ITEM #5

COMMUTER CONNECTIONS
STATE OF THE COMMUTE SURVEY
2007

Technical Survey Report

Final Draft

Prepared for:

Metropolitan Washington Council of Governments

Prepared by:

LDA Consulting
Washington, DC 20015
(202) 548-0205

In conjunction with:

CIC Research, Inc.
San Diego, CA

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SECTION 1 – INTRODUCTION

This report presents the results of the State-of-the-Commute (SOC) Survey conducted for the Commuter Connections program of the Metropolitan Washington Council of Governments (COG).[1] Commuter Connections provides a wide range of transportation information and assistance services in the Washington metropolitan area designed to inform commuters of the availability and benefits of alternatives to driving alone and to assist them to find alternatives that fit their commute needs. COG administers these services, called Transportation Emission Reduction Measures (TERMs), in a regional effort to reduce vehicle trips, vehicle miles of travel, and emissions resulting from commute travel.

COG has a strong interest in evaluating the effectiveness of its commuter services programs. In 1997 Commuter Connections established an evaluation framework that outlined a methodology and data collection activities to evaluate several of its commuter programs. This framework was updated and revised three times, in 2001, 2004, and 2007, to include several enhancements.[2] A major addition to the 2001 framework was the State of the Commute (SOC) survey, a random sample survey of employed persons in the Washington metropolitan region.

The SOC survey serves several purposes. First, it documents trends in commuting behavior, such as commute mode shares and distance traveled, and prevalent attitudes about specific transportation services, such as public transportation, that are available to commuters in the region.

Second, the SOC survey is used to help estimate the impacts of some TERMs, such as Commuter Connections' Telework Assistance, InfoExpress Kiosk, and Mass Marketing, three TERMs that might influence the population-at-large as well as commuters who directly participate in Commuter Connections' programs. Finally, by querying commuters about sources of information on alternative modes and their reasons for choosing alternative modes for commuting, the survey examines how other commute alternative programs and marketing efforts might influence commuting behavior in the region.

This report summarizes the survey methodology, presents key results of the survey, and offers conclusions about regional commute travel based on the results. The report is divided into three sections following this introduction:

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

Following these four main sections are six appendices dealing with survey procedures. They include: Appendix A – Survey data expansion, Appendix B – Final dialing disposition, Appendix C – SOC Survey instruments, Appendix D – Interviewer Instructions and Terms, and Appendix E – Comparison of Key SOC Results – 2007, 2004, and 2001.

[1] Commuter Connections is administered through the National Capital Region Transportation Planning Board at COG and funded through the District Department of Transportation, the Maryland Department of Transportation, and the Virginia Department of Transportation, with state and federal funds.

[2] For more information on the evaluation framework in effect at the time of this survey, readers may refer to *Transportation Emissions Reduction Measures (TERMs) Revised Evaluation Framework – 2005 – June 2008*, available from COG.

SECTION 2 – SURVEY AND SAMPLING METHODOLOGY

Overview

The geographic scope of COG's responsibility encompasses the 11 counties that make up the Washington metropolitan federally-designated non-attainment region. All households within this geographic area that had at least one employed person residing in the household were eligible for selection in the 2007 study. A minimum of 600 random telephone surveys were conducted in each of the 11 jurisdictions of the study area, resulting in 6,610 completed surveys.

Note that the 11-jurisdiction survey area is different from that used in the 2001 and 2004 SOC surveys; these earlier surveys surveyed residents of 12 jurisdictions, including Stafford County, VA. Stafford County was removed from the survey area in 2007 because Stafford County was no longer in the COG federally-designated non-attainment area.

Using GENESYS, CIC's random digit dialing sampling system, household records were randomly drawn by county and where prefixes overlapped counties, by ZIP code, from all working prefixes. In past State of the Commute studies, there tended to be a very high number of records with numbers that were not in service. As a result, CIC moved from the GENESYS ID+ screening process, a process that dials only numbers which are not in the software suppliers' database of listed households and known businesses, to the GENESYS CSS process, which dials all numbers sent to the software supplier. This resulted in an increase in the cost per record, but allowed for a more efficient sample. A detailed list of dialing results can be found in Appendix B.

Questionnaire Design

The 2007 SOC questionnaire was based on the questionnaire used in 2004, with modifications and additions as needed. LDA Consulting, CIC Research, and COG modified the survey questionnaire, with input from a TDM Evaluation Group comprised of representatives from the District of Columbia, Maryland, and Virginia. The survey was intended to meet multiple objectives, including trend analysis and evaluation of three TERMs: Telework, Integrated Rideshare (Kiosk component), and the Mass Marketing TERM.

New questions also were added to test various new programs Commuter Connections is considering implementing. Wherever possible, an attempt was made to replicate questions used in the 2004 SOC Survey to allow trend analysis, but changes were made when the revisions were expected to add substantially to the accuracy of the data. As a result, the overall length of conducting this survey increased significantly.

Before the full survey was conducted, CIC completed a pretest of the questionnaire. Using the responses to these surveys, the questionnaire was finalized with COG Project staff and translated into Spanish. The survey instrument was designed for telephone administration using Computer Assisted Telephone Interviewing (CATI). A copy of the English questionnaire is included in Appendix C. The Spanish questionnaire is available upon request.

Survey Administration

The telephone survey was conducted in CIC's telephone survey facilities. Surveys were conducted using the CATI system and Quantime software. Before beginning the full survey effort, CIC conducted interviewer-training sessions. Issues discussed in the session included:

- Explanation of the purpose of the study
- Identification of 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
- Paper/computer review of skip-patterns to familiarize interviewers with questionnaire flow
- Practice session on CATI systems in full operational mode

Interviews were conducted between January 31 and April 28, 2007. Calls were made to the respondent's home number. All weekday calls were made from 5:30 pm to 8:30 pm local time and all weekend calls from 10:00 am to 6:30 pm local time. CIC interviewers conducted a minimum of five callback attempts over different days throughout the data collection period. CIC adopted measures to assure confidentiality of responses. Bilingual interviewers surveyed all Spanish-speaking respondents using the Spanish questionnaire. A total of 221 surveys (3.5%) were completed in Spanish.

All interviewing was conducted 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, and reviewing completed surveys. To insure quality control, the survey supervisor conducted periodic random monitoring. Other quality assurance logical checks were done once survey data was collected.

A minimum of 600 interviews were completed in each of the 11 counties, resulting in a total sample size of 6,610 completed surveys. The refusal rate for the survey was 14.8%[3]. An average of 62.2 call attempts was made for each completed interview.

Survey Data Expansion

Survey responses were expanded numerically to align the sampled survey results with published, employment information for the study area. The process developed for the 11-area, Washington, DC metropolitan region is detailed in Appendix A. Data from the Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS) were utilized to provide an expansion of survey interviews to estimate the number of workers by jurisdiction. The 2000 U.S. Census statistics were used to proportionally adjust survey bias for the distribution of race/ethnicity in Alexandria City, VA, Arlington County, VA, Frederick County, MD, and the District of Columbia.

[3] Refusal rates are calculated as the number of initial refusals plus the number terminated during the interview, divided by the total sample. See Appendix B.

SECTION 3 – SURVEY RESULTS

This section of the report presents the key findings of the survey. To align the sampled survey results with published numbers for the study area, the data were weighted to represent the number of employed people in the metropolitan region. The expansion methodology, described in Appendix A, allows the proper representation of employees in each of the 11 jurisdictions included in the survey area. Percentages presented in the results tables and figures show percentages weighted to the total working population, but also show the raw number of respondents (e.g., n=__) who answered the question.

