



**Commuter Connections and
Maryland Transit Administration**

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

2013 GRH SURVEY REPORT

Prepared for:

**Metropolitan Washington Council of Governments
Commuter Connections Program**

Prepared by:

**LDA Consulting
Washington, DC**

In association with:

**CIC Research, Inc.
San Diego, CA**

November 19, 2013

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION	1
SECTION 2 – SURVEY AND SAMPLING METHODOLOGY	2
SURVEY GOALS	2
SAMPLE SELECTION PROCESS	2
QUESTIONNAIRE DESIGN	3
SURVEY ADMINISTRATION	3
WEIGHTING OF SURVEY DATA	4
COMPARISON OF RESULTS – TELEPHONE VS INTERNET	6
SECTION 3 - SURVEY RESULTS	7
CHARACTERISTICS AND DEMOGRAPHICS OF THE SAMPLE	7
- Home and Work Locations	
- Demographics	
REGISTRATION INFORMATION	9
- Registration Status	
- Year of Registration	
- Participation in Other GRH Programs	
- Time Participating in GRH	
- Reasons for Not Reregistering	
GRH INFORMATION SOURCES	13
- How Heard About GRH	
- GRH Advertising	
CURRENT COMMUTE PATTERNS	16
- Work Schedule	
- Current Commute Mode	
- Pool Occupancy	
- Commute Length	

Table of Contents (cont.)

COMMUTE PATTERNS BEFORE AND DURING PARTICIPATION IN GRH	18
- “During-GRH” Modes Compared with “Pre-GRH” Modes	
- “During-GRH” Days in Alternative Modes Compared with Pre-GRH” Days	
- Length of Time Using Current Alternative Modes	
INFLUENCE OF GRH ON COMMUTE PATTERN DECISIONS	22
- Types of Pre-GRH to During-GRH Commute Changes	
- Importance to Decision to Start, Maintain, or Increase Use of Alternatives	
- Likelihood to Make Alternative Modes Changes if GRH Not Available	
- Other Influences Motivating Commute Changes	
USE OF AND SATISFACTION WITH GRH	31
- Characteristics of Participants Who Used GRH Trips	
- Reasons for Taking GRH Trip	
- Satisfaction with Trip	
- Desired Improvements to the GRH Program	
SECTION 4 – CONCLUSIONS	35
- Program Participation Findings	
- Impact of GRH on Commute Patterns	
- Implications of Results for Travel and Air Quality Impact Assessment	
- Program Marketing Findings	
APPENDICES	37
- APPENDIX A – DISPOSITION OF FINAL DIALING RESULT	
- APPENDIX B – SURVEY QUESTIONNAIRE	

LIST OF TABLES AND FIGURES

<u>Tables</u>	<u>Page</u>
1 Sample Group Quotas and Population	3
2 Comparison of Sample Group and Total Population Distributions.....	5
3 Home and Work States	7
4 Race / Ethnicity	9
5 Registration Status as Defined by Respondent	10
6 Registration Status as Defined by Respondent Compared with Status Defined in Database	10
7 How Respondents Learned about GRH.....	13
8 Primary Mode During-GRH by Primary Mode Pre-GRH.....	20
9 Used GRH Trip	31
10 Time Waited for Taxi	33
11 Suggested Improvements to GRH Program	34

<u>Figures</u>	<u>Page</u>
1 Annual Household Income	8
2 Respondent Age Distribution	9
3 Year First Registered for GRH Program.....	11
4 Length of Time Registered in GRH Program by Survey Registration Status.....	12
5 Reasons Past Registrants Did Not Reregister	12
6 How Respondents Learned about GRH by Primary Mode Pre-GRH	14
7 Heard or Saw GRH Advertising by Year Registered for GRH	15
8 Influence of GRH Advertising	15
9 Current Primary Modes by Registration Status	17
10 Commute Distance (miles) – All GRH Registrants.....	18
11 Commute Travel Time (minutes) – All GRH Registrants	18
12 Primary Modes Used Pre-GRH and During-GRH	19
13 Days Using Alternative Modes Pre-GRH and During-GRH (Respondents who Increased Alternative Mode Frequency During-GRH)	21
14 Days using Alternative Modes Pre-GRH and During-GRH (All GRH Respondents)	21
15 Length of Time Using Alternative Modes - Current Alternative Mode Users	22

List of Tables and Figures (continued)

<u>Figures (continued)</u>	<u>Page</u>
16 Alternative Mode Changes from Pre-GRH to During-GRH	23
17 Importance of GRH to Start, Increase, or Maintain Alternative Mode Use	24
18 Importance of GRH to Maintain Alternative Mode by Alternative Mode Used Pre-GRH.....	24
19 Importance of GRH to Decisions to Start or Maintain Alternative Mode by Registration Registration Status – Current or Past.....	26
20 Likely to Start, Increase, or Maintain Use of Alternative Modes if GRH Not Available	26
21 Likely to Start or Maintain Alternative Modes Without GRH by Registration Status – Current or Past	27
22 Assistance or Benefits Received from Commuter Connections, in Addition to GRH	28
23 Assistance or Benefits Received from Commuter Connections, in Addition to GRH By Type of Commute Change Made	29
24 Commuter Connections Assistance or Benefits – More Important than GRH to Mode Decisions.....	30
25 Other Factors/Circumstances Important to Decision to Make a Change in Alternative Modes	31
26 Used GRH Trip by Primary mode Used During-GRH	32
27 Used GRH Trip by Commute Distance (miles)	32
28 Reason for Taking Most Recent GRH Trip.....	33

SECTION 1 - INTRODUCTION

This report presents the results of a Guaranteed Ride Home (GRH) survey of 543 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. This report is divided into three sections following this introduction:

- Section 2 – Description of the survey and sampling methodology
- Section 3 – Presentation of the survey results
- Section 4 – Conclusions from the survey results

Following these main sections are two appendices, including:

- Appendix A – Disposition of dialing results
- Appendix B – Survey questionnaire

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

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

SAMPLE SELECTION PROCESS

The set of eligible respondents for this survey included any commuter who registered or participated in the Baltimore and St. Mary's County GRH program between October 1, 2010 and March 15, 2013. Commuters who had active and valid registration status at the time of the survey were considered "current or Active registrants." But some commuters who had participated in the program during the sample period had let their registrations expire and a small number had their registrations cancelled by Commuter Connections. These registrants were considered to be "past or Inactive registrants."

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

In March 2013, the combined GRH database contained 2,281 records 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 database contained 2,192 records from which to draw the sample.

The survey was administered using Internet or telephone methods, depending on the contact information that respondents had provided in the GRH database. Commuter Connections opted to conduct survey interviews via Internet with applicants who had provided an email address for contact. Applicants who had not provided an email contact were contacted by telephone. 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.

For the 2013 Baltimore GRH survey, the evaluation team sampled from among the four groups and attempted to obtain completed interviews with a target number of 702 registrants. The sampling plan thus divided the targeted 702 completed interviews into Internet and telephone access groups, as well as past registrant and current registrant groups. Commuter Connections' online GRH system could be used to survey only current participants, because it required respondents to access the survey through their GRH accounts. This group of Current-Internet applicants comprised a total of 350 interviews. The LDA/CIC team was assigned to complete the remaining three sample groups: Past-Telephone (58 interviews), Past-Internet (252 interviews), and Current-Telephone (42 interviews).

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

Table 1
Sample Group Quotas and Population

Sample Group	Target Quota	Population
Telephone Administration		
Current Participants	42	83
Past Participants	58	144
Internet Administration		
Current Participants	350	1,141
Past Participants	252	824
TOTAL – All Groups	702	2,192

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 2013 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 before participating in GRH (Pre-GRH)
- Commute patterns while participation in GRH (During-GRH)
- Influence of GRH on commute choices
- Use of other, non-GRH services provided by Commuter Connections and other organizations
- Use of and satisfaction with GRH trips and the GRH Program
- 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

Telephone Interviews

A pretest was conducted for the Washington region's GRH survey, which was administered immediately prior to the Baltimore region's survey. Because the Baltimore version of the questionnaire was essentially the same as the Washington region's questionnaire, the Washington region's survey pretest results also were applied to the Baltimore questionnaire. An introductory letter customized to the Baltimore region's survey was designed and mailed to all past and current Baltimore region and St. Mary's County GRH participants who were included in the telephone survey, to introduce them to the upcoming study. The letter was mailed on May 9, 2013 by COG/TPB staff.

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 May 7 and June 21, 2013. Interviewers made all weekday calls from 1:00 p.m. to 8:45 p.m. EDT and all weekend calls from 1:00 p.m. to 7:00 p.m. EDT. Calls were first directed to the respondent's work number. If contact was unsuccessful, the respondent was called at home. If the call was answered by an answering machine, at least five more attempts were made to contact the respondent. A minimum of six 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 insure data quality, the survey supervisors conducted periodic random monitoring. Other quality assurance checks were performed after the data were collected.

A total of 29 initial telephone interviews were completed from the list of 227 current and past participants for the telephone interviewing effort. These included 16 surveys completed with current participants, and 13 surveys completed with past participants.

Due to the extremely low response rate to the Internet survey, the remaining 1,697 eligible Internet sample points that contained a telephone number as well as Internet contact information and who had not responded to the Internet survey, were loaded onto CIC's CATI server. An additional 312 telephone surveys were completed (217 with current participants and 95 with past participants) from this group. The group surveyed via the telephone had a refusal rate of 14.0 percent.¹ An average of 29.1 call attempts was made for each completed interview. A disposition of telephone dialing results can be found in Appendix A.

Internet Interviews

For the Internet survey of current and past participants, all 1,965 Baltimore sample points were sent to COG on May 9, 2013. COG/TPB Commuter Connections staff immediately sent out the letter of introduction containing a link to the survey and received "invalid/undeliverable email" returns from 13 current sample points and 46 past sample points. A total of 122 current participant web surveys were completed via the Commuter Connections online system and 80 past participant web surveys were completed via CIC's web-based CATI server.

On May 24, Commuter Connections sent an email reminder letter to all prospective participants who had not yet responded to the survey. Due to the extremely low response to the Internet survey, CIC Research was asked to complete the Internet quota via the telephone. A total of 312 surveys originally slated to be conducted via the Internet were consequently completed via the telephone.

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.

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 “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 participation group for the weighting variable – type of GRH participant.

Type of GRH Participant	Sample Group	Total Population
Current participant/registrant (Includes one-time exceptions)	65%	56%
Past participant/registrant	35%	44%

The differences between these groups test as statistically significant. As a result, each group was weighted to realign participant responses to the population groups. As anticipated, the sample group contained a higher proportion of current participants and a lower proportion of past participants, when compared to the total respondent group.

Table 2
Comparison of Sample Group and Total Population Distribution

Type of GRH Participant	Sample Group		Total Population
	n = __	Percentage	Percentage
Current Participants			
Telephone participants	233	42.9%	3.8%
Internet participants	122	22.5%	52.0%
Total Current Participants:	355	65.4%	55.8%
Past Participants			
Past telephone participants	108	19.9%	6.6%
Past Internet participants	80	14.7%	37.6%
Total Past Participants:	188	34.6%	44.2%
TOTAL – ALL PARTICIPANTS	543	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 543 interviews from a population of 2,133 (2,192 less undeliverable emails of 59) resulted in a level of confidence of 95% \pm 3.6% for the 2013 Baltimore region’s GRH survey.

COMPARISON OF RESULTS – TELEPHONE VS. INTERNET

CIC Research compared results from the total of all telephone surveys completed (n = 341), with the total of all Internet surveys completed (n = 202). The differences found include the following:

- Participants surveyed via the Internet (92%) were significantly more likely to respond that they were currently registered for the Commuter Connections GRH program than were those surveyed via the telephone (80%).
- Participants surveyed via the Internet were more likely to mention they typically use an alternate mode of transportation to travel work (94%) than were participants surveyed via the telephone (86%).
- A significantly greater proportion of Internet survey participants (76%) than telephone survey participants (62%) considered themselves to be of White ethnicity, whereas a significantly smaller proportion of Internet participants (16%) than telephone participants (25%) considered themselves to be of Black/African-American ethnicity.

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.

- 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

As shown in Table 3, the majority (72%) of respondents live in Maryland. About 14% live in Virginia and 2% live in the District of Columbia. The remaining 11% live north of Baltimore in Pennsylvania (6%), New Jersey (3%) or Delaware (2%). The distribution by work state is considerably different; essentially all (99.7%) of the respondents work in Maryland.

