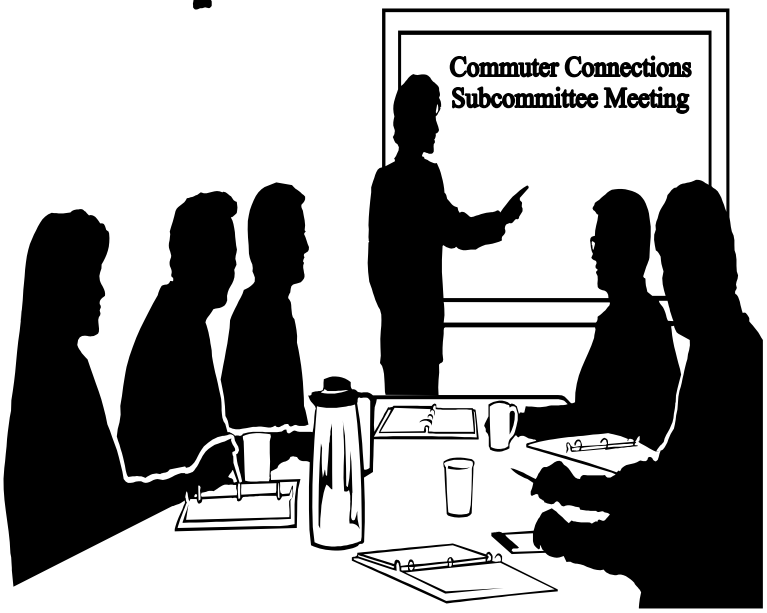
HANDOUTS

from previous meeting



November 20, 2007

ITEM #4

COMMUTER CONNECTIONS

GUARANTEED RIDE HOME (GRH) PROGRAM

2007 GRH SURVEY REPORT

FINAL DRAFT

Prepared for:

Metropolitan Washington Council of Governments
Commuter Connections Program

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SECTION 1 - INTRODUCTION

This report presents the results of a Guaranteed Ride Home (GRH) survey of 1,001 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, 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:

- To identify and examine commute and demographic characteristics of commuters participating in GRH.
- To 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 2008. 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 – Distribution of dialing results
- Appendix B – GRH Survey instrument
- Appendix C – Letters, Instructions, and Definition of Terms
- Appendix D – Non-Response Survey
- Appendix E – Results from 2007, 2004, and 2001 GRH Surveys – Comparison on Key Questions

SECTION 2 – SURVEY AND SAMPLING METHODOLOGY

SURVEY GOALS

A primary goal of the GRH survey was to examine travel characteristics of GRH Program participants. MWCOG, through its Commuter Connections Program, introduced GRH in January 1997. Since that time, MWCOG collected data on GRH applicants through two GRH applicant surveys conducted in the winter of 2001 and winter of 2004. The survey documented in this report mirrors the questionnaire and methodology used for those surveys.

The GRH survey was designed to examine three key questions associated with the GRH Program. Did GRH participants make certain commuting changes and did GRH play 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

Since January 1997, more than 30,000 commuters have joined the GRH Program. Not all of these applicants are currently registered for the program. Some have let their registrations expire. A small percentage of commuters in the database never registered, but have 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.

Both past and current participants were eligible for selection to be surveyed. The 2001 GRH survey sampled from commuters who entered the database between January 1997 and February 2001. The 2004 survey sampled from among commuters who entered the database, either for the first time or as a re-registrant, between March 1, 2001 and March 15, 2004. The 2007 survey sample was selected from commuters who entered or re-registered between March 1, 2004 and March 15, 2007.

In March 2007, the GRH database contained approximately 36,864 records from the designated survey period. The database contained duplicate records, because some existing participants who re-register for the program past the end of each year of participation are given a new status code and a new record. In addition to removing these records, other duplicate records were removed that were observed to contain slight differences in name, but with the same telephone number or address. The remaining database included approximately 26,390 records from which to draw the sample.

According to Commuter Connections' specifications, 1,000 completed surveys were to be collected, with a minimum of 70% of selected survey participants responding. An initial sample of 1,429 randomly selected program participants was drawn from the database. A replacement sample of 219 was drawn at a later date, once all the initial sample points were exhausted and additional points were needed to complete the quota of 1,000[1]. (Only 199 of the 219 replacement points were actually used.) The initial sample was

1 The additional 199 sample points covered 71 people whose number was not in service, 74 people whose number was wrong, 51 people who were no longer with the company, and 3 people who had only provided a Fax number.

insufficient largely because the database included records that were three years old and the sample had a large number of applicants who could not be reached for one of the following reasons:

- Respondent no longer at the work number and the home number not in service
- Respondent no longer at work and no home number was available
- Respondent no longer at work or home number
- Respondent no longer at work and home number produced a fax computer tone
- Wrong work number and no home number
- Wrong work number and home number not in service
- Respondent moved out of area

QUESTIONNAIRE DESIGN

LDA Consulting, together with input from COG and CIC Research, Inc., designed the questionnaire used in the survey. The questionnaire collected data on seven major topics:

- Registration status
- Commute patterns before participating in GRH
- Commute patterns during participation in GRH
- Influence of GRH on commute choices
- Source of information on GRH program and knowledge of GRH advertising
- Use of and satisfaction with GRH trips and the GRH Program
- Participant demographics

The questionnaire was designed for telephone administration using Computer Assisted Telephone Interviewing (CATI). Prior to conducting the full survey, 75 pretest interviews were conducted and the results reviewed. Using input from the pretest, the questionnaire was modified slightly and finalized with approval of COG project staff. A copy of the final questionnaire is provided in Appendix B.

SURVEY ADMINISTRATION

After the questionnaire was finalized, an introductory letter was designed and mailed to all prospective respondents to introduce them to the survey. During the week of April 9 - 13, 2007 COG staff mailed the letter. 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 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

Calls were made between April 13 and May 16, 2007. 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 1,001 interviews were completed from the list of 1,628 respondents for the initial interviewing effort. This group had a refusal rate of 6.2 percent.[2] An average of 9.8 call attempts was made for each completed interview.

WEIGHTING OF SURVEY DATA

After all interviews were completed, the data were weighted to align the survey results with the total population of GRH participants. The criterion used to weight the survey data was "type" of GRH participant. This variable denotes if the participant is currently registered for GRH, or was registered in the past. The following table shows the relationship between the sample and the total participation group for the weighting variable – type of GRH participant.

Type of GRH Participant	Sample Group	Total Population
Current participant/registrant (Includes 1 one-time exception user)	93.5%	61%
Past participant/registrant	6.5%	39%

The differences between these groups test statistically significant. As anticipated, the sample group contained a higher proportion of current participants and a lower proportion of past participants, when compared to the total respondent group.

2 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.

STATISTICAL DISTRIBUTION COMPARISON BETWEEN SAMPLE AND TOTAL POPULATION

To assess whether or not distributional differences between the sample results and the total respondent group existed, a series of statistical goodness-of-fit tests were conducted. These tests rely on a Chi-square distribution and measure the distributional differences between two groups. The sample group consisted of 1,001 respondents while the total respondent group contained 26,387 individuals. Comparisons between the groups were made with respect to type of GRH participant.

The comparison showed statistical differences between the distributional make-up of the groups for the sample and total respondent participation at the 99 percent confidence level. As a result, the data were weighted according to the total respondent participation distribution.

NON-RESPONSE SURVEY

While the proportion of non-response to the survey was relatively small, a non-response survey was conducted to determine whether or not the non-response group was in some manner systematically different from the survey group. A total of 73 applicants were eligible for inclusion in the non-response survey. These applicants were made up applicants who refused to participate in the survey when initially called.

A total of 32 applicants were contacted and administered an abbreviated survey. In determining the sample size for the non-response survey, a 90 percent confidence level and 10 percent error rate was assumed 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

In all areas except one, no statistical difference between the non-response and full survey groups occurred. The area that showed a statistical difference was whether or not the respondent considered themselves to be Latino/Hispanic/Spanish. None of the non-response group identified themselves to be in that ethnic group. This group comprised five percent of the total survey group. Given the low prevalence found in the total survey group, it is not surprising that the non-response sample did not contain a member of this ethnic group.

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 and 2004 GRH surveys conducted in the Washington region, when these data were available. These comparisons are presented in the appropriate subsections.

- 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 1, in the 2007 survey, six in ten respondents worked in the District of Columbia (60%) and three in ten (30%) worked in Virginia. The remaining ten percent worked in Maryland. The distribution by home state is considerably different. The majority of respondents lived in Virginia (64%). About a third (34%) lived in Maryland. A few (1%) lived in the District of Columbia or in another state (1%). These home and work distribution percentages were essentially the same as in the 2004 survey.

Table 1
Home and Work States
(n=1,001)

State	GRH 2007		GRH 2004	
	Home State	Work State	Home State	Work State
District of Columbia	1%	60%	2%	60%
Maryland	34%	10%	29%	10%
Virginia	64%	30%	67%	30%
Other	1%	0%	2%	0%

Top home locations for 2007 GRH registrants include, by state and county:

Virginia Counties	Percentage	Maryland Counties	Percentage
Prince William County	20%	Montgomery County	7%
Fairfax County	14%	Prince George's County	6%
Stafford County	9%	Anne Arundel County	4%
Loudoun County	6%	Charles County	3%
Spotsylvania County	5%	Frederick County	3%

Demographics

The survey asked respondents four demographic questions: sex, age, income, and ethnic group. Most GRH participants were female (57%). Details of other characteristics are presented in Tables 2 through 4.

Age – As shown in Table 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. About 18% were under 35 and the remaining 19% were 55 years or older.

Table 2
Respondent Age
(n=986)

Age Group	Percentage
18 – 24 years	<1%
25 – 34 years	17%
35 – 44 years	32%
45 – 54 years	31%
55 – 64 years	18%
65 years or older	1%

Income – GRH participants have quite high annual household incomes. Table 3 shows that more than eight in ten respondents (88%) had household incomes of $60,000 or more and over half (52%) had incomes of $100,000 or more.

Table 3
Annual Household Income
(n=830)

Income	Percentage
Less than $30,000	1%
$30,000 – 39,999	1%
$40,000 – 59,999	9%
$60,000 – 79,999	17%
$80,000 – 99,999	19%
$100,000 – 119,999	20%
$120,000 – 139,999	10%
$140,000 – 159,999	8%
$160,000 or more	14%

Ethnic Background – Lastly, as shown in Table 4, Caucasians and African-Americans represent the two largest ethnic group categories of GRH survey respondents, 65% and 21% respectively. Asians/Pacific Islanders represent ten percent of respondents and Hispanics account for about four percent.

Table 4
Ethnic Background
(n=943)

Ethnic Group	Percentage
Hispanic	4%
Caucasian	65%
African-American	21%
Asian/Pacific Isl.	10%

REGISTRATION INFORMATION

Registration Status

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

Table 5
Registration Status as Defined by Respondent
(n=1,001)

Registration Status	Percentage
Current registrants	93%
Past registrants	4%
One-time exceptions	<1%
Don't know	3%

The majority (93%) of respondents said they were currently registered for the Program. About four percent said they had been registered, but were not currently participating. Less than one percent said they never registered; they participated as one-time exceptions. Three percent said they didn't know if they were currently registered. These respondents were treated as past registrants throughout the report.

It should be noted that registration status in the survey was defined by the respondent. This was necessary for completion of questions that asked about the times "during" and "before" participation in GRH. But a substantial portion of respondents defined their registration status differently than was shown in the GRH database. More than 180 respondents said they were currently registered, when their registrations had actually expired. It is possible these respondents did not realize they needed to re-register after the first year, so assumed they were still eligible for the program. These respondents were treated as "currently registered" in the survey and throughout the report.

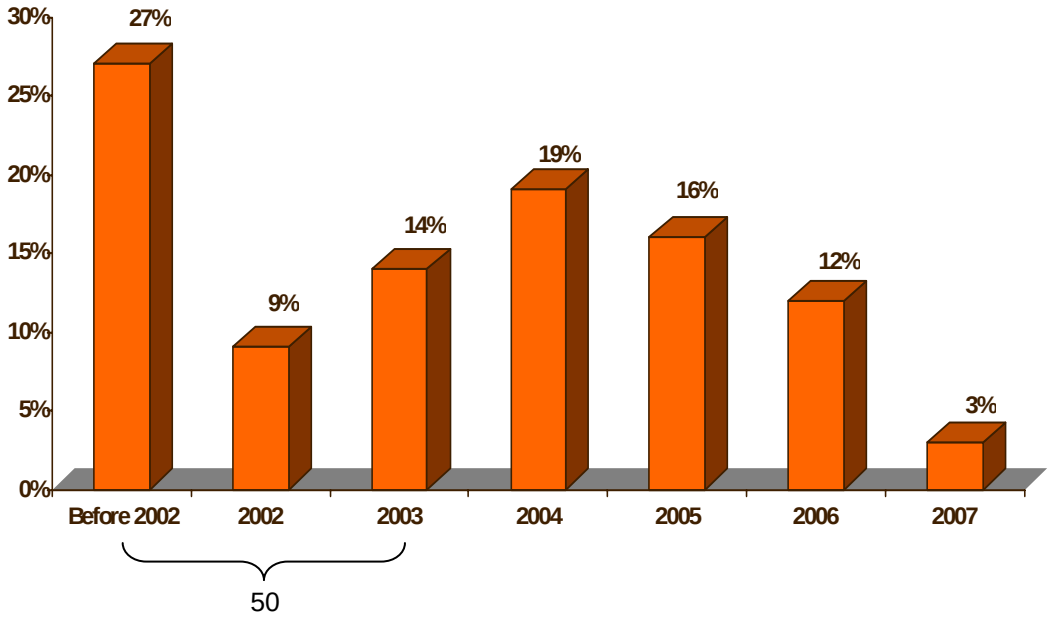
A smaller number of respondents, 14 of the total 1,001, said they were no longer registered for the program, when their registration was actually current; they registered or re-registered less than one year before the survey was conducted. One explanation for these respondents is that, since their last registration/re-registration date, they made a commute change 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.

Finally, some respondents classified as current registrants or past registrants first joined GRH as one-time exceptions and later completed the official registration procedure. In this survey, they are treated as either current or past registrants, whichever applies. Only one of the 1,001 respondents was actually counted as a one-tme exception who never registered.

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 2004 and March 2007. As shown in Figure 1, within that group, about half said they first registered in 2003 or earlier the largest group, 19% registered in 2004, 16% registered in 2005, and 12% registerd in 2006. A small percerntage said they registered in 2007, but because the GRH survey interviews were conducted in April and May 2007, registration figures for 2007 include only registrants who joined GRH in January 1 through March 15.

Figure 1
Year First Registered for GRH Program
(n=1,001)



Participation in Other GRH Programs

When asked if they had participated in another GRH program prior to joining Commuter Connections' program, only one respondent said he/she had participated previously in a "local government program."

Time Participating in GRH

Table 6 shows how long respondents have been registered for the GRH Program, or in the case of past registrants, how long they were registered.

Table 6
Length of Time Registered in GRH Program
(Current and Past Registrants)

Registration Status	Time in GRH				
	<1 year	1 year	2 years	3 years	>3 years
All registrants (n=1,001)	13%	20%	22%	9%	36%
	33%		22%	45%	
Current registrants (n=935)*	20%	16%	13%	9%	41%
	36%		13%	50%	
Past registrants (n=65)	3%	27%	33%	9%	29%
	30%		33%	38%	

* - Note this sample for "current registrants" includes 180 respondents whose registrations had expired but who reported in the survey that they were still registered.

About two-thirds of all respondents (67%) participated (past registrants) or have been participating (current registrants) 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 30% of past registrants. But a larger percentage of current registrants also are long-time registrants; 41% have been participating for more than three years, compared to 29% of past registrants who participated that long.

Reasons for Not Re-registering

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

The reasons fell into two major categories:

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

The most frequently mentioned program reason for not re-registering was that respondents "had never used the program" and presumably felt they didn't need it. This was noted by nearly one in five (17%), nearly three times the percent who noted this reason in 2004. Another common program reason was "did not know I had to re-register," cited by 11% of respondents. The percentage of respondents citing this reason dropped from 21% in the 2001 survey to 14% in the 2004 survey, suggesting that registrants are now more aware that re-registration is required.

Table 7
Reasons Past Registrants Did Not Re-Register*

Reasons	GRH – 2007 (n=64)	GRH – 2004 (n=125)	GRH – 2001 (n=126)
Program-Related Reasons			
Never used program	17%	6%	----
Did not know I had to re-register	11%	14%	21%
Didn't get around to it, forgot	6%	13%	7%
CP, VP, transit didn't work out	5%	10%	6%
Couldn't rideshare/use transit two+ days per week	6%	6%	4%
Dissatisfied with program, bad experience	0%	5%	----
Too much effort to use the program	0%	2%	14%
Personal-Circumstance Reasons			
Changed job/work hours	25%	27%	25%
Moved to a different residence	6%	3%	7%
Needed my car for work/other purpose	6%	3%	3%
Retired/telecommuter/don't commute now	0%	6%	5%
Other**	2%	4%	20%

*Might add to more than 100% due to multiple responses.
**Each response in the "Other" category was mentioned by less than one percent of respondents.

About six percent said they "forgot" or "didn't get around to re-registering." Similar percentages said they were no longer eligible for the program, either because the "carpool, vanpool, or transit arrangement didn't work out" (5%) or because they couldn't use an alternative mode at least two days per week (6%).

But many respondents cited personal circumstances that were unrelated to the program. More than one-quarter said they "changed job or work hours" (25%), six percent said they had moved to a new residence and another six percent said they needed their cars for work or other purposes. It is possible personal circumstances actually represent higher proportions of the reasons for not re-registering. As noted earlier, past registrants were substantially under-represented in the survey sample, because they are more difficult to reach by telephone. It is likely that some of these unreachable registrants have moved out of the Washington region or changed jobs and it was impossible to find a forwarding phone number for them.

GRH INFORMATION SOURCES

The survey also asked respondents how they learned about GRH and their awareness of any advertising about the program.

How Heard About GRH

Commuters heard about the GRH Program from various sources. As shown in Table 8, a third (34%) mentioned word of mouth/referrals as their source of information, a significant increase over the 26% who gave this as their source in the 2004 survey. Other sources were about the same in 2007 as in 2004. About one in seven (16%) cited the radio as their source of information and one in ten mentioned the Internet (11%). Smaller percentages of respondents noted their employer (7%), a brochure (7%) or direct mail postcard sent to them directly by Commuter Connections (6%).

Table 8
How Respondents Learned About GRH

Information Source	**GRH – 2007** (n=1,001)	**GRH – 2004** (n=1,030)
Word of mouth – referral	34%	26%
Radio	16%	16%
Internet	11%	11%
Employer/employee survey	7%	10%
Brochure/promo materials	7%	6%
Direct mail/postcard from CC	6%	5%
Bus/train schedule	4%	1%
Bus/train sign	3%	7%
TV	3%	3%
Newspaper	2%	2%
Newsletter	2%	2%
On-site event, fair	2%	0%
Don't know	13%	11%
Other *	5%	5%

*Multiple responses permitted.
** Each response in the "Other" category was mentioned by less than one percent of respondents.

Sources of information were generally similar for current and past registrants, with a few exceptions. Two in ten (22%) past registrants said they heard about GRH on the radio compared to half that number (11%) of current registrants. And a slightly higher percentage of past registrants (17%) said they learned

of the program through direct mail from COG or through other promotional materials, while only 11% of current registrants mentioned one of these methods. By contrast, 42% of current registrants cited word of mouth as their source; only 22% of past registrants mentioned this source.

Radio was a particular source of information for those who joined GRH in 2003 or 2004. Fully a quarter (26%) of respondents who said they registered in one of these two years noted the radio as the source, compared to only 11% of respondents who said they joined either earlier or later than that time period.

