



**COMMUTER CONNECTIONS**

**GUARANTEED RIDE HOME (GRH)**  
**PROGRAM**

**2010 GRH SURVEY REPORT**

Prepared for:

Metropolitan Washington Council of Governments  
Commuter Connections Program

Prepared by:

LDA Consulting  
Washington, DC

In association with:

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San Diego, CA

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## ABSTRACT

**TITLE:** Commuter Connections Guaranteed Ride Home Applicant Survey Report

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**AGENCY:** The Metropolitan Washington Council of Governments is the regional planning organization of the Washington area's major local governments and their governing officials. COG works toward solutions to problems in such areas as growth, air and water quality, transportation, and housing, and serves as the regional planning organization for metropolitan Washington.

**ABSTRACT:** This report presents the results of a survey (GRH survey) of 1,033 commuters who currently participate or who have participated in the past in the regional Guaranteed Ride Home (GRH) Program operated by the Metropolitan Washington Council of Governments. Commuter Connections introduced the GRH Program in 1997 to eliminate one barrier to using alternative modes, commuters' fear of being without transportation in the case of an emergency. The program provides up to four free rides home per year in a taxi or rental car in the event of an unexpected personal emergency or unscheduled overtime.

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## SECTION 1 - INTRODUCTION

This report presents the results of a Guaranteed Ride Home (GRH) survey of 1,033 commuters who currently participate or who have participated in the Commuter Connections regional Guaranteed Ride Home (GRH) Program operated by the Metropolitan Washington Council of Governments (MWCOG). MWCOG, through the National Capitol Region Transportation Planning Board (TPB), introduced the Commuter Connections GRH Program in 1997 to eliminate one barrier to using alternative modes, commuters' fear of being without transportation in the case of an emergency. The program provides up to four free rides home per year in a taxi, rental car, public transit, or a combination of these modes, in the event of an unexpected personal emergency or unscheduled overtime.

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

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

This report covers the first of these two objectives. The report focuses on how the survey was conducted and what results were obtained. The second objective, the estimate of travel and air quality impacts of the program, will be addressed in an evaluation to be conducted in the spring of 2011. That evaluation will assess impacts of GRH and other Transportation Emission Control Measures (TERMs).

This report is divided into four 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 four main sections are four appendices dealing with survey procedures. They include:

- Appendix A – Disposition of dialing results
- Appendix B – Survey questionnaire
- Appendix C – Letters, Instructions, and Definition of Terms
- Appendix D – Results from 2010, 2007, 2004, and 2001 GRH Surveys – Comparison on Key Questions

## SECTION 2 – SURVEY AND SAMPLING METHODOLOGY

### SURVEY GOALS

The primary goal of the GRH survey was to examine characteristics of GRH Program participants. Commuter Connections introduced GRH in January 1997. Since that time, Commuter Connections collected data on GRH applicants through the semi-annual placement surveys conducted to assess travel and air quality impacts of the Commuter Connections' rideshare database. This GRH survey is the fourth survey dedicated to the GRH Program. The previous GRH surveys were conducted in 2001, 2004, and 2007.

The survey was designed to examine three key questions associated with the GRH Program. These questions were aimed at determining whether GRH participants make certain commuting changes and whether GRH plays a role in the change. Did GRH:

- Encourage commuters who drive alone to work to use alternative modes?
- 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?

### SAMPLE SELECTION PROCESS

The set of eligible respondents for this survey included any commuter who registered or participated in the GRH program between March 16, 2007 and March 31, 2010. But not all of these commuters were registered and actively participating at the time of the survey. Some had let their registrations expire and a small number had their registrations cancelled by Commuter Connections. These registrants were considered to be "past 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. Commuters who had active and valid registration status at the time of the survey were considered "current registrants." All three groups of participants were eligible for selection to be surveyed.

For the 2010 survey, CIC Research, Inc. started the sample selection by merging the active GRH database and an "archived" database that pre-dated the 2009 move to the current online GRH system. In March 2010, the combined GRH database contained 30,484 records from the designated survey period. CIC first removed duplicate records for commuters who re-registered for the program at the end of a year who were given a new status code and a new record. CIC also observed duplicate records that contained slight differences in name, but with the same telephone number or address. And there was overlap between the current, active database and the archived database for registrants who had participated before the move to the online system. When all duplicates were removed, the remaining database included approximately 26,046 records from which to draw the sample.

Past GRH surveys were sampled randomly from among all applicants entered in the database during the evaluation period. In 2010, Commuter Connections' opted to conduct interviews by Internet if the applicant had provided an email address for contact and conduct telephone interviews only with applicants who had not provided an email contact. The evaluation team would sample from among the two groups in proportion to their incidence in the database to obtain completed interviews with 1,000 registrants. The sampling plan thus divided the required 1,000 completed interviews into Internet and telephone groups, to

be collected in proportion to their incidence in the database. Initially, CIC was to complete only the telephone portion, amounting to 14% of the surveys or 141 completes. The Internet portion of 86%, or 859 interviews, was to have been completed through Commuter Connections' online database.

Before starting the survey, it became evident that 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. Thus, Commuter Connections decided that CIC would complete the Internet survey of past participants and the 859 Internet complete quota was sub-divided into a quota of 486 completed interviews for past registrants and 373 completed interviews for current registrants.

For the telephone survey, an initial sample of 377 randomly selected program participants was drawn from the database, divided into current (44) and past (333) registrants. Subsequently, 44 of these sample points were replaced<sup>1</sup>. Once all the initial sample points were exhausted and additional points were needed to complete the quota of 141, 32 of the 44 eligible replacement sample leads were used. The additional 12 leads were eligible for replacement but were not replaced as the quota had been met. A disposition of telephone dialing results can be found in Appendix A.

For the Internet survey of current participants, an initial sample of 1,492 was randomly drawn from the database. While a replacement sample was available, it was not used to complete the survey. For the Internet survey of past registrants, an initial sample of 3,888 randomly selected past program participants was drawn. This sample was larger in proportion to the number of completes required because it was expected that past registrants would be more difficult to reach. Commuter Connections received "invalid email" returns for 599 of these sample points and they were replaced from the reserve sample once all the initial sample points were exhausted and additional points were needed to complete the quota.

Shown below is a summary of the quotas and sample draws for the four sample groups.

**Table 1**  
**Sample Group Quotas and Sample Draws**

<b>Sample Group</b>	<b>Quota</b>	<b>Anticipated Response Rate</b>	<b>Sample Draw</b>
<b>Telephone Administration</b>			
Current Participants	31	70%	44
Past Participants	110	33%	333
<b>Internet Administration</b>			
Current Participants	373	25%	1,492
Past Participants	486	13%	3,888
<b>TOTAL – All Groups</b>	<b>1,000</b>		

<sup>1</sup> The additional 44 sample points covered 38 people whose work as well as home number was not working/ wrong, 3 people who had a wrong work number and no home number, and 3 people who had a wrong home number and no work number.

## QUESTIONNAIRE DESIGN

LDA Consulting, with input from COG/TPB staff and CIC Research, designed the Internet as well as the telephone questionnaires used in the survey. The questionnaires collected data on seven 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 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. Prior to conducting the full survey, 20 pretest telephone interviews were conducted and the results reviewed. The pretest indicated that no changes to the questionnaire were necessary. A copy of the final internet questionnaire is presented in Appendix B.

## SURVEY ADMINISTRATION

### Telephone Interviews

Once the pretest was completed and the questionnaire finalized, an introductory letter was designed and mailed to all past and current participants who were included in the telephone survey, to introduce them to the upcoming study. The letter was mailed on April 29, 2010 by COG/TPB staff. Copies of this document can be found in Appendix C. Interviews were conducted in CIC's telephone survey facilities, using the CATI (computer-assisted telephone interviewing) system and Quantime 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 3 and May 12, 2010. Interviewers made all weekday calls from 10:00 am to 5:30 pm, local time, and all weekend calls from noon to 7:30 pm, local time. Home telephone numbers were called on weekdays from 5:00 pm to 8:45 pm, local time. Calls were first directed to the respondent's work number. If contact was unsuccessful, the respondent was called at home. Interviews were conducted while respondents were at work or at home, depending on their wishes. If the call was answered by an answering machine, three more attempts were made to contact the respondent, and then the interviewer left a message asking the person to call back on a 1-800 number.

All interviewing was conducted at CIC's offices with survey supervisors present. The survey supervisor was responsible for overseeing the CATI server, checking quotas, editing call-back appointment times, monitoring interviews, answering questions, reviewing completed surveys, and passing respondents to an available station when they called in on the 1-800 line.

To insure quality control, the survey supervisor conducted periodic random monitoring. Other quality assurance checks were done once the data was collected. A total of 146 telephone interviews were completed from the list of 401 respondents for the initial interviewing effort. This was made up of 115 surveys completed with past participants, and 31 surveys completed with current participants, as per their proportions in the actual data set. This entire group had a refusal rate of 3.2 percent.<sup>2</sup> An average of 13.8 call attempts was made for each completed interview.

#### Internet Interviews

After the Internet questionnaire was finalized, an introductory letter was designed and emailed to past registrant prospective respondents with an email address, to introduce them to the upcoming survey. During the week of April 26, 2010 COG staff emailed the letter to past participants. Copies of this document can be found in Appendix C. A reminder letter was emailed on May 12, 2010 to all past participants who had not yet responded to the survey, as well as the 599 replacement sample.

COG emailed a similar introductory letter to current participants on May 12, 2010 to begin the “Current Registrant-Internet” component of the survey and sent a reminder letter about 10 days later. As the survey progressed, it was determined that a large proportion of these registrants were not responding to the survey and only 250 of the required 373 survey were completed. At that time, Commuter Connections shifted the remaining 123 surveys to CIC Research to be completed by telephone.

CIC Research completed 136 telephone surveys. A total of 201 original sample points and 55 replacement sample points were used to complete the 136 telephone surveys. The replacement leads were due to wrong home numbers, wrong work numbers, or both, as well as callbacks that had greater than six calls.

### **WEIGHTING OF SURVEY DATA**

In previous GRH studies, CIC Research weighted the data by type of GRH participant, i.e., current participant versus past participant, to align the survey results with the total population of GRH participants. This variable denotes if the participant is currently registered for GRH, or was registered in the past. The sample plan for the current study segmented the completed interviews in proportion to the incidence of GRH participant type prior to surveying. As a result, it was unnecessary to weight the data after all interviews were completed. The following table shows how the sample was proportioned by type of GRH participant.

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<sup>2</sup> 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.

Table 2  
Comparison of Sample Group and Total Population Distributions

Type of GRH Participant	Sample Group		Total Population
	n = __	Percentage	Percentage
<b>Current Participants</b>			
Telephone participants	31	3.0%	3.1%
Internet participants	250	24.2%	37.3%
Internet participants completed via telephone	136	13.2%	
<b>Total Current Participants:</b>	<b>417</b>	<b>40.4%</b>	<b>40.4%</b>
<b>Past Participants</b>			
Past telephone participants	115	11.1%	11.0%
Past Internet participants	500	48.5%	48.6%
<b>Total Past Participants:</b>	<b>615</b>	<b>59.6%</b>	<b>59.6%</b>
<b>TOTAL – ALL PARTICIPANTS</b>	<b>1,032</b>	<b>100.0%</b>	<b>100.0%</b>

## NON-RESPONSE SURVEY

A non-response survey was conducted to determine if potential respondents who did not respond to the survey are in some manner systematically different from the survey group. Because the quota for current Internet participants was not met, CIC conducted a non-response survey with two goals. First, to complete the quota for current Internet respondents, and second, to determine if participants who did not respond to that survey invitation were different from those who did respond. A total of 1,242 applicants (1,492-250) were eligible for inclusion in the non-response survey. These sample points were made up of current participants who did not respond to the Internet survey.

As noted earlier, CIC Research completed the remaining Current registrant-Internet quota interviews by telephone. These respondents were combined with the non-response survey and CIC completed 136 telephone surveys. The survey questionnaire was modified to add five questions as part of the non-response set. A total of 136 current participants were contacted via the telephone and administered the entire survey as well as an abbreviated (non-response) survey. This sample size for the non-response survey results in a 90 percent confidence level and 6.7% error rate coupled with the inclusion of a population correction factor. Statistical comparisons were made on the following six areas:

- Currently registered for Commuter Connection's GRH program
- Number of weekdays working
- How respondent gets to work
- Age of respondent
- Ethnicity of respondent
- Household income of respondent

Findings from the non-response survey included the following:

- Current participants who completed the survey by the Internet method were more likely (at a 95% confidence level) than were the telephone respondents to say they were currently registered for the Commuter Connections GRH program. This finding is not surprising as one of the reasons the non-respondents might not have responded to the Internet survey was that they did not know they were currently registered in the GRH program.
- A significantly higher proportion of Internet survey respondents said they work a compressed work schedule (22.4%) than was observed for telephone respondents (6.6%). One possible explanation for this difference is that Internet participants might have misunderstood some aspect of this schedule option, whereas telephone participants have the opportunity to ask questions if they do not fully understand category inclusions. Additionally, telephone interviewers know to clarify schedules that are not commonly reported to be sure they are accurate.
- The distributions of Internet and telephone respondents were significantly different for the age and income categories. Current participants surveyed by Internet had a significantly lower proportion of African-American participants (10.4%) compared with telephone survey participants (19.9%).
- There was no distributional difference between the Internet and telephone survey participants with respect to the number of days they worked.

#### Additional Questions Administered via the Telephone with the Internet Non-Response Set of Current Participants

The response to the emailed invitation sent to current participants in the online database was substantially lower than expected. To explore why this response rate was low, five additional questions were added to the survey instrument administered to these follow-up telephone survey participants regarding their receipt and actions taken after receiving the invitation. Results from these questions are as follows:

- Recall receiving invitation – Of the 136 current participants surveyed, two-thirds (66%) recalled receiving the Commuter Connections GRH survey via an email, 12% did not recall receiving the email, and 22% were unsure if they received it.
- Open Email – Two-thirds (67%) of the participants who recalled receiving the email said they opened it; the remaining 33% did not open the email,
- Why Not Open Email – A large majority (90%) of respondents who did not open the email said they were too busy or did not get around to it. The remaining four respondents were out of the office when they received the email, had never used GRH, so didn't bother opening the email, or did not know why they didn't open it.
- Why Not Respond – The 60 participants who did open the email were asked why they did not respond to the Web survey invitation. Three in ten of these participants (30%) were too busy/did not get around to it, 27% thought they had clicked on it and filled it out or partially filled it out, and 23% tried but had encountered a password problem or error message in accessing the account. One in ten (10%) could not get the link to work, 7% didn't get around to it or didn't have time to complete it, 5% thought it did not apply to them or didn't get the information they needed. Three percent said they just didn't want to fill it out, and two percent gave some other reason.

## COMPARISON OF RESULTS – TELEPHONE VS. INTERNET

Using the same six areas as selected for statistical comparison in the non-response survey, CIC Research compared results from the total of all telephone surveys completed (n = 282), with the total of all Internet surveys completed (n = 750). Overall, there were very few statistically significant differences. Differences found include the following:

- While the mean number of weekdays worked was not significantly different between the two groups, participants surveyed via the telephone were more likely to mention they typically work a five day week (94%), than were participants surveyed via the Internet (88%).
- A significantly greater proportion of participants surveyed via the telephone than surveyed via the Internet mentioned vanpooling during a typical week (19.5% for telephone vs 12.4% for Internet). Additionally, a significantly lower proportion of telephone participants mentioned that they buspool (0.4% for telephone vs. 4.9% for Internet) or use a bicycle (0.7% for telephone vs. 3.1% for Internet) during a typical week.
- A significantly greater proportion of telephone participants were of White ethnicity (67% for telephone vs 53% for Internet) or African-American ethnicity (23% for telephone vs. 14% for Internet).

## SECTION 3 SURVEY RESULTS

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

Where relevant, survey results are compared for sub-groups of respondents. Survey results also are compared with corresponding data for the 2001, 2004, and 2007 GRH surveys conducted in the Washington region, when these data were available. These comparisons are presented in the appropriate sub-sections.

- 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 and satisfaction with GRH trips and the GRH Program

### CHARACTERISTICS AND DEMOGRAPHICS OF THE SAMPLE

#### Home and Work Location

As shown in Table 3, in the 2010 survey, the majority of respondents lived in Virginia (65%). About a third (32%) lived in Maryland. A few (1%) lived in the District of Columbia or in another state (2%). The distribution by work state is considerably different. More than six in ten respondents worked in the District of Columbia (63%) and almost three in ten (26%) worked in Virginia. The remaining 11% worked in Maryland. These home and work distribution percentages were essentially the same as in the 2007 survey.