The results in this section generally follow the order of sections in the survey questionnaire.

- 3-A Characteristics of the sample
- 3-B Commute patterns
- 3-C Teleworking
- 3-D Availability of and attitudes toward transportation options
- 3-E Awareness of commute advertising and services
- 3-F Awareness of use of commuter assistance resources
- 3-G Employer-provided commuter assistance services
- 3-H Guaranteed Ride Home
- 3-I New regional commute program concepts
- 3-J Commute information kiosks

Comparisons to Past SOC Surveys

Where relevant, survey results are compared for sub-groups of respondents. Survey results also are compared with corresponding data from the 2004 and 2001 SOC Surveys, where the comparison is notable. A comparison of key results from the three SOC surveys also is presented in Appendix E.

As mentioned in the Introduction, the 2007 survey surveyed residents of 11 jurisdictions, while the 2001 and 2004 surveys surveyed residents of 12 jurisdictions. Stafford County, VA, which was included in the 2004 survey sample, was removed in 2007 because it was no longer part of the federally-designated COG non-attainment area. Thus, the sampled area in 2007 was not identical to the areas covered in the 2004 and 2001 surveys.

COG examined the possible implications of the change in the survey area and concluded that eliminating Stafford County from the survey area did not represent a significant issue for comparison of 2007 results to results of the earlier surveys. This was primarily because the Stafford accounted for a very small proportion of the overall weighted sample. In 2004, Stafford, when weighted to account for its share in the regional worker population, accounted for only 2.0% of the resident workers. And because many Stafford residents travel to work locations outside the 12-jurisdiction region, Stafford respondents accounted for an even smaller share, just 0.8%, of all workers destined for the 12-jurisdiction area. Thus, removing Stafford respondents would not affect a change in any regional result unless the results for Stafford County were dramatically different from those of other counties.

To test this possibility, COG compared key variables (e.g., travel mode, commute distance, telework percentage, etc.) for Stafford with values for the 12-jurisdiction region. In most cases, Stafford results were not statistically different from the regional averages. Thus, removing Stafford would not have changed the overall regional results in 2004, even if Stafford had constituted a larger share of the total worker population of the region.

In a few cases (e.g., travel distance, travel time), the results for Stafford were statistically different from the regional averages, but removing Stafford from the sample did not change the overall regional average significantly, due to the small contribution of Stafford's results to the regional average. For example, Stafford residents traveled an average of 45 minutes to work, compared to a regional average of 34 minutes, but the average remained 34 minutes when Stafford was removed. Similarly, Stafford residents traveled much farther (30.2 miles) than the 16.5 mile region average, but when Stafford was removed from the sample, the regional average dropped only to 16.2 miles. Throughout the report, in any case in which the removal of Stafford would have changed the comparison between 2007 and 2004 or 2001, the text notes what the regional average would have been in that earlier survey year had Stafford not been included in the earlier survey.

3-A CHARACTERISTICS OF THE SAMPLE

At the end of the survey interview, respondents were asked a series of questions about themselves, including: sex, ethnic background, age, income, home and work locations, type of employer, size of employer, and occupation. These results are presented first, to define characteristics of the sample.

Demographic Characteristics

Sex – Most respondents were female (54%). This was essentially the same percentage as in the 2004 and 2001 SOC surveys.

Age – As shown in Table 1, about three-quarters of respondents (74%) were between the ages of 25 and 54. About four percent were under 25 and about 22% were 55 years or older.

Table 1
Respondent Age
(n=6,359)

Age Group	Percentage	Age Group	Percentage
Under 24	4%	45 – 54	30%
25 – 34	16%	55 – 64	18%
35 – 44	28%	Over 64	4%

Ethnic Background – As illustrated in Table 2, Caucasians and African-Americans represented the two largest ethnic groups of survey respondents, 62% and 22% respectively. Hispanic and Latino respondents accounted for about nine percent and Asians/Pacific Islanders represented four percent.

Table 2
Ethnic Background
(n=6,183)

Ethnic Group	Percentage	Ethnic Group	Percentage
White/Caucasian	62%	Asian	4%
African-American	22%	Other/Mixed	3%
Hispanic/Latino	9%		

Income – Table 3 shows that more than three-quarters (77%) of respondents had household incomes of $60,000 or more. Almost half (48%) had incomes of $100,000 or more.

Table 3
Annual Household Income
(n=5,258)

Income	Percentage	Income	Percentage
Less than $20,000	2%	$80,000 – 99,999	15%
$20,000 – 29,999	4%	$100,000 – 119,999	14%
$30,000 – 39,999	5%	$120,000 – 139,000	9%
$40,000 – 59,999	12%	$140,000 – 159,000	7%
$60,000 – 79,999	14%	$160,000 or more	18%

Home and Work Locations – Table 4 presents the distribution of respondents by their home and work states and counties. About equal shares of respondents lived in Maryland (46%) and Virginia (43%). The remaining 12% of respondents lived in the District of Columbia. Because the survey only interviewed residents of the 11-jurisdiction, federally-designated non-attainment area, no respondents lived outside these areas.

Work locations were more evenly divided. The largest number of respondents worked in Virginia (36%), but the District of Columbia and Maryland, with 31% and 30% of respondents respectively, were close behind in employment numbers.

Four jurisdictions accounted for residences of seven in ten respondents: Fairfax County (including Fairfax City and Falls Church) (22%), Montgomery County, MD (19%), Prince George's County, MD (17%), and the District of Columbia (12%). The same four jurisdictions also represented about three-quarters of the work locations, but in different proportions: District of Columbia (31%), Fairfax County (19%), Montgomery County (16%), and Prince George's County (9%).

Table 4
Home and Work Locations

State/County	Home Location* (n=6,610)	Work Location** (n=6,610)
District of Columbia	**12%**	**31%**
Maryland Counties	**46%**	**30%**
Montgomery Co.	19%	16%
Prince Georges Co.	17%	9%
Frederick Co.	5%	3%
Charles Co.	3%	1%
Calvert Co.	2%	1%
Virginia Counties	**43%**	**36%**
Fairfax Co.	22%	19%
Prince William Co.	7%	3%
Arlington Co.	5%	6%
Loudoun Co.	6%	4%
Alexandria City	3%	4%
Other***	**N/A**	**3%**

* Adjusted distribution allows for the proper representation of working households in each geographical area.

** Work location percentages for Maryland and Virginia include only counties located in the COG 11-jurisdiction non-attainment region. Maryland and Virginia locations outside this area are counted in the "other" category.

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

Employment Characteristics

Type and Size of Employer – Respondents were asked for what type of employer they worked and the number of employees at their worksites. These results are shown in Tables 5 and 6, respectively. Nearly half (47%) of the respondents worked for a private sector employer. Government agencies employed about one-third: federal agencies, 20%, and state and local agencies, 12%. About one in ten (11%) worked for a non-profit organization and the remaining 10% were self-employed.

Table 5
Employer Type
(n=6,436)

Employer Type	Percentage
Private sector	47%
Federal agency	20%
State/local agency	12%
Non-profit	11%
Self-employed	10%

The majority of respondents worked for employers that are either very small or very large. About half (48%) worked for firms with 100 or fewer employees. About a quarter (24%) worked for employers that employ 1,000 or more employees. This was the same distribution as was observed in the 2004 SOC.

