher proportion of current participants and a lower proportion of past participants, when compared to the total respondent group.

Table 2
Comparison of Sample Group and Total Population Distribution

Type of GRH Participant	Sample Group		Total Population
	n = __	Percentage	Percentage
Current Participants			
Telephone participants	37	1.8%	1.6%
Internet participants	1,005	48.6%	44.9%
Total Current Participants:	1,042	50.4%	46.5%
Past Participants			
Past telephone participants	92	4.5%	5.5%
Past Internet participants	932	45.1%	48.0%
Total Past Participants:	1,024	49.6%	53.5%
Total – All Participants	2,066	100.0%	100.0%

Level of Confidence for Analysis

The level of confidence for the study was calculated using the finite population correction factor, an approach used when the sample size is large relative to the total population. Completion of 2,066 interviews from a population of 20,416 (20,422 less 6 records with no valid contact option) resulted in a level of confidence of 95% \pm 2.0% for the 2019 Washington GRH Applicant survey, statistically comparable to the 95% \pm 2.0% for the 2016 survey and the 95% \pm 1.9% for the 2013 survey.

SECTION 3 SURVEY RESULTS

Following are key results from each section of the survey. Survey result percentages presented in the results tables and figures show percentages weighted to the total applicant population, but also show the raw number of respondents (e.g., n=__) to which the weighting factor was applied for that question.

Where relevant, survey results are compared for sub-groups of respondents and against data for past Washington Regional GRH surveys, when these data were available. These comparisons are presented in the appropriate subsections. Appendix D presents comparisons of 2019 results with those of previous GRH surveys.

- Characteristics and demographics of the sample
- Registration Information
- GRH information sources
- Current commute patterns for GRH participants
- Commute patterns before and during participation in GRH
- Influence of GRH on commute pattern decisions
- Use of and satisfaction with GRH trips and the GRH Program

Characteristics and Demographics of the Sample

Home and Work Locations

In the 2019 survey, more than half (55%) of respondents lived in Virginia (Table 3). Four in ten (41%) lived in Maryland. Two percent of respondents lived in the District of Columbia and 2% lived in another state. The distribution by work state was considerably different. More than six in ten respondents (63%) worked in the District of Columbia. Two in ten (21%) respondents worked in Virginia and 16% worked in Maryland.

Table 3
Home and Work States

(2013 n = 2,374, 2016 n = 2,171, 2019 n = 2,066)

State	Home State			Work State		
	2013	2016	2019	2013	2016	2019
District of Columbia	2%	2%	2%	61%	64%	63%
Maryland	36%	40%	41%	11%	15%	16%
Virginia	60%	55%	55%	28%	21%	21%
Other	2%	3%	2%	0%	0%	0%

Comparison of results from 2013 through 2019 shows that the share of Maryland respondents increased slightly and the share of Virginia respondents declined over the past six years. The higher share of Virginia residents in past surveys could be related to previous GRH programs conducted by the Virginia Railway Express (VRE) commuter rail and I-66 in Virginia, as well as major roadway construction on I-95, I-66, and the Capital Beltway. Those programs and promotional efforts were directed toward Virginia residents, so likely increased both GRH program awareness and registrations by Virginia residents during the years they were in effect.

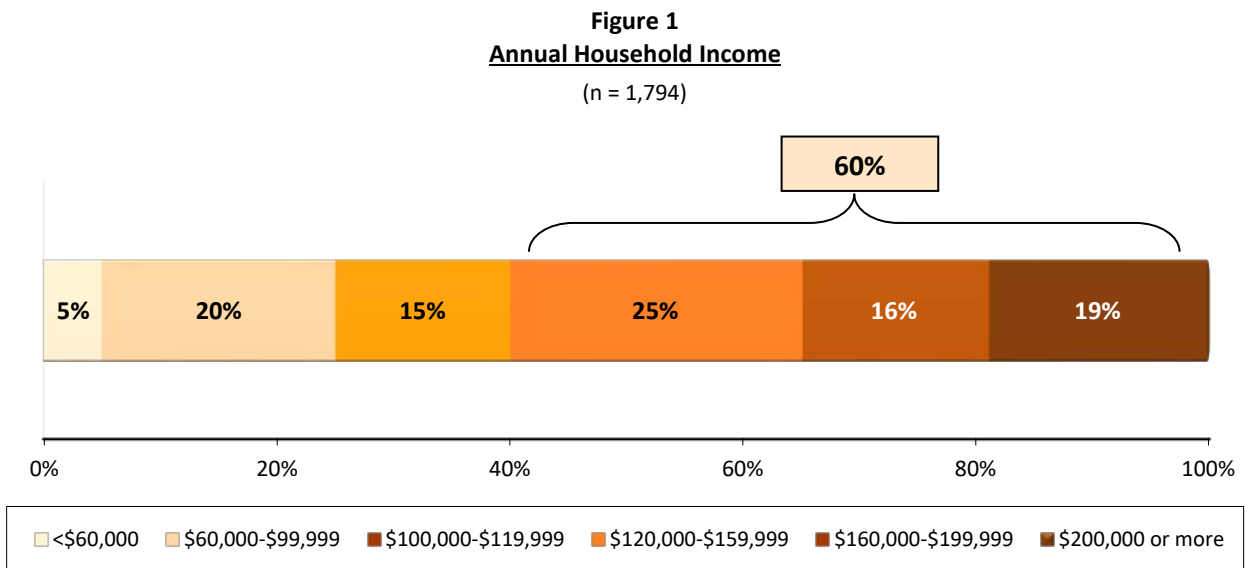
Top home Maryland and Virginia locations for 2019 GRH registrants, each with at least 4% of total respondents, included:

Virginia Counties	Percentage	Maryland Counties	Percentage
Prince William County	17%	Montgomery County	8%
Fairfax County	12%	Anne Arundel County	5%
Stafford County	7%	Frederick County (MD)	5%
Loudoun County	7%	Charles County	5%
Fredericksburg	4%	Prince George's County	5%
		Howard County	4%

Demographics

The survey asked respondents four demographic questions: gender, income, age, and ethnic group. Respondents were about evenly divided into male (54%) and female (46%) respondents. Details of other characteristics are presented below.

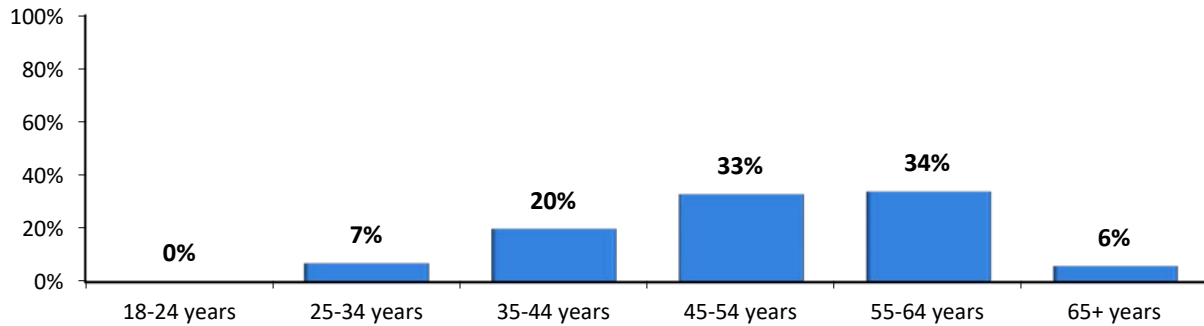
Income – Figure 1 presents the distribution of respondents' annual household income. GRH participants had quite high annual household incomes. Six in ten (60%) respondents had household incomes of \$120,000 or more and 19% had incomes of \$200,000 or more.



Age – GRH participants were clustered in the middle and older age brackets (Figure 2). About half (53%) were between the ages of 35 and 54 years old, four in ten (40%) were 55 years or older. Less than one in ten (7%) were under 35 years.

Figure 2
Respondent Age Distribution

(n = 2,033)



Race/Ethnicity – Lastly, as shown in Table 4, Non-Hispanic Whites and Non-Hispanic Blacks represented the two largest race/ethnicity group categories of GRH survey respondents, 61% and 22% respectively. Asians accounted for about 8% and Hispanics represented 6% of respondents.

Table 4
Race/Ethnicity

(n = 1,916)

Ethnic Group	Percentage
Non-Hispanic White	61%
Non-Hispanic Black	22%
Asian	8%
Hispanic	6%
Other	3%

Registration Information

Registration Status

As noted earlier, to facilitate respondents' understanding of survey questions the GRH database population was divided into categories by their registration status. Three-quarters (75%) of respondents said they were currently registered for GRH (Table 5). The remaining one-quarter (25%) said they had been registered in the past, but were not participating at the time of the survey. Only four respondents (0.2% of total respondents) self-identified as one-time exception users.

Table 5
Registration Status as Defined by Respondent (during survey interview)

(n = 2,066)

Registration Status	Percentage
Current registrants	75%
Past registrants	25%
One-time exceptions	0%

A major function of the survey was to examine travel changes from the time before participants were in the GRH program, thus, the survey asked numerous questions relating to the times “before” and “while” participating in GRH. Respondents’ registration status could be defined by their actual status, as defined in the database, but also by their perception of their status, which could be different than the actual status. The respondent-perceived status was used in the survey interview to ensure that respondents were asked questions that would make sense to them. But a substantial portion of respondents defined their registration status differently than was shown in the GRH database. Table 6 shows the distribution of respondents by these two status definitions.

Table 6
Registration Status as Defined by Respondent Compared with Status Defined in Database

Registration Status Defined in GRH Database	Registration Status Perceived by Respondent	
	Current	Past
Current registrants (n = 957)	95%	5%
Past registrants (n = 1,109)	60%	40%

Nearly all (95%) respondents whose database status was current/active correctly identified their status as current. The remaining 5% said they were no longer registered for the program, although their registration was actually current; they had registered or re-registered less than one year before the survey was conducted. Some of these respondents might have made a commute change since their last registration/re-registration date that would make them ineligible for GRH, such as reducing their use of alternative modes to less than twice per week. Because these respondents perceived themselves no longer registered, they were treated in the survey interview as “past registrants.”

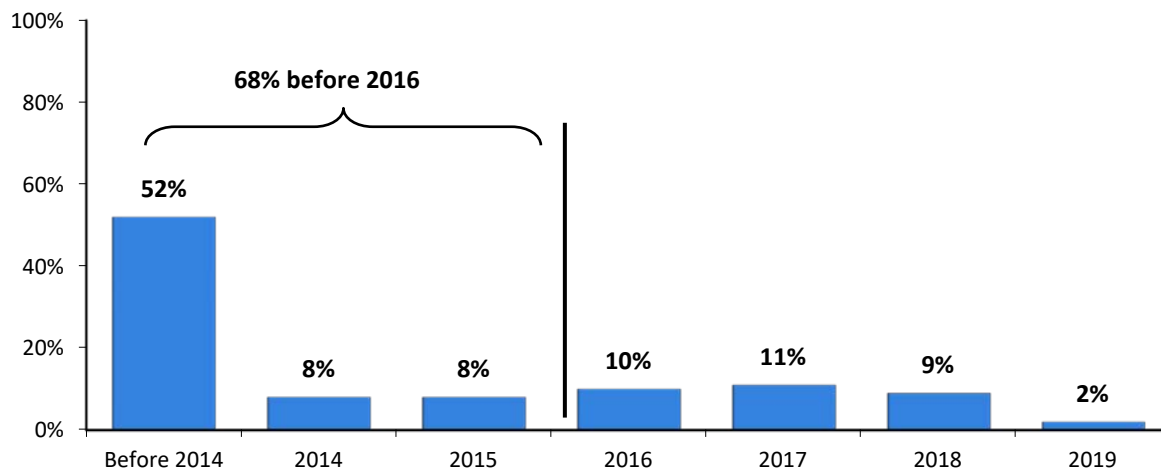
A more significant issue was the 60% of respondents whose registration had expired, but who thought they were still registered. It is possible these respondents did not realize they needed to re-register each year, so assumed they were still eligible for the program. These respondents were treated as “currently registered” in the survey and throughout the report.

Year of Registration

Respondents were asked the year they first joined the program. The GRH Program was implemented in 1997, but continues to attract new participants each year. Respondents in this survey were selected from those who had registered or re-registered between March 2016 and March 2019. About seven in ten (68%) surveyed respondents said they first registered before 2016 (Figure 3). The remaining respondents were about equally distributed among three more recent years: 10% registered in 2016, 11% in 2017, and 9% in 2018. Two percent said they registered in 2019, but because the GRH survey interviews were conducted in April and May 2019, registration figures for 2019 included only registrants who joined GRH between January 1 and March 15.

Figure 3
Year First Registered for GRH Program

(n = 1,779, Excludes respondents who could not recall year)



Note that 14% of the total respondents surveyed could not remember when they registered. They are not included in the base for the distribution shown in Figure 3, however, it is likely many of these respondents would have registered at least several years ago.

Participation in Other GRH Programs

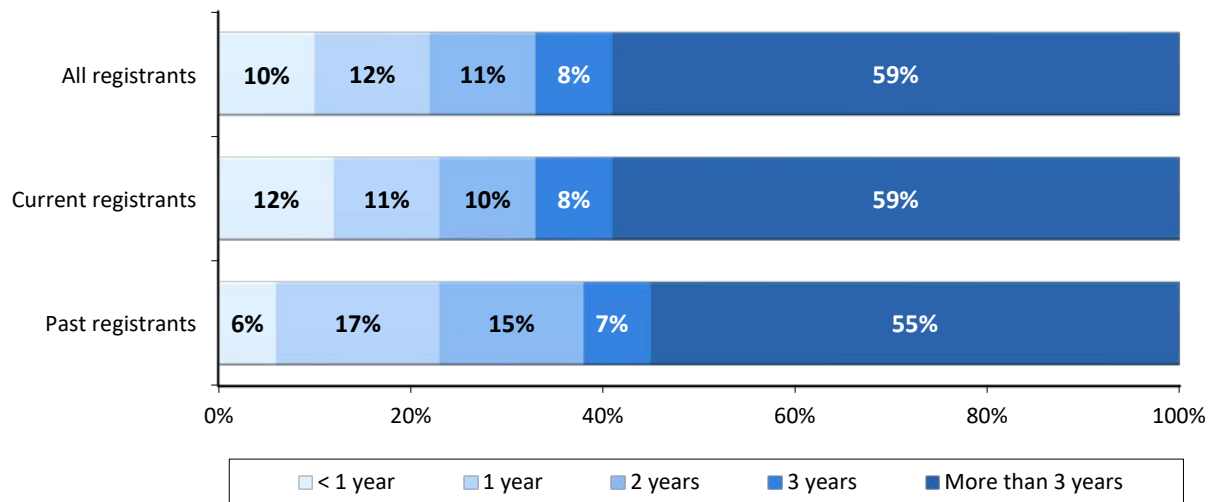
When asked if they had participated in another GRH program prior to joining Commuter Connections' program, 36 respondents (1.7% of total respondents), said they had participated previously in another program. Fifteen of these respondents indicated they had participated in a program offered by their employer, eight said the program was offered by a "county or city government," and six participated in "another" program. The remaining seven respondents did not recall the sponsor.

Time Participating in GRH

Nearly eight in ten (78%) of all respondents participated (or had been participating) in the GRH program for two or more years and 59% had been participating for more than three years (Figure 4). On average, respondents had been registered for about 41 months.

The comparison of GRH duration for respondents who self-identified as current versus past registrants shows a quite similar profile for the two groups. Twenty-three percent of current/active registrants had been participating in GRH for one year or less, compared with the same share of past registrants. And in both groups, nearly six in ten participated for more than three years (current – 59%, past – 55%). The average length of time in the program also was similar; current/active registrants had participated for an average of 41 months and past registrants participated for an average of 40 months.

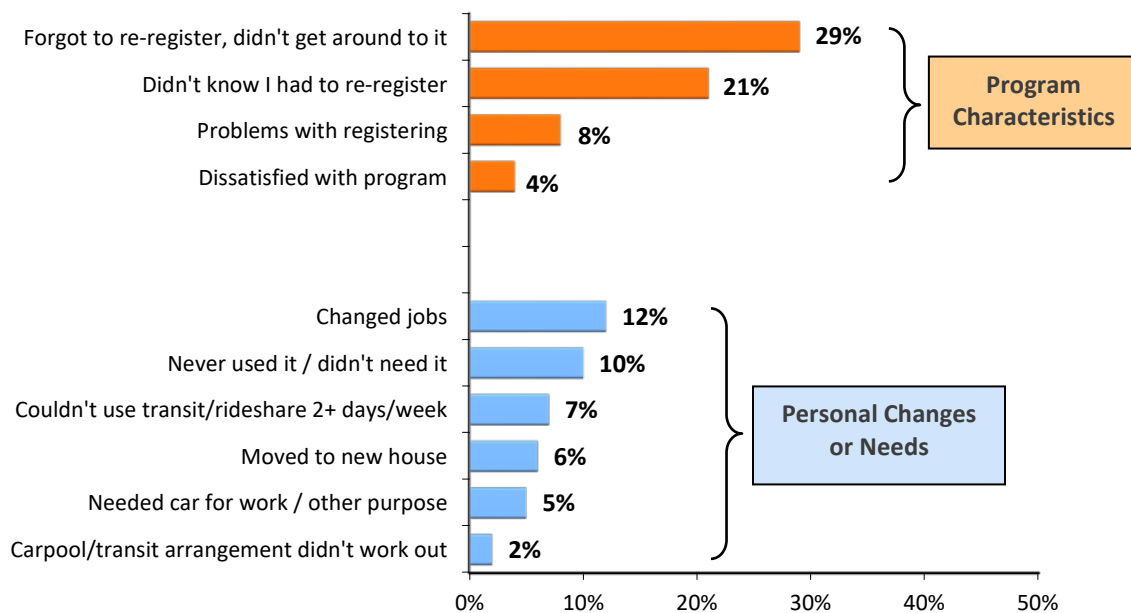
Figure 4
Length of Time Registered in GRH Program By Survey Registration Status
 (All registrants n = 1,739, Current registrants n = 1,353, Past Registrants n = 386)



Reasons for Not Re-registering

Past registrants were asked why they did not re-register for GRH when their registration expired. Figure 5 presents common reasons for not re-registering, divided into two categories: reasons associated with characteristics of the GRH program and reasons associated with personal circumstances of the registrant.

Figure 5
Reasons Past Registrants Did Not Re-Register
 (n = 362)



A frequently mentioned program reason for not re-registering was that respondents had not gotten around to it/forgot, mentioned by 29% past registrants. Another common program reasons for not re-registering was that respondents did not know they had to re-register or did not know their registrations had expired, cited by 21% of respondents. These were also common reasons mentioned in the 2013 and 2016 surveys, suggesting that registrants need to be reminded to re-register. Eight percent had a problem or difficulty re-registering and 4% said they were dissatisfied with the program.

Other respondents mentioned personal reasons that were unrelated to the program. Twelve percent said they did not re-register because they changed jobs and 6% moved to a different residence. Ten percent did not re-register because they had never used the program and presumably felt it would not be necessary in the future. About one in ten were no longer eligible for the program, either because the carpool, vanpool, or transit arrangement didn't work out (2%) or because they could not use transit or ridesharing two or more days per week (7%), as required by the program rules.

GRH Information Sources

How Heard About GRH

Commuters heard about the GRH Program from various sources (Table 7). Three in ten (30%) mentioned word of mouth/referrals as their source of information, and one in ten mentioned employer or employer survey (12%), radio (9%), or Internet (8%). Small shares mentioned other responses. Six percent of respondents cited Commuter Connections by name, but it is important to note that Commuter Connections advertises GRH on the radio and Internet, on social media, and through others of the sources listed, thus, Commuter Connections likely is the source for many respondents, even if they do not specifically recall it as such. In 2019, 21% of respondents did not remember how they learned of GRH. As noted above, half of all respondents first registered for GRH before 2014, so given the years that had passed, it is not surprising that some respondents could not recall the source. GRH information sources in 2019 were generally similar to sources from previous years.

Table 7
How Respondents Learned About GRH

Information Source	2007 GRH (n=1,001)	2010 GRH (n=1,032)	2013 GRH (n=2,374)	2016 GRH (n=2,171)	2019 GRH (n=2,066)
Word of mouth – referral	34%	35%	31%	30%	30%
Employer/employee survey	7%	8%	9%	9%	12%
Radio	16%	12%	12%	10%	9%
Internet	11%	14%	9%	11%	8%
Bus/train sign	3%	4%	5%	4%	5%
Other rideshare/transit organization	N/A	2%	5%	4%	4%
Brochure/promo materials	7%	4%	3%	3%	3%
Direct mail/postcard from CC	6%	3%	2%	<1%	3%
Commuter Connections (other)	N/A	2%	3%	4%	3%
Advertisement	N/A	3%	2%	4%	2%
Don't know	13%	13%	20%	20%	21%
Other *	5%	2%	5%	3%	3%

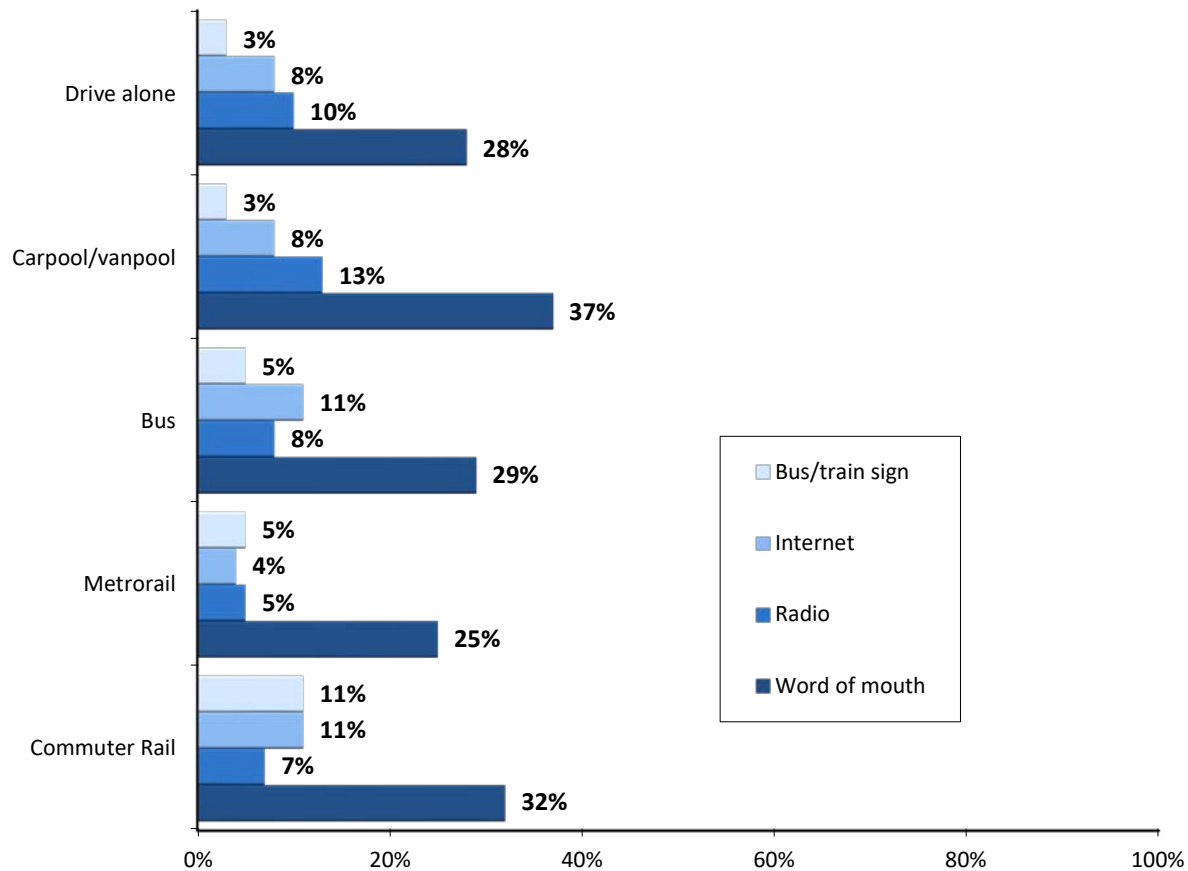
*Multiple responses permitted.

** Each response in the "Other" category was mentioned by less than two percent of respondents.

GRH Referral Source by Pre-GRH Commute Mode – Some differences also were noted for respondents’ source of referral by the commute mode they used before joining GRH (pre-GRH mode) (Figure 6). Nearly four in ten (37%) respondents who carpooled/ vanpooled to work pre-GRH mentioned word of mouth as their source, compared with about three in ten respondents who drove alone (28%), rode a bus (29%), or rode commuter rail (32%), and only 25% of respondents who rode Metrorail before joining GRH.