Table 3  
Home and Work States

State	GRH 2010 (n = 1,032)		GRH 2007 (n=1,001)		GRH 2004 (n = 1,030)	
	Home State	Work State	Home State	Work State	Home State	Work State
District of Columbia	1%	63%	1%	60%	2%	60%
Maryland	32%	11%	34%	10%	29%	10%
Virginia	65%	26%	64%	30%	67%	30%
Other	2%	0%	1%	0%	2%	0%

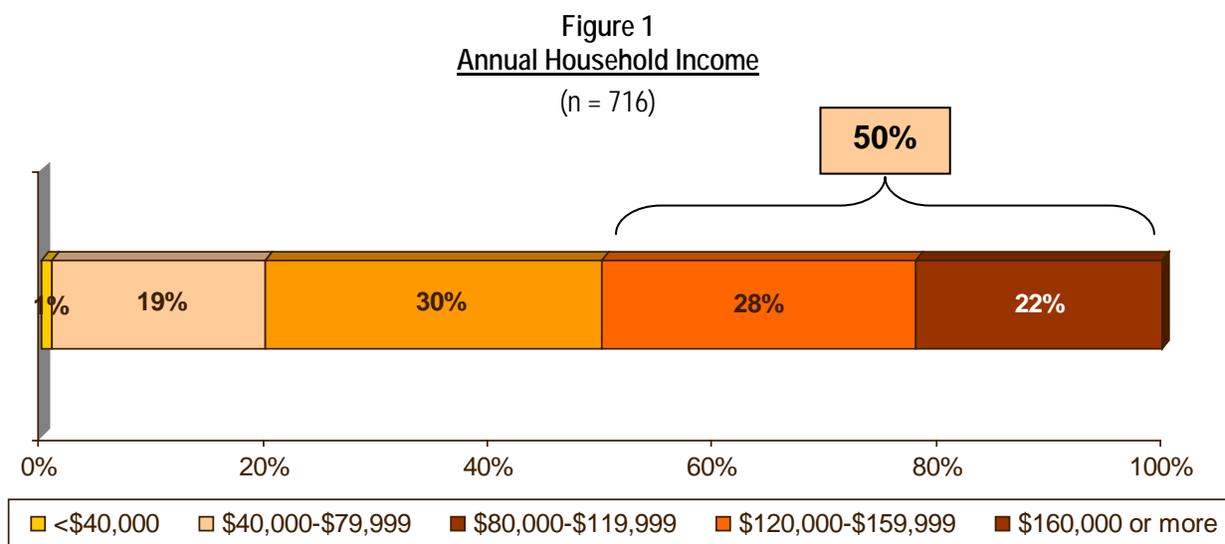
Top home locations for 2010 GRH registrants include, by state and county:

Virginia Counties	Percentage	Maryland Counties	Percentage
Prince William County	17%	Montgomery County	5%
Fairfax County	13%	Anne Arundel County	4%
Stafford County	12%	Charles County	4%
Spotsylvania County	6%	Frederick County	4%
Loudoun County	5%	Prince George's County	3%

### Demographics

The survey asked respondents four demographic questions: gender, income, age, and ethnic group. A higher proportion of GRH participants were male (53%) than female (47%). Details of other characteristics are presented below.

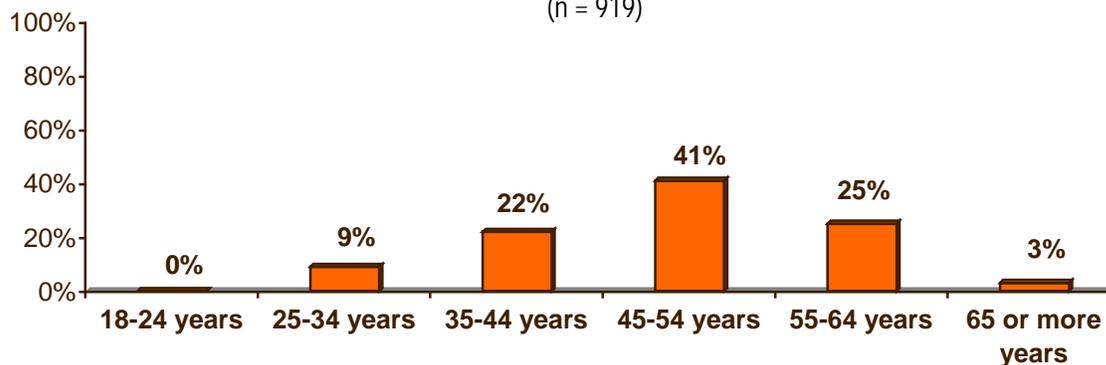
*Income* – Figure 1 presents the distribution of respondents' annual household income. GRH participants have quite high annual household incomes. More than eight in ten respondents (80%) had household incomes of \$80,000 or more and half had incomes of \$120,000 or more.



*Age* – As shown in Figure 2, GRH participants were clustered in the middle and older age brackets. About two-thirds (63%) were between the ages of 35 and 54 years old. Approximately one in ten was under 35 and just over a quarter (28%) were 55 years or older.

Figure 2  
Respondent Age Distribution

(n = 919)



*Ethnic Background* – Lastly, as shown in Table 4, Caucasians and African-Americans represent the two largest ethnic group categories of GRH survey respondents, 68% and 20% respectively. Hispanics account for about five percent and Other races represent seven percent of respondents.

Table 4  
Ethnic Background

(n = 838)

Ethnic Group	Percentage
African-American	20%
Caucasian	68%
Hispanic	5%
Other	<1%

## REGISTRATION INFORMATION

### Registration Status

As noted earlier, the GRH database population was divided into two categories by their registration status. Table 5 presents the distribution of respondents by these categories.

More than three-quarters (76%) of respondents said they were currently registered for GRH. About one in four said they had been registered, but were not currently participating (24%). Less than one percent said they never registered; they participated as one-time exceptions.

**Table 5**  
Registration Status as Defined by Respondent  
 (n = 1,032)

<b>Registration Status</b>	<b>Percentage</b>
Current registrants	76%
Past registrants	24%
One-time exceptions	<1%

It should be noted that the survey asked numerous questions relating to the times “before” and “while” participating in GRH. For this reason, respondents’ registration status both by their actual status, as defined in the database, and by their perception of their status. This perceived status was used in the survey 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 by Status Defined in Database  
 (n = 1,032)

<b>Registration Status Perceived by Respondent</b>	<b>Registration Status from Database</b>		
	<b>Current</b> (n = 503)	<b>Past</b> (n = 507)	<b>One-time Exception</b> (n = 22)
Current registrants	93%	60%	55%
Past registrants	7%	40%	45%
One-time exceptions	0%	0%	0%
<b>TOTAL</b>	100%	100%	100%

The highlighted boxes show differences between the database status and the perceived status. A large majority (93%) of respondents who were defined in the database as currently registered correctly self-defined. The remaining seven percent of current registrants, said they were no longer registered for the program, when their registration was actually current; they had registered or re-registered less than one year before the survey was conducted. Some of these respondents might have made a commute change since their last registration/re-registration date that would make them ineligible for GRH, such as reducing their use of alternative modes to less than twice per week. Because these respondents considered themselves no longer registered, they were treated as “past registrants” in the survey.

A larger issue is the 60% of respondents whose registrants has expired and were listed as past registrants in the database but who thought they were still registered. It is possible these respondents did not realize

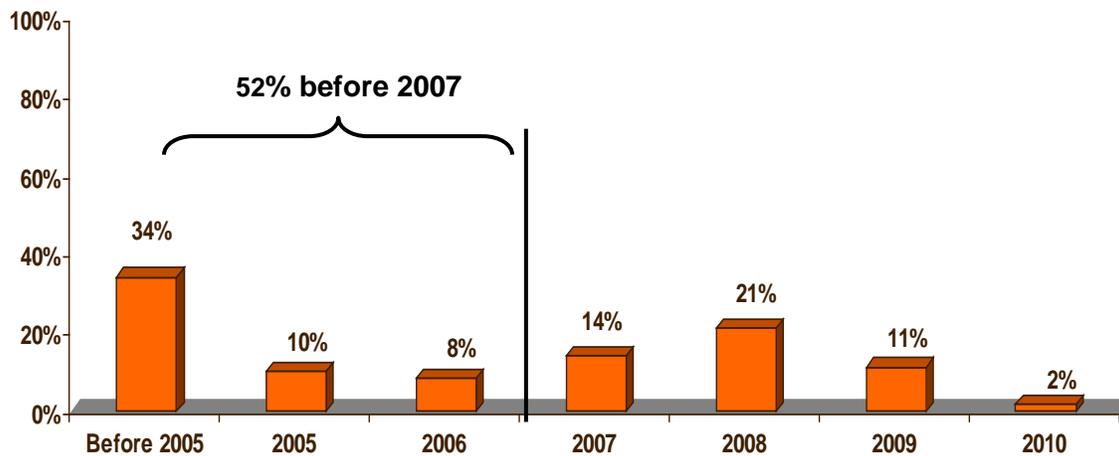
they needed to re-register each year, so assumed they were still eligible for the program. These respondents were treated as “currently registered” in the survey and throughout the report.

Finally, a the survey included 22 respondents who were classified in the database as one-time exceptions. All of these respondents self-classified as either currently or previously registered. In this survey, they are treated as either current or past registrants, whichever applies.

#### Year of Registration

Respondents were asked the year they first joined the program. The GRH Program was implemented in 1997, but continues to attract new participants each year. Respondents in this survey were selected from those who had registered or re-registered sometime between March 2007 and March 2010. As shown in Figure 3, about half (52%) of surveyed respondents said they first registered in 2006 or earlier. Fourteen percent registered in 2007, 21% registered in 2008, and 11% registered in 2009. A small percentage said they registered in 2010, but because the GRH survey interviews were conducted in May and June 2010, registration figures for 2010 include only registrants who joined GRH in January 1 through March 31.

**Figure 3**  
**Year First Registered for GRH Program**  
(n = 871)



#### Participation in Other GRH Programs

When asked if they had participated in another GRH program prior to joining Commuter Connections' program, 16 respondents, less than two percent, said they had participated previously in another program. Seven of these respondents replied they had participated in “a local government program”, six participated in a program sponsored by their employer, one participated in a program offered by VRE, and two respondents did not know who offered or 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. Two-thirds (67%) 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 – 36% have been registered for one year or less, compared to 23% of past registrants. .

Figure 4

#### Length of Time Registered in GRH Program By Survey Registration Status

(All registrants n = 1,030; Current registrants n = 787\*; Past Registrants n = 243\*\*)



\*- Note the sample for “current registrants” includes 305 respondents whose registrations had expired but who reported in the survey that they were still registered.

\*\* The sample for “past registrants” includes 33 respondents whose registrations were valid but who reported in the survey that they were not registered.

### Reasons for Not Re-registering

Past registrants were asked why they did not re-register for GRH Program when their registration expired. Table 7 presents common reasons for not re-registering. The table also displays the results for this question from the 2001, 2004, and 2007 GRH surveys.

The reasons fell into two major categories:

- Reasons associated with the program
- Reasons associated with the personal circumstances of the registrant

**Table 7**  
**Reasons Past Registrants Did Not Re-Register\***

<b>Reasons</b>	<b>2010 GRH (n = 175)</b>	<b>2007 GRH (n = 64)</b>	<b>2004 GRH (n = 125)</b>
<b>Program-Related Reasons</b>			
Didn't get around to it, forgot	32%	23%	14%
Did not know registration had expired, didn't know I had to re-register	21%	11%	14%
Problems/difficulties re-registering	10%	N/A	N/A
Never used program, didn't need it	6%	17%	12%
Dissatisfied with program, bad experience	6%	0%	5%
Carpool, vanpool, transit didn't work out	3%	5%	10%
Couldn't rideshare/use transit two+ days per week	3%	6%	6%
<b>Personal-Circumstance Reasons</b>			
Changed job/work hours	10%	25%	27%
Moved to a different residence	6%	6%	3%
Needed my car for work/other purpose	5%	6%	10%
Other	2%	4%	6%

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

The most frequently mentioned program reason for not re-registering was that respondents “didn’t get around to it/forgot,” mentioned by almost one-third (32%) of past registrants. This also was a primary reason noted in 2007. Another frequently mentioned program reason was that respondents “did not know I had to re-register / didn’t know registration had expired,” cited by 21% of respondents. The percentage of respondents citing this reason nearly doubled from 2007, suggesting that registrants need to be reminded that re-registration is required.

About 10% said they “had problems/difficulties re-registering.” This could be related to the shift to the online system, which requires respondents to recall a password to make changes to their accounts. Six percent were “dissatisfied with the program/had a bad experience.” A similar percentage (6%) had “never used the program,” compared with 17% who gave this response in 2007. Three percent each of respondents noted that they were no longer eligible for the program, either because the “carpool, vanpool, or transit arrangement didn’t work out” or because they couldn’t use an alternative mode at least two days per week.

Some respondents cited personal circumstances unrelated to the program. About 10% said they “changed job or work hours,” compared with 25% who gave this response in 2007. Six percent said they had moved to a new residence and five percent said they needed their cars for work or other purposes.

## GRH INFORMATION SOURCES

### How Heard About GRH

Commuters heard about the GRH Program from various sources. As shown in Table 8, more than a third (35%) mentioned word of mouth/referrals as their source of information, similar to the 34% who gave this response in 2007, but a significant increase over the 26% who gave this as their source in the 2004 survey. Other sources were similar in 2010 as in 2007. In 2010, the Internet was mentioned as a source by a slightly higher proportion of respondents (14%) and the radio by slightly fewer respondents (12%) than in 2007 (11% and 16% respectively). Smaller percentages of respondents noted their employer (8%), a brochure (4%), a sign on the bus or train (4%), direct mail postcard sent to them directly by Commuter Connections, or an advertisement (3% respectively).

Table 8  
How Respondents Learned About GRH

<b>Information Source</b>	<b>2010 GRH</b> (n=1,032)	<b>2007 GRH</b> (n=1,001)	<b>2004 GRH</b> (n=1,030)
Word of mouth – referral	35%	34%	26%
Internet	14%	11%	11%
Radio	12%	16%	16%
Employer/employee survey	8%	7%	10%
Brochure/promo materials	4%	7%	6%
Bus/train sign	4%	3%	7%
Direct mail/postcard from CC	3%	6%	5%
Advertisement	3%	N/A	N/A
Commuter Connections	2%	N/A	N/A
Other rideshare/transit organization	2%	N/A	N/A
TV	2%	3%	3%
Newspaper, newsletter	3%	4%	4%
On-site event, fair	1%	2%	0%
Don't know	13%	13%	11%
Other *	2%	5%	5%

\*Multiple responses permitted.

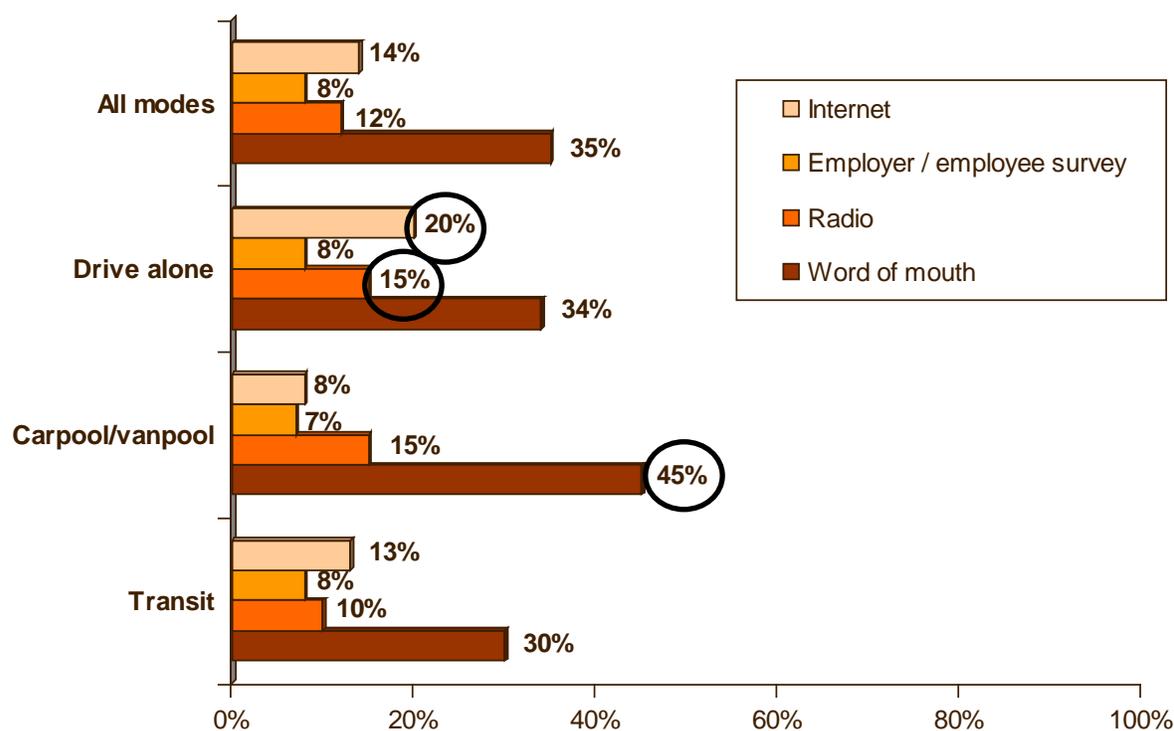
\*\* Each response in the “Other” category was mentioned by less than one percent of respondents.

The Internet was cited as a source of information by more participants who registered for the GRH program in recent years, than who registered in earlier years.

Some differences also were noted for respondents' source of referral by their pre-GRH commute mode, as indicated in Figure 5. More than four in ten (45%) respondents who carpooled/ vanpooled to work pre-GRH mentioned "word of mouth" as their source, compared with 34% of respondents who drove alone and 30% of respondents who rode transit. Registrants who drove alone before GRH were more likely to mention the Internet as their source (20%), compared with 13% of transit riders and eight percent of carpool/vanpool respondents.