Table 6
Employer Size
(n=5,766)

Number of Employees	Percentage
1-25	26%
26-50	10%
51-100	12%
101-250	13%
251-999	15%
1,000+	24%

Occupations – Respondents represented many occupations, as shown in Table 7. About six in ten respondents worked in professional (41%) or executive/managerial occupations (18%). Other common occupations included administrative support (9%), service (7%), sales (6%), and technicians/technical support (5%).

Table 7
Occupation
(n=6,266)

Occupation	Percentage
Professional	41%
Executive/managerial	18%
Administrative support	9%
Service	7%
Sales	6%
Technicians/support	5%
Precision craft, production	4%
Transportation	2%
Protective services	2%
Equipment handlers/cleaners	2%
Military	1%
Other*	3%

* Each response in Other category was mentioned by fewer than one percent of respondents.

3-B COMMUTE PATTERNS

An important section of the survey questioned respondents on their weekly commute patterns. Commute questions in the survey included:

- Number of days worked per week and work hours
- Commute mode(s) used and the frequency of use
- Use of alternative work schedules
- Alternative mode characteristics
- Length of time using current alternative modes
- Use of other alternative modes in the past
- Reasons for using current commute modes
- Commute distance

Number of Days Worked Per Week and Work Hours

Full-Time vs Part-Time – Nearly nine in ten (89%) respondents worked full-time, defined as 35 or more hours per week. The remaining 11% were employed part-time.

Commute Times – As shown in Table 8, two-thirds (66%) of respondents worked at times that required them to commute in the morning between 6 am and 9 am, at least one day per week. And 91% said they commute between 5 am and 10 am.

Table 8
Arrival Time at Work
Respondents Who Commuted to Employment Sites Outside the Home
(n=5,908)

Arrival Time	Percentage
5 am to 5:59 am	4%
6 am to 6:59 am	11%
7 am – 7:59 am	24%
8 am – 8:59 am	31%
9 am – 9:59 am	21%
10 am to 5:59 pm	8%
6 pm to midnight	1%
12:01 am – 4:59 am	1%

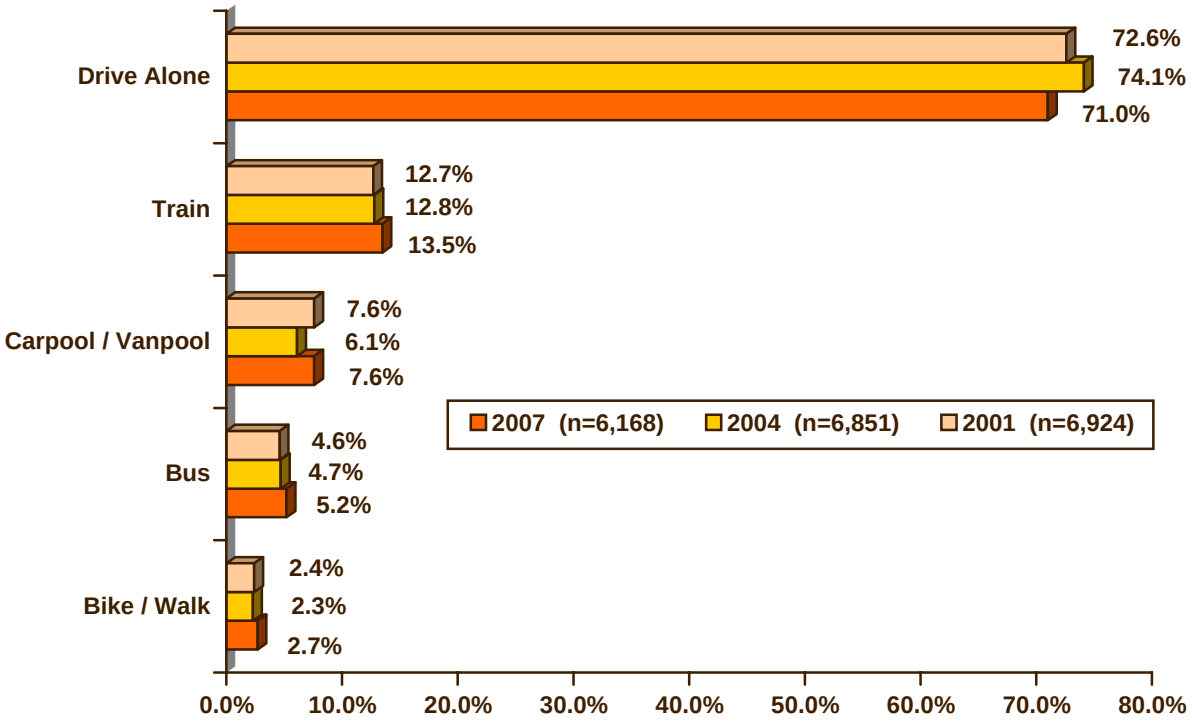
Work at Home – About eight percent of the total survey respondents said they never commuted to a work location outside their homes. The majority of these respondents (6% of total respondents) said they were self-employed and had no other work location. The remaining two percent of respondents said they teleworked from home every day they worked. These two groups of respondents were not asked further questions about commute patterns, but were included in questions about awareness of commute advertising and demographics. Additionally, respondents who teleworked five days per week were asked questions about their telework experience.

Current Commute Mode

Respondents were asked what modes they used to travel to work each weekday (Monday-Friday) during the survey week. If they were sick, on holiday or vacation, or otherwise absent from work one or more days during the week, respondents were asked to report how they likely would have traveled to work on those days. Figures 1 through 4 present several different views of modal distribution.

Weekly Trips by Mode 2007, 2004, and 2001 – Figure 1 presents mode shares as a percentage of weekly commute trips made to job locations outside the home in 2007, 2004, and 2001. This represents the mode split of traffic "on the road" on an average day. Five traditional mode groups are shown: drive alone, train (subway/commuter rail), carpool/vanpool, bus, and bike/walk. This figure includes only trips actually made to job locations outside the home.

Figure 1
Weekly Trips by Mode – 2007, 2004, and 2001
(Excluding CWS and Telework)

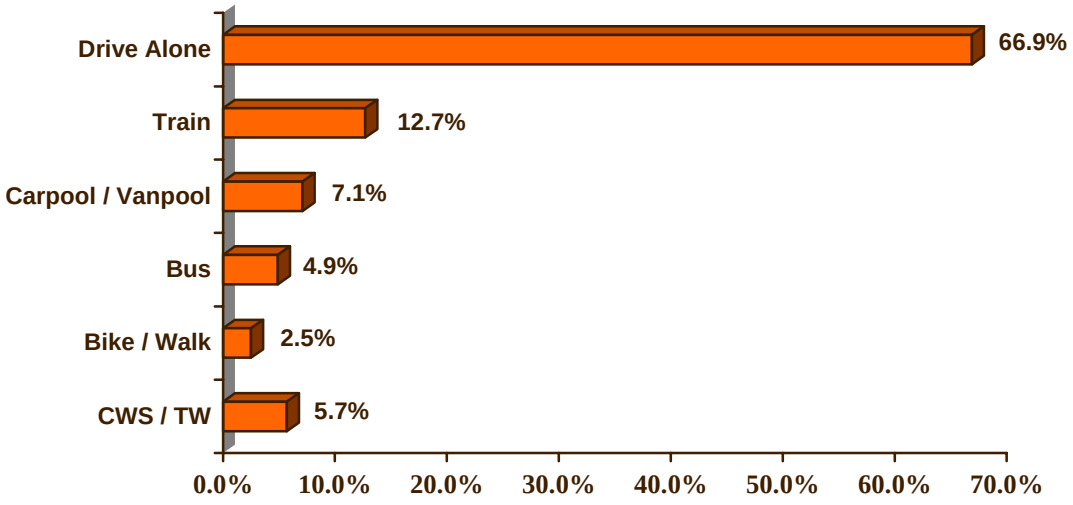


The comparison shows that the percentage of drive alone trips dropped slightly from 2004 to 2007 and the share of alternative modes increased. The percentage of commute trips made by driving alone fell from 74.1% in 2004 to 71.0% in 2007. Without Stafford County, the 2004 drive alone share would have been 74.0%, so the removal of Stafford County from this calculation would not have altered this comparison statistically.