Figure 6
How Respondents Learned About GRH by Primary Mode Pre-GRH

(Drive alone n = 539, Carpool/vanpool n = 370, Bus n = 381, Metrorail n = 2805, Commuter rail n = 350)



Registrants who drove alone or carpooled/vanpooled before GRH were more likely to mention the radio as their source (Drive alone 10%, Carpool/vanpool 13%), compared with only 5% of Metrorail riders. Conversely, transit riders mentioned seeing a sign on a bus or train or at a train station or learning about Commuter Connections on the Internet more than did commuters who drove alone or rode in a carpool/vanpool.

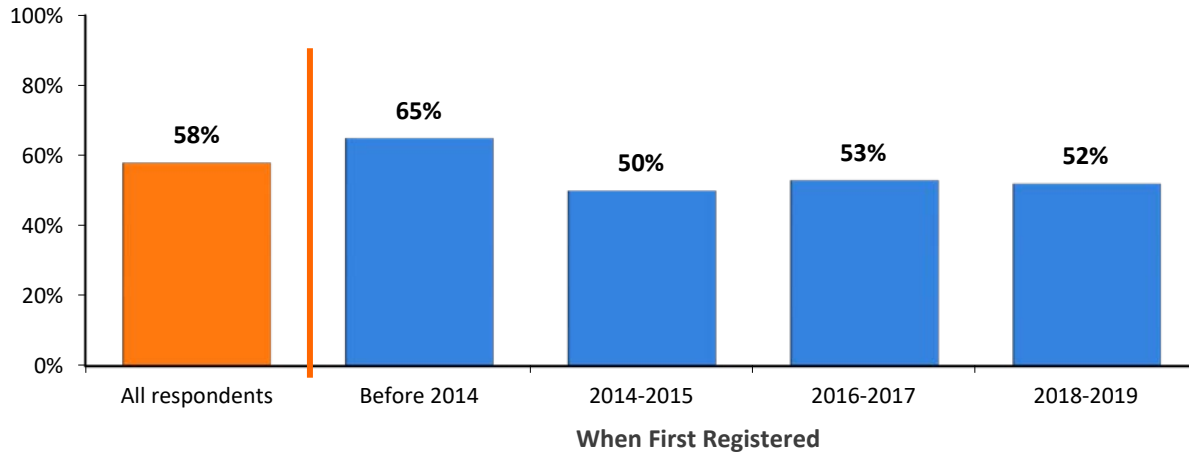
GRH Advertising

Heard or Saw GRH Advertising – When respondents were asked if they had heard, seen, or read any advertising about GRH, 58% of respondents said they recalled GRH advertising, the same percentage as recalled advertising in the 2016 (58%) and 2013 (57%) GRH surveys.

Respondents were more likely to have seen or heard GRH advertising if they registered before 2014, compared to a more recent registration (Figure 7). Two-thirds (65%) who registered before 2014 said they had heard or seen advertising, compared to about half of respondents who registered more recently.

Figure 7
Heard or Saw GRH Advertising by Year Registered for GRH

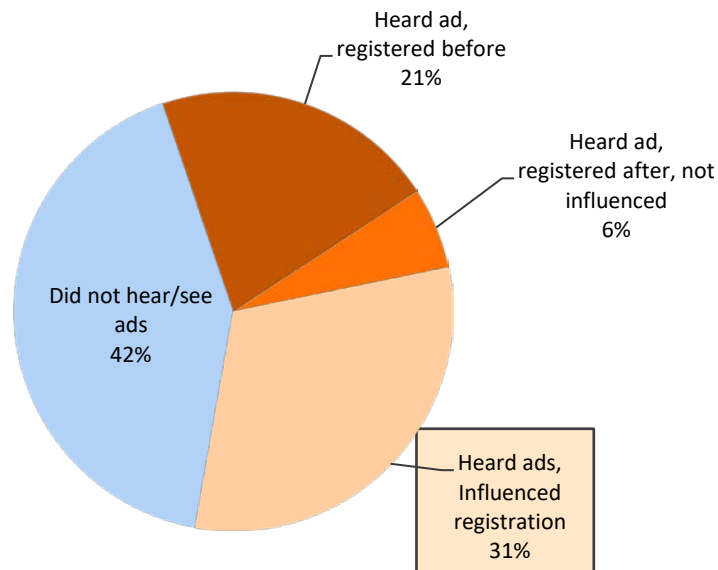
(All n = 2,066, Before 2014 n = 930, 2014-2015 n = 275, 2016-2017 n = 374, 2018-2019 n = 200)



Influence of Ads on GRH Registration – The 58% of respondents who said they had seen or heard GRH advertising were asked if they had registered for GRH before they encountered the ads and if the ads had influenced them to register for GRH. Figure 8 shows these results, combined with the results for those who had not seen the ads. This chart thus summarizes ad exposure and ad influence.

Figure 8
Influence of GRH Advertising

(n = 2,066)



Four in ten (42%) respondents did not see or hear the ads at all. About two in ten (21%) saw or heard ads but had already registered for GRH. And 6% said they saw or heard the ads before they registered, but said the ads had not influenced them. These groups, in total, represented registrants who were not influenced by the advertising (69%).

The remaining 31% of respondents said they saw or heard the ads before they registered and that the advertising had encouraged them to register. This indicates the advertising was instrumental in both informing and persuading a substantial portion of registrants to join the program.

Current Commute Patterns

An important section of the survey examined characteristics of respondents' commuting behavior, particularly to determine changes respondents had made in response to GRH. Thus, the survey queried respondents about their commuting for three time periods:

- **Current** – Commuting patterns at the time of the survey
- **During-GRH** – Commuting patterns during the time the respondent participated in GRH. For current registrants, this is the same as the current time period. For one-time exception users and past registrants, this was a previous point in time.
- **Pre-GRH** – Commuting patterns at the time just before the respondent registered for GRH (current and past registrants) or heard about GRH (one-time exception users)

Commute pattern questions in the survey included:

- Current mode used
- Carpool occupancy, if applicable
- Length of time using current alternative modes
- Commute distance

Work Schedule

The overwhelming majority (99%) of respondents worked full-time. But 19% worked a compressed schedule in which they worked a full-time schedule in fewer than five days; 16% worked a 9/80 compressed schedule, with one weekday off in alternate weeks and 3% worked a 4/40 schedule, with one weekday off each week. These respondents were classified as working a five-day week for purposes of commute mode, with either one or one-half weekdays off each week.

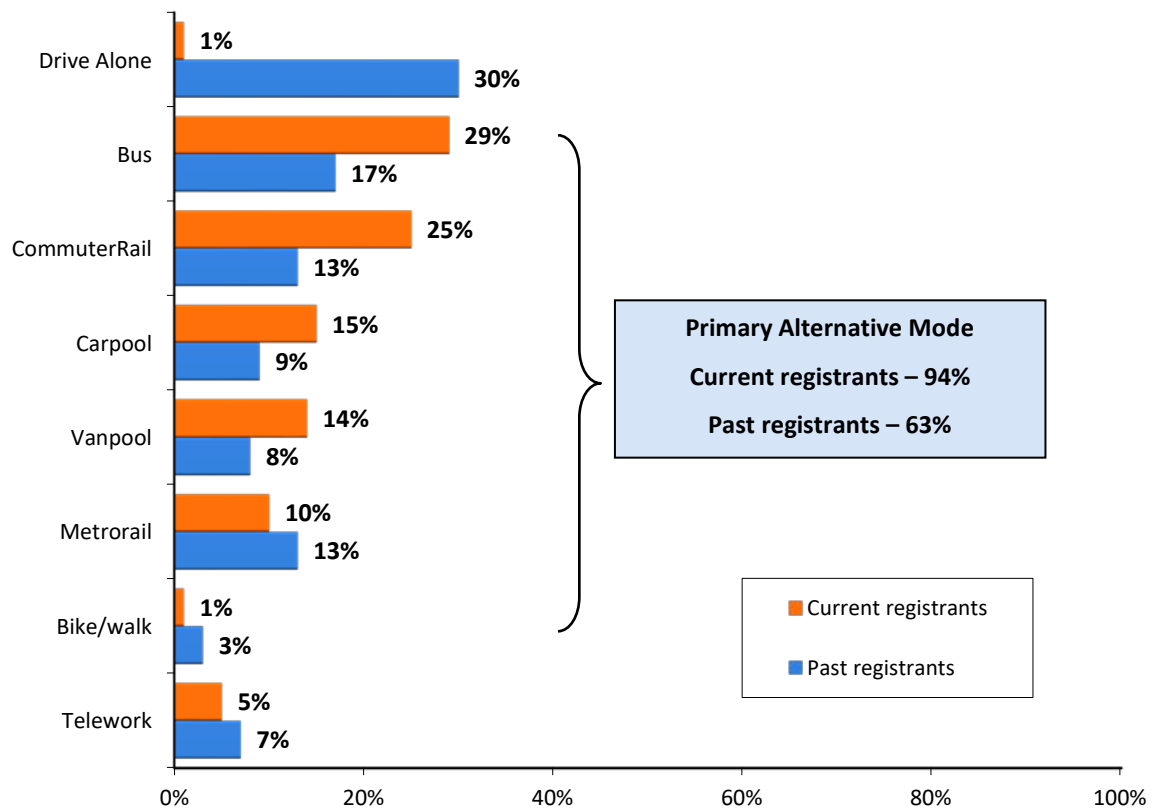
Current Commute Mode

Respondents were asked about use of various commute modes for a typical work week, Monday through Friday. Figure 9 shows the percentages of respondents who used each mode as their primary mode (mode used most days of the week). Because it was expected that past registrants would have different modes from respondents who were currently eligible for GRH, these two groups are shown separately.

Current Registrants – Bus was the most common primary mode for current registrants. It was used by three in ten (29%) current registrants. Commuter rail was the second most common primary mode, used by 25% of current registrants. Carpool and vanpool were used by 15% and 14% of current registrants, respectively, and 10% primarily used Metrorail. Only 1% of current registrants said they primarily drove alone to work, but commuters are eligible for the program if they use any alternative mode two or more days per week, so this would be permissible. Five percent said they primarily teleworked and 1% bicycled/walked to work.

Figure 9
Current Primary Modes by Survey Registration Status

(Current Registrants n = 1,566, Past Registrants n = 496)



Past Registrants – Not surprisingly, past registrants were more likely than current registrants to drive alone; 30% of past registrants said this was their primary mode. But nearly two-thirds (63%) of past registrants said they still used an alternative mode most of the time. Thus they were still eligible for GRH, even though they no longer participated. Almost two in ten (17%) rode a bus, 13% rode commuter rail, and 13% rode Metrorail. Nine percent carpooled, 8% vanpooled, and 3% bicycled or walked as their primary mode. Seven percent of respondents primarily teleworked.

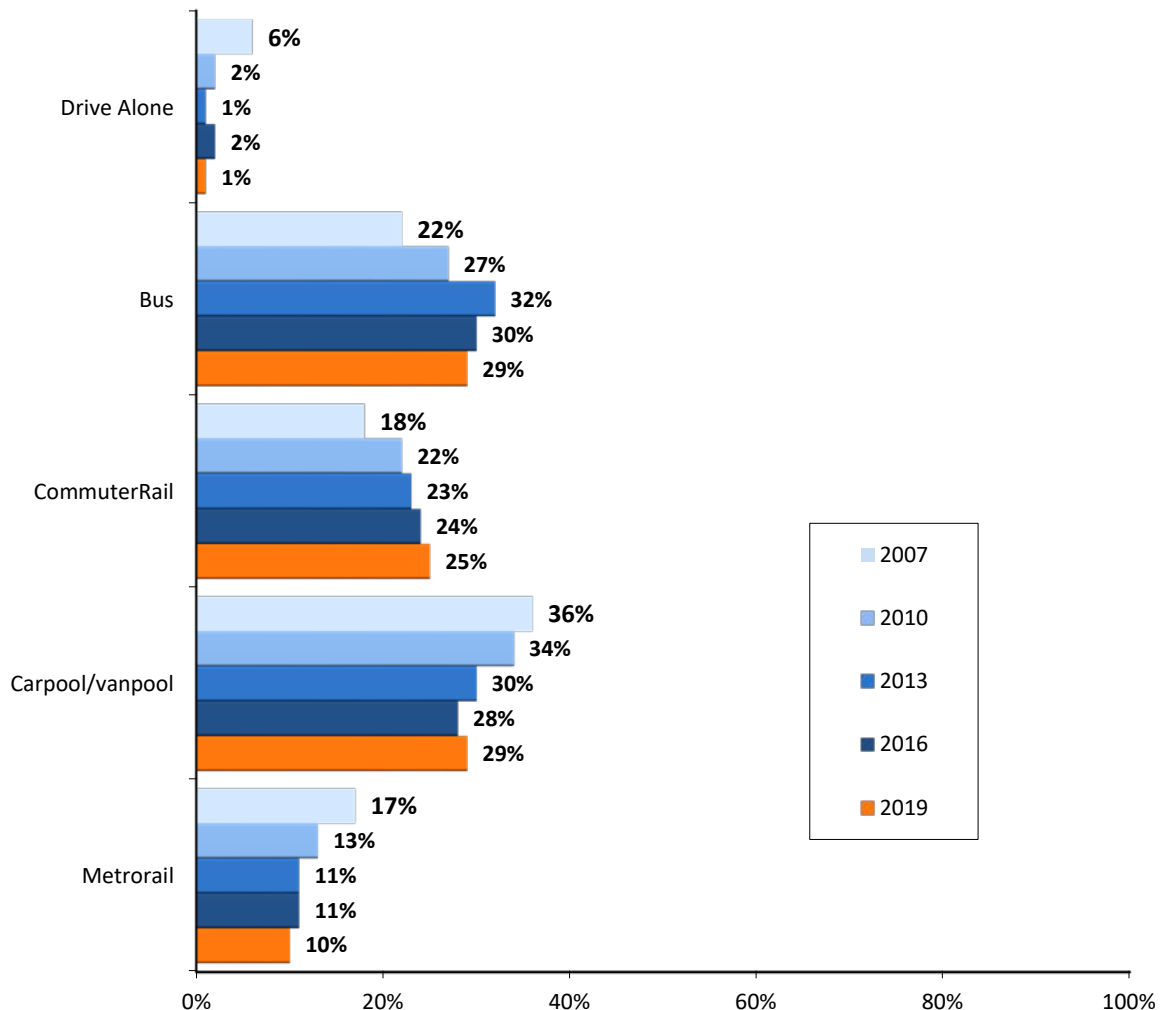
Current Mode, 2007 to 2019 – The overall share of alternative mode use has changed only slightly over the past 12 years, but the distribution of commute modes used by current GRH registrants has changed over that time (Figure 10). The share of current registrants who used carpool/vanpool as their primary mode has declined from 36% of all registrants in 2007 to 29% in 2019. Use of Metrorail also has fallen, from 17% to 10%. Conversely, use of bus and commuter rail has increased. In 2007, only 22% of GRH registrants primarily rode a bus to work; in 2019, 29% of registrants primarily rode the bus. And use of commuter rail as a primary mode has increased from 18% in 2007 to 25% in 2019.

Figure 10
Primary Commute Modes Used by GRH Registrants in 2007 – 2019

Current GRH Registrants

(2007 n = 935, 2010 n = 787, 2013 n = 1,773, 2016 n = 1,670, 2019 n = 1,566)

(Note: percentages will not add to 100% because primary telework and primary bike/walk are excluded)



Pool Occupancy

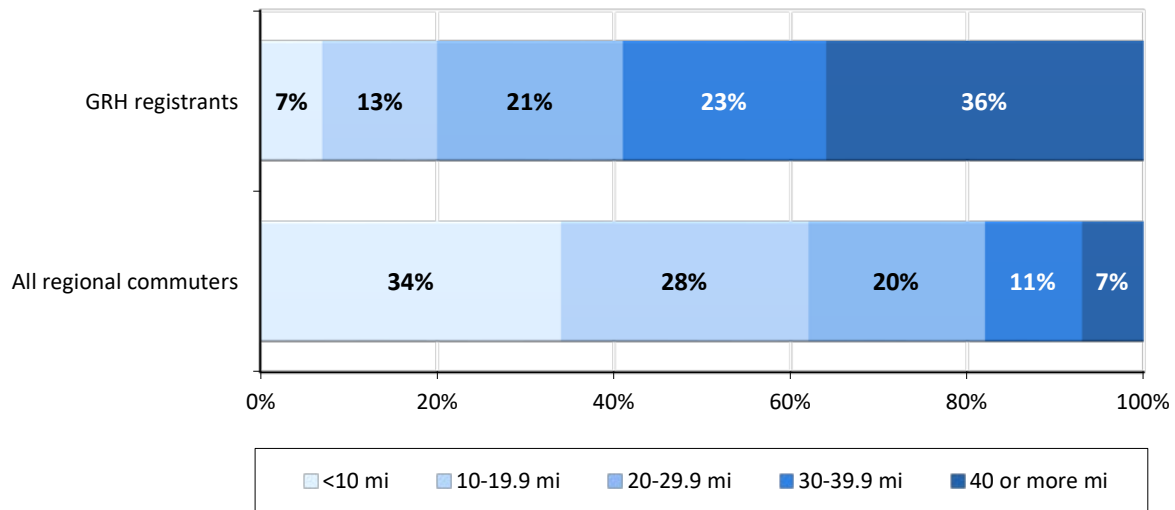
The average number of occupants in GRH carpools and vanpools was 3.1 and 8.6 people, respectively. The carpool occupancy was similar to that found in the 2016 (3.2 occupants) and 2013 (3.0 occupants) GRH surveys. Vanpool occupancy continued to fall; the average vanpool carried 10.4 occupants in 2013 and 9.5 occupants in 2016.

Commute Length

Commuter Miles – Commuters in the survey sample had a wide range of commute distances, from less than one mile to more than 120 miles. The average one-way distance for GRH respondents was 34.4 miles. This was considerably longer than the distance of 17.1 miles traveled by the average commuter in the Washington metro region, as defined by the 2019 regional State of Commute survey. Nearly six in ten (59%) GRH respondents commuted 30 or more miles to work, compared to just 18% of all regional commuters (Figure 11).

Figure 11
Commute Distance (miles) - GRH Registrants and All Regional Commuters

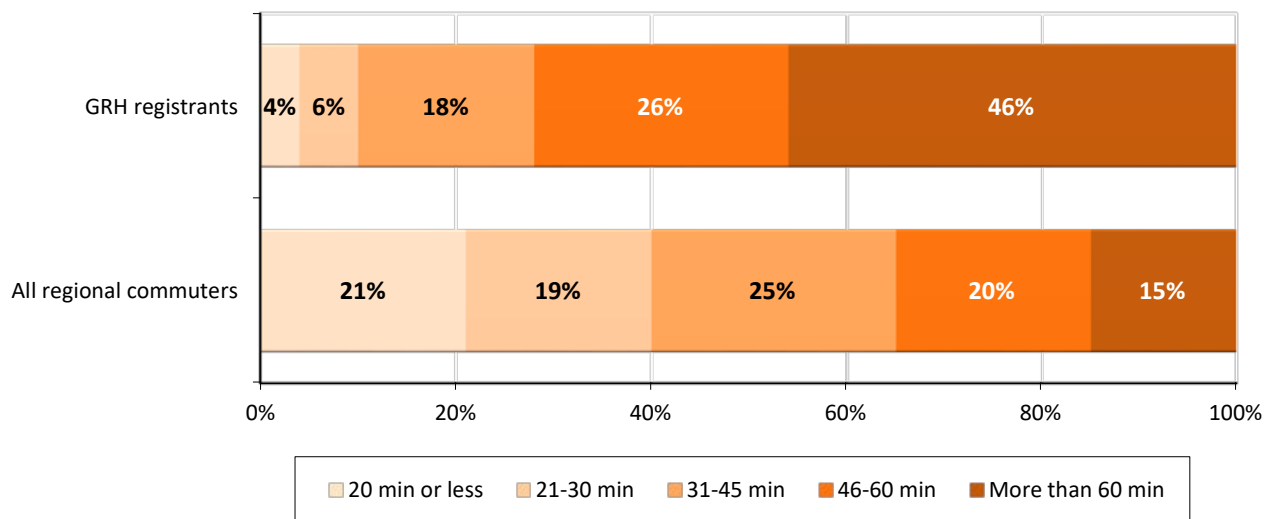
(GRH registrants n = 1,877, All regional commuters n = 7,412)



Commute Time – GRH participants commuted, on average, about 67 minutes one way. This was much longer than the 43-minute average commute time for all regional commuters. The longer-than-average commute time is due in part to their longer-than-average travel distance, but also is likely influenced by their substantial use of carpool, vanpool, and transit. These modes typically take longer per mile than does driving alone. Seven in ten (72%) GRH participants commuted more than 45 minutes each way to work (Figure 12). Nearly half (46%) commuted more than an hour. Only 15% of all regional commuters traveled more than 60 minutes to work.

Figure 12
Commute Travel Time (minutes) – GRH Registrants and All Regional Commuters

(GRH registrants n = 1,928, All regional commuters n = 7,862)



Primary Roads Used on the Trip to Work

The GRH survey also included a question in 2019 to identify the major Interstate and state roadways that commuters used to get to work. The results from this question will primarily be used for MWCOC performance management and planning purposes and in the TDM analysis to explore the role that Commuter Connections TDM program elements such as GRH play in mitigating congestion on specific roads in the MWCOC region.

Commute Patterns Before and During Participation in GRH

The GRH survey was conducted in part to determine if and how commuters' participation in GRH had affected their commute patterns. In particular, did GRH encourage commuters who were driving alone to shift to alternative modes and did GRH encourage commuters who were using alternative modes to use them more days per week? Survey results pertaining to these questions are presented below.

"During-GRH" Modes Compared with Washington Region

Respondents were asked about their commute modes during the time they participated in the GRH program and their modes before they participated. For current registrants and one-time exception users, the "during-GRH" mode was their current mode, as described earlier. Because past registrants might have changed modes since they left the program, these respondents were asked about their weekly travel during "the time you were registered."

Table 8 shows use of individual modes within the mode groups defined above for GRH registrants for the during-GRH time period. The table also shows the mode distribution for all metropolitan Washington region commuters, as reported in the 2019 State of the Commute (SOC) survey. GRH registrants used all alternative modes except bike/walk at a higher rate than did the regional commute population. For example, more than one-quarter of GRH registrants used ridesharing as their primary mode (regular carpool 7%, casual carpool 8%, and vanpool 13%), while only 5% of all regional commuters primarily used these modes. Differences between GRH registrants and all regional commuters were statistically significant for all modes except bike/walk and telework.

Table 8
Commute Mode Distribution (Primary Commute Mode) – During GRH Period
GRH Registrants (Current and Past Combined) and All Regional Commuters

Commute Mode	GRH Registrants (n = 2,066)	Regional Commuters* (n = 8,107)
Carpool/vanpool	27%	5%
- Regular carpool	7%	4%
- Casual carpool (slug)	8%	1%
- Vanpool	13%	<1%
Transit	64%	26%
Bus	28%	7%
Commuter Rail	24%	2%
Metrorail	12%	17%
Drive alone	3%	61%
Bike/walk	2%	3%
Telework	4%	5%

* Data from 2019 State of the Commute regional survey for all commuters in the metropolitan Washington region.

Carpool/Vanpool – Among all commuters in the region who carpooled or vanpooled, regular carpooling dominated, with casual carpool (slug) and vanpool having much smaller mode shares. The distribution was much different for GRH registrants; nearly half in the rideshare group primarily rode in a vanpool (13% of 27% total rideshare) and casual carpool accounted for about the same share of weekly commute trips (8%) as did regular carpool (7%).

Transit – The bus and commuter rail mode groups also showed markedly different use patterns for the two populations. Bus trips comprised a much larger share of the transit group for GRH registrants (28% of 64% total transit) than for the regional commuter population (7% of 26% total). Commuter rail use was even more dramatically different; 24% of all GRH registrants primarily used commuter rail to get to work, while only 2% of commuters region-wide used this mode. By contrast, GRH registrants used Metrorail at a lower rate than did commuters region-wide.

The disproportionate shares of commuter rail and vanpooling for GRH registrants likely are due to several factors. These commuters travel long distances. And commuter rail service is generally infrequent outside of peak commuting periods, heightening both the value of and need for GRH service. Additionally, commuter rail operators have promoted GRH, providing an additional method for these commuters to learn about GRH.