Figure 5  
How Respondents Learned About GRH by Primary Mode Pre-GRH

(All modes n = 1,032; Drive alone n = 225; Carpool/vanpool n = 266; Transit n = 466)

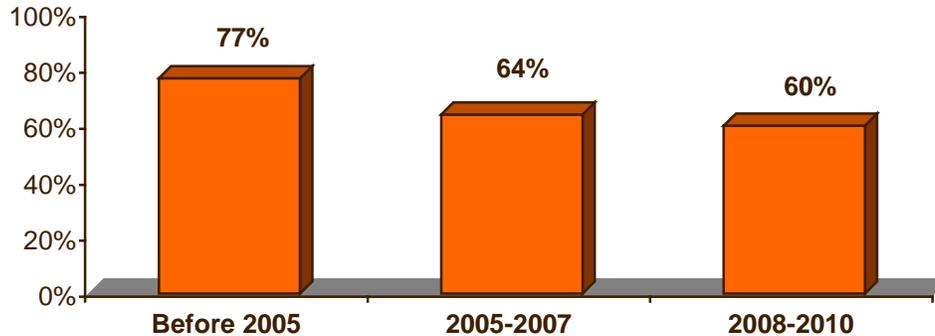


### GRH Advertising

**Heard or Saw GRH Advertising** – When asked how they heard about GRH, three percent of respondents cited a direct mail postcard from Commuter Connections. Respondents who did not mention this source were asked if they had heard, seen, or read any advertising about GRH. An additional 59% of respondents said they did recall GRH advertising, for a total of 62% of respondents.

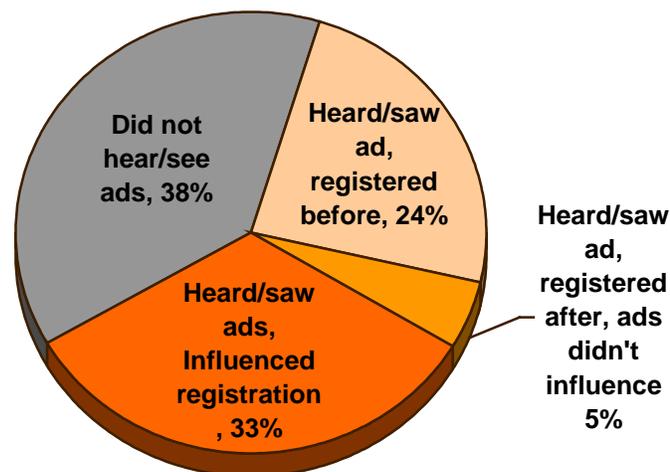
Respondents were more likely to have seen or heard GRH advertising if they had registered before 2005, compared to a more recent registration. As portrayed in Figure 6, 77% of respondents who registered before 2005 said they had heard or seen advertising, compared to 64% of respondents who registered between 2005 and 2007 and 60% who registered between 2008 and 2010. This finding is consistent with Commuter Connections' reduced level of GRH advertising in recent years, compared to the early years of the GRH Program.

**Figure 6**  
**Heard or Saw GRH Advertising by Year Registered for GRH**  
 (Before 2005 n=273; 2005-2007 n=251; 2008-2010 n=273)



*Influence of Ads on GRH Registration* – The 62% of respondents who said they had seen or heard GRH advertising were asked if they had registered for GRH before they encountered the ads and if the ads had influenced them to register for GRH. Figure 7 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 7**  
**Influence of GRH Advertising**  
 (n = 1,032)



About four in ten (38%) respondents did not see or hear the ads at all. About quarter saw or heard the ad before they registered. And five percent saw or heard the ads before they registered, but said the ads had not influenced them. This group, in total, represented registrants who were not influenced.

The remaining 33% of respondents said they saw or heard the ads before they had registered and that the advertising had encouraged them to register. This suggests the advertising was instrumental in both informing and persuading a substantial portion of registrants to join the program.

## CURRENT COMMUTE PATTERNS

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

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

Commute pattern questions in the survey included:

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

### Work Schedule

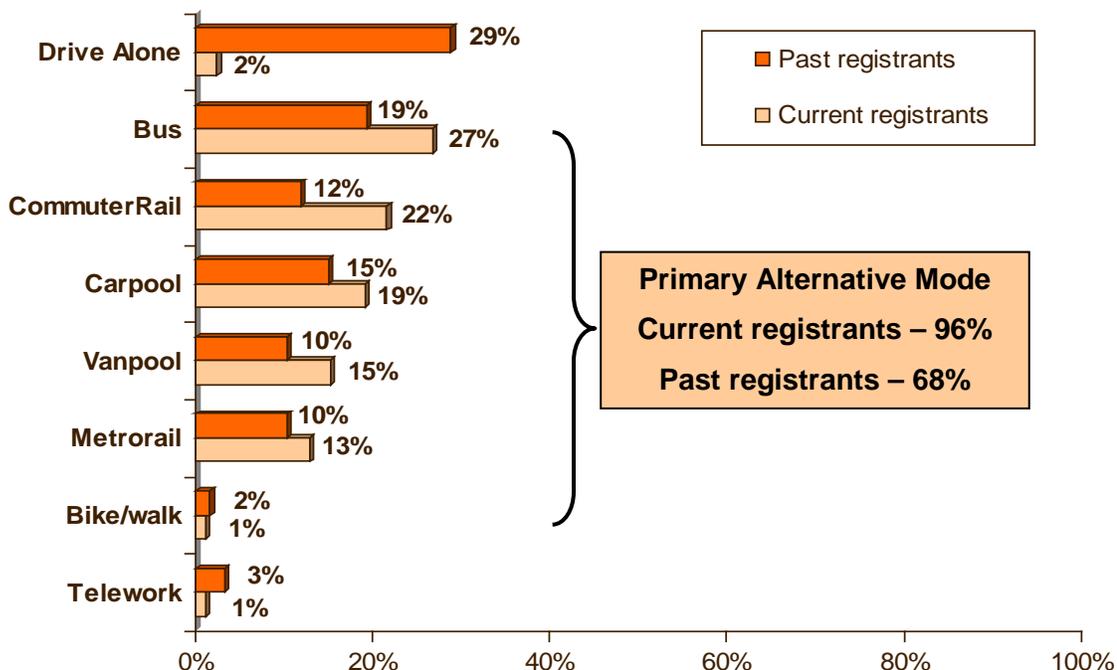
The overwhelming majority (89%) of respondents worked a five-day week. About eight percent worked four days per week, two percent worked three days per week, and less than one percent worked one or two days per week. About 42% of respondents said they worked a compressed work schedule; 3% worked a 4/40 CWS and 25% worked a 9/80 CWS. These respondents were classified as working a five-day week for purposes of commute mode, with either one or one-half work days off each week. Thirteen percent said they worked a Flex-schedule, or had some flexibility in their work schedule.

### Current Commuting Mode

Respondents were asked about use of various commute modes for the preceding 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. Figures 8 and 9 show 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.

*Primary Commute Mode* – Figure 8 shows the percentage of respondents who used each mode as their "primary" mode, that is, the mode used most days during the typical week.

Figure 8  
Current Primary Modes by Registration Status  
 (Current Registrants n=787; Past Registrants n=243)

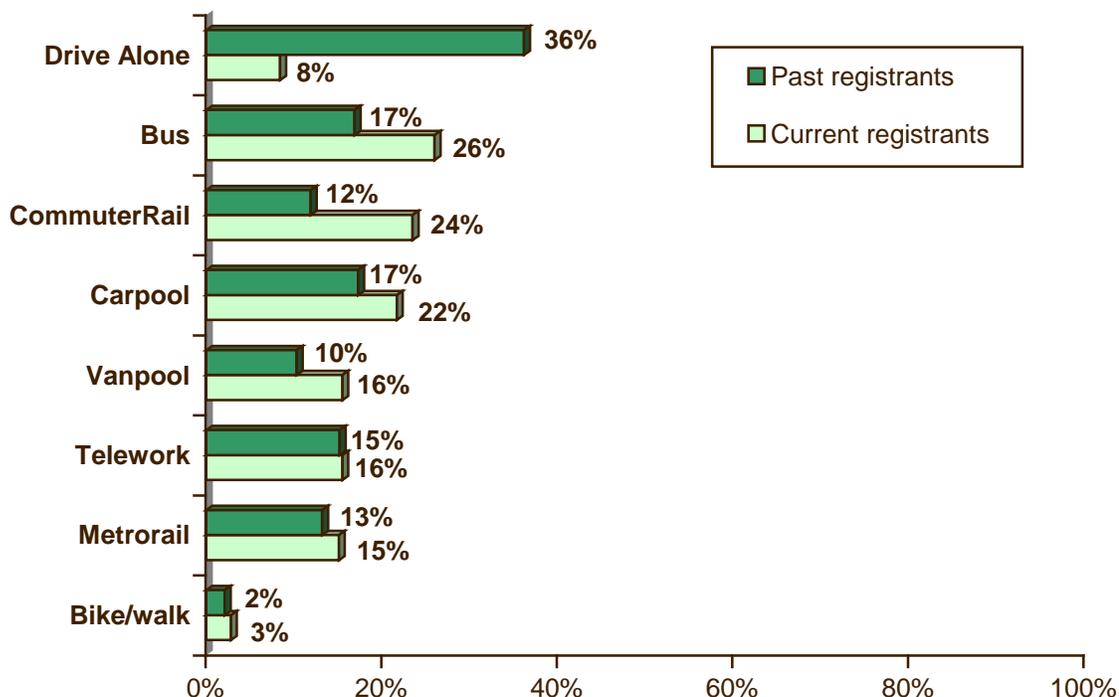


**Current Registrants** – Bus was the most common primary mode for current registrants. It was used by more than a quarter (27%) of respondents. Commuter rail was the second most common primary mode; it was used by 22% of current registrants. Nearly two in ten (19%) respondents primarily carpooled and 15% vanpooled. Metrorail was the primary mode for 13% of current registrants. Only two percent of current registrants said they primarily drove alone to work, but commuters are eligible for the program if they use any alternative mode two or more days per week, so this would be permissible. One percent said they primarily teleworked (1%) or bicycled or walked to work (1%).

**Past Registrants** – Not surprisingly, past registrants were more likely than current registrants to drive alone; 29% of past registrants said this was their primary mode. But two-thirds of past registrants (68%) said they still used an alternative mode most of the time, even though they were no longer in the GRH Program. Thus, these respondents were still eligible for GRH. Almost one in four said they primarily carpooled (15%) or vanpooled (10%). About two in ten (19%) rode a bus, 12% rode commuter rail, and 10% rode Metrorail. Smaller percentages used telework (3%), and bicycle or walk (2%).

**All Commute Modes Used** – Figure 9 shows the percentage of GRH participants who used various modes at least one day during the survey week. This category also includes respondents who said they used these modes two, three, four, or five times during the week. Percentages for the groups in this figure will total to more than 100% because some respondents used more than one mode.

**Figure 9**  
**Current Modes Used One or More Days Per Week by Registration Status**  
 (Current Registrants n = 787; Past Registrants n = 243)



**Current Registrants** – The relative use of the modes did not change from the three or more days per week order, but the percentages of participants using each mode increased, because some respondents who were counted in the three or more days per week category used a secondary mode in addition to their primary mode. For current registrants, bus continued as the most popular mode; 26% of current GRH participants used this mode at least occasionally.

Commuter rail, used by 24% of current registrants was the second most popular mode for current registrants. About two in ten (22%) said they carpooled at least occasionally, 16% vanpooled at least one day per week and a similar share teleworked. Almost one in ten (8%) said they drove alone one or more days per week and three percent bicycled or walked to work.

**Past Registrants** – Drive alone remained the most used mode for past registrants; 36% of past participants used this mode at least occasionally. Carpool and bus were next in popularity, with 17% of respondents using each of these modes.

**Mode Group Distribution** – Table 9 shows use of individual modes within the mode groups shown in Figure 9. The table presents mode distributions for GRH registrants for the During-GRH time period and for all Washington metro region commuters, as reported in the 2010 State of the Commute (SOC) survey. GRH registrants had higher mode shares for all alternative modes than did the regional population. All of the differences noted were statistically significant, with the exception of telework. GRH registrants teleworked at a lower rate than did all regional commuters.

**Table 9**  
**Commuter Modes Used One or More Days Per Week -**  
**GRH Registrants and All Regional Commuters**

<b>Commuter Mode</b>	<b>GRH Registrants (n = 1,032)</b>	<b>Regional 2010 SOC Survey** (n=6,050)</b>
<b>Carpool/vanpool</b>	<b>36%</b>	<b>8%</b>
- Regular carpool	12%	7%
- Casual carpool (slug)	9%	1%
- Vanpool	15%	<1%
<b>Transit</b>	<b>68%</b>	<b>23%</b>
<b>Bus</b>	<b>29%</b>	<b>7%</b>
- Ride a bus/shuttle	25%	7%
- Buspool	4%	<1%
<b>Metrorail</b>	<b>17%</b>	<b>15%</b>
<b>Commuter Rail</b>	<b>22%</b>	<b>1%</b>
- MARC (MD commuter rail)	7%	<1%
- VRE	15%	<1%
- AMTRAK/other train	<1%	<1%
Drive alone	9%	70%
Bike/walk	3%	3%
Compressed work schedule	13%	3%
Telework	13%	12%

\* Percentages will not total to 100%, because some respondents used more than one mode.

\*\* Data from 2010 State of the Commute regional survey for the Metropolitan Washington region.

**Carpool/Vanpool** – Among all commuters in the region who carpooled or vanpooled, regular carpooling dominated, with casual carpool (slug) and vanpool having much smaller mode shares. The distribution was much different for GRH registrants. Almost than half of the GRH registrants in the carpool/vanpool group vanpooled (15% of 36%) and casual carpool accounted for a quarter of the carpool/vanpool group (9% of 36%).

**Bus** – The bus mode group showed markedly different overall mode shares for the two populations with almost three in ten GRH registrants using bus, compared to less than seven percent of all regional commuters. But for both GRH registrants and all regional commuters, this mode group was dominated by regular bus; buspool had a small share of total bus ridership.

**Metrorail and Commuter Rail** – Rail ridership among GRH registrants also was quite different from that for all regional commuters. About 17% of registrants rode Metrorail, just slightly above the 15% of all regional commuters who used this mode. But commuter rail ridership showed dramatic differences for the two populations. More than two in ten GRH registrants used commuter rail, compared to about one percent of all commuters. VRE commuter rail service had the majority of commuter rail ridership

The disproportionate shares of commuter rail and vanpooling for GRH registrants are likely due to several factors. These commuters travel long distances. And commuter rail service is generally very infrequent outside of peak commuting periods, heightening both the value of and need for GRH service. Additionally, VRE offered a GRH program prior to the start of Commuter Connections' GRH program and has incorporated the regional GRH Program into its marketing, providing an additional method for these commuters to learn about GRH.

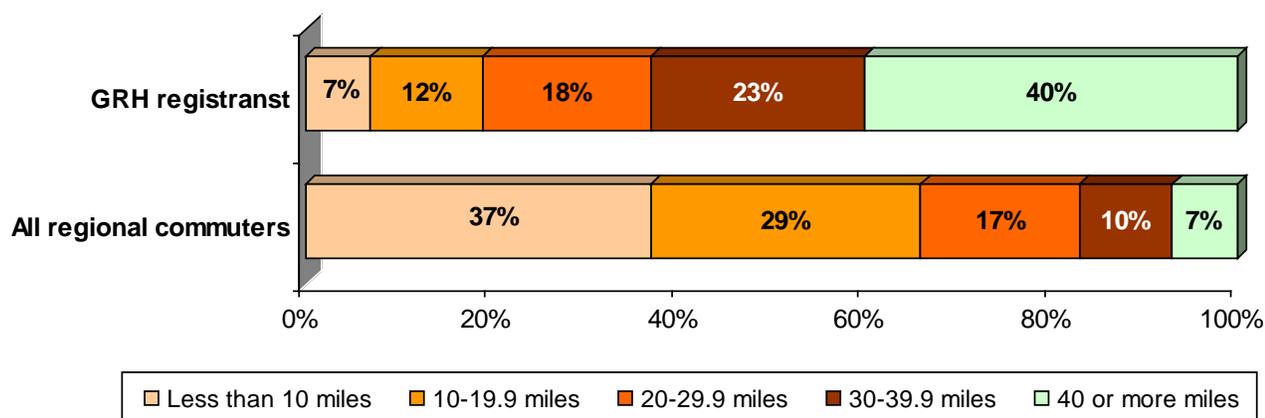
### Pool Occupancy

The average number of occupants in GRH carpools and vanpools was 3.2 and 10.6 people, respectively. The carpool occupancy was about the same as in 2007 (3.1), but the vanpool occupancy was lower than the 12.0 people observed in the 2007 GRH survey.

### Commute Length

**Commute Miles** – Commuters in the survey sample had a wide range of commute distances, from less than one mile to more than 120 miles. Figure 10 shows results for this travel characteristic. The average one-way distance for GRH respondents was 36.5 miles. This is considerably longer than the distance of 16.3 miles traveled by the average commuter in the Washington metro region. More than six in ten (63%) GRH respondents commute 30 or more miles to work, compared to just 17% of all regional commuters, as observed in the 2010 SOC survey of Washington metro region commuters.

