

Commuter Connections and Maryland Transit Administration

Baltimore and St. Mary's County Regional Guaranteed Ride Home (GRH) Program

2016 GRH SURVEY DRAFT REPORT

Prepared for:

Metropolitan Washington Council of Governments

Commuter Connections Program

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EXECUTIVE SUMMARY

<u>Introduction</u>

This report presents the results of a Guaranteed Ride Home (GRH) survey of 329 commuters who currently participate or who have participated in the Baltimore and St. Mary's County regional Guaranteed Ride Home (GRH) Program marketed through the Maryland Transit Administration and operated through the Commuter Connections program at the Metropolitan Washington Council of Governments. This program was introduced in October 2010 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.

The Metropolitan Washington Council of Governments National Capital Regional Transportation Planning Boards' (COG/TPB) Commuter Connections program undertook the survey described in this report to identify and examine commute and demographic characteristics of commuters participating in GRH.

Commuter Connections' conducted interviews by Internet if the applicant had provided an email address for contact; interviews were conducted by telephone 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. Ten percent of curent registrants had been registered for one year or less, but more than half (54%) had been participating for three or more years.
- Nearly two-thirds (64%) of all respondents were no longer registered for the GRH program (past registrants).
 However, 45% 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 suggest many of these respondents 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 didn't know they had to re-register (24%) and that they hadn't gotten around to it/forgot, mentioned by 24% of past registrants. These also were common reasons noted in 2013, indicting it is still important to remind registrants that re-registration is required. Six percent were "dissatisfied with the program/had a bad experience."

Impact of GRH on Commute Patterns

The GRH survey was designed to examine the following 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 one-third (36%) of 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 remaining 58% said they maintained but did not increase use of alternative modes they were using before GRH.
- 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 39% of respondents said they primarily drove alone to work before starting GRH. The remaining participants used alternative modes as their primary type of transportation before they joined the program.
- 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 10 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.
- 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 3% said they were "not at all likely" to have continued using these modes if GRH were not available and 16% were somewhat likely. By contrast, 11% of respondents who started using a new alternative mode said they were not likely to have made the change without GRH and 25% were somewhat likely.

Seven in ten (70%) respondents said GRH was the only Commuter Connections service they received. But even among respondents who did receive other Commuter Connections services, GRH was typically the most important of these services. Only 12% of respondents who started an alternative mode and 6% of respondents who maintained alternative mode use said another Commuter Connections service was more important to their commute decision

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. Four in ten respondents said
 they had heard or seen some form of GRH advertising. And 20% of survey respondents said they had not
 registered before hearing or seeing the ads and that the ads had encouraged them to register.
 - Respondents were more likely to have seen or heard GRH advertising if they registered <u>before 2011</u> or <u>recently</u>, in 2015 or 2016. About 45% of respondents who registered before 2011 and the same share who registered in 2015-2016 said they had heard or seen advertising, compared to about 38% of respondents

who registered between 2011 and 2014. The high awareness of advertising for early registrants likely is due to introductory advertising initiated with the program roll-out.

- The results also showed the need for multiple outreach channels. Word of mouth continued to be the predominant method by which respondents learned of GRH, but employer/employee survey, Internet, other rideshare organization, and bus/train signs all were noted by at least 5% of respondents as their first information source about GRH.
- Word of mouth and employer were particularly important sources for drive alone commuters. One-third
 (35%) of drive alone commuters mentioned word of mouth as their source and 28% learned of GRH from
 their employer. Bus and train riders were more likely than were respondents who drove alone or carpooled/vanpooled to say they learned about GRH from a bus or train sign. Another rideshare agency was a
 more common referral sources for registrants who carpooled/vanpooled before GRH than for respondents
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SECTION 1 – INTRODUCTION

This report presents the results of a Guaranteed Ride Home (GRH) survey of 329 commuters who currently participate or who had participated in the Baltimore and St. Mary's County Regional Guaranteed Ride Home (GRH) Program marketed through the Maryland Transit Administration and operated through the Commuter Connections program at the Metropolitan Washington Council of Governments. This program was introduced in October 2010 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.

The Metropolitan Washington Council of Governments National Capital Regional Transportation Planning Boards' (COG/TPB) Commuter Connections program undertook the survey described in this report to identify and examine commute and demographic characteristics of commuters participating in GRH.

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 Disposition of dialing results
- Appendix B Survey questionnaire
- Appendix C Respondent alert letters
- Appendix D Results from 2016 and 2013 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 and to examine research questions regarding potential travel changes that might be influences or assisted by the GRH program. Commuter Connections introduced the Baltimore and St. Mary's County GRH Program in October 2010. In April/May 2013, Commuter Connections conducted a survey of GRH applicants to assess travel and air quality impacts of the program. The 2016 GRH survey is the second such survey. Specifically, the survey explores if the GRH program:

- Encourages commuters who drive alone to work to use alternative modes
- Encourages commuters who use alternative modes to use these modes more days per week

Sample Selection Process

The set of eligible respondents for this survey included any commuter who registered or participated in the Baltimore and St. Mary's County GRH program between March 16, 2013 and March 15, 2016. Commuters who had active and valid registration status at the time of the survey were considered "current or Active registrants." 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."

The GRH program also provides rides to commuters who did not register, but participate 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 as "one-time exception" users. All three groups of participants were eligible for the survey.

In March 2016, 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. When all duplicates were removed, the remaining program database contained 2,037 records.

For both the 2016 GRH survey and the survey administered in 2013, Commuter Connections conducted interviews by Internet with applicants who had provided an email address for contact and by telephone 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 Participants	24	1.2%
Past Participants	177	8.7%
Internet Administration		
Current Participants	711	34.9%
Past Participants	1,125	55.2%
TOTAL – All Groups	2,037	

Questionnaire Design

LDA Consulting, with input from the Commuter Connections TDM Evaluation Group, Baltimore metropolitan region and St. Mary's County local jurisdiction staff, COG/TPB Commuter Connections staff, and CIC Research, designed both the Internet and telephone questionnaires used in the survey. The questionnaires, which were modeled on the 2016 GRH survey conducted by Commuter Connections in the Washington metropolitan region, with additional commute mode and travel route customizations to apply in the Baltimore region, collected data on eight major topics:

- Registration status
- Current commute patterns
- Commute patterns <u>before</u> participating in GRH (Pre-GRH)
- Commute patterns <u>while</u> 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
- 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 B.

Survey Administration

Survey Pretest

Both Internet and telephone survey instruments were tested internally prior to administration. Because the questionnaire had no significant changes and computer programming was the same as the 2013 survey instrument, a pretest of respondents was not conducted for the study.

<u>Telephone Interviews</u>

Once the questionnaire was finalized, COG/TPB staff mailed an introductory letter to all past and current participants who were included in the telephone survey, to introduce them to the upcoming study. Copies of this document can be found in Appendix C. 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. Issues discussed in the session included:

- 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 12 and May 31, 2016. Interviewers made weekday calls from 12:15 pm to 8:45 pm EDT. Calls were first directed to the respondent's work number. If contact was unsuccessful, the respondent was called at home. Interviews were conducted while respondents were at work or at home, depending on their wishes. 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 195 completed interviews, 24 from the telephone-only sample, and 171 from the Internet sample. The telephone group in total had a refusal rate of 4.2 percent. An average of 30.9 call attempts was made for each completed interview. A disposition of telephone dialing results can be found in Appendix A.

Internet Interviews

Upon 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 711 current (Active) GRH participants. COG staff merged the survey sample with the alert letter for these participants, then distributed the letters electronically, accompanied by a link to COG's server. The other list contained the names and contact information for the 1,125 past (Inactive) GRH participants. These also were distributed electronically with a link to CIC's server. Copies of the emails can be found in Appendix C.

For the Internet survey directed to COG's server, COT/TPB staff sent two reminder letters to participants who had not yet responded to the survey. For the original 711 current participant list, 650 emails were sent for the first reminder and 624 were sent for the second reminder. A total of 186 current participants were interviewed via the Internet site located on COG server. Past participants also received two reminders. For the original 1,125 past participant list, 1,027 emails were sent for the first reminder and 993 were sent for the second reminder. A total of 119 Internet interviews were completed and submitted to the CIC server.

Weighting of Survey Data

After all interviews were completed, the data were weighted to align the survey results with the total population of Baltimore GRH participants during the evaluation period. The criterion used to weight the survey data was

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 A.

"type" of GRH participant. This variable denotes if the participant is currently registered for GRH or was registered in the past. The following table shows the relationship between the sample and the total population group for the weighting variable – type of GRH participant.

	Sample	Total
Type of GRH Participant	Group	<u>Population</u>
Current participant/registrant	58%	36%
Past participant/registrant	42%	64%

The differences between these groups test 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
<u>Comparison of Sample Group and Total Population Distribution</u>

Type of GRH Participant		e Group	Total Population
	n = Percentage		Percentage
Current Participants			
Telephone participants	106	32.2%	1.2%
Internet participants	86	26.2%	34.9%
Total Current Participants:	192	58.4%	36.1%
Past Participants			
Past telephone participants	89	27.1%	8.7%
Past Internet participants	48	14.5%	55.2%
Total Past Participants:	137	41.6%	63.9%
TOTAL – ALL PARTICIPANTS	329	100.0%	100.0%

Level of Confidence for Analysis

The level of confidence for the study was calculated using the finite population correction factor. Completion of 329 interviews from a population of 1,916 (2,037 less undeliverable postal mail/emails of 121) resulted in a level of confidence of $95\% \pm 4.9\%$ for the 2016 Baltimore region GRH survey. This was slightly lower than the $95\% \pm 3.6\%$ for the 2013 survey, due to a smaller 2016 sample size (329) than was collected in 2013 (543).

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 with corresponding data for the 2013 Baltimore region GRH survey, when these data are available. These comparisons are presented in the appropriate sub-sections and in Appendix D.

- Demographics of the sample
- GRH participation characteristics
- GRH information sources
- Current commute patterns for GRH participants
- · Commute patterns before and during participation in 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

Characteristics and Demographics of the Sample

Home and Work Location

The majority (71%) of respondents lived in Maryland. About 15% lived in Virginia and 1% lived in the District of Columbia (Table 3). The remaining 13% lived north of Baltimore in Pennsylvania (6%), New Jersey (6%), or Delaware (1%). The distribution by work state was considerably different; essentially all (98%) of the respondents worked in Maryland.