Table 3
Home and Work States
(n = 543)

State	Home State	Work State
Delaware	2%	0%
District of Columbia	2%	<1%
Maryland	72%	100%
New Jersey	3%	0%
Pennsylvania	6%	0%
Virginia	14%	<1%
Other	1%	0%

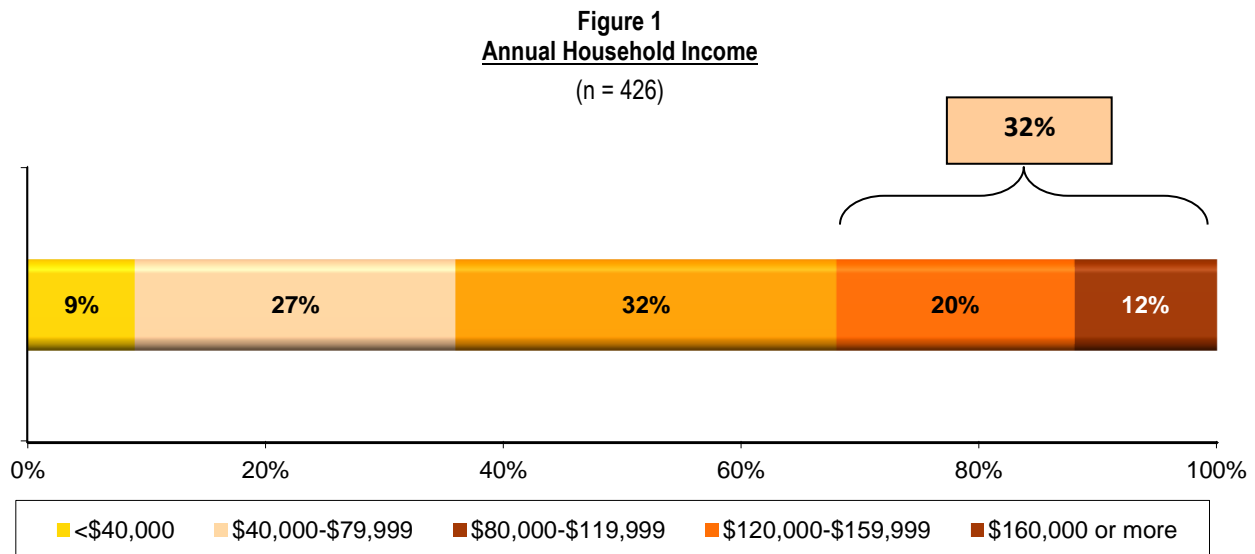
Top home locations for GRH registrants, each with at least 3% of total respondents, include:

<u>Home County</u>	<u>Percentage</u>
• Baltimore City, MD	21%
• Baltimore County, MD	15%
• Harford County, MD	13%
• Howard County, MD	6%
• Fairfax County, VA	6%
• York County, PA	4%
• Anne Arundel County, MD	3%

Demographics

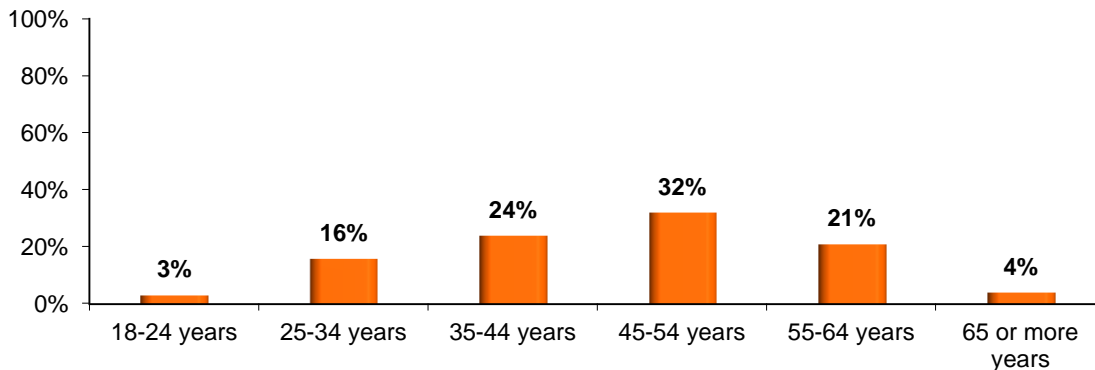
The survey asked respondents four demographic questions: gender, income, age, and ethnic group. Respondents were about evenly divided into male (54%) and female (46%) respondents. Details of other characteristics are presented below.

Income – Figure 1 presents the distribution of respondents' annual household income. More than six in ten respondents (64%) have household incomes of \$80,000 or more and 32% have incomes of \$120,000 or more.



Age –GRH participants are clustered in the middle and older age brackets (Figure 2). More than half (56%) are between the ages of 35 and 54 years old. Approximately two in ten (19%) are under 35 and one-quarter (25%) are 55 years or older.

Figure 2
Respondent Age Distribution
(n = 532)



Ethnic Background – Lastly, as shown in Table 4, Caucasians/Whites and African-Americans represent the two largest ethnic group categories of GRH survey respondents, 64% and 21% respectively. Asians account for about 8% and Hispanics represent 4% of respondents.

Table 4
Race / Ethnicity
(n = 495)

Ethnic Group	Percentage
African-American / Black	21%
Causasian / White	64%
Asian	8%
Hispanic	4%
Other	3%

REGISTRATION INFORMATION

Registration Status

As noted earlier, to facilitate respondents' understanding of survey questions the GRH database population was divided into categories by their registration status. Table 5 presents the distribution of respondents by these categories.

About seven in ten (73%) respondents said they are currently registered for GRH. Sixteen percent said they had been registered in the past, but are not currently participating. The remaining 11% said they didn't know if they were still registered.

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

(n = 543)

Registration Status	Percentage
Current registrants	73%
Past registrants	16%
Don't know	11%

The survey asked numerous questions relating to the times “before” and “while” participating in GRH. For this reason, respondents’ registration status is 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 GRH Database	Registration Status Perceived by Respondent	
	Current	Past
Current registrants (n = 308)	88%	12%
Past registrants (n = 230)	48%	52%

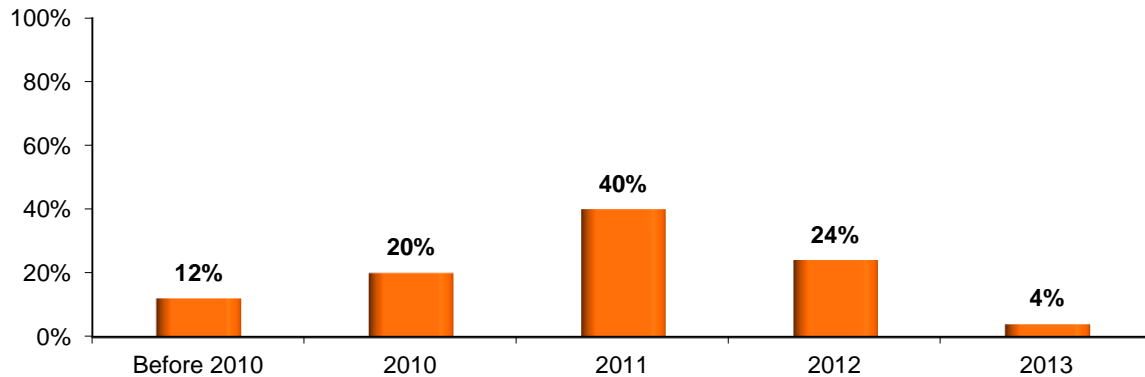
As shown, 88% of respondents whose database status is current correctly identified their status as current. The remaining 12% said they were no longer registered for the program, although their registration is actually current; they had registered or re-registered less than one year before the survey 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 is the 48% of respondents whose registration has expired, but who think they are still registered. It is possible these respondents do not realize they need to re-register each year, so assume they are still eligible for the program. These respondents were treated as “currently registered” in the survey and throughout the report.

Year of Registration

Respondents were asked the year they first joined the Baltimore and St. Mary’s County GRH program. Respondents in this survey were selected from those who had registered or re-registered between October 2010, when the Baltimore and St. Mary’s County GRH Program started, and March 15, 2013. As shown in Figure 3, 12% of surveyed respondents said they first registered for GRH before 2010. Since this was before the Baltimore GRH program started, these respondents likely were enrolled in the Washington region’s GRH program.

Figure 3
Year First Registered for GRH Program
 (n = 485)



Twenty percent said they registered in 2010, 40% registered in 2011, and 24% registered in 2012. Four percent said they registered in 2013, but the survey population included only 2013 registrants who joined GRH between January 1 through March 15. Note also, that 58 respondents (11% of the total 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 .

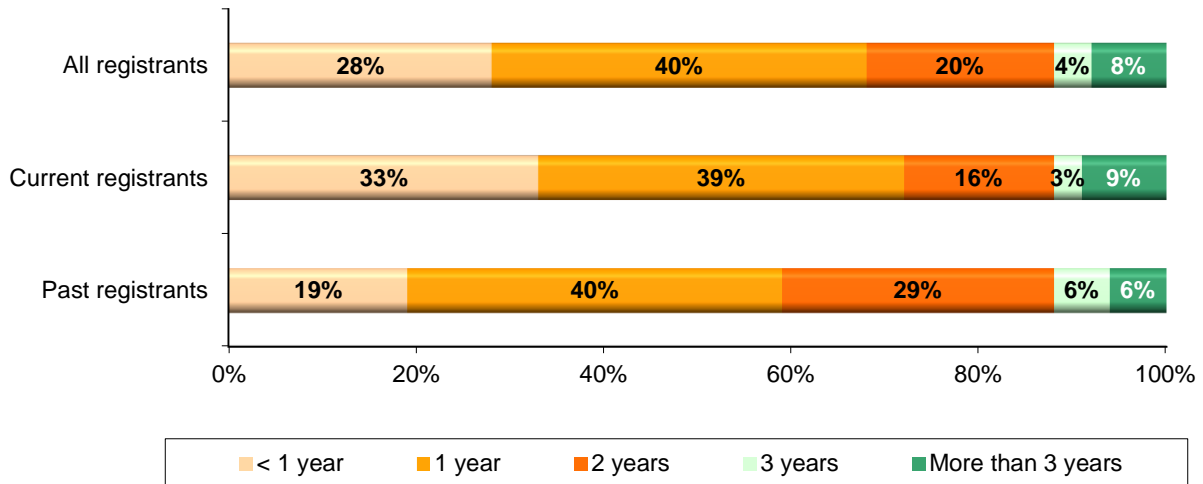
Participation in Other GRH Programs

When asked if they had participated in another GRH program prior to joining Commuter Connections' program, 35 respondents, about 7% of the total respondents surveyed, said they had participated previously in another program. Respondents mentioned participating in programs sponsored by a local government (6 respondents), BWI partnership (5%), Commuter Connections in Washington (4 respondents), and an employer (3 respondents). Eight respondents said the program was offered by another organization and nine respondents did not recall who sponsored the program.

Time Participating in GRH

Figure 4 shows how long respondents have been registered for the GRH Program, or in the case of past registrants, how long they were registered. About one-third (32%) of all respondents participated or have been participating for two or more years. Not surprisingly, the comparison of GRH duration for current and past registrants shows that a larger percentage of current registrants are new to the program – 33% of current registrants have been registered for less than one year, compared with 19% of past registrants.

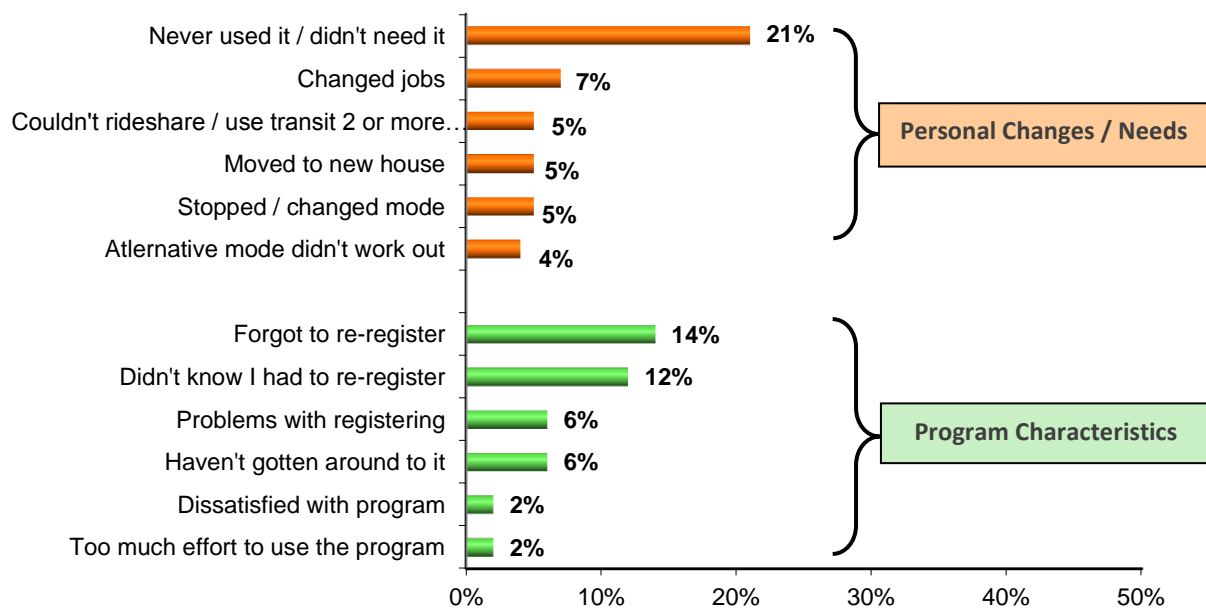
Figure 4
Length of Time Registered in GRH Program By Survey Registration Status
 (All registrants n = 485; Current registrants n = 379; Past Registrants n = 106)



Reasons for Not Reregistering

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

Figure 5
Reasons Past Registrants Did Not Re-Register
 (n = 120, multiple responses permitted)



The most common reason for not reregistering, mentioned by 21% of respondents, is that they had never used the program, thus didn't see a need for it. Seven percent changed jobs and 5% moved to new residence. More than one in ten cited a reason related to their ability to use alternative modes. Five percent said they couldn't rideshare or use transit two or more days per week, as required by the program rules. Similar shares of respondents said they stopped/changed modes (5%) or that the alternative mode they were using while they were in the program didn't work out (4%).