“During-GRH” Modes Compared with “Pre-GRH” Modes

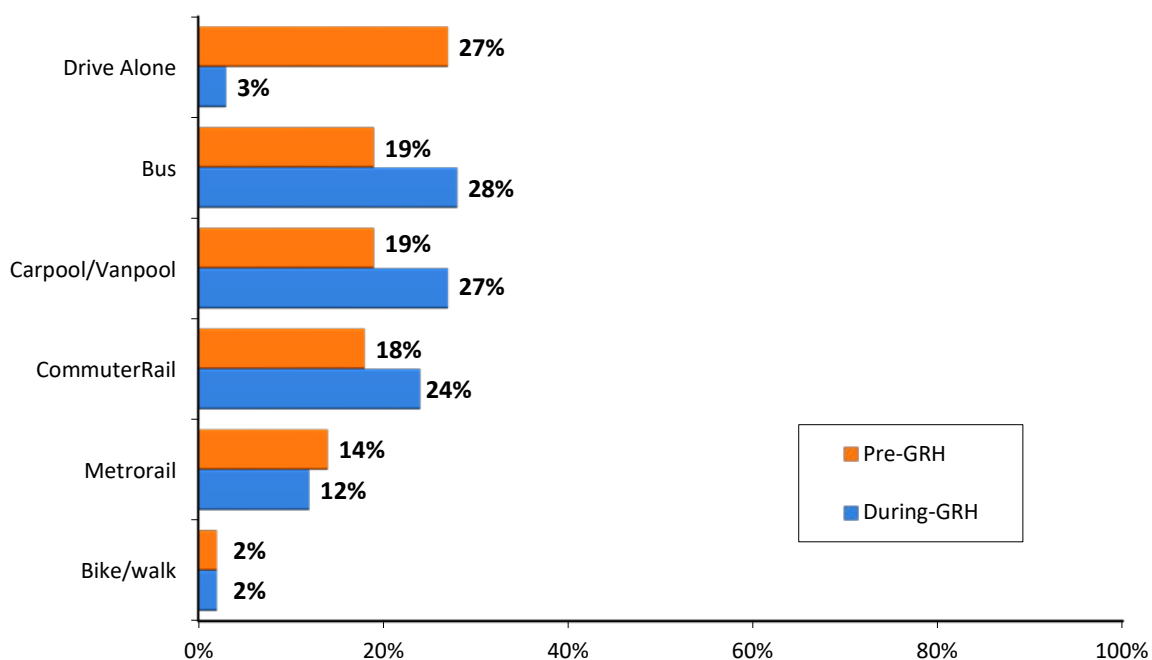
All respondents also were asked about their “pre-GRH” modes. Current and past registrants were asked about the “time before you registered for the GRH Program.” Because one-time exception users did not register, they were asked about the “time before you heard about the GRH Program.”

Figure 13 presents a comparison of respondents’ primary modes before participating in GRH (pre-GRH) and while participating (during-GRH). Primary mode was defined as the mode used most days during a typical week: drive alone, bus, carpool/vanpool, commuter rail, Metrorail, and bike/walk. The percentages shown are percentages of respondents who used the mode groups as their primary modes during the time period shown.

Figure 13
Primary Modes Used Pre-GRH and During-GRH

(Pre-GRH n = 1,982, During-GRH n = 2,066)

Pre-GRH and During-GRH mode shares will not total to 100%, because telecommute is excluded



Note that the totals of these percentages do not add to 100%, because a small number of respondents said they primarily teleworked and that option is not shown. Additionally, 4% of respondents said they were not living or working in the Washington area before joining GRH. These respondents did not have a “pre-GRH” primary mode and were removed from the base.

More than one-quarter (27%) of respondents primarily drove alone pre-GRH. The drive alone mode share dropped to just 3% for the “during-GRH” time period and the share of respondents primarily using bus, commuter rail, and carpool/vanpool increased. Primary use of bus increased from 19% pre-GRH to 28% during-GRH, carpool/vanpool use increased from 19% pre-GRH to 27% during-GRH, and the share of respondents using commuter rail grew from 18% to 24%. Metrorail use appeared to decline, but this difference was not statistically significant.

Table 9 illustrates the mode changes respondents made from their primary “pre-GRH” mode to their primary “during-GRH” mode. As expected, drive alone users made the greatest mode changes. One-third (34%) of drive alone respondents shifted to carpooling and half shifted to one of the three transit modes. About 10% of drive alone commuters said they continued to drive alone as their primary mode; presumably they drove alone three days per week and used an alternative mode two days.

Table 9
Primary Mode During-GRH by Primary Mode Pre-GRH

Pre-GRH and During-GRH mode shares and mode shift percentages will not total to 100%, because bike/walk and telecommute are excluded

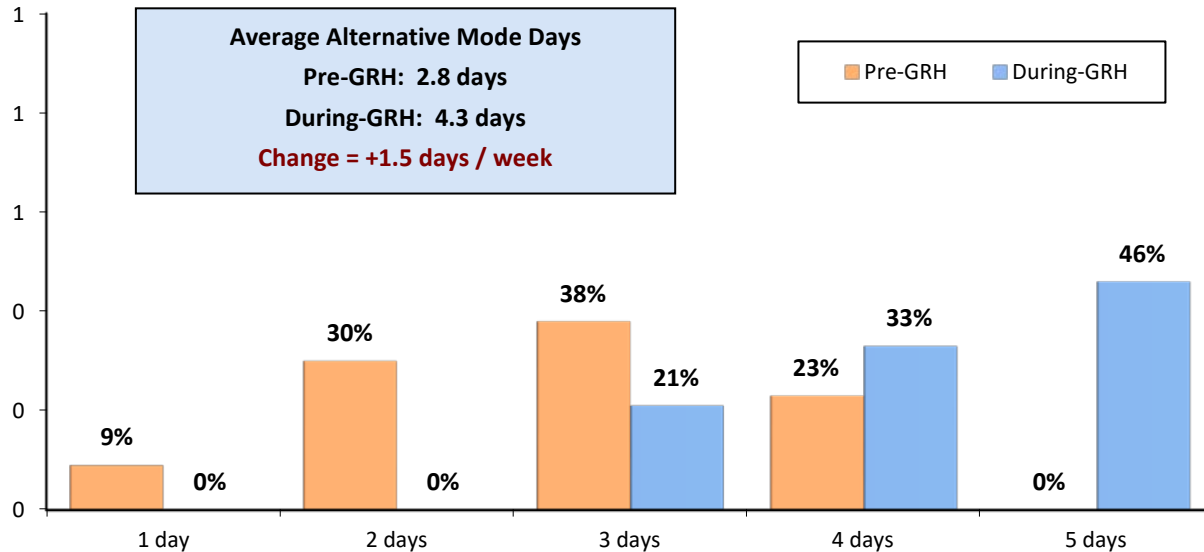
Pre-GRH Mode	During-GRH Mode				
	DA	Carpool / Vanpool	Bus	Metrorail	Commuter Rail
Drive alone (n = 539)	10%	34%	25%	6%	19%
Alternative Modes					
- Carpool/vanpool (n = 370)	0%	72%	14%	2%	9%
- Bus (n = 381)	1%	10%	78%	3%	4%
- Metrorail (n = 285)	2%	9%	14%	56%	14%
- Commuter rail (n = 350)	0%	8%	6%	2%	80%

Respondents who used alternative modes before they joined GRH largely remained in their pre-GRH modes after they joined GRH. About seven in ten respondents who previously carpooled/vanpooled (72%) and eight in ten who rode a bus (78%) or used commuter rail (80%) stayed in these modes. The Metrorail retention was noticeably lower, at 56%. But some switching occurred among all alternative modes. About one in ten respondents who used a bus, Metrorail, or commuter rail pre-GRH switched to carpool or vanpool. Bus and commuter rail also gained users from other pre-GRH modes.

“During-GRH” Days in Alternative Modes Compared with “Pre-GRH” Days

Respondents Who Increased Alternative Mode Frequency – The second survey research question focused on frequency of alternative mode use. Did participants who were using alternatives before joining GRH increase the number of days they used these modes after registering? Figure 14 shows the number of alternative mode days per week for these respondents, pre-GRH and during-GRH. It was not possible to answer the question with confidence, due to a small sample; only 48 of the 2,066 respondents said they increased alternative mode frequency. But it appears these respondents did increase their use of alternative modes.

Figure 14
Days Using Alternative Modes Pre-GRH and During-GRH
 Respondents Who Increased Alternative Mode Frequency During-GRH
 (n = 48)



Before joining GRH, 23% of these respondents were using alternative modes four days per week and 38% were using alternative modes three days per week. About four in ten (39%) used alternative modes one or two days per week before joining GRH. So, most respondents could add only one or two days of alternative mode use per week.

During their GRH registration period, nearly half (46%) were full-time users of alternative modes, while another 33% used alternative modes four days per week. Only two in ten (21%) used alternative modes less often than four days per week. This is consistent with the change in the overall increase in average alternative mode days from 2.8 days to 4.3 days, or about 1.5 days per week increase per respondent.

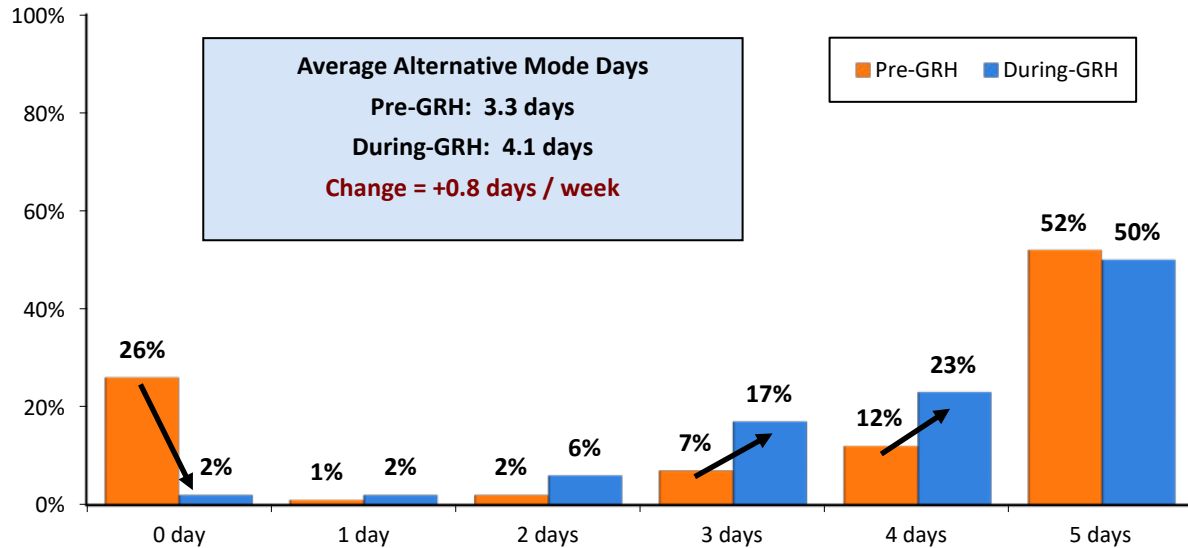
All GRH Respondents – The analysis also examined the overall frequency of alternative mode use for all GRH respondents. These results are shown in Figure 15.

The average number of days all GRH participants used alternative modes increased, from 3.3 days per week to 4.1 days per week. But the majority of the increase came from respondents who did not use alternatives at all pre-GRH. In other words, the overall increase in the average frequency of alternative mode use resulted primarily from shifts from drive alone to alternatives, rather than from increasing frequency among registrants who used alternative mode pre-GRH.

On a positive note, since there was very little change in the one-day and two-days per week categories, it is clear that most of the respondents who never used alternatives before GRH started using alternatives at least three days per week while in GRH.

Figure 15
Days Using Alternative Modes Pre-GRH and During-GRH (All GRH Respondents)

(Pre-GRH n = 1,982; During-GRH n = 2,066)



Influence of GRH on Commute Pattern Decisions

Types of Pre-GRH to During-GRH Commute Changes

The comparison of pre-GRH and during-GRH commute patterns is only part of the question of GRH's impact. Also important is the value of GRH in motivating these changes. Three types of pre-GRH and during-GRH commute pattern combinations were examined:

- Start alternative mode – Respondents who drove alone pre-GRH and started using alternative modes during-GRH
- Increase alternative mode – Commuters who were using an alternative pre-GRH and increased the frequency of alternative mode use during-GRH
- Maintain alternative mode – Commuters who were using an alternative mode pre-GRH and continued using it during-GRH, with no changes

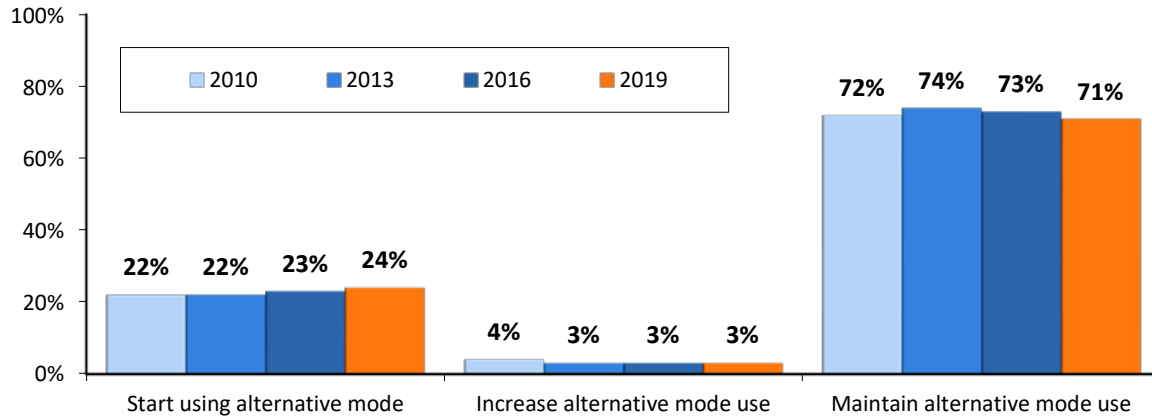
Figure 16 presents a breakdown of respondents into these alternative mode change groups. About one-quarter (24%) of respondents started using a new alternative mode at the time they joined GRH. A small number of respondents (3%) increased the number of days they used alternative modes. These percentages were similar to those reported in the three previous GRH surveys (2010, 2013, and 2016).

The largest share of respondents (71%) said they maintained but did not increase use of alternative modes they were using before GRH. This was as expected, since most respondents used an alternative pre-GRH and most used alternative modes four or five days per week pre-GRH. This percentage of “maintained” alternative mode use also was about the same as in the past three GRH surveys.

Figure 16
Alternative Mode Changes from Pre-GRH to During-GRH

(2010 n = 972, 2013 n = 2,226, 2016 n = 2,085, 2019 n = 1,986)

Note: Totals will not add to 100% because some respondents said they did not use an alternative mode “During-GRH”



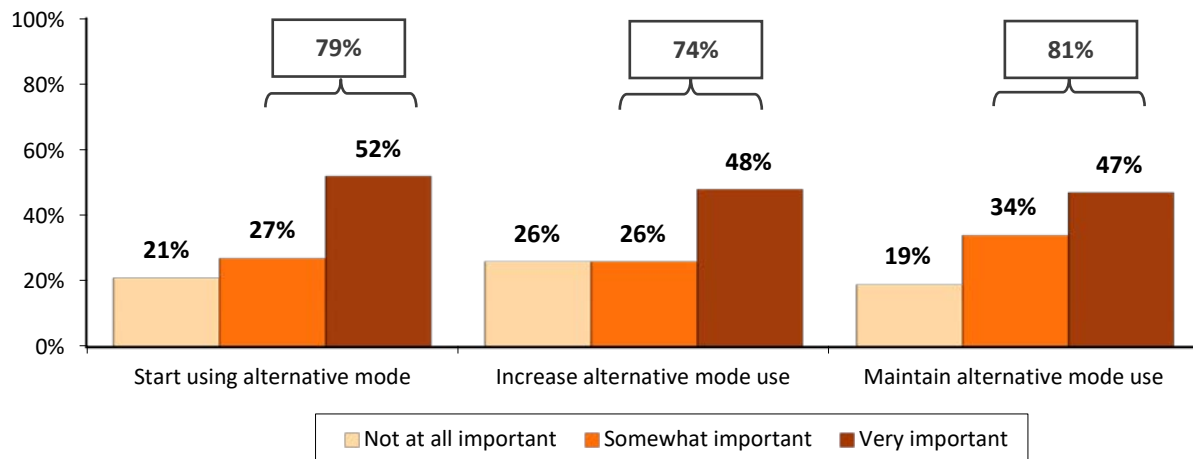
About 2% of respondents said they were not using an alternative mode while they were in GRH, even though the program requires them to be using an alternative mode to participate, about the same as the percentage in the previous three surveys. Respondents who were not using an alternative mode could be explained by the fact that most of these respondents said they were current registrants, thus were not asked directly about their “during-GRH” modes; their “during-GRH” travel was set equal to their current travel. But if these respondents had recently stopped using alternative modes, they might have said they were currently registered, even though they actually were no longer eligible for the program.

Importance to Decision to Start, Maintain, or Increase Use of Alternatives

For whichever of the three commute pattern categories that applied, respondents were asked how important GRH was to their commute decision. Figure 17 presents the results for this question.

Figure 17
Importance of GRH to Start, Maintain, or Increase Alternative Mode Use

(Start n = 479, Increase n = 47, Maintain n = 1,360)



Start Using Alternative Mode – Eight in ten respondents who drove alone pre-GRH and started using alternative modes during-GRH said GRH was important to their decision to make the change. Half (52%) said GRH was very important and 27% said it was somewhat important to the decision. The remaining 21% said GRH was not at all important.

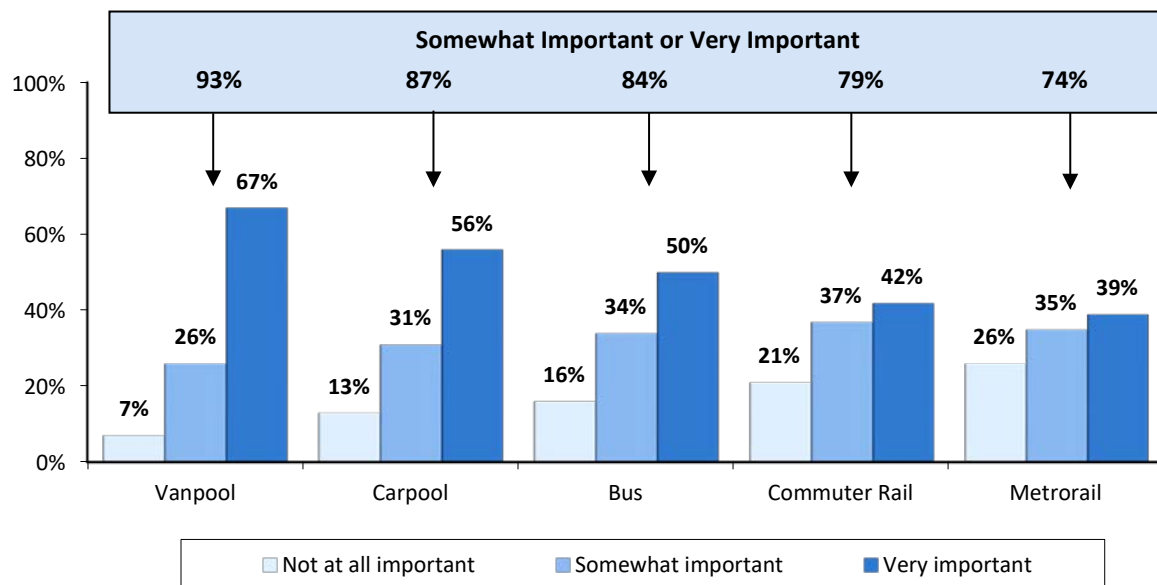
Increase Use of Alternative Mode – The importance of GRH to respondents who increased use of alternative modes was slightly lower than that for respondents who started alternative modes; 74% of respondents who increased alternative mode said it was either very important (48%) or somewhat important (26%). Given the small sample size for this group, the differences in importance rating are not statistically different from the “start alternative mode” group.

Maintain Use of Alternative Mode – GRH appears to be similarly important for respondents who maintained alternative mode use as for those who started using alternative modes. About 81% of respondents who maintained alternative mode use said GRH was very important (47%) or somewhat important (34%) to their decision.

Importance of GRH to Maintain Alternative Modes by Pre-GRH Alternative Modes – Respondents who were using alternative modes before they joined GRH differed slightly in their perceived value of GRH by the modes they were using pre-GRH. These results are shown in Figure 18.

Figure 18
Importance of GRH to Maintain Alternative Mode Use by Alternative Mode Used Pre-GRH

(Vanpool n = 106; Carpool n = 243; Bus n = 353; Commuter Rail n = 330; Metrorail n = 271)

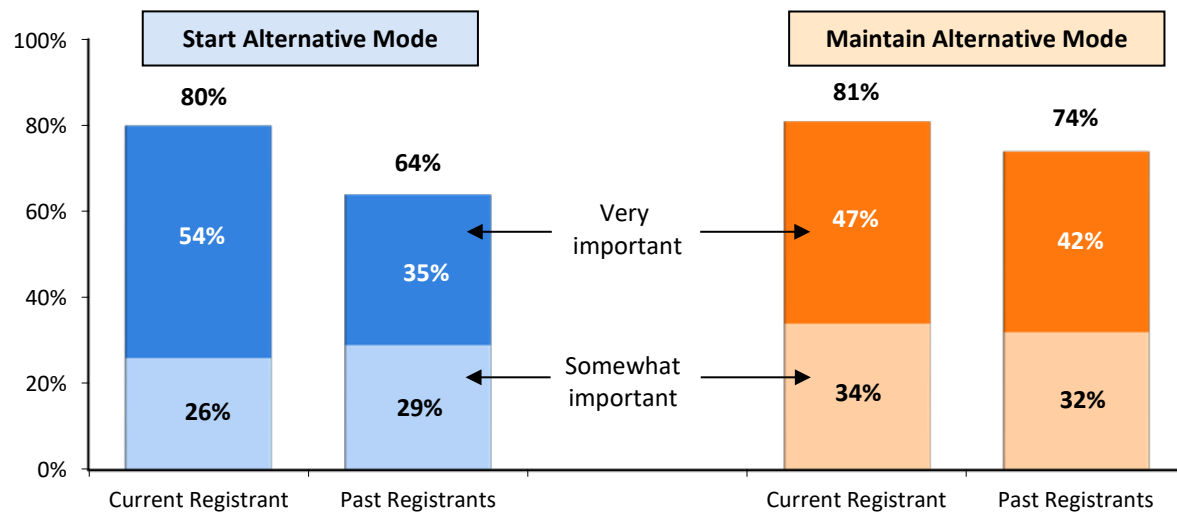


Nine in ten (93%) respondents who were vanpooling pre-GRH said GRH had been at least somewhat important to their decision to continue using this mode and 67% said it was very important. Carpoolers and bus riders also rated GRH as quite important, with 87% of carpoolers and 84% of bus riders saying it was at least somewhat important and at least half rating it as very important. About eight in ten (79%) of commuter rail riders said GRH was important. A slightly lower share of Metrorail riders (74%) rated GRH as important, likely because Metrorail runs at a reasonable frequency all day long, so many Metrorail commuters have an acceptable emergency option even without GRH.

Importance of GRH by Registration Status – Figure 19 presents the relative importance of GRH to current registrants and past registrants. Among participants who started using an alternative mode, 80% of current registrants rated GRH as either important or very important, but only 64% of past registrants gave these high ratings. A smaller difference was noted between current and past registrants who continued using an alternative; 81% of continued registrants said it was important, compared with 74% of past registrants.

Figure 19
Importance of GRH to Decision to Start or Maintain Alternative Mode by Registration Status

(Start alternative mode: Current registrants n = 406, Past registrants n = 82)
(Maintain alternative mode: Current registrants n = 1,064, Past registrants n = 333)



Likely to Make Alternative Mode Changes if GRH Not Available

Respondents also were asked how likely they would have been to make the same commute change decisions if GRH had not been available to them. Figure 20 shows the likelihood mentioned by respondents who started, increased, or maintained use of alternative modes.