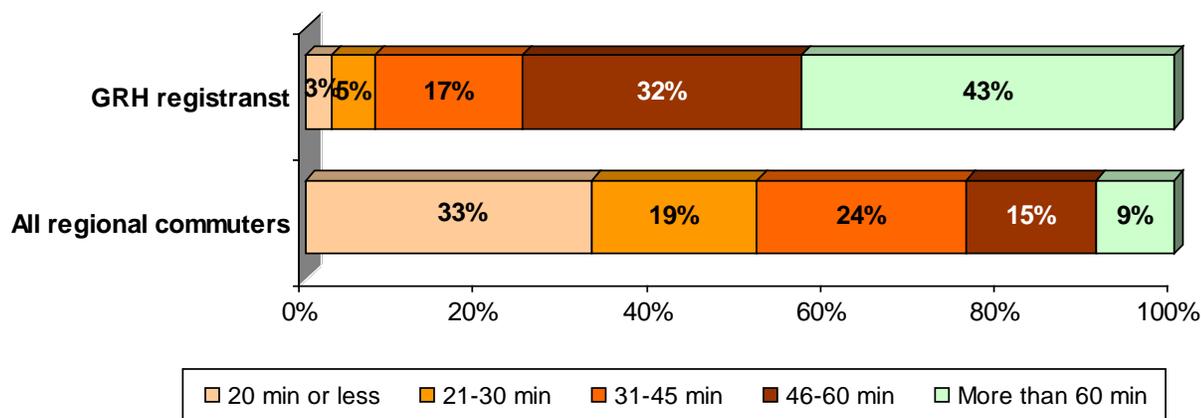
**Figure 10**  
**Commute Distance (miles) - GRH Registrants and All Regional Commuters**  
(GRH registrants n = 999; All regional commuters n = 5,538)



**Commute Time** – GRH participants commute, on average, about 67 minutes one way. This is also much longer than the commute time for all regional commuters, who commute an average of 36 minutes. As

presented in Figure 11, three-quarters (75%) of GRH participants commute more than 45 minutes each way to work. More than four in ten (43%) commute more than an hour. Only nine percent of all regional commuters travel this long to work.

Figure 11  
Commute Travel Time (minutes) – GRH Registrants and All Regional Commuters  
 (GRH registrants n = 1,025; All regional commuters n = 5,859)



## 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 – did 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 to "Pre-GRH" Modes

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

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."

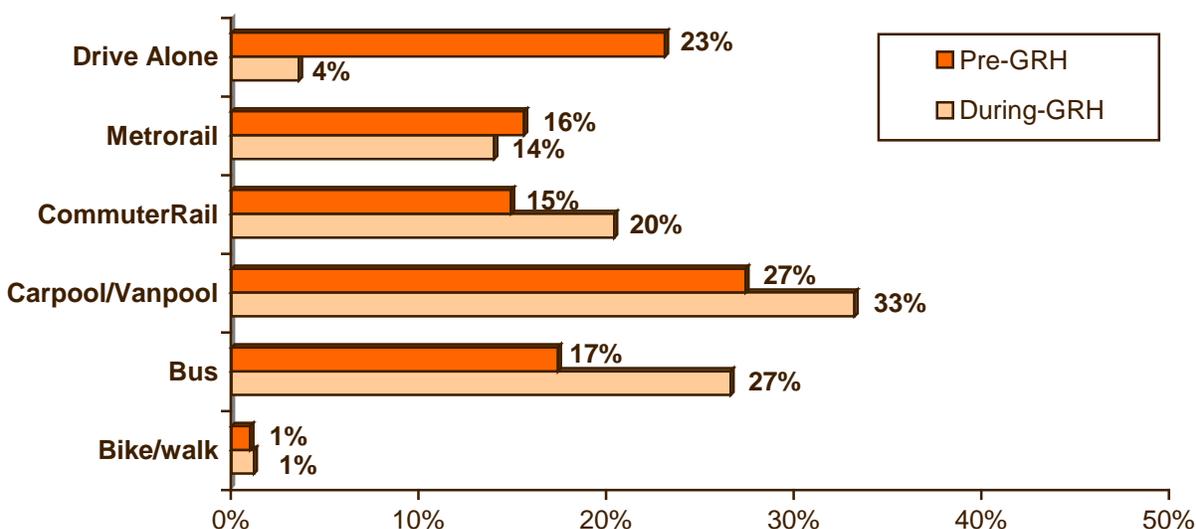
**Primary Mode** – Figure 12 presents a comparison of respondents' primary modes before participating in GRH (pre-GRH) and while participating (During-GRH). Primary mode is defined as the mode used most

days during a typical week: drive alone, Metrorail, commuter rail, carpool/vanpool, and bus and the percentages shown are percentages of respondents who used the mode groups as their primary modes.

**Figure 12**  
**Primary Modes Used Pre-GRH and During-GRH**

(During-GRH n = 1,032; Pre-GRH n = 972)

Note that scale extends only to 50% to highlight differences between variables



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

As shown, 23% of respondents primarily drove alone pre-GRH. The primary Drive Alone mode share dropped to just four percent for the “During-GRH” time period. Not surprisingly, the share of respondents primarily using each alternative mode increased. Primary use of carpool/vanpool use increased from 27% pre-GRH to 33% During-GRH, bus use rose from 17% to 27%, and the share of respondents using commuter rail as their primary mode grew from 15% to 20%. Metrorail appears to have declined, but this difference was not statistically significant.

Table 10 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 (34%) drive alone respondents shifted to carpooling and 53% shifted to transit. About one in ten (11%) said they continued to drive alone as their primary mode.

**Table 10**  
**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*				
	DA	Carpool / Vanpool	Bus	Metrorail	Commuter Rail
<b>Drive alone</b> (n = 225)	11%	34%	27%	7%	19%
<b>Alternative Modes</b>					
- CP/VP (n = 266)	1%	71%	13%	3%	10%
- Bus (n = 169)	1%	14%	73%	5%	6%
- Metrorail (n = 152)	2%	12%	14%	63%	9%
- Commuter rail (n = 145)	2%	11%	8%	6%	73%

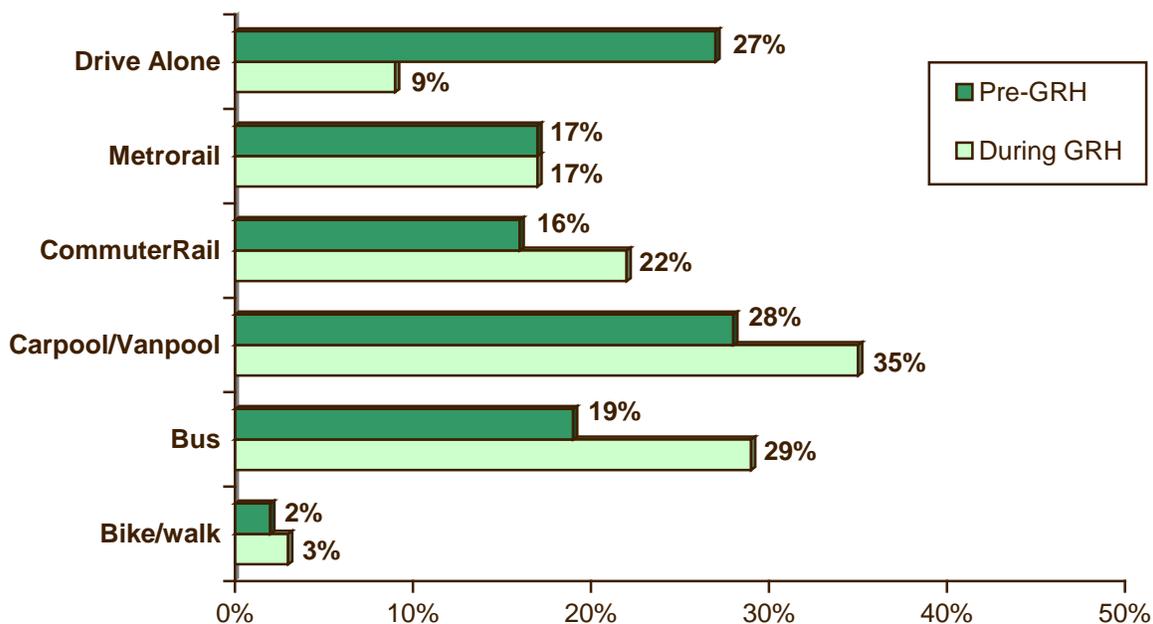
Respondents who were using alternative modes before they joined GRH largely remained in their pre-GRH modes after they joined GRH. About seven in ten respondents who previously carpooled/vanpooled (71%), rode a bus (73%), or used commuter rail (73%) stayed in these modes. The Metrorail retention was slightly lower, at 63%.

Some switching occurred among alternative modes, with carpool/vanpool the primary gainer, attracting 14% of bus riders, 12% of former Metrorail riders, and 11% of commuter rail riders. About one in ten respondents who used a bus, Metrorail, and commuter rail Pre-GRH switched to carpool or vanpool. Bus also gained users from among Pre-GRH carpools/vanpools and Metrorail riders.

*Occasional Mode (1+ Days Per Week)* – Figure 13 shows the percentages of respondents who said they used each mode group at all (one or more days per week) Pre-GRH and During-GRH. The relative use of most modes before and during participation in GRH is the same in this figure as was seen in Figure 12 (Primary Mode). Use of the drive alone mode dropped from 27% to 9%. This drop was less than the reduction for primary use of drive alone (23% pre-GRH to 4% During-GRH), indicating that the drive alone mode continued to be a popular occasional mode for GRH participants.

Commuter rail, carpool/vanpool, and bus use all showed marked increases from Pre-GRH to During-GRH. The share of participants using commuter rail grew from 16% to 22%, carpool/vanpool rose from 28% to 35%, and bus use increased from 19% of respondents to 29%. Use of Metrorail showed no change.

**Figure 13**  
**Modes Used 1+ Days per Week Pre-GRH and During-GRH**  
 (During-GRH n = 1,032; Pre-GRH n = 972)  
 Note that scale extends only to 50% to highlight differences between variables

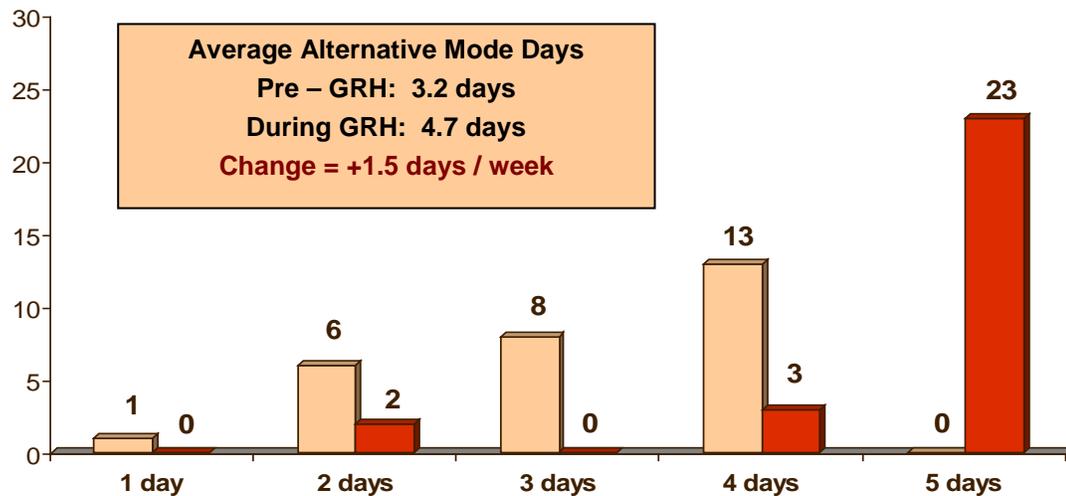


#### "During-GRH" Days in Alternative Modes Compared to "Pre-GRH" Days

**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 used these modes after registering for GRH? Figure 14 shows the number of alternative mode days per week for these respondents, Pre-GRH and During-GRH. Unfortunately, it was not possible to answer the question with confidence, due to a small sample. Only 28 of the 1,032 respondents said they had increased alternative mode frequency. But clearly, these respondents did increase their use of alternative modes.

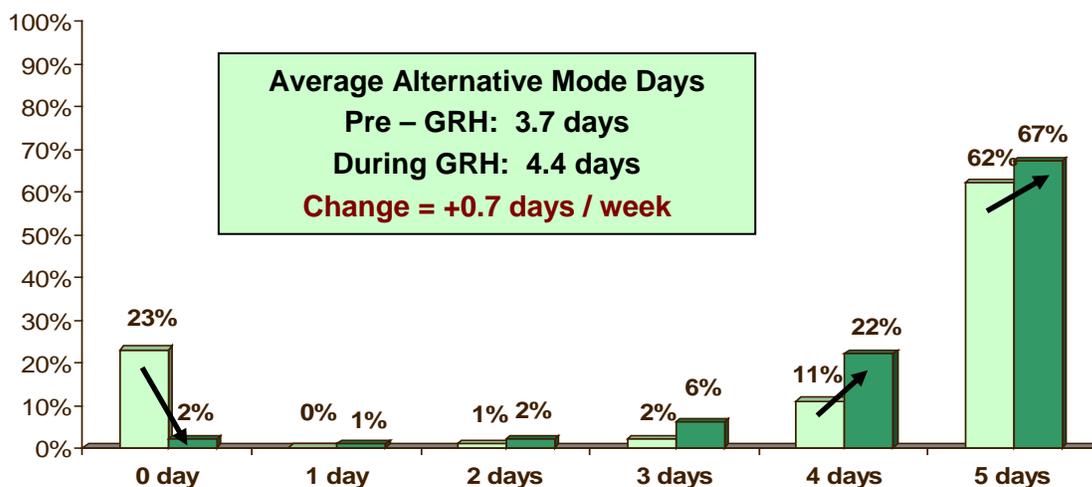
The majority of these respondents (13 of 28) were using alternative modes four days per week, eight were using alternative modes three days per week, and the remaining seven were using alternative modes one or two days per week before joining GRH. So, most respondents could add only one or two days of alternative mode use per week. While they were participating in GRH, nearly all (23 of 28) were full-time users of alternative modes, while three respondents used alternative modes four days per week, and two used alternative modes two days per week. This is consistent with the change in the overall increase in average alternative mode days from 3.2 days to 4.7 days, or about 1.5 days per week increase per respondent.

**Figure 14**  
Days Using Alternative Modes Pre-GRH and During-GRH  
 (Respondents Who Increased Alternative Mode Frequency During-GRH)  
 (n = 28)



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

**Figure 15**  
Days Using Alternative Modes Pre-GRH and During-GRH (All GRH Respondents)  
 (n = 972; Note that 60 respondents who were not in the regional workforce Pre-GRH were removed from the sample base; they could not provide information on commute patterns pre- GRH)



The average number of days all GRH participants used alternative modes increased, from 3.7 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 pre-GRH. In other words, the overall increase in the average frequency of alternative

mode use resulted primarily from shifts from drive alone to alternatives, rather than from shifts among current alternative mode users.

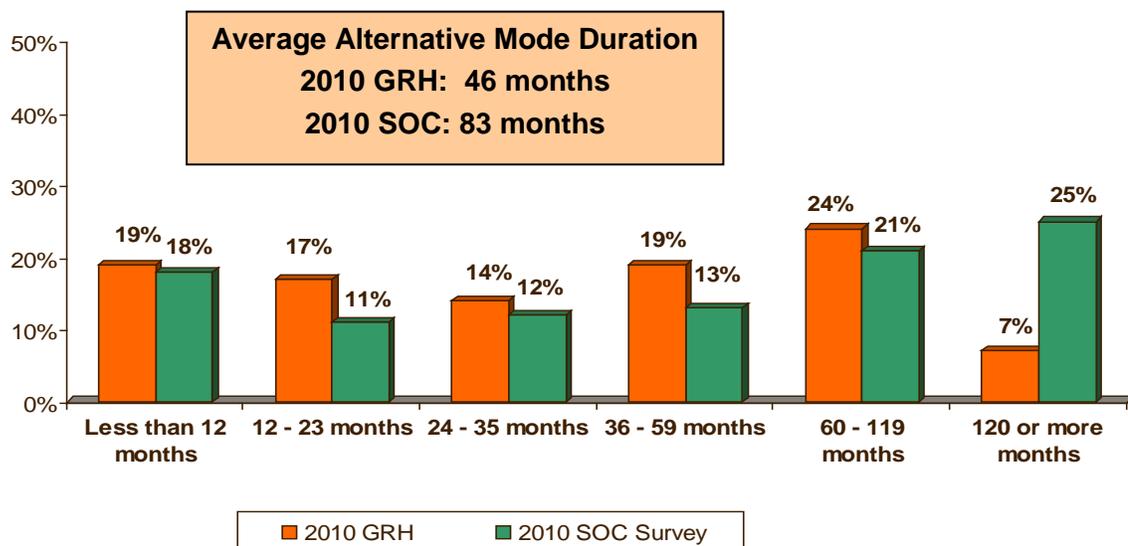
On a positive note, since there was very little change in the one-day, two-days, and three-days per week categories, it is clear that most of the respondents who never used alternatives before GRH started using alternatives four or five days per week During-GRH.