Respondents also mentioned reasons related to characteristics of the program; 14% of respondents forgot to register and 12% said they didn't know they had to reregister. Six percent said they hadn't gotten around to it and the same share said they had problems/difficulties reregistering. Only 2% were dissatisfied with the program/had a bad experience and 2% thought it was too much effort to use the program.

GRH INFORMATION SOURCES

How Heard About GRH

Commuters heard about the GRH Program from various sources. As shown in Table 7, more than one-quarter (27%) mentioned word of mouth/referrals as their source of information and 23% said they learned about GRH from their employer or a worksite survey. About one in ten respondents cited the Internet (11%) or a bus/train sign (11%) as their source, and 8% learned about GRH from another rideshare or transit organization.

Table 7
How Respondents Learned About GRH
(n = 120)

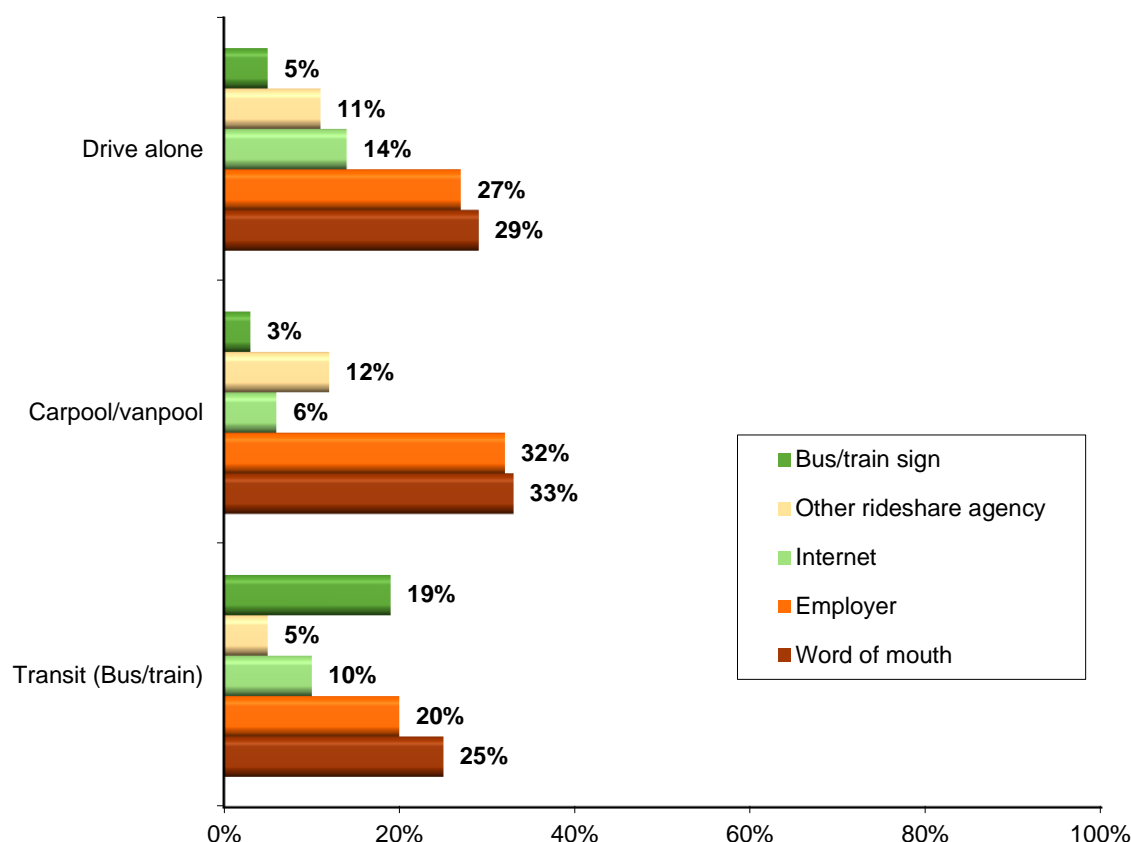
Information Source	Percentage
Word of mouth – referral	27%
Employer/employee survey	23%
Internet	11%
Bus/train sign	11%
Other rideshare/transit organization	8%
Brochure/promo materials	3%
Direct mail/postcard from CC	2%
Radio	2%
Commuter Connections	1%
Don't know / no answer	11%
Other *	6%

*Multiple responses permitted.

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

GRH Referral Source by Pre-GRH Commute Mode – As shown in Figure 6, word of mouth was an important referral sources for all respondents, regardless of the mode they used before they joined GRH, but some differences were noted by mode for other referral sources. Nearly two in ten (19%) transit riders said they learned about GRH from a bus or train sign, compared with only 5% of respondents who drove alone and 3% of respondents who carpooled or vanpooled before joining GRH. By contrast, another rideshare agency and employer were more common referral sources for registrants who drove alone and carpooled/vanpooled before GRH than for transit riders.

Figure 6
How Respondents Learned About GRH by Primary Mode Pre-GRH
 (Drive alone n = 185; Carpool/vanpool n = 84; Transit (bus/train) n = 229)

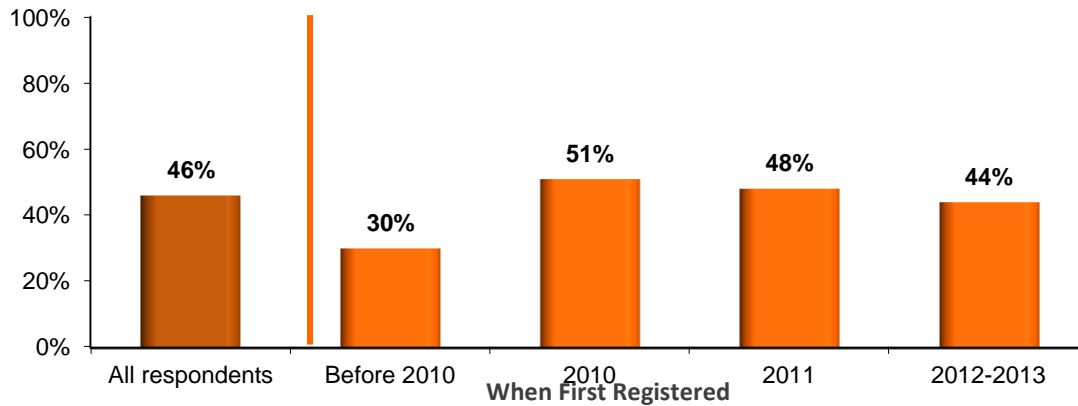


GRH Advertising

Heard or Saw GRH Advertising – When respondents were asked if they had heard, seen, or read any advertising about GRH, 46% of respondents said they recalled GRH advertising

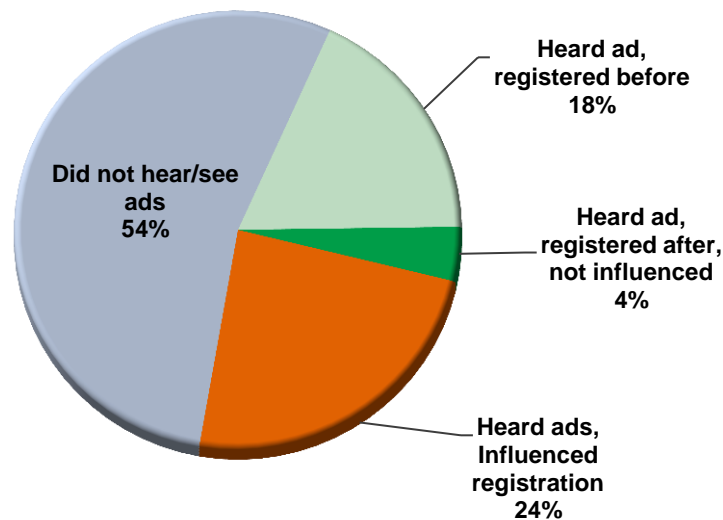
Respondents are more likely to have seen or heard GRH advertising if they registered soon after the program started in late 2010 or 2011 (Figure 7). Half (51%) who registered for Commuter Connections GRH in 2010 and 48% who registered in 2011 said they had heard or seen advertising, compared to 44% of respondents who registered in 2012 or 2013. Only 30% of respondents who said they registered before 2010 reported hearing or seeing GRH advertising.

Figure 7
Heard or Saw GRH Advertising by Year Registered for GRH
 (All n = 543, Before 2010 n = 55; 2010 n = 87; 2011 n = 192; 2012-2013 n = 151)



Influence of Ads on GRH Registration – Respondents who said they had seen or heard GRH advertising were asked if they had registered for GRH before they encountered the ads. Respondents who had not previously registered were asked if the ads influenced them to register. 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 = 543)



About two in ten (18%) saw or heard ads but had already registered for GRH. Four percent said they saw or heard the ads before they registered, but said the ads had not influenced them. And as noted previously, 54% of respondents said they had not seen any ads for the program. These groups, in total, represented registrants who were not influenced by the advertising (76%).

The remaining 24% 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 portion of registrants to join the program.

CURRENT COMMUTE PATTERNS

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

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

Commute pattern questions in the survey included:

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

Work Schedule

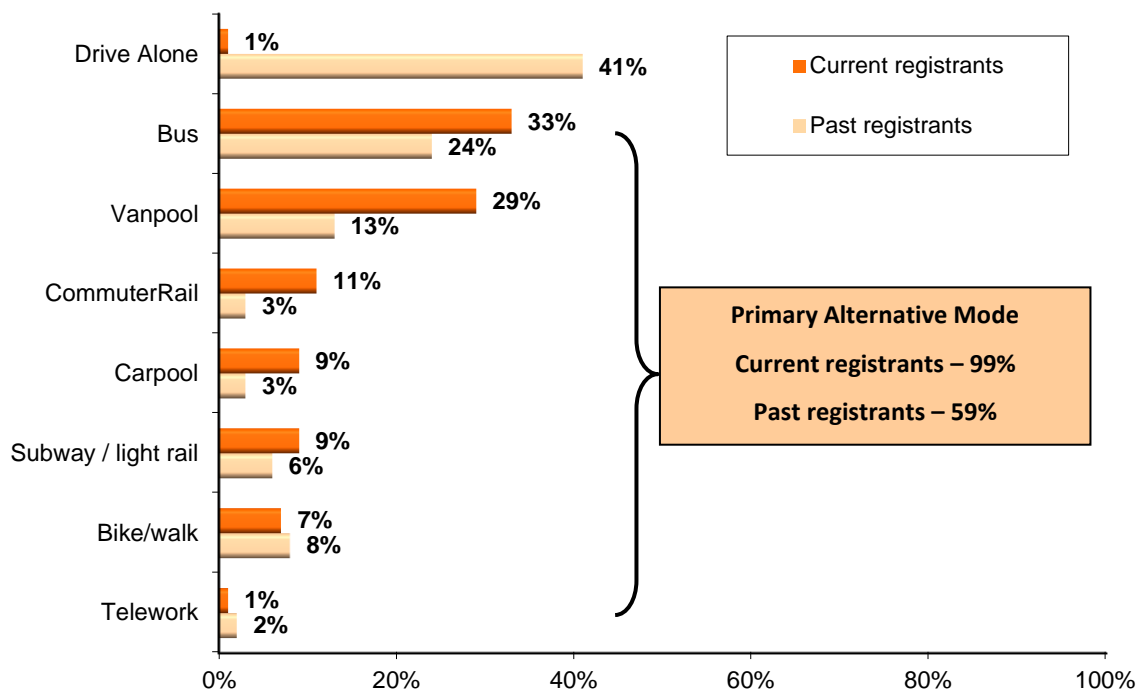
The overwhelming majority (97%) of respondents work full-time. But 9% work a compressed schedule in which they work a full-time schedule in fewer than five days; 4% work a 9/80 compressed schedule, with one weekday off in alternate weeks and 4% work a 4/40 schedule, with one weekday off each week. One percent work an "other" compressed schedule. These respondents were classified as working a five-day week for purposes of commute mode, with one-half, one, and two weekdays off each week, respectively.

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 various modes, based on the frequency with which they used the modes. Because it is expected that past respondents would have different modes from current respondents, these two groups are shown separately.

Current Registrants – Bus is the most common primary mode for current registrants. It is used by one-third (33%) of current registrants. Vanpool is the second most common primary mode, used by 29% of current registrants. Commuter rail, carpool, and subway / light rail each are used by about one in ten current registrants. Seven percent of current registrants primarily bike or walk to work and 1% telework. Only 1% of current registrants said they primarily drive 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
Current Primary Modes by Registration Status
 (Current Registrants n = 386; Past Registrants n = 157)



Past Registrants – Not surprisingly, past registrants are more likely than current registrants to drive alone; 41% of past registrants said this is their primary mode. But nearly six in ten (59%) past registrants said they still use an alternative mode most of the time. Thus they are still eligible for GRH, even though they no longer participate. Almost one-quarter (24%) ride a bus and 13% vanpool. Eight percent primarily bike/walk to work and 6% ride a subway or light rail train. Small percentages carpool, ride a commuter train, or telework as their primary mode.