Some differences also were noted for respondents by their pre-GRH commute mode, as indicated in Table 9. One in four (27%) respondents who drove alone to work pre-GRH mention the radio as their source, compared with 16% of respondents who were carpooling and 13% of respondents who rode transit. This reinforces the value of drive-time advertising to alert this group. Registrants who carpooled or vanpooled before GRH were more likely to note "word of mouth" as their source; 41% gave this as their source, compared with 30% of drive alone respondents and 31% of transit riders. Respondents who were using an alternative mode before joining GRH also were more likely than were drive alone registrants to have learned about GRH through a direct mail postcard from Commuter Connections or through an employer survey.

Table 9
How Respondents Learned About GRH by Pre-GRH Commute Mode

Information Source	**All Modes** (n=1,001)	**Drive alone** (n=231)	**CP/VP** (n=255)	**Transit** (n=424)
Word of mouth – referral	34%	30%	41%	31%
Radio	16%	27%	16%	13%
Internet	11%	4%	9%	14%
Employer/employee survey	7%	3%	9%	6%
Direct mail/postcard from CC	6%	<1%	6%	7%

*Multiple responses permitted.

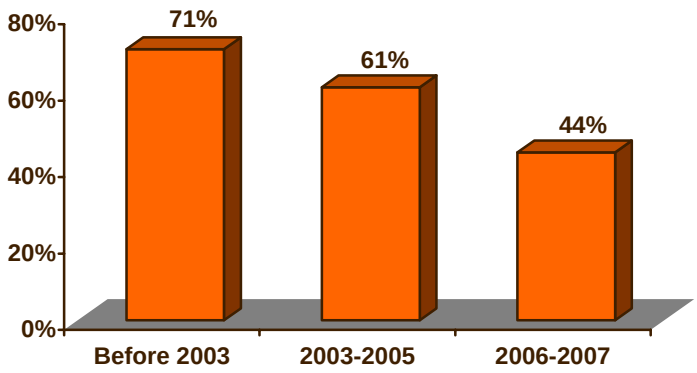
Bus/train schedules and bus/train signs were noted by 20% of commuter rail riders, while only five percent of commuters who used other modes mentioned these sources. The internet was mentioned more often by commuter rail and Metrorail riders than by other respondents; 15% of train riders heard about GRH on the internet, but only nine percent of other respondents mentioned the internet.

GRH Advertising

Heard or Saw GRH Advertising – When asked how they heard about GRH, six percent of respondents cited a direct mail notice or 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 57% of respondents said yes. When added together, this totaled to 63% of respondents who said they had heard or seen some GRH advertising.

Respondents were more likely to have said they heard or saw GRH advertising if they had registered several years ago, compared to a more recent registration. As portrayed in Figure 2, among respondents who registered before 2003, 71% said they had heard or seen advertising, compared to 61% of respondents who registered between 2003 and 2005. Among respondents who registered in 2006 or 2007, only 44% said they had heard or seen advertisements for GRH.

Figure 2
Heard or Saw GRH Advertising
By When Registered for GRH
(Before 2003 n=403, 2003-2005 n=410, 2006-2007 n=187)

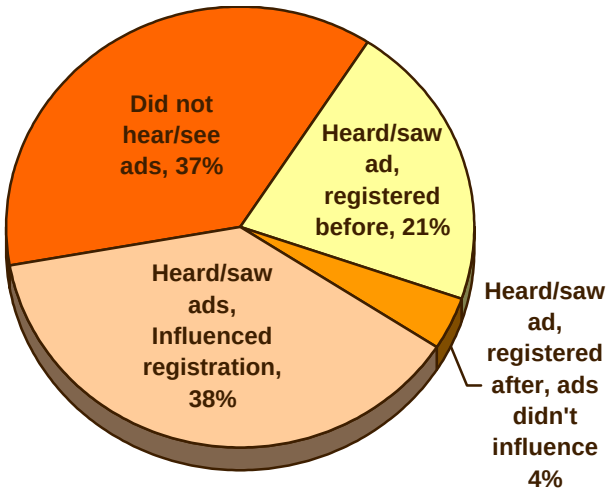


Past registrants also were slightly more likely to say they heard or saw GRH advertising than were current registrants. About 60% of past registrants said they heard or saw a GRH ad, compared to 55% of current registrants. This is a small difference, but it reinforces the conclusion that awareness of GRH advertising is linked to the registration year as well as the length of time in GRH, since current registrants have been in GRH longer than were past registrants.

Influence of Ads on GRH Registration – As noted, about a third of respondents said they had not seen or heard GRH advertising. The remaining respondents were asked if they had registered for GRH before they encountered the ads. Figure 3 shows these results.

About a third, representing 21% of total respondents, said they had registered before that time. Respondents who had not registered before were asked if the advertising had encouraged them to seek information about GRH or to register for GRH. An overwhelming 92% of these respondents said the advertising had encouraged them. This group accounted for 38% of the total survey respondents. This suggests the advertising was instrumental in both informing and persuading a substantial portion of registrants to join the program.

Figure 3
Influence of GRH Advertising
By When Registered for GRH
(n = 1,001)



CURRENT COMMUTE PATTERNS

An important section of the survey examined characteristics of respondents' commuting behavior. Because the survey was designed to examine behavior changes as a result of GRH, respondents were asked about their commuting for three time periods:

- **Current** – Commuting patterns at the time of the survey
- **With-GRH** – Commuting patterns during the time the respondent participated in GRH (the current time for current registrants and one-time exception users and a previous time for respondents who were no longer registered)
- **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
- Length of time using current alternative modes
- Commute distance

Work Schedule

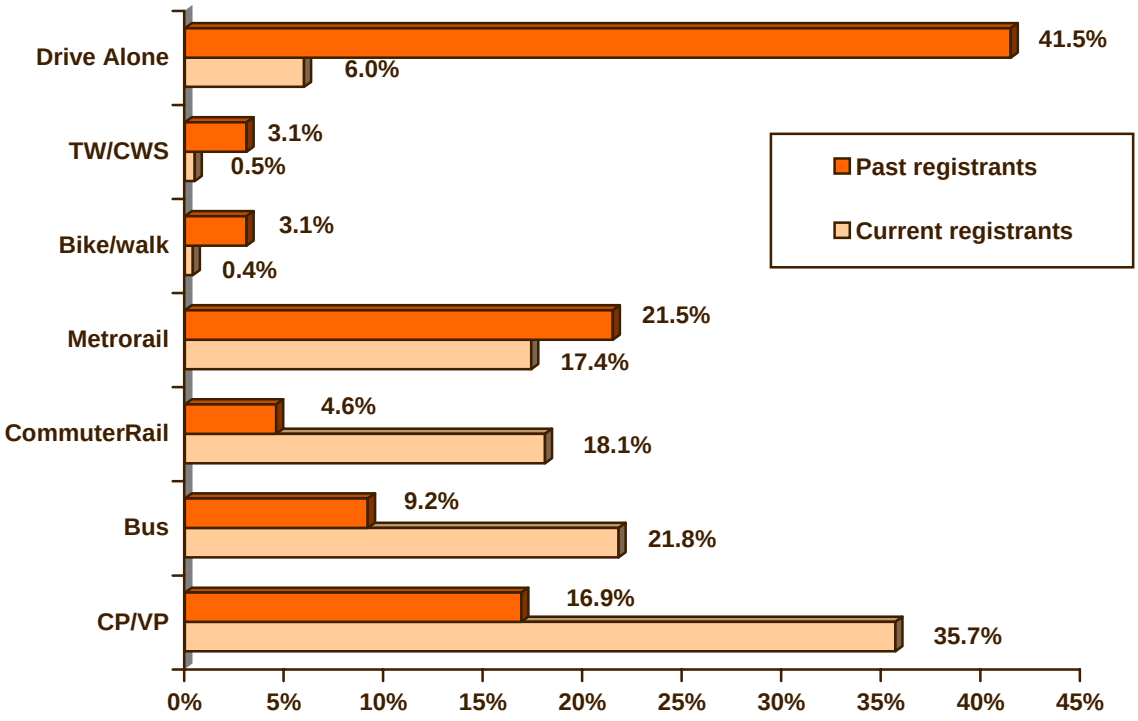
The overwhelming majority (98%) of respondents worked a five-day week. About two percent worked four days per week and one percent worked a three-day week. About 17% of respondents said they worked a compressed work schedule; 3% worked a 4/40 CWS and 14% worked a 9/80 CWS. These respondents were classified as working a five-day week for purposes of commute mode, with either one or one-half work days off each week.

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 2 and 3 show the percentages of respondents who used each of five mode groups: carpool/vanpool, bus, drive alone, Metrorail, and commute train, 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 4 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 4
Current Primary Commute Modes
Current Registrants (n=935) and Past Registrants (n=65)

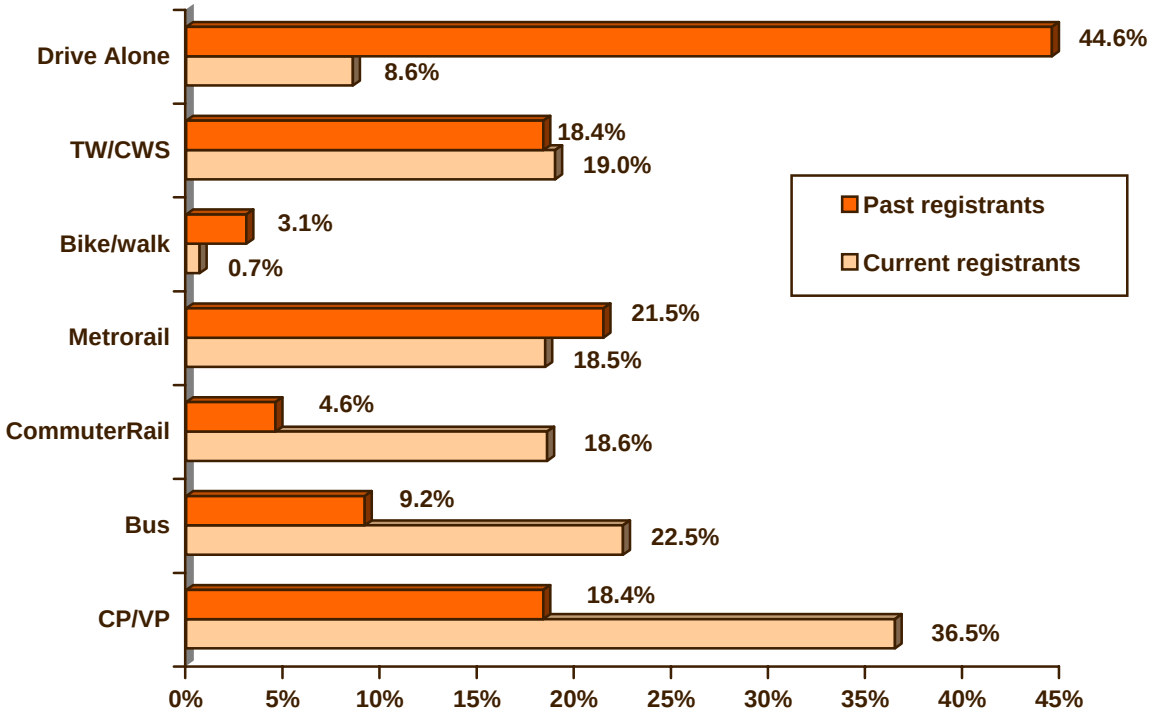


Current Registrants – Carpool/vanpool was the most common primary mode for current registrants. It was used by more than a third of these respondents (35.7%). Bus was the second most common primary mode for current registrants, used by 21.8%. About two in ten current registrants (18.1%) said they rode a commuter rail train and another 17.4% said they typically used Metrorail. About six percent of current registrants said they primarily drove alone to work. Less than one percent said they primarily teleworked (0.5%) or bicycled or walked to work (0.4%).

Past Registrants – Not surprisingly, past registrants were more likely than current registrants to drive alone; 41.5% of past registrants said this was their primary mode. But more than half of past registrants (58.5%) said they still used an alternative mode most of the time, even though they were no longer in the GRH Program. This is surprising in that these respondents were still eligible for GRH. About one in five (21.5%) rode Metrorail, 16.9% said they primarily carpooled or vanpooled, and one in ten (9.2%) rode a bus. Smaller percentages primarily used a different mode: commuter rail (4.6%), bicycle or walk (3.1%), or telework (3.1%).

All Commute Modes Used – Figure 5 shows the percentage of GRH participants who used each of the four mode groups 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 5
Current Commute Modes
Modes Used One or More Days Per Week
Current Registrants (n=935) and Past Registrants (n=65)



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, carpool/vanpool continued as the most popular mode; 36.5% of current GRH participants used this mode at least occasionally.

Bus, used by 22.5% of current registrants was the second most popular mode. About one in five (18.5%) said they used Metrorail rail at least occasionally and 18.6% used commuter rail at least one day per week. One in ten (8.6%) said they drove alone one or more days per week. About two in ten respondents said they teleworked at least one day per week or had a compressed schedule day off.

Past Registrants – Drive alone remained the most used mode for past registrants; 44.6% of past participants used this mode at least occasionally. Metrorail was second in popularity, with about two in ten respondents (21.5%) using this mode. Carpool/vanpool was the choice of 18.4% of past registrants and one in ten (9.2%) rode a bus. Fewer than five percent used commuter rail (4.6%) or bike/walk (3.1%). The percentage of past registrants who either teleworked or had a compressed schedule day off (18.4%) was similar to the percentage for current registrants.

Mode Group Distribution – Table 10 shows use of individual modes within the mode groups shown in Figures 4 and 5. The table presents mode distributions for current GRH registrants and for all Washington metro region commuters, as reported in the 2004 State of the Commute (SOC) survey. As seen in the table, for every alternative mode, the GRH registrants had higher mode shares 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.

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 current GRH registrants. More than half of the GRH registrants in the carpool/vanpool group vanpooled (16.5% of 36.5%) and casual carpool accounted for a quarter of the carpool/vanpool group (6.6% of 36.5%).

Bus – The bus mode group showed markedly different overall mode shares for the two populations with more than two in ten GRH registrants using bus, compared to only five 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 very 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. Nearly two in ten GRH registrants rode Metrorail, compared to about thirteen percent of regional commuters. Commuter rail ridership showed dramatic differences for the two populations. Nearly two in ten GRH registrants used commuter rail, compared with less than one percent of all commuters. VRE commuter rail service had the majority of commuter rail ridership

Table 10
Current Commute Modes (1+ days per week)
Current GRH Registrants and Regional Commuters

Commute Mode	Current GRH Registrants (n=935)	Regional 2007 SOC Survey** (n=6,168)
Carpool/vanpool	**36.5%**	**8.0%**
- Regular carpool	13.4%	7.2%
- Casual carpool (slug)	6.6%	0.6%
- Vanpool	16.5%	0.2%
Transit	**59.6%**	**19.4%**
Bus	**22.5%**	**5.4%**
- Ride a bus/shuttle	22.2%	5.3%
- Buspool	0.3%	0.1%
Metrorail	**18.5%**	**13.2%**
Commuter Rail	**18.6%**	**0.8%**
- MARC (MD commuter rail)	5.6%	0.4%
- VRE	12.9%	0.4%
- AMTRAK/other train	0.1%	0.0%
Drive alone	8.6%	71.7%
Bike/walk	0.7%	3.0%
Compressed work schedule	13.3%	2.8%
Telecommute	5.7%	9.5%

* Percentages will not total to 100%, because some respondents used more than one mode.
** Data from 2007 State of the Commute regional survey for the Metropolitan Washington region.

The disproportionate shares of commuter rail and vanpooling for GRH registrants are likely is 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 3.1 and 12.0 people respectively.

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. Table 11 shows results for this travel characteristic.

As shown in Table 11, the average one-way distance for GRH respondents was 34.5 miles. This is considerably longer than the distance of 16.3 miles traveled by the average commuter in the Washington metro region. Nearly six in ten (58%) GRH respondents commute 30 or more miles to work, compared to 16% of all regional commuters, as observed in the 2007 SOC survey of Washington metro region commuters.

Table 11
Commute Distance (miles)
GRH Respondents and All Regional Commuters

Number of Miles to Work	GRH – 2007 (n=968)		Region – 2007 SOC * (n=6,222)	
	Percentage	Cumulative Percentage	Percentage	Cumulative Percentage
Less than 10 miles	9%	9%	37%	37%
10 – 19.9 miles	15%	24%	29%	66%
20 – 29.9 miles	18%	42%	17%	83%
30 – 39.9 miles	22%	64%	9%	92%
40 miles or more	36%	100%	7%	100%
Average (mean)	**34.5 miles**		**16.3 miles**	

* Data from 2007 State of the Commute regional survey for the Metropolitan Washington region.

Commute Time – GRH participants commute, on average, about 63 minutes one way. This is also much longer than the commute time for all regional commuters, who commute an average of 35 minutes. As presented in Table 12, two thirds (65%) of GRH participants commute more than 45 minutes each way to work. Four in ten (40%) commute more than an hour. Only eight percent of all regional commuters travel this long to work.

Table 12
Commute Time (minutes)
GRH Respondents and All Regional Commuters

Number of Minutes to Work	GRH – 2007 (n=999)		Region – 2007 SOC * (n=5,941)	
	Percentage	Cumulative Percentage	Percentage	Cumulative Percentage
20 minutes or less	7%	7%	35%	35%
21 – 30 minutes	9%	16%	20%	55%
31 – 45 minutes	19%	35%	23%	78%
46 – 60 minutes	25%	60%	14%	92%
61 minutes or more	40%	100%	8%	100%
Average (mean)	**63 minutes**		**35 minutes**	

* Data from 2007 State of the Commute regional survey for the Metropolitan Washington region.

COMMUTE PATTERNS BEFORE AND DURING PARTICIPATION IN GRH

The GRH survey was conducted in part to determine if and how commuters' participation in GRH had affected their commute patterns. 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.

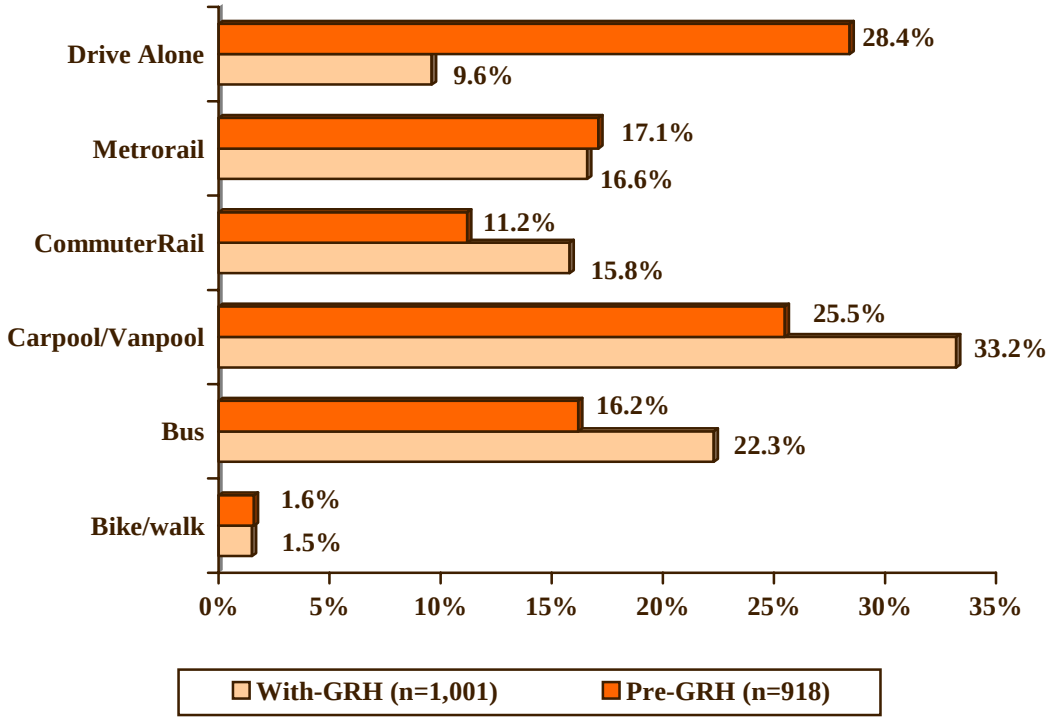
"With-GRH" Modes Compared to "Pre-GRH" Modes

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 "with-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 6 presents a comparison of respondents' primary modes before participating in GRH (pre-GRH) and while participating (with-GRH). Primary mode is defined as the mode used most days during a typical week. The same mode groups are presented as were shown in Figures 4 and 5: 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 6
Pre-GRH and With-GRH Primary Commute Modes



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, seven 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, the percentage of respondents who regularly drove alone, three or more days per week pre-GRH was 28.4%. Drive alone mode share dropped to 9.6% for the "with-GRH" time period. Not surprisingly, the share of respondents primarily using alternative modes increased. All alternative modes displayed increased use, with the exception of Metrorail, which exhibited no real difference from Pre-GRH to With-GRH. But carpool/vanpool use increased from pre-GRH to with-GRH, from 25.5% to 33.2%, bus use rose from 16.2% to 22.3% of respondents, and commuter rail use grew from 11.2% of respondents to 15.8%.