Train use increased slightly from 12.8% of weekly trips in 2004 to 13.5% in 2007 and carpool/vanpool trips showed a small increase from 6.1% in 2004 to 7.6% in 2007. Bus trips also grew, again by a small amount, from 4.7% to 5.2% of weekly trips. Again, the removal of Stafford would not have significantly changed the comparisons between 2004 and 2007. Without Stafford, the train, carpool/vanpool, and bus mode shares in 2004 were 13.0%, 6.0%, and 4.6% respectively.

Weekly Trips by Mode in 2007 – Figure 2 also presents mode shares as a percentage of weekly commute trips, but includes one additional category to the mode groups displayed in Figure 1 – teleworking and compressed work schedule. These are not actually travel modes, but this figure includes them to show the percentage of weekly work trips that were eliminated through use of these work schedule options.

Figure 2
Current Commute Modes - 2007
Percentage of Weekly Trips
(n= 6,168)



As shown, when compressed work schedule days off and telework days are included in the mode distribution, the share of drive alone trips drops to 66.9% of weekly "trips." Trip percentages for other modes also drop, because CWS and teleworking draw trips away from all modes, not just drive alone. But the second most popular mode continues to be train, used for 12.7% of weekly trips. Respondents

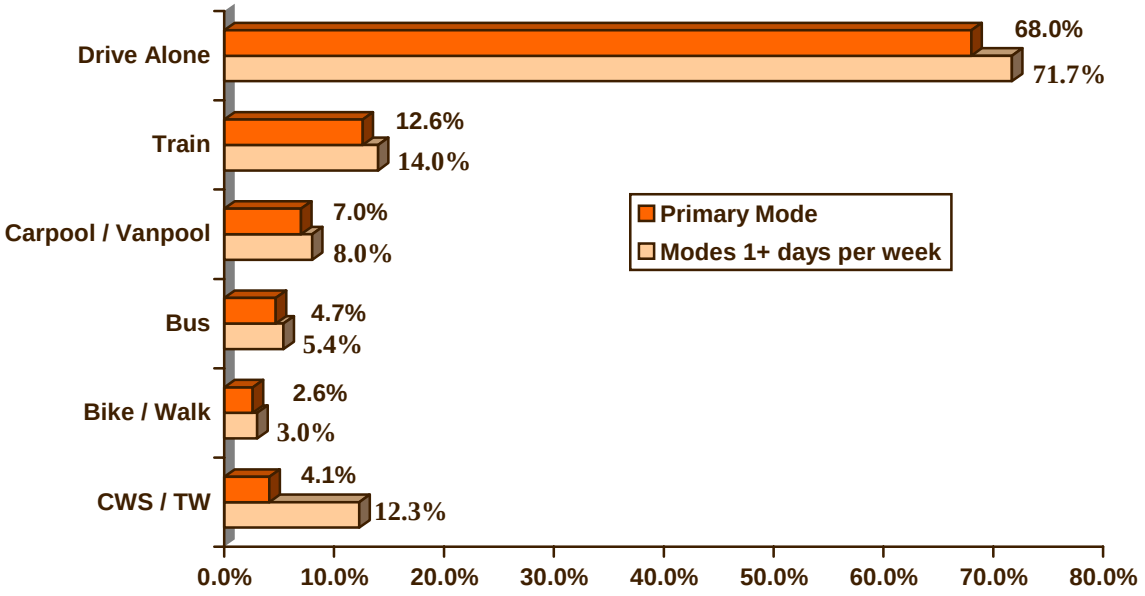
used carpool/vanpool for 7.1% of weekly commute trips and bus for about five percent (4.9%). A small percentage (2.5%) of weekly trips were made by bike or walking.

Compressed work schedule days off and teleworking accounted for nearly six percent (5.7%) of weekly work "trips." As noted earlier, these "trips" actually were not made, but they were officially assigned as part of the work week, so were included in this distribution.

Frequency of Current Mode Use – Figure 3 shows mode split for 2007 as the percentage of respondents who used these modes. First the figure presents the percentages of respondents who used each mode as their "primary" mode, defined as the mode used most days per week. The figure also shows the percentages of respondents who used each mode one or more days per week, that is, at least occasionally.

Primary Mode – Nearly all (99%) respondents said they used a single mode most days per week. Since most respondents worked five or more days, primary mode generally equated to use three or more days per week. But for a small percentage of respondents who worked fewer than five days or who used more than two modes, the primary mode could be used just two days per week.

Figure 3
Current Primary Commute Modes and Modes Used 1+ Days per Week
(n= 6,168)



* Percentages for Modes used 1+ add to more than 100% because some respondents used more than one mode in a week

As with mode split by weekly trips, the most common primary mode was drive alone, used by 68.0% of respondents. The second most common mode, used by 12.6% of respondents, was train. Seven percent (7.0%) said they carpooled, "casual" carpooled (slug), or vanpooled. Bus was the primary mode of about five percent of respondents (4.7%). Just under three percent (2.6%) of respondents said they pri-

marily biked or walked and four percent (4.1%) said they primarily teleworked. Note that no respondents used compressed work schedule as a primary mode so all the respondents in the CWS/TW primary mode group were teleworkers.

Primary or Occasional Use of Modes – Figure 3 also shows the percentage of respondents who used the modes at least one day during the survey week. This category also includes respondents who said they used these modes two, three, four, or five times during the week, in other words, used the modes either occasionally or regularly.

The relative use of modes did not change from the primary mode order. But the percentage using each mode increased, because some respondents counted in the primary mode category occasionally also used a "secondary mode." Drive alone was still the most popular mode; 71.7% of respondents used this mode either regularly or occasionally. When compared to the 68.0% of respondents who said they primarily drove alone, this shows that about four percent of respondents were occasional users of this mode.

Train was the second most popular mode, used by 14.0% of respondents. Carpooling/vanpooling was the third most popular mode, used by about eight percent (8.0%) of respondents one or more days per week. About one in twenty (5.4%) respondents rode a bus and 3.0% biked or walked. The major difference between the primary mode and 1+ mode distribution is in the percentage of respondents who teleworked one or more days or had one or more compressed work schedule days off during the survey week. As shown in the figure, 12.3% of respondents said they used one of these alternative work arrangements at least one day a week. This is compared to only four percent who used these arrangements as their primary mode.

Mode Use within Mode Groups – Table 9 shows use of individual modes within the six mode groups displayed in Figure 3.