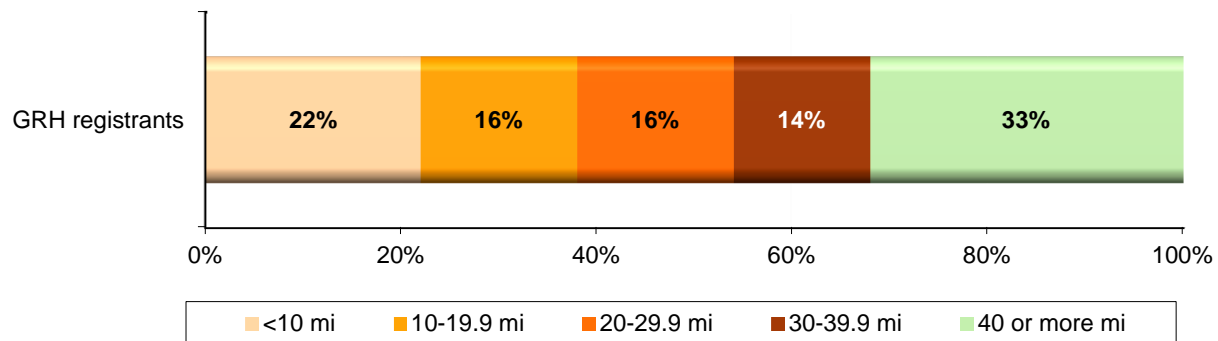
Primary Roads Used on the Trip to Work

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 Length

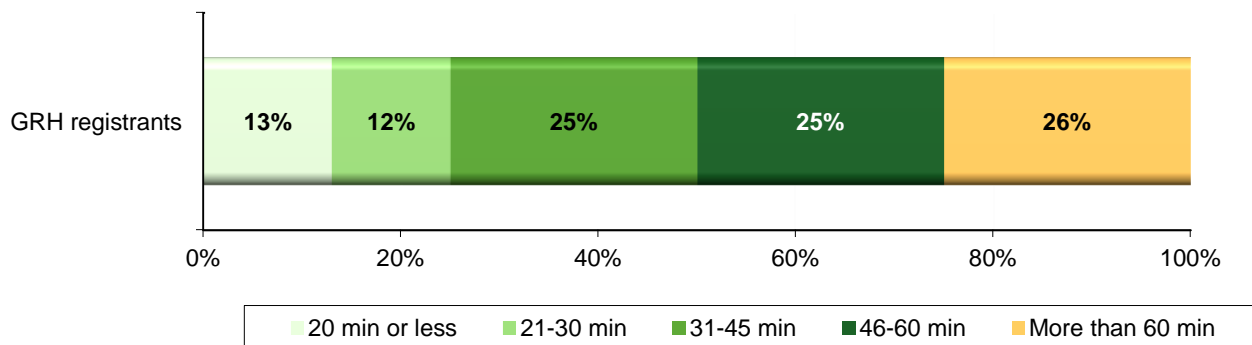
Commute Miles – Commuters in the survey sample have a wide range of commute distances, from less than one mile to more than 120 miles. Figure 10 shows results for this travel characteristic. The average one-way distance for GRH respondents is 29.9 miles. More than six in ten (63%) respondents travel 20 or more miles to work and 47% commute 30 or more miles to work

Figure 10
Commute Distance (miles) – All GRH Registrants
 (n = 534)



Commute Time – GRH participants commute, on average, about 53 minutes one way. As presented in Figure 11, half (51%) of GRH participants commute more than 45 minutes each way to work and 26% commute more than an hour.

Figure 11
Commute Travel Time (minutes) – All GRH Registrants
 (n = 540)



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. Three key research questions were examined – does GRH:

- Encourage commuters who were driving alone to shift to alternative modes?
- Encourage commuters who were using alternative modes to use them more days per week?
- Extend the duration of commuters' use of alternative modes?

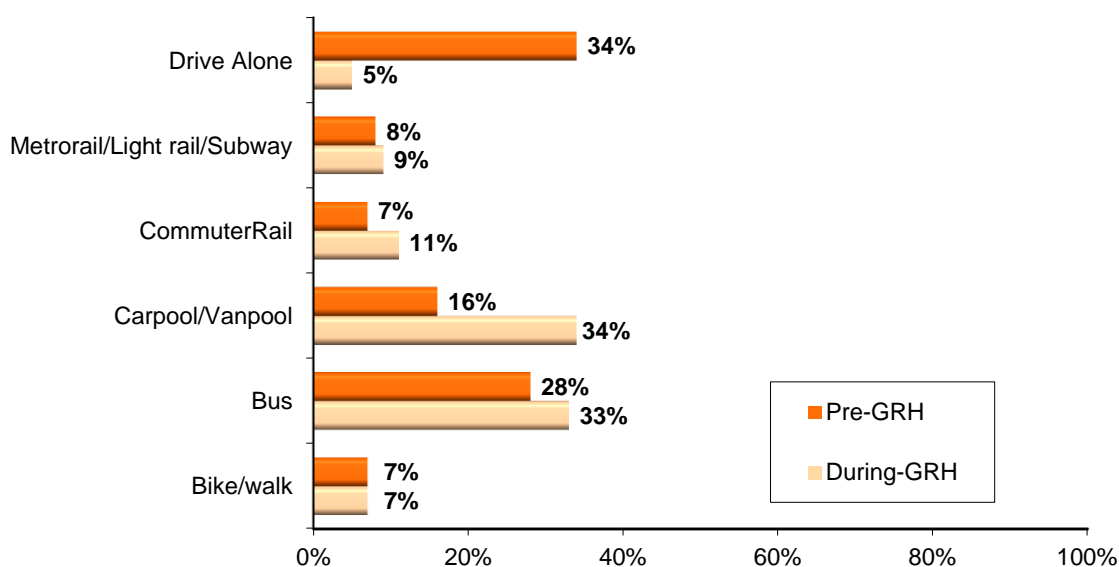
Survey results pertaining to these questions are presented below.

“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 12 presents a comparison of respondents’ primary modes before participating in GRH (pre-GRH) and while participating (During-GRH). Primary mode is defined as the mode used most days during a typical week: drive alone, Metrorail/Baltimore 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 12
Primary Modes Used Pre-GRH and During-GRH
 (During-GRH n = 543; Pre-GRH n = 2,140)



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, three percent of respondents said they were not living or working in the Baltimore area before joining GRH. These respondents did not have a “pre-GRH” primary mode and were removed from the base for both During-GRH and Pre-GRH.

As shown, 34% of respondents primarily drove alone pre-GRH. The primary drive alone mode share dropped to just 5% for the “During-GRH” time period and the share of respondents primarily using most alternative modes increased from the Pre-GRH to During-GRH time. Primary use of carpool/vanpool use increased from 16% pre-GRH to 34% During-GRH, bus use rose from 28% to 33%, and the share of respondents using commuter rail as their primary mode grew from 7% to 11%. Use of Metrorail/Light rail/Baltimore Subway and bike/walk appear to have declined, but these differences are not statistically significant.

Table 8 illustrates the mode changes respondents made from their primary “pre-GRH” mode to their primary “During-GRH” mode. As expected, drive alone users made the greatest mode changes. Three in ten (55%) drive alone

respondents shifted to carpooling or vanpooling and 32% shifted to transit. About 11% 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. For example, 87% of respondents who carpooled or vanpooled before they joined GRH continued to use these modes and 13% shifted to other modes.

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

Pre-GRH Mode	During-GRH Mode*					
	Drive Alone	Carpool / Vanpool	Bus	Subway / light rail	Bike/walk	Commuter rail
Drive alone (n = 185)	11%	55%	22%	4%	2%	6%
Alternative Modes						
- Carpool/vanpool (n = 84)	3%	87%	3%	2%	1%	4%
- Bus (n = 141)	1%	4%	89%	4%	1%	1%
- Subway/light rail (n = 43)	0%	4%	12%	79%	0%	6%
- Bike/walk (n = 38)	5%	2%	3%	2%	83%	5%
- Commuter rail (n = 37)	0%	0%	0%	0%	0%	100%

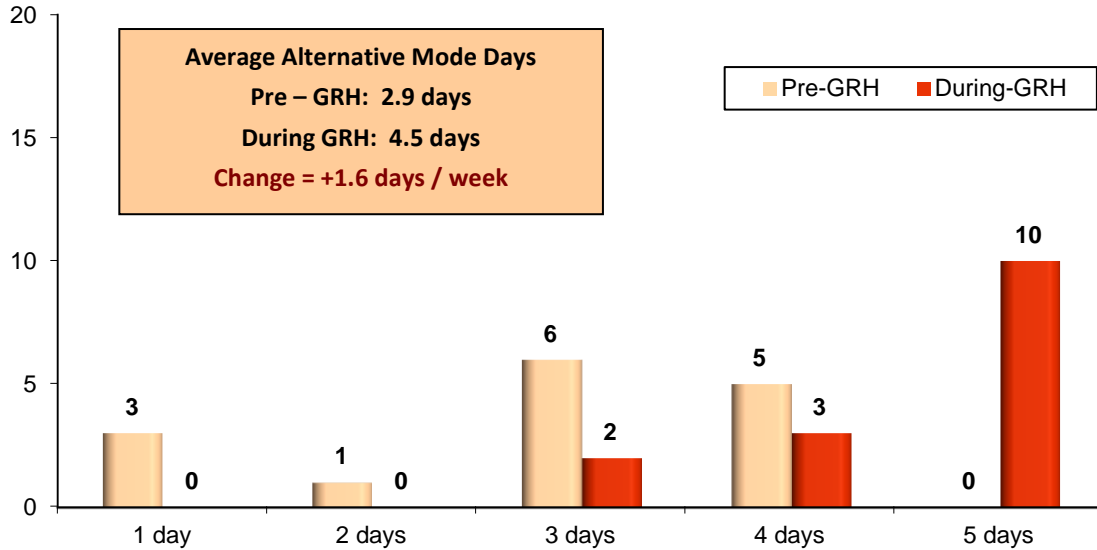
“During-GRH” Days in Alternative Modes Compared with “Pre-GRH” Days

Respondents Who Increased Alternative Mode Frequency – 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 use these modes after registering for GRH? Figure 13 shows the number of alternative mode days per week for these respondents, Pre-GRH and During-GRH. It was not possible to answer the question with confidence, due to a small sample; only 15 of the 543 respondents said they increased alternative mode frequency. But clearly, these respondents did increase their use of alternative modes.

Four respondents used alternative modes one or two days per week before joining GRH. But five of the 15 respondents who increased alternative mode use were using alternative modes four days per week and six were using alternative modes three days per week before they joined GRH, so most respondents could add only one or two days of alternative mode use per week. During their GRH registration period, 10 of the 15 respondents were full-time users of alternative modes, three used alternative modes four days per week and the remaining two used alternative modes three days. This is consistent with the change in the overall increase in average alternative mode days from 2.9 days to 4.5 days, or about 1.6 days per week increase per respondent.

Figure 13
Days Using Alternative Modes Pre-GRH and During-GRH
(Respondents Who Increased Alternative Mode Frequency During-GRH)

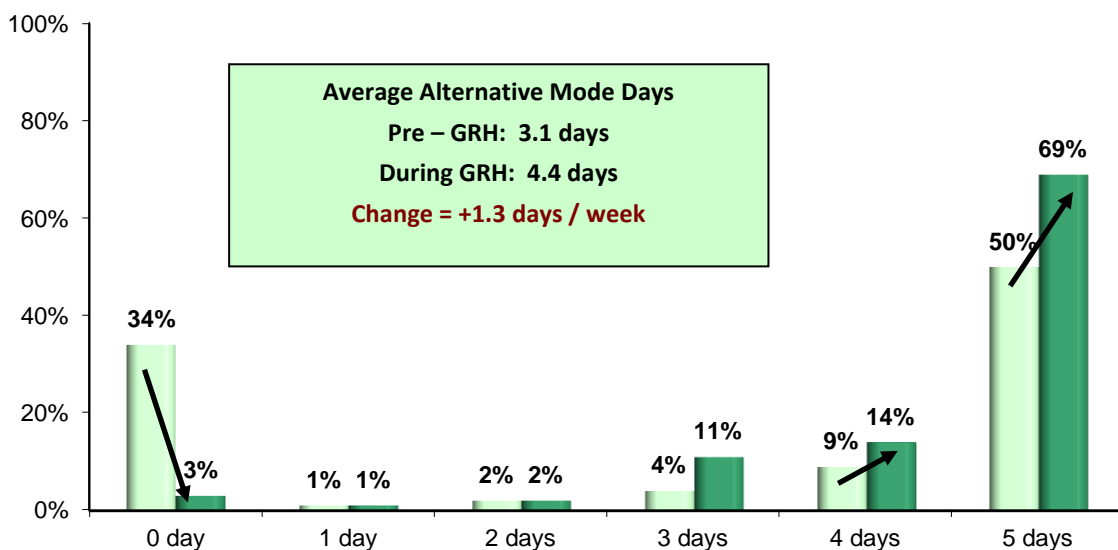
(n = 15; due to small sample size, actual respondents counts are shown, rather than percentages)



All GRH Respondents – The analysis also examined the overall frequency of alternative mode use for all GRH respondents. These results are shown in Figure 14.