Table 13 illustrates the mode changes respondents made from their primary "pre-GRH" mode to their primary "with-GRH" mode. As expected, drive alone users made the greatest mode changes. Three in ten (31%) shifted to carpooling and about half (49%) shifted to transit. About two in ten (20%) said they continued to drive alone as their primary mode. For most respondents, this meant that they drove alone three or more days per week.

Table 13
With-GRH Mode by Pre-GRH Mode

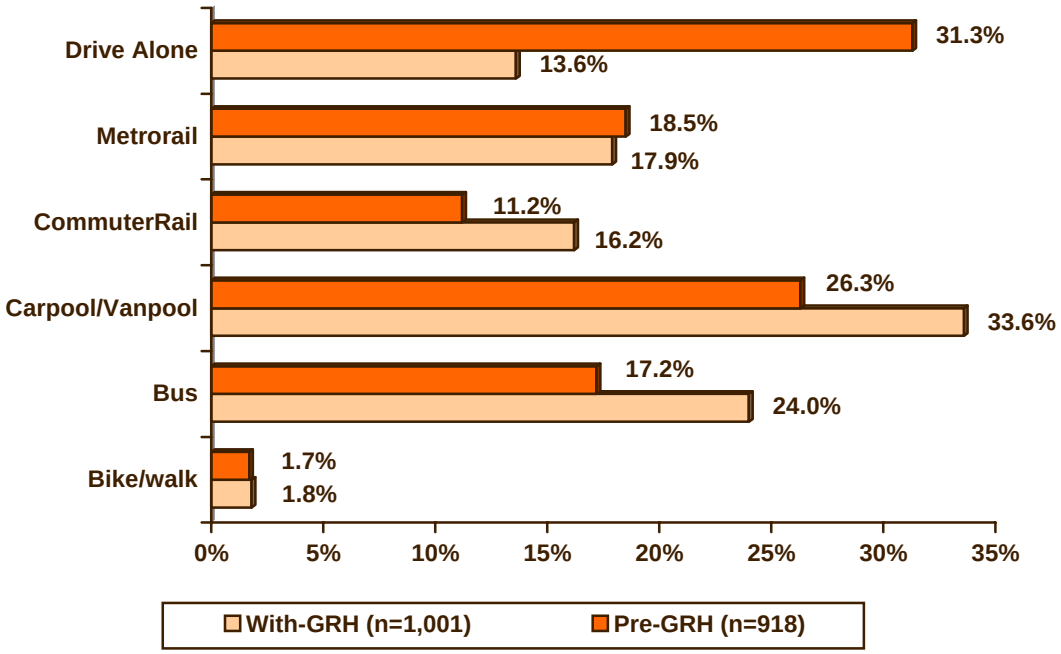
Pre-GRH Mode	With-GRH Mode*				
	DA	**CP/VP**	**Bus**	**Metrorail**	**Commuter Rail**
Drive alone (n=231)	20%	31%	27%	10%	12%
Alternative Modes					
- CP/VP (n=255)	4%	75%	11%	3%	7%
- Bus (n=132)	10%	12%	67%	7%	4%
- Metrorail (n=183)	4%	8%	8%	68%	12%
- Commuter rail (n=109)	5%	19%	4%	2%	70%

* Pre-GRH and with-GRH mode shares and between mode shift percentages will not total to 100%, because bus/walk and telecommute are not counted above.

Respondents who were using alternative modes before they joined GRH largely remained in their pre-GRH modes after they joined GRH. Three-quarters of carpoolers/vanpoolers (75%) and two thirds of bus riders (67%), Metrorail riders (68%), and commuter rail passengers (70%) stayed in these modes. Some switching did occur among alternative modes, with carpool/vanpool the primary gainer, attracting 12% of bus riders, 8% of former Metrorail riders, and 19% of commuter rail riders. About one in ten (11%) respondents who was carpooling/vanpooling pre-GRH started using the bus while in the GRH program and 12% of pre-GRH Metrorail riders shifted to commuter rail. These mode shift results were very similar to the results for the 2004 GRH survey.

Occasional Mode (1+ Days Per Week) – Figure 7 shows the percentages of respondents who said they used each mode group at all (1+ days per week) pre-GRH and with-GRH. The pattern of relative mode use before and during participation in GRH is the same in this figure as was seen in Figure 4 (primary mode). Use of the drive alone mode dropped from 31.3% to 13.6%. But this drop was less than the reduction for primary use of drive alone (28.3% pre-GRH to 9.6% with-GRH), indicating that the drive alone mode continued to be a popular occasional mode for GRH participants.

Figure 7
Pre-GRH and With-GRH Commute Modes (1+ days per week)



Carpool/vanpool and bus use both showed marked increases from pre-GRH to with-GRH. The share of participants using carpool/vanpool grew from 26.3% to 33.6% and bus use increased from 17.2% of respondents to 24.0%. Commuter rail and bus also showed some gains in use. Occasional use of Metrorail showed a modest drop, but this change was not statistically significant.

"With-GRH" Days in Alternative Modes Compared to "Pre-GRH" Days

Respondents Who Increased Alternative Mode Frequency – The second research question 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? Table 14 shows the number of alternative mode days per week for these respondents, pre-GRH and with-GRH. Unfortunately, it was not possible to answer the question with confidence, due to a small sample. Only 33 of the 1,001 respondents said they had increased alternative mode frequency. But clearly, these respondents did increase their use of alternative modes.

As shown, the majority of these respondents (26 of 33) were using alternative modes four days per week and the remaining seven were using alternative modes two or three 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 (31 of 33) were full-time users of alternative modes and the remaining two respondents used alternative modes four days per week. This is consistent with the change in the overall increase in average alternative mode days from 3.3 days to 4.9 days, or about 1.6 days per week increase per respondent.

Table 14
Days Using Alternative Modes Pre-GRH and With-GRH

Respondents Who Used Alternative Mode Pre-GRH
and Increased Alternative Mode Frequency With-GRH
(n=33)

Days Using Alternative Modes	Respondents	
	Pre-GRH	With-GRH
0	0	0
1	0	0
2	5	0
3	2	0
4	26	2
5	0	31
Average*	**3.3 days/week**	**4.9 days/week**

* Note that although the unweighted sample sizes are shown in the table, the average frequency is based on weighted data

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

The average number of days all GRH participants used alternative modes increased, from 3.5 days per week to 4.3 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 with-GRH.

Table 15
Days Using Alternative Modes Pre-GRH and With-GRH
All GRH Respondents
(n=918) *

Days Using Alternative Modes	Percentage	
	Pre-GRH	With-GRH
0	27%	10%
1	0%	1%
2	2%	0%
3	2%	3%
4	10%	14%
5	60%	71%
Average	**3.5 days/week**	**4.3 days/week**

*Respondents who were not in the regional workforce prior to registering for GRH were removed from the sample base. These 83 respondents could not provide information on commute patterns pre-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. Table 16 presents this distribution for the survey results.

GRH participants generally were long-term users of alternative modes. Half (50%) had used their current alternative mode for five or more years and eight in ten (81%) had used this mode for two years or more. The third column in Table 16 displays this same information for all regional commuters, based on data from the 2007 State of the Commute survey conducted in 11 jurisdictions in the Washington metropolitan region. About three in ten (29%) of regional commuters said they used their current alternative mode for less than two years, compared to about 18% of GRH respondents.

Table 16 also shows the average time these respondents had used their current alternative mode. The overall average for GRH respondents was 87 months, compared with 80 months for all commuters in the region. An interesting finding is that respondents who had not used alternative modes pre-GRH, but started when they joined GRH, used alternative modes an average of 49 months. This suggests that new alternative mode users became committed users.

Table 16
Length of Time Using Alternative Modes

Length of Time	**GRH – 2007** (n=908)	**Region – 2007 *** (n= 1,719)
Less than 12 months	9%	17%
12 – 23 months	9%	12%
24 – 35 months	12%	10%
36 – 59 months	19%	14%
60 – 83 months	14%	13%
84 – 119 months	10%	9%
10 or more years	26%	26%
Mean duration	87 months	80 months

* Data from 2007 State of the Commute regional survey for the Metropolitan Washington region.

The long duration of alternative mode use for GRH is an encouraging finding, because it means that congestion mitigation and air quality improvement benefits of commuters in the GRH program extend for a substantial period of time. Thus, a portion of GRH benefits can be assumed to carry over from past GRH evaluation periods for purpose of the TERM analysis.

Time Participating in GRH by Time Using Alternative Modes – Another comparison was made for the length of time current registrants had participated in GRH as a function of the time they had spent in an alternative mode. As can be seen in Table 17, the length of time the participant had been in the GRH program was somewhat related to the length of time the participant used the current alternative mode.

As expected, among respondents who joined GRH two or more years ago, the large majority of respondents had used their current alternative modes three or more years, and most of them joined GRH two or more years ago. This suggests that the program continues to attract long-term alternative mode users who perhaps are now learning of the program.

But among more recent registrants, a pattern emerges showing a connection between time in GRH and time in alternative modes. Among respondents who had participated in the GRH program one year or less, more than four in ten (43%) had been in their alternative mode for less than 2 years and 18% had been using the alternative mode for less than one year. This result suggests that many GRH participants might be learning about GRH at the time they change modes.

Table 17
Length of Time Using Alternative Modes
By Time Participating in GRH (Current Registrants only)

Time Participating in GRH	Time Using Alternative Mode				
	1-11 months	12-23 months	24–35 months	36–47 months	48+ months
1 year or less (n=322)	18%	25%	18%	16%	23%
	43%		18%	39%	
2 to 3 years (n=229)	7%	4%	11%	13%	65%
	11%		11%	78%	
More than 3 years (n=384)	3%	2%	5%	9%	81%
	5%		5%	90%	

One point should be noted for the 10% of respondents who said they had been using an alternative mode less than three years were actually in the GRH program more than three years. The survey asked respondents how long they had been using alternative modes they were currently using. It is possible that these respondents were using a different alternative mode when they started in GRH and switched to their current mode while they have been participating.

INFLUENCE OF GRH ON COMMUTE PATTERN DECISIONS

The comparison of pre-GRH and with-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 with-GRH commute pattern combinations were examined:

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

Table 18 presents a breakdown of respondents into these alternative mode change groups.

Table 18
Alternative Mode Changes

Change Pre-GRH to With-GRH	2007 Percentage (n=918)*	2004 Percentage (n=981)*
Start alternative mode	22%	24%
Increase alt mode	5%	4%
Maintain alt mode	64%	67%
Not using alt mode "with GRH"	9%	4%

*Respondents who were not in the regional workforce prior to registering for GRH were removed from the sample base. These respondents could not provide information on commute patterns pre- GRH.

The largest percentage of respondents (64%) said they were using an alternative mode before GRH and did not increase their frequency of use. This is to be expected, since most respondents said they were using an alternative pre-GRH. But about 22% of respondents said they started using alternatives when they joined GRH. A small number of respondents (5%) said they increased the number of days they used alternative modes. These percentages were similar to those reported in the 2004 GRH survey.

As shown in the last row of Table 18, about nine 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 could be explained by the fact that most of these respondents said they were current registrants, thus were not asked directly about their "with-GRH" modes; their "with-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 Table 19 indicate that half (50%) of all the respondents who drove alone pre-GRH and started using alternative modes with-GRH said GRH was "very important" to the decision to make the change. About one in five (19%) said GRH was "somewhat important" to the decision. The remaining 31% said GRH was "not at all important."

Maintain Use of Alternative Mode – The second column in Table 19 shows the importance of GRH 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 74% 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.

Table 19
Importance of GRH to Alternative Mode Decisions

Importance to Decision	Start alt mode (n=199)	Maintain alt mode (n=604)	Increase alt mode (n=33)
Very important	50%	43%	28%
Somewhat important	19%	31%	38%
Not at all important	31%	26%	35%

Increase Use of Alternative Mode – The third column shows GRH's importance to respondents who increased their use of alternative modes. GRH appeared to be slightly less important for this decision than for decisions to start or maintain use of alternatives. Only 66% said it was "very important" or "somewhat important" to this decision, compared with 69% of respondents who started an alternative mode and 74% who maintained alterantive modes. About a third (35%) said it was "not at all important" to the decision. But the sample for this group is quite small, so these results are not statistically significant.

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 Table 20.

Table 20
Importance of GRH to Decision to Maintain Alternative Mode*
By Alternative Modes Used Pre-GRH

Importance	Primary Pre-GRH Mode			
	CP/VP (n=214)	Bus (n=121)	Metrorail (n=167)	Commuter Rail (n=96)
Very important	40%	52%	36%	54%
Somewhat important	38%	27%	27%	33%
Not at all important	22%	22%	37%	13%

* Respondents who used alternative modes pre-GRH

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. By contrast, less than two-thirds of Metrorail riders rated it as valuable.

Importance of GRH by Registration Status – Results presented in Table 21 show the relative importance of GRH to current registrants and past registrants. Among participants who started using an alternative mode, current registrants rated GRH as more important than did past registrants. But the sample of past registrants was very small and the differences were not statistically significant. Some difference also was noted between current and past registrants who continued using an alternative, but again, the sample of past registrants was small and the results were not statistically significant.

Table 21
Importance of GRH to Decision to Start or Maintain Alternative Mode
Current and Past Registrants

Importance	Start Alt Mode *		Maintain Alt Mode **	
	Current Registrants (n=186)	Past Registrants (n=13)	Current Registrants (n=570)	Past Registrants (n=33)
Very important	52%	46%	48%	33%
Somewhat important	22%	15%	28%	36%
Not at all important	27%	39%	24%	30%

Likelihood to Use Alternative Modes 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. Table 22 shows how likely respondents were to have started, increased, or maintained use of alternative modes if GRH had not been available to them.

Table 22
Likelihood to Start, Maintain, or Increase
Use of Alternative Modes if GRH Not Available

Likelihood	Start Alt Mode (n=201)	Maintain Alt Mode (n=603)	Increase Alt Mode (n=33)
Very likely	65%	66%	48%
Somewhat likely	24%	25%	21%
Not at all likely	11%	9%	32%

Two-thirds (65%) 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 24% said they were "somewhat likely" to have done so. Only about one in ten (11%) said they were "not at all likely" to have started using alternative modes if GRH had not been available.

GRH seemed to have similar value to respondents who had been using an alternative pre-GRH and did not make any changes. Two-thirds (66%) said they were "very likely" to have maintained their alternative mode use without GRH and 25% said they were only somewhat likely to have continued using alternative modes. One in ten (9%) said they were "not at all likely" to have continued using these modes even if GRH were not available.

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. A third (32%) said they were "not at all likely" to have made this change without GRH and 21% 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, Table 23 shows differences between current and past registrants in likelihood to start or maintain alternative modes without GRH. There appears no statistical difference in GRH importance between current and past registrants who started using alternatives than to current registrants who started. Note that the sample size is very small for the past registrant group. Past registrants appear less likely to continue using alternative modes in the absence of GRH; only 53% said they were very likely to continue, compared to 73% of current registrants. Again the sample size is quite small for past registrants, but even so, the difference is statistically significant.

Table 23
Likely to Start or Maintain Alternative Modes Without GRH
Current and Past Registrants

Likelihood	Start Alt Mode *		Maintain Alt Mode **	
	Current Registrants (n=188)	**Past Registrants** (n=13)	**Current Registrants** (n=568)	**Past Registrants** (n=34)
Very likely	67%	62%	73%	53%
Somewhat likely	25%	23%	21%	32%
Not at all likely	9%	15%	6%	15%

* Respondents who always drove alone to work pre-GRH
** Respondents who used alternative modes at least occasionally pre-GRH

Other Influences Motivating Commute Changes

Tables 19 through 23 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 24 shows that 37% of all survey respondents received such assistance or benefits. Current registrants were significantly more likely than were past registrants to cite such benefits; 53% of current registrants received benefits compared with 37% of past registrants.

Table 24
Assistance or Benefits Received, Other than GRH, That Influenced Commute Decision
All Respondents and Current and Past Registrants

Received Assistance or Benefit	All Respondents (n=964)	Current Registrants (n=909)	Past Registrants (n=54)
Yes	37%	53%	37%
No	63%	47%	63%

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 25 shows these results. About a third of respondents (37%) mentioned another service or benefit. The most common other benefit, named by 35% of total respondents, was "discount/free transit pass/Metrochek." Three percent mentioned another financial incentive and three percent named "assistance from employer" as a more important benefit than GRH.

Table 25
Assistance or Benefits More Important to Decision Than GRH
(n=1,001)

Assistance/Benefit	Percentage*
Discount/free transit pass/Metrochek	35%
Other financial incentive	3%
Assistance from employer	3%
Other**	2%

* 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. Table 26 lists the factors mentioned.

About three in ten (31%) 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 often mentioned reason, by far, was, "didn't want to drive," cited by 41% of respondents. Other common reasons included, wanted to "save money" (19%), or "save time" (16%). Smaller percentages of respondents noted "parking issues" (7%), "stress" (3%), "save wear and tear on vehicle" (3%), or "help the environment" (3%). A few respondents mentioned personal circumstances reasons. These data suggest that GRH, although important to commuters, is not the primary motivator for using alternative modes. Rather, for many commuters, personal factors and characteristics of their commute are more important in influencing mode choice.

Table 26
Other Factors/Circumstances Important
to Decision to Use Alternative Modes

Other Factors/Circumstances	**Total *** (n=964)
No other factor was important	31%
Didn't want to drive	41%
Save money	19%
Save time	16%
Parking issues	7%
Stress	3%
Save car wear and tear on vehicle	3%
Help environment	3%
Moved to a different residence	2%
Changed job/work hours	1%
Family obligations	1%
Traffic congestion	1%
Other **	4%

* Might add to more than 100% due to multiple responses
** Each response in the "Other" category mentioned less than one percent of respondents

USE OF AND SATISFACTION WITH GRH

Characteristics of Participants Who Used GRH Trips

Used GRH Trip by Registration Status – As shown in Table 27, only 23% of all respondents said they had taken a GRH trip. This was consistent with the results of the 2004 survey, in which 25% said they had taken a GRH trip. Current registrants used GRH trips at a slightly higher rate than did past registrants. This could be because current registrants have been participating in GRH for a longer period time than did past registrants. Thus, they have had a longer time in which to need a GRH trip.

Table 27
Used GRH Trip
by All Respondents, Current Registrants, and Past Registrants

Taken a GRH Trip	**All Registered Respondents** (n=1,001)	**Current registrants** (n=935)	**Past Registrants** (n=65)
Yes	23%	30%	21%
No	77%	70%	79%

Used GRH Trip by With-GRH Modes – Table 28 compares use of GRH by four "with-GRH" mode groups: carpool/vanpool, bus, Metrorail, and commuter rail. Use of GRH varied slightly by the mode used. Carpoolers/vanpoolers and bus riders had the highest trip usage; 27% and 28% of these respondents, respectively, said they took a GRH trip. Commuter rail and Metrorail riders had the lowest usage. Only 17% and 14%, respectively, of these respondents took GRH trips.