Table 3
Home and Work States

	GRH 2016 (n = 329)			
State	Home State	Work State	Home State	Work State
Delaware	1%	0%	2%	0%
District of Columbia	1%	1%	2%	<1%
Maryland	71%	98%	72%	100%
New Jersey	6%	0%	3%	0%
Pennsylvania	6%	0%	6%	0%
Virginia	15%	1%	14%	<1%
Other	0%	0%	1%	0%

Top home locations for GRH registrants, each with at least 3% of total respondents, included:

<u>Home</u>	County	<u>Percentage</u>
•	Harford County, MD	19%
•	Baltimore City, MD	15%
•	Baltimore County, MD	10%
•	Fairfax County, VA	7%
•	Howard County, MD	5%
•	Frederick County, MD	5%
•	York County, PA	4%
•	Prince George's County, MD	4%
•	Anne Arundel County, MD	3%
•	Carroll County, MD	3%

Demographics

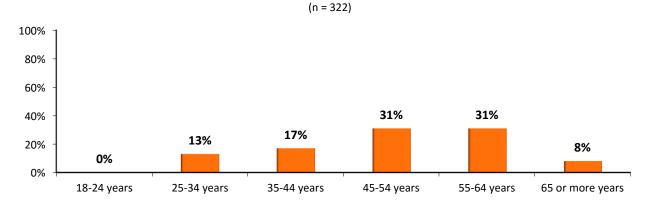
The survey asked respondents four demographic questions: gender, income, age, and ethnic group. Respondents were about evenly divided into male (53%) and female (47%) respondents. Details of other characteristics are presented below.

Income – Figure 1 presents the distribution of respondents' annual household income. Three-quarters (73%) of respondents had household incomes of \$80,000 or more and 14% had incomes of \$160,000 or more.

Figure 1 **Annual Household Income** (n = 262)73% 8% 19% 35% 24% 14% 0% 20% 40% 60% 80% 100% <\$40,000 \$40,000-\$79,999 \$80,000-\$119,999 **\$120,000-\$159,999** ■\$160,000 or more

Age –GRH participants were clustered in the middle and older age brackets (Figure 2). Slightly less than half (48%) were between the ages of 35 and 54 years old, four in ten (39%) were 55 years or older, and 13% were under 35 years.

Figure 2
Respondent Age Distribution



Ethnic Background – Lastly, as shown in Table 4, Caucasians/Whites and African-Americans represented the two largest ethnic group categories of GRH survey respondents, 61% and 24% respectively. Hispanics accounted for about 7% and Asians represented 6% of respondents.

Table 4
Race/Ethnic Background

(n = 1,802)

Ethnic Group	Percentage
Causasian / White	61%
African-American / Black	24%
Hispanic	7%
Asian	6%
Other	2%

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, either current or past. Table 5 presents the distribution of respondents by these categories.

More than six in ten (62%) respondents said they were currently registered for GRH. Two in ten said they had been registered in the past, but were not participating at the time of the survey. The remaining 18% said they were not sure of their GRH status. No respondents self-identified as a one-time exception user.

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

(n = 329)

Registration Status	Percentage
Current registrants	62%
Past registrants	20%
Not sure	18%

The survey asked numerous questions relating to the times "before" and "while" participating in GRH. For this reason, respondents' registration status was defined by both their actual status, as defined in the database, and by their perception of their status. This 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	Registration Status Perceived by Respondent	
GRH Database	Current	Past
Current registrants (n = 163)	88%	12%
Past registrants (n = 166)	45%	55%

As shown, 88% of respondents whose database status was current correctly identified their status as current. The remaining 12% 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 considered themselves no longer registered, they were treated in the survey interview as "past registrants."

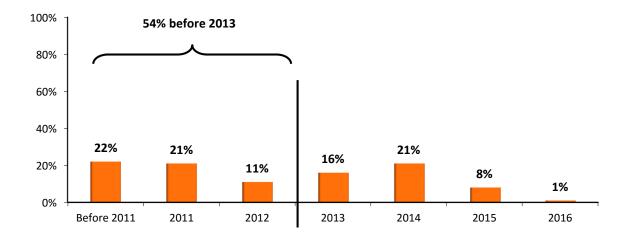
A more significant issue was the 45% of respondents whose registration had expired, but who thought they were still registered. It is possible these respondents did not realize they needed to re-register each year, so assumed they were still eligible for the program. These respondents were treated as "currently registered" in the survey and throughout the report.

Year of Registration

Respondents in this survey were selected from those who had registered or re-registered for GRH between March 2013 and March 2016, but about half (54%) of surveyed respondents said they first registered before 2013 (Figure 3). Sixteen percent registered in 2013, 21% in 2014, and 8% in 2015. One percent said they registered in 2016, but because the survey interviews were conducted in April and May 2016, registration figures for 2016 included only registrants who joined GRH between January 1 through March 15.

Figure 3 Year First Registered for GRH Program

(n = 284, Excludes 45 respondents who could not recall year)



Note that 15% of 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, 17 respondents, about 4% of the total respondents surveyed, said they had participated previously in another program. Respondents mentioned participating in programs sponsored by a local government (5 respondents), Virginia Railway Express (4 respondents), and an employer (2 respondents). Three respondents said the program was offered by another organization and three respondents did not recall who sponsored the program.

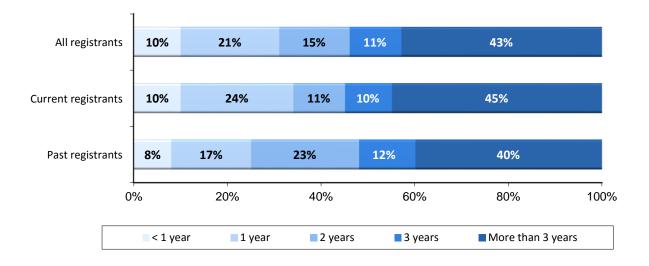
Time Participating in GRH

Figure 4 shows how long respondents had been registered for the GRH Program. Nearly seven in ten (69%) respondents participated (or had been participating) for two or more years and 43% had been participating for more than three years.

The comparison of GRH duration for respondents who self-identified as current versus past registrants shows that a larger percentage of current registrants were new to the program – 34% had been registered for one year or less, compared with 25% of past registrants.

Figure 4
Length of Time Registered in GRH Program By Survey Registration Status

(All registrants n = 284; Current registrants n = 196; Past Registrants n = 88)

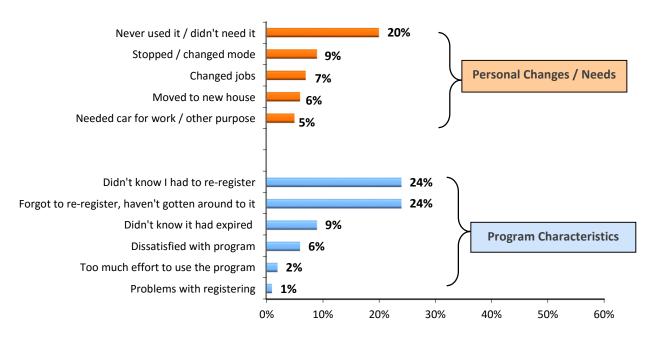


Reasons for Not Re-registering

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

Figure 5
Reasons Past Registrants Did Not Re-Register

(n = 93, note scale only extends to 60% to highlight results)



A frequently-mentioned program reason for not re-registering was that respondents did not know they had to re-register or didn't know their registrations had expired, cited by 24% and 9% of respondents, respectively. Another common program reason for not re-registering was that respondents hadn't gotten around to it/forgot, mentioned by 24% of past registrants. The large share of respondents who cited these reasons suggests that registrants need to be reminded that re-registration is required. Only 6% were dissatisfied with the program, 2% thought it was too much effort to use the program, and 1% had a problem or difficulty re-registering.

Other respondents mentioned personal reasons that were unrelated to the program. Twenty percent said they didn't re-register because they had never used the program and presumably felt it was not necessary. Nine percent had stopped using the alternative modes that made them eligible for the program, 7% changed jobs, and 6% moved to a different residence. Five percent needed a car for work or another purpose.

GRH Information Sources

How Heard About GRH

Commuters heard about the GRH Program from various sources (Table 7). More than one-third (36%) mentioned word of mouth/referrals as their source of information and 21% learned about GRH from their employer. Smaller shares mentioned other sources, such as the Internet (7%), another rideshare organization (7%), and a bus/train sign (5%). Fewer than one in twenty mentioned each other response. GRH information sources in 2016 were generally similar to sources from 2013.

Table 7
How Respondents Learned About GRH

Information Source	2016 GRH (n = 329)	2013 GRH (n = 120)
Word of mouth – referral	36%	27%
Employer/employee survey	21%	23%
Internet	7%	11%
Other rideshare/transit organization	7%	8%
Bus/train sign	5%	11%
Radio	3%	2%
Brochure/promo materials	2%	3%
Commuter Connections	2%	1%
Bus/train schedule	2%	<1%
On-site fair/event	2%	<1%
Direct mail/postcard from CC	1%	2%
Other *	4%	6%
Don't know / no answer	10%	11%

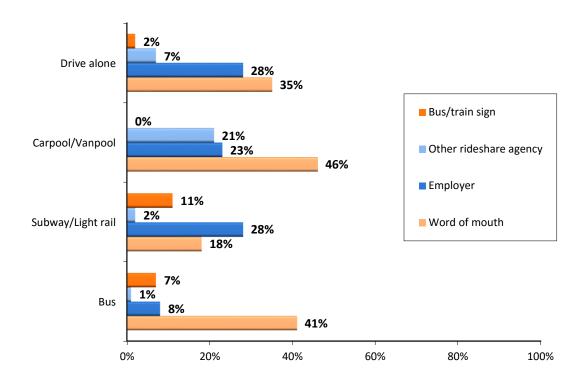
^{*}Multiple responses permitted.

^{**} Each response in the "Other" category was mentioned by less than 2% of respondents.

GRH Referral Source by Pre-GRH Commute Mode – Some differences were noted for respondents' source of referral by the commute modes they used before joining GRH (pre-GRH mode) (Figure 6). Word of mouth was an important referral sources for all respondents, regardless of the mode they used before they joined GRH, but was a less common source for subway/light rail riders (18%) than for respondents who carpooled/vanpooled (46%), rode a bus (41%), or drove alone (35%).

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

(Drive alone n = 132; Carpool/vanpool n = 48; Bus n = 79, Subway/Light rail n = 30)



Employer also was noted frequently as the source across modes, except that bus riders were notably less likely to mention this source; only 8% of bus riders cited employer, compared with about one-quarter of respondents who used other modes. Bus and train riders were more likely than were respondents who drove alone or carpooled/vanpooled to say they learned about GRH from a bus or train sign. By contrast, another rideshare agency was a more common referral sources for registrants who carpooled/vanpooled before GRH than for respondents who used other modes.

GRH Advertising

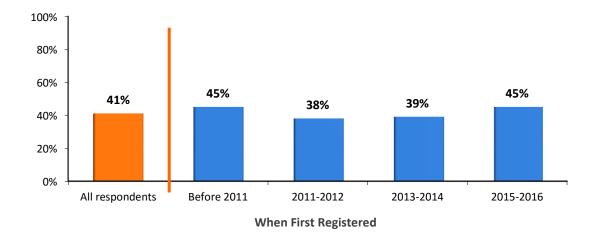
Heard or Saw GRH Advertising – When asked if they had heard, seen, or read any advertising about GRH, 41% of respondents said they recalled GRH advertising. This was slightly lower than the percentage who recalled advertising in the 2013 survey (46%).

Respondents were more likely to have seen or heard GRH advertising if they registered <u>before 2011</u> or <u>recently</u>, in 2015 or 2016 (Figure 7). About 45% of respondents who registered before 2011 and the same share who registered in 2015-2016 said they had heard or seen advertising, compared to about 38% of respondents who registered between 2011 and 2014. The high awareness of advertising for early registrants likely is due to introductory advertising initiated with the program roll-out.