Figure 14
Days Using Alternative Modes Pre-GRH and During-GRH (All GRH Respondents)

(During-GRH n = 543; Pre-GRH n = 542)



The average number of days all GRH participants used alternative modes increased, from 3.1 days per week to 4.4 days per week. But the majority of the increase came from respondents who did not use alternatives at all before joining 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.

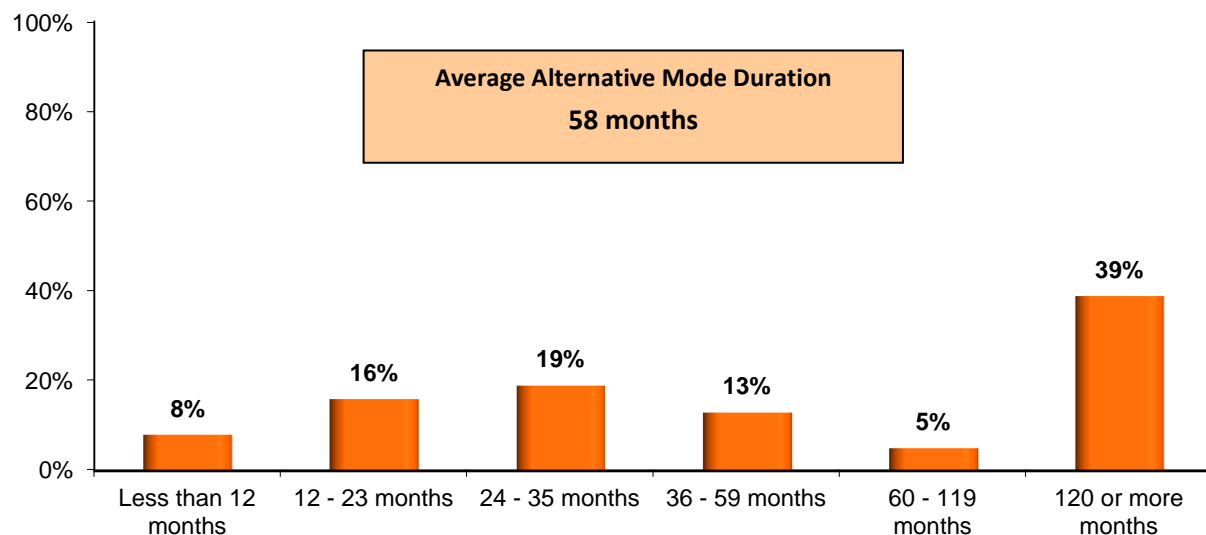
On a positive note, since there was very little change in the one-day, two-days, and three-days per week categories, it is clear that most of the respondents who never used alternatives before GRH started using alternatives four or five days per week During-GRH.

Length of Time Using Current Alternative Modes

The third research question examined the duration of alternative mode arrangements. Did GRH encourage participants to stay in alternative modes longer than they otherwise would have done? Respondents who said they used an alternative mode at least one day during the survey week were asked how long they have been using this form of transportation. Figure 16 presents this distribution for the survey results.

As presented in Figure 15, more than four in ten (44%) GRH participants said they have used their current alternative mode for five years or longer and three-quarters (76%) have used this mode for two years or more. On average they have used these modes for 58 months.

Figure 15
Length of Time Using Alternative Modes – Current Alternative Mode Users
(n = 473)



INFLUENCE OF GRH ON COMMUTE PATTERN DECISIONS

Types of Pre-GRH to During-GRH Commute Changes

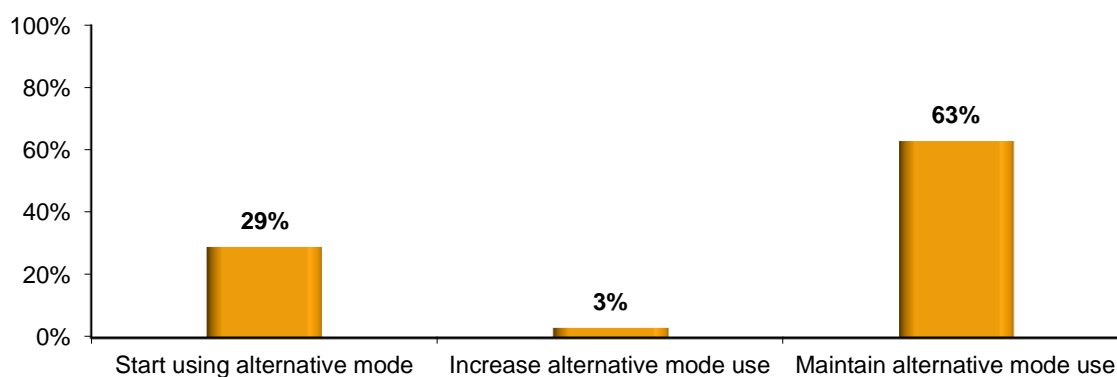
The comparison of pre-GRH and During-GRH commute patterns is only part of the question of GRH's impact. Also important is the value of GRH in motivating these changes. Three types of pre-GRH and During-GRH commute pattern combinations were examined:

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

Figure 16 presents a breakdown of respondents into these alternative mode change groups. About three in ten (29%) respondents said they started using a new alternative mode at the time or since they joined GRH. A small number of respondents (3%) increased the number of days they use alternative modes. The largest share of respondents (63%) said they maintained but did not increase use of an alternative mode that they were using before GRH. This is to be expected, since most respondents were using an alternative pre-GRH and most used alternative modes four or five days per week pre-GRH.

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

(n = 530 ; Totals will not add to 100% because some respondents said they did not use an alternative mode "During-GRH")



About 4% 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. The respondents who were not using an alternative mode could be explained by the fact that most of these respondents said they were current registrants, thus were not asked directly about their "During-GRH" modes; their "During-GRH" travel was set equal to their current travel. But if these respondents had recently stopped using alternative modes, they might have said they were currently registered, even though they were no longer really eligible for the program.

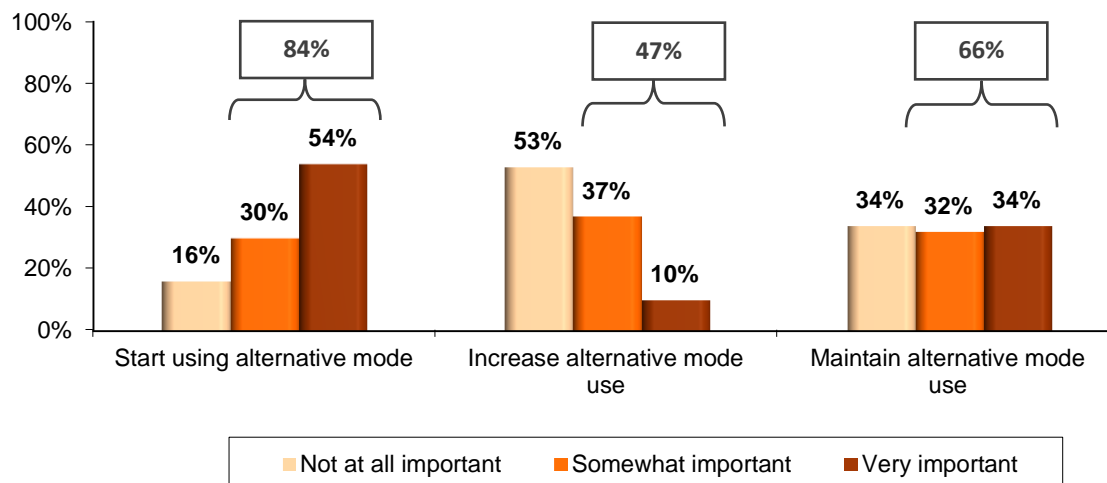
Importance to Decision to Start, Maintain, or Increase Use of Alternatives

For whichever of the three commute pattern categories that applied, respondents were asked how important GRH was to their commute decision.

Start Using Alternative Mode – Results presented in Figure 17 indicate that half (54%) of the respondents who drove alone pre-GRH and started using alternative modes during-GRH said GRH was "very important" to the decision to make the change. Three in ten (30%) said GRH was "somewhat important" to the decision. The remaining 16% said GRH was "not at all important."

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

(Start n = 163; Increase n = 15; Maintain n = 323)



Increase Use of Alternative Mode – Figure 17 also shows GRH’s importance to respondents who increased use of alternative modes. GRH appeared to be less important to this decision than for decisions to start use of alternatives. Only about half (47%) of these respondents said it was either “very important” or “somewhat important” to this decision, compared with 84% of respondents who started an alternative mode. About 53% said it was “not at all important” to the decision. But the sample for this group is small, relative to the start alternative mode group.

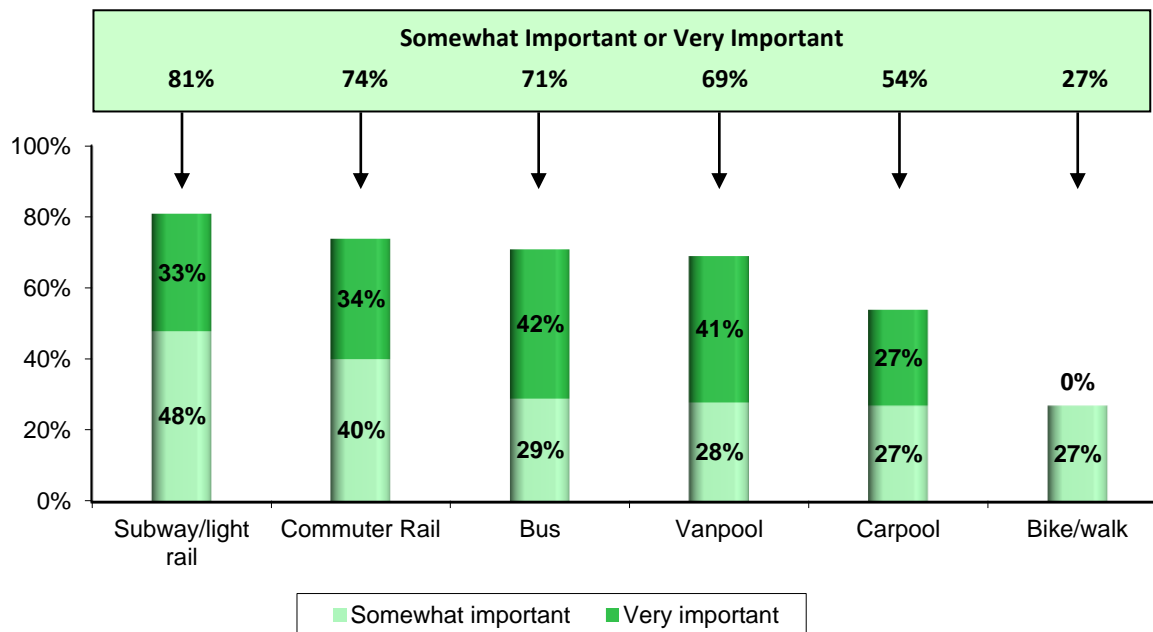
Maintain Use of Alternative Mode – Finally, Figure 17 shows the importance of GRH to respondents’ decisions to continue alternative modes they used before joining GRH. Two-thirds of respondents who maintained alternative mode use said GRH was “very important” (34%) or “somewhat important” (32%) to their decision.

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

Eight in ten (81%) respondents who were riding a subway or light rail pre-GRH and 74% who rode a commuter train said GRH had been somewhat or very important to their decision to continue using this mode. About seven in ten bus riders (71%) and vanpoolers (69%) rated GRH as important. Carpoolers and respondents who biked or walked to work rated GRH as less influential. One-quarter (27%) of carpoolers said GRH was very important and 27% said it was somewhat important. The service was considerably less important for bikers and walkers; none of these respondents rated GRH as very important and only 27% rated it as somewhat important.

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

(Carpool n = 39; Vanpool n = 38; Bus n = 136; Subway / light rail n = 40; Commuter Rail n = 35; Bike/walk n = 31)

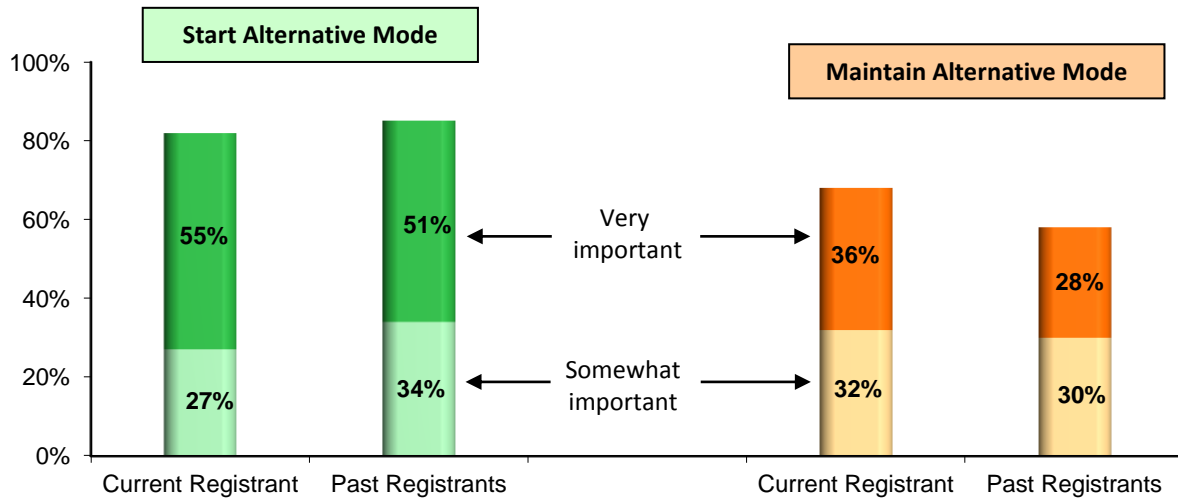


Importance of GRH by Registration Status – Results presented in Figure 19 show the relative importance of GRH to current registrants and past registrants. Among participants who started using an alternative mode, 82% of current registrants rated GRH as either important or very important and 85% of past registrants gave these high ratings. The small difference in these total ratings is not statistically significant, so past and current registrants were equally likely to consider GRH as important.