Carpool/Vanpool – Among respondents who carpooled or vanpooled, regular carpooling dominated. More than 90% of regional carpool/vanpool use was in regular carpools (7.2% of total 8.0% carpool/vanpool use). Small proportions of regional carpoolers/vanpoolers used either casual carpool or vanpool.

Bus – Among both regular and all bus users, regular bus accounted for the vast majority of bus use. Only about 2% of bus ridership was in buspools (0.1% of total 5.4% bus use).

Train – The train mode group was comprised of Metrorail and three commuter rail companies: MARC (Maryland commuter rail), Virginia Railway Express (VRE), and Amtrak. Metrorail dominated this category, with 94% of train riders using this mode (13.2% of total 14.0% train ridership). The balance of train ridership was in commuter rail, with commuter rail divided approximately evenly among the MARC and VRE.

Bike/Walk – Walking accounted for the majority of the bike/walk mode group. Among all users, walking attracted three-quarters of the respondents (2.3% of 3.0% of bike/walk use).

CWS/TC – Finally, about one in eight respondents (12.3%) said they teleworked one or more days or had one or more compressed work schedule days off during the survey week. Teleworking dominated this category, accounting for three-quarters of this group (9.5% of 12.3% total CWS/TW mode group).

Table 9
Individual Commute Modes Used 1+ Days per Week
(n=6,168)

Mode Group / Modes	Percentage	Mean Days
Drive alone	**71.7%**	4.4
Carpool/Vanpool	**8.0%**	
- Regular carpool	7.2%	4.2
- Casual carpool (slug)	0.6%	4.1
- Vanpool	0.2%	4.4
Bus	**5.4%**	
- Ride a bus/shuttle	5.3%	4.4
- Buspool	0.1%	2.9
Train	**14.0%**	
- Metrorail	13.2%	4.3
- MARC (MD commuter rail)	0.4%	3.7
- VRE	0.4%	4.5
- AMTRAK/other train	<0.1%	4.3
Bike/Walk	**3.0%**	
- Bike	0.7%	3.2
- Walk	2.3%	4.2
CWS/TC	**12.3%**	
- Compressed work schedule	2.8%	1.1
- Telework	9.5%	2.6

* Percentage will add to more than 100%, because some respondents used more than one mode in a week

Mean Days Used – Table 9 also shows the average number of days each mode/mode group was used. All of the traditional commute modes, excluding telework and compressed schedules, were used at least three days per week on average. This is consistent with other results in the survey, which show that most respondents used one mode most of the time for their commute. Two modes, buspool and bike, were used fewer than 4.0 days on average, but these modes had small sample sizes.

Telework and compressed work schedules also showed low average use, compared to other modes. Telework was used an average of 2.6 days during the survey week and respondents who worked compressed schedules had an average of 1.1 days off per week. It should be noted that the average days per week for these two modes include only respondents who actually teleworked or had a CWS day off dur-

ing the survey week. Many more respondents said they telework infrequently, for example "occasionally for special projects." Additionally, some respondents said they worked a 9/80 CWS schedule and about half of these respondents would not have had a 9/80 day off during the survey week. These respondents were not included in the frequency base for this figure.

Primary Commute Mode by Demographic Group – Analysis of survey data showed some differences in choice of primary mode (mode used most days per week) among various demographic groups. Tables 10 through 14 present distributions of primary mode by respondent sex, ethnic group, income, states of residence and employment, and vehicle availability categories, respectively.

Sex – As shown in Table 10, women were slightly less likely to drive alone to work than were men. They were approximately equally likely to use a train and to walk or bicycle but were considerably more likely to ride a bus (5.6% for women vs 3.8% for men).

Table 10
Current Primary Mode by Sex

Sex	(n=__)	Primary Commute Mode				
		DA	CP/VP	Bus	Train	B/W
Female	3,258	67.9%	6.7%	5.6%	12.7%	2.6%
Male	2,856	69.4%	7.6%	3.8%	12.9%	2.6%

Ethnic Group – Table 11 shows primary mode for the three largest ethnic groups. Whites were the most likely to drive alone and much less likely than other groups to use the bus. Hispanic respondents were the most likely to carpool and used the bus, nearly twice as likely as any other ethnic groups. African-American were statistically more likely to use the train than were either White or Hispanic respondents.

Table 11
Current Primary Mode by Ethnic Group

Ethnic Group	(n=__)	Primary Commute Mode				
		DA	CP/VP	Bus	Train	B/W
Hispanic	467	52.5%	16.5%	13.8%	11.5%	2.7%
African-American	963	63.7%	6.2%	7.7%	18.3%	2.1%
White	3,966	72.9%	5.8%	2.0%	11.0%	2.9%
Other	323	69.5%	8.0%	3.1%	12.9%	4.0%

Income – Table 12 presents primary mode by annual household income. Solo driving was most common among moderate- and high-income respondents ($60,000 or higher), but declined at the highest income categories, in favor of carpool/vanpool and train ridership. Bus ridership declined steadily as income increased and carpool generally increased slightly. But except for respondents who had incomes less than $30,000, use of other modes were essentially the same for most income categories.

Table 12
Current Primary Mode by Annual Household Income

Income	(n=__)	Primary Commute Mode				
		DA	CP/VP	Bus	Train	B/W
Less than $30,000	255	45.7%	12.8%	16.4%	16.4%	6.0%
$30,000 – 59,999	806	69.9%	8.5%	6.6%	10.6%	3.1%
$60,000 – 79,999	682	74.3%	5.8%	4.6%	11.7%	2.0%
$80,000 – 99,999	761	71.3%	4.6%	2.3%	15.5%	3.1%
$100,000 – 119,999	729	68.1%	6.3%	3.1%	13.3%	2.4%
$120,000 – 139,999	472	68.3%	6.5%	3.1%	11.7%	3.7%
$140,000 +	1,188	69.2%	7.7%	1.6%	12.8%	1.9%

State of Residence – As illustrated in Table 13, respondents' commute modes differed by where they lived. About seven in ten respondents in Virginia and a slightly higher percentage of respondents in Maryland drove alone to work, while fewer than half of District of Columbia residents primarily used this mode for commuting. Virginia residents were the most likely to carpool than were either residents of Maryland or the District of Columbia.

District residents were significantly more likely to use bus, train, bike, or walk to work than were respondents living in other states. Maryland residents used train slightly more than did Virginia residents, but mode shares for bus and bike/walk were statistically the same for these residents.

State of Employment – Table 13 also displays mode by state of employment. Respondents who worked in the District of Columbia were substantially less likely to drive alone to work than were those who worked in Virginia or Maryland. District workers were somewhat more likely to carpool or ride a bus than were Maryland or Virginia workers. But train use for respondents working in the District was dramatically higher than for other respondents. District workers were six times more likely than other respondents to use the train as their primary mode.

Table 13
Current Primary Mode by State of Residence and State of Employment

State	(n=__)	Primary Commute Mode				
		DA	CP/VP	Bus	Train	B/W
State of Residence						
District of Columbia	538	46.5%	6.5%	11.7%	24.1%	8.8%
Maryland	2,798	72.8%	5.9%	3.8%	12.3%	1.7%
Virginia	2,778	70.1%	8.5%	3.9%	10.3%	1.8%
State of Employment						
District of Columbia	1,741	42.3%	9.1%	8.3%	29.0%	4.7%
Maryland	2,028	76.8%	5.4%	3.6%	4.0%	2.2%
Virginia	2,209	73.9%	6.0%	2.6%	5.1%	1.4%

Vehicles Available – Finally, Table 14 shows the mode distribution by the number of vehicles available to the respondent. Not unexpectedly, respondents who did not have a car available were considerably less likely to drive alone and considerably more likely to commute by bus or train than were those with one or more vehicles. As the number of vehicles in the household increased from zero to one and from one to two, driving alone increased and the use of bus and train declined significantly. Carpooling was fairly equal, however, regardless of the number of vehicles available.