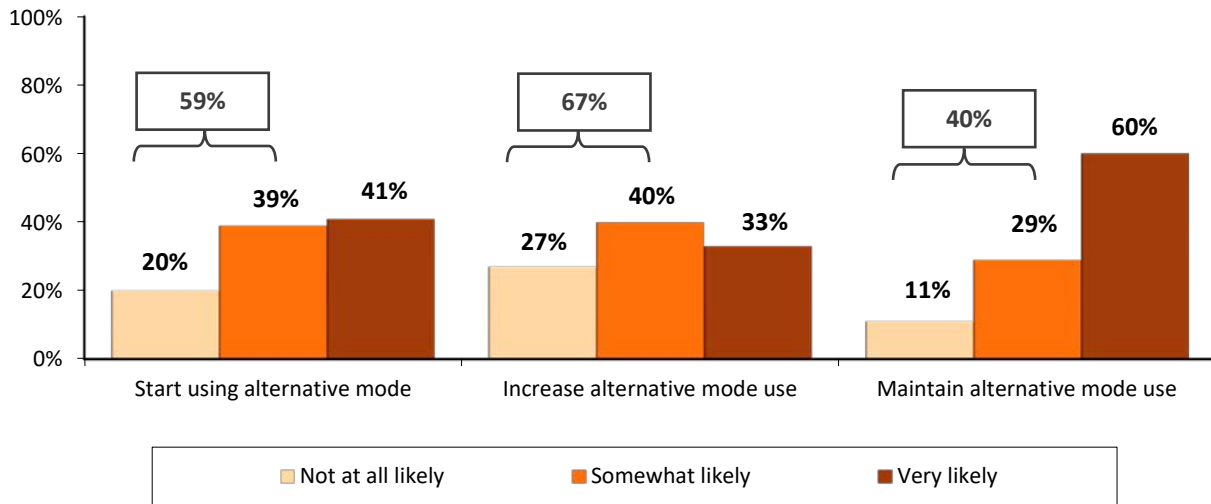
Start Using Alternative Mode – Nearly six in ten respondents who started using alternative modes said they were not likely (20%) or only somewhat likely (39%) to have made the change if GRH had not been available. The remaining 41% said they were very likely to have made the change even if they did not have access to GRH; these respondents were considered not to have been influenced by GRH.

Increase Use of Alternative Mode – A small number of respondents used alternative modes pre-GRH but increased their use of these modes while participating in GRH. GRH seemed to be of similar value to these respondents as to those who started using alternative modes. More than one-quarter (27%) were not at all likely to have made this change without GRH and 40% were somewhat likely to have made this change. One third (33%) of respondents who increased alternative mode use were very likely to have made the change without GRH.

Maintain Use of Alternative Mode – GRH seem to be less valuable to registrants who were using alternative modes and didn't make any changes during GRH (maintained alternative mode); 60% said they were very likely to have continued in this mode even if GRH had not been available. One in ten (11%) said they were not at all likely to have continued that mode and 29% were somewhat likely to have continued that mode without GRH.

Figure 20
Likely to Start, Maintain, or Increase Use of Alternative Modes if GRH Not Available

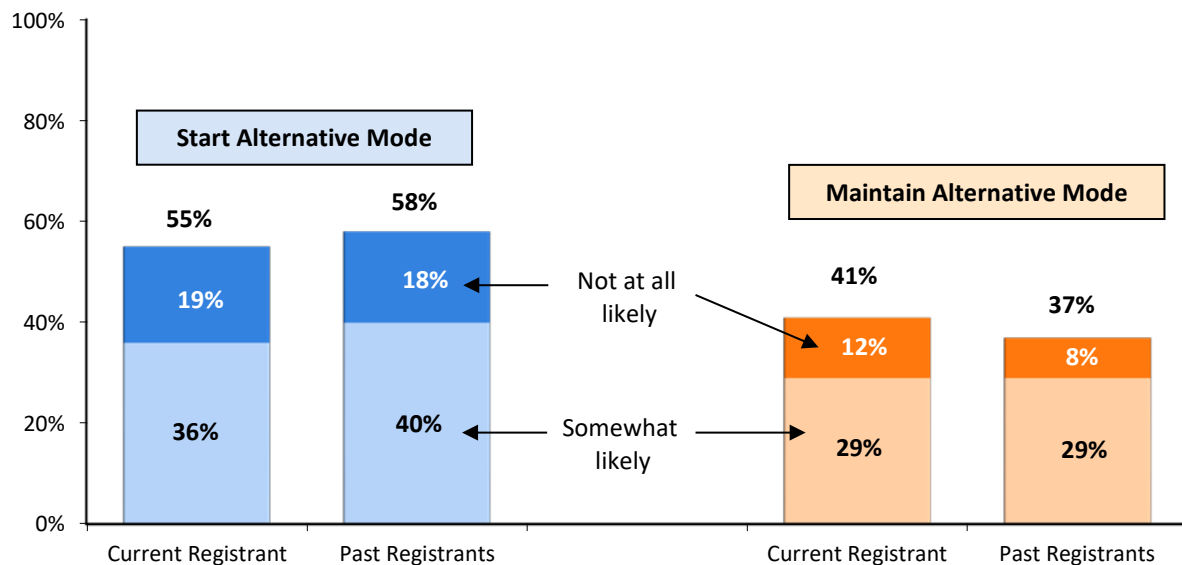
(Start n = 463, Increase n = 42, Maintain n = 1,298)



Likelihood to Start or Continue Modes by Registration Status – Finally, Figure 21 shows differences between current and past registrants in likelihood to start or maintain alternative modes without GRH. There was no statistical difference between current and past registrants for their likelihood to start alternative modes. And among respondents who maintained alternative mode use, similar shares of current registrants (41%) and past registrants (37%) said they were not likely or only somewhat likely to take this action without GRH.

Figure 21
Likely to Start or Maintain Alternative Modes Without GRH by Registration Status

(Start alternative mode: Current registrants n = 406, Past registrants n = 82)
 (Maintain alternative mode: Current registrants n = 983, Past registrants n = 313)



Other Influences Motivating Commute Changes

Figures 17 through 21 presented an apparent contradiction. Despite the high percentage of respondents who rated GRH as very important or somewhat important to their decisions to use alternative modes, a large share of respondents said they were likely to have made these decisions anyway, implying that GRH was useful, but not essential, to their decisions. These results are consistent with other GRH program evaluations. GRH users typically do rate GRH as a valuable service, but indicate that it is not “the reason” for which they made a change to an alternative mode. They were influenced by a variety of factors, including GRH, but including other factors as well.

With this in mind, respondents were asked about other services or factors that could have influenced their mode choice decisions. First, all respondents were asked, “Do you recall receiving or accessing any of the following commute information or assistance services from Commuter Connections, in addition to GRH?” Then respondents who said they had made a commute change were asked three questions:

- Was any of the information or assistance that you received from Commuter Connections more important than GRH to your decision to make this change?
- Did you receive any commute assistance or benefits, in addition to GRH, from any source, that influenced your decision? If yes, what was the assistance or benefit?
- Were any other factors or circumstances important to your decision? If yes, what other factors or circumstances were more important to your decision?

Responses to these questions are presented below.

Other Assistance or Benefits Received from Commuter Connections – Figure 22 lists the services that respondents mentioned receiving from Commuter Connections, in addition to GRH. Half (50%) said GRH was the only service they received from Commuter Connections. The other 50% noted one or more other services.

The top section of the table shows services focused primarily on assistance for carpooling and vanpooling. About two in ten (17%) received a matchlist with names of potential carpool/vanpool partners, 8% received a rideshare matching map, and 16% received “other” carpool or vanpool information. Fourteen percent of respondents received information on Park & Ride lots from Commuter Connections, 10% received HOV/Express lane information, and 5% obtained information on the ‘Pool Rewards carpool and vanpool incentive program. Three percent of respondents said they had used the new CarpoolNow mobile application for real-time ridematching. The percentages of 2019 respondents who received each of these services was not statistically different than the percentages for the 2016 and 2013 GRH surveys.

The second section of the table shows use of transit, bike/walk, telework, and multi-modal services. Two in ten (20%) respondents obtained transit route or schedule information, the highest percentage of all services listed. About one in ten (13%) had received information on a special event such as Bike-to-Work Day. Five percent of respondents mentioned telework information and bike information. Small shares of respondents also noted two other Commuter Connections services that were initiated in the 2018; 3% had used the incenTrip trip tracking and points application and 2% had used the Flextime Rewards incentive. The percentage of 2019 survey respondents who received each service was similar to the percentages noted in the 2016 and 2013 surveys, except that a higher share of respondents noted receiving information on special events (13%) than in either of 2016 (7%) or 2013 (7%).

Figure 22
Assistance or Benefits Received from Commuter Connections, in Addition to GRH – All Respondents
 (2013 n = 2,374, 2016 n = 2,171, 2019 n = 1,984, (multiple responses permitted for use of services))

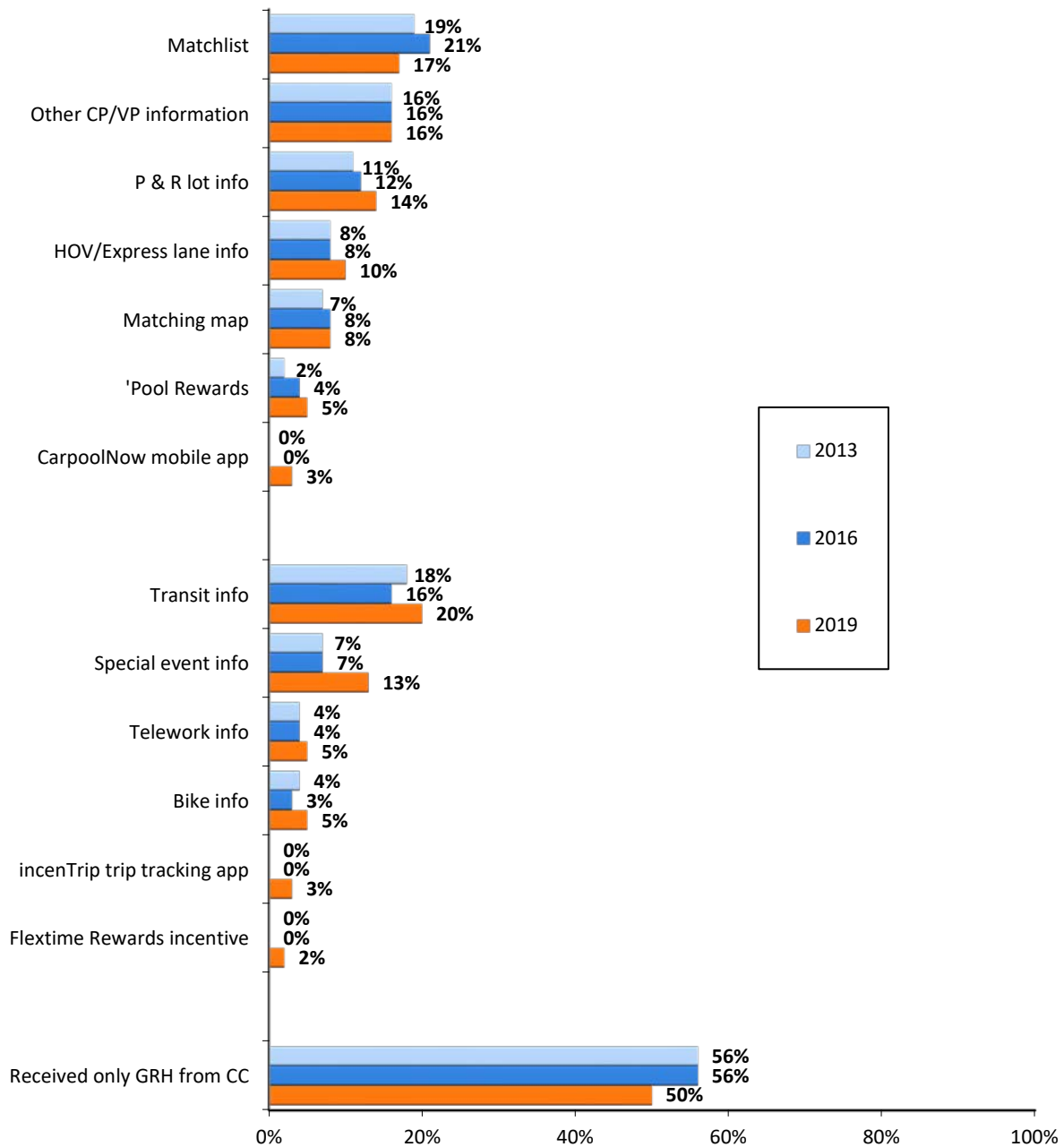
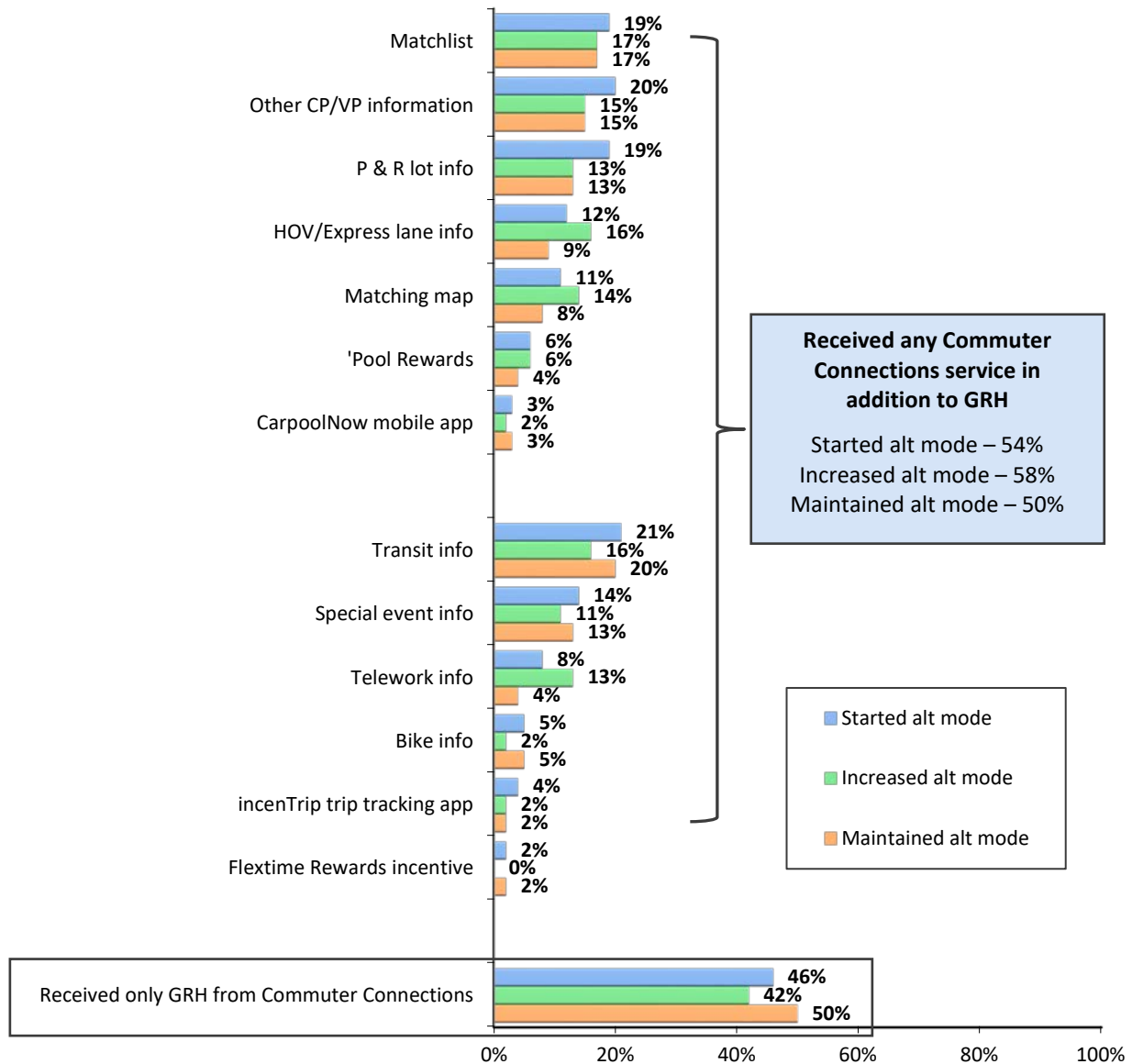


Figure 23 shows the same services, with respondents divided into groups by the type of commute change they reported from the pre-GRH to during-GRH time period. Respondents who started using alternative modes and those who increased alternative mode use received non-GRH Commuter Connections services at slightly higher rates (Started 54%, Increased 58%) than did those who maintained alternative mode use (50%).

Figure 23

Assistance/Benefits Received from Commuter Connections in Addition to GRH – By Type of Commute Change

(Started alt mode n = 466, Increased alt mode n = 44, Maintained alt mode n = 1,354)
 (multiple responses permitted for use of services)

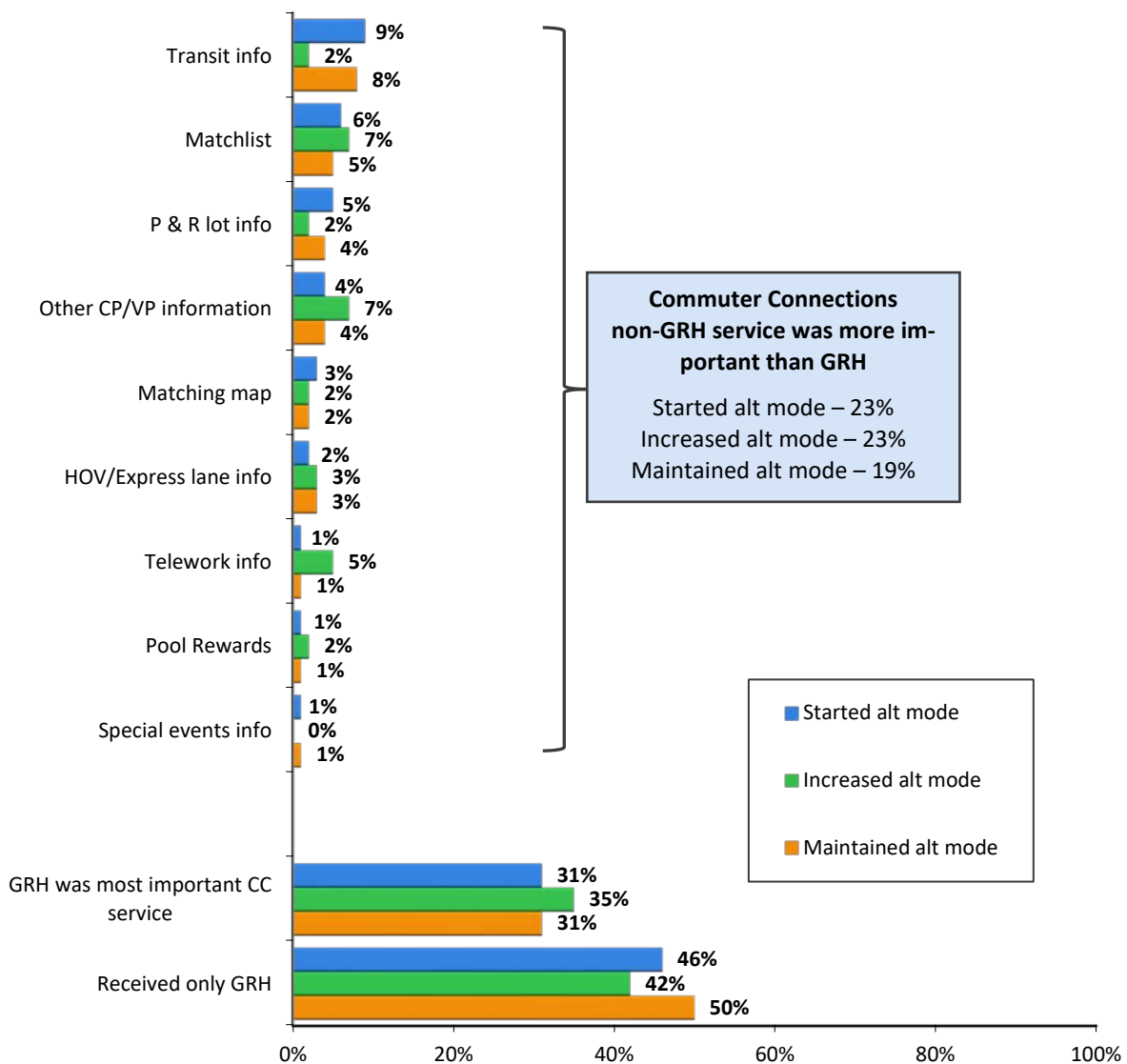


There were few clear differences in use of individual services across the three groups. Commuters who started using alternative modes were slightly more likely to have received carpool/vanpool information and Park & Ride lot information than were other respondents. Commuters who started alternative modes also used transit information at a high rate, but respondents who maintained alternative mode use also reported higher use of this service. Respondents who increased alternative modes appeared slightly more likely to have received HOV/Express lane information and telework information. But the sample of respondents who increased alternative mode use was very small (n = 48) relative to the other groups, and difference in use of individual services were not statistically significant.

Commuter Connections Assistance or Benefits that Were More Important than GRH – Respondents who also had received non-GRH services from Commuter Connections were asked if any of these services had been more important than GRH in influencing their use of alternative modes. As noted earlier, 50% said GRH was the only Commuter Connections service they used. Another 29% had used a non-GRH Commuter Connections service, but said that GRH was the most important of the services they received. The remaining 21% said a non-GRH service from Commuter Connections had been more important than GRH to their decision.

Figure 24 presents the percentages of respondents who reported non-GRH services that were more important to their decisions by the type of alternative mode use decision they made.

Figure 24
Commuter Connections Assistance or Benefits – More Important than GRH to Mode Decisions
 (Started alt mode n = 462, Increased alt mode n = 43, Maintained alt mode n = 1,346, multiple responses permitted)
 Note: Services that were mentioned by less than 1% of respondents are excluded from the chart



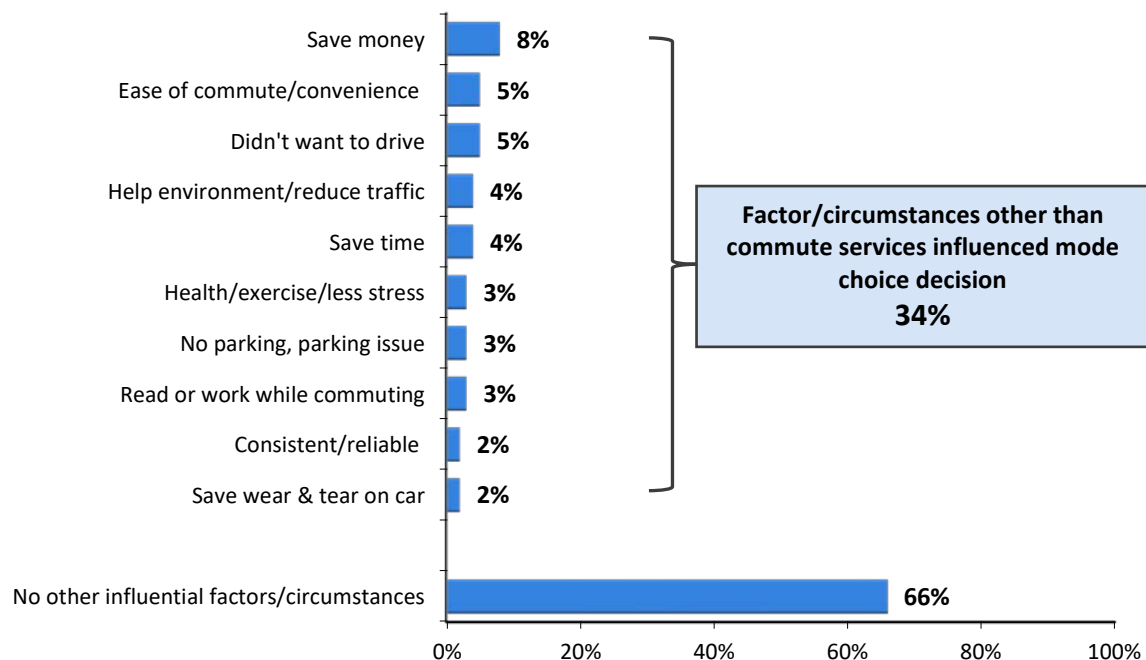
As indicated in the bottom section of the figure, at least four in ten respondents in each of the change groups said GRH was the only service they received (Started 46%, Increased 42%, Maintained 50%) and at least three in ten said GRH had been the most important Commuter Connections service they received (Started 31%, Increased 35%, Maintained 31%). Accounting for these two groups, this leaves relatively small shares of respondents who mentioned any other Commuter Connections service that was more important than GRH. Only 23% of respondents who started an alternative mode and the same share of those who increased alternative mode use reported a Commuter Connections service that was more important than GRH. Among those who maintained alternative mode use, with no changes, 19% cited a service that was more important than GRH.

Influential Assistance or Benefits Received from Another Organization – Respondents also were asked about services they received from an employer or other organization that influenced their mode choice decisions. Just over one-third (35%) mentioned a service that had influenced their decision. Nearly all of these respondents (31% of 35%) said the influential service was a transit pass, transit subsidy, vanpool subsidy, or pre-tax payroll deduction for commute travel costs. Each other service mentioned was named by less than one percent of respondents.