Among respondents who were using an alternative mode before joining GRH, current registrants were more likely to say GRH was important to their decision to continue using alternative modes; 68% of current registrants said GRH was important, compared with 58% of past registrants.

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

(Start alternative mode: Current registrants n = 131; Past registrants n = 32)
 (Maintain alternative mode: Current registrants n = 237; Past registrants n = 86)

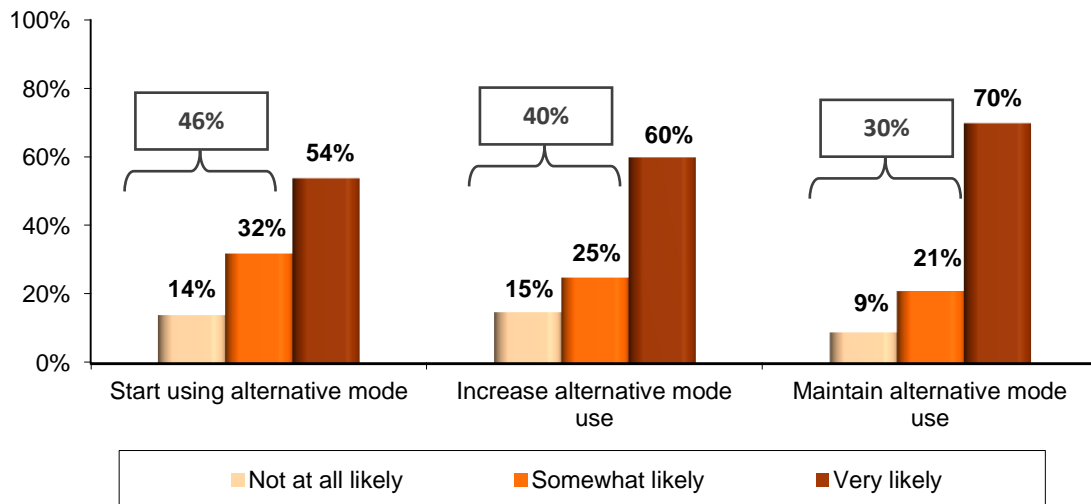


Likelihood to Make Alternative Mode Changes if GRH Not Available

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

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

(Start n = 163; Increase n = 15; Maintain n = 317)



Start Using Alternative Mode – Nearly half (46%) of respondents who started using alternative modes said they were only “somewhat likely” or “not at all likely” to have made the change if GRH had not been available. The remaining 54% said they were “very likely” to have made the change even if they did not have access to GRH.

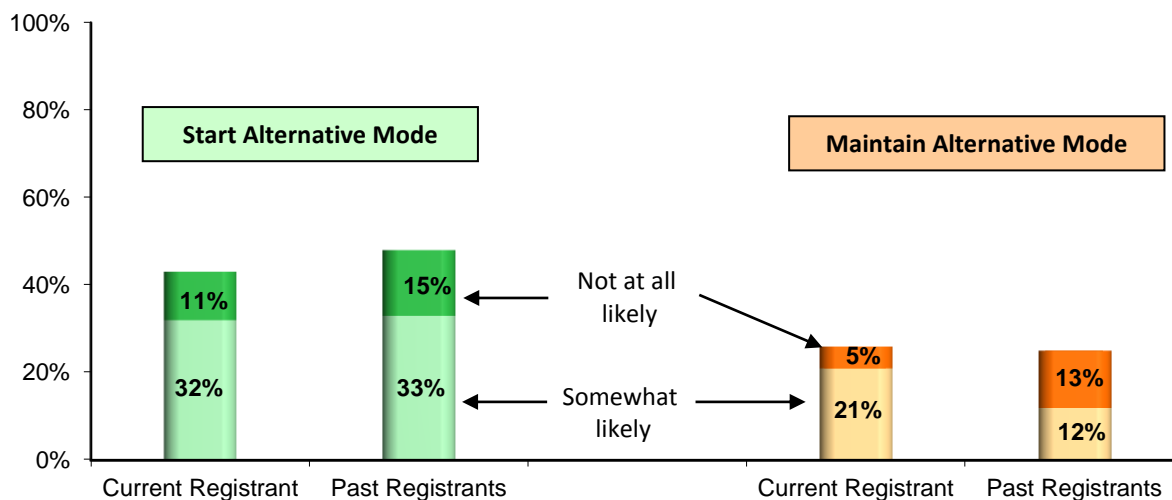
Increase Use of Alternative Mode – A small number (15) of respondents used alternative modes pre-GRH but increased their use of these modes while participating in GRH. GRH seemed to be of similar value to these respondents as to those who started using alternative modes. Fifteen percent were “not at all likely” to have made this change without GRH and 25% were only “somewhat likely” to have made this change.

Maintain Use of Alternative Mode – GRH seem to be less valuable to registrants who were using alternative modes and didn’t make any changes during GRH (maintained alternative mode); 70% said they were “very likely” to have continued in this mode if GRH had not been available. One-quarter (21%) said they were “somewhat likely” to have continued that mode; only 9% were “not likely” to have continued that mode without GRH.

Likelihood to Start or Continue Modes by Registration Status – Finally, Figure 21 shows differences between current and past registrants in likelihood to start or maintain alternative modes without GRH. There are no statistical differences between current and past registrants for their likelihood to start alternative modes; 43% of current registrants and 48% of past registrants said they were not at all likely or only somewhat likely to make the mode change without GRH. Among respondents who maintained alternative mode use, the overall likelihood to continue their commute mode also was about the same for both current (26%) and past (25%) registrants. But a significantly higher shares of past registrants (13%) than current registrants (5%) reported they were “not at all likely” to have continued using alternative modes.

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

(Start alternative mode: Current registrants n = 131; Past registrants n = 32)
(Maintain alternative mode: Current registrants n = 235; Past registrants n = 82)



Other Influences Motivating Commute Changes

Figures 17 through 21 presented an apparent contradiction. Despite the high percentage of respondents who rate 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 essential 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.

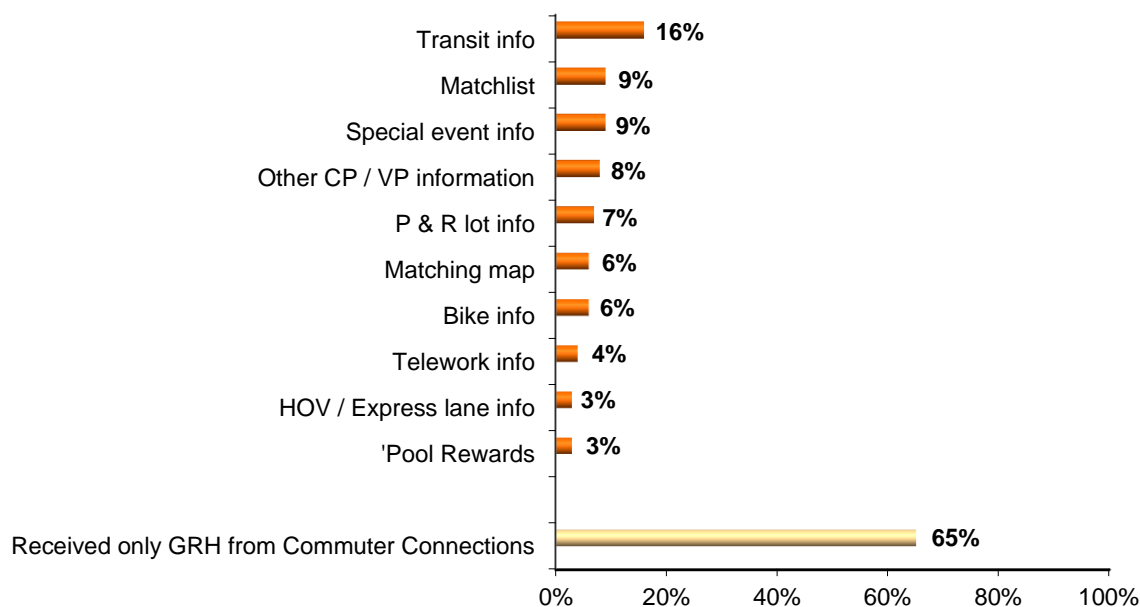
With this in mind, respondents were asked several questions to define other services or factors that could have influenced their mode choice decisions. First, all respondents were asked, “Do you recall receiving or accessing any of the following commute information or assistance services from Commuter 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 22 lists the services that respondents mentioned receiving from Commuter Connections, in addition to GRH. Nearly two-thirds (65%) said GRH was the only service they received from Commuter Connections. The other 35% noted one or more other services.

Figure 22
Assistance or Benefits Received from Commuter Connections, In Addition to GRH – All Respondents
(n = 543)

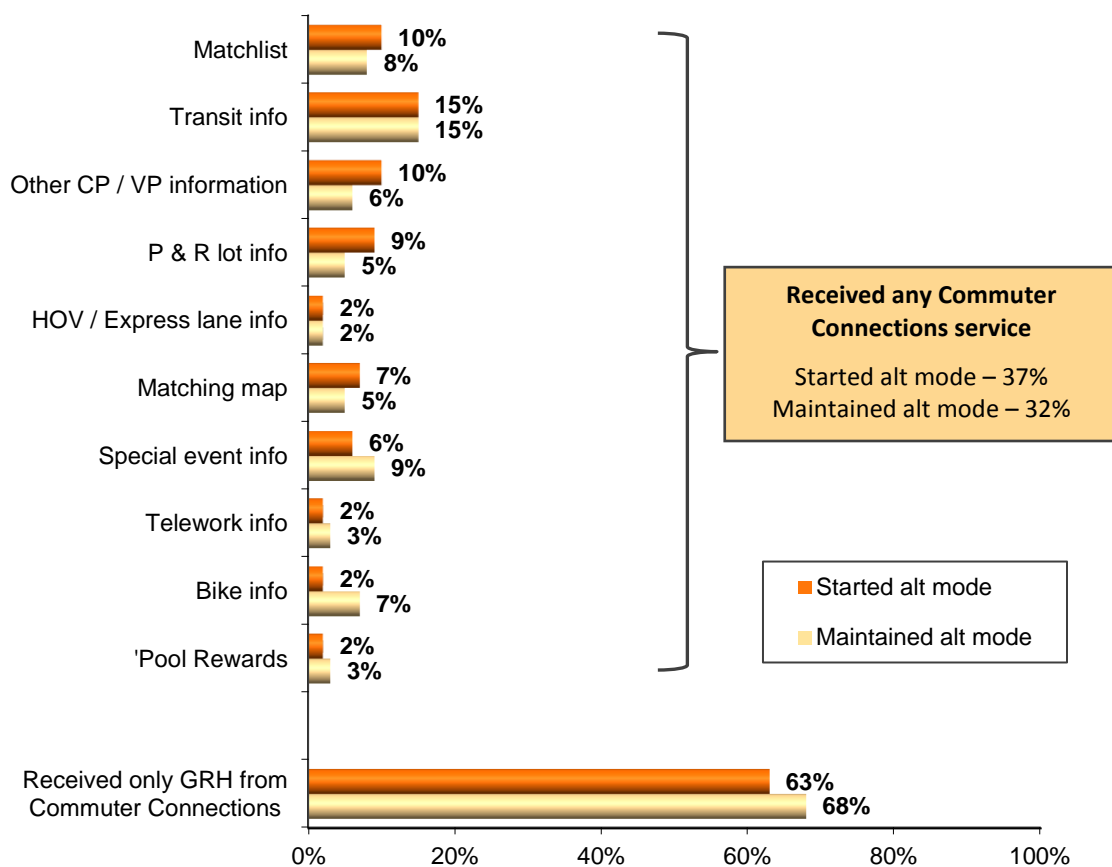


The most common services focused on transit information (16%) and carpool/vanpool assistance. About one in ten (9%) said they received a matchlist, with names of potential carpool/vanpool partners, 7% received a rideshare matching map, and 8% received “other” carpool or vanpool information. One in ten (9%) received information on special events, such as Bike-to-Work week, and 7% obtained Park & Ride lot information from Commuter Connections. Other services received from Commuter Connections included bike information (6%), telework information (4%), HOV / Express lane information (3%), and the ‘Pool Rewards financial incentive (3%).

Figure 23 shows the same services, with respondents divided into groups by the type of commute change they reported from the Pre-GRH to During-GRH time period: Started alternative mode or Maintained alternative mode (used an alternative mode before GRH and continued in that mode with no change).