Table 14
Current Primary Mode by Number of Vehicles in the Household

Number of Vehicles	(n=__)	Primary Commute Mode				
		DA	CP/VP	Bus	Train	B/W
0	221	3.4%*	9.2%	35.9%	38.1%	12.4%
1	1,429	60.7%	7.7%	6.0%	18.9%	4.0%
2	2.434	74.5%	6.2%	2.4%	10.2%	1.7%
3 or more	1,953	76.8%	7.6%	2.3%	7.3%	1.4%

* Respondents in this group could be passengers in taxi

Length of Commute

Number of Miles – Commuters in the sample had a wide range of commute distances, ranging from less than one mile to more than 100 miles. Table 15 presents the distribution of distance. The average one-way distance was 16.3 miles, about the same distance as the 16.2 miles reported in the 2004 SOC survey (results without Stafford County). As shown in the table, more than one-third of the respondents (37%) commuted fewer than 10 miles one-way. Three in ten (29%) said they traveled between 10 and 19 miles. A small percentage (7%) had commute distances of 40 miles or greater.

Table 15
Commute Distance (miles)
(n=5,465)

Number of Miles	Percentage	Number of Miles	Percentage
Less than 5 miles	17%	20 to 29 miles	17%
5 to 9 miles	20%	30 to 39 miles	9%
10 to 14 miles	17%	40 or more miles	7%
15 to 19 miles	12%	**Mean distance**	**16.3 miles**

Respondents who were employed in the District of Columbia traveled the shortest distance to work, an average of 14.9 miles. Respondents employed in Maryland traveled the longest distance, an average of 17.2 miles. Respondents who worked in Virginia traveled 15.9 miles one way. But respondents who lived in Maryland and Virginia traveled farther, 18.3 miles and 15.9 miles, respectively, than did residents of the District of Columbia, who traveled only 9.0 miles one way to work.

Commute Travel Time – Survey respondents commuted, on average, about 35 minutes one way, approximately the same as the 34 minute average trip from the 2004 SOC survey (results for Stafford County removed). As shown in Table 16, about a third (35%) of respondents commuted 20 minutes or less and 43% commuted between 21 and 45 minutes. The remaining 22% traveled more than 45 minutes.

Table 16
Commute Distance (minutes)
(n=5.941)

Number of Minutes	Percentage	Number of Minutes	Percentage
10 minutes or less	14%	46 to 60 minutes	14%
11 to 20 minutes	21%	More than 60 minutes	8%
21 to 30 minutes	20%	**Mean time**	35 minutes
31 to 45 minutes	23%		

Commute Distance By Mode – Survey respondents' travel distance varied by the type of transportation they used to commute. As shown in Table 17, commuter rail riders traveled the farthest, 27.0 miles one-way. Carpoolers/vanpoolers also traveled more than 20 miles one way. But commuter rail, bus, and train riders spent the longest time commuting, at least 46 minutes one-way, compared to about 35 minutes for all respondents.

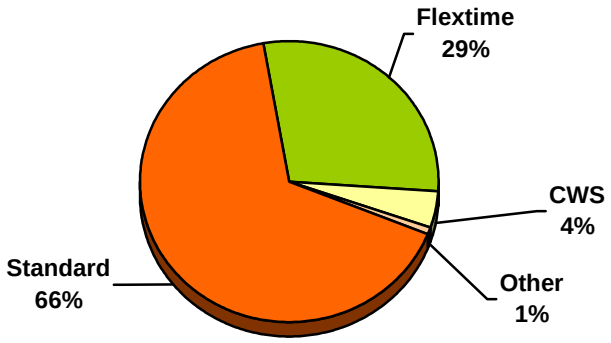
Table 17
Commute Distance by Primary Commute Mode

Primary Commute Mode	Average Distance (mi.)		Average Time (min.)	
	(n=__)	Average	(n=__)	Average
Drive alone	4,085	16.4 mi.	4,250	32 min.
Carpool/Vanpool	402	20.9 mi.	453	41 min.
Bus	206	16.7 mi.	286	51 min.
Metrorail	440	14.5 mi.	604	46 min.
Commuter rail	34	27.0 mi.	40	62 min.
Bike/walk	147	2.3 mi.	153	16 min.

Non-Standard Work Schedules

Non-Standard Work Schedules Used – Figure 4 shows the distribution of respondents' work schedules. The majority (66%) of respondents who traveled outside their homes for work said they worked a "standard" schedule, defined for full-time workers as 5-days per week. Of those who worked a "non-standard," the most common schedule was flex-time or flexible work hours, used by 29% of respondents. Compressed work schedules were used by about four percent of respondents; 4/40 and 9/80 compressed schedules were most typical. The remaining one percent worked another type of schedule.

Figure 4
Non-Standard Schedule Types Used
(n=6,057)



Primary Commute Mode by Non-Standard Schedule – Use of non-standard work schedules sometimes has been assumed to reduce the use of alternative modes for commuting, by making it more difficult to maintain a carpool or vanpool or by reducing the possibility of using transit for early or late hour commuting. But as seen from Table 18, respondents who worked a compressed schedule actually had higher carpool/vanpool rates and lower drive alone rates than did respondents who worked a standard, non-compressed, schedule. Respondents who worked compressed schedules also had higher train ridership but bus use percentages were essentially the same for all three groups.

Table 18
Current Primary Mode by Use of Non-Standard Schedules

Type of Non-Standard Schedule	(n=__)	Primary Commute Mode				
		DA	CP/VP	Bus	Train	B/W
CWS	263	63.4%	10.8%	5.9%	18.7%	<1%
Flextime	1,650	69.1%	7.6%	4.3%	11.3%	3.4%
No non-std schedule	3,912	70.8%	6.9%	5.1%	13.6%	2.5%

Alternative Mode Use Characteristics

Length of Time Using Alternatives – Respondents who used an alternative mode of transportation to get to work at the time of the survey were asked how long they had been using the alternative mode. Results are presented in Table 19 for the 2007, 2004, and 2001 SOC surveys.

Table 19
Length of Time Using Alternative Mode – 2007, 2004, 2001

Time Using Alternative Modes	2007 SOC (n=1,597)		2004 SOC (n=1,719)		2001 SOC (n=1,854)
Less than one year	17%		23%		28%
12 – 24 months	21%		23%		23%
25 – 36 months	10%	62%	9%	54%	49%
37 – 60 months	13%		12%		
More than 60 months	39%		33%		
Mean duration	**80 months**		**70 months**		**N/A**

A substantial portion of respondents who were using alternative modes at the time of the survey were long-term users of alternative modes. Four in ten (40%) respondents had used their current alternative

mode for more than five years and more than six in ten (62%) had used this mode for more than two years. The average time using an alternative mode was 80 months.

The table also shows results for this question from the 2001 and 2004 surveys, in the fourth and third columns, respectively. The results for the three survey periods, appears to show a trend toward longer use of alternative modes. In 2007, 62% of alternative mode users had used these modes for more than two years, compared to 54% of alternative mode users in 2004 and 49% of alternative mode users in 2001. Further, the average 80 months duration of an alternative mode use calculated from the 2007 survey data was considerably longer than the average 70 month duration calculated in 2004.