Table 28
Used GRH Trip by With-GRH Primary Mode

Used GRH Trip	**Percentage** (n=1,001)	**With-GRH Primary Mode**			
		CP/VP (n=354)	**Bus** (n=219)	**Metrorail** (n=173)	**Commuter Rail** (n=177)
Yes	23%	27%	28%	14%	17%
No	73%	73%	72%	86%	83%

Used GRH Trip by Commute Distance – Table 29 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 35.1 miles one-way, compared to 34.5 miles for all GRH respondents overall.

Table 29
Used GRH Trip by Commute Distance (miles)

Commute Distance	Percentage
All respondents (n=1,001)	23%
Less than 10 miles (n=54)	7%
10 – 19.9 miles (n=108)	34%
20 – 29.9 miles (n=191)	18%
30 – 39.9 miles (216)	26%
40 miles or more (n=399)	24%
Average (mean)	**35.1 miles**

Respondents who had very short commutes, less than 10 miles one-way, were very unlikely to use a trip; only seven percent of these registrants took a GRH trip, compared to at least two in ten respondents in other distance groups and a third of respondents in the 10 to 19.9 miles group. This suggests that Registrants with short 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

Table 30 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 a child (33%), the respondent (25%), or another family member (15%). "Unscheduled overtime" (14%) and "other personal emergency" (7%) were the two other common reasons.

Table 30
Reason for Taking a GRH Trip – Most Recent Trip
(n=285)

Reason	Percentage
Illness of child	33%
Illness (self)	25%
Illness of family member	15%
Unscheduled overtime	14%
Other personal emergency	7%
Other*	6%

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

Satisfaction With the Trip

Participants, who had taken a GRH trip were asked if the service was satisfactory. The overwhelming majority (94%) said they were satisfied. Reasons given by the 22 unsatisfied respondents were: "problem with a customer service representative" (5 respondents), "waited too long" (4 respondents), "no one answered phone" (3 respondents), "hard to get approval" (3 respondents), "taxi went to the wrong place" (2 respondents), and "didn't like taxi/driver" (2 respondents).

As shown in Table 31, respondents waited an average of 16 minutes for a taxi, the same wait time as observed in the 2004 GRH survey. In 2007, almost half (45%) said the taxi arrived within 10 minutes and four of five (81%) respondents waited 20 minutes or less.

Table 31
Time Waited for Taxi
(n=284)

Wait Time	Percentage	Cumulative Percentage
5 minutes or less	22%	22%
6 to 10 minutes	23%	45%
11 to 20 minutes	36%	81%
21 to 30 minutes	14%	95%
31 to 45 minutes	2%	97%
46 to 60 minutes	2%	99%
61 or more minutes	1%	100%
Mean Time	**16 minutes**	

Desired Improvements to the GRH Program

Participants appear to be generally quite satisfied with the GRH Program. A quarter (25%) of respondents said that they felt no improvement was necessary for the GRH program. An additional 47% or participants were unsure of a way Commuter Connections could improve the GRH Program. Specific suggestions mentioned by respondents are detailed in Table 32.

The most often mentioned improvement was more advertising, named by 13% of respondents. This was cited by nearly twice as many respondents as in 2004, when only seven percent of respondents mentioned advertising. All other responses were cited by fewer than five percent of respondents and the results were consistent with the results of the 2004 survey. There were not statistical differences in the improvements desired by current registrants vs past registrants. The reinforces the conclusion that most GRH registrants who choose not to re-register did not make this decision due to a dissatisfaction with the program.

Table 32
Suggested Improvements to GRH Program
(n=1,001)

Desired Improvement	Percentage*
No improvement needed	25%
More advertising	13%
Allow more trips per year	4%
Quicker response for ride requests	3%
Don't require supervisor approval	3%
Don't require re-registration, streamline re-registration	2%
Wider area for trips	2%
Easier/faster approval	2%
Improve dispatching (faster, nicer)	1%
Other	8%
Don't know	47%

* 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. Appendix E provides conclusions dealing with technical elements of the survey methodology and sampling procedures.

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 program appears to be able to attract participants who recently started using alternative modes. More then half of the participants who joined the program within the past year had been using an atlernative less than two years. But the program also continues to atttract some long-term users of alternative modes.

- About 24% of total respondents said they no longer participated in the program (past registrants). 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.

  More than four in ten past registrant respondents mentioned circumstance reasons. The most frequently mentioned program reason (17%) was that respondents "had never used the program" and presumably felt they didn't need it. About one in ten (11%) respondents said they did not know they had to re-register. This was about half the percentage (21%) of respondents who noted this reason in 2001. This suggests registrants are better aware of program rules. Another change from past surveys was the percentage who said they left because it was "too much effort to use the program." In 2001, 14% of past registrants cited this reason, compared to two percent in 2004 and no respondents in 2007.

Impact of GRH on Commute Patterns

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

- Encourage commuters who drive alone to work to use alternative modes, such as transit and carpool?
- Encourage commuters who use alternative modes to use these modes more days per week?
- Encourage commuters who use alternative modes to use them for a longer period of time?

- *Shifts from Drive Alone to Alternative Modes* – The survey clearly showed that some commuters who registered for GRH were driving alone prior to joining the program. About 28% of respondents said they drove alone full-time before starting GRH and another three percent said they drove alone most

of the time. The remaining 72% of participants were 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 33 of 1,001 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 3.3 days to 4.9 days, or about 1.6 days per week increase per respondent.

- *Extending the Duration of Alternative Mode Use* – The survey results indicated that 81% of participants had been using their current alternative mode for more than two years and 50% had used the alternative at least five years. The average time using the alternative mode was about 87 months.

  This was significantly longer than the average 80 month duration of rideshare arrangements for the regional population. The regional population does appear to have a larger percentage of recent switches to alternative modes. About a third of regional commuters started using alternatives within the past two years, compared with about a quarter of GRH respondents. This implies that GRH tends to attract a greater share of long-term users of alternative modes than recent switchers.

- *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.

  Interestingly, GRH seemed to have similar value to respondents who had been using an alternative pre-GRH and did not make any changes. Only one in ten said they were "not at all likely" to have continued using these modes even if GRH were not available. This suggests that GRH has a modest impact on both encouraging shifts from drive alone to alternative modes and on encouraging alternative mode users to extend the time they use alternatives.

  Surprisingly, GRH seemed more valuable to respondents who used alternative modes pre-GRH but increased their use of these modes while participating in GRH. Fully a third (32%) said they were "not at all likely" to have made this change without GRH and 21% said they were "somewhat likely" to have made this change.

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 2008. 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, 87 months, is certainly longer than three years; fully 69% of GRH participants have been in their alternative modes at least three years and 50% for five year or more. This is an encouraging finding, because it means that congestion mitigation and air quality improvement benefits of GRH extend longer than the two years that had been generally assumed and that a portion of the benefits can be carried over 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 1.6 days per week, so the overall impact will be minimal.

- Finally, a very interesting finding is that more than half of past registrants continued to use alternative modes, even though they were no longer registered. About 17% of past registrants were still carpooling or vanpooling and 36% 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. Nearly two-thirds of 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 two-thirds (71%) of respondents who registered before 2003 had heard or seen advertising, compared to 61% of respondents who registered between 2003 and 2005 and on 44% of those who registered in 2006 or 2007.

- The results also showed the need for multiple outreach channels. Word of mouth was the predominant method by which respondents learned of GRH, but radio, Internet, employer, and brochures/direct mail from COG 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. One in five (27%) respondents who drove alone to work pre-GRH mentioned the radio as their source, compared with 14% of other respondents. Registrants who carpooled or vanpooled before GRH were more likely to note "word of mouth" as their source; 41% gave this as their source, compared with 32% of all other respondents. Bus/train schedules and bus/train signs were noted by 20% of commuter rail riders. The internet was mentioned more often by commuter rail and Metrorail riders than by other respondents.

APPENDICES

APPENDIX A – DISPOSITION OF FINAL DIALING RESULTS

APPENDIX B – SURVEY QUESTIONNAIRE

APPENDIX C – LETTERS, INSTRUCTIONS AND DEFINITION OF TERMS

APPENDIX D – NON-RESPONSE SURVEY QUESTIONNAIRE

APPENDIX E - RESULTS FROM 2007, 2004 AND 2001 GRH SURVEYS - COMPARISON ON KEY QUESTIONS

APPENDIX A

DISPOSITION OF FINAL DIALING RESULTS

Dialing Disposition at **Conclusion of Survey**	**Total Sample**	
	No.	**Percent**
Completed Interviews	1,001	61.5%
No Answer	98	6.0%
Answering Machine	73	4.5%
Busy	1	0.1%
Arranged Call Back	40	2.5%
Respondent Never Available	13	0.8%
Business Number/Fax/Modem	4	0.2%
Not In Service	74	4.5%
Refused	73	4.5%
Respondent Terminated	28	1.7%
Language Not English	7	0.4%
Wrong Number	76	4.7%
No Longer with Company	52	3.2%
Never Heard of GRH	7	0.4%
Retired, Not Employed	38	2.3%
Respondent Screened Out (Q3/Q8)	43	2.6
	1,628	100.0%

Total Dialings	9,815
Average Number of Dialings per Complete:	9.8

APPENDIX B
SURVEY QUESTIONNAIRE

MWCOG Guaranteed Ride Home Survey
Final - 04/18/07

Hello. May I speak to ____ . My name is _____. I'm calling from CIC Research on behalf of Commuter Connections. We're surveying people who have registered for or participated in Commuter Connections' Regional Guaranteed Ride Home (GRH) program. It takes less than __ minutes. Is now a good time?

REGISTRATION INFORMATION

Q1. In what year did you first register for Commuter Connections' GRH program?
IF RESPONDENT SAYS "Don't know, don't remember," ASK, "Do you recall that you did register for the GRH program at some time? IF "yes," CODE 9 (don't remember, don't know year). IF "no," CODE 8 (Never registered, don't recall registering).

1 Before 2002
2 2002
3 2003
4 2004
5 2005
6 2006
7 2007
8 Never registered, don't recall registering (SKIP TO Q3)
9 Don't remember/don't know year registered

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

1 yes (**SKIP TO Q6)**
2 no (**SKIP TO Q4)**
9 DK (**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?

1 changed job/work hours
2 moved to a different residence
3 joined a program offered by employer
4 joined a program offered by TMA or other group
5 couldn't use transit or rideshare at least 2 days per week
6 couldn't continue using carpool/vanpool/transit didn't work out
7 needed my car for work or other purpose (had to start driving alone)
8 too much effort to use the program
9 did not know I had to register
10 other (SPECIFY) _____
19 Don't know

SKIP TO DEFINITION OF REGISTRATION STATUS - BEFORE Q8

Q4 How long were you registered in the GRH program?

1 Less than 1 year
2 1 year
3 2 years
5 more than 3 years
4 3 years
9 Don't remember/don't know

Q5 Why did you not re-register when your registration expired? (DO NOT READ)

1 changed job/work hours
2 moved to a different residence
3 joined a program offered by employer
4 joined a program offered by TMA or other group
5 couldn't use transit or rideshare at least 2 days per week
6 couldn't continue using carpool/vanpool/transit didn't work out
7 needed my car for work or other purpose (had to start driving alone)
8 too much effort to use the program
9 did not know I had to re-register
10 forgot to re-register
11 never used it, didn't need it
12 haven't gotten around to it
13 dissatisfied with program
14 other (SPECIFY) _____

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

1 yes **(ASK Q7)**
2 no **(SKIP TO Q8)**

Q7 Who offered/sponsored that program? (DO NOT READ)

1 My employer
2 Local government program (i.e., Fairfax County, Montgomery County)
3 VRE
9 Other _____

DEFINITION OF REGISTRATION STATUS

IF Q1 = 8 AND Q3 = 1, GRHTYPE = ONE_TIME

IF Q1 = 1, 2, 3, 4, 5, 6, 7, OR 9 AND Q2 = 1, GRHTYPE = CURR_REG

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

COMMUTE PATTERNS

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

_____ Days

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)**

Q10 What type of schedule do you use? (**DO NOT READ, UNLESS NEEDED TO CLARIFY**)

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 - police, fire, hospitals)
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 Now I want to ask you about telecommuting, also called teleworking. 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 DK/Ref **(SKIP TO Q10c)**

Q10b How often do you usually telecommute? **(DO NOT READ)**

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 (e.g., sick child, snowstorm)
8 1-3 times a month
9 other (SPECIFY) _____
19. DK/Ref.

Q10c Last week Monday through Friday, did you travel to your usual work location every day that you were assigned to work? (**PROGRAMMER NOTE: ALLOW MULTIPLES FOR 2 - 4)**

1 Yes
2 No, I was sick, on vacation, or on business/work travel one or more days
3 No, last week my work place was closed for a holiday
4 No, I teleworked one or more days
9 Don't know

IF Q10c = 2, 3, 4, OR 9, AUTOCODE Q11 = 2, THEN SKIP TO Q14

Q11 Would you consider last week to be a typical work and commuting week?

1 yes (**ASK Q12, THEN SKIP TO Q15)**
2 no (**SKIP TO Q14)**

Q12 Then thinking just about LAST week, how did you get to work each day. Let's start with Monday? . . . How about Tuesday? . . . Wednesday? . . . Thursday? . . . Friday?

(IF RESPONDENT MENTIONS MORE THAN ONE MODE ON ANY DAY, PROMPT FOR THE MODE USED FOR THE LONGEST DISTANCE PORTION OF THE TRIP.)

(IF Q10 = 1, 2, OR 3 AND RESPONDENT DOES NOT MENTION "CWS day off" (RESPONSE 1), ASK:) "You said you typically work a compressed work schedule. Did you have a compressed work schedule day off last week?"

IF Q10b = 1, 2, 3, 4, OR 5 AND RESPONDENT DOES NOT MENTION "Telecommute" (RESPONSE 2), ASK: "You said you typically telecommute one or more days per week. Did you telecommute last week?"

IF RESPONDENT SAYS TRAVEL TO WORK IN A CAR, TRUCK, VAN, OR SUV, SAY, Were you alone in the vehicle? **IF YES, REPORT RESPONSE 3. IF NO, SAY,** "Including yourself, how many people were in the vehicle?" **IF 2-4, RECORD RESPONSE 5, IF 5, PROBE TO ASK ABOUT VANPOOL, THEN CODE RESPONSE 5 OR 7 AS APPROPRIATE, IF 6 OR MORE, RECORD AS RESPONSE 7**

(IF ALL WEEKDAYS IN Q8 ARE ACCOUNTED FOR BY MODES 1-16 IN Q12 BEFORE ALL WEEKDAYS ARE COUNTED, ASK: "You said you typically work only (number of weekdays reported in Q8) per week. Were the weekdays I haven't asked you about regular days off for you last week?" **IF RESPONSE IS YES, CATI WILL AUTOFILL REMAINING DAYS WITH CODE 17; OTHERWISE CONTINUE AND RECORD MODES USED FOR THOSE DAYS)**

(IF RESPONDENT MENTIONS "BUSINESS TRIP, WORK OUT OF AREA" (RESPONSE 18) FOR ANY DAY, CODE RESPONSE 18, THEN ASK "If you had worked at your regular work location that day, how would you likely have traveled to work?" **AND CODE ADDITIONAL MODE RESPONSE FOR THAT DAY.**

(IF RESPONDENT MENTIONS "SICK, VACATION, HOLIDAY" (RESPONSE 19) FOR ANY DAY, CODE RESPONSE 19, THEN ASK "If you had worked that day, how would you likely have traveled to work?" **AND CODE ADDITIONAL MODE RESPONSE FOR THAT DAY.**

	Go to Work				
Mode/Day of Week	Mon	Tues	Wed	Thur	Fri
1 compressed work schedule day off	1	1	1	1	1
2. telecommute/telework	2	2	2	2	2
3. drive alone in your car, truck, van, or SUV	3	3	3	3	3
4. motorcycle	4	4	4	4	4
5. carpool, including carpool w/family member, dropped off	5	5	5	5	5
6. casual carpool (slugging)	6	6	6	6	6
7. vanpool	7	7	7	7	7
8. buspool	8	8	8	8	8
9 rode a bus (public Bus, shuttle)	9	9	9	9	9
10. Metrorail	10	10	10	10	10
11. MARC (MD Commuter Rail)	11	11	11	11	11
12. VRE	12	12	12	12	12
13. AMTRAK/other train	13	13	13	13	13
14. bicycle	14	14	14	14	14
15. walk	15	15	15	15	15
16. taxi	16	16	16	16	16
17. regular day off (non-CWS)	17	17	17	17	16
18. business trip, work out of area, etc. (prompt for travel on non trip day)	18	18	18	18	18
19. sick, vacation, holiday, etc. (prompt for travel on non sick, vacation day)	19	19	19	19	19
20. N/A					

SKIP TO Q15

Q13 Then thinking about a TYPICAL week, what type or types of transportation do you use to get to work**?**

PROGRAMMER, LIST MODES FOR USE IN Q14.
IF Q10 = 1, 2, OR 3, ADD "CWS day off" TO LIST OF MODES FOR Q14.
IF Q10b = 1, 2, 3, 4, OR 5, ADD "telecommute/telework" TO LIST OF MODES FOR Q14

IF "CWS DAY OFF" IS IN Q13 LIST, ASK FIRST: "You said you typically work a compressed work schedule. How many compressed schedule days do you typically have off in a week**?"**

IF "telecommute/telework" IS IN Q13 LIST, ASK SECOND: "You said you typically telework <NUMBER OF TELEWORK DAYS FROM Q10b> days, right? **IF YES, CODE THAT NUMBER OF DAYS. IF NO, ASK**,"How many days do you telework in a typical week?

THEN FOR EACH OTHER MODE MENTIONED IN Q13, ASK…

Q14 About how many days per week do you <MODE FROM Q13>?

(IF RESPONDENT MENTIONS MORE THAN ONE MODE ON ANY DAY, PROMPT FOR THE MODE USED FOR THE LONGEST DISTANCE PORTION OF THE TRIP.)

(IF SUM OF DAYS FROM Q14 NE Q8, ASK) "And how do you commute on other days you are assigned to work?**" – ACCEPT OPTION OF "don't work, regular day off."**

(IF RESPONDENT MENTIONS "BUSINESS TRIP, WORK OUT OF AREA" (RESPONSE 18) FOR ANY DAY, CODE RESPONSE 18, THEN ASK "If you worked at your regular work location that day, how would you likely travel to work?" **AND CODE ADDITIONAL MODE RESPONSE FOR THAT DAY.**

	Go to Work – number of days				
Mode/Days typically used per week	1	2	3	4	5
1. have a compressed work schedule day off	1	2	3	4	5
2. telecommute/telework	1	2	3	4	5
3. drive alone in your car, truck, van, or SUV	1	2	3	4	5
4. ride a motorcycle	1	2	3	4	5
5. carpool, including carpool w/family member, dropped off	1	2	3	4	5
6. casual carpool (slugging)	1	2	3	4	5
7. vanpool	1	2	3	4	5
8. ride in a buspool	1	2	3	4	5
9 ride a bus (public Bus, shuttle)	1	2	3	4	5
10. ride Metrorail	1	2	3	4	5
11. ride MARC (MD Commuter Rail)	1	2	3	4	5
12. ride VRE	1	2	3	4	5
13. ride AMTRAK/other train	1	2	3	4	5
14. bicycle	1	2	3	4	5
15. walk	1	2	3	4	5
16. ride in a taxi	1	2	3	4	5
17. have a regular day off (non-CWS)	1	2	3	4	5
18. have a business trip, work out of area, etc. (prompt for travel on non trip day)	1	2	3	4	5
19. N/A					
20. N/A					

IF NO ALT MODE MENTIONED IN Q12 OR Q14, ASK Q14a

Q14a Do you occasionally use any of the following types of transportation to get to work? (**READ 1 - 4; Select all that apply)**

1 Carpool or Casual Carpool
2 Vanpool
3 Bus or Train
4 Bike or Walk
5 Don't use any of these modes (DO NOT READ)

Q15 About how many miles do you usually travel from home to work one way?