Figure 23
Assistance or Benefits Received from Commuter Connections, In Addition to GRH – By Type of Commute Change Made

(Started alt mode n = 163; Maintained alt mode n = 334
 (Note: Increased alt mode changes not shown, due to small sample size n = 15)

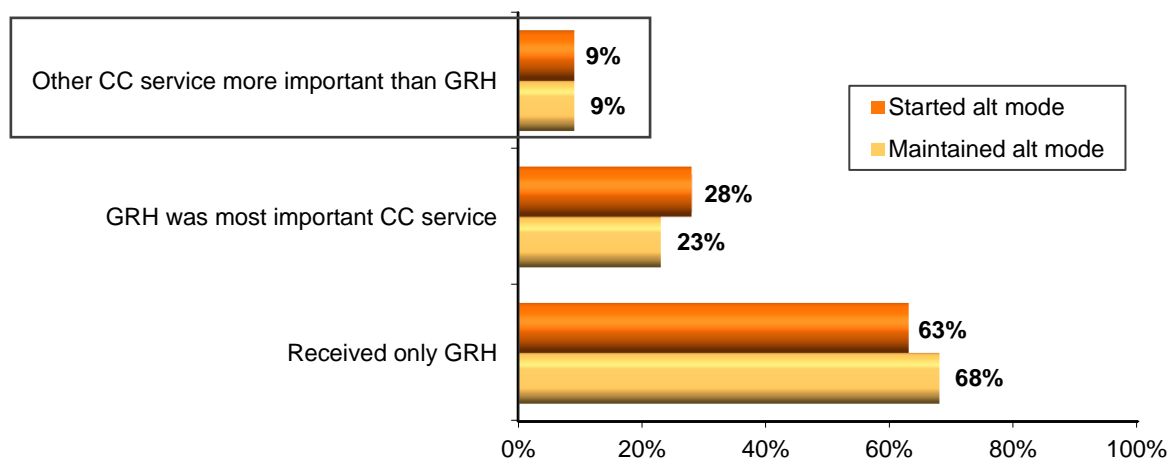


Respondents who reported starting a new alternative mode and those who maintained alternative mode use received non-GRH Commuter Connections services at about the same rate (Started 37% vs Maintained 32%). They also received most individual services at about the same rate. The only service that showed a statistical difference in use by the two change groups was bike information; 7% of respondents who maintained alternative mode use obtained bike information from Commuter Connections, compared with 2% of respondents who started a new alternative mode. None of the other differences shown are statistically significant.

Commuter Connections Assistance or Benefits that are 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, increase, or maintain use of alternative modes. As was noted above, 63% of respondents who started a new alternative mode and 68% who maintained alternative mode use said GRH was the only Commuter Connections service they received. But as illustrated in Figure 24, even among respondents who did receive other Commuter Connections services, most said GRH was the most important of these services (Started alt mode 28%, Maintained alt mode 23%). Only 9% of respondents who started an alternative mode and the same percentage who maintained alternative mode use said another Commuter Connections service was more important to their commute decision.

Figure 24
Commuter Connections Assistance or Benefits – More Important than GRH to Mode Decisions

(Started alt mode n = 163; Maintained alt mode n = 334
(Note: Increased alt mode changes not shown, due to small sample size n = 15)

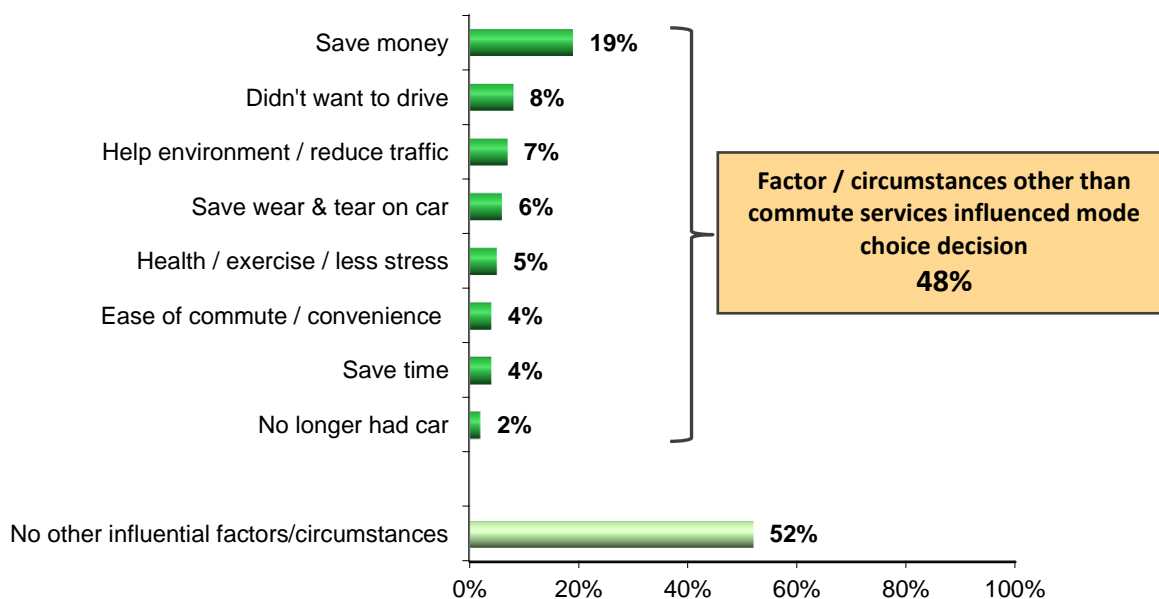


Influential Assistance or Benefits Received from Another Organization – Respondents also were asked about services they received from another organization that influenced their mode choice decisions. About one-third (32%) mentioned a service that had influenced their decision. Nearly all of these respondents (28% of 32%) 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 – Lastly, respondents who made changes 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. As shown in Figure 25, 52% said that no other factors or circumstances influenced their decision, but 48% mentioned one or more other factors. About two in ten (19%) respondents said a desire to save money influenced their decision. Fewer than one in ten noted other responses.

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

(n = 543, multiple responses permitted, all other responses cited by fewer than 2% of respondents)



USE OF AND SATISFACTION WITH GRH

Characteristics of Participants Who Used GRH Trips

Used GRH Trip by Registration Status – As shown in Table 9, 10% of all respondents surveyed said they had taken a GRH trip. Current registrants have used GRH trips at a higher rate than have past registrants. This could be because current registrants have been participating in GRH for a longer time period than past registrants. Thus, they have had a longer time in which to encounter a situation in which they would need a GRH trip.

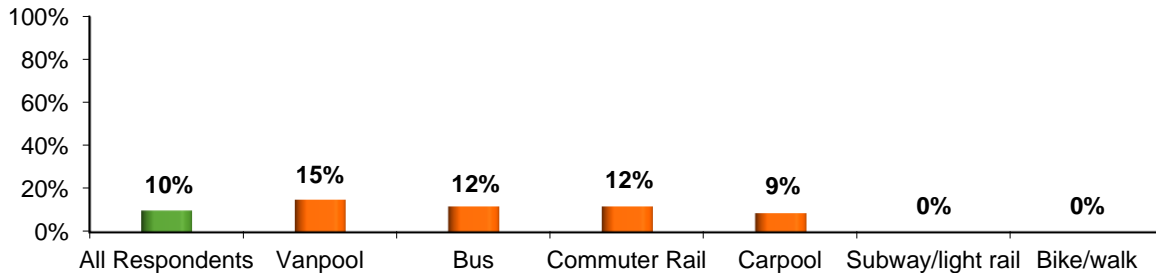
Table 9
Used GRH Trip
 All Respondents, Current Registrants, and Past Registrants

Taken a GRH Trip	All Registered Respondents (n = 540)	Current Registrants (n = 385)	Past Registrants (n = 157)
Yes	10%	12%	5%
No	90%	88%	95%

Used GRH Trip by During-GRH Modes – Figure 26 compares use of GRH by six “During-GRH” mode groups: vanpool, bus, commuter rail, carpool, subway/light rail, and bike/walk. Vanpoolers were most likely to have taken a GRH trip, but about one in ten bus riders, commuter rail riders, and carpoolers also have used a GRH trip. None of the respondents who reported riding a subway / light rail train or biking or walking to work used a GRH trip.

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

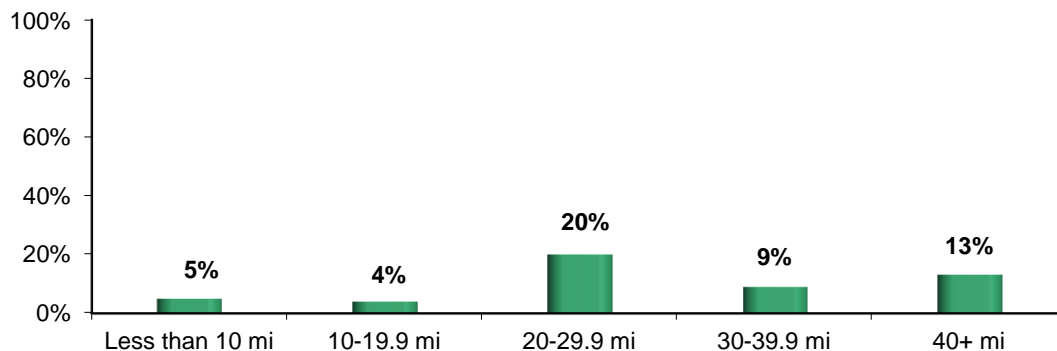
(All respondents n = 542; Vanpool n = 148; Bus n = 180; Commuter rail n = 60; Carpool n = 42; Subway/light rail n = 46; Bike/walk n = 37)



Used GRH Trip by Commute Distance – Figure 27 presents a comparison of the use of GRH by the commute distance of respondents. The average one-way distance of a respondent who used a GRH trip is 38.6 miles one-way, compared to 31.9 miles for all GRH respondents overall. Respondents who have short commutes, less than 10 miles or between 10 and 19.9 miles one-way, are less likely to use a trip (5% and 4%, respectively) than are respondents in longer-distance groups. About two in ten (20%) respondents who travel between 20 and 29 miles and one in ten respondents who travel 30 or more miles to work have taken a GRH trip. This suggests that registrants with shorter commutes find another travel option in the case of an emergency, such as a being driven by a co-worker or taking public transportation or a taxi, for which they pay themselves.

Figure 27
Used GRH Trip by Commute Distance (miles)

(Less than 10 mi n = 104; 10-19.9 mi n = 81; 20-29.9 mi n = 85; 30-39.9 mi n = 73; 40+ mi n = 183)

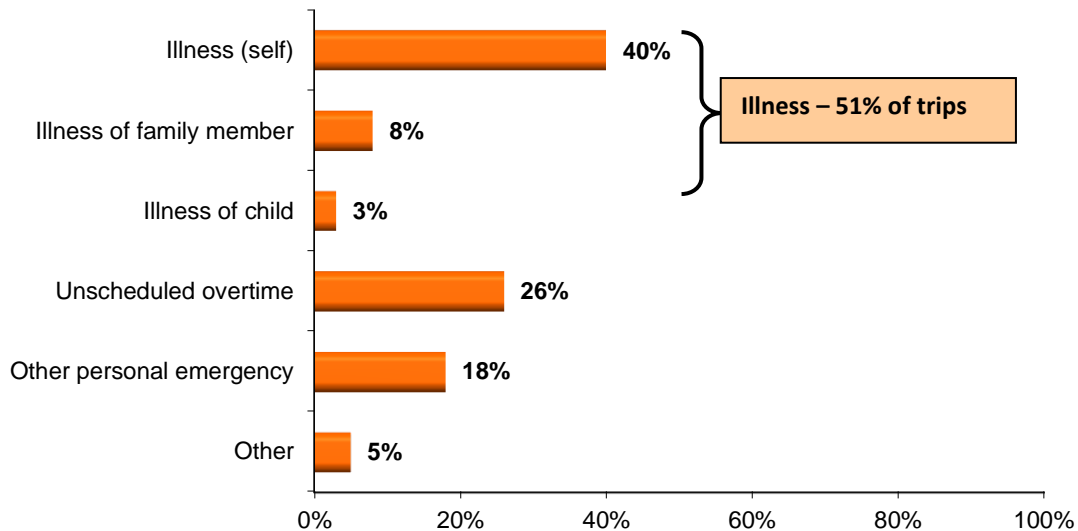


Reasons for Taking GRH Trip

Figure 28 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. Half (51%) of all GRH trips were taken to address an illness: respondent (40%), another family member (8%), or a child (3%). Unscheduled overtime (26%) and other personal emergency (18%) were the two other common reasons.

Figure 28
Reason for Taking Most Recent GRH Trip

(n = 55)



Satisfaction With the Trip

Participants, who had taken a GRH trip were asked if the service was satisfactory. The overwhelming majority (92%) said they were satisfied. Of the five respondents who were not satisfied, three said they waited too long for the taxi to arrive. Respondents waited an average of 27 minutes for a taxi. As shown in Table 10, 17% said the taxi arrived within 10 minutes and more than six in ten (61%) respondents waited 20 minutes or less. But 18% reported that they waited more than 45 minutes.