There is no obvious reason why these results would have been observed. In fact, the result appears contradictory to the mode split results noted earlier, that show greater use of alternative modes in 2007 than in 2004. This would suggest new alternative mode use between 2004 and 2007, which should lead to a reduction in the average alternative mode duration, rather than an increase.

Modes Used Before Starting Current Alternative Modes – Respondents who used an alternative mode during the survey week were asked what modes they used before starting these alternatives. Table 20 displays these results for both 2007 and 2004.

Table 20
Modes Used Before Starting Current Alternative Modes – 2007, 2004

Previous Mode	**2007 SOC** (n=1,573)	**2004 SOC** (1,749)
Always used this mode	23%	12%
Not working in DC metro area then	15%	17%
Made a shift from another mode	62%	71%
Made a shift from another mode *		
Drive alone, taxi, motorcycle	55%	56%
Metrorail	18%	11%
Bus	15%	15%
Carpool / vanpool	10%	10%
Bike / walk	6%	8%
Commuter rail	2%	1%
CWS / TW	6%	4%

*Adds to more than 100% because multiple responses were permitted

In 2007, about 15% of alternative mode users said they did not have a previous mode to report because they had not been working in the Washington metropolitan area then. This was nearly the same percentage as in 2004. About a quarter of these respondent said they had always used the current alternative modes. This was considerably higher than the 12% who reported not using any other mode in 2004. Six in ten (62%) respondents said they could name a previous mode for travel in the Washington area, compared to about 71% who could name a previous mode in 2004.

The bottom section of the table shows modes for respondents who reported a previous mode. More than half (55%) of respondents said they made a shift from driving alone. The remaining 45% shifted from a different alternative mode. About a third said they previously used transit; either a train (Metrorail or commuter rail) (20%) or bus (13%) and one in ten (10%) said they had carpooled or vanpooled before switching to their current alternative mode. The results for 2007 were similar to the 2004 results for most modes, with the exception of Metrorail, which was mentioned more often in 2007 than in 2004.

Carpool and Vanpool Occupancy – The average number of occupants in respondents' carpools and vanpools was 2.5 and 9.9 people, respectively. Overall average pool occupancy was 2.7. The carpool occupancy was equal to the 2.6 person average from the 2004 and 2001 SOC survey. The vanpool average was about the same as the 10.0 observed in 2004, but lower than the 11.4 shown in 2001. The drop between 2001 and 2004 could reflect a shift to lower-passenger mini-vans. In 2001, 58% of vanpoolers said their vans carried 12 or more passengers, compared to only 43% who rode in vans of this size in 2007. But the 2007 sample included only 18 vanpoolers, so this result should be viewed cautiously.

Access Mode to Alternative Mode Meeting Points – Table 21 presents how carpoolers, vanpoolers, and transit riders traveled to where they met their rideshare partners or where they started their transit trip.

Table 21
Means of Getting from Home to Alternative Mode Meeting Place
(n=1,516)

Access Mode to Alternative Mode	Percentage
Walk	35%
Picked up at home	12%
Drive to a central location (e.g., Park & Ride)	18%
Drive alone to driver's/passenger's home	10%
Bus/transit	12%
I am the carpool/vanpool driver	10%
Dropped off / rode in another carpool / vanpool	1%
Other*	2%

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

About a third (35%) of respondents walked to the meeting place. Transit riders were most likely to walk; 81% of bus riders and 37% of Metrorail riders said they used this method to get to the meeting point, while only three percent of carpoolers/vanpoolers walked to the meeting point.

About 12% said they were picked up at home by the carpool or vanpool driver and 12% of respondents said they took transit to the meeting point. Ten percent said they drove to the location, but then continued on as the carpool/vanpool driver. One percent said they were dropped off, for example by a spouse or other household member.

More than a quarter of respondents (28%) said they drove to the meeting point but left their cars there. This is significant, because a large proportion of auto emissions are produced during the first few miles of a vehicle trip, when the engine is cold. Even though these trips generally were short, they must be reflected in an air quality analysis.

Distance to Alternative Mode Meeting Point – As shown in Table 22, access trips to alternative mode meetings points tended to be short. Respondents traveled an average of 3.1 miles. Just over half (51%) of respondents traveled one mile or less to the meeting point. These were primarily bus and Metrorail riders. A third (34%) of respondents said they traveled between two and five miles. Only 15% of respondents traveled more than five miles.

Table 22
Distance Traveled from Home to Alternative Mode Meeting Point
(n=1,064)

Distance	Percentage
1 mile or less	51%
2 miles	14%
3 miles	8%
4 to 5 miles	12%
6 to 10 miles	11%
11 miles or more	4%

Use of Other Alternative Modes

Alternative Modes Tried – Respondents who did not work at home full-time were asked about use of alternative modes in the past two years. Respondents who were driving alone at the time of the survey were asked if they had used or tried an alternative mode for their commute. Respondents who were using an alternative mode when the survey was conducted were asked if they had used another alternative mode, other than the mode they were currently using.

Approximately 14% of respondents said they used or tried an alternative mode or another alternative mode in the past two years. This was notably less than the 22% who mentioned trying or using another alternative mode in 2004 and the 25% who mentioned using or trying another alternative mode in 2001. These numbers are consistent, however, with the longer use of current alternative modes described earlier and with a higher overall use of alternative modes. If commuters are satisfied with the alternative modes they are now using, they are perhaps less motivated to try another mode.

Respondents who said they had used or tried another alternative mode were asked which modes they had used/tried. Responses to this question are shown in Table 23 for 2007, 2004, and 2001.

Table 23
Alternative Modes Used/Tried in Past Two Years

Alternative Modes Used/Tried	**2007 SOC Percentage *** (n=879)	**2004 SOC Percentage *** (n=1,350)	**2001 SOC Percentage *** (n=1,500)
Train - Metrorail	45%	52%	55%
Train - commuter rail	7%	5%	
Bus	32%	32%	33%
Carpool	11%	14%	14%
Bicycle	8%	6%	3%
Walk	7%	7%	6%
Vanpool	0%	1%	<1%

*Might add to more than 100% because multiple responses were permitted

In 2007, train was the alternative mode mentioned most frequently; more than half of respondents who used or tried another alternative mode tried either Metrorail (45%) or commuter rail (7%). One-third of respondents (32%) tried or used bus and about one in ten (11%) tried or used a carpool. Smaller percentages said they had tried bicycling (8%) or walking (7%). The distribution of modes tried or used in 2007 was very similar to the results observed in 2004 and 2001.

Length of Time Using Other Alternatives – The majority of respondents who had tried or used an alternative mode other than one they were currently using used the modes for a short time. Table 24 indicates that about a third of these respondents used these modes for less than one month (13%) or used them "occasionally/once" (20%). About 42% used or tried the mode for one to six months. Only 24% used these other alternatives for more than six months. This latter group likely consisted of respondents who shifted to their current alternative mode from another alternative mode that they had used regularly before shifting.