Other Factors or Circumstances That Influenced Decision – Finally, respondents were asked if any other factors or circumstances, other than GRH, non-GRH services from Commuter Connections, and non-GRH assistance or benefits from another organization, had been important to their mode choice decision. Nearly two-thirds (66%) said that no other factors or circumstances influenced their decision; 34% mentioned one or more other factors (Figure 25). The most common factors were a desire to save money (8%), have an easier or more convenient commute (5%), avoid driving (5%), save time (4%), or help the environment or reduce traffic (4%).

Figure 25
Other Factors/Circumstances Important to Decision to Make a Change in Alternative Modes

(n = 2,066, multiple responses permitted)



Use of and Satisfaction With GRH

Characteristics of Participants Who Used GRH Trips

Thirty-seven percent of respondents said they had taken a GRH trip (Table 10). This was slightly higher than the 33% who reported in 2016 and the 31% who reported using GRH in 2013. Current registrants (39%) used GRH trips at a higher rate than did past registrants (30%). Current and past registrants had been participating in GRH for about the same average amount of time (current – 41 months, past – 40 months), so program time does not seem to have been a determining factor in GRH trip-making. Rather, it is more likely that current registrants have simply encountered situations in which they would need a GRH trip, illustrating the value of the program and making them more likely to renew their registration. As was noted in an early section of the report, some past participants said they had not re-registered for GRH because they found they had not needed to use a GRH trip.

Table 10
Used GRH Trip
All Respondents, Current Registrants, and Past Registrants

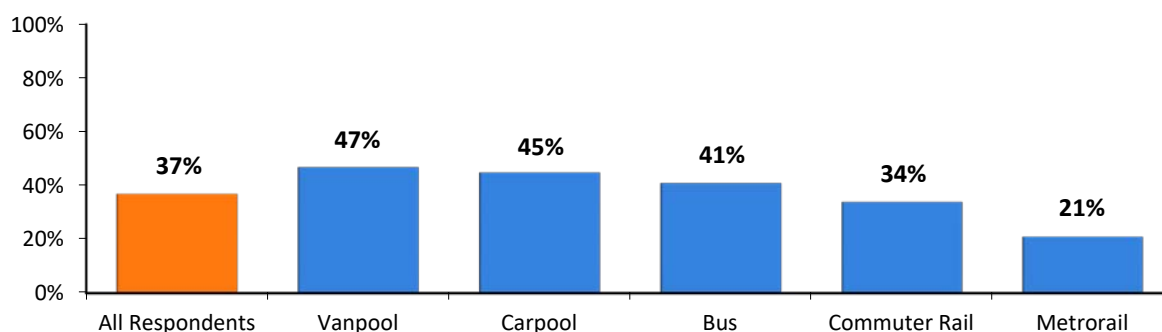
Taken a GRH Trip	All Registered Respondents (n = 2,031)	Current Registrants (n = 1,566)	Past Registrants (n = 496)
Yes	37%	39%	30%
No	63%	61%	70%

Used GRH Trip by Demographic Characteristics – Male respondents used GRH at a higher rate than did females; 39% of male respondents said they had taken a GRH trip, compared with 35% of females. Non-Hispanic Black (46% had taken a trip) and Hispanic (44%) respondents also were higher users of the program than were Non-Hispanic Whites (32%). And use of GRH trips increased with increasing respondent age. Less than one-quarter (23%) of respondents who were younger than 35 years had taken a GRH trip. Among respondents who were between 35 and 54 years, the percentage was 37%. Among respondents who were 55 years or older, 38% said they had taken a GRH trip. There was no difference in use by respondents in different income categories.

Used GRH Trip by During-GRH Modes – Figure 26 compares use of GRH by five “during-GRH” mode groups: vanpool, carpool, bus, commuter rail, and Metrorail. Vanpoolers and carpoolers were most likely to have used a GRH trip, with 47% and 45%, respectively, saying they had taken a GRH trip. About four in ten (41%) bus riders and 34% of commuter rail riders had taken a trip. Metrorail riders had the lowest usage; only 21% had taken a trip.

Figure 26
Used GRH Trip by Primary Commute Mode Used During-GRH

(All respondents n = 2,066, Vanpool n = 264, Carpool n = 135, Bus n = 581, Commuter rail n = 496, Metrorail n = 236)

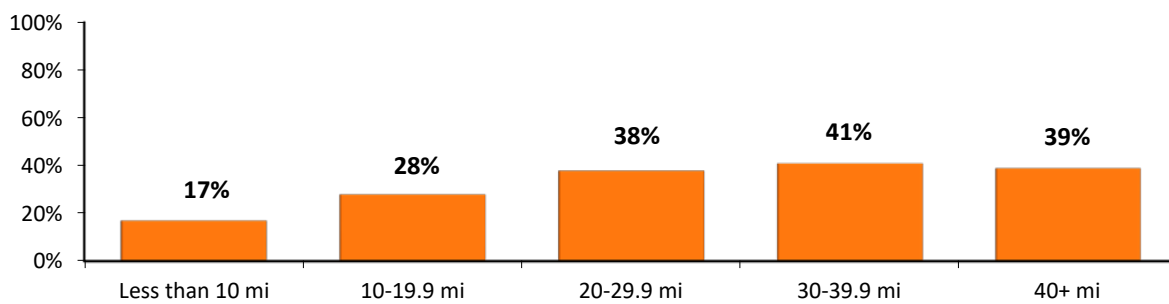


Regardless of which alternative mode they used, GRH registrants who used alternative modes more frequently used GRH at a higher rate. Thirty-eight percent who used alternative modes three or more days per week had taken a GRH trip, while only 33% who used alternative modes two days a week or less had taken a trip.

Used GRH Trip by Commute Distance – The average one-way distance of a respondent who used a GRH trip was 37.0 miles, longer than the 34.4 miles for GRH respondents overall. GRH use also rose as commute distance increased (Figure 27). About 17% of respondents who traveled less than 10 miles and 28% who traveled between 10 and 19.9 miles one-way used GRH. By contrast, about four in ten respondents with commute distances of 20 miles or more had made a GRH trip. This suggests that registrants with shorter commutes found another travel option, such as a being driven by a co-worker or taking public transportation or a taxi, for which they paid themselves.

Figure 27
Used GRH Trip by Commute Distance (miles)

(Less than 10 mi n = 135, 10-19.9 mi n = 232, 20-29.9 mi n = 405, 30-39.9 mi n = 424, 40 mi or more n = 681)

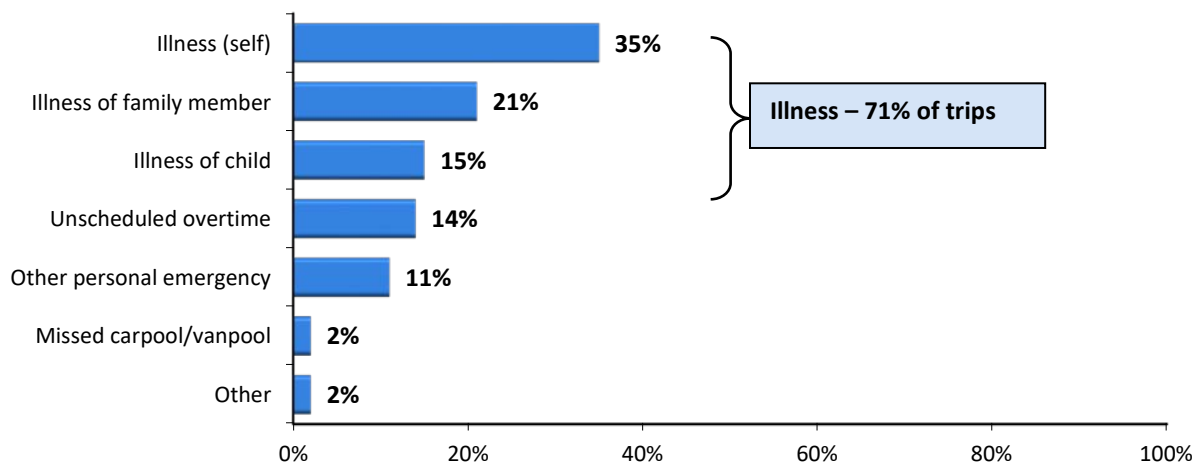


Reasons for Taking GRH Trip

Figure 28 lists the reasons for which participants used the service for their most recent trip. Seven in ten of all GRH trips were taken to address an illness: respondent (35%), another family member (21%), or a child (15%). Unscheduled overtime (14%) and other personal emergency (11%) were the two other common reasons.

Figure 28
Reason for Taking Most Recent GRH Trip

(n = 753)



Satisfaction With the Trip

Participants, who had taken a GRH trip were asked if the service was satisfactory. The overwhelming majority (95%) said they were satisfied. The primary reasons given by the 35 unsatisfied respondents include: waited too long (12 respondents), difficult to get approval (12 respondents), trip took too long because no direct ride was offered (9 respondents), customer service was not satisfactory during the request (6 respondents), and didn't like the taxi driver (5 respondents).

Respondents waited an average of 14 minutes for a taxi, about the same time as calculated in 2016 (15 minutes) and 2013 (16 minutes). In 2019, more than half (57%) of respondents who had taken a GRH trip said the taxi arrived within 10 minutes and nearly nine in ten (85%) respondents waited 20 minutes or less (Table 11).

Table 11
Time Waited for Taxi

(n = 718)

Wait Time	Percentage	Cumulative Percentage
5 minutes or less	29%	29%
6 to 10 minutes	28%	57%
11 to 20 minutes	28%	85%
21 to 30 minutes	8%	93%
31 to 45 minutes	3%	96%
46 or more minutes	4%	100%

Desired Improvements to the GRH Program

Participants appear to be generally quite satisfied with the GRH Program. Nineteen percent of respondents said no improvement was necessary for the GRH program. An additional 49% of participants did not provide any suggestions for improvements. The remaining 32% mentioned the suggestions detailed in Table 12.

The most frequently mentioned improvement was more advertising or more program information, named by 9% of respondents, about the same percentage as mentioned it in 2016 (10%) and 2013 (11%). Two responses, relax conditions for supervisor approval and send annual email reminder for renewal, each was named by 5% of respondents. All other responses were cited by fewer than 5% of respondents and the results were consistent with the results of the 2016 and 2013 surveys.

There were a few statistical differences in the improvements desired by current registrants versus past registrants in all cases with higher shares of past registrants mentioning the improvements:

- Easier/faster approval – 5% of past registrants versus 3% of current registrants
- Send renewal reminder – 11% of past registrants versus 3% of current registrants
- Advertise more – 12% of past registrants versus 8% of current registrants

Table 12
Suggested Improvements to GRH Program

(n = 2,066)

Desired Improvement	Percentage*
More advertising/more program information	9%
Relax conditions/supervisor approval	5%
Send annual e-mail reminder for renewal	5%
Easier/faster approval/online registration	3%
Quicker response for ride requests	2%
More direct/faster service from work to home	2%
Improve dispatching (faster, nicer)	2%
Allow more trips per year	2%
Wider area for trips	1%
Extend hours for use	1%
GRH drivers should be more knowledgeable about the program	1%
Other	2%
No improvement needed	19%
Don't know/no suggestions provided	49%

* Might add to more than 100% due to multiple responses

Social Networking and Travel Information Applications

The 2019 GRH survey added two new questions to examine the growing use of social networking and traveler information mobile applications. These questions also were added to the 2019 regional State of the Commute (SOC) survey, to examine use of these services among the regional commuting population as a whole.

Social Networking

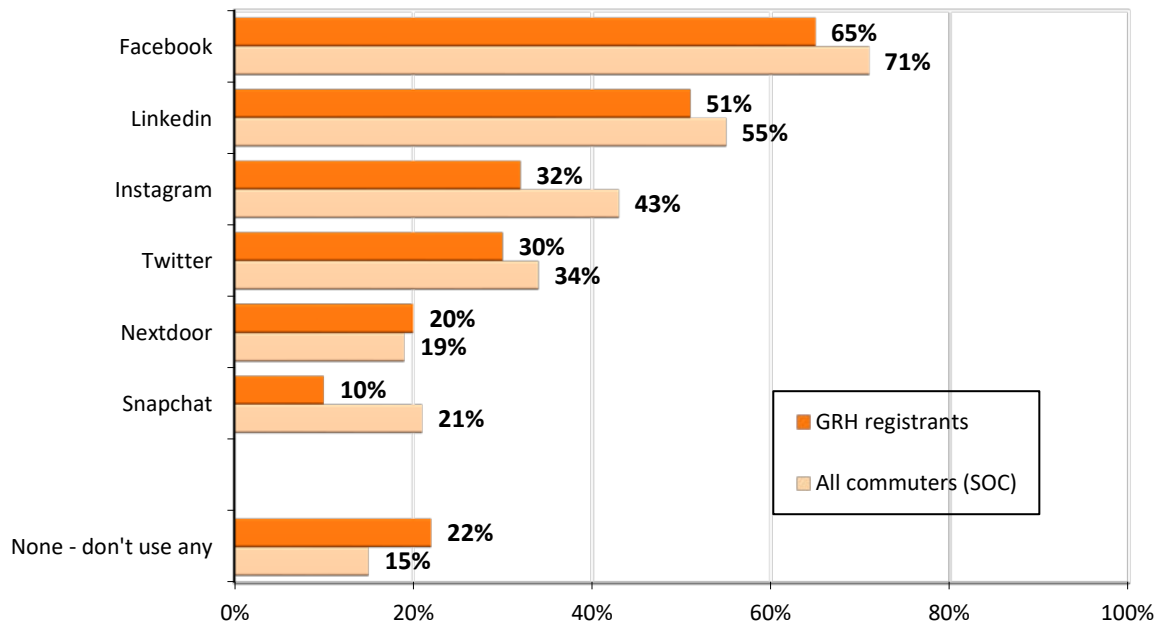
Use of social networking applications has become a daily part of life for many people and the networking apps have become a common source of information. In both the GRH and SOC surveys, survey respondents were shown a list of six applications and asked to indicate those with which they had accounts.

About eight in ten (78%) GRH respondents said they had an account with at least one of the six applications (Figure 29). The most common application was Facebook, used by 65% of respondents. LinkedIn, used primarily for work-related/professional interactions, was noted by 51% of respondents. About one-third (32%) had an account with Instagram and 30% had a Twitter account. Two in ten (20%) mentioned having a Nextdoor account and 10% had a Snapchat account.

As indicated by the results from the regional SOC survey, also shown in Figure 29, use of social networking was more common among the general regional commuter population than among GRH registrants. A total of 85% of all regional commuters had an account with at least one of the six applications, compared with the 78% of GRH registrants. Use of individual apps also generally was lower among GRH registrants, with the exception of Nextdoor, which was used approximately equally. Two apps, Instagram and Snapchat, were used notably less by GRH registrants than by the commuting population overall.

Figure 29
Social Networking Applications – Percentage with Accounts
 GRH Registrants and All Regional Commuters

(GRH registrants n = 2,014, SOC all commuters n = 8,157)



The differences in social networking use between GRH registrants and the overall regional commuting population likely are related to the older age profile of GRH registrants. The SOC survey found that use of social networking applications declined with increasing respondent age. More than nine in ten (93%) respondents who were younger than 35 years had accounts, compared with about 85% of respondents who were between 35 and 54 years, 77% who were between 55 and 64 years, and only 69% of respondents who were 65 years or older.

As noted in an earlier section of this report, 93% of GRH registrants were 35 years of age or older, thus less likely to be using social networking. A review of social networking use by GRH registrants of various ages did show a similar pattern of decreasing use by increasing age, but with lower use than the general commuting population even within each age group as illustrated below:

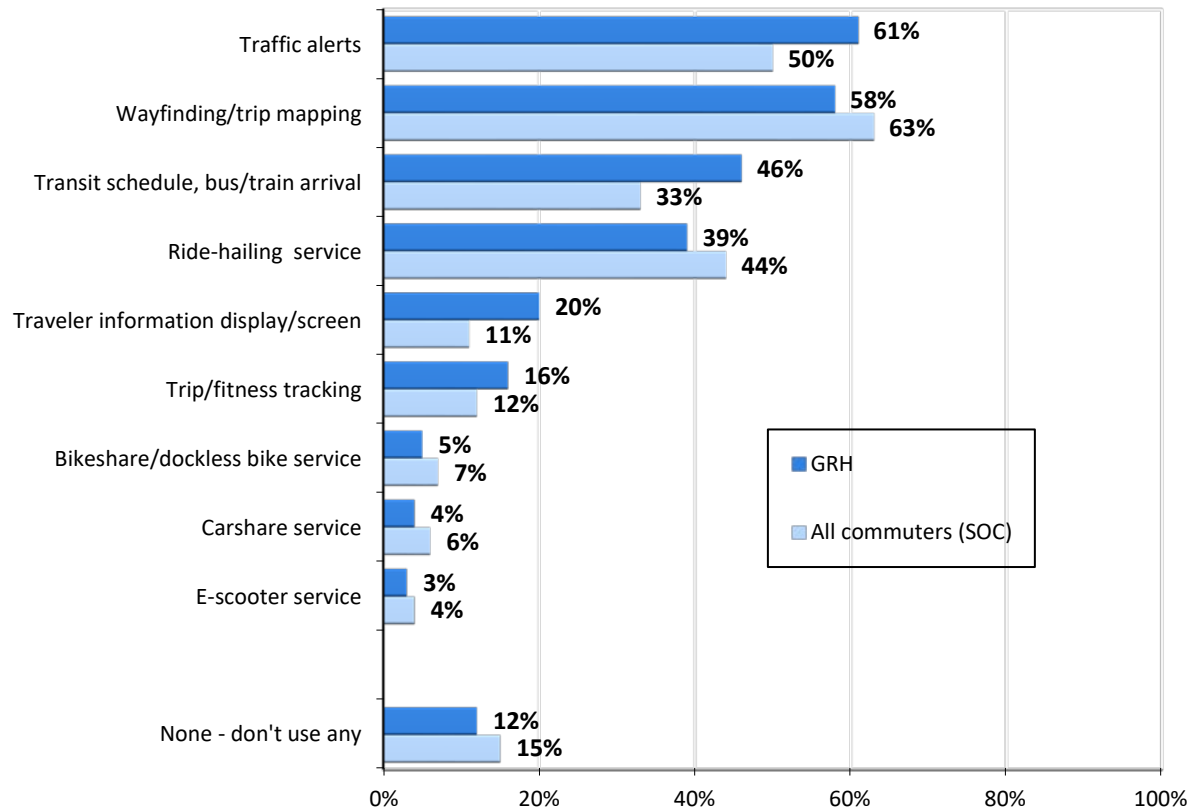
Age Group	Use at least one application	
	GRH	SOC
Under 35 years	83%	93%
35 to 54 years	82%	85%
55 to 64 years	70%	77%
65 years or more	64%	69%

Travel/Trip Information Applications

Wide-scale availability of smartphones and other mobile devices also has created an opportunity for commute information and service organizations to deliver an extensive range of traveler information via mobile applications, enhancing commuters' access to travel information in real time and before and during a trip. Both the 2019 GRH survey and the SOC survey added a question to identify applications that regional commuters used. Survey respondents were shown a list of nine applications and asked to indicate those they had used.

Nearly nine in ten (88%) GRH respondents had used at least one of the listed applications (Figure 30). Among GRH respondents, the most common application was for traffic alerts delivered via text message or other means; 61% of GRH respondents had used this type of app. Wayfinding or mapping applications, such as Google maps and Waze also were common among GRH respondents; 58% had used this type of application.

Figure 30
Travel/Trip Information Applications – Percentage Using Apps
 GRH Registrants and All Regional Commuters
 (GRH registrants n = 2,014, SOC all commuters n = 8,161)



Nearly half (46%) of GRH registrants had used an application that tracked transit schedules or provided “next bus/train” information on arrival time and 39% had used an application for a ride-hailing service such as Uber, Lyft, or Via. Two in ten (20%) used a traveler information display or screen located in a public location and 16% had used a trip or fitness tracking app. Smaller shares of respondents had used applications for bikeshare (5%), carshare (4%), and e-scooter (3%) services.

Overall use of travel/trip information applications was similar among GRH registrants (88%) and all commuters region-wide (85%). But GRH respondents were notably higher users of some types of travel information. Six in ten GRH registrants used traffic alerts, compared with only half (50%) of all regional commuters. GRH respondents also were much higher users of transit schedule/transit arrival applications (GRH 46%, SOC 33%) and traveler information displays (GRH 20%, SOC 11%). GRH registrants used wayfinding/trip mapping apps and ride-hailing service apps at a slightly lower rate than did all regional commuters.

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 respondent age. Nearly all (97%) respondents who were younger than 35 years had accounts, compared with about nine in ten respondents who were between 35 and 54 years and 86% of those who were 55 years or older.

Use of individual applications varied substantially by age, with younger respondents nearly always using the apps more than did older respondents (Table 13). The only application that exhibited an increasing pattern with increasing age was traffic alerts; 62% of respondents who were 55 years or older had used this application, compared with just 54% of respondents who were younger than 35 years.

Table 13
Use of Travel/Trip Information Applications by Age

(Shading indicates statistically higher percentages)

Trip/Travel Application	Respondent Age			
	18-34 years (n = 145)	35 – 44 years (n = 395)	45 – 54 years (n = 650)	55+ years (n = 898)
Use any trip/travel info app	97%	90%	88%	86%
Transit schedule arrival	56%	46%	44%	46%
Bikeshare service	12%	9%	4%	3%
E-scooter service	10%	4%	2%	1%
Traveler information display	29%	23%	18%	18%
Ride-hailing service	77%	50%	39%	27%
Wayfinding	84%	68%	59%	48%
Trip/fitness tracking	30%	22%	15%	11%
Carshare service	8%	5%	4%	3%
Traffic alerts	54%	59%	63%	62%

Respondents who were younger than 35 years were higher users of transit schedule arrival applications. Respondents who were younger than 45 years used bikeshare and e-scooter service apps, as well as traveler information displays at higher rates. Note that the SOC survey demonstrated that younger respondents were less likely to have access to a personal vehicle and more likely to live in the central section of the region, where these services are more widely available. The pattern for use of ride-hailing service apps, wayfinding app, and trip/fitness tracking apps declined steadily through all four age groups, with each age group using the application less than did the next younger group.

Use of Travel/Trip Information Applications by Commute Mode – Overall use of travel/trip information apps was high among respondents of all commute modes, with at least eight in ten respondents in each mode group saying they had used one or more of the applications listed (Table 14). But 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 for respondents to have used.

Use of individual applications, however, did vary substantially by commute mode. GRH respondents who primarily used Metrorail to commute were the highest users of the apps, with particularly high use of transit schedule arrival apps, and apps for ride-hailing, bikeshare, and carshare services. Metrorail and commuter rail riders also reported greater use of traveler information displays than did respondents who used other modes.

Table 14
Use of Trip/Travel Information Applications by Primary Current Commute Mode

(Shading indicates statistically higher percentages)

Trip/Travel Application	Primary Commute Mode				
	Vanpool (n = 257)	Carpool (n = 269)	Bus (n = 563)	Metrorail (n = 233)	Commuter Rail (n = 444)
Use any trip/travel info app	81%	89%	86%	91%	91%
Transit schedule arrival	11%	35%	48%	64%	58%
Ride-hailing service	25%	37%	36%	53%	41%
Traveler information display	10%	15%	14%	26%	30%
Bikeshare service	1%	3%	4%	11%	5%
Carshare service	2%	3%	2%	10%	4%
Wayfinding	59%	63%	53%	63%	55%
Trip/fitness tracking	10%	11%	15%	17%	16%
Traffic alerts	61%	63%	57%	62%	63%
E-scooter service	1%	1%	2%	5%	3%

Vanpoolers were least likely to use the apps; only 81% said they had used any of the apps and they had the lowest use of most individual applications. As noted earlier in this report, vanpoolers generally have long commute distances, thus are most likely to live farther from the center of the region, where apps for bikeshare, carshare, and e-scooter would be most useful. Additionally, because they are not riding transit to work, they are less likely to have a reason to use a transit-focused application.

APPENDICES

Appendix A – Survey Questionnaire

Appendix B – Respondent Alert Letters

Appendix C – Disposition of Final Dialing Results

Appendix D – Results from 2016, 2013, 2010, 2007 GRH Surveys – Comparison on Key Questions

APPENDIX A – SURVEY QUESTIONNAIRE

MWCOG 2019 Guaranteed Ride Home Survey - Internet Version

INTRODUCTION

Commuter Connections is conducting this survey of commuters who have registered for or participated in Commuter Connections' Regional Guaranteed Ride Home (GRH) program. Your answers will be confidential. It will take about ___ minutes. Please complete the survey and click on the "SUBMIT" button at the end.

Commuter Connections is offering a drawing for ten \$50 Amazon gift cards for commuters 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.