Figure 7

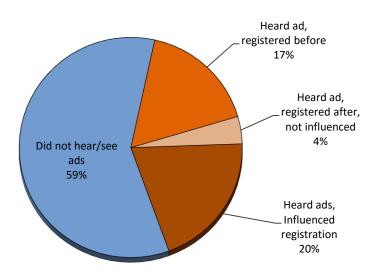
Heard or Saw GRH Advertising by Year Registered for GRH

(All n = 2,171, Before 2011 n = 923; 2011-2012 n = 305; 2013-2014 n = 346; 2015-2016 n = 223)



Influence of Ads on GRH Registration — The 41% 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 = 329)



Six in ten (59%) respondents did not see or hear the ads at all. About two in ten (17%) saw or heard ads but had already registered for GRH. And 4% 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 (80%).

The remaining 20% 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 was 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
- Commute distance

Work Schedule

The overwhelming majority (98%) of respondents worked full-time. But 10% worked a compressed schedule in which they worked a full-time schedule in fewer than five days; 7% worked a 9/80 compressed schedule, with one weekday off in alternate weeks, 2% worked a 4/40 schedule, with one weekday off each week, and 1% worked a 3/36 schedule, with two weekdays off. These respondents were classified as working a five-day week for purposes of commute mode, with either one-half, one, or two weekdays off each week.

Current Commute Mode

Respondents were asked about use of various commute modes for a typical work week. If a respondent said last week was not a "typical" commute week, they were instead asked about their travel for a "typical" 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 respondents would have different modes from current respondents, these two groups are shown separately.

Current Registrants – Vanpool was the most common primary mode for current registrants; it was used by 45% of current registrants. Bus was the second most common primary mode, used by 28% of current registrants. Commuter rail and subway (Baltimore subway or Metrorail)/light rail each were used by about one in ten current registrants. Four percent of current registrants primarily carpooled, 1% biked or walked, and 1% teleworked. 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.

Figure 9

<u>Current Primary Modes by Survey Registration Status</u>

(Current Registrants n = 223; Past Registrants n = 106)

Drive Alone 33% Current registrants 45% Vanpool 18% ■ Past registrants 28% Bus 23% 10% CommuterRail **Primary Alternative Mode** Current registrants - 98% 10% Subway/light rail 12% Past registrants - 63% Carpool Bike/walk

Past Registrants – Not surprisingly, past registrants were more likely than current registrants to drive alone; 33% of past registrants said this was their primary mode. But more than six in ten (63%) 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 one-quarter (23%) rode a bus and 18% vanpooled. Twelve percent primarily rode a subway or light rail train, 6% carpooled, and 4% biked/walked. Four percent teleworked as their primary mode.

40%

60%

80%

100%

20%

Telework

0%

Current Mode, 2013 and 2016 – While the overall share of alternative mode use in 2016 was the same as in 2013, the 2016 distribution of commute modes used by current GRH registrants was different from that in 2013 (Figure 10). The share of current registrants who used carpool/vanpool as their primary mode increased from 38% of all registrants in 2013 to 49% in 2016. The share of current registrants who rode a bus declined slightly, from 33% to 28%. Use of bike/walk also fell, from 7% of respondents in 2013 to 1% in 2016. Use of other modes was similar in 2013 and 2016.

Drive Alone 38% Carpool/vanpool 49% 33% Bus 28% 11% CommuterRail 10% 2013 9% Subway/light rail 10% **2016** 7% Bike/walk Telework 1% 20% 60% 100% 0% 40% 80%

Figure 10

Primary Commute Modes Used by GRH Registrants in 2013 and 2016 – Current GRH Registrants
(2013 n = 534, 2016 n = 329)

Commute Length

Commute Miles – Commuters in the survey sample had a wide range of commute distances, from less than one mile to more than 120 miles. Figure 10 shows results for this travel characteristic. The average one-way distance for GRH respondents was 35.3 miles. More than six in ten (61%) respondents traveled 30 or more miles to work and 43% commuted 40 or more miles to work

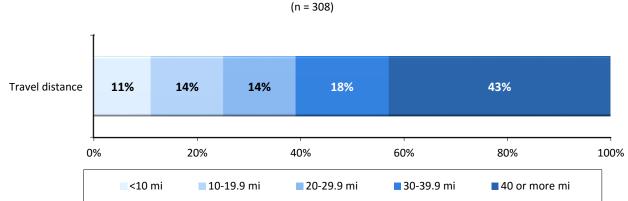


Figure 11
Commute Distance (miles) – All GRH Registrants

Commute Time – GRH participants commuted, on average, about 56 minutes one way. Nearly six in ten (58%) commuted more than 45 minutes each way to work (Figure 12). Almost three in ten (28%) commuted more than an hour.

Commute Travel Time (minutes) – All GRH Registrants (n = 323)**GRH** registrants 11% 6% 25% 30% 28% 0% 20% 40% 60% 80% 100% 20 min or less 21-30 min ■ 31-45 min ■ 46-60 min ■ More than 60 min

Figure 12

Primary Roads Used on the Trip to Work

The GRH survey also included a question to identify the major Interstate, state, and arterial roadways that commuters use to get to work. The results from this question will primarily be used for regional planning purposes to explore the role that programs such as GRH play in mitigating congestion on specific roads in the Baltimore metropolitan region. Analysis of GRH data for this question will be described in appropriate regional reports as the data are used.

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.

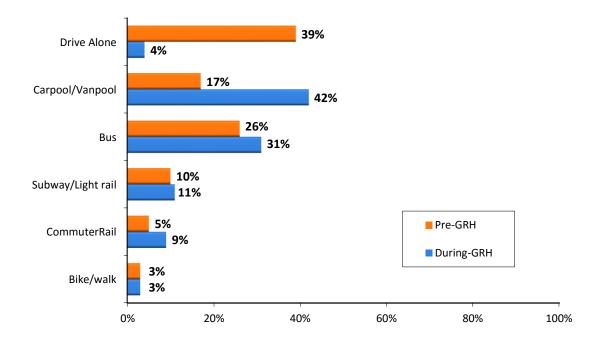
"During-GRH" Modes Compared with "Pre-GRH" Modes

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, subway/light rail, commuter rail, carpool/vanpool, bus, 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

(During-GRH n = 329; Pre-GRH n = 318; excludes primary telework)



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 Baltimore region before joining GRH. These respondents did not have a "pre-GRH" primary mode and were removed from the base.

Nearly four in ten (39%) respondents primarily drove alone pre-GRH. The drive alone mode share dropped to just 4% for the "During-GRH" time period and the share of respondents primarily using each alternative mode increased. Primary use of carpool/vanpool increased from 17% pre-GRH to 42% During-GRH, bus use rose from 26% to 31%, and the share of respondents using commuter rail as their primary mode grew from 5% to 9%. Use of subway/light rail and bike/walk remained essentially the same.

Table 8 illustrates the mode changes respondents made from their "pre-GRH" primary mode to their "During-GRH" primary mode. As expected, drive alone users made the greatest mode changes. Two-thirds (63%) of drive alone respondents shifted to carpooling and 28% shifted to transit. About 8% of drive alone commuters said they continued to drive alone as their primary mode.

Respondents who were using alternative modes before they joined GRH largely remained in their pre-GRH modes after they joined GRH. Nearly all respondents who previously carpooled/vanpooled (97%), rode a bus (89%), or used a train (subway/light rail/commuter rail) (85%) stayed in these modes. Some shifting across alternative modes was noted. For example, 5% of respondents who rode a bus to work pre-GRH and 4% of previous train users shifted to carpool/vanpool during their GRH enrollment.

Table 8
Primary Mode During-GRH by Primary Mode Pre-GRH

* Pre-GRH and During-GRH mode shares and between mode shift percentages will not total to 100%, because bike/walk and telecommute are excluded due to small sample sizes

	During-GRH Mode*			
Pre-GRH Mode	Drive Alone	Carpool / Vanpool	Bus	Train
Drive alone (n = 132)	8%	63%	16%	12%
Alternative Modes				
- Carpool/vanpool (n = 48)	0%	97%	3%	0%
- Bus (n = 79)	0%	5%	89%	6%
- Train (n = 47)	1%	4%	9%	85%

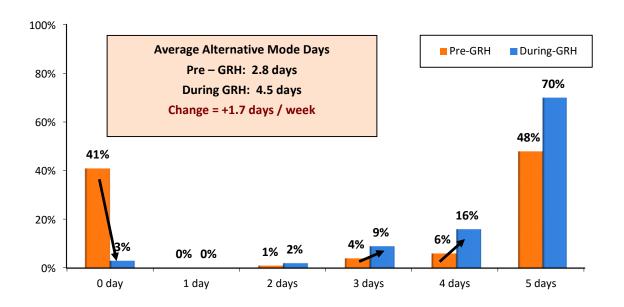
"During-GRH" Days in Alternative Modes Compared with "Pre-GRH" Days

The second research question in the survey focused on frequency of alternative mode use. Did participants who were using alternatives before joining the program increase the number of days they used these modes after registering for GRH? Only ten respondents said they increased alternative mode frequency, so it was not possible to analyze the data for this small sample. But the analysis examined the overall frequency of alternative mode use for all GRH respondents. These results are shown in Figure 14.

Figure 14

<u>Days Using Alternative Modes Pre-GRH and During-GRH (All GRH Respondents)</u>

(During-GRH n = 329; Pre-GRH n = 329)



The average number of days all GRH participants used alternative modes increased, from 2.8 days per week to 4.5 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 shifts among current alternative mode users.

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 During-GRH.

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:

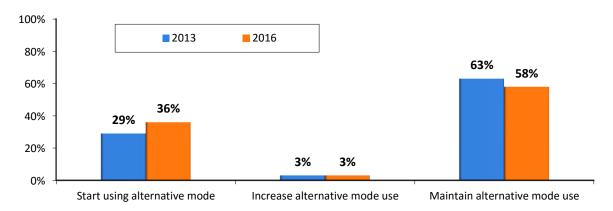
- <u>Start alternative mode</u> Respondents who drove alone pre-GRH and started using alternative modes During-GRH
- <u>Increase alternative mode</u> Commuters who were using an alternative pre-GRH and increased the frequency of alternative mode use During-GRH
- <u>Maintain alternative mode</u> Commuters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

Figure 15 presents a breakdown of respondents into these alternative mode change groups. More than one-third (36%) of respondents started using alternative modes at the time they joined GRH. This was seven percentage points higher than the 29% of 2013 survey respondents who said they had started using an alternative mode. As noted earlier, 3% of respondents (10 respondents) increased the number of days they used alternative modes. The largest share of respondents (58%) said they maintained 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.