#### 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.

Three in ten GRH participants said they had used their current alternative mode for five years or longer and six in ten (64%) had used this mode for two years or more. On average they had used these modes for 46 months. As shown in Figure 16, however, this was considerably shorter duration than the 83 months average for all regional commuters, based on data from the 2010 State of the Commute survey. About three in ten (29%) regional commuters said they used their current alternative mode for less than two years, just slightly lower than the 36% of GRH respondents. But 46% of regional commuters had been using their alternative mode five years or more, a much larger share than for GRH participants.

**Figure 16**  
**Length of Time Using Alternative Modes – Current Alternative Mode Users**  
(2010 GRH n = 759; 2010 SOC n = 1,741)



## INFLUENCE OF GRH ON COMMUTE PATTERN DECISIONS

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. As noted earlier, three types of pre-GRH and During-GRH commute pattern combinations were examined:

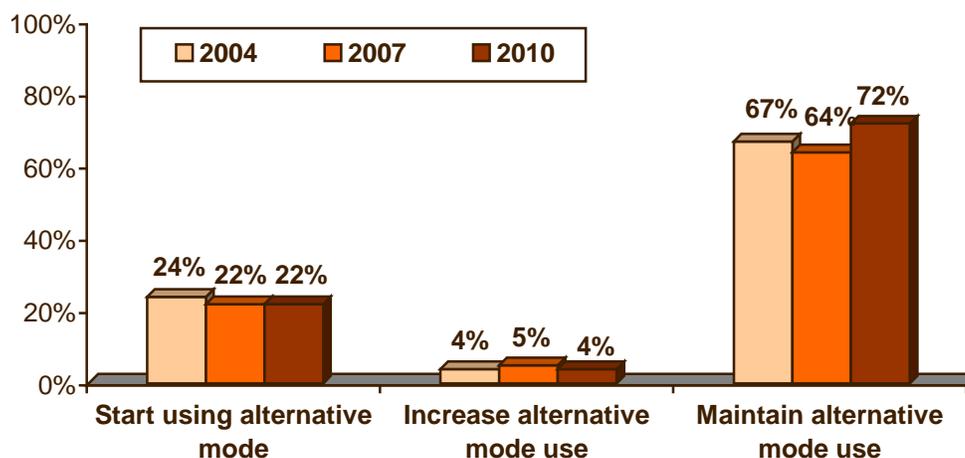
- Start alternative mode – Respondents who drove alone pre-GRH and started using alternative modes During-GRH
- Maintain alternative mode – Commuters who were using an alternative mode pre-GRH and continued using it During-GRH
- Increase alternative mode – Commuters who were using an alternative pre-GRH and increased the frequency of alternative mode use During-GRH

Figure 17 presents a breakdown of respondents into these alternative mode change groups. About two in ten (22%) respondents said they started using alternatives at the time they joined GRH. A small number of respondents (4%) increased the number of days they used alternative modes. These percentages were similar to those reported in the 2007 GRH survey. The share of respondents who said they maintained but did not increase use of an alternative mode they started before GRH increased significantly from 64% in 2007 to 72% in 2010. This is to be expected, since most respondents said they were using an alternative pre-GRH and most used alternative modes four or five days per week pre-GRH.

Figure 17  
Alternative Mode Changes

(2004 n = 981, 2007 n = 918, 2010 n = 972)

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



About two percent 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. This result is significantly lower than the nine percent of respondents who gave this response in 2007. 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.

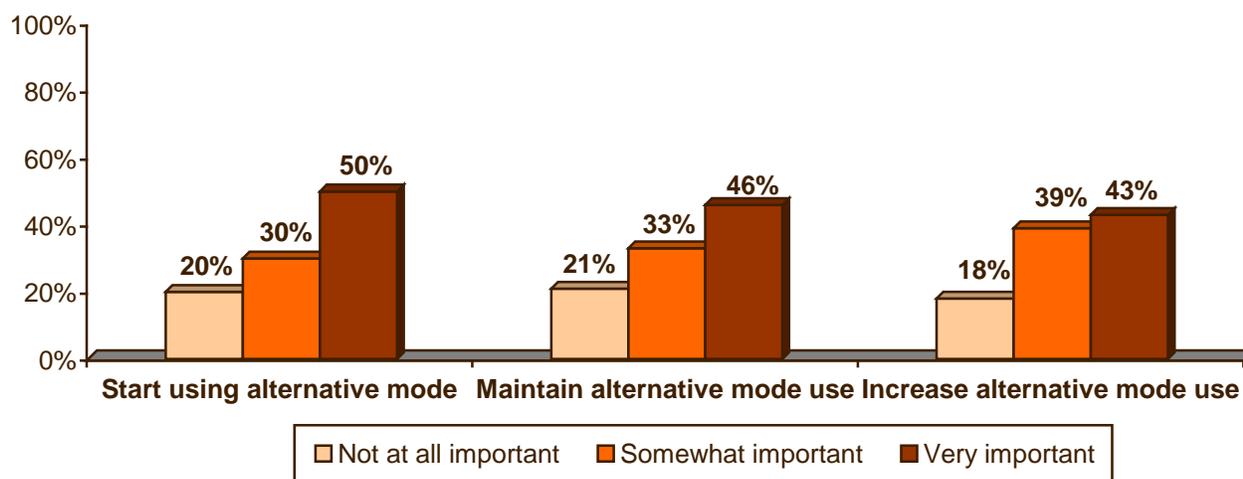
#### Importance to Decision to Start, Maintain, or Increase Use of Alternatives

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 18 indicate that half (50%) of all 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 20% said GRH was “not at all important.”

**Maintain Use of Alternative Mode** – Figure 18 also shows how important GRH was to respondents’ decisions to continue using alternative modes they used before joining GRH. GRH appears to be similarly important for these respondents as for those who were not using alternative modes at all pre-GRH. About 79% of respondents who maintained use of an alternative mode or who started using alternative modes said GRH was “very important” or “somewhat important” to their decision.

**Figure 18**  
**Importance of GRH to Start, Maintain, or Increase Alternative Mode Use**  
(Start n = 208; Maintain n = 678; Increase n = 28)

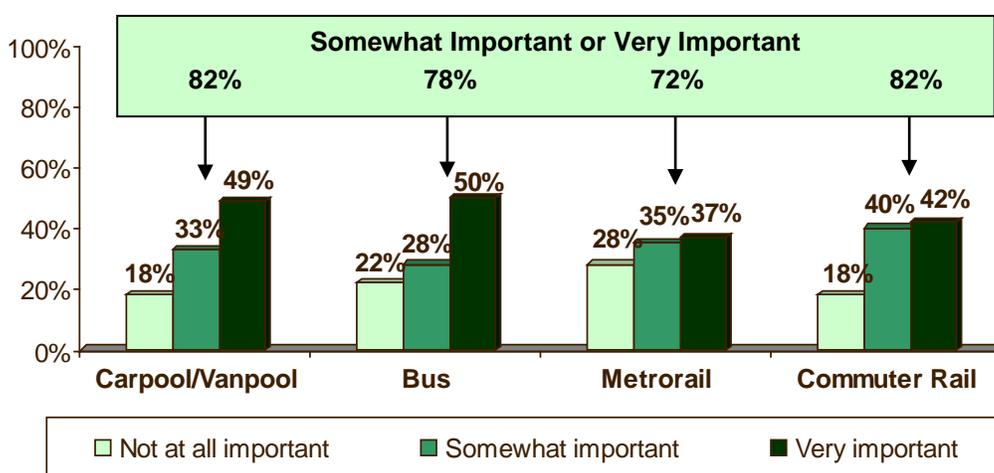


**Increase Use of Alternative Mode** – Finally, Figure 18 also shows GRH’s importance to respondents who increased their use of alternative modes. GRH appeared to be about equally important to this decision as for decisions to start or maintain use of alternatives. Eight in ten (82%) respondents said it was “very important” or “somewhat important” to this decision, compared with 80% of respondents who started an alternative mode and 78% who maintained alternative modes. About two in ten said it was “not at all important” to the decision. But the sample for this group is small.

**Importance of GRH to Maintain Alternative Modes by Pre-GRH Alternative Modes** – Respondents who were using alternative modes before they joined GRH differed slightly in their perceived value of GRH by the modes they were using pre-GRH. These results are shown in Figure 19.

Respondents who were carpooling/vanpooling, riding the bus, or using commuter rail seemed to find GRH most important. In each of these mode groups, about eight in ten considered GRH either “very important” or “somewhat important” to their decision to continue using these modes. In comparison, approximately seven in ten Metrorail riders rated it as valuable.

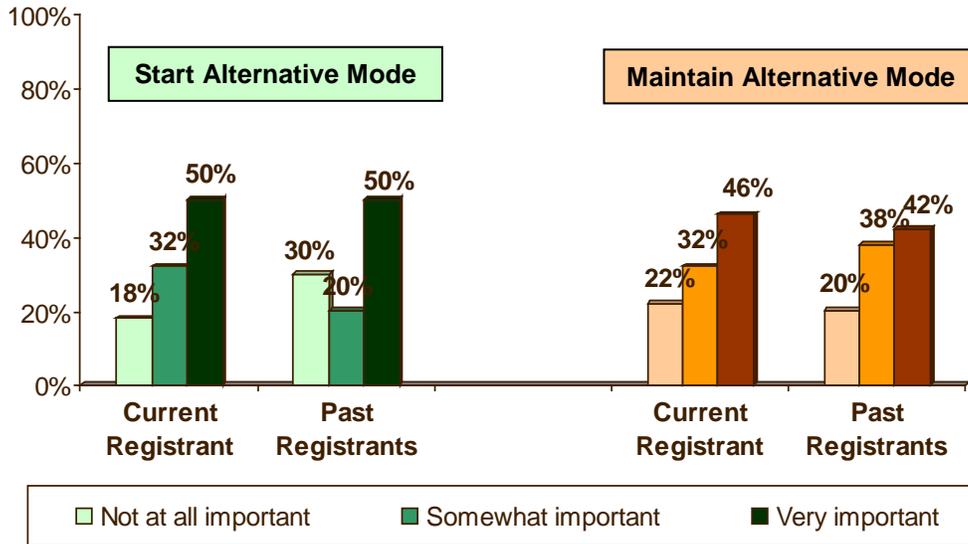
**Figure 19**  
**Importance of GRH to Maintain Alternative Mode Use by Alternative Mode used Pre-GRH**  
 (Carpool/vanpool n = 247; Bus n = 150; Metrorail n = 136; Commuter Rail n = 133)



**Importance of GRH by Registration Status** – Results presented in Figure 20 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, while only 70% of past registrants gave these high ratings. But the differences were not statistically significant. Some difference also was noted between current and past registrants who continued using an alternative, but again the results were not statistically significant.

**Figure 20**  
**Importance of GRH to Decision to Start or Maintain Alternative Mode by**  
**Registration Status – Current or Past**

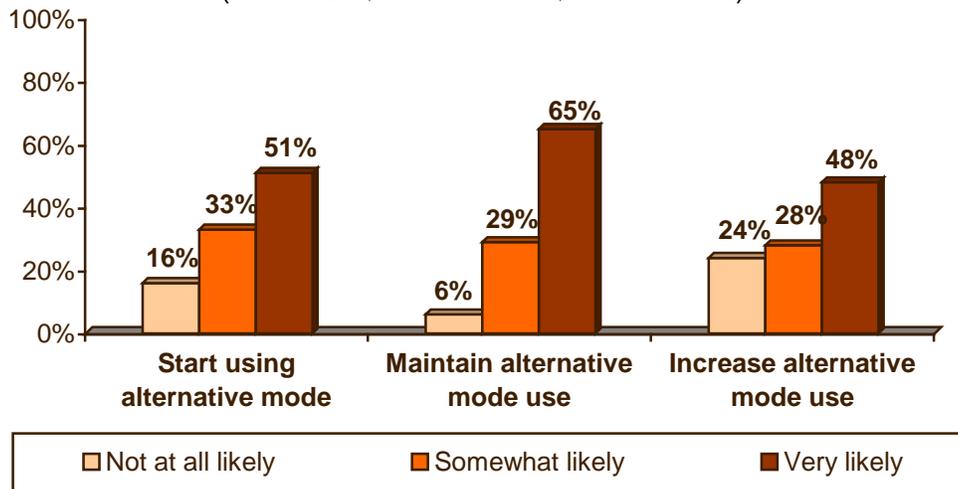
(Start alternative mode: Current registrants n = 164; Past registrants n = 44)  
 (Maintain alternative mode: Current registrants n = 522; Past registrants n = 154)



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 21 shows how likely respondents were to have started, increased, or maintained use of alternative modes if GRH had not been available to them.

**Figure 21**  
**Likely to Start, Maintain, or Increase Use of Alternative Modes if GRH Not Available**  
 (Start n = 204; Maintain n = 653; Increase n = 42)



More than half (51%) of respondents who started using alternative modes said they were “very likely” to have made the change even if GRH had not been available, and 33% said they were “somewhat likely” to have done so. These results were significantly lower than the 65% and 24% of respondents respectively who gave these responses in the 2007 study. Only about one in six (16%) said they were “not at all likely” to have started using alternative modes if GRH had not been available. This was a similar percentage to that reported in 2007 (11%). These differences were not statistically significant.

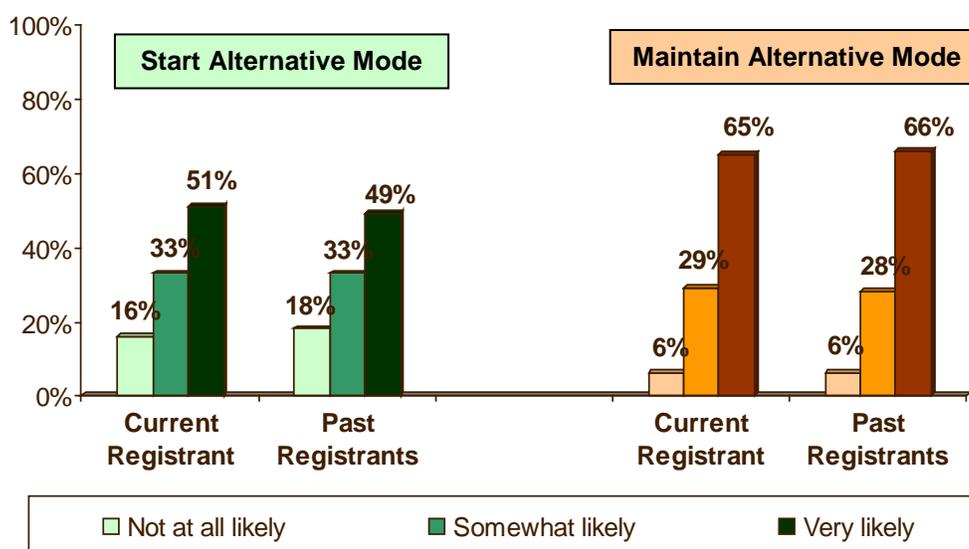
A significantly higher proportion of respondents who had been using an alternative mode pre-GRH, than those who had started using alternative modes, tended to mention that they were “very likely” to have maintained their alternative mode use without GRH (65% vs. 51% respectively). In addition, a significantly lower proportion of respondents who had been using an alternative mode pre-GRH, than those who had started using alternative modes, tended to mention that they were “not at all likely” to have maintained their alternative mode use without GRH (6% vs. 16% respectively).

A small number of respondents used alternative modes pre-GRH but increased their use of these modes while participating in GRH. GRH seemed to be more valuable to these respondents than to respondents who started using alternative modes or made no changes in their commute. Almost one-quarter (24%) said they were “not at all likely” to have made this change without GRH and 28% said they were only “somewhat likely” to have made this change. About half (48%) said they were “very likely” to have made this change without GRH.

*Likelihood to Start or Continue Modes by Registration Status* – Finally, Figure 22 shows differences between current and past registrants in likelihood to start or maintain alternative modes without GRH. There appears no statistical difference in the likelihood of starting or maintaining alternative modes without GRH, between current and past registrants. Note that the sample size is very small for the past registrant group that started alternative modes without GRH.

Figure 22  
**Likely to Start or Maintain Alternative Modes Without GRH  
by Registration Status – Current or Past**

(Start alternative mode: Current registrants n = 159; Past registrants n = 45)  
(Maintain alternative mode: Current registrants n = 505; Past registrants n = 146)



The proportion of current registrants who mentioned they were “very likely” to start or maintain the use of alternative modes in the absence of GRH, was significantly lower in 2010 (51% and 65% respectively), than in 2007 (67% and 73% respectively).

#### Other Influences Motivating Commute Changes

Figures 18 through 22 presented an apparent contradiction. Despite the high percentage of respondents who rated GRH as “very important” or “somewhat important” to their decisions to use alternative modes, most respondents said they were likely to have made these decisions anyway, implying that GRH was not 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, of which GRH was one.

*Other Assistance or Benefits That Influenced Decision* – With this in mind, respondents were asked if they had received other commute benefits or assistance, in addition to GRH, that influenced their commute mode choice decision. Table 11 shows that 52% of all survey respondents received such assistance or benefits, while 48% did not. Current registrants were similar to past registrants with respect to likelihood of receiving assistance or benefits other than GRH.