Thank you for your participation.

REGISTRATION INFORMATION

Q1. In what year did you first register for Commuter Connections' GRH program?

- 1 Before 2014 **(SKIP TO Q2)**
- 2 2014 **(SKIP TO Q2)**
- 3 2015 **(SKIP TO Q2)**
- 4 2016 **(SKIP TO Q2)**
- 5 2017 **(SKIP TO Q2)**
- 6 2018 **(SKIP TO Q2)**
- 7 2019 **(SKIP TO Q2)**
- 8 Never registered, don't recall registering **(SKIP TO Q3)**
- 9 Don't remember/don't know year registered **(ASK Q1a)**
- 89 *Left blank (ASK Q1a)*

Q1a Do you recall that you did register for the GRH program at some time?

- 1 Yes **(CONTINUE TO Q2)**
- 2 No **(RECODE Q1 = 8, THEN SKIP TO Q3)**
- 9 Don't know **(RECODE Q1 = 8, THEN SKIP TO Q3)**
- 89 *Left blank (RECODE Q1 = 8, THEN SKIP TO Q3)*

Q2 Are you currently registered for Commuter Connections' GRH program?

- 1 Yes **(SKIP TO Q6)**
- 2 No **(SKIP TO Q4)**
- 9 Don't know **(SKIP TO Q4)**
- 89 *Left blank (ASK Q3)*

Q3 Have you ever taken a GRH trip provided by Commuter Connections' GRH program?

- 1 Yes
- 2 No **(THANK and TERMINATE)**
- 89 *Left blank (THANK AND TERMINATE)*

Q3a For what reason did you not register for the GRH program after you took this one-time GRH trip?

OPEN ENDED _____

SKIP TO Q8

Q4 How long were you registered in the GRH program?

- 1 Less than 1 year
- 2 1 year
- 3 2 years
- 4 3 years
- 5 More than 3 years
- 9 Don't remember/don't know
- 89 Left blank

Q5 Why did you not re-register when your registration expired?

OPEN ENDED _____

Q6 Did you participate in another GRH program before registering for Commuter Connections' GRH program?

- 1 Yes (**ASK Q7**)
- 2 No (**SKIP TO Q8**)
- 9 Don't know (**SKIP TO Q8**)
- 89 Left blank (**SKIP TO Q8**)

Q7 Who offered/sponsored that program?

- 1 My employer
- 2 County or city government (please specify) _____
- 3 VRE
- 9 Other _____
- 89 Left blank

CURRENT COMMUTE PATTERNS (Asked of all respondents)

Q8 Next, think about your travel to work. First, in a TYPICAL week, how many weekdays (Monday-Friday) are you assigned to work?

- 1 1 day per week
- 2 2 days per week
- 3 3 days per week
- 4 4 days per week
- 5 5 days per week
- 8 0 weekdays (not currently working or work only on weekends) (**SKIP TO INTRO TO DEMOGRAPHICS – BEFORE Q60**)

Q10 Which of the following best represents your work schedule? (**SHOW RESPONSES ON SCREEN**)

1. Full-time, 5 or more days per week
2. Part-time
3. 4/40 compressed schedule (four 10-hour days per week, 40 hours)
4. 9/80 compressed schedule (9 days every 2 weeks, 80 hours)
5. 3/36 compressed schedule (three 12-hour days per week, 36 hours)
- 9 Other (SPECIFY) _____
- 89 Question left blank

Q10a Do you telecommute or telework. For purposes of this survey, “telecommuters” are defined as “wage and salary employees who at least occasionally work at home or at a telework or satellite center during an entire work day, instead of traveling to their regular work place.” Based on this definition, are you a telecommuter?

- 1 Yes
- 2 No (**SKIP TO Q10c**)
- 9 Don't know (**SKIP TO Q10c**)
- 89 *Left blank*

Q10b How often do you usually telecommute?

- 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
- 6 Occasionally for special projects
- 7 Less than one time per month/only in emergencies
- 8 1-3 times a month
- 9 Other (SPECIFY) _____
- 19 Not sure
- 89 *Left blank*

Q10c In a typical week, how often are you away from your usual work location **for an entire day** for business / work travel (e.g., meetings/ visits to clients or customers)?

- 1 Never, I don't ever travel for work
- 2 Occasionally, but less than 1 day per week
- 3 Regularly, 1 or more days per week
- 9 Not sure
- 89 *Left blank*

Q14 Thinking about a TYPICAL week, how do you get to work, Monday through Friday? In the table below, enter the number of weekdays you typically use each of the listed types of transportation. If you use more than one type on a single day (e.g., walk to the bus stop, then ride the bus), count only the type you use for the **longest distance part** of your trip.

IF Q10c = 3, ALSO SHOW: “For days that you typically would be on business / work travel, please report the type of transportation you would use to get to work if you worked at your usual work location.”

Indicate also how many weekdays you do NOT travel to your usual work location and the reasons (e.g., regular day off, telecommute, compressed work schedule day off) for not traveling to work.

Q14 PROGRAMMER NOTES:

CHECK SUM OF Q14 DAYS. IF TOTAL OF Q14 RESPONSES 1-21 IS LESS THAN 5, SHOW MESSAGE: ““Please report for all days Monday – Friday, including telework days, compressed schedule days, and days you do not work.” **IF TOTAL OF Q14 RESPONSES 1-21 IS GREATER THAN 5, SHOW MESSAGE:** “You’ve reported more than five days. Please report only for Monday – Friday and only one type of transportation per day.”

IF Q10 = 3, 4 OR 5 AND RESPONDENT DOES NOT CHECK "CWS day off" (RESPONSE 1), 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 VALID RESPONSE**

IF Q10b = 1, 2, 3, 4, OR 5 AND RESPONDENT DOES NOT CHECK "Telecommute" (RESPONSE 2), SHOW MESSAGE: “You said you typically telework. How many days do you telework in a typical week? **ACCEPT 0 AS VALID RESPONSE**

Type of Transportation	Number of Days (Mon-Fri) Used (0 to 5)
Days you travel to your usual work location	
3 Drive alone in a car, truck, van, or SUV	
4 Motorcycle	
5 Carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 Casual carpool (slugging)	
7 Vanpool	
8 Buspool N/A Not used	
9 Bus (public or private bus, shuttle, buspool, commuter bus, express bus)	
10 Metrorail	
11 MARC (MD Commuter Rail)	
12 VRE	
13 AMTRAK / other train	
14 Bicycle/e-scooter (entire trip or longest distance part of trip from home to work)	
15 Walk (entire trip from home to work)	
16 Taxi	
18 Uber, Lyft, Via	
Days you do not travel to your usual work location	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe) _____	
Total Days (DO NOT SHOW THIS LINE ON SCREEN)	Sum of 1-21

IF Q14 = 5, 6, OR 7 (carpool or vanpool), ASK Q14a, OTHERWISE SKIP TO DEFINE CALTDAYS

Q14a Including yourself, how many people usually ride in your <carpool or vanpool>? **(IF MORE THAN ONE ANSWER IN Q14, SELECT ONE USING THIS PRIORITY: vanpool, carpool, casual carpool.)**

_____ total people in pool

89 Left blank

DEFINE CALTDAYS (days currently using alternative modes)

CALTDAYS = TOTAL Q14 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15

DEFINE CMCA (Current Most Common Alternate)

Set CMCA using Q14 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15)

IF CALTDAYS = 0, SET CMCA = 99 (no MCA)

IF CALTDAYS > 0, SET CMCA AS FOLLOWS:

IF GREATEST NUMBER OF Q14, RESPONSES 5-15 =

Q14_05, SET CMCA = 05 (Carpool)

Q14_06, SET CMCA = 06 (Casual Carpool / Slug)

Q14_07, SET CMCA = 07 (Vanpool)

Q14_09, SET CMCA = 09 (Bus)

Q14_10, SET CMCA = 10 (Metrorail train)

Q14_11, SET CMCA = 11 (MARC train)

Q14_12, SET CMCA = 12 (VRE train)

Q14_13, SET CMCA = 13 (AMTRAK / Other train)

Q14_14 SET CMCA = 14 (Bicycle)

Q14_15 SET CMCA = 15 (Walk)

IF TIE FOR MOST Q14 DAYS USED, SELECT IN THIS ORDER: VANPOOL, CARPOOL, BUS, VRE, MARC, METRORAIL, AMTRAK, CASUAL CARPOOL, BIKE, WALK.

DEFINITION OF REGISTRATION STATUS (GRHTYPE)

IF Q1 = 1, 2, 3, 4, 5, 6, 7, 9, OR 89 AND Q2 = 1 AND CALTDAYS > 0, GRHTYPE = 1 (CURR_REG)

IF Q1 = 1, 2, 3, 4, 5, 6, 7, 9, OR 89 AND Q2 = 1 AND CALTDAYS = 0, GRHTYPE = 2 (PAST_REG)

IF Q1 = 1, 2, 3, 4, 5, 6, 7, 9, OR 89 AND Q2 = 2 OR 9, GRHTYPE = 2 (PAST_REG)

IF Q1 = 8 AND Q3 = 1 AND CALTDAYS = 0, GRHTYPE = 2 (PAST_REG)

IF Q1 = 8 AND Q3 = 1 AND CALTDAYS > 0, GRHTYPE = 3 (ONE_TIME)

IF CALTDAYS > 0, SKIP TO Q15

IF CALTDAYS = 0 (Q14 = ONLY 1, 2, 3, 4, 16, 17, AND 21), ASK Q14b

IF CALTDAYS = 0 AND Q2 = 1, START Q14b WITH "You said you're currently registered for the GRH Program but you drive alone all the days you travel to work,"

Q14b <You said you're currently registered for the GRH Program but you typically drive alone or ride in a taxi/Uber/Lyft/Via all the days that you travel to work.> Do you occasionally use any of the following types of transportation to get to work?

(Check all that apply) **(DO NOT ALLOW MULTIPLES WITH RESPONSE 5)**

- 1 Carpool or casual carpool (slug)
- 2 Vanpool
- 3 Bus or train
- 4 Bike or walk
- 5 Don't use any of these modes
- 89 Left blank

Q15 About how many miles do you usually travel from home to work one way? **(ALLOW DECIMALS)**

_____ miles one way
899 Left blank

Q16 And about how many minutes does it take you to get to work?

_____ minutes
899 Left blank

Q16a At what time do you typically arrive at work?

- 1 12:00 am (midnight) – 5:59 am
- 2 6:00 am – 6:59 am
- 3 7:00 am – 7:59 am
- 5 8:00 am – 8:59 am
- 7 9:00 am – 9:59 am
- 9 10:00 am – 2:59 pm
- 10 3:00 pm – 6:59 pm
- 11 7:00 pm – 11:59 pm
- 99 Don't know
- 89 Left blank

INSTRUCTIONS BEFORE Q16b

Check sum of days using Personal vehicle (DA/ MC /Taxi, Uber/Lyft, CP, VP) – Show different form of Q16b question depending on sum of vehicle days

IF SUM OF (Q14_3 + Q14_4 + Q14_5 + Q14_6 + Q14_7 + Q14_16 + Q14_18) = 4 OR 5, INSERT V1 “What Interstate highways or major U.S. or state routes do you use on your trip to work?”

IF SUM OF (Q14_3 + Q14_4 + Q14_5 + Q14_6 + Q14_7 + Q14_16 + Q14_18) = 1, 2, OR 3, INSERT V2, “On days that you drive or ride to work in a personal vehicle, what Interstate highways or major U.S. or state routes do you use?”

IF SUM OF (Q14_3 + Q14_4 + Q14_5 + Q14_6 + Q14_7 + Q14_16 + Q14_18) = 0, INSERT V3, “If you were to drive to work, what Interstate highways or major U.S. or state routes would you use?”

Q16b **V1** – “What Interstate highways or major U.S. or state routes do you use on your trip to work? Select all that apply.”

V2 – “On days that you drive or ride to work in a personal vehicle, what Interstate highways or major U.S. or state routes do you use? Select all that apply.”

V3 – “If you were to drive to work, what Interstate highways or major U.S. or state routes would you use? Select all that apply.”

THEN SHOW LIST BELOW TO ALL RESPONDENTS. ACCEPT MULTIPLES FOR 1 – 21 AND 99, DO NOT ALLOW MULTIPLES WITH 98

Interstate Highways

- 1 Capital Beltway (I-495) (MD)
- 2 Capital Beltway (I-495) (VA)
- 3 I-66 OUTSIDE the Beltway (VA)
- 4 I-66 INSIDE the Beltway (VA)
- 5 I-95 (MD)
- 6 I-95 (VA)
- 7 I-270 (MD)
- 8 I-295 (DC / MD)
- 9 I-395 (VA)
- 10 I-695 (DC - Southeast-Southwest Freeway)

Major U.S./State Routes

- 11 BW Parkway (US 295, Baltimore-Washington Parkway - MD)
- 12 Dulles Toll Road (Dulles Greenway, Route 267)
- 13 GW Parkway (George Washington Parkway)
- 14 ICC (Inter-County Connector, Route 200)
- 15 US Route 1 (MD)
- 16 US Route 1 (VA - Richmond Highway, Jefferson Davis Highway)
- 17 US Route 29 (MD - Colesville Road, Columbia Pike)
- 18 US Route 29 (VA – Lee Highway)
- 19 US Route 50 (MD – John Hanson Highway)
- 20 US Route 50 (VA – Lee Jackson Highway, Arlington Blvd, Fairfax Blvd)
- 21 US Route 301 (MD)

98 No Interstate or U.S. or state routes

99 Other (specify) _____

899 *Left blank*

IF CMCA = 99 (no alt mode), SKIP TO INSTRUCTIONS BEFORE Q21

IF CMCA = 5, 6, 7, 9, 10, 11, 12, 13, 14, OR 15, CONTINUE WITH Q17

Q17 About how long have you been using < CMCA > for your trip to work? Please enter the number of MONTHS.

_____ months (**CONVERT YEARS TO MONTHS**)

999 Don't know

899 *Left blank*

INSTRUCTIONS BEFORE Q19

IF Q14 NE 5, 6, 7, 9, 10, 11, 12, OR 13, SKIP TO INSTRUCTIONS BEFORE Q21.

IF Q14 = 5, 6, 7, 9, 10, 11, 12, OR 13, ASK Q19-Q20, INSERTING <Q14 MODE> NAME DEFINED BY Q14 MOST DAYS USED AS FOLLOWS:

- Q14_R5 + Q14_R6 = carpool

- Q14_R7 = vanpool

- Q14_R9 = bus

- Q14_R10 + Q14_R11 + Q14_R12 + Q14_R13 = train

IF TIE FOR Q14 MOST DAYS, SELECT MODE IN THIS PRIORITY ORDER: VANPOOL, CARPOOL, TRAIN, BUS.

IF Q14 MODE = bus or train (Q14, responses 9, 10, 11, 12, 13), DO NOT SHOW Q19 RESPONSES 1, 2 OR 8 ON THE

SCREEN – SHOW ONLY 3, 4, 5, 6, 7, 9, 10, 11, 19

Q19 How do you get from home to where you meet your <Q14 MODE: carpool, vanpool, bus, train>?

- 1 Picked up at home by car/vanpool (or car/vanpool leaves from my home) **(SKIP TO INSTRUCTIONS BEFORE Q21)**
- 2 Drive alone to driver’s home or drive alone to passenger’s home
- 3 Drive to a central location, like a park & ride or bus stop/train station
- 4 Dropped off (including by household member)
- 5 Bicycle (personal bike or Capital Bikeshare bike)
- 6 Motorcycle
- 7 Walk
- 8 I am always the driver of carpool/vanpool **(SKIP TO INSTRUCTIONS BEFORE Q21)**
- 9 Bus/transit
- 10 Taxi
- 11 Uber, Lyft, Via
- 19 Other (SPECIFY) _____
- 89 Left blank

Q20 How many miles is it one way from your home to where you meet your < Q14 MODE: carpool, vanpool, bus, train>?

_____ miles **(ALLOW DECIMALS)**

899 Left blank

MODE DURING GRH (Past Registrants)**INSTRUCTIONS BEFORE Q21**

IF GRHTYPE = 2 (PAST_REG) AND Q2 = 2 OR 9, ASK Q21-23, INSERT “registered”

IF GRHTYPE = 2 (PAST_REG) AND Q3 = 1, ASK Q21-Q23, INSERT “eligible”

IF GRHTYPE = 1 (CURR_REG), SKIP TO Q27

IF GRHTYPE = 3 (ONE_TIME), SKIP TO Q24

Q21 Next, think back to the time that you were <registered, eligible> for the GRH program. During that time, how many days, Monday – Friday, were you assigned to work in a typical week?

- 1 1 day per week
- 2 2 days per week
- 3 3 days per week
- 4 4 days per week
- 5 5 days per week

Q23 And while you were <registered, eligible> for GRH, how did you get to work? Enter the number of days, Monday through Friday, that you typically used each of the listed types of transportation. If you used more than one type on a single day (e.g., walked to the bus stop, then rode the bus), count only the type you used for the **longest distance part** of your trip.

Indicate also how many weekdays you did NOT travel to your usual work location and the reasons (e.g., regular day off, telecommute, compressed work schedule day off) for not traveling to work.

Q23 PROGRAMMER NOTES:

CHECK SUM OF Q23 DAYS. IF TOTAL OF Q23, RESPONSES 1-21 IS LESS THAN 5, SHOW MESSAGE: “Please report for all days Monday – Friday, including telework days, compressed schedule days, and days you did not work.” **IF TOTAL OF Q23 RESPONSES 1-21 IS GREATER THAN 5, SHOW MESSAGE:** “You’ve reported more than

five days. Please report only for Monday – Friday and only one type of transportation per day.”

IF Q14 = 1 AND RESPONDENT DOES NOT REPORT "CWS day off" (RESPONSE 1), SHOW MESSAGE: “You said you typically work a compressed work schedule now. Please indicate the number of compressed schedule days you had during the time you were registered for the GRH program.” **ACCEPT “0” AS THE RESPONSE.**

IF Q14 = 2 AND RESPONDENT DOES NOT REPORT "Telecommute/telework" (RESPONSE 2), SHOW MESSAGE: “You said you typically telecommute now. Please indicate the number of days you telecommuted during the time you were registered for the GRH program?” **ACCEPT “0” AS RESPONSE.**

Type of Transportation – While <i>Registered or Eligible</i> for GRH	Number of Days (Mon-Fri) Used (0 to 5)
Days you traveled to your usual work location	
3 Drive alone in a car, truck, van, or SUV	
4 Motorcycle	
5 Carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 Casual carpool (slugging)	
7 Vanpool	
8 Buspool N/A, Not used	
9 Bus (public or private bus, shuttle, buspool, commuter bus, express bus)	
10 Metrorail	
11 MARC (MD Commuter Rail)	
12 VRE	
13 AMTRAK / other train	
14 Bicycle/e-scooter (entire trip or longest distance part of trip from home to work)	
15 Walk (entire trip from home to work)	
16 Taxi	
18 Uber, Lyft, Via	
Days you did not travel to your usual work location	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe) _____	
Total Days (DO NOT SHOW THIS LINE ON SCREEN)	Sum of 1-21

DEFINE DALTDAYS (Days using alt modes during GRH – past registrants only)**DALTDAYS = TOTAL Q23 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15****DEFINE DMCA (During Most Common Alternate)****Set DMCA using Q23 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15)****IF DALTDAYS = 0, SET DMCA = 99 (no MCA)****IF DALTDAYS > 0, SET DMCA AS FOLLOWS:****IF GREATEST NUMBER OF Q23, R5-15 =****Q23_05, SET DMCA = 05 (Carpool)****Q23_06, SET DMCA = 06 (Casual Carpool / Slug)****Q23_07, SET DMCA = 07 (Vanpool)****Q23_09, SET DMCA = 09 (Bus)****Q23_10, SET DMCA = 10 (Metrorail)****Q23_11, SET DMCA = 11 (MARC)****Q23_12, SET DMCA = 12 (VRE)****Q23_13, SET DMCA = 13 (AMTRAK / Other)****Q23_14 SET DMCA = 14 (Bicycle)****Q23_15 SET DMCA = 15 (Walk)****IF TIE FOR MOST DAYS USED, SELECT DCMA IN THIS ORDER: VANPOOL, CARPOOL, BUS, VRE, MARC, METRORAIL, AMTRAK, CASUAL CARPOOL, BIKE, WALK.****IF GRHTYPE = 2 (PAST_REG) AND Q3 = 1, CONTINUE WITH Q24****OTHERWISE SKIP TO Q27****MODE BEFORE HEARD ABOUT GRH (OTE only)*****(One-Time Exceptions mode before GRH)***

Q24 Think back to the time before you heard about the GRH program. At that time, how many days Monday – Friday were you assigned to work in a typical week?

- 0 did not work any days Monday-Friday then, did not work in Washington area then
- 1 1 day per week
- 2 2 days per week
- 3 3 days per week
- 4 4 days per week
- 5 5 days per week

IF Q24 = 0, AUTOCODE Q26, RESPONSE 20 (did not work then) = 5, THEN SKIP TO DEFINE BHALTDAYS

Q26 And before you heard about GRH, how did you get to work? Enter the number of days, Monday through Friday, that you typically used each of the listed types of transportation. If you used more than one type on a single day (e.g., walked to the bus stop, then rode the bus), count only the type you used for the **longest distance part** of your trip.

Indicate also how many weekdays you did NOT travel to your usual work location and the reasons (e.g., regular day off, telecommute, compressed work schedule day off) for not traveling to work.

Q26 PROGRAMMER NOTES:

CHECK SUM OF DAYS. IF TOTAL OF Q26, RESPONSES 1-21 IS LESS THAN 5, SHOW MESSAGE: "Please report for all days Monday – Friday, including telework days, compressed schedule days, and days you did not work." **IF TOTAL OF Q26 RESPONSES 1-21 IS GREATER THAN 5, SHOW MESSAGE:** "You've reported more than five days. Please report only for Monday – Friday and only one type of transportation per day."

IF Q14 = 1 AND RESPONDENT DOES NOT REPORT "CWS day off" (RESPONSE 1), SHOW MESSAGE: "You said you typically work a compressed work schedule now. Please indicate the number of compressed schedule days you had before you heard about the GRH program." **ACCEPT "0" AS VALID RESPONSE**

IF Q14 = 2 AND RESPONDENT DOES NOT REPORT "Telecommute/telework" (RESPONSE 2), SHOW MESSAGE: "You said you typically telecommute now. Please indicate the number of days you telecommuted before you heard about the GRH program?" **ACCEPT "0" AS VALID RESPONSE.**

Type of Transportation – Before Hearing About GRH	Number of Days Mon-Fri Used (0 to 5)
Days you traveled to your usual work location	
3 Drive alone in a car, truck, van, or SUV	
4 Motorcycle	
5 Carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 Casual carpool (slugging)	
7 Vanpool	
8 Buspool <i>N/A, Not used</i>	
9 Bus (public or private bus, shuttle, buspool, commuter bus, express bus)	
10 Metrorail	
11 MARC (MD Commuter Rail)	
12 VRE	
13 AMTRAK / other train	
14 Bicycle/e-scooter (entire trip or longest distance part of trip from home to work)	
15 Walk (entire trip from home to work)	
16 Taxi	
18 Uber, Lyft, Via	

Days you did not travel to your usual work location	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe) _____	
20 Did not work Monday-Friday then, did not work in Washington area then	
Total Days (DO NOT SHOW THIS LINE ON SCREEN)	Sum of 1-21

DEFINE BHALTDAYS (Days using alt modes before heard about GRH - OTE)

BHALTDAYS = TOTAL Q26 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15

DEFINE BHMCA (Most Common Alternative before respondent heard about GRH - OTE)

Set BHMCA using Q26 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15)

IF BHALTDAYS = 0, SET BHMCA = 99 (no MCA)

IF BHALTDAYS > 0, SET BHMCA AS FOLLOWS:

IF GREATEST NUMBER OF Q26, R5-15 =

Q26_05, SET BHMCA = 05 (Carpool)

Q26_06, SET BHMCA = 06 (Casual Carpool / Slug)

Q26_07, SET BHMCA = 07 (Vanpool)

Q26_09, SET BHMCA = 09 (Bus)

Q26_10, SET BHMCA = 10 (Metrorail)

Q26_11, SET BHMCA = 11 (MARC)

Q26_12, SET BHMCA = 12 (VRE)

Q26_13, SET BHMCA = 13 (AMTRAK / Other)

Q26_14 SET BHMCA = 14 (Bicycle)

Q26_15 SET BHMCA = 15 (Walk)

IF TIE FOR MOST DAYS USED, SELECT BHCMA IN THIS ORDER: VANPOOL, CARPOOL, BUS, VRE, MARC, METRORAIL, AMTRAK, CASUAL CARPOOL, BIKE, WALK.