_____ miles one way

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

_____ minutes

IF Q12 OR Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 ASK ABOUT MOST COMMON ALTERNATIVE <MODE Q12 or Q14>. OTHERWISE, SKIP TO Q18

Q17 About how long have you been using < MODE Q12 OR Q14 > for your trip to work? **(DO NOT READ) (ADD TO BRIEFING DOCUMENT INSTUCTIONS IF RESPONDENT SAYS, "DO YOU MEAN HOW LONG HAVE I BEEN USING THIS MODE OR HOW LONG I'VE BEEN IN THIS PARTICULAR ARRANGEMENT," INTERVIEW SHOULD SAY, "**"Using <MODE Q12/Q14>, Using this type of transportation**")**

_____ months (CONVERT YEARS TO MONTHS)
_____ Don't know

IF Q12 or Q14 = 5, 6, OR 7, ASK Q18, OTHERWISE SKIP TO Q21

Q18 Including yourself, how many people usually ride in your <carpool or vanpool>? (If more than one answer in Q12 or Q14, select one using this priority: vanpool, carpool, casual carpooling.)

_____ total people in pool

(ASK Q19-Q20 OF RESPONDENTS ANSWERING CODE 5-13 IN Q12 OR Q14)

Q19 How do you get from home to where you meet your <MODE Q12 or Q14>?

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 HH members
5 bicycle
6 motorcycle
7 walk
8 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 <MODE Q12 OR Q14>?

_____ miles (no decimals)

PREVIOUS MODE

IF PAST_REG, ASK Q21-23. IF CURR_REG, SKIP TO Q27. IF ONE_TIME, SKIP TO Q24

(Past Registrants)

Q21 Next I'd like you to think back to the time that you were registered for the GRH program. During that time, how many days were you assigned to work in a typical week?

____ days

Q22 And at that time, what type or types of transportation did you use to get to work? (**PROGRAMMER, LIST MODES FOR USE IN Q23)**

FOR EACH MODE MENTIONED IN Q22, ASK…

Q23 About how many days per week did you use <MODE FROM Q22>?

IF SUM OF DAYS FROM Q23 NE Q21, ASK, "And how did you commute on other days you were assigned to work?" **– ACCEPT OPTION OF "didn't work, regular day off."**

IF Q12 OR Q14 = 1 AND RESPONDENT DOES NOT MENTION "CWS day off" (RESPONSE 1), ASK: "You said you typically work a compressed work schedule now. Did you work a compressed schedule during the time you were registered for the GRH program?"

IF Q12 OR Q14 = 2 AND RESPONDENT DOES NOT MENTION "Telecommute/telework" (RESPONSE 2), ASK: "You said you typically telecommute now. Did you telecommute during the time you were registered for the GRH program?"

	Go to Work – number of days				
Mode/Days typically used per week	1	2	3	4	5
1. compressed work schedule day off	1	2	3	4	5
2. telecommute/telework	1	2	3	4	5
3. drive alone in your car, truck, van, or SUV	1	2	3	4	5
4. motorcycle	1	2	3	4	5
5. carpool, including carpool w/family member, dropped off	1	2	3	4	5
6. casual carpool (slugging)	1	2	3	4	5
7. vanpool	1	2	3	4	5
8. buspool	1	2	3	4	5
9 rode a bus (public Bus, shuttle)	1	2	3	4	5
10. Metrorail	1	2	3	4	5
11. MARC (MD Commuter Rail)	1	2	3	4	5
12. VRE	1	2	3	4	5
13. AMTRAK/other train	1	2	3	4	5
14. bicycle	1	2	3	4	5
15. walk	1	2	3	4	5
16. taxi	1	2	3	4	5
17. regular day off (non-CWS)	1	2	3	4	5
18. business trip, work out of area, etc. (prompt for travel on non trip day)	1	2	3	4	5
19. N/A					
20. N/A					

NOW SKIP TO Q27

(One-Time Exceptions)

Q24 Now, please think back to the time before you heard about the GRH program. At that time, how many days were you assigned to work in a typical week?

_____ days
20 Did not work then

IF Q24 = 20, AUTOCODE Q25 = "DID NOT WORK THEN" AND AUTOCODE Q26 = 20

Q25 And at that time, what type or types of transportation did you use to get to work? (**PROGRAMMER, LIST MODES FOR USE IN Q26)**

FOR EACH MODE MENTIONED IN Q25, ASK…

Q26 About how many days per week did you use <MODE FROM Q25>??

IF SUM OF DAYS FROM Q26 NE Q24, ASK, "And how did you commute on other days you were assigned to work?" **– ACCEPT OPTION OF "didn't work, regular day off."**

IF Q12 OR Q14 = 1 AND RESPONDENT DOES NOT MENTION "CWS day off" (RESPONSE 1), ASK: "You said you typically work a compressed work schedule now. Did you work a compressed schedule before you heard about the GRH program?"

IF Q12 OR Q14 = 2 AND RESPONDENT DOES NOT MENTION "Telecommute/telework" (RESPONSE 2), ASK: "You said you typically telecommute now. Did you telecommute before you heard about the GRH program?"

	Go to Work – number of days				
Mode/Days typically used per week	1	2	3	4	5
1. compressed work schedule day off	1	2	3	4	5
2. telecommute/telework	1	2	3	4	5
3. drive alone in your car, truck, van, or SUV	1	2	3	4	5
4. motorcycle	1	2	3	4	5
5. carpool, including carpool w/family member, dropped off	1	2	3	4	5
6. casual carpool (slugging)	1	2	3	4	5
7. vanpool	1	2	3	4	5
8. buspool	1	2	3	4	5
9 rode a bus (public Bus, shuttle)	1	2	3	4	5
10. Metrorail	1	2	3	4	5
11. MARC (MD Commuter Rail)	1	2	3	4	5
12. VRE	1	2	3	4	5
13. AMTRAK/other train	1	2	3	4	5
14. bicycle	1	2	3	4	5
15. walk	1	2	3	4	5
16. taxi	1	2	3	4	5
17. regular day off (non-CWS)	1	2	3	4	5
18. business trip, work out of area, etc. (prompt for travel on non trip day)	1	2	3	4	5
19. N/A					
20. Did not work then, did not work in area then					5

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 were you assigned to work in a typical week?

____ days
20 Did not work then

IF Q27 =20, AUTOCODE Q28 = "DID NOT WORK THEN" AND AUTOCODE Q29 = 20, "DID NOT WORK THEN,"

Q28 At that time, what type or types of transportation did you use to get to work? (**PROGRAMMER, LIST MODES FOR USE IN Q29)**

FOR EACH MODE MENTIONED IN Q29, ASK…

Q29 About how many days per week did you use <MODE FROM Q28>?

IF SUM OF DAYS FROM Q29 NE Q27, ASK "And how did you commute on other days you were assigned to work?" **– ACCEPT OPTION OF "didn't work, regular day off."**

IF Q12 OR Q14 = 1 AND RESPONDENT DOES NOT MENTION "CWS day off" (RESPONSE 1), ASK: "You said you typically work a compressed work schedule now. Did you work a compressed schedule before you registered for the GRH program?"

IF Q12 OR Q14 = 2 AND RESPONDENT DOES NOT MENTION "Telecommute/telework" (RESPONSE 2), ASK: "You said you typically telecommute now. Did you telecommute before you registered for the GRH program?"

	Go to Work – number of days				
Mode/Days typically used per week	1	2	3	4	5
1. compressed work schedule day off	1	2	3	4	5
2. telecommute/telework	1	2	3	4	5
3. drive alone in your car, truck, van, or SUV	1	2	3	4	5
4. motorcycle	1	2	3	4	5
5. carpool, including carpool w/family member, dropped off	1	2	3	4	5
6. casual carpool (slugging)	1	2	3	4	5
7. vanpool	1	2	3	4	5
8. buspool	1	2	3	4	5
9 rode a bus (public Bus, shuttle)	1	2	3	4	5
10. Metrorail	1	2	3	4	5
11. MARC (MD Commuter Rail)	1	2	3	4	5
12. VRE	1	2	3	4	5
13. AMTRAK/other train	1	2	3	4	5
14. bicycle	1	2	3	4	5
15. walk	1	2	3	4	5
16. taxi	1	2	3	4	5
17. regular day off (non-CWS)	1	2	3	4	5
18. business trip, work out of area, etc. (prompt for travel on non trip day)	1	2	3	4	5
19. N/A					
20. Did not work then, did not work in area then					5

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

Skip instruction for previous Drive Alone by registration status

INSTRUCTIONS BEFORE Q30

Current Registrants
IF CURR_REG AND IF Q12 or Q14 =5, 6, 7, 8, 9, 10, 11,12, 13, 14, OR 15 AND Q29 NE 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, ASK Q30.
IF Q29 = 20, SKIP TO Q45

Past Registrants
IF PAST_REG AND IF Q23 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 AND Q29 NE 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 , ASK Q31.
IF Q29 = 20, SKIP TO Q46

One-time Exception users
IF ONE_TIME AND IF Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 AND Q26 NE 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 , 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 carpooling, vanpooling, using transit, biking,or walking (FROM Q12 or Q14)? (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

NOW SKIP TO Q33

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

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

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

NOW 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 carpooling, vanpooling, using transit, biking, or walking (FROM Q12 or Q14)? (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

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 carpooling, vanpooling, using transit, biking, or walking (FROM Q12 or Q14)? (READ)

1 very likely
2 somewhat likely
3 not at all likely
9 DK/REFUSED (DO NOT READ)

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

1 very likely
2 somewhat likely
3 not at all likely
9 DK/REFUSED (DO NOT READ)

NOW SKIP TO Q46

Skip instruction for increased use of alt modes by registration status
INSTRUCTIONS BEFORE Q35

Current Registrants
(IF CURR-REG and IF Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 AND THE FREQUENCY OF Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 IS GREATER THAN THE FREQUENCY OF Q29 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15, ASK Q35 AND Q38.

Past Registrants
IF PAST_REG and IF Q23 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 AND THE FREQUENCY OF Q23 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 IS GREATER THAN THE FREQUENCY OF Q29 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15, ASK Q36 AND Q39.
One-time Exceptions

IF ONE_TIME and IF Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 AND THE FREQUENCY OF Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 IS GREATER THAN THE FREQUENCY OF Q26 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15, 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? (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

NOW SKIP TO Q38

(Past Registrants who increased use of alternative modes after registering)

Q36 You said that while you were registered for GRH, you used types of transportation OTHER than driving alone more days per week for your trip to work than you did before you registered for GRH. How important was GRH to your decision to make this change? (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

NOW 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? (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

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? (READ)

1 very likely
2 somewhat likely
3 not at all likely
9 DK/REFUSED (DO NOT READ)

SKIP TO Q45

(Past Registrants)

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

1 very likely
2 somewhat likely
3 not at all likely
9 DK/REFUSED (DO NOT READ)

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

Current Registrants
(IF CURR_REG AND Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 AND Q29 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 , AND THE FREQUENCY OF Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 IS LESS THAN OR EQUAL TO THE FREQUENCY OF Q26 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, ASK Q40.

Past Registrants
IF PAST_REG and Q23 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 and Q29 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15, AND THE FREQUENCY OF Q23 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 IS LESS THAN OR EQUAL TO THE FREQUENCY OF Q29 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, , ASK Q41.

One-Time exceptions
IF ONE_TIME and Q12 or Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15 AND Q26 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, OR 15, AND THE FREQUENCY OF Q12 OR Q14 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 IS LESS THAN OR EQUAL TO THE FREQUENCY OF Q26 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, , 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 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? Was it… (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

NOW SKIP TO Q43

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

Q41 You said that you were 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? Was it… (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

NOW 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 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? Was it… (READ)

1 very important
2 somewhat important
3 not at all important
9 DK/REFUSED (DO NOT READ)

NOW SKIP TO Q44

(Current Registrants or Past Registrants))

Q43 If GRH had not been available, how likely would you have been to continue? Would you say it was… (READ RESPONSES)

1 very likely
2 somewhat likely
3 not at all likely
9 DK/REFUSED (DO NOT READ)

NOW SKIP TO Q45

(One-Time Registrants)

Q44 If GRH had not been available, how likely would you have been to continue? Would you say it was … (READ)

1 very likely
2 somewhat likely
3 not at all likely
9 DK/REFUSED (DO NOT READ)

INSTRUCTIONS BEFORE Q45
IF CURR_REG or ONE_TIME, ASK Q45
IF PAST_REG, ASK Q46

(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 carpool, vanpool, use transit, bike, or walk (FROM Q12 or Q14)?

1 yes
2 no (**SKIP TO Q48**)
9 DK/REFUSED **(DO NOT READ; SKIP TO Q48)**

NOW SKIP TO Q47

(Past Registrants)

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

1 yes
2 no (**SKIP TO Q48)**
9 DK/REFUSED **(DO NOT READ; SKIP TO Q48)**

Q47 Was any assistance or benefit you received more important than GRH to your decision? **(DO NOT READ; ACCEPT ONLY ONE RESPONSE)**

1 matchlist
2 transit route/schedule info
3 P&R info
4 vanpool assistance
5 HOV lane specs
6 discount/free transit pass/Metrochek/SmarTrip, Smart Benefits
7 NuRide (Virginia carpool incentive)
8 other cash incentive
9 employer GRH
10 CP/VP preferential parking
11 parking fees
12 carpool/vanpool discount parking
13 assistance from employer
14 no assistance more important
15 other _____

Q48 Were any other factors or circumstances important to your decision? **(DO NOT READ; ACCEPT MULTIPLE RESPONSES)**

1 changed jobs or work hours
2 moved to a different residence
3 save money
4 save time
5 didn't want to drive
6 no longer had a car available for commuting
7 needed my car for work or other purpose (had to start driving alone)
8 family obligations
88 other (SPECIFY) _____
99 no other factor or circumstance was important

REFERRAL SOURCES FOR GRH, GRH ADVERTISING RECALL

Q49 How did you hear about the GRH Program? **(DO NOT READ, ACCEPT MULTIPLE RESPONSES; PROBE FOR ADDITIONAL SOURCES)**

1 direct mail/postcard from COG/CC
2 radio
3 TV
4 bus/train sign
5 internet
6 bus/train schedule
7 brochure/promo materials
8 highway sign
9 Info Kiosk
10 yellow Pages (One Book or Verizon)
11 newsletter
12 newspaper (regional or local)
13 employer/employer survey
14 fair/on-site event
15 word of mouth
16 other rideshare/transit organization
17 Other (specify)
19. DK/Ref.

IF Q49 = 1, AUTOCODE Q50 = 1, THEN SKIP TO Q52

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

1 yes
2 no **(SKIP TO Q54**)
9 DK/Ref (**SKIP TO Q54)**

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

1 yes
2 no (**SKIP TO Q54)**
9 DK/Ref (**SKIP TO Q54)**

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

1 yes
2 no
9 DK/Ref

USE OF GRH

IF **Q3 = 1, SAY** "You said you had taken a GRH trip," **THEN SKIP TO Q55**

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

1 yes
2 no (**SKIP TO Q59)**

Q55 For what reason did you take the trip? (**ASK ABOUT MOST RECENT TRIP; DO NOT READ, 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 DK **(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? **(IF DK, ASK FOR BEST GUESS)**

_____ minutes

Q59 In what ways could Commuter Connections improve the GRH program? **(DO NOT READ, CHECK ALL THAT APPLY)**

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 DK/Ref.

Q60 Which of the following groups includes your age? (**READ CHOICES)**

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

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

1 Yes
2 No
9 DK/Ref.

Q62 Now I want to ask you about your race. Which one of the following best describes your racial background. Is it . . . **(READ CHOICES 1-5; SELECT ONE RESPONE ONLY)**

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 DK/Ref

Q63 Finally, please stop me when I reach the category that best represents your household's total annual income. Is it . . . **(READ CHOICES)**

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 or more
19 Ref, DK

Thank you very much for your time and cooperation!

(RECORD SEX:) _1_ male _2_ female

APPENDIX C
LETTERS, INSTRUCTIONS & DEFINITION OF TERMS

Telephone Survey – Alert Letter
Sent by postal mail

Dear Sir/Madam:

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

You will be contacted by telephone within the next few days by CIC Research, Inc., an independent research firm hired by COG. An interviewer will ask you questions for just a few minutes about your travel to work and your experience with the GRH program. Your input is very important to us even if you are no longer registered in the program and/or have not used a GRH trip.

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 call Nicholas Ramfos, *Commuter Connections* Project Manager, at (202) 962-3200.

Sincerely,

Ronald F. Kirby
Director, Department of
Transportation Planning

GRH (Guaranteed Ride Home) - #823

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 riders 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. Commuter 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
NON-RESPONSE SURVEY QUESTIONNAIRE

MWCOG Guaranteed Ride Home Non-Response Survey
V1– 05/17/07

Hello. May I speak to ____ . My name is _____. I'm calling from CIC Research on behalf of Commuter Connections. We're surveying people who have registered for or participated in Commuter Connections' Regional Guaranteed Ride Home (GRH) program. It takes less than __ minutes. Is now a good time?

REGISTRATION INFORMATION

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

1 yes
2 no
9 DK

COMMUTE PATTERNS

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

_____ Days

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 Q13)**

Q10 What type of schedule do you use? (**DO NOT READ, UNLESS NEEDED TO CLARIFY**)

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 - police, fire, hospitals)
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) _____

Q13 Then thinking about a TYPICAL week, what type or types of transportation do you use to get to work**?**

PROGRAMMER, LIST MODES FOR USE IN Q14.
IF Q10 = 1, 2, OR 3, ADD "CWS day off" TO LIST OF MODES FOR Q14.
IF Q10b = 1, 2, 3, 4, OR 5, ADD "telecommute/telework" TO LIST OF MODES FOR Q14

IF "CWS DAY OFF" IS IN Q13 LIST, ASK FIRST: "You said you typically work a compressed work schedule. How many compressed schedule days do you typically have off in a week**?"**

IF "telecommute/telework" IS IN Q13 LIST, ASK SECOND: "You said you typically telework <NUMBER OF TELEWORK DAYS FROM Q10b> days, right? **IF YES, CODE THAT NUMBER OF DAYS. IF NO, ASK**,"How many days do you telework in a typical week?

THEN FOR EACH OTHER MODE MENTIONED IN Q13, ASK…

Q14 About how many days per week do you <MODE FROM Q13>?

(IF RESPONDENT MENTIONS MORE THAN ONE MODE ON ANY DAY, PROMPT FOR THE MODE USED FOR THE LONGEST DISTANCE PORTION OF THE TRIP.)

(IF SUM OF DAYS FROM Q14 NE Q8, ASK) "And how do you commute on other days you are assigned to work?**" – ACCEPT OPTION OF "don't work, regular day off."**

(IF RESPONDENT MENTIONS "BUSINESS TRIP, WORK OUT OF AREA" (RESPONSE 18) FOR ANY DAY, CODE RESPONSE 18, THEN ASK "If you worked at your regular work location that day, how would you likely travel to work?" **AND CODE ADDITIONAL MODE RESPONSE FOR THAT DAY.**

	Go to Work – number of days				
Mode/Days typically used per week	1	2	3	4	5
1. have a compressed work schedule day off	1	2	3	4	5
2. telecommute/telework	1	2	3	4	5
3. drive alone in your car, truck, van, or SUV	1	2	3	4	5
4. ride a motorcycle	1	2	3	4	5
5. carpool, including carpool w/family member, dropped off	1	2	3	4	5
6. casual carpool (slugging)	1	2	3	4	5
7. vanpool	1	2	3	4	5
8. ride in a buspool	1	2	3	4	5
9 ride a bus (public Bus, shuttle)	1	2	3	4	5
10. ride Metrorail	1	2	3	4	5
11. ride MARC (MD Commuter Rail)	1	2	3	4	5
12. ride VRE	1	2	3	4	5
13. ride AMTRAK/other train	1	2	3	4	5
14. bicycle	1	2	3	4	5
15. walk	1	2	3	4	5
16. ride in a taxi	1	2	3	4	5
17. have a regular day off (non-CWS)	1	2	3	4	5
18. N/A	1	2	3	4	5
19. N/A					
20. N/A					

DEMOGRAPHICS

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

Q60 Which of the following groups includes your age? **(READ CHOICES)**

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

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

1 Yes
2 No
9 DK/Ref.

Q62 Now I want to ask you about your race. Which one of the following best describes your racial background. Is it . . . **(READ CHOICES 1-5; SELECT ONE RESPONE ONLY)**

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 DK/Ref

Q63 Finally, please stop me when I reach the category that best represents your household's total annual income. Is it . . . **(READ CHOICES)**

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 or more
19 Ref, DK

Thank you very much for your time and cooperation!