Table 11  
Assistance or Benefits Received, Other than GRH, That Influenced Commute Decision  
All Respondents and Current and Past Registrants

<b>Received Assistance or Benefit</b>	<b>All Respondents (n = 993)</b>	<b>Current Registrants (n = 771)</b>	<b>Past Registrants (n = 222)</b>
Yes	52%	53%	50%
No	48%	47%	50%

Respondents who received commute assistance or benefits in addition to GRH were asked if any assistance or benefit was more important to their decision than GRH. Table 12 shows these results. About a third of respondents (34%) mentioned another service or benefit, but only two benefits were noted by at least one percent of respondents. The most common other benefit, named by 27% of total respondents, was “discount/free transit pass/Metrochek.” Five percent mentioned “assistance from employer” as a more important benefit than GRH.

Table 12  
Assistance or Benefits More Important to Decision than GRH  
 (n=1,032)

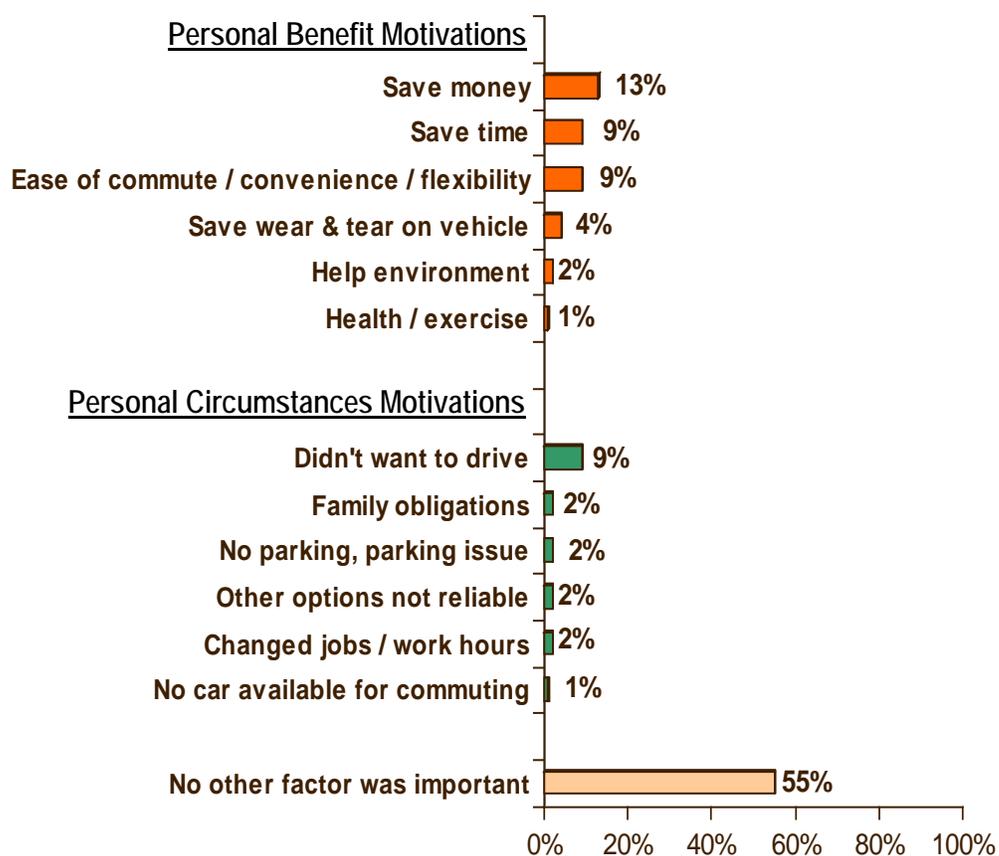
Assistance/Benefit	Percentage*
Discount/free transit pass/Metrochek	27%
Assistance from employer	5%
Other**	3%

\* Percentage will not add to 100% because not all respondents mentioned a service that was more important than GRH

\*\* Each response in the "Other" category was mentioned less than one percent of respondents

*Other Factors or Circumstances That Influenced Decision* – Respondents also were asked if any other factors or circumstances, other than GRH and other than the assistance or benefits mentioned above, were important to their decision to use alternative modes. Figure 23 lists the factors mentioned.

Figure 23  
Other Factors/Circumstances Important to Decision to Use Alternative Modes  
 (n = 956, multiple responses permitted)



More than half (55%) said no other factor was important. Respondents who did cite other factors primarily mentioned factors related to positive or negative characteristics of commuting. The most frequently mentioned reason, was to “save money,” cited by 13% of respondents. Other common reasons included, “didn’t want to drive”, wanted to “save time”, or the “ease of commute/convenience/flexibility”, (9% respectively). Four percent of respondents noted that they did it to “save wear and tear on vehicle”. These data suggest the importance of GRH as the primary motivator for using alternative modes, while, for many commuters, personal factors and characteristics of their commute play a lesser role in influencing mode choice.

## USE OF AND SATISFACTION WITH GRH

### Characteristics of Participants Who Used GRH Trips

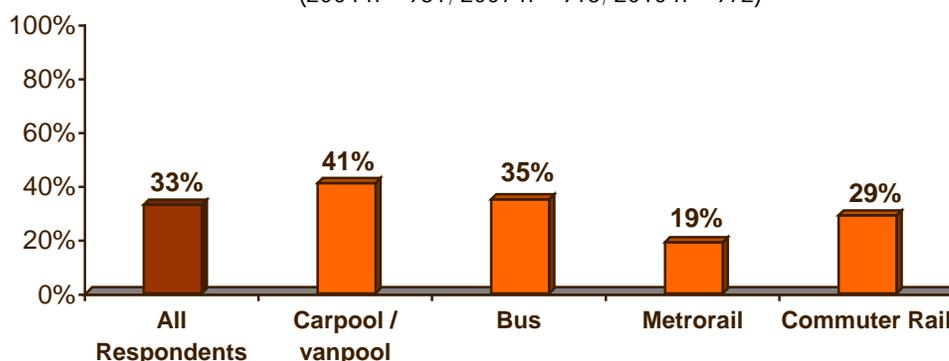
*Used GRH Trip by Registration Status* – As shown in Table 13, one in three (33%) respondents said they had taken a GRH trip. This was significantly higher than the result in 2007 (23%). Current registrants used GRH trips at a significantly higher rate than did past registrants. This could be because 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 13  
Used GRH Trip  
All Respondents, Current Registrants, and Past Registrants

<b>Taken a GRH Trip</b>	<b>All Registered Respondents (n = 1,026)</b>	<b>Current Registrants (n = 783)</b>	<b>Past Registrants (n = 243)</b>
Yes	33%	35%	27%
No	67%	65%	73%

*Used GRH Trip by During-GRH Modes* – Figure 24 compares use of GRH by four “During-GRH” mode groups: carpool/vanpool, bus, Metrorail, and commuter rail.

Figure 24  
Used GRH Trip by Primary Mode Used During-GRH  
(2004 n = 981; 2007 n = 918; 2010 n = 972)

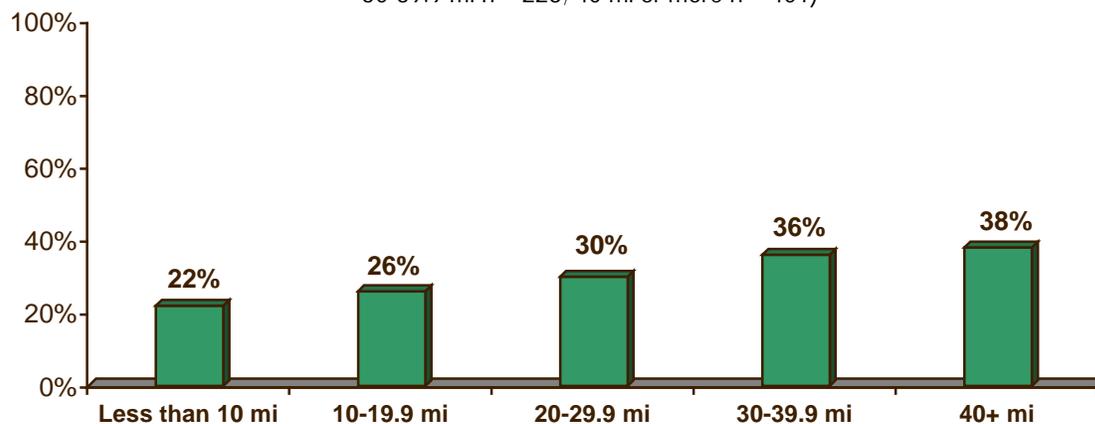


Carpoolers/vanpoolers, bus riders, and commuter rail had the highest trip usage; 41%, 35%, and 29% of these respondents, respectively, said they took a GRH trip. Metrorail riders had the lowest usage. Only 19% of these respondents took GRH trips.

*Used GRH Trip by Commute Distance* – Figure 25 presents a comparison of the use of GRH by the commute distance of respondents. As shown, the average one-way distance of a respondent who used a GRH trip was 38.3 miles one-way, compared to 36.5 miles for all GRH respondents overall.

**Figure 25**  
**Used GRH Trip by Commute Distance (miles)**

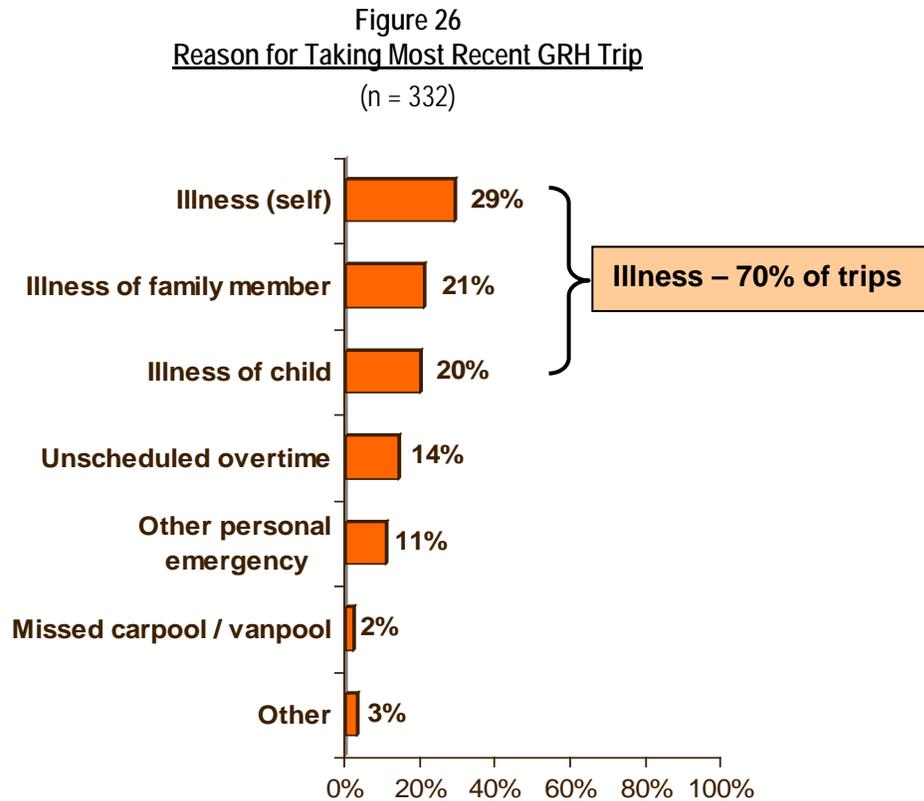
(Less than 10 mi n = 69; 10-19.9 mi n = 120; 20-29.9 mi n = 181;  
30-39.9 mi n = 228; 40 mi or more n = 401)



Respondents who had the shorter commutes, less than 10 miles or between 10 and 19.9 miles one-way, were the least likely to use a trip (22% and 26% respectively); compared to at least three in ten respondents in other distance groups. 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.

#### Reasons for Taking GRH Trip

Figure 26 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. The overwhelming reason was “illness,” either of the respondent (29%), another family member (21%), or a child (20%). Seven in ten GRH trips were taken to address an illness. “Unscheduled overtime” (14%) and “other personal emergency” (11%) were the two other common reasons.



### Satisfaction With the Trip

Participants, who had taken a GRH trip were asked if the service was satisfactory. The overwhelming majority (97%) said they were satisfied. Reasons given by the 11 unsatisfied respondents were: “waited too long” (4 respondents), “hard to get approval” (2 respondents), and other reasons (5 respondents).

As shown in Table 14, respondents waited an average of 17 minutes for a taxi. This was one minute more than the average calculated for the 2007 GRH survey. In 2010, more than half (53%) said the taxi arrived within 10 minutes and more than four in five (85%) respondents waited 20 minutes or less.

**Table 14**  
**Time Waited for Taxi**  
(n=317)

<b>Wait Time</b>	<b>Percentage</b>	<b>Cumulative Percentage</b>
5 minutes or less	26%	26%
6 to 10 minutes	27%	53%
11 to 20 minutes	32%	84%
21 to 30 minutes	7%	91%
31 to 45 minutes	2%	93%
46 to 60 minutes	4%	97%
61 or more minutes	3%	100%
<b>Mean Time</b>	<b>17 minutes</b>	

#### Desired Improvements to the GRH Program

Participants appear to be generally quite satisfied with the GRH Program. More than two in ten (22%) respondents said that they felt no improvement was necessary for the GRH program. An additional 49% of participants were unsure of a way Commuter Connections could improve the GRH Program. Specific suggestions mentioned by respondents are detailed in Table 15.

The most frequently mentioned improvement was more advertising, named by 7% of respondents. This was cited by nearly twice as many respondents in 2007 (13%). All other responses were cited by fewer than five percent of respondents and the results were basically consistent with the results of the 2007 survey. Respondents who mentioned that GRH should allow more trips per year dropped from 4% in 2007 to 1% in 2010. There were some statistical differences in the improvements desired by current registrants versus past registrants. Current registrants were less likely than past registrants to mention that GRH should advertise more (5% vs. 9% respectively). In addition, current registrants were more likely than past registrants to mention that no improvement was needed (26% vs. 17% respectively). This reinforces the conclusion that current GRH registrants are satisfied with the program.

**Table 15**  
**Suggested Improvements to GRH Program**  
 (n=1,032)

<b>Desired Improvement</b>	<b>Percentage*</b>
No improvement needed	22%
More advertising	7%
Don't require supervisor approval	4%
Quicker response for ride requests	3%
Don't require re-registration, streamline re-registration	3%
Easier/faster approval	3%
Extend the hours	2%
GRH drivers more knowledgeable	2%
Wider area for trips	1%
Send e-mail reminder for renewal	1%
Allow more trips per year	1%
Improve dispatching (faster, nicer)	1%
Other	3%
Don't know	49%

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

## 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
- Implications of results for travel and air quality assessment
- Program marketing findings

### Program Participation Findings

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

- The GRH program continues to attract participants but also retains many participants. More than a third of current registrants have been registered for one year or less, but four in ten have been participating for more than three years.
- About 60% of total respondents were no longer registered for the GRH program (past registrants). However, 60% of respondents whose registrants had expired and were listed as past registrants in the database thought they were still registered. It is possible 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 reason was respondents “didn’t get around to it/forgot,” mentioned by almost one-third (32%) of past registrants. This also was a primary reason noted in 2007. A related reason, named by 21% of respondents, was “did not know I had to re-register or didn’t know registration had expired.” The percentage of respondents citing this reason nearly doubled from 2007, suggesting that registrants need to be reminded that re-registration is required.
- About 10% said they “had problems/difficulties re-registering.” This could be related to the shift to the online system, which requires respondents to recall a password to make changes to their accounts. Six percent were “dissatisfied with the program/had a bad experience.”

### Impact of GRH on Commute Patterns

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

- Encourage commuters who drive alone to work to use alternative modes, such as transit and car-pool?
- 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 19% of respondents said they drove alone full-time before starting GRH and another four percent said they drove alone most days. The remaining 77% 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 28 of 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. Overall, participants who were using an alternative pre-GRH already did so four or five days per week. In other words, a large majority of participants already were using alternative modes 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 3.2 days to 4.7 days, or about 1.5 days per week increase per respondent.

- ***Extending the Duration of Alternative Mode Use*** – Three in ten GRH participants said they had used their current alternative mode for five years or longer and six in ten (64%) had used this mode for two years or more. The average time using the alternative mode was about 46 months.

This duration was considerably shorter duration than the 83 months average for all regional commuters, based on data from the 2010 State of the Commute survey. About three in ten (29%) regional commuters said they used their current alternative mode for less than two years, just slightly lower than the 36% of GRH respondents. But 46% of regional commuters had been using their alternative mode five years or more, a much larger share than for GRH participants.

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

GRH seemed to have very modest impact on respondents who had been using an alternative pre-GRH and did not increase their alternative mode use. Less than one in ten said they were “not at all likely” to have continued using these modes if GRH were not available. By contrast, 16% of respondents who started using a new alternative mode said they were not likely to have made the change without GRH.

Surprisingly, GRH seemed most valuable to respondents who used alternative modes pre-GRH but increased their use of these modes while participating in GRH. A quarter (24%) said they were “not at all likely” to have made this change without GRH and 28% said they were only “somewhat likely” to have made this change without GRH.

### **Implications of Results for Travel and Air Quality Impact Assessment**

An important role of the survey was to collect data to support the upcoming TERM evaluation, scheduled to be performed in the spring of 2011. Several of the findings have specific implications for the assessment of travel and air quality impacts of GRH in that evaluation. These findings include:

- A positive finding is that the average duration of alternative mode use, 46 months, is longer than three years and that half of GRH participants have been in their alternative modes at least three years and 31% for five year or more. This means that congestion mitigation and air quality im-

provement benefits of GRH extend longer than the three year evaluation period, thus it would be reasonable to carry over benefits from one evaluation period to the next.