NOW SKIP TO Q29a (DEFINE GRH CHANGE)

MODE BEFORE REGISTERED FOR GRH (Current Registrants, Past Registrants)***(Current Registrants and Past Registrants mode before GRH)***

Q27 Now, please think back to the time before you registered for the GRH program. At that time, how many days, Monday - Friday were you assigned to work in a typical week?

- 0 0, did not work any days Monday – Friday then, did not work in Washington area then
- 1 1 day per week
- 2 2 days per week
- 3 3 days per week
- 4 4 days per week
- 5 5 days per week

IF Q27 = 0, AUTOCODE Q29, RESPONSE 20 (not working M-F) = 5, THEN SKIP TO BRALTDAYS

Q29 And before you registered for GRH, how did you get to work? Enter the number of days, Monday through Friday, that you typically used each of the listed types of transportation. If you used more than one type on a single day (e.g., walked to the bus stop, then rode the bus), count only the type you used for the **longest distance part** of your trip.

Indicate also how many weekdays you did NOT travel to your usual work location and the reasons (e.g., regular day off, telecommute, compressed work schedule day off) for not traveling to work.

Q29 PROGRAMMER NOTES:

CHECK SUM OF DAYS. IF TOTAL OF Q29, RESPONSES 1-21 NOT EQUAL TO 5, SHOW MESSAGE: "Please report for all days Monday – Friday, including telework days, compressed schedule days, and days you did not work." **IF TOTAL OF Q26 RESPONSES 1-21 IS GREATER THAN 5, SHOW MESSAGE:** "You've reported more than five days. Please report only for Monday – Friday and only one type of transportation per day."

IF Q14 = 1 AND RESPONDENT DOES NOT REPORT "CWS day off" (RESPONSE 1), SHOW MESSAGE: "You said you typically work a compressed work schedule now. Please indicate the number of compressed schedule days you had before you registered for the GRH program?" **ACCEPT "0" AS VALID RESPONSE.**

IF Q14 = 2 AND RESPONDENT DOES NOT REPORT "Telecommute/telework, SHOW MESSAGE: "You said you typically telecommute now. Please indicate the number of days you telecommuted before you registered for the GRH program?" **ACCEPT "0" AS VALID RESPONSE**

Type of Transportation – Before Registering for GRH	Number of Days Mon-Fri Used (0 to 5)
Days you traveled to your usual work location	
3 Drive alone in a car, truck, van, or SUV	
4 Motorcycle	
5 Carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 Casual carpool (slugging)	
7 Vanpool	
8 N/A, Do not use	
9 Bus (public or private bus, shuttle, buspool, commuter bus, express bus)	
10 Metrorail	
11 MARC (MD Commuter Rail)	
12 VRE	
13 AMTRAK / other train	
14 Bicycle/e-scooter (entire trip or longest distance part of trip from home to work)	
15 Walk (entire trip from home to work)	
16 Taxi	
18 Uber, Lyft, Via	
Days you did not travel to your usual work location	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe) _____	
20 Did not work Monday-Friday then, did not work in Washington area then	
Total Days (DO NOT SHOW THIS LINE ON SCREEN)	Sum of 1-21

DEFINE BRALTDAYS (Days using alt modes before registered for GRH (Current, Past))

BRALTDAYS = TOTAL Q29 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15

DEFINE BRMCA (Most Common Alt Mode before registering for GRH (Current, Past))

Set BRMCA using Q29 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15)

IF BRALTDAYS = 0, SET BRMCA = 99 (no MCA)

IF BRALTDAYS > 0, SET BRMCA AS FOLLOWS:

IF GREATEST NUMBER OF Q29, R5-15 =

Q29_05, SET BRMCA = 05 (Carpool)

Q29_06, SET BRMCA = 06 (Casual Carpool / Slug)

Q29_07, SET BRMCA = 07 (Vanpool)

Q29_09, SET BRMCA = 09 (Bus)

Q29_10, SET BRMCA = 10 (Metrorail)

Q29_11, SET BRMCA = 11 (MARC)

Q29_12, SET BRMCA = 12 (VRE)

Q29_13, SET BRMCA = 13 (AMTRAK / Other)

Q29_14 SET BRMCA = 14 (Bicycle)

Q29_15 SET BRMCA = 15 (Walk)

IF TIE FOR MOST DAYS USED, SELECT BRMCA IN THIS ORDER: VANPOOL, CARPOOL, BUS, VRE, MARC, METRORAIL, AMTRAK, CASUAL CARPOOL, BIKE, WALK.

Q29a – DEFINE GRH CHANGE – AUTOCODE ONLY – DO NOT ASK**COMPARE MODE WHILE IN GRH TO MODE BEFORE GRH TO DETERMINE CHANGE**

IF GRHTYPE = 1 (CURR_REG) AND IF CALTDAYS > 0 AND BRALTDAYS = 0, SET Q29a = 1

IF GRHTYPE = 2 (PAST_REG) AND IF DALTDAYS > 0 AND BRALTDAYS = 0, SET Q29a = 1

IF GRHTYPE = 3 (ONE_TIME) AND IF CALTDAYS > 0 AND BHALTDAYS = 0, SET Q29a = 1

IF GRHTYPE = 2 (PAST_REG) AND IF DALTDAYS > 0 AND BHALTDAYS = 0, SET Q29a = 1

IF GRHTYPE = 1 (CURR_REG) and IF CALTDAYS > 0 AND BRALTDAYS > 0 AND CALTDAYS > BRALTDAYS, SET Q29a = 2

IF GRHTYPE = 2 (PAST_REG) and IF DALTDAYS > 0 AND BRALTDAYS > 0 AND DALTDAYS > BRALTDAYS, SET Q29a = 2

IF GRHTYPE = 3 (ONE_TIME) and IF CALTDAYS > 0 AND BHALTDAYS > 0 AND CALTDAYS > BHALTDAYS, SET Q29a = 2

IF GRHTYPE = 2 (PAST_REG) and IF DALTDAYS > 0 AND BHALTDAYS > 0 AND DALTDAYS > BHALTDAYS, SET Q29a = 2

IF GRHTYPE = 1 (CURR_REG) AND CALTDAYS > 0 AND BRALTDAYS > 0 AND CALTDAYS <= BRALTDAYS, SET Q29a = 3

IF GRHTYPE = 2 (PAST_REG) and DALTDAYS > 0 AND BRALTDAYS > 0 AND DALTDAYS <= BRALTDAYS, SET Q29a = 3

IF GRHTYPE = 3 (ONE_TIME) and CALTDAYS > 0 AND BHALTDAYS > 0 AND CALTDAYS <= BHALTDAYS, SET Q29a = 3

IF GRHTYPE = 2 (PAST_REG) and IF DALTDAYS > 0 AND BHALTDAYS > 0 AND DALTDAYS <= BHALTDAYS, SET Q29a = 3

IF GRHTYPE = 1 (CURR_REG) AND CALTDAYS = 0, SET Q29a = 4

IF GRHTYPE = 2 (PAST_REG) and DALTDAYS = 0, SET Q29a = 4

IF GRHTYPE = 3 (ONE_TIME) and CALTDAYS = 0, SET Q29a = 4

IF GRHTYPE = 1 (CURR_REG) AND Q29, RESPONSE 20 > 0, SET Q29a = 9

IF GRHTYPE = 2 (PAST_REG) AND Q29, RESPONSE 20 > 0, SET Q29a = 9

IF GRHTYPE = 3 (ONE_TIME) AND Q26, RESPONSE 20 > 0, SET Q29a = 9

- 1 Started alt mode
- 2 Increased alt mode
- 3 Continued alt mode
- 4 No alt mode while in GRH
- 9 Unknown – no previous mode reported

IF Q29a = 1, CONTINUE TO INSTRUCTIONS BEFORE Q30
IF Q29a = 2, SKIP TO INSTRUCTIONS BEFORE Q35
IF Q29a = 3, SKIP TO INSTRUCTIONS BEFORE 40
IF Q29a = 4 OR 9, SKIP TO Q44a

GRH INFLUENCE IN STARTING, CONTINUING, OR INCREASING USE OF ALTERNATIVE MODES

Two questions asked of respondents who use / used alt modes while in GRH

- Ask about the importance of GRH in their decision to start, increase, or continue alt mode use
- Ask about the likelihood of starting, increasing, or continuing alt mode use if GRH wasn't available

Note slight wording differences by registration status (Current, Past, OTE)

Started alt mode – previously drove alone all the time (Q30 – Q34)

- **Current registrants** who previously DA all the time – Q30 and Q33, THEN SKIP TO Q44a (Other services used)
- **Past registrants** who previous DA all the time – Q31 and Q34, THEN SKIP TO Q44a (Other services used)
- **OTE** who previous DA all the time – Q32 and Q33, THEN SKIP TO Q44a (Other services used)

Increased alt mode (Q35 – Q39)

- **Current registrants** who increased alt mode – Q35 and Q38, THEN SKIP TO Q44a (Other services used)
- **Past registrants** who increased alt mode – Q36 and Q39, THEN SKIP TO Q44a (Other services used)
- **OTE** who increased alt mode – Q37 and Q38, THEN SKIP TO Q44a (Other services used)

Continued alt mode (Q40 – Q44)

- **Current registrants** who continued alt mode – Q40 and Q43, THEN SKIP TO Q44a (Other services used)
- **Past registrants** who continued alt mode – Q41 and Q43, THEN SKIP TO Q44a (Other services used)
- **OTE** who continued alt mode – Q42 and Q44, THEN SKIP TO Q44a (Other services used)

INSTRUCTIONS BEFORE Q30

Skip instruction for previous Drive Alone by registration status

FOR Q30 – Q34, INSERT MODE NAME USING CMCA, DMCA

IF GRHTYPE = 1 (CURR_REG), USE CMCA

IF GRHTYPE = 2 (PAST_REG), USE DMCA

IF GRHTYPE = 3 (ONE_TIME), USE CMCA

IF CMCA, DMCA = 5 OR 6, INSERT carpooling

IF CMCA, DMCA = 7, INSERT vanpooling

IF CMCA, DMCA = 9, 10, 11, 12, OR 13, INSERT using transit

IF CMCA, DMCA = 14, INSERT biking

IF CMCA, DMCA = 15, INSERT walking

Current Registrants

IF GRHTYPE = 1 (CURR_REG) AND IF CALTDAYS > 0 AND BRALTDAYS = 0, ASK Q30, THEN SKIP TO Q33.

Past Registrants

IF GRHTYPE = 2 (PAST_REG) AND IF DALTDAYS > 0 AND BRALTDAYS = 0, ASK Q31, THEN SKIP TO Q34.

One-time Exception users

IF GRHTYPE = 3 (ONE_TIME) AND IF CALTDAYS > 0 AND BHALTDAYS = 0, ASK Q32, THEN ASK Q33 .

IF GRHTYPE = 2 (PAST_REG) AND IF DALTDAYS > 0 AND BHALTDAYS = 0, ASK Q32, THEN ASK Q33.

IF Q29a = 4 OR 9, SKIP TO Q44a

ALL OTHERS, SKIP TO INSTRUCTIONS BEFORE Q35

SHIFT FROM DRIVING ALONE – GRH IMPORTANCE (Current, Past, OTE)

(Current Registrants who always drove alone to work before registering)

Q30 You said that you regularly drove alone to work before you registered for GRH. How important was the availability of GRH to your decision to start <CMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q14)>?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Not sure
- 89 Left blank

NOW SKIP TO Q33

(Past Registrants who always drove alone to work before registering)

Q31 You said that you regularly drove alone to work before you registered for GRH. How important was the availability of GRH to your decision to start <DMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q23)>?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Not sure
- 89 Left blank

SKIP TO Q34

(One-Time Exceptions who always drove alone to work before learning about GRH)

Q32 You said that you regularly drove alone to work before you heard about GRH. How important was the availability of GRH to your decision to start <CMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q14)>?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Not sure
- 89 Left blank

CONTINUE WITH Q33

SHIFT FROM DRIVING ALONE – LIKELY TO SHIFT WITHOUT GRH (Current, Past, OTE)***(Current Registrants or One-Time exceptions who always drove alone to work before registering)***

Q33 If GRH had not been available, how likely would you have been to start <CMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q14)>?

- 1 Very likely
- 2 Somewhat likely
- 3 Not at all likely
- 9 Don't know
- 89 Left blank

SKIP TO Q44a

(Past Registrants who always drove alone to work before registering)

Q34 If GRH had not been available, how likely would you have been to start <DMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q23)>?

- 1 Very likely
- 2 Somewhat likely
- 3 Not at all likely
- 9 Don't know
- 89 Left blank

SKIP TO Q44a

INSTRUCTIONS BEFORE Q35

Skip instruction for increased alt mode days, by registration status

Current Registrants

IF GRHTYPE = 1 (CURR_REG) and IF CALTDAYS > 0 AND CALTDAYS > BRALTDAYS, ASK Q35, THEN SKIP TO Q38

Past Registrants

IF GRHTYPE = 2 (PAST_REG) and IF DALTDAYS > 0 AND DALTDAYS > BRALTDAYS, ASK Q36, THEN SKIP TO Q39

One-time Exceptions

IF GRHTYPE = 3 (ONE_TIME) and IF CALTDAYS > 0 AND CALTDAYS > BHALTDAYS, ASK Q37, THEN SKIP TO Q38

IF GRHTYPE = 2 (PAST_REG) and IF DALTDAYS > 0 AND DALTDAYS > BHALTDAYS, ASK Q37, THEN SKIP TO Q38

ALL OTHERS SKIP TO INSTRUCTIONS BEFORE Q40

INCREASED ALT MODE USE SINCE GRH – GRH IMPORTANCE (Current, Past, OTE)***(Current Registrants who increased use of alternative modes after registering)***

Q35 You said that since you registered for GRH, you've increased the number of days per week that you use types of transportation OTHER than driving alone for your trip to work. How important was GRH to your decision to make this change?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Don't know
- 89 Left blank

SKIP TO Q38***(Past Registrants who increased use of alternative modes after registering)***

Q36 You said that while you were registered for GRH, you increased the number of days per week that you used types of transportation OTHER than driving alone for your trip to work. How important was GRH to your decision to make this change?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Don't know
- 89 Left blank

SKIP TO Q39***(One-Time Exceptions who increased use of alternative modes after registering)***

Q37 You said that since you heard about GRH, you've increased the number of days per week that you use types of transportation OTHER than driving alone for your trip to work. How important was GRH to your decision to make this change?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Don't know
- 89 Left blank

CONTINUE WITH Q38**INCREASED ALT MODE USE SINCE GRH – LIKELY TO MAKE CHANGE WITHOUT GRH (Current, Past, OTE)*****(Current Registrants, or One-time Exceptions)***

Q38 If GRH had not been available, how likely would you have been to make this change?

- 1 Very likely
- 2 Somewhat likely
- 3 Not at all likely
- 9 Don't know
- 89 Left blank

SKIP TO Q44a***(Past Registrants)***

Q39 If GRH had not been available, how likely would you have been to make this change?

- 1 Very likely
- 2 Somewhat likely
- 3 Not at all likely
- 9 Don't know
- 89 Left blank

SKIP TO Q44a

INSTRUCTIONS BEFORE Q40

Skips for Respondents who used alt modes before GRH and did not increase alt mode days, by registration status

FOR Q40 – Q42, INSERT MODE NAME USING BHMCA, BRMCA

IF GRHTYPE = 1 (CURR_REG), USE BRMCA

IF GRHTYPE = 2 (PAST_REG), USE BRMCA

IF GRHTYPE = 3 (ONE_TIME), USE BHMCA

IF BHMCA, BRMCA = 5 OR 6, INSERT carpooling

IF BHMCA, BRMCA = 7, INSERT vanpooling

IF BHMCA, BRMCA = 9, 10, 11, 12, OR 13, INSERT using transit

IF BHMCA, BRMCA = 14, INSERT biking

IF BHMCA, BRMCA = 15, INSERT walking

Current Registrants

IF GRHTYPE = 1 (CURR_REG) AND CALTDAYS > 0 AND BRALTDAYS > 0 AND CALTDAYS <= BRALTDAYS, ASK Q40, THEN SKIP TO Q43.

Past Registrants

IF GRHTYPE = 2 (PAST_REG) and DALTDAYS > 0 AND BRALTDAYS > 0 AND DALTDAYS <= BRALTDAYS, ASK Q41,

IF GRHTYPE = 2 (PAST_REG) AND Q29a = 3 (CONTINUED MODE), ASK Q41

THEN SKIP TO Q43.

One-Time exceptions

IF GRHTYPE = 3 (ONE_TIME) and CALTDAYS > 0 AND BHALTDAYS > 0 AND CALTDAYS <= BHALTDAYS, ASK Q42, THEN SKIP TO Q44.

IF GRHTYPE = 2 (PAST_REG) and DALTDAYS > 0 AND BHALTDAYS > 0 AND DALTDAYS <= BHALTDAYS, ASK Q42, THEN SKIP TO Q44.

ALL OTHERS, SKIP TO Q44a

CONTINUED ALT MODE USE SINCE GRH (NO CHANGE) – GRH IMPORTANCE (Current, Past, OTE)

(Current Registrants who were ridesharing/using transit at least some days before registering)

Q40 You said that you were <BRMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q29)> before you registered for GRH. How important was the availability of GRH to your decision to continue using a type of transportation other than driving alone for your trip to work?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Don't know
- 89 Left blank

SKIP TO Q43

(Past Registrants who were ridesharing/using transit at least some days before registering)

Q41 You said that you were <BRMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q29)> before you registered for GRH. How important was the availability of GRH to your decision to continue using a type of transportation other than driving alone for your trip to work?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Don't know
- 89 Left blank

SKIP TO Q43***(One-Time Exceptions who were ridesharing/using transit at least some days before hearing about GRH)***

Q42 You said that you were <BHMCA - carpooling, vanpooling, using transit, biking, or walking (FROM Q26)> before you heard about GRH. How important was the availability of GRH to your decision to continue using a type of transportation other than driving alone for your trip to work?

- 1 Very important
- 2 Somewhat important
- 3 Not at all important
- 9 Don't know
- 89 Left blank

SKIP TO Q44**CONTINUED ALT MODE SINCE GRH (NO CHANGE) – LIKELY TO CONTINUE WITHOUT GRH (Current, Past, OTE)*****(Current Registrants or Past Registrants)***

Q43 If GRH had not been available, how likely would you have been to continue using a non-drive alone type of transportation?

- 1 Very likely
- 2 Somewhat likely
- 3 Not at all likely
- 9 Don't know
- 89 Left blank

SKIP TO Q44a***(One-Time Exceptions)***

Q44 If GRH had not been available, how likely would you have been to continue using a non-drive alone type of transportation?

- 1 Very likely
- 2 Somewhat likely
- 3 Not at all likely
- 9 Don't know
- 89 Left blank

OTHER SERVICES RECEIVED THAT COULD HAVE INFLUENCED DECISIONS (Current, Past, OTE)**ASK ALL RESPONDENTS Q44a**

Q44a Do you recall receiving or accessing any of the following commute information or assistance services from Commuter Connections, in addition to GRH?

ROTATE RESPONSES 1-13, SHOW "90-no services" AT THE END OF THE LIST. ACCEPT MULTIPLES FOR 1-13, DO NOT ALLOW MULTIPLES WITH 90

- 1 Names of people you could contact to form a carpool or vanpool (matchlist)
- 2 Map showing home and work locations of people you could contact to form a carpool or vanpool
- 3 Other carpool / vanpool information
- 4 HOV lane, Express lane information
- 5 'Pool Rewards carpool/vanpool financial incentive
- 6 Transit schedule / route / fare information
- 7 Park & Ride lot information
- 8 Telework information, telework center information, co-working center
- 9 Bicycling information, online bicycle route planning
- 10 Special events information (e.g., Bike to Work Day, Car Free Day)
- 11 CarpoolNow mobile application (real-time ridematching)
- 12 IncenTrip trip tracking/points application
- 13 Flextime Rewards incentive program
- 90 Did not receive or access any of these services (**PROGRAMMER: GREY OUT THIS BOX IF ANY OTHER RESPONSE IS CHECKED**)
- 89 *Left blank*

INSTRUCTIONS BEFORE Q44b

IF Q29a = 4 OR 9, SKIP TO Q49

IF Q44a = ONLY 90 OR IS LEFT ENTIRELY BLANK OR IF Q44a NE ANY OF 1-13, SKIP TO INSTRUCTIONS BEFORE Q45
IF Q44a = ANY OF 1-13, CONTINUE

IF GRHTYPE = 1 OR 3 (CURR_REG OR ONE_TIME) AND CALTDAYS = 0, SKIP TO INSTRUCTIONS BEFORE Q45
IF GRHTYPE = 2 (PAST_REG) AND DALTDAYS = 0, SKIP TO INSTRUCTIONS BEFORE Q45

IF GRHTYPE = 1 OR 3 (CURR_REG OR ONE_TIME) AND Q29a = 1, 2, OR 3, ASK Q44b
IF GRHTYPE = 2 (PAST_REG) AND Q29a = 1, 2, OR 3, SKIP TO Q44c

FOR Q44b – Q44c, INSERT MODE NAME USING CMCA, DMCA

IF GRHTYPE = 1 (Current Registrant), USE CMCA

IF GRHTYPE = 2 (Past Registrant), USE DMCA

IF GRHTYPE = 3 (OTE), USE CMCA

IF CMCA, DMCA = 5 OR 6, INSERT carpool

IF CMCA, DMCA = 7, INSERT vanpool

IF CMCA, DMCA = 9, 10, 11, 12, OR 13, INSERT use transit

IF CMCA, DMCA = 14, INSERT bike

IF CMCA, DMCA = 15, INSERT walk

(Current Registrants or One-Time Exceptions)

Q44b Was any of the information or assistance that you received from Commuter Connections more important than GRH to your decision to <CMCA - carpool, vanpool, use transit, bike, or walk (FROM Q14)>?

SHOW RESPONSES 1-13 ONLY IF THEY WERE CHECKED IN Q44a, ALSO SHOW RESPONSE 98

- 1 Names of people you could contact to form a carpool or vanpool (matchlist)
- 2 Map showing home and work locations of people you could contact to form a carpool or vanpool
- 3 Other carpool / vanpool information
- 4 HOV lane, Express lane information
- 5 'Pool Rewards carpool/vanpool financial incentive
- 6 Transit schedule / route / fare information
- 7 Park & Ride lot information
- 8 Telework information, telework center information, co-working center
- 9 Bicycling information, online bicycle route planning
- 10 Special events information (e.g., Bike to Work Day, Car Free Day)
- 11 CarpoolNow mobile application (real-time ridematching)
- 12 IncenTrip trip tracking/points application
- 13 Flextime Rewards incentive program
- 98 No, services were not important
- 89 *Left blank*

SKIP TO INSTRUCTIONS BEFORE Q45**(Past Registrants)**

Q44c Was any of the information or assistance that you received from Commuter Connections more important than GRH to your decision to <DMCA - carpool, vanpool, use transit, bike, or walk (FROM Q23)>?

SHOW RESPONSES 1-13 ONLY IF THEY WERE CHECKED IN Q44a, ALSO SHOW RESPONSE 98

- 1 Names of people you could contact to form a carpool or vanpool (matchlist)
- 2 Map showing home and work locations of people you could contact to form a carpool or vanpool
- 3 Other carpool / vanpool information
- 4 HOV lane, Express lane information
- 5 'Pool Rewards carpool/vanpool financial incentive
- 6 Transit schedule/ route / fare information
- 7 Park & Ride lot information
- 8 Telework information, telework center information, co-working center
- 9 Bicycling information, online bicycle route planning
- 10 Special events information (e.g., Bike to Work Day, Car Free Day)
- 11 CarpoolNow mobile application (real-time ridematching)
- 12 IncenTrip trip tracking/points application
- 13 Flextime Rewards incentive program
- 98 No, services were not important
- 89 *Left blank*

INSTRUCTIONS BEFORE Q45

IF GRHTYPE = 1 OR 3 (CURR_REG OR ONE_TIME) AND CALTDAYS > 0, ASK Q45

IF GRHTYPE = 2 (PAST_REG) AND DALTDAYS > 0, ASK Q46

OTHERWISE, SKIP TO Q49

FOR Q45 – Q46, INSERT MODE NAME USING CMCA, DMCA

IF GRHTYPE = 1 (Current Registrant), USE CMCA

IF GRHTYPE = 2 (Past Registrant), USE DMCA

IF GRHTYPE = 3 (OTE), USE CMCA

IF CMCA, DMCA = 5 OR 6, INSERT carpool

IF CMCA, DMCA = 7, INSERT vanpool

IF CMCA, DMCA = 9, 10, 11, 12, OR 13, INSERT use transit

IF CMCA, DMCA = 14, INSERT bike

IF CMCA, DMCA = 15, INSERT walk

(Current Registrants or One-Time Exceptions)

Q45 Did you receive any other commute assistance or benefits, from any source, that influenced your decision to <CMCA - carpool, vanpool, use transit, bike, or walk (FROM Q14)>?