(RECORD SEX:) _1_ male _2_ female

Appendix E
Results from 2007, 2004, and 2001 GRH Surveys
Comparison on Key Questions

Registration Information

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

	2007	2004	2001
Current registrant	61%	59%	62%
Past registrant	39%	39%	32%
One-time exception	0%	2%	6%

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

	2007		2004		2001
Less than 1 year	2%		7%		7%
1 year	28%		29%		39%
2 years	34%		21%		23%
3 years	5%	31%	17%	43%	
More than 3 years	26%		26%		31%

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

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

GRH Information Sources

- **How heard about GRH** – Percentage of all respondents

	2007	2004	2001
Word of mouth – referral	34%	26%	----
Radio	16%	16%	----
Internet	11%	11%	----
Employer/employee survey	7%	10%	----
Brochure/promo materials	7%	6%	----
Direct mail/postcard from Commuter Connections	6%	5%	----
Bus/train sign	4%	7%	----
Bus/train schedule	4%	1%	----
TV	3%	3%	----
Newspaper	2%	2%	----
Newsletter	2%	1%	----
Other	7%	5%	----

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

	2007	2004	2001
Heard or saw GRH advertising	57%	72%	---
Registered after hearing ads	36%	54%	---
Advertising encouraged respondent to register	34%	49%	---

Current Travel Information

- **Current mode split** – Primary mode

	Current Registrant			Past Registrant		
	2007	2004	2001	2007	2004	2001
DA/Motorcycle	6.0%	5.0%	9.1%	41.5%	41.4%	33.3%
CP/VP	35.7%	35.7%	35.3%	16.9%	20.3%	20.2%
Bus	21.8%	19.2%	18.2%	9.2%	13.4%	9.3%
Metrorail	17.4%	14.3%	36.2%	21.5%	9.3%	34.5%
Commuter Rail	18.1%	24.0%		4.6%	11.8%	
Bike/walk	0.4%	1.5%	0.7%	3.1%	2.3%	1.5%
Telecommute	0.5%	0.3%	0.4%	3.1%	1.5%	1.2%

- **Average length of commute**

	2007	2004	2001
Distance (miles)	34.5 mi	32.7 mi	31.7 mi
Time (minutes)	63 min	50 min	57 min

- **"Pre-GRH" Modes vs "With-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			With-GRH		
	2007	2004	2001	2007	2004	2001
DA/Motorcycle	31.3%	26.1%	23.2%	13.6%	4.6%	9.4%
CP/VP	26/3%	29.1%	30.4%	33.6%	35.1%	33.7%
Bus	17/2%	15.6%		24.0%	21.3%	
Metrorail	18/5%	14.3%	44.9%	17.9%	15.0%	54.8%

Commuter Rail	11/2%	12.6%		16.2%	20.3%

- **Average Days Using Alternative Modes "Pre-GRH" and "With-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			With-GRH		
	2007	**2004**	**2001**	**2007**	**2004**	**2001**
0 days/week	32%	26%	23%	10%	4%	8%
1 day/week	0%	0%	0%	1%	1%	0%
2 days/week	2%	1%	0%	1%	1%	1%
3 days/week	1%	2%	1%	3%	3%	4%
4 days/week	9%	11%	2%	14%	16%	7%
5 days/week	56%	60%	74%	71%	74%	80%
Average days/week	3.2	3.5	3.8	4.2	4.5	4.4

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

	2007	**2004**		**2001**
1 – 11 months	9%	13%		12%
12 – 23 months	9%	13%		14%
24 – 35 months	12%	15%		17%
36 – 59 months	20%	21%		
60 – 83 months	50%	11%	59%	57%
84 + months (7 or more years)		27%		
Average duration (months)	**87 months**	**65 months**		**N/A**
New alt mode users	**49 months**	**44 months**		**N/A**

Influence of GRH on Commute Pattern Decisions

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

	2007	**2004**	**2001**
Started using alternative mode	22%	24%	18%
Maintained use of alternative mode	64%	67%	72%
Increased alternative mode use (frequency)	5%	4%	2%
No alt mode "with-GRH"	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

	2007	**2004**	**2001**
n=	199	229	163
Very important	50%	46%	50%
Somewhat important	19%	26%	23%
Not at all important	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

	2007	2004	2001
n=	604	596	702
Very important	43%	40%	39%
Somewhat important	31%	32%	25%
Not at all important	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

	2007	2004	2001
n=	32	44	15
Very important	28%	27%	47%
Somewhat important	38%	30%	20%
Not at all important	35%	43%	33%

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

	2007	2004	2001
n=	201	225	163
Very likely	65%	50%	63%
Somewhat likely	24%	28%	26%
Not at all likely	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

	2007	2004	2001
n=	603	573	702
Very likely	66%	71%	76%
Somewhat likely	25%	23%	15%
Not at all likely	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

	2007	2004	2001
n=	33	42	14
Very likely	48%	48%	22%
Somewhat likely	21%	23%	36%
Not at all likely	32%	29%	43%

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

	2007	2004	2001
None	58%	60%	77%
Discount/free transit pass, Metrochek, SmarTrip	35%	28%	17%
Other cash incentive	1%	3%	1%
Assistance from employer	3%	1%	1%
Other	4%	3%	3%

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

	2007	2004	2001
Didn't want to drive	41%	16%	15%
None	31%	42%	43%
Save money	19%	12%	15%
Save time	16%	11%	14%
Parking issues	7%	3%	4%
Stress	3%	2%	3%
Save wear and tear on vehicle	3%	2%	1%
Moved to different residence	2%	2%	2%
Changed job/work hours	1%	4%	2%
Traffic congestion	1%	3%	3%
Family obligations	1%	2%	2%
Use HOV lane	----	2%	----
Other	6%	8%	12%

Use of and Satisfaction with GRH

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

	2007		2004		2001
All respondents	23%		25%		22%
By Registration Status					
- Current registrants	30%		25%		23%
- Past registrants	21%		21%		19%
By Mode Used "With-GRH"					
- CP/VP	27%		35%		27%
- Bus	28%		29%		27%
- Metrorail	14%	31%	21%	41%	18%
- Commuter rail	17%		20%		

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

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

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

	2007	2004	2001
5 minutes or less	22%	28%	41%
6 – 10 minutes	23%	28%	13%
11 – 20 minutes	36%	24%	22%
21 – 30 minutes	14%	13%	8%
31 – 45 minutes	3%	3%	5%
46 – 60 minutes	1%	3%	9%
61 or more minutes	2%	1%	2%
Average (minutes)	16 min	16 min	19 min

- **Improvements desired to GRH Program ***

	2007	2004	2001
None needed	25%	28%	47%
More advertising	13%	8%	6%
Allow more trips per year	4%	3%	----
Quicker response for ride requests	3%	3%	4%
Easier/faster approval	2%	3%	4%
Wider area for trips	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	1%	2%	----
Don't require registration	1%	1%	2%
Notify when time to re-register	1%	1%	----
Other	10%	7%	11%
Don't know	47%	41%	25%

* Multiple responses permitted

Demographics

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

	Residence			Employment		
	2007	2004	2001	2007	2004	2001
DC		2%	3%		61%	----
Maryland		29%	35%		9%	---
Virginia		67%	61%		30%	---
Other/Ref		2%	2%		0%	---

- **Income** – all respondents

	2007		2004		2001
Under $30,000	1%		1%		4%
$30,000 – $39,999	1%		3%		6%
$40,000 – $59,999	9%		14%		19%
$60,000 – $79,999	17%		19%		20%
$80,000 – $99,999	19%		24%		22%
$100,000 – $119,999	20%		17%		
$120,000 – $139,999	10%	52%	8%	39%	30%
$140,000 – $159,999	8%		5%		
$160,000 or more	14%		9%		

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

	2007	2004	2001
Hispanic/Latino	4%	4%	5%
White	65%	71%	73%
Black/African-American	21%	21%	17%
Asian	10%	3%	4%
Other/Mixed	0%	1%	2%

- **Gender** – all respondents

	2007	2004	2001
Female	57%	57%	59%
Male	43%	43%	41%

- **Age** – all respondents

	2007	2004	2001
18 – 24	1%	<1%	2%
25 – 34	17%	17%	17%
35 – 44	32%	35%	37%
45 – 54	31%	33%	32%
55 – 64	18%	14%	10%
65 or older	1%	1%	1%

Federal Register

Wednesday,
February 14, 2007

Part III

Department of Transportation

Federal Highway Administration
23 CFR Parts 450 and 500

Federal Transit Administration
49 CFR Part 613

Statewide Transportation Planning; Metropolitan Transportation Planning; Final Rule

Section 450.320 Congestion Management Process in Transportation Management Areas

The docket included more than 25 documents that contained almost 30 comments on this section with about one-third from State DOTs, one-fifth from national and regional advocacy organizations, half from MPOs and COGs, and the rest from transit operators.

On May 16, 2006, the U.S. Secretary of Transportation announced a national initiative to address congestion related to highway, freight and aviation.[13] The intent of the "National Strategy to Reduce Congestion on America's Transportation Network" is to provide a blueprint for Federal, State and local officials to tackle congestion. USDOT encourages the States and MPO(s) to seek Urban Partnership Agreements with a handful of communities willing to demonstrate new congestion relief strategies and encourages states to pass legislation giving the private sector a broader opportunity to invest in transportation. It calls for more widespread deployment of new operational technologies and practices that end traffic tie-ups, designates new interstate "corridors of the future," targets port and border congestion, and expands aviation capacity.

U.S. DOT encourages State DOTs and MPOs to consider and implement strategies, specifically related to highway and transit operations and expansion, freight, transportation pricing, other vehicle-based charges techniques, congestion pricing, electronic toll collection, quick crash removal, etc. The mechanism that the State DOTs and MPOs employ to explore these strategies is within their discretion. The USDOT will focus its resources, funding, staff and technology to cut traffic jams and relieve freight bottlenecks.

A few commenters reiterated that the congestion management process (CMP) should result in multimodal system performance measures and strategies. The FHWA and the FTA note that existing language reflects the multimodal nature of the CMP. Existing language (§ 450.320(a)(2)) specifically allows for the appropriate performance measures for the CMP to be determined cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area.

Most of the comments pointed out that the provisions of § 450.320(e) pertaining to projects that add significant new carrying capacity for Single Occupant Vehicles (SOVs) applies in "Carbon Monoxide (CO) and Ozone Nonattainment TMAs," but does not apply to TMAs in air quality maintenance areas. The FHWA and the FTA agree and have clarified the language in paragraph (e). We also clarified that this provision applies to projects "to be advanced with Federal funds."

Several commenters asked for a clarification regarding what CMP requirements apply in air quality maintenance and attainment areas, as opposed to the requirements in air quality nonattainment areas. The CMP requirements for all TMA areas (attainment, maintenance and nonattainment) are identified in § 450.320(a), § 450.320(b), § 450.320(c), and § 450.320(f). Additional CMP requirements that apply only to non-attainment TMA areas (for ozone and carbon monoxide) are identified in § 450.320(d) and § 450.320(e).

Another commenter asked for clarification regarding the exact requirements for a CMP and how the CMP is integrated with the metropolitan transportation plan. As noted above, the specific CMP requirements for all TMAs, regardless of air quality status, are identified in this section. The CMP

[13] Speaking before the National Retail Federation's annual conference on May 16, 2006, in Washington, DC, former U.S. Transportation Secretary Norman Mineta unveiled a new plan to reduce congestion plaguing America's roads, rails and airports. The National Strategy to Reduce Congestion on America's Transportation Network includes a number of initiatives designed to reduce transportation congestion. The transcript of these remarks is available at the following URL: *http://www.dot.gov/affairs/minetasp051606.htm.*

in this section is not described as, nor intended to be, a stand-alone process, but an integral element of the transportation planning process. To reinforce the integration of the CMP and the metropolitan transportation plan, § 450.322(f)(4) requires that the metropolitan transportation plan shall include "consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for carbon monoxide or ozone."

One commenter asked for examples of the reasonable travel demand reduction and operational management strategies as required in § 450.320(e). Examples of such strategies include, but are not limited to: Transportation demand management measures such as car and vanpooling, flexible work hours compressed work weeks and telecommuting; Roadway system operational improvements, such as improved traffic signal coordination, pavement markings and intersection improvements, and incident management programs; Public transit system capital and operational improvements; Access management program; New or improved sidewalks and designated bicycle lanes; and Land use policies/regulations to encourage more efficient patterns of commercial or residential development in defined growth areas.

23 CFR Part 500

Section 500.109 Congestion Management Systems

Few docket documents specifically referenced this section. However, the docket included more than 25 documents that contained almost 30 comments on § 450.320 (Congestion management process in transportation management areas) which is relevant to this section.

As was mentioned, on May 16, 2006, the U.S. Secretary of Transportation announced a national initiative to address congestion related to highway, freight and aviation. The intent of the "National Strategy to Reduce Congestion on America's Transportation

Network" is to provide a blueprint for Federal, State and local officials to tackle congestion. The States and MPO(s) are encouraged to seek Urban Partnership Agreements with a handful of communities willing to demonstrate new congestion relief strategies and encourages States to pass legislation giving the private sector a broader opportunity to invest in transportation. It calls for more widespread deployment of new operational technologies and practices that end traffic tie ups, designates new interstate "corridors of the future," targets port and border congestion, and expands aviation capacity.

U.S. DOT encourages the State DOTs and MPOs to consider and implement strategies, specifically related to highway and transit operations and expansion, freight, transportation pricing, other vehicle-based charges techniques, etc. The mechanism that the State DOTs and MPOs employ to explore these strategies is within their discretion. The U.S. DOT will focus its resources, funding, staff and technology to cut traffic jams and relieve freight bottlenecks.

A few comments were received reiterating that the CMP should result in multimodal system performance measures and strategies. The FHWA and the FTA note that existing language reflects the multimodal nature of the CMP. Specifically, § 450.320(a)(2) allows for the appropriate performance measures for the CMP to be determined cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area.

Several commenters asked for a clarification with regards to what CMP requirements apply in air quality attainment areas, as opposed to the requirements in air quality nonattainment areas. The CMP requirements for all TMA areas (attainment and nonattainment) are identified in §§ 450.320(a), 450.320(b), 450.320(c), and 450.320(f). Additional CMP requirements that apply only to nonattainment TMA areas (for CO and ozone) are identified in § 450.320(d) and § 450.320(e).

Congestion management process means a systematic approach required in transportation management areas (TMAs) that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C., and title 49 U.S.C., through the use of operational management strategies.

Consideration means that one or more

binding guidance material.

§ 450.320 Congestion management process in transportation management areas.

(a) The transportation planning process in a TMA shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53 through the use of travel demand reduction and operational management strategies.

(b) The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the metropolitan transportation plan and the TIP. The level of system performance deemed acceptable by State and local transportation officials may vary by type of transportation facility, geographic location (metropolitan area or subarea), and/or time of day. In addition, consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.

(c) The congestion management process shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes coordination with transportation system management and operations activities. The congestion management process shall include:

(1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;

(2) Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area;

(3) Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area;

(4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:

(i) Demand management measures, including growth management and congestion pricing;

(ii) Traffic operational improvements;

(iii) Public transportation improvements;

(iv) ITS technologies as related to the regional ITS architecture; and

(v) Where necessary, additional system capacity;

(5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and

(6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decisionmakers and the public to provide guidance on selection of effective strategies for future implementation.

(d) In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (i.e., a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process meeting the requirements of this section.

(e) In TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (as described in paragraph (d) of this section) is proposed to be advanced with Federal funds. If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the congestion management process shall identify all reasonable strategies to manage the SOV facility safely and effectively (or to facilitate its management in the future). Other travel demand reduction and operational management strategies appropriate for the corridor, but not appropriate for incorporation into the SOV facility itself, shall also be identified through the congestion management process. All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation.

(f) State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303.

§ 450.322 Development and content of the metropolitan transportation plan.

(a) The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.

(b) The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

(c) The MPO shall review and update the transportation plan at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon. In addition, the MPO may revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The transportation plan (and any revisions) shall be approved by the MPO and submitted for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to the FHWA and the FTA.

(d) In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO shall coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP).

(e) The MPO, the State(s), and the public transportation operator(s) shall validate data utilized in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update.

(f) The metropolitan transportation plan shall, at a minimum, include:

(1) The projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;

(2) Existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. In addition, the locally preferred alternative selected from an Alternatives Analysis under the FTA's Capital Investment Grant program (49 U.S.C. 5309 and 49 CFR part 611) needs to be adopted as part of the metropolitan transportation plan as a condition for funding under 49 U.S.C. 5309;

(3) Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;

(4) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide;

(5) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation

movement of people and goods in a region. A congestion management system or process is a systematic and regionally accepted approach for managing congestion that provides accurate, up-to-date information on transportation system operations and performance and assesses alternative strategies for congestion management that meet State and local needs.

(b) The development of a congestion management system or process should result in performance measures and strategies that can be integrated into transportation plans and programs. The level of system performance deemed acceptable by State and local officials may vary by type of transportation facility, geographic location (metropolitan area or subarea and/or non-metropolitan area), and/or time of day. In both metropolitan and non-metropolitan areas, consideration needs to be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity of those lanes.

PART 500—MANAGEMENT AND MONITORING SYSTEMS

■ 2. Revise the authority citation for part 500 to read as follows:

Authority: 23 U.S.C. 134, 135, 303, and 315; 49 U.S.C. 5303–5305; 23 CFR 1.32; and 49 CFR 1.48 and 1.51.

■ 3. Revise § 500.109 to read as follows:

§ 500.109 CMS.

(a) For purposes of this part, congestion means the level at which transportation system performance is unacceptable due to excessive travel times and delays. Congestion management means the application of strategies to improve system performance and reliability by reducing the adverse impacts of congestion on the

Briefing on the Congestion Management Process (CMP)

Melanie Wellman
COG/TPB Staff

Commuter Connections Subcommittee
November 20, 2007

Introduction

- A Congestion Management Process (CMP) is a requirement in metropolitan transportation planning
  - SAFETEA-LU
  - March 2006 Federal certification of the TPB process
- Metropolitan long-range plans developed after July 1, 2007 must have a CMP
  - Need to develop the CMP in concert with the updated CLRP
- New federal regulations for metropolitan planning issued February 14, 2007 address CMP requirements

Federal Regulation Overview

"The transportation planning process shall address congestion management…

…through a process that provides for safe and effective integrated management and operation of the multimodal transportation system…

…based on a cooperatively developed and implemented metropolitan-wide strategy…

…of new and existing transportation facilities…

…through the use of travel demand reduction and operational management strategies."

[§450.320(a), Metropolitan Transportation Planning, Final Rule, Federal Register, February 14, 2007 – emphasis added.]

Federal Regulations, cont.

"In TMAs designated as nonattainment for ozone or carbon monoxide, the CMP…

…shall provide an appropriate analysis of travel demand reduction and operational management strategies…for the corridor in which a project will result in significant capacity increase for SOVs.

…If additional capacity is warranted, the CMP shall identify reasonable strategies to manage SOV capacity safely and effectively…

…Other travel demand reduction and strategies appropriate for the corridor, but not appropriate for the SOV facility itself, shall be identified.