- Another finding related to impact assessment is that the benefit from participants who increase their use of alternatives is likely to be small. Although some benefit is achieved by this increase, only three percent of participants fall into this category and the average increase was only 1.5 days per week, so the overall impact will be minimal.
- Finally, an interesting finding is that more than half of past registrants continued to use alternative modes, even though they were no longer registered. Almost a quarter of past registrants were still carpooling or vanpooling and 41% continued to use transit. Thus, the region does not lose the air quality and congestion mitigation benefit of these participants, even after they leave the program.

### 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. More than six in ten respondents said they had heard or seen some form of GRH advertising. And a third of total survey respondents said they had not registered before hearing or seeing the ads and that the ads had encouraged them to register.

But awareness of advertising seems to have dropped in recent years. More than three-quarters (77%) of respondents who registered before 2005 had heard or seen advertising, compared to 64% of respondents who registered between 2005 and 2007 and 60% of those who registered in 2008, 2009, or 2010.

- 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 radio, Internet, employer, and employer / employee survey all were noted by at least five percent of respondents as their first information source about GRH.
- Radio and the Internet may be particularly important marketing tools to reach drive alone commuters. Two in ten (20%) respondents who drove alone to work pre-GRH mentioned the Internet as their source of information, compared with 12% of other respondents. Drive alone respondents also mentioned radio at higher than average rates. Registrants who carpooled or vanpooled before GRH were more likely to note “word of mouth” as their source; 45% gave this as their source, compared with 35% of all other respondents.

## APPENDICES

APPENDIX A – DISPOSITION OF FINAL DIALING RESULTS

APPENDIX B – SURVEY QUESTIONNAIRE

APPENDIX C – LETTERS, INSTRUCTIONS AND DEFINITION OF TERMS

APPENDIX D – RESULTS FROM 2010, 2007, 2004 AND 2001 GRH SURVEYS - COMPARISON ON  
KEY QUESTIONS

## APPENDIX A

## DISPOSITION OF FINAL DIALING RESULTS

Dialing Disposition at Conclusion of Survey	Initial Telephone Survey		Telephone Survey for Internet Non-Response	
	No.	Percent	No.	Percent
Completed Interviews	146	36.5%	136	53.1%
No Answer	46	11.5%	16	6.3%
Answering Machine	110	27.5%	66	25.8%
Busy	1	0.3%	-	-
Arranged Call Back	34	8.5%	8	3.1%
Respondent Never Available	1	0.3%	6	2.3%
Not In Service	-	--	4	1.6%
Refused	11	2.8%	11	4.3%
Respondent Terminated	2	0.5%	2	0.8%
Language Not English	1	0.3%	-	-
Both Numbers Wrong	38	9.5%	4	1.6%
Wrong Work Number	3	0.8%	2	0.8%
Wrong Home Number	3	0.8%	-	-
Respondent Screened Out (Q8)	4	1.0%	1	2.6
	400	100.0%	256	100.0%
Total Dialings		2,011		1,398
Average Number of Dialings Per Complete:		13.8		10.3

## APPENDIX B - SURVEY QUESTIONNAIRE

MWCOG 2010 Guaranteed Ride Home Survey - Internet Version

### INTRODUCTION

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

- 1 Before 2005 (**SKIP TO Q2**)
- 2 2005 (**SKIP TO Q2**)
- 3 2006 (**SKIP TO Q2**)
- 4 2007 (**SKIP TO Q2**)
- 5 2008 (**SKIP TO Q2**)
- 6 2008 (**SKIP TO Q2**)
- 7 2010 (**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 Commuter Connections' 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 Commuter Connections' 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 Commuter Connections' 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 \_\_\_\_\_

### COMMUTE PATTERNS

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

Q9 Do you work a compressed or flexible work schedule, for example, a full-time work week in fewer than five days or a schedule with flexible start and end times?

- 1 Yes (**CONTINUE**)
- 2 No (**SKIP TO Q10a**)
- 9 Don't know (**SKIP TO Q10a**)

Q10 What type of schedule do you use? (**SHOW RESPONSES ON SCREEN**)

1. 4/40 (4 10-hour days per week, 40 hours)
2. 9/80 (9 days every 2 weeks, 80 hours)
3. 3/36 (3 12-hour days per week, 36 hours)
4. Flex-time or flexible work hours (core hours with flexible start & stop)
5. Work five days per week, 35 or more hours per week (**RECODE Q9 = 2**)
- 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) \_\_\_\_\_
- 10 Don't know

Q10c In a typical week, how many work days are you away from your usual work location for an entire day on business / work travel?

- 0 0 days per week (I do not regularly travel for 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
- 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 = 1, 2, 3, 4, OR 5 ALSO SHOW:** "For days that you were on business / work travel, please report the type of transportation you would have used to get to work if you had 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 did not work."**

**IF Q10 = 1, 2, OR 3 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)
3 Drive alone in a car, truck, van, or SUV	
4 motorcycle	
5 carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 casual carpool (slugging)	
7 Vanpool	
8 Buspool	
9 Bus (public bus or shuttle)	
10 Metrorail	
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	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe) _____	
Total Days	Sum of 1-21

**DEFINE CALTDAYS = TOTAL Q14 DAYS USING MODES 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15**

**DEFINE CMCA (Current Most Common Alternate)**

**Set CMCA using Q14 alt mode used most days (responses 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15)**

**NOTE – GROUP RESPONSES 8 (buspool) AND 9 (bus)**

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

**IF CALTDAYS > 0, SET CMCA AS FOLLOWS:**

**IF GREATEST NUMBER OF Q14, RESPONSES 5-15 =**

**Q14\_05, SET CMCA = 05 (Carpool)**

**Q14\_06, SET CMCA = 06 (Casual Carpool / Slug)**

**Q14\_07, SET CMCA = 07 (Vanpool)**

**Q14\_08 + R09, SET CMCA = 09 (Bus)**

**Q14\_10, SET CMCA = 10 (Metrorail train)**

**Q14\_11, SET CMCA = 11 (MARC train)**

**Q14\_12, SET CMCA = 12 (VRE train)**

**Q14\_13, SET CMCA = 13 (AMTRAK / Other train)**

**Q14\_14 SET CMCA = 14 (Bicycle)**

**Q14\_15 SET CMCA = 15 (Walk)**

**IF TIE FOR MOST DAYS USED, SELECT IN THIS ORDER: VANPOOL, CARPOOL, BUS (INCLUDE BUSPOOL), VRE, MARC, 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 21), ASK Q14a**

**IF CALTDAYS = 0 AND Q2 = 1, START Q14a WITH "You said you're currently registered for the GRH Program but you drive alone all the days you travel to work,"**

Q14a <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)

- 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

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

**IF CMCA = 5 – 15, 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

**IF Q14 = 5, 6, OR 7, ASK Q18, OTHERWISE SKIP TO INSTRUCTIONS BEFORE Q19**

Q18 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

**IF Q14 NE 5, 6, 7, 8, 9, 10, 11, 12, OR 13, SKIP TO INSTRUCTIONS BEFORE Q21.**

**IF Q14 = 5, 6, 7, 8, 9, 10, 11, 12, OR 13, ASK Q19-Q20, INSERTING <Q14 MODE> NAME DEFINED BY Q14 MOST DAYS USED AS FOLLOWS:**

- Q14\_R5 + Q14\_R6 = carpool
- Q14\_R7 = vanpool
- Q14\_R8 + Q14\_R9 = bus
- Q14\_R10 + Q14\_R11 + Q14\_R12 + Q14\_R13 = 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 car/van pool or driver (**SKIP TO 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 car/van pool, 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**)

#### **PAST REGISTRANTS – MODE DURING GRH**

**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**

*(Past Registrants)*

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 <Registered, Eligible> for GRH	Number of Days Used (0 to 5)
3 Drive alone in a car, truck, van, or SUV	
4 motorcycle	
5 carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 casual carpool (slugging)	
7 Vanpool	
8 Buspool	
9 Bus (public bus or shuttle)	
10 Metrorail	
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	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe) _____	
Total Days	Sum of 1-21

**DEFINE DALTDAYS = TOTAL Q23 DAYS USING MODES 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15**

**DEFINE DMCA (During Most Common Alternate)**

**Set DMCA using Q23 alt mode used most days (responses 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15)**

**NOTE – GROUP RESPONSES 8 (buspool) AND 9 (bus)**

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

**IF DALTDAYS > 0, SET DMCA AS FOLLOWS:**

**IF GREATEST NUMBER OF Q23, R5-15 =**

**Q23\_05, SET DMCA = 05 (Carpool)**

**Q23\_06, SET DMCA = 06 (Casual Carpool / Slug)**

**Q23\_07, SET DMCA = 07 (Vanpool)**

**Q23\_08 + R09, SET DMCA = 09 (Bus)**

**Q23\_10, SET DMCA = 10 (Metrorail)**

**Q23\_11, SET DMCA = 11 (MARC)**

**Q23\_12, SET DMCA = 12 (VRE)**

**Q23\_13, SET DMCA = 13 (AMTRAK / Other)**

**Q23\_14 SET DMCA = 14 (Bicycle)**

**Q23\_15 SET DMCA = 15 (Walk)**

**IF TIE FOR MOST DAYS USED, SELECT DCMA IN THIS ORDER: VANPOOL, CARPOOL, BUS (INCLUDE BUSPOOL), VRE, MARC, METRORAIL, AMTRAK, CASUAL CARPOOL, BIKE, WALK.**

**NOW SKIP TO Q27**

**PREVIOUS MODE – MODE BEFORE GRH**

*(One-Time Exceptions)*

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

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

**IF Q24 = 0, AUTOCODE Q26, RESPONSE 20 (did not work then) = 5, THEN SKIP TO INSTRUCTIONS BEFORE Q30**

**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)
3 Drive alone in a car, truck, van, or SUV	
4 motorcycle	
5 carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 casual carpool (slugging)	
7 Vanpool	
8 Buspool	
9 Bus (public bus or shuttle)	
10 Metrorail	
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	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe) _____	
20 Did not work Monday-Friday then, did not work in Washington area then	
Total Days	Sum of 1-21

**DEFINE BHALTDAYS = TOTAL Q26 DAYS USING MODES 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15**

**DEFINE BHMCA (Before Heard Most Common Alternate)**

**Set BHMCA using Q26 alt mode used most days (responses 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15)**

**NOTE – GROUP RESPONSES 8 (buspool) AND 9 (bus)**

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

**IF BHALTDAYS > 0, SET BHMCA AS FOLLOWS:**

**IF GREATEST NUMBER OF Q26, R5-15 =**

**Q26\_05, SET BHMCA = 05 (Carpool)**

**Q26\_06, SET BHMCA = 06 (Casual Carpool / Slug)**

**Q26\_07, SET BHMCA = 07 (Vanpool)**

**Q26\_08 + R09, SET BHMCA = 09 (Bus)**

**Q26\_10, SET BHMCA = 10 (Metrorail)**

**Q26\_11, SET BHMCA = 11 (MARC)**

**Q26\_12, SET BHMCA = 12 (VRE)**

**Q26\_13, SET BHMCA = 13 (AMTRAK / Other)**

**Q26\_14 SET BHMCA = 14 (Bicycle)**

**Q26\_15 SET BHMCA = 15 (Walk)**

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

**NOW SKIP TO INSTRUCTIONS BEFORE Q30**

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

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

**IF Q27 = 0, AUTOCODE Q29, RESPONSE 20 (not working M-F) = 5, THEN SKIP TO INSTRUCTIONS BEFORE Q30**

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 REPORT “Telecommute/telework, SHOW MESSAGE:** “You said you typically telecommute now. Please indicate the number of days you telecommuted before you registered for the GRH program?” **ACCEPT “0” AS VALID RESPONSE**

Type of Transportation – Before Registering for GRH	Number of Days Used (0 to 5)
3 Drive alone in a car, truck, van, or SUV	
4 motorcycle	
5 carpool, including carpool w/family member, dropped off (ride or drive with others in a car, truck, van, or SUV)	
6 casual carpool (slugging)	
7 Vanpool	
8 Buspool	
9 Bus (public bus or shuttle)	
10 Metrorail	
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	
1 Compressed work schedule day off	
2 Telecommute/telework all day	
17 Regular day off	
21 Other (describe)	
20 Did not work Monday-Friday then, did not work in Washington area then	
Total Days	Sum of 1-21

**DEFINE BRALTDAYS = TOTAL Q29 DAYS USING MODES 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15**

**DEFINE BRMCA (Before Registered Most Common Alternate)**

**Set BRMCA using Q29 alt mode used most days (responses 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15)**

**NOTE – GROUP RESPONSES 8 (buspool) AND 9 (bus)**

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

**IF BRALTDAYS > 0, SET BRMCA AS FOLLOWS:**

**IF GREATEST NUMBER OF Q29, R5-15 =**

**Q29\_05, SET BRMCA = 05 (Carpool)**

**Q29\_06, SET BRMCA = 06 (Casual Carpool / Slug)**

**Q29\_07, SET BRMCA = 07 (Vanpool)**

**Q29\_08 + R09, SET BRMCA = 09 (Bus)**

**Q29\_10, SET BRMCA = 10 (Metrorail)**

**Q29\_11, SET BRMCA = 11 (MARC)**

**Q29\_12, SET BRMCA = 12 (VRE)**

**Q29\_13, SET BRMCA = 13 (AMTRAK / Other)**

**Q29\_14 SET BRMCA = 14 (Bicycle)**

**Q29\_15 SET BRMCA = 15 (Walk)**

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

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

**Skip instruction for previous Drive Alone by registration status**

**INSTRUCTIONS BEFORE Q30**

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

**IF CMCA, DMCA = 5 OR 6, INSERT carpooling**

**IF CMCA, DMCA = 7, INSERT vanpooling**

**IF CMCA, DMCA = 8, 9, 10, 11, 12, OR 13, INSERT using transit**

**IF CMCA, DMCA = 14, INSERT biking**

**IF CMCA, DMCA = 15, INSERT walking**

**Current Registrants**

**IF CURR\_REG (GRHTYPE = 1) AND IF CALTDAYS > 0 AND BRALTDAYS = 0, ASK Q30.**

**IF Q29 = 20, SKIP TO Q45**

**Past Registrants**

**IF PAST\_REG (GRHTYPE = 2) AND IF DALTDAYS > 0 AND BRALTDAYS = 0, ASK Q31.**

**IF Q29 = 20, SKIP TO Q46**

**One-time Exception users**

**IF ONE\_TIME (GRHTYPE = 3) AND IF CALTDAYS > 0 AND BHALTDAYS = 0, ASK Q32.**

**IF Q26 = 20, SKIP TO Q45**

**ALL OTHERS, SKIP TO INSTRUCTIONS BEFORE Q35**

*(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

**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**

*(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 Q45**

*(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 Q46**

**Skip instruction for increased use of alt modes by registration status**

**INSTRUCTIONS BEFORE Q35**

Current Registrants

**(IF CURR-REG (GRHTYPE = 1) and IF CALTDAYS > 0 AND CALTDAYS > BRALTDAYS ASK Q35 AND Q38.**

Past Registrants

**IF PAST\_REG (GRHTYPE = 2) and IF DALTDAYS > 0 AND DALTDAYS > BRALTDAYS, ASK Q36 AND Q39.**

One-time Exceptions

**IF ONE\_TIME (GRHTYPE = 3) and IF CALTDAYS > 0 AND CALTDAYS > BHALTDAYS, ASK Q37 AND Q38.**

**ALL OTHERS SKIP TO INSTRUCTIONS BEFORE Q40)**

*(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**

*(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 Q45**

*(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 Q46**

**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, BDMCA**

**IF BHMCA, BDMCA = 5 OR 6, INSERT carpooling**

**IF BHMCA, BDMCA = 7, INSERT vanpooling**

**IF BHMCA, BDMCA = 8, 9, 10, 11, 12, OR 13, INSERT using transit**

**IF BHMCA, BDMCA = 14, INSERT biking**

**IF BHMCA, BDMCA = 15, INSERT walking**

Current Registrants

**(IF CURR\_REG (GRHTYPE = 1) AND CALTDAYS > 0 AND BRALTDAYS > 0 AND CALTDAYS <= BRALTDAYS, ASK Q40.**

Past Registrants

**IF PAST\_REG (GRHTYPE = 2) and DALTDAYS > 0 AND BRALTDAYS > 0 AND DALTDAYS <= BRALTDAYS, ASK Q41.**

One-Time exceptions

**IF ONE\_TIME (GRHTYPE = 3) and CALTDAYS > 0 AND BHALTDAYS > 0 AND CALTDAYS <= BHALTDAYS, ASK Q42.**

**ALL OTHERS, SKIP TO INSTRUCTIONS BEFORE Q45**

*(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**

*(Current Registrants or Past Registrants)*

Q43 If GRH had not been available, how likely would you have been to continue?

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

**SKIP TO Q45**

*(One-Time Registrants)*

Q44 If GRH had not been available, how likely would you have been to continue?