Figure 15
<u>Alternative Mode Changes from Pre-GRH to During-GRH</u>

(2013 n = 530, 2016 n = 318)

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



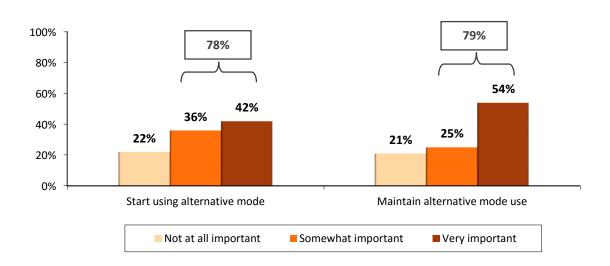
About 3% of respondents said they were not using an alternative mode while they were in GRH, even though the program requires them to be using an alternative mode to participate, about the same as the 4% in 2013. Respondents who were not using an alternative mode could be explained by the fact that most of these respondents said they were current registrants, thus 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 were no longer really eligible for the program.

<u>Importance to Decision to Start or Maintain Use of Alternatives</u>

For whichever of the three commute pattern categories applied, respondents were asked how important GRH was to their commute decision. Figure 16 presents the results for respondents who started or maintained alternative modes. Only 10 respondents increased alternative mode use; this sample size was too small for reliable analysis.

Figure 16
Importance of GRH to Start or Maintain Alternative Mode Use

(Start n = 120; Maintain n = 151)



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. Four in ten (42%) said GRH was very important and 36% said it was somewhat important to the decision. The remaining 22% said GRH was not at all important.

Maintain Use of Alternative Mode – GRH appeared to be similarly important for respondents who maintained alternative mode use as for those who started using alternative modes. Eight in ten respondents who maintained alternative mode use said GRH was very important (54%) or somewhat important (25%) 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 17.

Nine in ten respondents who were riding a bus pre-GRH said GRH had been somewhat or very important to their decision to continue using this mode and 68% said it had been very important. The service was slightly less important for respondents who carpooled/vanpooled and those who commuted by train; 74% of carpoolers/vanpoolers and 69% of train riders rated GRH as important.

Somewhat Important or Very Important 89% 74% 69% 100% Somewhat important 80% ■ Very important 60% 68% 35% **51%** 40% 20% 34% 21% 23% 0%

Carpool/vanpool

Bus

Figure 17

Importance of GRH to Maintain Alternative Mode Use by Alternative Mode used Pre-GRH

(Carpool/Vanpool n = 41; Bus n = 66; Train n = 33)

Importance of GRH by Registration Status – Figure 18 presents the relative importance of GRH to current registrants and past registrants. Among participants who <u>started</u> using an alternative mode, 82% of current registrants rated GRH as either important or very important. The share of past registrants who gave these high ratings was much lower (59%), but the sample of past registrants who started a new mode was small (17 respondents). Less difference was noted between current and past registrants who continued using an alternative; 85% of continued registrants said it was important, compared with 71% of past registrants.

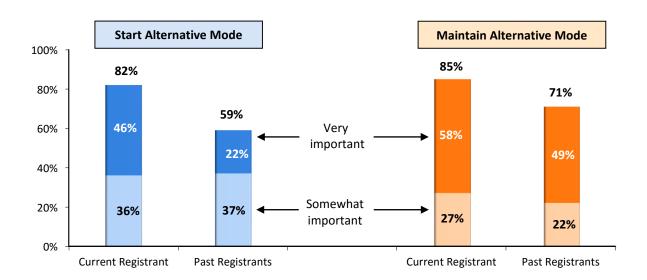
Train

Figure 18

Importance of GRH to Decision to Start or Maintain Alternative Mode by Registration Status – Current or Past

(Start alternative mode: Current registrants n = 103; Past registrants n = 17 NOTE SMALL SAMPLE)

(Maintain alternative mode: Current registrants n = 93; Past registrants n = 58)

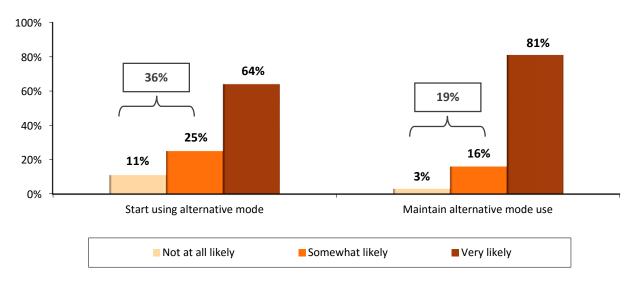


<u>Likelihood to Make Alternative Mode Changes if GRH Not Available</u>

Respondents also were asked if they would have made the same commute pattern decisions if GRH had not been available to them. Figure 19 shows how likely respondents were to have started or maintained use of alternative modes if GRH had not been available to them.

Figure 19
<u>Likely to Start or Maintain Use of Alternative Modes if GRH Not Available</u>

(Start n = 119; Maintain n = 149)



Start Using Alternative Mode – One-third of respondents who started using alternative modes said they were not likely (11%) or only somewhat likely (25%) to have made the change if GRH had not been available. The remaining 64% said they were very likely to have made the change even if they did not have access to GRH; in other words, GRH had little to no influence on these respondents.

Maintain Use of Alternative Mode – GRH seemed to be less valuable to registrants who were using alternative modes and didn't make any changes during GRH (maintained alternative mode); 81% said they were very likely to have continued in this mode if GRH had not been available. Three percent said they were not at all likely to have continued that mode and 16% were somewhat likely to have continued that mode without GRH.

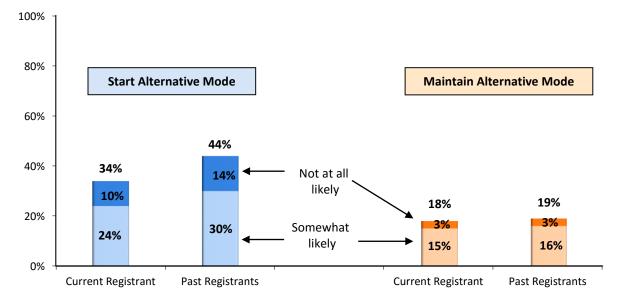
Likelihood to Start or Continue Modes by Registration Status — Finally, Figure 20 shows differences between current and past registrants in likelihood to start or maintain alternative modes without GRH. There was no statistical difference between current and past registrants for their likelihood to start alternative modes. Note that the sample size for past registrants who started alternative modes was just 17 respondents, so the apparent difference is not statistically significant. There was similarly no difference between current and past registrants in likelihood to maintain alternative mode use, about two in ten in both groups said they were not likely or only somewhat likely to take this action without GRH.

Figure 20

<u>Likely to Start or Maintain Alternative Modes Without GRH by Registration Status – Current or Past</u>

(Start alternative mode: Current registrants n = 103; Past registrants n = 17 NOTE SMALL SAMPLE)

(Maintain alternative mode: Current registrants n = 103; Past registrants n = 17 NOTE SMALL SAMPLE,



Other Influences Motivating Commute Changes

Figures 16 through 20 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, most respondents said they were likely to have made these decisions anyway, implying that GRH was not <u>essential</u> to their decision. 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 several questions to define 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 21 lists the services that respondents mentioned receiving from Commuter Connections, in addition to GRH. Seven in ten (70%) respondents said GRH was the only service they received from Commuter Connections. The other 30% noted one or more other services.

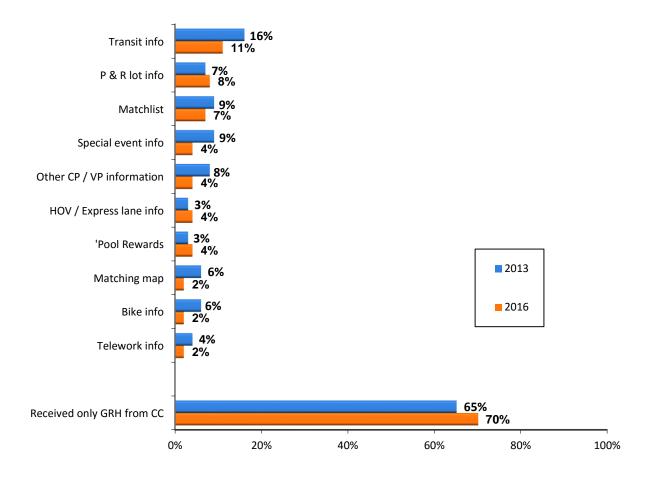


Figure 21

<u>Assistance or Benefits Received from Commuter Connections, In Addition to GRH – All Respondents</u>
(2013 n = 543, 2016 n = 329)

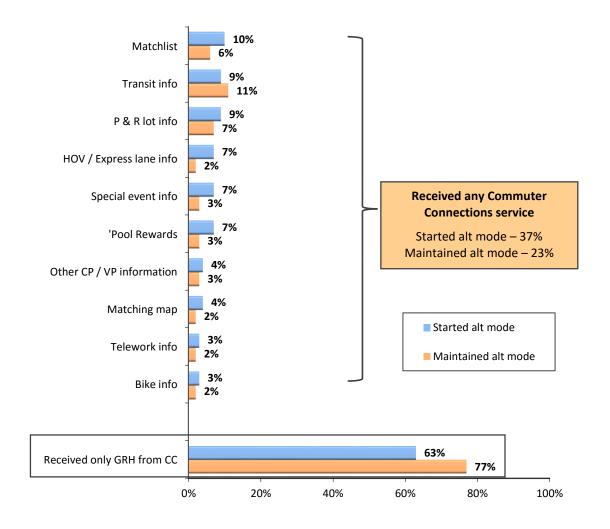
The most common services focused on transit information (11%) and carpool/vanpool assistance. About one in ten (7%) said they received a matchlist, with names of potential carpool/vanpool partners, 8% received Park & Ride lot information, and 4% received "other" carpool or vanpool information. Small shares of respondents received other services. Services received in 2016 were similar to those received in 2013.

Figure 22 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: started alternative mode or maintained alternative mode (used an alternative mode before GRH and continued in that mode with no change). Respondents who reported starting a new alternative mode received non-GRH Commuter Connections services at a higher rate than did respondents who maintained alternative mode use (37% of respondents who started vs 23% of respondents who maintained). They also received most individual services at a slightly higher rate.

Figure 22

<u>Assistance/Benefits Received from Commuter Connections In Addition to GRH – By Type of Commute Change</u>

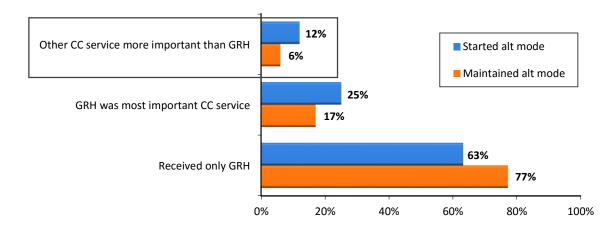
(Started alt mode n = 122; Maintained alt mode n = 176)



Commuter Connections Assistance or Benefits that Were More Important than GRH — Respondents who received Commuter Connections services were asked if any of the services had been more important than GRH in influencing their decision to start or maintain use of alternative modes. As was noted above, 63% of respondents who started a new alternative mode and 77% who maintained alternative mode use said GRH was the only Commuter Connections service they received. But as illustrated in Figure 23, even among respondents who did receive other Commuter Connections services, GRH was typically the most important of these services. Only 12% of respondents who started an alternative mode and 6% of respondents who maintained alternative mode use said another Commuter Connections service was more important to their commute decision.