[§450.320(e), Metropolitan Transportation Planning, Final Rule, Federal Register, February 14, 2007 – emphasis added.]

Federal Planning Rule

- Congestion management process requires a systematic approach

- Must be part of the regional transportation plan and include:
  - Methods to monitor and evaluate system performance
  - Objectives and performance measures
  - Data collection
  - Identification and evaluation of the anticipated performance and expected benefits of Congestion Management strategies, including:
    - Demand management
    - Public transportation improvements
    - Traffic operational improvements
    - ITS technologies
    - Where necessary, additional system capacity
  - Assessment of the effectiveness of previously implemented strategies

- SOV-capacity-increasing projects must be in conjunction with a CMP

Development of the CMP

- Two tracks
  - "Initial" CMP components of the updated CLRP
    - Develop and document proposed CM Process
  - "Later" CMP Technical Report
- Travel Management Subcommittee especially interested in process development
- In coordination with other committees and programs

CMP Interactions

Program or Committee	CMP- Related Activities
TPB Technical Committee	Long-range plan; interaction with necessary subcommittees – **CMP lead**
Travel Monitoring Program (in conjunction with the Travel Forecasting Subcommittee)	Travel monitoring and forecasting of future recurring congestion
Travel Management Program	Strategy identification and analysis
Management, Operations, and Intelligent Transportation Systems (MOITS) Program	Non-recurring congestion, traffic management, ITS technologies
Commuter Connections Program	**Implementation and assessment of regional demand management alternatives**
Regional Bus Planning Program	Public transportation issues

Schedule

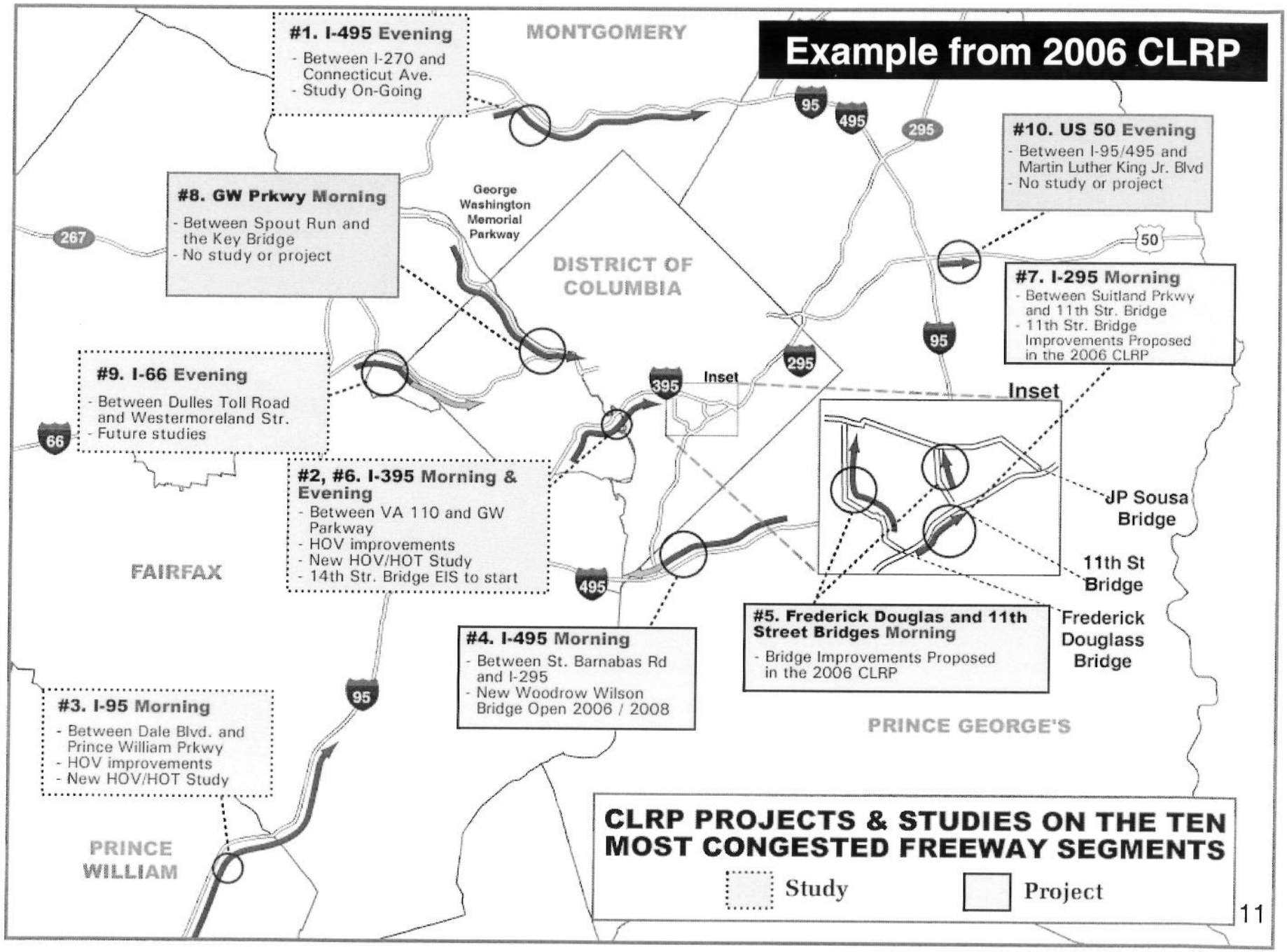
July 1	New FY2008 resources began (separate UPWP CMP task)
Summer/Fall 2007	Staff CMP development & discussions with subcommittees
October - November	First draft of CLRP CMP components available for review
December	Final draft updated CLRP CMP components
January 16, 2008	Approval of updated CLRP including CMP components
Winter/Spring 2008	Completion of CMP Technical Report; follow-up/enhancement activities

Draft CMP Components for the Updated CLRP

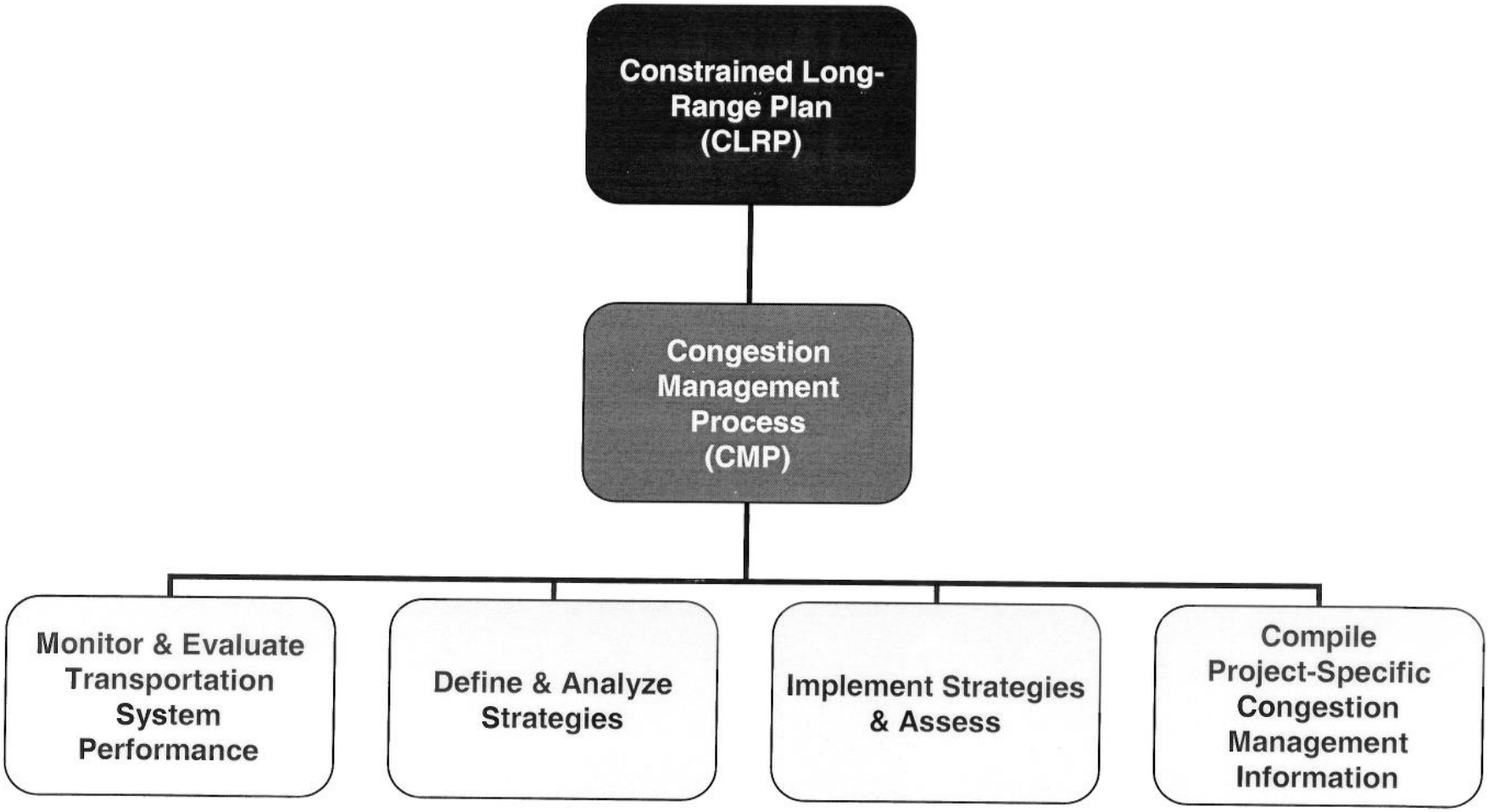
- Structured as interlinked Web site pages
- Defines process, with illustrations of results
- Specifics reflect federal regulations
  - Requirements
  - Naming conventions

Draft CMP Components for the Updated CLRP - Outline

1. Top Web Page / Overview
2. Addressing the CMP in the Regional Planning Process
3. Need for a CMP
4. Major CMP Components
5. Major CMP Strategies
    1. Demand Management
    2. Operational Management
6. Considering the Results of the CMP


Example from 2006 CLRP
#1. I-495 Evening
- Between I-270 and Connecticut Ave.
- Study On-Going
MONTGOMERY
#8. GW Prkwy Morning
- Between Spout Run and the Key Bridge
- No study or project
George Washington Memorial Parkway
DISTRICT OF COLUMBIA
#10. US 50 Evening
- Between I-95/495 and Martin Luther King Jr. Blvd
- No study or project
#7. I-295 Morning
- Between Suitland Prkwy and 11th Str. Bridge
- 11th Str. Bridge Improvements Proposed in the 2006 CLRP
#9. I-66 Evening
- Between Dulles Toll Road and Westermoreland Str.
- Future studies
Inset
Inset
#2, #6. I-395 Morning & Evening
- Between VA 110 and GW Parkway
- HOV improvements
- New HOV/HOT Study
- 14th Str. Bridge EIS to start
JP Sousa Bridge
11th St Bridge
Frederick Douglass Bridge
FAIRFAX
#5. Frederick Douglas and 11th Street Bridges Morning
- Bridge Improvements Proposed in the 2006 CLRP
#4. I-495 Morning
- Between St. Barnabas Rd and I-295
- New Woodrow Wilson Bridge Open 2006 / 2008
PRINCE GEORGE'S
#3. I-95 Morning
- Between Dale Blvd. and Prince William Prkwy
- HOV improvements
- New HOV/HOT Study
PRINCE WILLIAM
CLRP PROJECTS & STUDIES ON THE TEN MOST CONGESTED FREEWAY SEGMENTS
Study
Project

CMP Components

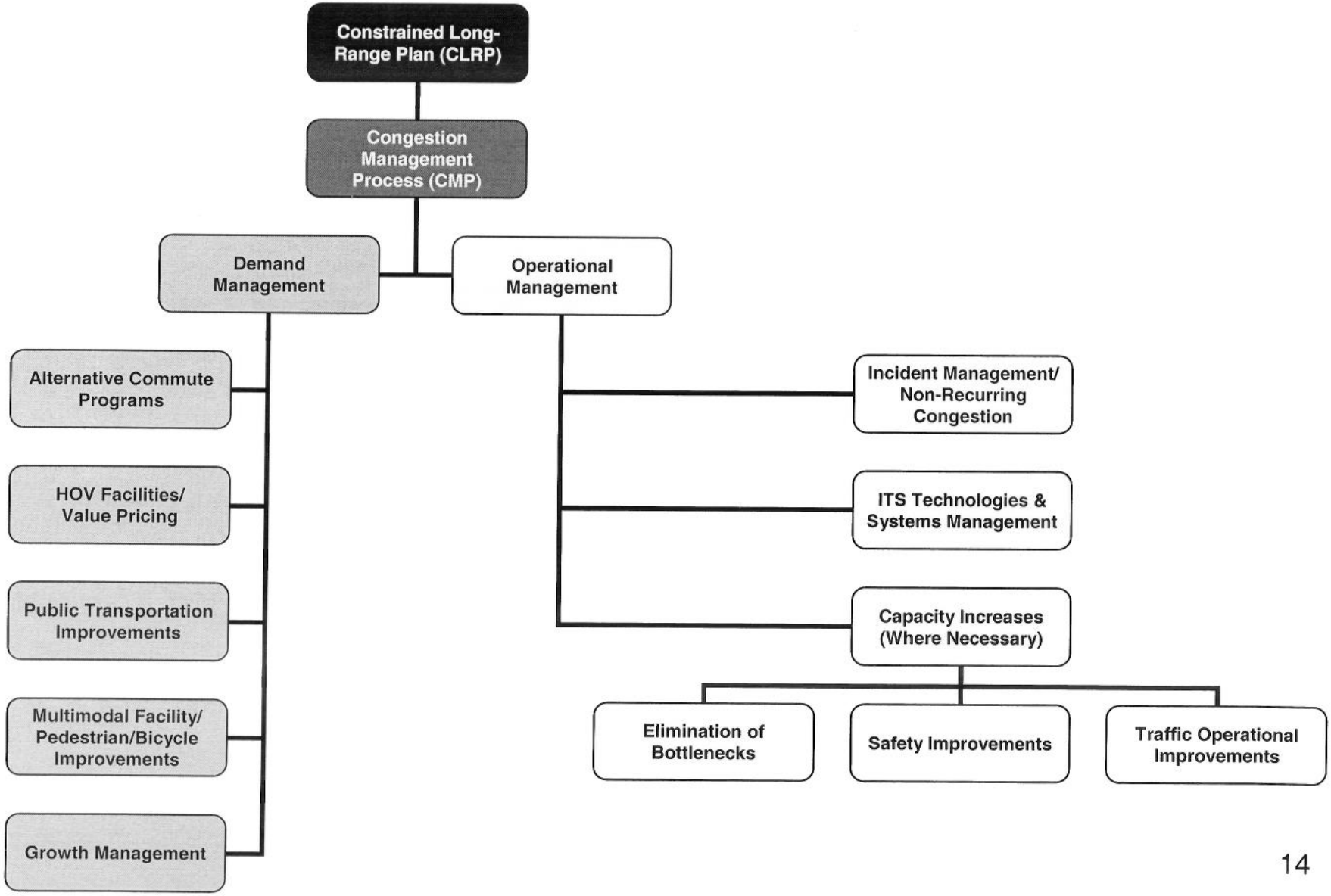


CMP Draft Components of CLRP can be reviewed at:

www.mwcog.org

- Transportation
  - Committees
    - Technical Committee
      - Past Documents
      - November 2, 2007 meeting
      - Item # 8

Major CMP Strategies



CMP in CLRP Project Listings

- Implementing agencies submit congestion management documentation forms associated with major SOV projects
- Forms provide opportunities for agencies to identify demand management strategies benefiting the SOV project
- More such information will be encouraged in the future
- The ability for these projects to refer to Commuter Connections programs helps ensure SAFETEA-LU compliance.

Commuter Connections and the CMP

- Commuter Connections programs are vital as components of the regional CMP strategy
  - Wealth of existing data & strategies
  - Integrated into several areas (HOV/HOT lanes, public transportation)
  - Part of the big, regional picture
  - Efforts are quantifiable
- Commuter Connections Subcommittee briefed regularly as CMP is developed further

CONGESTION MANAGEMENT DOCUMENTATION FORM FOR PROJECTS IN THE 2030 CLRP

DRAFT

BASIC PROJECT INFORMATION

1. Agency: VDOT Secondary Agency:
2. Project Title: Idea66 Spot Improvements Inside the Beltway
4. Facility:

Prefix	Route	Name	Modifier
I	66 WB	Spot 1 Fairfax Dr to Sycamore St	Extend accel/decel la.
I	66 WB	Spot 2 Washington Blvd to Dulles Airport Access Connector (DAAR)	Add accel/decel la.
I	66 WB	Spot 3 Lee Hwy/Spout Run to Glebe Road	Extend accel/decel la.

5. From (_ at): Fairfax Drive, Arlington County
6. To: Dulles Airport Access Road, Fairfax County
7. Jurisdiction(s): Arlington and Fairfax Counties
8. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

Yes Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)
_ A Transportation Management Association is in the vicinity
_ Channelized or grade-separated intersection(s) or roundabouts
_ Reversible, turning, acceleration/deceleration, or bypass lanes
Yes High occupancy vehicle facilities or systems
Yes Transit stop (rail or bus) within a 1/2 mile radius of the project location
_ Park-and-ride lot within a one-mile radius of the project location
Yes Real-time surveillance/traffic device controlled by a traffic operations center
Yes Motorist assistance/hazard clearance patrols
_ Interconnected/coordinated traffic signal system
_ Other in-place congestion management strategy or strategies (briefly describe below:)

9. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

The facility benefits from the regional rideshare program, Commuter Connections that is jointly funded by Virginia, Maryland and the District of Columbia. Commuter Connections and its many program elements are all demand management strategies. Additionally VDOT and VDRPT provide funding and technical expertise to Arlington and Fairfax Counties to implement rideshare assistance programs within their jurisdictions aimed at demand management.

b. Traffic operational improvements

The entry ramps to this stretch of I-66, where the spot improvements are being proposed, are being managed with ramp metering. The freeway also has surveillance and motorist assistance programs aimed at monitoring and managing traffic operations. The purpose of the spot improvements being proposed are in fact to address traffic operational problems caused in part by the short merge, weave and diverge areas on this stretch of I-66.

c. Public transportation improvements

Public transportation service providers in the corridor include WMATA and Arlington County. VDOT understands that these service providers do examine their service routes and make enhancements as needed to address the changing demand. The Spot improvements being proposed are interim in nature and are intended to address traffic operational issues. VDOT plans to address the longer term demand and capacity issues of the corridor in a separate detailed multi-modal environmental study and identify the long term solutions for the congestion along I-66, inside the Beltway. A variety of public transportation strategies will be examined as part of the alternatives improvement scenarios in this multi-modal study. VDOT has currently requested funding for the study.

d. Intelligent Transportation Systems technologies

Ramp metering, variable message signs and freeway surveillance system are part of the ITS components that are currently operational on this stretch of the facility. VDOT's Smart Traffic Center program continues to upgrade the system components as needed and when funding becomes available. The Spot improvements project will evaluate the existing ramp metering and variable/static message signs and upgrade them as needed within the project limits. The long term multi-modal study VDOT intends to undertake for this facility will also look examine for any new / enhancements ITS components as part of the long term solution.

e. Other congestion management strategies

The long term multi-modal study VDOT intends to undertake for the facility will include a comprehensive examination of existing congestion management strategies and evaluate the need for any new/enhanced strategies.

f. Combinations of the above strategies

As above.

10. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

No. As noted earlier the proposed improvements are to address operational problems caused by geometric conditions of the short merge, weave and diverge areas along this heavily used facility. Ramp metering, one of the most effective tools to manage demand on freeways, is currently being used.

11. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

As noted earlier, the facility currently benefits from a comprehensive set of congestion management strategies. No additional congestion management strategies are being proposed as part of this interim operational/safety improvement project.

12. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

As noted above, there are no new congestion management strategies being proposed as part of the spot improvements project, but rather a continuation of the comprehensive set of congestion management strategies. The geometric changes being proposed as part of this project are expected to relieve congestion and improve safety. The TIP form describes the funding for the spot improvements project.

CMS Documentation for Projects in the 2006 CLRP

1. Project ID:

Record No: 538 Agency Project ID:

2. Project Location

Project Name: National Harbor Main Circulation

Facility:

From/At: I 95/295 I-95/I-295 Interchange

To: Waterfront Parcel, National Harbor

Jurisdiction: Prince George's County

3. Description of the traffic congestion conditions that necessitate the proposed project

This purpose of this project is to provide access to the proposed National Harbor development from the Capital Beltway, I-295, MD 210, and MD 414. This project will also accommodate traffic circulation between the two major parcels known as the Capital Beltway Parcel and the Waterfront Parcel and will connect to the Prince George's County's proposed Waterfront Main Road. The proposed development is expected to generate significant traffic volumes in this area. It is anticipated that the majority of patrons remain on this site during their visit, however, assumptions were made for patrons who would travel to the other tourist destinations in the area.

☐ CMS Documentation is not available, form will be completed at a later date.

Anticipated date of completion:

Reason for unavailability:

4. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

- ☑ Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)
- ☐ A Transportation Management Association is in the vicinity
- ☑ Channelized or grade-separated intersection(s) or roundabouts
- ☑ Reversible, turning, acceleration/deceleration, or bypass lanes
- ☐ High occupancy vehicle facilities or systems
- ☑ Transit stop (rail or bus) within a 1/2 mile radius of the project location
- ☑ Park-and-ride lot within a one-mile radius of the project location
- ☑ Real-time surveillance/traffic device controlled by a traffic operations center
- ☑ Motorist assistance/hazard clearance patrols
- ☑ Interconnected/coordinated traffic signal system
- ☑ Other in-place congestion management strategy or strategies (briefly describe below)

5. List and briefly describe how the following categories of (additional) strategies were considered as full or

a. Transportation demand management measures, including growth management and congestion pricing

Transportation Demand Management plan should include telecommuting, alternative work hours preferential parking and use of transit, carpooling and ridesharing options. Transit options will be discussed as part of public transportation improvements. Considering the number of the future employees (Approximately 10700 persons) hired by the proposed development in the vicinity of the project, carpooling is a viable strategy. Seven percent of the employees are expected to arrive at the job site by public transportation. The remaining employees are expected to arrive by automobiles at an average rate of 1.2 employees per vehicle.

Due to type of proposed development, retail, office, entertainment venues, it is anticipated that the visitors will arrive at the by automobiles, each vehicle will have 3 occupants.

b. Traffic operational improvements

In addition to the roadway improvements proposed by this project, other improvements will be implemented along the roadway network in the vicinity of the project.

c. Public transportation improvements

The public transportation facilities in this area include bus, shuttle bus, tour bus and water taxi. Approximately 10700 persons are expected to be employed by the National Harbor development. It is anticipated that 7 percent of employees would use the shuttle or metros service to the site. It is also predicted that 10 percent of the site visitors would arrive via public transportation. Shuttle bus service to major transportation facilities such as the King Street or Eisenhower Avenue Metro Stations is planned.

The National Harbor development would include three waterfront boating facilities, including two water-taxi/tour boat terminals with one open terminals pier. A total 80 boat slips at the two marinas. It is expected that the marina and dock facilities planned for this development would attract visitors in a similar manner to the boating in other part of Maryland and Virginia.

d. Intelligent Transportation Systems technologies

The following strategies are recommended as general mitigation measures for roadway network in the vicinity of the project:

Establishing ITS technologies on the roadway network in the vicinity of the project. These technologies include VMS signage, cameras, signal timing, electronic detection systems, and highway advisory radio.

e. Other congestion management strategies

The proposed development includes a trail that would connect the southern terminus of the Federal Trail on Oxon Hill Road to Potomac River waterfront and boardwalk along the Potomac River. The trail is expected to be extended along the waterfront north to Rossalie Island.

Described below is a summary of other mitigating efforts:
Create an internal network of trails that would connect the site to Oxon Hill Road.
Construct a section of the Heritage Trail extending from Oxon Hill Road to Rosalie Island.
Develop a park on Rosalie Island, with walking trails and other recreational opportunities.

f. Combinations of the above strategies

The above strategies need to combined and implemented as part of the proposed development.

6. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

No, the proposed project will provide access to the site. Without the proposed improvement other congestion management strategies can be implemented. Transit, ridesharing and some extent ITS strategies are totally depended upon the proposed roadway improvements.

7a. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

The following strategies will be included in this project:
Shuttle Bus,
Metrobus,
Carpooling,
ITS,
Sidewalks,
Trails,
Boardwalk,
Water Taxi, and
Parking lots

7b. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of

The proposed improvements cost will be provided through public private partnership by the developer, State and Prince George's County.

CONGESTION MANAGEMENT DOCUMENTATION FORM FOR PROJECTS IN THE 2030 CLRP

DRAFT

BASIC PROJECT INFORMATION

1. Agency Project ID: Secondary Agency:
2. Project Type: (check all that apply) ✓ System Expansion; _ System Maintenance; _ Operational Program; _ Study; _ Other
   ✓ Freeway; _ Primary; _ Secondary; ✓ Urban; _ Bridge; _ Bike/Ped; _ Transit; _ CMAQ; _ ITS; _ Enhancement; _ Other
3. Project Title: **I-95 / I-395 HOV / Bus / HOT Lanes Project**
4. Facility: I-95 / 395
5. From (_ at): Eads Street, Arlington County
6. To: Route 610 (Garrisonville Road), Stafford County

No.	Route	Connection Location:	Morning connections:	Evening connections:	Type of Modification:
1	I 395	Eads Street	NB HOT Lanes to Eads Street	Eads Street to SB HOT Lanes	Expanded
2	I 395	Between South Hayes Street and Washington Blvd.	SB Express Lanes to SB general purpose lanes	SB Express Lanes to SB general purpose lanes	Deleted (to accommodate No. 1 above) [1]
3	I 395	VA 402 (Shirlington Circle)	NB HOT Lanes to Shirlington Circle	Shirlington Circle to SB HOT Lanes	New
4	I 395	VA 420 (Seminary Road)	NB HOT Lanes to Seminary Road	Seminary Road to SB HOT Lanes	New [1] (Bus only access)
5	I 95	Between VA 236 (Duke Street) and VA 648 (Edsall Road)	NB HOT Lanes to NB general purpose lanes	N/A	New
6	I 95	VA 7100 (Fairfax County Parkway)	N/A	Fairfax County Parkway to SB HOT Lanes	New
7	I 95	Between VA 7100 (Fairfax County Pkwy) and VA 638 (Pohick Road)	N/A	SB HOV Lanes to SB general purpose lanes	Deleted (to accommodate No. 6 above) [1]
8A	I 95	Between VA 7100 (Fairfax County Pkwy) and VA 642 (Lorton Road)	NB HOT Lanes to NB general purpose lanes	N/A	New
8B	I 95	Between VA 7100 (Fairfax County Pkwy) and VA 642 (Lorton Road)	NB HOT Lanes to new bus station, back to NB HOT lanes (Buses only)	SB HOT lanes to new bus station, back to SB HOT lanes (Buses only)	New, reversible bus-only ramp
9	I 95	Between VA 123 (Gordon Road) and VA 3000 (Prince William County Parkway)	NB HOT Lanes to NB general purpose lanes	SB HOT Lanes to SB general purpose lanes	New
10	I 95	Between VA 610 (Cardinal Drive) and US 234 (Dumfries Road)	NB HOT Lanes to NB general purpose lanes	N/A	New
11	I 95	Between US 234 (Dumfries Road) and VA 610 (Garrisonville Road)	N/A	SB HOT Lanes to SB general purpose lanes	Expanded

[1] Integration of this proposed modification in the project design is currently under evaluation.

CONGESTION MANAGEMENT DOCUMENTATION FORM

7. Jurisdiction(s): Arlington County, City of Alexandria, Fairfax County, Prince William County, Town of Dumfries, Stafford County

8. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

- ✓ Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)
- _ A Transportation Management Association is in the vicinity
- _ Channelized or grade-separated intersection(s) or roundabouts
- ✓ Reversible, turning, acceleration/deceleration, or bypass lanes
- ✓ High occupancy vehicle facilities or systems
- ✓ Transit stop (rail or bus) within a 1/2 mile radius of the project location
- ✓ Park-and-ride lot within a one-mile radius of the project location
- ✓ Real-time surveillance/traffic device controlled by a traffic operations center
- ✓ Motorist assistance/hazard clearance patrols
- ✓ Interconnected/coordinated traffic signal system
- _ Other in-place congestion management strategy or strategies (briefly describe below:)

9. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

- The I-95/395 HOV/Bus/HOT Project will employ dynamic pricing as a transportation demand management program in the corridor. These tolls will target SOV ("single occupancy vehicles") and non-HOV 3+ vehicles, while HOV-3+ vehicles and buses will not be charged a toll.
- The dynamic pricing will vary based on the time of day, the day of the week, and the level of congestion. In essence, as congestion levels increase in the HOV/Bus/HOT lanes, toll levels will be raised to manage SOV demand in the lanes. In addition the variation of tolls by time of day will contribute to the retiming of trips to less congested periods.
- Additional transit services, both routes and frequencies, have been included as part of the proposal for the project. These factors are two of the most significant contributors to transit mode choice and as such the improvements are anticipated to increase demand and usage of transit along the corridor.
- Additional park-and-ride capacity will be provided along the corridor for transit and local informal carpools ("sluggers"). Both of which are designed to facilitate the use of high occupancy vehicles and transit services.

b. Traffic operational improvements

- The Project also proposes to address a traffic operational issue noted with the existing HOV system. During peak PM periods, traffic traveling in a southbound direction in the current HOV system is often congested at the point in which the HOV lanes terminate and merge into the general purpose lanes at Dumfries. This project proposes to relieve this current congestion problem by both expanding this current merge point, and providing for the extension of a single lane for 9 miles, to be used by southbound HOT lanes traffic, from Dumfries to Route 610 (Garrisonville Road) in Stafford County.
- The Project proposes to make improvements at Eads Street, the proposed northern termination point (for tolling purposes) of the HOT lanes. Improvements at Eads would affect both am and pm peak traffic, and provide for additional lanes for HOV/HOT lane traffic exiting at Eads, including a ramp dedicated exclusively for use by buses exiting into/out of the Pentagon reservation.

c. Public transportation improvements

- There are numerous transit elements integrated into this Project, including an increase in bus service along the I-95/395 corridor, expansion of HOV capacity from two lanes to three lanes, an increase or expansion of access points between the HOV/Bus/HOT lanes and the general purpose lanes, and other infrastructure additions and improvements along the corridor.
- The transit plan proposed by the Project provides for additional transit services in the I-95/395 corridor in the form of new and expanded bus services. This is a preliminary transit plan that has been developed for the conformity analysis, and is based on what is reasonably expected to be funded by this Project. The Transit Advisory Committee ("TAC"), a group established by the VA Secretary of Transportation to facilitate coordination between the transit service providers in the corridor and the Project, is developing a detailed Transit/TDM Plan.
- The proposed new and expanded bus service in the I-95/395 corridor will add about 40,000 hours of bus service in 2010, about 80,000 hours of bus service in 2020 and about 88,000 hours of bus service is 2030. Compared to the bus services assumed for the base year (2006) in the CLRP these additional hours of bus service represents an increase of approximately 11% in 2010, 22% in 2020 and 25% in 2030. These increases in bus operating hours in the corridor will be realized via addition of new routes and reducing headways of services currently assumed in the CLRP in the respective years.
- In addition, the seamless, free-flowing network of the HOV/Bus/HOT lanes, park & ride lots and access points along the corridor will create the opportunity for current public, private regional/local service providers to expand their existing services, or provide new services to key activity and employment centers in the I-95/395 and I-495 corridors beyond that which is included in this Project.
- Beyond the addition of the above high quality bus service and the opportunities afforded to existing transit providers through the addition of new/expanded infrastructure, the Project also proposes to provide a bus-only ramp into and out of the Pentagon at Eads Street (part of the northern terminus of the HOT lanes), a transit-only access ramp at Seminary Road in the City of Alexandria, and a reversible bus-only ramp from the HOT lanes into and out of a new bus station located adjacent to the Lorton VRE Station. A pedestrian bridge would provide access between the proposed bus station and the VRE station.
- The Project proposes to add six (6) park & ride facilities, an equivalent of 3,000 additional parking spaces, to the network of park & ride lots along the corridor. The Project has proposed one facility be located in Fairfax County, two in Prince William County, two in Stafford County and one in Spotsylvania County. The location plans for these lots are being developed in consultation with the local jurisdictions and the TAC. The Project also proposes to provide enhancements to several existing bus stations/stops along the corridor.
- Once the I-95/395 HOV lanes have been converted into HOV/Bus/HOT lanes, they will still be classified as "fixed guideway miles" for purposes of the transit funding formulas administered by the Federal Transit Administration.

d. Intelligent Transportation Systems technologies

This Project employs numerous "ITS" technologies. For instance:

- Dynamic pricing;
- Fully electronic (free flow) tolling;
- 24-hour monitoring/surveillance of the roadway;
- Lane management signs – where the shoulders are inadequate;
- Continuous data collection;
- Variable message signage along the I-95/395 corridor;
- Signage located on arterial approach roads; communicating information to users in advance of getting on I-95/395
- Website to support Travel Demand Management (linked to VDOT website and 511 service)

e. Other congestion management strategies

f. Combinations of the above strategies

10. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

- The congestion management alternatives, such as those listed above, are expected to make a significant contribution to offsetting the growth in single occupant vehicles. However, existing levels of traffic demand and congestion in the corridor, coupled with the expected growth in traffic volumes, indicate that there has been a clear and growing need for additional capacity relief.
- The congestion management strategies outlined in this document have been collectively designed to make best use of the available resources by provide the additional capacity for all vehicles while maintaining and/or improving the services and benefits specifically available to non-SOV's.

11. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

Please see Question 9 above.

12. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

Schedule

- Construction for the Project is projected to begin in early 2008, with an estimated construction completion time of two and a half years. The facility is expected to enter operations in mid to late 2010. The current schedule calls for environmental review in compliance with Federal (NEPA) and state regulations.

Financial Plan

- The Project will be constructed using a combination of private equity and third party debt, including private bank loans and/or Private Activity Bonds, with the potential for TIFIA funding as a form of subordinated debt. As the Project progresses, the project's private consortium partners will explore all avenues of funding to ensure the lowest cost of capital for the Project. The Project will not require Commonwealth or Federal funding support.
- The Consortium partners operating the facility will be fully authorized to collect tolls on the facility, which will serve to pay debt service, operating/maintenance costs (including enforcement and transit operations) and return on equity. Toll revenue will be the main source of revenue. The Commonwealth will enter into a Comprehensive Agreement with FTU, which will authorize them to raise the necessary funds to construct the Project.

ITEM #10

Metropolitan Washington Air Quality Committee

Suite 300, 777 North Capitol Street, N.E. Washington , D.C. 20002-4239 202-962-3358 Fax: 202-962-3203

October 11, 2006

Honorable Michael Knapp, Chair
National Capital Region Transportation Planning Board
777 North Capitol Street, NE
Washington, D.C. 20002

Dear Chair Knapp:

The Metropolitan Washington Air Quality Committee (MWAQC) has reviewed the September 20, 2006 draft *Air Quality Conformity Determination Of The 2006 Constrained Long Range Plan And The FY2007-2012 Transportation Improvement Program For The Washington Metropolitan Region.* We are pleased the proposed transportation plan meets the interim emissions tests for both the 8-hour ozone and $PM_{2.5}$ standards.

As allowed by EPA in the interim before 8-hour ozone and $PM_{2.5}$ mobile budgets are developed and approved, conformity for the 8-hour ozone standard is being tested against the 1-hour ozone mobile budgets in the region's approved SIP. For $PM_{2.5}$, the region selected the build no greater than 2002 interim emissions test in this year's conformity analysis. We note that this analysis uses the same approach as the conformity determination for the 2005 CLRP and FY 2006-2011 TIP.

The conformity analysis indicates that substantial reductions in transportation emissions will occur by 2010 and in succeeding years, resulting in transportation emissions well below the maximum allowable emission levels. While this is a positive development, it is anticipated to be a temporary circumstance as the existing emission budgets (based on the old one-hour ozone SIP) are expected to be replaced by more stringent requirements using the new eight-hour ozone and small particle standards ($PM_{2.5}$). These new emission budgets will be established in the new SIPs expected to be in place in 2007 and 2008.

We continue to urge States and local governments to maintain their commitments to TERMs and other emission reduction measures, regardless of whether implementation of these measures is currently necessary for conformity. Meeting the 8-hour ozone and $PM_{2.5}$ standards is expected to be a much more difficult effort, requiring continuation of all mobile and non-mobile emission reduction commitments, and possibly new ones in the near future.

Thank you for the opportunity to comment on the draft conformity analysis. We look forward to working closely with you on making further improvements to the region's air quality for attaining the new 8-hour ozone and $PM_{2.5}$ air quality standards.

Sincerely,

Hon. Phil Mendelson, Chair
Metropolitan Washington Air Quality Committee

ITEM #11

COMMUTER CONNECTIONS QUARTERLY BUDGET
COMMITMENTS AND EXPENDITURES
FOR COG FY08 (July 1, 2007 - September 30, 2007)

	BUDGET TOTAL	FUNDS COMMITTED*	FUNDS EXPENDED**	%FUNDS EXPENDED***
COMMUTER OPERATIONS CENTER	**$644,461**	**$644,461**	**$84,612**	**13%**
Data & PC	$49,500		$3,066	6%
Contract Services/Consultants	$249,999		$0	0%
COG/TPB staff, indirect & direct costs	$344,962		$81,546	24%
GUARANTEED RIDE HOME	**$545,584**	**$545,584**	**$92,540**	**17%**
Data & PC	$3,500		$0	0%
Contract Services/Consultants	$121,487		$10,123	8%
User Subsidies	$170,500		$17,176	10%
COG/TPB staff, indirect & direct costs	$253,597		$65,241	26%
MARKETING	**$2,174,084**	**$2,174,084**	**$81,850**	**4%**
Data & PC	$3,000		$1,276	0%
Contract Services/Consultants	$560,000		$0	0%
COG/TPB staff, indirect & direct costs	$1,611,084		$80,574	5%
MONITORING AND EVALUATION	**$421,730**	**$421,730**	**$36,312**	**9%**
Data & PC	$0		$0	0%
Contract Services/Consultants	$216,500		$0	0%
COG/TPB staff, indirect & direct costs	$205,230		$36,312	18%
EMPLOYER OUTREACH	**$1,019,721**	**$1,019,721**	**$26,746**	**3%**
Data & PC	$3,000		$0	0%
Contract Services/Consultants	$15,000		$0	0%
Pass-thru to local governments	$752,664		$0	0%
COG/TPB staff, indirect & direct costs	$249,057		$26,746	11%
MD & VA TELEWORK	**$162,126**	**$162,126**	**$5,020**	**3%**
Data & PC	$0		$0	0%
Contract Services/Consultants	$120,000		$0	0%
COG/TPB staff, indirect & direct costs	$42,126		$5,019	12%
DC KIOSKS	**$31,031**	**$31,031**	**$1,355**	**4%**
Data & PC			$0	0%
Contract Services/Consultants	$25,000		$0	0%
COG/TPB staff, indirect & direct costs	$6,031		$1,355	22%
TOTAL	**$4,998,737**	**$4,998,737**	**$328,435**	**7%**

* **Committed funds are based on funding commitment letters received.**
** **Preliminary funds expended are through September 30, 2007.**
*** **Percentage is based on Budget Total Column**

16 Nov 2007