1 Yes (SKIP TO Q46a)

2 No (SKIP TO Q47a)

9 Don't know (SKIP TO Q47a)

89 Left blank (SKIP TO Q47a)

(Past Registrants)

Q46 Did you receive any other commute assistance or benefits, from any source, that influenced your decision to <DMCA - carpool, vanpool, use transit, bike, or walk (FROM Q23)>?

1 Yes (CONTINUE WITH Q46a)

2 No (SKIP TO Q47a)

9 Don't know (SKIP TO Q47a)

89 Left blank (SKIP TO Q47a)

Q46a What was that assistance or benefit?

OPEN ENDED _____

Q47a Were any other factors or circumstances important to your decision?

1 Yes (CONTINUE WITH Q48)

2 No (SKIP TO Q49)

9 Don't know (SKIP TO Q49)

89 Left blank (SKIP TO Q49)

Q48 What other factors or circumstances were important to your decision?

OPEN ENDED _____

REFERRAL SOURCES FOR GRH, GRH ADVERTISING RECALL

Q49 How did you hear about the GRH Program?

OPEN ENDED _____

Q50 Have you heard, seen, or read any advertising about GRH?

- 1 Yes
- 2 No **(SKIP TO Q54)**
- 9 Don't know **(SKIP TO Q54)**
- 89 *Left blank (SKIP TO Q54)*

Q52 Had you registered for GRH before you saw or heard this advertising?

- 1 Yes **(SKIP TO Q54)**
- 2 No
- 9 Don't know
- 89 *Left blank*

Q53 Did the advertising encourage you to seek information about GRH or to register for GRH?

- 1 Yes
- 2 No
- 9 Don't know
- 89 *Left blank*

USE OF GRH

IF Q3 = 1, AUTOCODE Q54 = 1, THEN SKIP TO Q55

Q54 Have you taken a GRH trip since you registered for GRH?

- 1 Yes
- 2 No **(SKIP TO Q59)**
- 9 Don't know **(SKIP TO Q59)**
- 89 *Left blank (SKIP TO Q59)*

Q55 **IF Q3 = 1, SHOW**, "You said you had taken a GRH trip. For what reason did you take the trip? If you have taken more than one trip, report about the most recent trip.

IF Q3 NE 1 (BLANK / SYSTEM MISSING), SHOW, "For what reason did you take the trip?" If you have taken more than one trip, report about the most recent trip.

(ACCEPT ONLY ONE RESPONSE)

- 1 Illness (self)
- 2 Illness of family member
- 3 Other personal emergency
- 4 Illness of child
- 5 Child care problem
- 6 Illness of carpool partner
- 7 Unscheduled overtime
- 8 Missed carpool/vanpool
- 9 Other (SPECIFY) _____
- 89 *Left blank*

Q56 Was the service satisfactory?

- 1 Yes **(SKIP TO Q58)**
- 2 No
- 9 Don't know **(SKIP TO Q58)**
- 89 Left blank **(SKIP TO Q58)**

Q57 Why was it not satisfactory? Select all that apply.

- 1 Waited too long
- 2 Hard to get approval
- 3 Didn't like taxi/driver
- 4 Other (SPECIFY) _____
- 89 Left blank

Q58 About how long did you wait for the taxi to arrive?

_____ minutes
899 Left blank

Q59 In what ways could Commuter Connections improve the GRH program?

OPEN ENDED _____

Code responses in the following categories in survey post-processing

- 1 Quicker response for GRH ride requests
- 2 Don't require registration
- 3 Allow use of GRH if ridesharing/using transit less than twice per week
- 4 Allow more GRH trips in a year
- 5 Easier/faster approval process
- 6 Wider area for trips
- 88 No improvement needed
- 99 Other (SPECIFY)
- 98 DK
- 89 Left blank

SOCIAL MEDIA, TRAVEL APPS, AND DRIVERLESS CARS

Q59a With which of the following social networking applications do you currently have an account? Select all that apply.

- 1 Facebook
- 2 Twitter
- 3 LinkedIn
- 4 Instagram
- 5 Snapchat
- 6 Nextdoor
- 97 Other (Please specify) _____
- 9 None of these, I don't use social networking
- 99 Left blank

Q59b Which of the following types of travel or trip applications have you used? Select all that apply.

- 1 Traffic alerts (e.g., radio, TV, text)
- 2 Ridehailing apps (ex., Uber, Lyft, Via)
- 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, Next Train)
- 6 Traveler information display (e.g. screen at workplaces and public locations)
- 7 Bikeshare/ dockless bike service app (e.g., Capital Bikeshare, Jump)
- 8 E-scooter service app (e.g., Birk, Skip, Lime, Spin)
- 9 Carshare service apps (e.g., Zipcar, car2go)
- 97 Other (Please specify) _____
- 77 None of these, I don't use those types of services or applications
- 99 Left blank

DEMOGRAPHICS

Now just a few last questions to help us group your answers with those of others. These questions will not be used to identify you in any way.

Q60 Which of the following groups includes your age?

- 1 under 18
- 2 18 - 24
- 3 25 - 34
- 4 35 - 44
- 5 45 - 54
- 6 55 - 64
- 7 65 or older
- 89 Left blank

Q61 Do you consider yourself to be Latino, Hispanic, or Spanish?

- 1 Yes
- 2 No
- 89 Left blank

Q62 Which one of the following best describes your racial background? (**ALLOW ONLY ONE RESPONSE**)

- 1 White
- 2 Black or African-American
- 3 American Indian or Alaska Native
- 4 Asian
- 5 Native Hawaiian or Other Pacific Islander
- 6 Other (SPECIFY) _____
- 89 Left blank

Q63 Finally, please indicate the category that best represents your household's total annual income.

- 1 less than \$20,000
- 2 \$20,000 - \$29,999
- 3 \$30,000 - \$39,999
- 4 \$40,000 - \$59,999
- 5 \$60,000 - \$79,999
- 6 \$80,000 - \$99,999
- 7 \$100,000 - \$119,999
- 8 \$120,000 - \$139,999
- 9 \$140,000 - \$159,999
- 10 \$160,000 - \$179,999
- 11 \$180,000 - \$199,999
- 12 \$200,000 or more
- 89 Left blank

Q64 Are you female or male?

- 1 Female
- 2 Male
- 3 Other
- 89 Left blank

Q65 Commuter Connections is offering a drawing for ten \$50 Amazon gift cards. If you would like to participate in 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 the drawing. Would you like to participate in the drawing?

- 1 Yes (**ASK Q66**)
- 2 No (**SKIP TO END**)
- 89 Left blank (**SKIP TO END**)

Q66 Please provide your name and email address so we can contact you if you are one of the 10 winners.

First Name:

Last Name:

Email Address:

END

Thank you for taking the time to fill out our survey. Your input is very important to us!
Please click on "SUBMIT" to submit your responses.

AFTER SUBMIT, REDIRECT TO COMMUTER CONNECTIONS HOME PAGE.

APPENDIX B

Respondent Alert Letters

Telephone Survey for Phone Only Participants – Alert Letter Sent by postal mail

Dear Sir/Madam:

Commuter Connections is conducting a brief survey of people who have used and/or registered with the Regional Guaranteed Ride Home (GRH) program. The Metropolitan Washington Council of Governments (COG) will be overseeing this survey on behalf of *Commuter Connections* and I'm writing to request your participation.

You will be contacted by telephone within the next few days by CIC Research, Inc., an independent research firm hired by COG. An interviewer will ask you questions for just a few minutes about your experience with the GRH program.

Your input is very important to us even if you are no longer registered in the program and/or have not used a GRH trip. If you have recently taken a GRH trip and completed a feedback survey about that trip, please note that this is a different survey.

The information you provide will be kept completely confidential, and will be used only to help improve the regional GRH program. Thank you in advance for your help. If you have any questions about this study, please contact me at (202) 962-3200.

Sincerely,

Nicholas W. Ramfos
Director, Commuter Connections

Internet Survey for Active Participants - Alert Letter - Sent by email

Dear Sir/Madam:

Commuter Connections is conducting a brief survey of people who have used and/or registered with the Regional Guaranteed Ride Home (GRH) program. The Metropolitan Washington Council of Governments (COG) will be overseeing this survey on behalf of *Commuter Connections* and I'm writing to request your participation.

Shown below is the internet link that will take you directly to the Commuter Connections web site where you will log into your account to take the survey. The survey will take just a few minutes to complete and will ask about your experience with the GRH program. You might also have seen a pop-up notice for this survey when you logged-in to your Commuter Connections account. If you already completed the survey from that notice, thank you for your participation.

<https://tdm.commuterconnections.org/mwcog/>

If you cannot log in to your account, please contact us at 800-745-RIDE, (Monday through Friday from 8:30 a.m. – 4:30 p.m.)

Your input is very important to us even if you are no longer registered in the program and/or have not used a GRH trip. If you have recently taken a GRH trip and completed a feedback survey about that trip, please note that this is a different survey.

The information you provide will be kept completely confidential, and will be used only to help improve the regional GRH program. Thank you in advance for your help. If you have any questions about this study, please contact me at (202) 962-3200.

Sincerely,

Nicholas W. Ramfos
Director, Commuter Connections

Internet Survey for Inactive Participants - Alert Letter - Sent by email

Dear Sir/Madam:

Commuter Connections is conducting a brief survey of people who have used and/or registered with the Regional Guaranteed Ride Home (GRH) program. The Metropolitan Washington Council of Governments (COG) will be overseeing this survey on behalf of *Commuter Connections* and I'm writing to request your participation.

Shown below is the internet link that will take you directly to the survey. The survey will take just a few minutes to complete and will ask about your experience with the GRH program.

<https://proj.cicresearch.com/GRH19W.asp?id=XXXXXXXX>

Your input is very important to us even if you are no longer registered in the program and/or have not used a GRH trip. If you have recently taken a GRH trip and completed a feedback survey about that trip, please note that this is a different survey.

The information you provide will be kept completely confidential, and will be used only to help improve the regional GRH program. Thank you in advance for your help. If you have any questions about this study, please contact me at (202) 962-3200.

Sincerely,

Nicholas W. Ramfos
Director, Commuter Connections

APPENDIX C – DISPOSITION OF FINAL DIALING RESULTS

Dialing Disposition of All Telephone Sample at the Survey Conclusion	Telephone Survey	
	Number	Percent
Interviews Completed by Telephone	236	5.5%
Interviews Completed by Internet	950	21.9%
No Answer	417	9.6%
Answering Machine	1,759	40.6%
Busy	89	2.1%
Arranged Call Back	483	11.1%
Respondent Never Available	3	0.1%
Not In Service	226	5.2%
Wrong Number	15	0.3%
Fax	7	0.2%
Other Language	7	0.2%
Refused	111	2.6%
Respondent Terminated	2	0.0%
Lives Outside of Study Area	3	0.1%
Retired	1	0.0%
Prefers to Complete Survey Online	20	0.5%
Total	4,329	100.0%
Total Dialings	5,727	
Average Dialings Per Complete	24.3	

APPENDIX D

Results from 2019, 2016, 2013, 2010, and 2007 GRH Surveys

Comparison on Key Questions

Registration Information

- **Registration status as defined in the GRH database** – Percentage of all respondents

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Current registrant	43%	44%	51%	40%	61%
Past registrant	57%	55%	49%	60%	39%
One-time exception	0%	1%	0%	0%	0%

- **Length of time in GRH** – Percentage of all registrants

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Less than 1 year	10%	11%	15%	12%	2%
1 year	12%	11%	14%	21%	28%
2 years	11%	11%	13%	15%	34%
3 years	8%	9%	9%	9%	5%
More than 3 years	59%	58%	49%	43%	26%

- **Reasons for not re-registering** – Past registrants only

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
<u>Program Related Reasons</u>					
Didn't get around to it, forgot	29%	20%	22%	32%	24%
Didn't know I had to re-register	21%	23%	23%	21%	11%
Had a problem with registering	8%	6%	7%	10%	---
Dissatisfied, bad experience	4%	9%	6%	6%	---
Too much effort to use program	1%	2%	3%	0%	---

Personal Circumstance Reasons

Changed job/work hours	12%	8%	18%	10%	25%
Never used program	10%	10%	9%	6%	17%
Couldn't CP/VP/use transit 2+ day/week	7%	6%	8%	3%	6%
Moved to different residence	6%	4%	4%	6%	6%
Needed car for work/other purpose	5%	3%	4%	5%	6%
Carpool/Vanpool/Transit didn't work out	2%	---	---	3%	5%

GRH Information Sources• **How heard about GRH – Percentage of all respondents**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Word of mouth – referral	30%	30%	31%	35%	34%
Employer/employee survey	12%	9%	9%	8%	7%
Radio	9%	10%	12%	12%	16%
Internet	8%	11%	9%	14%	11%
Bus/train sign	5%	4%	5%	4%	4%
Other Rideshare/Transit Org	4%	4%	5%	2%	----
Brochure/promo materials	3%	3%	3%	4%	7%
Direct mail/postcard from CC	3%	<1%	2%	3%	6%
Commuter Connections (other)	3%	4%	3%	2%	----
Advertisement	2%	4%	2%	3%	----
Television	1%	<1%	<1%	2%	3%
Newspaper/Newsletter	<1%	<1%	<1%	3%	4%
Bus/train schedule	0%	<1%	<1%	0%	4%
Other	2%	3%	5%	2%	7%

• **Awareness/influence of GRH advertising – Percentage of all respondents**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Heard or saw GRH ad	58%	58%	57%	62%	57%
Registered after hearing ads	37%	37%	39%	38%	36%
Ad encouraged registration	31%	30%	33%	33%	34%

Current Travel Information• **Current mode split – Primary mode**

<u>Current Registration</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
DA/Motorcycle	1%	2%	1%	2%	6%
Bus	29%	30%	31%	27%	22%
Carpool/Vanpool	29%	28%	30%	19%	36%
Commuter Rail	25%	24%	23%	22%	18%
Metrorail	10%	11%	11%	13%	17%
Bike/walk	1%	1%	2%	1%	<1%
Telework	5%	4%	2%	1%	<1%

<u>Past Registration</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
DA/Motorcycle	30%	25%	31%	29%	42%
Bus	17%	19%	19%	19%	9%
Carpool/Vanpool	17%	17%	18%	14%	17%
Commuter Rail	13%	17%	14%	12%	5%
Metrorail	13%	12%	12%	10%	22%
Bike/walk	3%	2%	2%	2%	3%
Telework	7%	7%	4%	3%	3%

- Average length of commute**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Distance (miles)	34.4 mi	35.9 mi	35.4 mi	36.5 mi	34.5 mi
Time (minutes)	67 min	68 min	66 min	67 min	63 min

- Primary Modes “Pre-GRH” vs “During-GRH” (Mode used most days during the week) – Percentage of all registrants – modes used before registering/participating in GRH and the modes used while registered/participating in GRH (excludes telework as primary mode)**

<u>Pre-GRH</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Drive alone*	27%	24%	24%	23%	31%
Bus	19%	20%	19%	17%	17%
Carpool/Vanpool	19%	19%	23%	27%	26%
Commuter Rail	18%	19%	18%	15%	11%
Metrorail	14%	15%	14%	16%	19%
Bike/Walk	2%	1%	----	----	----
<u>During-GRH</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Drive alone*	3%	3%	3%	4%	14%
Bus	28%	29%	30%	27%	24%
Carpool/Vanpool	27%	28%	30%	33%	34%
Commuter Rail	24%	24%	22%	20%	16%
Metrorail	12%	12%	12%	14%	18%
Bike/Walk	2%	1%	----	----	----

* Drive alone includes motorcycle, taxi, and ride-hail

- Average Days Using Alternative Modes “Pre-GRH” and “During GRH” – Percentage of all registrants – number of days using carpool, vanpool, transit, bike, or walk for commuting before registering/participating in GRH and the modes used while registered/participating in GRH**

<u>Pre-GRH</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
0 days/week	26%	27%	26%	23%	32%
1 day/week	1%	1%	1%	0%	0%
2 days/week	2%	1%	1%	1%	2%
3 days/week	7%	5%	5%	2%	1%
4 days/week	12%	13%	13%	11%	9%
5 days/week	52%	53%	54%	62%	56%
Average days/week	3.3	3.4	3.4	3.7	3.2
<u>During-GRH</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
0 days/week	2%	1%	1%	2%	10%
1 day/week	2%	2%	1%	1%	1%
2 days/week	6%	5%	3%	2%	1%
3 days/week	17%	15%	11%	6%	3%
4 days/week	23%	24%	24%	22%	14%
5 days/week	50%	53%	60%	67%	71%
Average days/week	4.1	4.2	4.4	4.4	4.2

Influence of GRH on Commute Pattern Decisions

- **Alternative mode changes from “Pre-GRH” to “With-GRH” – All respondents***

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Started using alternative mode	24%	23%	22%	24%	22%
Increased alt mode use (frequency)	3%	3%	3%	4%	5%
Maintained use of alternative mode	71%	73%	74%	67%	64%
No alt mode “with-GRH”	2%	1%	1%	0%	9%

Note this table does not include respondents who said they did not commute in the Washington metropolitan area before they joined GRH.

- **Importance of GRH to Decision to Start Using Alternative Mode – Respondents who started alt modes when they registered for GRH**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
n=	479	468	479	208	199
Very important	52%	51%	50%	50%	50%
Somewhat important	27%	29%	30%	30%	19%
Not at all important	21%	20%	20%	20%	31%

- **Importance of GRH to Decision to Increase Use of Alternative Mode – Respondents who were using alt modes before they registered for GRH and increased the frequency of alt mode use**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
n=	47	58	70	28	32
Very important	48%	27%	37%	43%	28%
Somewhat important	26%	37%	38%	39%	38%
Not at all important	26%	36%	25%	18%	35%

- **Importance of GRH to Decision to Maintain Use of Alternative Mode – Respondents who were using alt modes before they registered for GRH**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
n=	1,360	1,459	1,606	678	604
Very important	47%	45%	43%	46%	43%
Somewhat important	34%	32%	32%	33%	31%
Not at all important	19%	23%	25%	21%	26%

- **Likely to Start Using Alternative Mode if GRH not available – Respondents who started alt modes when they registered for GRH**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
n=	463	453	464	204	201
Very likely	41%	48%	48%	51%	65%
Somewhat likely	39%	34%	34%	33%	24%
Not at all likely	20%	18%	18%	6%	11%

- **Likely to Increase Use of Alternative Mode if GRH not available** – Respondents who were using alt modes before they registered for GRH and increased the frequency of alt mode use

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
n=	42	53	66	42	33
Very likely	33%	37%	43%	48%	48%
Somewhat likely	40%	40%	41%	28%	21%
Not at all likely	27%	23%	16%	24%	32%

- **Likely to Maintain Use of Alternative Mode if GRH not available** – Respondents who were using alt modes before they registered for GRH

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
n=	1,298	1,424	1,572	653	603
Very likely	60%	64%	68%	65%	66%
Somewhat likely	29%	26%	25%	29%	25%
Not at all likely	11%	10%	7%	5%	9%

- **Other factors or circumstances that influenced decision to start, continue, or increase use of alternative mode** – All respondents

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Save money	8%	8%	10%	13%	19%
Commute ease/flexibility/convenience	5%	7%	8%	9%	0%
Didn't want to drive	5%	5%	3%	9%	41%
Help environment/reduce traffic	4%	6%	5%	2%	0%
Save time	4%	4%	5%	9%	16%
Stress/health/exercise	3%	3%	5%	0%	3%
Parking issues	3%	3%	3%	2%	7%
Other options not reliable	2%	3%	3%	2%	0%
Save wear and tear on vehicle	2%	2%	3%	4%	3%
Changed job/work hours	1%	2%	<1%	2%	1%
Moved to different residence	1%	1%	<1%	0%	2%
Family obligations	1%	1%	<1%	2%	1%
None	66%	64%	65%	55%	31%

Use of and Satisfaction with GRH

- **Used GRH trip** – all respondents, by registration status and by mode used

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
All respondents	37%	33%	31%	33%	23%
<u>By Registration Status</u>					
- Current registrants	39%	36%	33%	35%	30%
- Past registrants	30%	27%	25%	27%	21%
<u>By Mode Used "During-GRH"</u>					
- CP/VP	----	----	----	41%	27%
- Vanpool	47%	44%	39%	----	----
- Carpool	45%	44%	34%	----	----
- Bus	41%	35%	31%	35%	28%
- Commuter rail	34%	32%	31%	29%	17%
- Metrorail	21%	18%	22%	19%	14%

- **Reasons for taking a GRH trip** – Respondents who took a trip

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Illness (self)	35%	32%	33%	29%	25%
Illness of family member	21%	27%	21%	21%	15%
Illness of child	15%	16%	19%	20%	33%
Unscheduled overtime	14%	12%	15%	14%	14%
Other personal emergency	11%	9%	9%	11%	7%
Missed carpool/vanpool	2%	<1%	1%	2%	1%
Other	2%	4%	2%	3%	6%

- **Time waiting for taxi** – Respondents who took a trip using a taxi

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
5 minutes or less	29%	28%	23%	26%	22%
6 – 10 minutes	28%	28%	28%	27%	23%
11 – 20 minutes	28%	29%	33%	32%	36%
21 – 30 minutes	8%	9%	9%	7%	14%
31 – 45 minutes	3%	2%	2%	2%	3%
46 or more minutes	4%	4%	5%	7%	3%
Average (minutes)	14 min	15 min	16 min	17 min	16 min

- Improvements desired to GRH Program ***

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
None needed	19%	14%	12%	22%	25%
More advertising	9%	10%	11%	7%	13%
Relax conditions/supervisor approval	5%	4%	7%	----	1%
Notify when time to re-register	5%	3%	4%	1%	1%
Easier/faster approval	3%	2%	1%	3%	2%
Quicker response for ride requests	2%	3%	2%	3%	3%
More direct, faster service home	2%	3%	----	----	----
Wider area for trips	1%	1%	<1%	1%	2%
Allow more trips per year	2%	1%	<1%	1%	4%
Better communication with drivers	1%	<1%	1%	2%	1%
Extend the hours	1%	<1%	2%	2%	0%
Don't require registration	<1%	<1%	<1%	3%	1%
Better directions/info on how to use	---	<1%	2%	----	1%
Other	2%	5%	5%	3%	10%
Don't know/no suggestions	49%	55%	58%	49%	47%

* Multiple responses permitted

Demographics

- States of Residence and Employment – all respondents**

<u>Residence</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
District of Columbia	2%	2%	2%	1%	1%
Maryland	41%	40%	36%	32%	34%
Virginia	55%	55%	60%	65%	64%
Other/Refused	2%	3%	2%	2%	1%

<u>Employment</u>	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
District of Columbia	63%	64%	61%	63%	60%
Maryland	16%	15%	11%	11%	10%
Virginia	21%	21%	28%	26%	30%
Other/Refused	0%	0%	0%	0%	0%

- Income – all respondents**

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Under \$40,000	1%	1%	1%	2%	2%
\$40,000 – \$59,999	4%	4%	5%	6%	9%
\$60,000 – \$79,999	9%	7%	10%	12%	17%
\$80,000 – \$99,999	11%	13%	13%	14%	19%
\$100,000 – \$119,999	15%	18%	18%	16%	20%
\$120,000 – \$139,999	14%	15%	16%	15%	10%
\$140,000 – \$159,999	11%	11%	12%	13%	8%
\$160,000 – \$179,999	8%	8%	8%	8%	----
\$180,000 or more	27%	23%	17%	14%	----

- **Ethnic/Racial background** – all respondents

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Hispanic/Latino	6%	5%	5%	5%	4%
Non-Hispanic White	61%	70%	73%	68%	65%
Non-Hispanic Black	22%	17%	16%	20%	21%
Asian	8%	6%	6%	7%	10%
Other	3%	2%	0%	0%	0%

- **Gender** – all respondents

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
Female	46%	47%	48%	47%	57%
Male	54%	53%	52%	53%	43%

- **Age** – all respondents

	<u>2019</u>	<u>2016</u>	<u>2013</u>	<u>2010</u>	<u>2007</u>
18 – 24	<1%	<1%	<1%	<1%	1%
25 – 34	7%	7%	9%	9%	17%
35 – 44	20%	18%	20%	23%	32%
45 – 54	33%	35%	39%	41%	31%
55 – 64	34%	34%	27%	25%	18%
65 or older	6%	5%	5%	3%	1%