Figure 23
Commuter Connections Assistance or Benefits – More Important than GRH to Mode Decisions

(Started alt mode n = 122; Maintained alt mode n = 176) (Note: Increased alt mode changes not shown, due to small sample size n = 10)

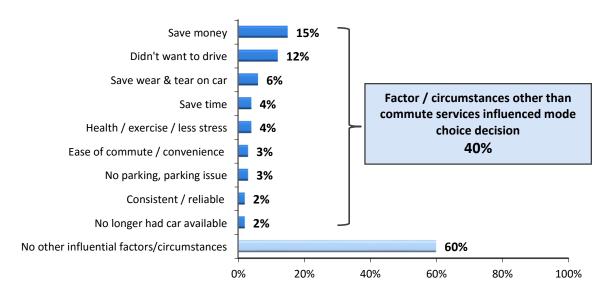


Influential Assistance or Benefits Received from Another Organization — Respondents also were asked about services they received from another organization that influenced their mode choice decisions. About one-third (36%) mentioned a service that had influenced their decision. Nearly all of these respondents (33% of 36%) said the influential service was a transit pass, transit subsidy, or pre-tax payroll deduction for commute travel costs.

Other Factors or Circumstances That Influenced Decision – Respondents also were asked if any other factors or circumstances, other than GRH and other than the assistance or benefits mentioned above, had been important to their mode choice decision. Six in ten (60%) said no other factors or circumstances influenced their decision, but 40% mentioned one or more other factors (Figure 24). The most common factors were a desire to save money (15%) or avoid driving (12%). Smaller shares of respondents noted other motivations.

Figure 24
Other Factors/Circumstances Important to Decision to Make a Change in Alternative Modes

(n = 329, multiple responses permitted)



Use of and Satisfaction With GRH

<u>Characteristics of Participants Who Used GRH Trips</u>

Used GRH Trip by Registration Status – Two in ten (21%) respondents said they had taken a GRH trip (Table 9). This was higher than the 10% reported in 2013, but the program was much newer at the time of the 2013 survey. Current registrants (24%) used GRH trips at a higher rate than did past registrants (16%). Recall that about two in ten past registrants said they did not re-enroll in GRH because they had not taken a trip and felt they didn't need the service.

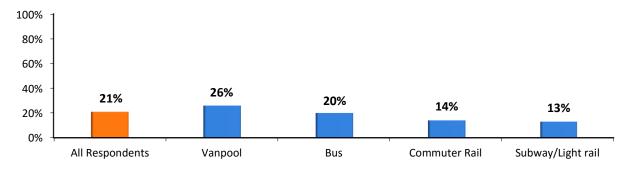
Table 9
Used GRH Trip
All Respondents, Current Registrants, and Past Registrants

Taken a GRH Trip			Past Registrants (n = 106)
Yes	21%	24%	16%
No	79%	76%	84%

Used GRH Trip by During-GRH Modes – Figure 25 compares use of GRH by four "During-GRH" mode groups: carpool, vanpool, bus, commuter rail, and subway/light rail. Vanpoolers were most likely to have used a GRH trip; 26% of respondents who vanpooled while they were registered for GRH had taken a GRH trip. About two in ten bus riders took a trip. Commuter rail riders and subway/light rail riders had the lowest usage; only 14% and 13% of these respondents, respectively, had taken a GRH trip.

Figure 25
Used GRH Trip by Primary Mode Used During-GRH

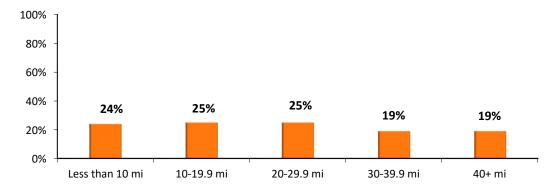
(All respondents n = 239; Vanpool n = 124; Bus n = 103; Commuter rail n = 30; Subway/Light rail n = 32 Carpool and Bike/walk not shown due to small sample sizes)



Used GRH Trip by Commute Distance – Figure 26 presents a comparison of the use of GRH by how far respondents traveled to work. The average one-way distance of a respondent who used a GRH trip was 36.5 miles one-way, slightly longer than the 35.3 miles for all GRH respondents overall. But GRH use was not substantially different for respondents who traveled different distances to work. About one-quarter of respondents who traveled 30 miles or less to work had taken a GRH trip. By contrast, among respondents who traveled 30 or more miles one-way, 19% had used a GRH trip.

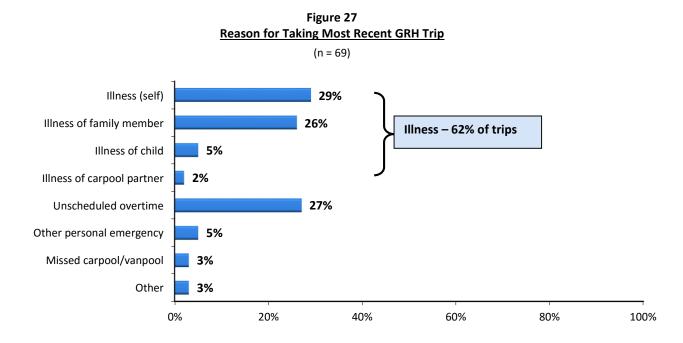
Figure 26
Used GRH Trip by Commute Distance (miles)

(Less than 10 mi n = 30; 10-19.9 mi n = 41; 20-29.9 mi n = 43; 30-39.9 mi n = 59; 40 mi or more n = 135)



Reasons for Taking GRH Trip

Figure 27 lists the reasons for which participants used the service. If respondents had taken more than one trip, they were asked to report on the reason for their most recent trip. Sixty-two percent of all GRH trips were taken to address an illness: respondent (29%), another family member (26%), a child (5%), or a carpool partner (2%). Unscheduled overtime (27%) was another common reason.



Satisfaction With the Trip

Participants, who had taken a GRH trip were asked if the service was satisfactory. The overwhelming majority (88%) said they were satisfied. The primary reason given by the unsatisfied respondents was that they waited too long for the taxi (6 respondents). Respondents waited an average of 28 minutes for a taxi, about the same as the 27 minute average calculated for the 2013 survey. In 2016, about half (49%) said the taxi arrived within 20 minutes, but one-third of respondents waited more than 30 minutes (Table 10).

Table 10
Time Waited for Taxi

(n = 65)

Wait Time	Percentage	Cumulative Percentage
5 minutes or less	11%	11%
6 to 10 minutes	9%	20%
11 to 20 minutes	29%	49%
21 to 30 minutes	19%	68%
31 to 45 minutes	12%	80%
46 or more minutes	20%	100%

Desired Improvements to the GRH Program

Participants appear to be generally quite satisfied with the GRH Program. One in ten respondents said no improvement was necessary for the GRH program. An additional 49% of participants did not provide any suggestions for improvements. The remaining 43% mentioned various suggestions (Table 11).

The most frequently mentioned improvement was more advertising or more program information, named by 16% of respondents, about the same percentage as mentioned it in 2013 (15%). All other responses were cited by very small shares of respondents and the results were consistent with the results of the 2013 survey.

Table 11
Suggested Improvements to GRH Program

Desired Improvement	2016 GRH (n = 329)	2013 GRH (n = 543)
More advertising / more program information	16%	15%
Quicker response for ride requests	5%	4%
Email reminder for renewal	5%	3%
Easier/faster approval / online registration	4%	2%
Relax conditions / supervisor approval	3%	5%
Difficult to get/use/return rental cars	4%	
Allow more GRH trips per year	1%	2%
Wider area for trips	2%	2%
Other	10%	11%
No improvement needed	8%	10%
Don't know / no suggestions provided	49%	49%

^{*} Might add to more than 100% due to multiple responses

^{**} Each other response was mentioned by fewer than one percent of respondents

APPENDICES

APPENDIX A – DISPOSITION OF FINAL DIALING RESULTS

APPENDIX B – SURVEY QUESTIONNAIRE

APPENDIX C – RESPONDENT ALERT LETTERS

APPENDIX D - RESULTS FROM 2016 AND 2013 SURVEYS - COMPARISON ON KEY QUESTIONS

APPENDIX A – DISPOSITION OF FINAL DIALING RESULTS

Dialing Disposition at	Telephone Survey		
Conclusion of Survey	Number	Percent	
Completed Interviews	195	10.3%	
No Answer	82	4.3%	
Answering Machine	891	47.0%	
Busy	61	3.2%	
Arranged Call Back	247	13.0%	
Respondent Never Available	15	0.8%	
Not In Service	189	10.0%	
Wrong Number	77	4.1%	
Fax	9	0.5%	
Other Language	1	< 0.0%	
Refused	76	4.0%	
Blocked Number	1	< 0.0%	
Respondent Terminated	4	0.2%	
No Longer with Company	18	0.9%	
Lives Outside of Study Area	22	1.2%	
Retired	7	0.4%	
Respondent Screened Out	2	0.1%	
Total	1,897	100.0%	
Total Dialings	6,025		
Average Dialings Per Complete	30.9		

APPENDIX B – SURVEY QUESTIONNAIRE

MWCOG 2016 Guaranteed Ride Home Survey - Internet Version

INTRODUCTION

Commuter Connections, a network of commuter transportation assistance organizations in the Baltimore/Washington region, is conducting this online survey or commuters who have registered for or participated in the Baltimore and St. Mary's County Regional Guaranteed Ride Home (GRH) program. The GRH program is marketed through the Maryland Transit Administration and is operated through the Commuter Connections program at the Metropolitan Washington Council of Governments.

Your answers will be confidential. It will take about 10 minutes. If you need to stop before you have finished the survey, your answers will be saved and you may come back and complete the remaining questions at a later time. If you need to go back to change an answer to a previous question, use the back button on your browser. Thank you for your participation