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

**OTHER SERVICES RECEIVED THAT COULD HAVE INFLUENCED DECISIONS**

**INSTRUCTIONS BEFORE Q45**

**IF CURR\_REG (GRHTYPE = 1) or ONE\_TIME (GRHTYPE = 3) AND CALTDAYS > 0, ASK Q45**

**IF PAST\_REG (GRHTYPE = 2) AND DALTDAYS > 0, ASK Q46**

**OTHERWISE, SKIP TO Q49**

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

**IF CMCA, DMCA = 5 OR 6, INSERT carpool**

**IF CMCA, DMCA = 7, INSERT vanpool**

**IF CMCA, DMCA = 8, 9, 10, 11, 12, OR 13, INSERT use transit**

**IF CMCA, DMCA = 14, INSERT bike**

**IF CMCA, DMCA = 15, INSERT walk**

*(Current Registrants or One-Time Exceptions)*

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

- 1 yes
- 2 no (**SKIP TO Q47a**)
- 9 Don't know (**SKIP TO Q47a**)

**SKIP TO Q46a**

*(Past Registrants)*

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

- 1 yes
- 2 no (**SKIP TO Q47a**)
- 9 Don't know (**SKIP TO Q47a**)

Q46a Was any assistance or benefit you received more important than GRH to your decision?

- 1 Yes
- 2 No
- 3 Don't know

**IF Q46a = 2 OR 3, SKIP TO Q47a**

Q47 What assistance or benefit was more important than GRH?

OPEN ENDED \_\_\_\_\_

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

- 1 Yes
- 2 No
- 3 Don't know

**IF Q47a = 2 OR 3, 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, SHOW**, "For what reason did you take the 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?

- 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 \_\_\_\_\_

*Responses will be coded into 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.

Q59a Do you have access to the internet, either at your home or your work?

- 1 Yes
- 2 No
- 9 Don't know

- 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!

## APPENDIX C LETTERS, INSTRUCTIONS & DEFINITION OF TERMS

### **Alert Letter Sent via email Internet Survey of Past Participants (CIC sample)**

Dear Sir/Madam:

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

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

<http://proj.cicresearch.com/grh10.asp?id>

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

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

Sincerely,

Nicholas W. Ramfos  
Director, Commuter Connections

**Alert Letter Sent via email**  
**Internet Survey of Current Participants (BTI sample)**

Dear Sir/Madam:

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

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

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

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

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

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

Sincerely,

Nicholas W. Ramfos  
Director, Commuter Connections

## Reminder Letter Sent by email Internet Survey

Dear *<name>*,

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

You might have received an email about this survey a week ago. If you completed the survey in response to that email, thank you. Your responses will help us improve the GRH program and we appreciate your participation.

If you haven't completed the survey, please click *<here>* to go to the internet survey link. It will take you just a few minutes to complete.

Thank you in advance for your help. If you have any questions about this study, please call me at (202) 962-3200.

Sincerely,

Nicholas Ramfos  
Director, Commuter Connections

**Instructions and Definitions of Terms for  
Guaranteed Ride Home 2007 (grh07) - #858**

**Q1, Q1a, Q3, Q4, etc:**

**GRH** Guaranteed Ride Home (otherwise known as GRH) provides commuters who regularly carpool, vanpool, bike, walk or take transit to work with a reliable ride home when one of life's unexpected emergencies arises. Commuters will be able to use GRH to get home for unexpected personal emergencies and unscheduled overtime up to FOUR times per year.

**Q7.**

**VRE.** Virginia Railway Express. Light rail.

**Q12, Q13:**

**Drive Alone.** Should include dropped off by taxi or other "livery" service, if the passenger is the only passenger. If two or more passengers are in the car, excluding the driver, it would be a carpool. You drive alone if you travel from your home to work by driving your car, motorcycle, or moped, without a passenger.

**Carpool.** You carpool if you arrive at your worksite by automobile with 2 to 6 occupants and your carpool has a regular arrangement between the occupants. May also include occupants that are being dropped off at other worksites or companies.

**Vanpool.** 7 - 15 occupants commuting to and from work by automobile. May also include occupants that are being dropped off at other worksites or companies.

**Buspool.** A buspool is a large vanpool - generally 16+ people regularly riding together. It differs from a bus in that the riders "subscribe" or sign up to ride and have a reserved seat.

**Casual carpooling/slugging.** Casual carpools are carpools that are formed on a day-to-day basis to take advantage of HOV lanes. They are most popular for commuters coming from Virginia to downtown Washington. People who want rides park at a few well-established but unofficial parking areas in VA and line up to wait for drivers. People who want rides cruise by that location and pick up as many as the car will hold. There are pick-up locations in Washington for the evening trip as well, but drivers and riders do not generally carpool home together.

**Transit.** You are a transit commuter if you ride a local or commuter bus (Metrobus, The Bus, Ride-On, Fairfax Connector, OmniRide, OmniLink, DASH or any other public or private bus), commuter rail (MARC, VRE), Amtrak, or Metrorail to get to work.

**Telecommuting.** You telework or telecommute if you work at your home, telework center, or satellite office other than your normal worksite, during your regular work time.

**Day off/compressed work schedule.** This is a non-standard of flexible (flex) schedule:

4/40 (4 10-hour days per week for a total of 40 hours)

9/80 (9 days every 2 weeks for a total of 80 hours)

3/36 (3 12-hour days per week for a total of 36 hours per week, usually worked by police, firemen, hospitals, etc.)

Flex-hours (core hours with flexible start & stop times)

**MARC.** Maryland Area Rail Commuter. Lite rail which comes from Baltimore and West Virginia, similar to our Coaster.

**Amtrak.** Just like the Amtrak train here.

**Metrorail.** This is a subway within Washington, D.C., & northern Virginia and Maryland. It's mostly underground, but does also run above ground in some areas.

**Contact person:**

Mr. Nicholas W. Ramfos, Chief of Alternative Commute Programs  
Metropolitan Washington Council of Governments (COG)  
Commuter Connections  
777 North Capitol Street NE, Suite 300  
Washington DC 20002  
202/962-3200

**How we got your number:**

The telephone number was randomly selected from a database of Guaranteed Ride Home participants. The numbers were provided by Metropolitan Washington Council of Governments and consisted of participants that had entered the GRH database between March 1, 2004 and March 15, 2007.

**You work for:**

CIC Research, Inc.  
San Diego, CA  
(800) 892-2250 or (858) 637-4000

**Supervisors:**

Dave Harper, Scot Evans and Susan Landfield

## Appendix D

### Results from 2010, 2007, 2004, and 2001 GRH Surveys

#### Comparison on Key Questions

#### Registration Information

- **Registration status** – Percentage of all respondents

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Current registrant	40%	61%	59%	62%
Past registrant	60%	39%	39%	32%
One-time exception	0%	0%	2%	6%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Less than 1 year	12%	2%	7%	7%
1 year	21%	28%	29%	39%
2 years	15%	34%	21%	23%
3 years	9%	5%	17%	31%
More than 3 years	43%	26%	26%	N/A

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
<u>Program Related Reasons</u>				
Didn't get around to it, forgot	32%	24%	13%	7%
Never used program	6%	17%	6%	---
Didn't know I had to re-register	21%	11%	14%	21%
Couldn't CP/VP/use transit 2+ dy/wk	3%	6%	6%	4%
CP/VP/Transit didn't work out	3%	5%	10%	6%
Dissatisfied, bad experience	6%	---	5%	---
Too much effort to use program	0%	---	2%	14%
<u>Personal Circumstance Reasons</u>				
Changed job/work hours	10%	25%	27%	25%
Needed car for work/other purpose	5%	6%	10%	3%
Moved to different residence	6%	6%	3%	7%
Retired/don't commute/don't need	0%	---	6%	5%
Joined employer program	0%	---	---	2%
Other	2%	2%	4%	20%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Word of mouth – referral	35%	34%	26%	----
Radio	12%	16%	16%	----
Internet	14%	11%	11%	----
Employer/employee survey	8%	7%	10%	----
Brochure/promo materials	4%	7%	6%	----
Direct mail/postcard from CC	3%	6%	5%	----
Bus/train sign	4%	4%	7%	----
Bus/train schedule	0%	4%	1%	----
TV	2%	3%	3%	----
Newspaper/Newsletter	3%	4%	3%	----
Other	2%	7%	5%	----

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Heard or saw GRH ad	62%	57%	72%	---
Registered after hearing ads	38%	36%	54%	---
Ad encouraged registration	33%	34%	49%	---

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

<u>Current Registration</u>	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
DA/Motorcycle	2.4%	6.0%	5.0%	9.1%
CP/VP	19.1%	35.7%	35.7%	35.3%
Bus	26.7%	21.8%	19.2%	18.2%
Metrorail	12.8%	17.4%	14.3%	36.2%
Commuter Rail	21.5%	18.1%	24.0%	
Bike/walk	1.1%	0.4%	1.5%	0.7%
Telework	1.1%	0.5%	0.3%	0.4%

<u>Past</u>	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
DA/Motorcycle	28.8%	41.5%	41.4%	33.3%
CP/VP	14.4%	16.9%	20.3%	20.2%
Bus	19.3%	9.2%	13.4%	9.3%
Metrorail	10.3%	21.5%	9.3%	34.5%
Commuter Rail	11.9%	4.6%	11.8%	
Bike/walk	1.6%	3.1%	2.3%	1.5%
Telework	3.3%	3.1%	1.5%	1.2%

• **Average length of commute**

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Distance (miles)	36.5 mi	34.5 mi	32.7 mi	31.7 mi
Time (minutes)	67 min	63 min	50 min	57 min

- **“Pre-GRH” Modes vs “During-GRH” Modes (3+ days per week)** – Percentage of all registrants – modes used before registering/participating in GRH and the modes used while registered/participating in GRH

Pre-GRH	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
DA/Motorcycle	23%	31%	26%	23%
CP/VP	27%	26%	29%	30%
Bus	17%	17%	16%	
Metrorail	16%	19%	14%	45%
Commuter Rail	15%	11%	13%	
During-GRH	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
DA/Motorcycle	4%	14%	5%	9%
CP/VP	33%	34%	35%	34%
Bus	27%	24%	21%	
Metrorail	14%	18%	15%	55%
Commuter Rail	20%	16%	20%	

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

Pre-GRH	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
0 days/week	23%	32%	26%	23%
1 day/week	0%	0%	0%	0%
2 days/week	1%	2%	1%	0%
3 days/week	2%	1%	2%	1%
4 days/week	11%	9%	11%	2%
5 days/week	62%	56%	60%	74%
Average days/week	3.7	3.2	3.5	3.8
During-GRH	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
0 days/week	2%	10%	4%	8%
1 day/week	1%	1%	1%	0%
2 days/week	2%	1%	1%	1%
3 days/week	6%	3%	3%	4%
4 days/week	22%	14%	16%	7%
5 days/week	67%	71%	74%	80%
Average days/week	4.4	4.2	4.5	4.4

- **Length of time using alternative modes** – Respondents who currently use alternative modes

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
1 – 11 months	19%	9%	13%	12%
12 – 23 months	17%	9%	13%	14%
24 – 35 months	14%	12%	15%	17%
36 – 59 months	19%	20%	21%	} 57%
60 – 83 months		50%	11%	
60-119 months	24%			
84 + months (7 or more years)			27%	
120 + months	7%			
<b>Average duration (months)</b>	<b>46 months</b>	<b>87 months</b>	<b>65 months</b>	<b>N/A</b>

**Influence of GRH on Commute Pattern Decisions**

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Started using alternative mode	24%	22%	24%	18%
Maintained use of alternative mode	67%	64%	67%	72%
Increased alt mode use (frequency)	4%	5%	4%	2%
No alt mode “with-GRH”	0%	9%	4%	8%

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

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
n=	208	199	229	163
Very important	50%	50%	46%	50%
Somewhat important	30%	19%	26%	23%
Not at all important	20%	31%	27%	27%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
n=	678	604	596	702
Very important	46%	43%	40%	39%
Somewhat important	33%	31%	32%	25%
Not at all important	21%	26%	28%	35%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
n=	28	32	44	15
Very important	43%	28%	27%	47%
Somewhat important	39%	38%	30%	20%
Not at all important	18%	35%	43%	33%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
n=	204	201	225	163
Very likely	51%	65%	50%	63%
Somewhat likely	33%	24%	28%	26%
Not at all likely	6%	11%	22%	11%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
n=	653	603	573	702
Very likely	65%	66%	71%	76%
Somewhat likely	29%	25%	23%	15%
Not at all likely	5%	9%	6%	9%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
n=	42	33	42	14
Very likely	48%	48%	48%	22%
Somewhat likely	28%	21%	23%	36%
Not at all likely	24%	32%	29%	43%

- **Other assistance/benefit that influenced decision to start, continue, or increase use of alternative mode** – All respondents

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
None	66%	58%	60%	77%
Discount/free transit pass, Metrochek, SmarTrip	27%	35%	28%	17%
Other cash incentive	0%	1%	3%	1%
Assistance from employer	5%	3%	1%	1%
Other	3%	4%	3%	3%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Didn't want to drive	9%	41%	16%	15%
Save money	13%	19%	12%	15%
Save time	9%	16%	11%	14%
Commute ease/flexibility/convenience	9%	0%	0%	0%
Parking issues	2%	7%	3%	4%
Stress	0%	3%	2%	3%
Save wear and tear on vehicle	4%	3%	2%	1%
Moved to different residence	0%	2%	2%	2%
Changed job/work hours	2%	1%	4%	2%
Help environment	2%	0%	0%	0%
Traffic congestion	0%	1%	3%	3%
Family obligations	2%	1%	2%	2%
Other options not reliable	2%	0%	0%	0%
No car for commuting	1%	----	----	----
Use HOV lane	0%	----	2%	----
Other		6%	8%	12%
None	55%	31%	42%	43%

**Use of and Satisfaction with GRH**

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
All respondents	33%	23%	25%	22%
<u>By Registration Status</u>				
- Current registrants	35%	30%	25%	23%
- Past registrants	27%	21%	21%	19%
<u>By Mode Used "During-GRH"</u>				
- CP/VP	41%	27%	35%	27%
- Bus	35%	28%	29%	27%
- Metrorail	19%	14%	21%	18%
- Commuter rail	29%	17%	20%	

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Illness (self)	29%	25%	30%	29%
Illness of family member	21%	15%	10%	11%
Illness of child	20%	33%	28%	27%
Unscheduled overtime	14%	14%	15%	11%
Other personal emergency	11%	7%	10%	16%
Missed CP/VP	2%	1%	3%	2%
Other	3%	6%	4%	4%

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
5 minutes or less	26%	22%	28%	41%
6 – 10 minutes	27%	23%	28%	13%
11 – 20 minutes	32%	36%	24%	22%
21 – 30 minutes	7%	14%	13%	8%
31 – 45 minutes	2%	3%	3%	5%
46 – 60 minutes	4%	1%	3%	9%
61 or more minutes	3%	2%	1%	2%
Average (minutes)	17 min	16 min	16 min	19 min

- **Improvements desired to GRH Program \***

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
None needed	22%	25%	28%	47%
More advertising	7%	13%	8%	6%
Allow more trips per year	1%	4%	3%	----
Quicker response for ride requests	3%	3%	3%	4%
Easier/faster approval	3%	2%	3%	4%
Wider area for trips	1%	2%	2%	2%
More flexibility in eligibility/procedures		1%	3%	2%
Better directions/info on how to use		1%	2%	2%
Better communication with cabs/complaints	2%	1%	2%	----
Don't require registration	3%	1%	1%	2%
Extend the hours	2%	0%	0%	0%
Notify when time to re-register		1%	1%	----
Other	3%	10%	7%	11%
Don't know	49%	47%	41%	25%

\* Multiple responses permitted

### Demographics

- **States of Residence and Employment – all respondents**

<u>Residence</u>	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
DC	1%	1%	2%	3%
Maryland	32%	34%	29%	35%
Virginia	65%	64%	67%	61%
Other/Ref	2%	1%	2%	2%

<u>Employment</u>	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
DC	63%	60%	61%	---
Maryland	11%	10%	9%	---
Virginia	26%	30%	30%	---
Other/Ref	0%	0%	0%	---

- **Income – all respondents**

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Under \$30,000	1%	1%	1%	4%
\$30,000 – \$39,999	1%	1%	3%	6%
\$40,000 – \$59,999	6%	9%	14%	19%
\$60,000 – \$79,999	12%	17%	19%	20%
\$80,000 – \$99,999	14%	19%	24%	22%
\$100,000 – \$119,999	16%	20%	17%	30%
\$120,000 – \$139,999	15%	10%	8%	
\$140,000 – \$159,999	13%	8%	5%	
\$160,000 – \$179,999	8%			
\$180,000 – \$199,999	14%			
\$200,000 or more				

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

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Hispanic/Latino	5%	4%	4%	5%
White	68%	65%	71%	73%
Black/African-American	20%	21%	21%	17%
Asian		10%	3%	4%
Other/Mixed	7%	0%	1%	2%

- **Gender** – all respondents

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
Female	47%	57%	57%	59%
Male	53%	43%	43%	41%

- **Age** – all respondents

	<u>2010</u>	<u>2007</u>	<u>2004</u>	<u>2001</u>
18 – 24	<1%	1%	<1%	2%
25 – 34	9%	17%	17%	17%
35 – 44	23%	32%	35%	37%
45 – 54	41%	31%	33%	32%
55 – 64	25%	18%	14%	10%
65 or older	3%	1%	1%	1%