Table 10
Time Waited for Taxi

(n = 52)

Wait Time	Percentage	Cumulative Percentage
5 minutes or less	5%	5%
6 to 10 minutes	12%	17%
11 to 20 minutes	44%	61%
21 to 30 minutes	10%	71%
31 to 45 minutes	11%	82%
46 to 60 minutes	9%	91%
61 or more minutes	9%	100%

Desired Improvements to the GRH Program

Participants appear to be generally quite satisfied with the GRH Program. Ten percent of respondents said no improvement is necessary for the GRH program. An additional 49% of participants did not provide any suggestions for improvements. The remaining 41% mentioned the suggestions detailed in Table 11. The most frequently mentioned improvement is more advertising or more program information, named by 15% of respondents. Five percent said they thought the program rules should be relaxed / less restrictive. All other responses were cited by fewer than 5% of respondents.

Table 11
Suggested Improvements to GRH Program
(n = 543)

Desired Improvement	Percentage*
More advertising / more program information	15%
Relax conditions / supervisor approval	5%
Quicker response for ride requests	4%
Extend the hours	4%
Email reminder for renewal	3%
Easier/faster approval / online registration	2%
Allow more GRH trips per year	2%
Wider area for trips	2%
Other	11%
No improvement needed	10%
Don't know / no suggestions provided	49%

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

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

SECTION 4 – CONCLUSIONS

This section of the report presents major conclusions from the analysis of the GRH survey. Conclusions are provided for the following topics:

- Program participation findings
- Impact of GRH on commute patterns
- Program marketing findings

Program Participation Findings

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

- The GRH program attracts new participants but also retains many participants. Nearly three in ten registrants have been registered for one year or less, but 12% participated or have been participating for three or more years.
- A little over one-third of total respondents were no longer registered for the GRH program (past registrants). However, 48% 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 forgot to reregister (14%) or didn't know they had to re-register (12%). Six percent said they had problems/difficulties re-registering and 6% said they haven't gotten around to reregistering.

Impact of GRH on Commute Patterns

The GRH survey was designed to examine three key questions: Did the GRH Program:

- Encourage commuters who drive alone to work to use alternative modes, such as transit and carpool?
- Encourage commuters who use alternative modes to use these modes more days per week?
- Encourage commuters who use alternative modes to use them for a longer period of time?
- **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 34% of respondents said they primarily drove alone to work before starting GRH. The remaining 66% of 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 15 of the total respondents increased the number of days they used alternative modes. The low respondent number is not necessarily indicative of GRH's value for this type of change, however. Nearly all participants who were using an alternative pre-GRH already did so three or four days per week. In other words, a large majority of participants already were using alternative modes nearly full-time.

But among the small sample of respondents who did increase the number of days they used alternative modes, the results were notable; these respondents increased their alternative mode frequency from 2.9 days to 4.5 days, or about 1.6 days per week increase per respondent.

- ***Extending the Duration of Alternative Mode Use*** – More than four in ten (44%) GRH participants said they had used their current alternative mode for five years or longer and 57% have used this mode for three years or more. The average time using the alternative mode is about 58 months.
- ***Role of GRH in Motivating Change*** – The majority of respondents said that the GRH Program was important to their decision to start, increase, or maintain 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 is 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 9% said they were “not at all likely” to have continued using these modes if GRH were not available. By contrast, 14% of respondents who started using a new alternative mode and 15% who increased alternative mode use said they were not likely to have made the change without GRH.

Two-thirds (65%) of all respondents said GRH was the only Commuter Connections service they received. But even among respondents who did receive other Commuter Connections services, most said GRH was the most important Commuter Connections service. Only one in ten respondents who started an alternative mode or maintained use of alternative modes reported a Commuter Connections service that was more important than GRH.

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. Nearly half of respondents said they had heard or seen some form of GRH advertising. And one-quarter of total survey respondents said they had not registered before hearing or seeing the ads and that the ads had encouraged them to register.
- The results also showed the need for multiple outreach channels. Word of mouth continues to be the predominant method by which respondents learned of GRH, but employer / employee survey, Internet, bus/train signs, and other rideshare/transit organizations all were noted by at least five percent of respondents as their first information source about GRH.

APPENDICES

APPENDIX A – DISPOSITION OF FINAL DIALING RESULTS

APPENDIX B – SURVEY QUESTIONNAIRE

APPENDIX A**DISPOSITION OF FINAL DIALING RESULTS**

Dialing Disposition at Conclusion of Survey	Telephone Survey	
	No.	Percent
Completed Interviews	341	17.7%
No Answer	49	2.5%
Answering Machine	725	37.7%
Busy	33	1.7%
Arranged Call Back	325	16.9%
Respondent Never Available	5	0.3%
Not In Service	86	4.5%
Fax		%
Refused	256	13.3%
Respondent Terminated	14	0.7%
Language Not English	2	0.1%
Both Numbers Wrong	29	1.5%
Wrong Work Number	36	1.9%
Respondent Screened Out (Q8)	24	1.2%
	1,925	100.0%
Total Dialings		9,936
Average Number of Dialings Per Complete:		29.1

APPENDIX B - SURVEY QUESTIONNAIRE

Commuter Connections – 2013 Baltimore Guaranteed Ride Home Survey - Internet Version

INTRODUCTION

Baltimore/Washington region, is conducting this online survey for 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. Please complete the survey and click on the "SUBMIT" button at the end. 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. Thank you for your participation

REGISTRATION INFORMATION

Q1. In what year did you first register for the Baltimore and St. Mary's County GRH program?

- 1 Before 2008 (**SKIP TO Q2**)
- 2 2008 (**SKIP TO Q2**)
- 3 2009 (**SKIP TO Q2**)
- 4 2010 (**SKIP TO Q2**)
- 5 2011 (**SKIP TO Q2**)
- 6 2012 (**SKIP TO Q2**)
- 7 2013 (**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 before 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**)

Q7 Who offered/sponsored that program?

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

CURRENT COMMUTE PATTERNS (Asked of all respondents)

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

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

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

1. Full-time, 5 days per week, 35 or more hours per week
2. Part-time (less than 35 hours per week)
3. 4/40 compressed schedule (four 10-hour days per week, 40 hours)
4. 9/80 compressed schedule (9 days every 2 weeks, 80 hours)
5. 3/36 compressed schedule (three 12-hour days per week, 36 hours)
- 9 Other (SPECIFY) _____

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

- 1 Never, I don't ever travel for work
- 2 Occasionally, but less than 1 day per week
- 3 Regularly, 1 or more days per week
- 9 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 than one type on a single day (e.g., walk to the bus stop, then ride the bus), count only the type you use for the **longest distance part** of your trip.

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

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

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	5
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, 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	
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 <carpool or vanpool>? (IF MORE THAN ONE ANSWER IN Q14, SELECT ONE USING THIS PRIORITY: vanpool, carpool, casual carpool.)

_____ 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 Blvd / 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 I-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 MD 3
- 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
- 55 MD 156 – Aldino Rd
- 56 MD 159 – Perryman Rd/Old Philadelphia Rd
- 57 MD 161 – Darlington Rd
- 58 MD 162 – Aviation Blvd
- 59 MD 165 – Baldwin Mill Rd/Federal Hill Rd/Pylesville Rd
- 60 MD 168 – Nursery Rd
- 61 MD 170 – Telegraph Rd/Aviation Blvd/Camp Meade Rd/Belle Grove Rd
- 62 MD 173 – Fort Smallwood Rd/Hawkins Point Rd/Pennington Ave/Patapsco Ave
- 63 MD 174 – Reece Rd/Donaldson Ave/Quarterfield Rd
- 64 MD 175 – Annapolis Rd/Jessup Rd/Waterloo Rd/Rouse Pkwy
- 65 MD 176 – Dorsey Rd
- 66 MD 177
- 67 MD 178 – Generals Hwy
- 68 MD 194
- 69 MD 198 – Laurel Ft. Meade Rd/Spencerville Rd/Old Columbia Pike/Sandy Spring Rd
- 70 MD 213 – Augustine Herman Hwy/Bohemia Ave/Bridge St/Singerly Rd/Lewisville Rd

- 71 MD 214
- 72 MD 216
- 73 MD 222 – Aiken Ave/Perryville Rd/Bainbridge Rd/Main St/Susquehanna River Rd
- 74 MD 242 – Colton Point Rd
- 75 MD 253 – Mayo Rd
- 76 MD 256 – Deale Rd/Deale Churchton Rd
- 77 MD 268 –North St
- 78 MD 270 – Furnace Branch Rd
- 79 MD 272 – Turkey Point Rd/Mauldin Ave/Northeast Rd/Chrome Rd
- 80 MD 273 – Rising Sun Rd/Telegraph Rd
- 81 MD 279 – Elkton Rd/Newark Ave
- 82 MD 439 – Old York Rd
- 83 MD 440 – Dublin Rd
- 84 MD 450 – Defense Hwy/West St/College Ave/King George St/Annapolis Rd/Crain Hwy
- 85 MD 462 – Paradise Rd
- 86 MD 482 – Hampstead Mexico Rd
- 87 MD 543 – Riverside Pkwy/Creswell Rd/Fountain Green Rd/Ady Rd
- 88 MD 607 – Magothy Bridge Rd/Hog Neck Rd
- 89 MD 623 – Castleton Rd/Flintville Rd
- 90 MD 624 – Graceton Rd
- 91 MD 646 – Prospect Rd
- 92 MD 665 – Aris T Allen Blvd
- 93 MD 702 – Southeast Blvd
- 94 MD 713 – Rockenbach Rd/Ridge Rd/Arundel Mills Blvd
- 95 MD 715 – Short La
- 96 MD 755 – Edgewood Rd
- 97 MD 924 – Emmorton Rd/Rock Springs Ave/Main St

99 Other (specify) _____

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

IF CMCA = 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, OR 20, CONTINUE WITH Q17

Q17 About how long have you been using < CMCA > for your trip to work?

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

_____ Don't know

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 (or leave from) home by 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 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 >?

_____ miles (**ALLOW DECIMALS**)

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

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

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

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

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, 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	
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

DEFINE DALTDAYS (Days using alt modes during GRH – past registrants only)

DALTDAYS = TOTAL Q23 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 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 before you heard about the GRH program. At that time, how many days Monday – Friday were you assigned to work in a typical week?

0 did not work any days Monday-Friday then, did not work in Baltimore area then

1 1 day per week

2 2 days per week

3 3 days per week

4 4 days per week

5 5 days per week

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

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

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

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, 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	
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

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

BHALTDAYS = TOTAL Q26 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 20

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

Set BHMCA using Q26 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 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)***(Current Registrants and Past Registrants mode before GRH)***

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

0 0, did not work any days Monday – Friday then, did not work in Baltimore area then

1 1 day per week

2 2 days per week

3 3 days per week

4 4 days per week

5 5 days per week

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

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

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

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, 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	
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

DEFINE BRALTDAYS (Days using alt modes before registered for GRH (Current, Past))
BRALTDAYS = TOTAL Q29 DAYS USING MODES 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 20

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

Set BRMCA using Q29 alt mode used most days (responses 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 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 BRMCA 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 21 > 0, SET Q29a = 9
 IF GRHTYPE = 2 (PAST_REG) AND Q29, RESPONSE 21 > 0, SET Q29a = 9
 IF GRHTYPE = 3 (ONE_TIME) AND Q26, RESPONSE 21 > 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, 18, OR 19, 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 - carpooling, vanpooling, using transit, biking, or walking (FROM Q14)>?

- 1 very important
- 2 somewhat important
- 3 not at all important
- 9 Don't know

NOW 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 - carpooling, vanpooling, using transit, biking, or walking (FROM Q23)>?

- 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)

Q32 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 - carpooling, vanpooling, using transit, biking, or walking (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 - carpooling, vanpooling, using transit, biking, or walking (FROM Q23)>?

- 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, 18, OR 19, 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 - carpooling, vanpooling, using transit, biking, or walking (FROM Q29)> before you registered for GRH. How important was the availability of GRH to your decision to continue using a type of transportation other than driving alone?

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

- 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 - carpooling, vanpooling, using transit, biking, or walking (FROM Q26)> before you heard about GRH. How important was the availability of GRH to your decision to continue using a type of transportation other than driving alone?

- 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 this 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 this 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 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, 18, OR 19, 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 - carpool, vanpool, use transit, bike, or walk (FROM Q14)>?

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 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 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, 18, OR 19, 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

Q49 How did you hear about the GRH Program?

OPEN ENDED _____

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

- 1 yes
- 2 no **(SKIP TO Q54)**
- 9 Don't know **(SKIP TO Q54)**

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 GRH

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

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

- 1 yes
- 2 no **(SKIP TO Q59)**
- 3 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
- 7 Unscheduled overtime
- 8 Missed CP/VP
- 9 Other (SPECIFY) _____

Q56 Was the service satisfactory?

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

Q57 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 About how long did you wait for the taxi to arrive?

_____ minutes

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

OPEN ENDED _____

Code responses in the following categories in survey post-processing (ALLOW UP TO THREE RESPONSES)

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

DEMOGRAPHICS

Now just a few last questions to help us group your answers with those of others.

Q60 Which of the following groups includes your age?

- 1 under 18
- 2 18 - 24
- 3 25 - 34
- 4 35 - 44
- 5 45 - 54
- 6 55 - 64
- 7 65 or older
- 9 Prefer not to answer

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

- 1 Yes
- 2 No
- 9 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
- 11 \$180,000 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!