REGISTRATION INFORMATION

Q1.	In what year did	you first register	for the Baltimore	and St. Mary	s County C	GRH program?
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- 1 Before 2011 (SKIP TO Q2)
- 2 2011 (SKIP TO Q2)
- 3 2012 (SKIP TO Q2)
- 4 2013 (SKIP TO Q2)
- 5 2014 (SKIP TO Q2)
- 6 2015 (SKIP TO Q2)
- 7 2016 (SKIP TO Q2)
- 8 Never registered, don't recall registering (SKIP TO Q3)
- 9 Don't remember/don't know year registered
- 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)
- Q2 Are you currently registered for the GRH program?
 - 1 Yes (SKIP TO Q6)
 - 2 No (SKIP TO Q4)
 - 9 Don't know (SKIP TO Q4)
- Q3 Have you ever taken a GRH trip provided by the Baltimore and St. Mary's County GRH program?
 - 1 Yes
 - 2 No (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
Q5	Why did you not re-register when your registration expired?
	OPEN ENDED
Q6	Did you participate in another GRH program <u>before</u> registering for the Baltimore and St. Mary's County GRH program?
	1 Yes (ASK Q7)
	2 No (SKIP TO Q8)
	9 Don't know (SKIP TO Q8)
	Who offered/sponsored that program?
Q7	who offered/sponsored that program:
Q7	1 My employer
Q7	
Q7	 My employer County or city government (please specify) VRE
Q7	1 My employer2 County or city government (please specify)
Q7	 My employer County or city government (please specify) VRE
	 My employer County or city government (please specify) VRE
	 1 My employer 2 County or city government (please specify) 3 VRE 9 Other
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents)
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) Next, think about your travel to work. First, in a TYPICAL week, how many weekdays (Monday-Friday) are
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) Next, think about your travel to work. First, in a TYPICAL week, how many weekdays (Monday-Friday) are you assigned to work?
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) Next, think about your travel to work. First, in a TYPICAL week, how many weekdays (Monday-Friday) are you assigned to work? 1 day per week
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) Next, think about your travel to work. First, in a TYPICAL week, how many weekdays (Monday-Friday) are you assigned to work? 1 day per week 2 days per week 3 days per week 4 days per week
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) 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
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) Next, think about your travel to work. First, in a TYPICAL week, how many weekdays (Monday-Friday) are you assigned to work? 1 day per week 2 days per week 3 days per week 4 days per week
CURRE	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) 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
CURRE Q8	1 My employer 2 County or city government (please specify)
CURRE Q8	1 My employer 2 County or city government (please specify) 3 VRE 9 Other
CURRE Q8	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) 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 6 0 weekday (not currently working or work only on weekends) (THANK AND TEERMINATE) 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)
CURRE Q8	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) 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 6 0 weekday (not currently working or work only on weekends) (THANK AND TEERMINATE) 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)
CURRE Q8	1 My employer 2 County or city government (please specify) 3 VRE 9 Other ENT COMMUTE PATTERNS (Asked of all respondents) 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 6 0 weekday (not currently working or work only on weekends) (THANK AND TEERMINATE) 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)

- 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)
- Q10b How often do you usually telecommute?
 - 1 1 day a week
 - 2 2 days a week
 - 3 days a week
 - 4 4 days a week
 - 5 5 or more days a 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 Don't know
- Q10c In a <u>typical week</u>, how often are you away from your usual work location <u>for an entire day</u> 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 Don't know
- 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 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.

PROGRAMMER NOTES:

CHECK SUM OF DAYS. IF TOTAL NOT EQUAL TO 5, SHOW MESSAGE: "Please report for all days Monday – Friday, including days you do not work."

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 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 N/A Not used	
9 Bus (public or private bus, shuttle, Bridj, or buspool)	
10 Metrorail (Washington region)	
11 MARC (MD Commuter Rail)	
12 VRE	
13 AMTRAK / other train	
14 Bicycle (entire trip from home to work)	
15 Walk (entire trip from home to work)	
16 Taxi, Uber, Lyft, Split	
19 Metro Subway (Baltimore)	
20 Light rail	

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	
18 Other (describe)	

Total Days	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 <arpool or="" vanpool="">? (IF MORE THAN ONE ANSWER IN Q14, SELECT ONE USING THIS PRIORITY: vanpool, carpool, casual carpool.)</arpool>
	total people in pool

DEFINE CALTDAYS (days currently using alternative modes)

CALTDAYS = TOTAL Q14 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 20

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, 19, 20)

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

IF CALTDAYS > 0, SET CMCA AS FOLLOWS:

IF GREATEST NUMBER OF Q14, RESPONSES 5-15, R18, R19 =

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)

Q14 19 SET CMCA = 19 (Baltimore Metro Subway)

Q14_20 SET CMCA = 20 (Light rail)

IF TIE FOR MOST DAYS USED, SELECT IN THIS ORDER: VANPOOL, CARPOOL, BUS, VRE, MARC, BALTIMORE METRO SUBWAY, LIGHT RAIL, METRORAIL, AMTRAK, CASUAL CARPOOL, BIKE, WALK.

DEFINITION OF REGISTRATION STATUS (GRHTYPE)

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

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

IF Q1 = 1, 2, 3, 4, 5, 6, 7, OR 9 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 18), 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 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
- Q15 About how many miles do you usually travel from home to work one way? (ALLOW DECIMALS)

____ miles one way

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

minutes

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

Check sum of days using Personal vehicle (DA, CP, VP, Taxi) – 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) = 4 OR 5, INSERT V1 "What major roads do you use on your trip to work?"
- IF SUM OF (Q14_3 + Q14_4 + Q14_5 + Q14_6 + Q14_7 + Q14_16) = 1, 2, OR 3, INSERT V2, "On days that you drive or ride to work in a personal vehicle, what major roads do you use?"
- IF SUM OF (Q14_3 + Q14_4 + Q14_5 + Q14_6 + Q14_7 + Q14_16) = 0, INSERT V3, "If you were to drive to work, what major roads would you use?"
- Q16b **V1** "What major roads do you use on your trip to work?"
 - V2 "On days that you drive or ride to work in a personal vehicle, what major roads do you use?"
 - V3 "If you were to drive to work, what major roads would you use?"

THEN SHOW FOR ALL RESPONDENTS:

"What Interstate highways or major U.S. or state roads?"

DROP DOWN BOX FOR INTERSTATES

"What major state or US routes?"

DROP DOWN BOX FOR MAJOR STATE / US ROUTES

"Any other major county or city roads?"

OPEN-ENDED WRITE-IN BOX FOR OTHER ROADS

DROP DOWN BOX FOR Interstates

- 1 I-70 (MD)
- 2 I-83 (Jones Falls Expressway, JFX)
- 3 I-95 (MD Kennedy Highway)
- 4 I-95 (VA south of Washington DC)
- 5 I-97 (MD)
- 6 I-195 (Metropolitan Bldv / BWI Airport)
- 7 I-270 (MD)
- 8 I-295 (DC / MD)
- 9 I-395 (MD Cal Ripken Way)
- 10 I-395 (VA Shirley Highway)
- 11 I-495 (Capital Beltway Washington region)
- 12 1-695 (Baltimore Beltway)
- 13 I-795 (Northwest Expressway)
- 14 I-895 (Harbor Tunnel Thruway)

DROP DOWN BOX FOR Major State / US Routes

- 15 US Route 1 (Belair Road, Baltimore Pike, Bel Air Bypass, Conowingo Road)
- 16 US Route 29 (Columbia Pike, Colesville Road)
- 17 US Route 40 (Pulaski Highway)
- 18 MD 295, BW Parkway, Baltimore-Washington Parkway)
- 19 US Route 50 (John Hanson Highway)
- 20 US Route 301
- 21 MD 32
- 22 MD 100

Major Co/City roads - Open-ended - Coded in post-processing

- 23 MD 2
- 24 MD3
- 25 MD 4
- 26 MD 7 Philadelphia Road
- 27 MD 10
- 28 MD 22 Churchville Road, Aberdeen Thruway;
- 29 MD 23 East-West Highway, Norrisville Road;
- 30 MD 24 Vietnam Veterans Memorial Highway, Rock Spring Road;
- 31 MD 25 Falls Road
- 32 MD 26
- 33 MD 27
- 34 MD 30
- 35 MD 31 New Windsor Rd/Green Valley Rd/Main St/High St
- 36 MD 43
- 37 MD 45
- 38 MD 70 Rowe Blvd/Bladen St/Bestgate Rd
- 39 MD 94 Woodbine Rd
- 40 MD 97
- 41 MD 99 Old Frederick Rd
- 42 MD 103 Meadowridge Rd/Montgomery Rd/Dorsey Rd/Parkway Drive South/St. Johns La
- 43 MD 104 Waterloo Rd
- 44 MD 108
- 45 MD 132 W BelAir Ave/APG Rd
- 46 MD 136 Calvary Rd/Priestford Rd/Whiteford Rd/Harkins Rd
- 47 MD 139 Charles St
- 48 MD 140
- 49 MD 144 National Pike/Old National Pike/Frederick Rd/Pratt St
- 50 MD 146 Dulaney Valley Rd/Jarrettsville Pike
- 51 MD 147 Harford Road;
- 52 MD 150
- 53 MD 152 Mountain Road/Magnolia Rd/Fallston Rd
- 54 MD 155 Level Rd/Superior St/Ohio St

-		months (CONVERT YEARS TO MONTHS) Don't know
Q17	Abo	ut how long have you been using < CMCA > for your trip to work?
IF CMCA	= 5,	9 (no alt mode), SKIP TO INSTRUCTIONS BEFORE Q21 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, OR 20, CONTINUE WITH Q17
9	99	Other (specify)
Ģ	97	MD 924 – Emmorton Rd/Rock Springs Ave/Main St
		MD 755 – Edgewood Rd
		MD 715 – Short La
9	94	MD 713 – Rockenbach Rd/Ridge Rd/Arundel Mills Blvd
9	93	MD 702 – Southeast Blvd
9	92	MD 665 – Aris T Allen Blvd
9	91	MD 646 – Prospect Rd
9		MD 624 – Graceton Rd
		MD 623 – Castleton Rd/Flintville Rd
	88	MD 607 – Magothy Bridge Rd/Hog Neck Rd
	87	MD 543 – Riverside Pkwy/Creswell Rd/Fountain Green Rd/Ady Rd
		MD 482 – Hampstead Mexico Rd
	84 85	MD 450 – Defense Hwy/West St/College Ave/King George St/Annapolis Rd/Crain Hwy MD 462 – Paradise Rd
		MD 440 – Dublin Rd MD 450 – Defense Hwy/West St/College Ave/King George St/Appapolis Rd/Crain Hwy
	82	MD 439 – Old York Rd
		MD 279 – Elkton Rd/Newark Ave
		MD 273 – Rising Sun Rd/Telegraph Rd
		MD 272 – Turkey Point Rd/Mauldin Ave/Northeast Rd/Chrome Rd
		MD 270 – Furnace Branch Rd
		MD 268 –North St
		MD 256 – Deale Rd/Deale Churchton Rd
		MD 253 – Mayo Rd
-	74	MD 242 – Colton Point Rd
-	73	MD 222 – Aiken Ave/Perryville Rd/Bainbridge Rd/Main St/Susquehanna River Rd
-	72	MD 216
•		MD 214
		MD 213 – Augustine Herman Hwy/Bohemia Ave/Bridge St/Singerly Rd/Lewisville Rd
		MD 198 – Laurel Ft. Meade Rd/Spencerville Rd/Old Columbia Pike/Sandy Spring Rd
	68	MD 194
		MD 178 – Generals Hwy
		MD 177
	64 65	MD 176 – Dorsey Rd
	63 64	MD 174 – Reece Rd/Donaldson Ave/Quarterfield Rd MD 175 – Annapolis Rd/Jessup Rd/Waterloo Rd/Rouse Pkwy
	62 63	MD 173 – Fort Smallwood Rd/Hawkins Point Rd/Pennington Ave/Patapsco Ave
		MD 170 – Telegraph Rd/Aviation Blvd/Camp Meade Rd/Belle Grove Rd
		MD 168 – Nursery Rd
		MD 165 – Baldwin Mill Rd/Federal Hill Rd/Pylesville Rd
!		MD 162 – Aviation Blvd
!	57	MD 161 – Darlington Rd
!	56	MD 159 – Perryman Rd/Old Philadelphia Rd
!	55	MD 156 – Aldino Rd

41

INSTRUCTIONS BEFORE Q19

IF Q14 NE 5, 6, 7, 9, 10, 11, 12, 13, 19, OR 20, SKIP TO INSTRUCTIONS BEFORE Q21.

IF Q14 = 5, 6, 7, 9, 10, 11, 12, 13, 19, OR 20, 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 + Q14_R19 + Q14_R20 = train
- Q19 How do you get from home to where you meet your <Q14 MODE: carpool, vanpool, bus, train>?
 - 1 Picked up at home by (or leave from home with) carpool/vanpool or driver (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 Another carpool/vanpool, including dropped off by household member
 - 5 Bicycle
 - 6 Motorcycle
 - 7 Walk
 - 8 I am the driver of carpool/vanpool
 - 9 Bus/transit
 - 19 Other (SPECIFY) ______
- Q20 How many miles is it one way from your home to where you meet your < Q14 MODE: carpool, vanpool, bus, train >?

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 Q2 = 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 <<u>registered</u>, <u>eligible></u> 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 days per week
 - 4 4 days per week
 - 5 5 days per week

And while you were <<u>registered, eliqible</u>> 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.

CHECK SUM OF DAYS. IF TOTAL NOT EQUAL TO 5, SHOW MESSAGE: "Please report for all days Monday – Friday, including days you did not work."

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 <u>Registered or Eligible</u> for GRH	Number of Days 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, Not used			
9 Bus (public or private bus, shuttle, Bridj, or buspool)			
10 Metrorail (Washington region)			
11 MARC (MD Commuter Rail)			
12 VRE			
13 AMTRAK / other train			
14 Bicycle (entire trip from home to work)			
15 Walk (entire trip from home to work)			
16 Taxi, Uber, Lyft, Split			
19 Metro Subway (Baltimore)			
20 Light rail			

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		
18 Other (describe)		
Total Days	Sum of 1-21	

<u>DEFINE DALTDAYS (Days using alt modes during GRH – past registrants only)</u>

DALTDAYS = TOTAL Q23 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 20

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, 19, 20)

IF DALTDAYS = 0, SET DMCA = 99 (no MCA)

IF DALTDAYS > 0, SET DMCA AS FOLLOWS:

IF GREATEST NUMBER OF Q23, R5-15, R18, R19 =

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)

Q23_19 SET DMCA = 19 (Baltimore Metro Subway)

Q23_20 SET DMCA = 20 (Light rail)

IF TIE FOR MOST DAYS USED, SELECT DCMA IN THIS ORDER: VANPOOL, CARPOOL, BUS, VRE, MARC, BALTIMORE METRO SUBWAY, LIGHT RAIL, 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 <u>before you heard about</u> 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 days per week
 - 4 4 days per week
 - 5 5 days per week

IF Q24 = 0, AUTOCODE Q26, RESPONSE 21 (did not work then) = 5, THEN SKIP TO DEFINE BHALTDAYS

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.

CHECK SUM OF DAYS. IF TOTAL NOT EQUAL TO 5, SHOW MESSAGE: "Please report for all days Monday – Friday, including days you did not work."

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 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	
&-N/A, Not used	
9 Bus (public or private bus, shuttle, Bridj, or buspool)	
10 Metrorail (Washington region)	
11 MARC (MD Commuter Rail)	
12 VRE	
13 AMTRAK / other train	
14 Bicycle (entire trip from home to work)	
15 Walk (entire trip from home to work)	
16 Taxi, Uber, Lyft, Split	
19 Metro Subway (Baltimore)	
20 Light rail	

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		
18 Other (describe)		
21 Did not work Monday-Friday then, did not work in Baltimore area then		
Total Days	Sum of 1-21	

<u>DEFINE BHALTDAYS (Days using alt modes before heard about GRH - OTE)</u> **BHALTDAYS = TOTAL Q26 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 20**

<u>DEFINE BHMCA (Most Common Alternative before respondent heard about GRH - OTE)</u>

Set BHMCA using Q26 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 20)

IF BHALTDAYS = 0, SET BHMCA = 99 (no MCA)
IF BHALTDAYS > 0, SET BHMCA AS FOLLOWS:
IF GREATEST NUMBER OF Q26, R5-15, R18, R19 =
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)
Q26_19 SET BHMCA = 19 (Baltimore Metro Subway)
Q26_20 SET BHMCA = 20 (Light rail)

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

NOW SKIP TO Q29a (DEFINE GRH CHANGE)

MODE BEFORE REGISTERED FOR GRH (Current Registrants, Past Registrants)

- Q27 Now, please think back to the time <u>before you registered</u> 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 Baltimore area then
 - 1 1 day per week
 - 2 2 days per week
 - 3 days per week
 - 4 4 days per week
 - 5 5 days per week

IF Q27 = 0, AUTOCODE Q29, RESPONSE 21 (not working M-F) = 5, THEN SKIP TO BRALTDAYS

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.

CHECK SUM OF DAYS. IF TOTAL NOT EQUAL TO 5, SHOW MESSAGE: "Please report for all days Monday – Friday, including days you did not work."

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 REPPORT "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 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, Bridj, or buspool)	
10 Metrorail (Washington region)	
11 MARC (MD Commuter Rail)	
12 VRE	
13 AMTRAK / other train	
14 Bicycle (entire trip from home to work)	
15 Walk (entire trip from home to work)	
16 Taxi, Uber, Lyft, Split	
19 Metro Subway (Baltimore)	· ·
20 Light rail	· ·

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	
18 Other (describe)	
21 Did not work Monday-Friday then, did not work in Baltimore area then	
Total Days	Sum of 1-21

```
<u>DEFINE BRMCA (Most Common Alt Mode before registering for GRH (Current, Past)</u>

Set BRMCA using Q29 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 20)
```

```
IF BRALTDAYS = 0, SET BRMCA = 99 (no MCA)
IF BRALTDAYS > 0, SET BRMCA AS FOLLOWS:
IF GREATEST NUMBER OF Q29, R5-15, R18, R19 =
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)
Q29_19 SET BRMCA = 19 (Baltimore Metro Subway)
Q29_20 SET BRMCA = 20 (Light rail)
```

IF TIE FOR MOST DAYS USED, SELECT BRCMA IN THIS ORDER: VANPOOL, CARPOOL, BUS, VRE, MARC, BALTIMORE METRO SUBWAY, LIGHT RAIL, 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
IFGRHTYPE = 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, 13, 19, OR 20, 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 before you registered for GRH. How important was the availability of GRH to your decision to start <CMCA <u>carpooling</u>, <u>vanpooling</u>, <u>using transit</u>, <u>biking</u>, or <u>walking (FROM Q14)>?</u>
 - 1 very important
 - 2 somewhat important
 - 3 not at all important
 - 9 Don"t know

SKIP TO Q33

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

- Q31 You said that you regularly drove alone before you registered for GRH. How important was the availability of GRH to your decision to start <DMCA <u>carpooling, vanpooling, using transit, biking, or walking (FROM Q23)>?</u>
 - 1 very important
 - 2 somewhat important
 - 3 not at all important
 - 9 Don't know

SKIP TO Q34

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

- You said that you regularly drove alone 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 Don't know

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 <u>carpooling</u>, <u>vanpooling</u>, <u>using transit</u>, <u>biking</u>, <u>or walking</u> (FROM Q14)>?
 - 1 very likely
 - 2 somewhat likely
 - 3 not at all likely
 - 9 Don't know

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 <u>carpooling</u>, <u>vanpooling</u>, <u>using transit</u>, <u>biking</u>, <u>or walking (FROM Q23)>?</u>
 - 1 very likely
 - 2 somewhat likely
 - 3 not at all likely
 - 9 Don't know

SKIP TO Q44a

INSTRUCTIONS BEFORE Q35

Skip instruction for increased use of alt modes 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

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

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

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

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

SKIP TO Q44a

INSTRUCTIONS BEFORE Q40

Skips for Respondents who used alt modes before GRH but did not increase the number of days using alt modes, 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, 13, 19, OR 20 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, 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 <u>carpooling</u>, <u>vanpooling</u>, <u>using transit</u>, <u>biking</u>, <u>or walking (FROM Q29)></u> 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?
 - 1 very important
 - 2 somewhat important
 - 3 not at all important
 - 9 Don't know

SKIP TO Q43

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

- Q41 You said that you were <BRMCA <u>carpooling</u>, <u>vanpooling</u>, <u>using transit</u>, <u>biking</u>, <u>or walking (FROM Q29)></u> 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?
 - 1 very important
 - 2 somewhat important
 - 3 not at all important
 - 9 Don't know

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 <u>carpooling</u>, <u>vanpooling</u>, <u>using transit</u>, <u>biking</u>, <u>or walking (FROM Q26)></u> 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?
 - 1 very important
 - 2 somewhat important
 - 3 not at all important
 - 9 Don't know

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

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

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 1-10, SHOW "90-no services" AT THE END OF THE LIST. ACCEPT MULTIPLES FOR 1-10, 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
- 9 Bicycling information, online bicycle route planning
- 10 Special events information (e.g., Bike to Work Day, Car Free Day)
- 90 Did not receive or access any of these services (PROGRAMMER: GREY OUT THIS BOX IF ANY OTHER RESPONSE IS CHECKED)

IF Q29a = 4 OR 9, SKIP TO Q49

IF Q44a = ONLY 90 OR IS LEFT ENTIRELY BLANK OR IF Q44a NE ANY OF 1-10, SKIP TO INSTRUCTIONS BEFORE Q45 IF Q44a = ANY OF 1-10, 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, 13, 19, OR 20, INSERT use transit

IF CMCA, DMCA = 14, INSERT bike IF CMCA, DMCA = 15, INSERT walk

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

SHOW RESPONSES 1-10 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
- 9 Bicycling information, online bicycle route planning
- 10 Special events information (e.g., Bike to Work Day, Car Free Day)
- 98 No, services were not important
- 99 Left blank

SKIP TO INSTRUCTIONS BEFORE Q45

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 1-10 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
- 9 Bicycling information, online bicycle route planning
- 10 Special events information (e.g., Bike to Work Day, Car Free Day)
- 98 No, services were not important
- 99 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, 13, 19, OR 20, 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)

(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)

	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) 3 Don't know (SKIP TO Q49)
Q48	What other factors or circumstances were important to your decision? OPEN ENDED

REFERRAL SOURCES FOR GRH, GRH ADVERTISING RECALL

7 Unscheduled overtime8 Missed carpool/vanpool9 Other (SPECIFY) ______

Q49	How did you hear about the GRH Program?
	OPEN ENDED
Q50	Have you heard, seen, or read any advertising about GRH?
	 yes no (SKIP TO Q54) Don't know (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
Q53	Did the advertising encourage you to seek information about GRH or to register for GRH? 1 yes 2 no 9 Don't know
USE OF	<u>GRH</u>
IF Q3 =	1, AUTOCODE Q54 = 1, THEN SKIP TO Q55
Q54	Have you taken a GRH trip since you registered for GRH?
	 yes no (SKIP TO Q59) Don't know (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

Q56	Wa	s the service satisfactory?				
	1	Yes (SKIP TO Q58)				
	2	No				
	9	Don't know (SKIP TO Q58)				
Q57	Wh	Why was it not satisfactory? (Allow multiple responses)				
	1	Waited too long				
	2	Hard to get approval				
	3	Didn't like taxi/driver				
	4	Other (SPECIFY)				
Q58	Abo	out how long did you wait for the taxi to arrive?				
		minutes				
Q59	In v	what ways could Commuter Connections improve the GRH program?				
-		EN ENDED				
		de responses in the following categories in survey post-processing (ALLOW UP TO THREE RESPONSES)				
	1	Quicker response for GRH ride requests				
	2 3	Don't require registration Allow use of GRH if ridesharing/using transit less than twice per week				
	3 4	Allow more GRH trips in a year				
	5	Easier/faster approval process				
	6	Wider area for trips				
	88	·				
	99	·				
		DK				
<u>DEMO</u>	GRAP	<u>HICS</u>				
Now ju	ıst a f	ew last questions to help us group your answers with those of others.				
Q60	Wh	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				
	9	Prefer not to answer				
Q61	Do	you consider yourself to be Latino, Hispanic, or Spanish?				
	1	Yes				
	2	No				

Prefer not to answer

Q62	Which one of the following best describes your racial background. Is it (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)		
	9	Prefer not to answer		
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		
		\$180,000 - \$199,999		
	12	\$200,000 or more		
	19	Prefer not to answer		
Q64	Are	you female or male?		
	1	Female		
	2	Male		
	3	Prefer not to answer		

Thank you for taking the time to fill out our survey. Your input is very important to us!

APPENDIX C 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 Baltimore and St. Mary's County Regional Guaranteed Ride Home (GRH) program. The Metropolitan Washington Council of Governments (COG) will be overseeing this survey on behalf of *Commuter Connections* and the Maryland Transit Administration, 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 Baltimore and St. Mary's County Regional Guaranteed Ride Home (GRH) program. The Metropolitan Washington Council of Governments (COG) will be overseeing this survey on behalf of *Commuter Connections* and the Maryland Transit Administration, 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 <u>even if you are no longer registered in the program and/or have not used a GRH trip</u>. 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 Baltimore and St. Mary's County Regional Guaranteed Ride Home (GRH) program. The Metropolitan Washington Council of Governments (COG) will be overseeing this survey on behalf of *Commuter Connections* and the Maryland Transit Administration, 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.

http://proj.cicresearch.com/GRH16B.asp?id=XXXXXX

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 D Results from 2016 AND 2013 Surveys Comparison on Key Questions

Registration Information

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

	<u>2016</u>	<u>2013</u>
Current registrant	36%	56%
Past registrant	64%	44%
One-time exception	0%	0%

• Length of time in GRH – Percentage of all registrants

	<u>2016</u>	<u>2013</u>
Less than 1 year	10%	28%
1 year	21%	40%
2 years	15%	20%
3 years	11%	4%
More than 3 years	43%	8%

Reasons for not re-registering – Past registrants only

	<u>2016</u>	<u>2013</u>
<u>Program Related Reasons</u>		
Forgot, didn't get around to it	24%	20%
Didn't know I had to re-register	24%	12%
Dissatisfied, bad experience	6%	2%
Too much effort to use program	2%	2%
Had a problem with registering	1%	6%
Personal Circumstance Reasons		
Never used program	20%	21%
Couldn't CP/VP/use transit 2+ dy/wk, changed mode	9%	14%
Changed job/work hours	7%	7%
Moved to different residence	6%	5%
Needed car for work/other purpose	5%	%

GRH Information Sources

How heard about GRH – Percentage of all respondents

	<u>2016</u>	<u>2013</u>
Word of mouth – referral	36%	27%
Employer/employee survey	21%	23%
Internet	7%	11%
Other rideshare/transit org	7%	8%
Bus/train sign	5%	11%
Radio	3%	2%
Commuter Connections (other)	2%	1%
Brochure/promo materials	2%	3%
Bus/train schedule	2%	%
On-site fair/event	2%	0%
Direct mail/postcard from CC	1%	2%
Other	4%	6%

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

	<u>2016</u>	2013
Heard or saw GRH ad	41%	46%
Registered after hearing ads	24%	28%
Ad encouraged registration	20%	24%

Current Travel Information

• Current mode split – Primary mode

Current Registration	<u>2016</u>	<u>2013</u>
Drive alone/motorcycle/taxi	1%	1%
Vanpool	45%	29%
Bus	28%	33%
Subway/Light rail	10%	9%
Commuter Rail	10%	11%
Carpool	4%	9%
Bike/walk	1%	7%
Telework	1%	1%
Past Registrants	<u>2016</u>	<u>2013</u>
Drive alone/motorcycle/taxi	33%	41%
Vanpool	18%	13%
Bus	23%	24%
Subway/Light rail	12%	6%
Commuter Rail	0%	3%
Carpool	6%	3%
Bike/walk	4%	8%
Telework	4%	2%

• Average length of commute

	<u>2016</u>	<u>2013</u>
Distance (miles)	35.3 mi	29.9 mi
Time (minutes)	56 min	53 min

• "Pre-GRH" Modes vs "During-GRH" Modes (3+ days per 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)

Pre-GRH	<u>2016</u>	<u>2013</u>
Drive alone/motorcycle/taxi	39%	34%
Carpool/Vanpool	17%	16%
Bus	26%	28%
Subway/Light rail	10%	8%
Commuter Rail	5%	7%
Bike/Walk	3%	7%
<u>During-GRH</u>	<u>2016</u>	<u>2013</u>
<u>During-GRH</u> Drive alone/motorcycle/taxi	2016 4%	2013 5%
	<u> </u>	
Drive alone/motorcycle/taxi	4%	5%
Drive alone/motorcycle/taxi Carpool/Vanpool	4% 42%	5% 34%
Drive alone/motorcycle/taxi Carpool/Vanpool Bus	4% 42% 31%	5% 34% 33%

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

Pre-GRH	<u>2016</u>	<u>2013</u>
0 days/week	41%	34%
1 day/week	0%	1%
2 days/week	1%	2%
3 days/week	4%	4%
4 days/week	6%	9%
5 days/week	48%	50%
Average days/week	2.8	3.1
<u>During-GRH</u>	<u>2016</u>	<u>2013</u>
0 days/week	3%	3%
1 day/week	0%	1%
2 days/week	2%	2%
3 days/week	9%	11%
4 days/week	16%	14%
5 days/week	70%	69%
Average days/week	4.5	4.4

<u>Influence of GRH on Commute Pattern Decisions</u>

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

	<u>2016</u>	<u>2013</u>
Started using alternative mode	36%	29%
Increased alt mode use (frequency)	3%	3%
Maintained use of alternative mode	58%	63%
No alt mode "with-GRH"	3%	5%

Note this table does not include respondents who said they did not commute in the Baltimore 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>2016</u>	<u>2013</u>
n=	120	163
Very important	42%	54%
Somewhat important	36%	30%
Not at all important	22%	16%

• 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>2016</u>	<u>2013</u>
n=	9	15
Very important	33%	10%
Somewhat important	33%	37%
Not at all important	33%	53%

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

	<u>2016</u>	<u>2013</u>
n=	151	323
Very important	54%	34%
Somewhat important	25%	32%
Not at all important	21%	34%

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

	<u>2016</u>	<u>2013</u>
n=	119	163
Very likely	64%	54%
Somewhat likely	25%	32%
Not at all likely	11%	14%

• **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>2016</u>	<u>2013</u>
n=	10	15
Very likely	62%	60%
Somewhat likely	31%	25%
Not at all likely	7%	15%

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

	<u>2016</u>	<u>2013</u>
n=	149	317
Very likely	81%	70%
Somewhat likely	16%	21%
Not at all likely	3%	9%

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

	<u>2016</u>	<u>2013</u>
Save money	15%	19%
Didn't want to drive	12%	8%
Save wear and tear on vehicle	6%	6%
Save time	4%	4%
Stress / health / exercise	4%	5%
Commute ease/flexibility/convenience	3%	4%
Parking issues	3%	0%
Consistent/reliable, other options not reliable	2%	0%
No longer had a car	2%	2%
Help environment / reduce traffic	0%	7%
None	60%	52%

Use of and Satisfaction with GRH

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

	<u>2016</u>	<u>2013</u>
All respondents	21%	10%
By Registration Status		
- Current registrants	24%	33%
- Past registrants	16%	25%
By Mode Used "During-GRH"		
- Carpool		9%
- Vanpool	26%	15%
- Bus	20%	12%
- Commuter rail	14%	12%
- Subway/Light rail	13%	0%

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

	<u>2016</u>	<u>2013</u>
Illness (self)	29%	40%
Illness of family member	26%	8%
Illness of child	5%	3%
Illness of carpool partner	2%	0%
Unscheduled overtime	27%	26%
Other personal emergency	5%	18%
Missed CP/VP	3%	0%
Other	3%	5%

• Time waiting for taxi – Respondents who took a trip using a taxi

	<u>2016</u>	<u>2013</u>
5 minutes or less	11%	5%
6 – 10 minutes	9%	12%
11 – 20 minutes	29%	44%
21 – 30 minutes	19%	10%
31 – 45 minutes	12%	11%
46 or more minutes	20%	18%
Average (minutes)	28 min	27 min

• Improvements desired to GRH Program (multiple responses permitted)

	<u>2016</u>	<u>2013</u>
None needed	8%	10%
More advertising/more program information	16%	15%
Quicker response for ride requests	5%	4%
Notify when time to re-register	5%	3%
Easier/faster approval	4%	2%
Relax conditions/supervisor approval	3%	5%
Wider area for trips	2%	2%
Allow more trips per year	1%	2%
Extend the hours	0%	4%
Difficult to get/use/return rental cars	4%	0%
Other	10%	11%
Don't know / no suggestions	49%	49%

Demographics

States of Residence and Employment – all respondents

Residence	<u>2016</u>	<u>2013</u>
Delaware	1%	2%
District of Columbia	1%	2%
Maryland	71%	72%
New Jersey	6%	3%
Pennsylvania	6%	6%
Virginia	15%	14%
Other/Ref	0%	1%
<u>Employment</u>	<u>2016</u>	<u>2013</u>
Delaware	0%	0%
District of Columbia	1%	<1%
Maryland	98%	100%
New Jersey	0%	0%
Pennsylvania	0%	0%
Virginia	1%	<1%
Other/Ref	0%	0%

• Ethnicity/Racial background – all respondents

	<u>2016</u>	<u>2013</u>
Hispanic/Latino	7%	4%
White	61%	64%
Black/African-American	24%	21%
Asian	6%	8%
Other	2%	3%

• **Income** – all respondents

	<u>2016</u>	<u>2013</u>
Under \$40,000	8%	9%
\$40,000 – \$79,999	19%	27%
\$80,000 – \$119,999	35%	32%
\$120,000 – \$159,999	24%	20%
\$160,000 or more	14%	12%

• **Gender** – all respondents

	<u>2016</u>	<u>2013</u>
Female	47%	46%
Male	53%	54%

• **Age** – all respondents

	<u>2016</u>	<u>2013</u>
18 – 24	0%	3%
25 – 34	13%	16%
35 – 44	17%	24%
45 – 54	31%	32%
55 – 64	31%	21%
65 or older	8%	4%