Table 24
Length of Time Using Alternative Modes Used/Tried in Past Two Years
(Modes Not Used Currently)
(n= 773)

Time	Percentage	Time	Percentage
Occasionally/once	20%	7 – 11 months	2%
Less than 1 month	13%	12 – 23 months	6%
1 – 6 months	42%	24 or more months	16%

These results were considerably different from the generally long alternative mode duration for current alternative mode users, presented in Table 19. The short duration of use for this question reflects the exploratory or trial nature of use for a large share of these respondents. Additionally, some use likely was due to short-term necessity or convenience, such as using the train or bus when one's car is in the shop for repairs.

Reasons for Using Alternative Modes – Respondents who used an alternative mode, either during the survey week or within the past two years were asked why they began using those modes. The reasons are listed in Table 25.

Current Alternative Mode Users – The center column shows responses for respondents who used alternative modes at the time of the survey. The most common commute-related reasons included: "save money" (18%), "save time" (13%), "no parking available" (6%), and "avoid congestion" (5%). Smaller percentages of respondents said they were tired of driving, had to pay a parking charge, or because they found a carpool or vanpool partner. The top personal circumstance reasons included: "changed jobs or work hours" (18%), "no vehicle available" (8%), or "moved residence" (8%).

Respondents Who Used or Tried Other Alternative Modes – The last column of Table 25 shows reasons given by past users or "trial users," that is reasons respondents cited for trying or using modes they were no longer using. The most common reason was that respondents had "no vehicle available," named by 24% of respondents. Other top reasons generally mirrored those that respondents gave for why the used their current alternative mode. To "save time" (8%), "save money" (8%), "avoid congestion" (5%), or "tired of driving" (4%) were the most important commute-related reasons. It is also interesting that eight percent of those who tried/used a new alternative in the past two years cited "weather" as their reason, compared with no respondents among current alternative mode users, suggesting occasional or short-term use.

Table 25
Reasons for Using Alternative Modes

Reasons	Percentage of Current Users (n=877)	Percentage of Past Users/Trial Users (n=764)
Commute related reasons		
- Save money	18%	8%
- Save time	13%	8%
- No parking available	6%	3%
- Avoid congestion	5%	5%
- Tired of driving	4%	4%
- Gas prices too high	4%	2%
- Too stressful, too much traffic	3%	2%
- Parking expense too high	3%	1%
- CP/VP partner available	2%	<1%
Personal circumstances reasons		
- Changed jobs/work hours	18%	7%
- Always used	11%	0%
- No vehicle available	8%	24%
- Moved to new residence	8%	2%
- Convenient, close to work	5%	4%
- Employer/worksite moved	1%	2%
- Spouse started new job	1%	0%
- Get exercise	2%	3%
- Weather	2%	8%
- Safety	1%	0%
- Car became available	1%	0%
Other	9%	6%

*Might add to more than 100% because multiple responses were permitted

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

Reasons for Not Continuing with Alternatives – Perhaps a more useful question to ask respondents who tried or used alternative modes in the past but do not now is why did they stopped using these modes? These reasons are detailed in Table 26.

Table 26
Reasons for Not Continuing Other Alternative Modes

Reasons	**2007 SOC Percentage*** (n=764)	**2004 SOC Percentage*** (n=1,212)
Too inconvenient	18%	20%
Took too much time	15%	20%
Job changes	12%	13%
Only used temporarily (e.g., car was in shop)	8%	11%
Vehicle became available	6%	8%
Need vehicle during/after work	5%	5%
Weather related	5%	4%
Vehicle became unavailable/unreliable	4%	4%
Costs too much	3%	8%
Moved residence	1%	3%
New or change in employer program	2%	1%
Parking issue	1%	0%
Bus/rail schedule/route change	1%	2%
Child-related activities	1%	2%
Safety concerns	1%	2%
Other**	7%	5%

*Might add to more than 100% because multiple responses were permitted

**Each "Other" response was mentioned by less than one percent of respondents

The most frequently mentioned reasons why respondents did not continue using an alternative mode included that it was "too inconvenient" (18%), "took too much time" (15%), or because the respondent made a "job change" (12%). About one in ten (8%) said they intended to use the mode only temporarily, for example, because the car was in the repair shop. Smaller percentages of respondents noted they stopped using the alternative mode because a "vehicle became available," because they "needed a vehicle during or after work," or for "weather-related" reasons. These 2007 reasons were quite similar to the reasons noted n 2004.

3-C TELEWORKING

The SOC survey also explored respondents' telework experience. For purposes of this survey, teleworkers were 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*." This section presents these results for 2007 and, in some tables, results for 2004 and 2001, but a few points on the definition of telework should be noted.

The definition presented above also was used in the 2004 SOC survey. But the definition had been changed in 2004 to limit teleworking to arrangements that reduced vehicle trips; the 2001 definition had interpreted teleworking more broadly. To enable a valid comparison of 2007 and 2004 with the 2001 data, the 2001 telework results were revised to exclude respondents who would not have been counted as teleworkers under the current definition. These adjusted data were used in all tables that show 2001 results.

The 2001 SOC definition described teleworkers as, "*wage and salary employees who at least occasionally work at home or at a location other than their central work place during their normal work hours*." This definition would have included workers who work at client sites outside of the Washington region and workers, such as sales or equipment repair staff, who travel to multiple customer locations during the course of the day. The 2001 definition also could have included respondents who worked a portion of the normal workday at home, for example while waiting for a delivery, but traveled to the regular workplace for another part of the day. These situations are not generally considered teleworking for transportation-related purposes, thus the telework definition was rewritten in 2004 to exclude these cases and they would not have been counted as telework in either 2007 or 2004.

Current and Potential Teleworking

Respondents who Currently Telework – Respondents were read the above definition of teleworking and asked if they would consider themselves teleworkers based on this definition. A total of 17.4% of all regional workers said they telework, either regularly or occasionally. About one in ten teleworkers (11%) said they telework every day that they work.

But teleworkers accounted for a higher percentage, 18.7%, of all regional commuters, that is, workers who travel to a main work location on non-telework days. Using this base of commuters excludes workers who are self-employed and for whom home is their only workplace. These workers do not have an outside work location, thus never make commute trips. The calculation of teleworkers as a proportion of commuters reflects a more realistic picture of the role of teleworking in eliminating commute trips, thus is relevant for assessing travel and air quality benefits of teleworking. The 18.7% of regional commuters who telework represents a significant increase over the 2004 level of 12.8% and a further increase over the 2001 level of 11.3%, as measured though the revised telework results from the 2001 SOC survey.

Interest in Teleworking – Respondents who said they were not teleworking and who were not self-employed/work at home full-time were asked if their job responsibilities would allow them to work at a location other than their main work place, at least occasionally. Approximately 37% of these respondents replied that this would be possible.

Respondents for whom teleworking was a possibility were asked if they would want to telework. Nearly three-quarters, said they would be interested in teleworking on either an occasional basis (53%) or a regular basis (26%). These interested respondents equal about 29% of non-teleworkers and 24% of all commuters.

These results suggest additional telework growth potential exists in the Washington metropolitan region. Table 27 summarizes the telework status of all respondents who are "commuters," that is, not self-employed/work at home full-time. As noted before, 18.7% of regional commuters are currently teleworking. But an additional 24% of commuters "could and would" telework, that is, they have job responsibilities that could be done while teleworking and they would be interested in teleworking, if given an opportunity. The remaining respondents said they would not be interested in teleworking (6%) or that their job responsibilities would not allow teleworking (52%).

Table 27
Summary of Current and Potential Teleworking
All Respondents who are not Self-Employed/Work at Home

Teleworking Status	**2007 SOC Percentage** (n=6,168)	**2004 SOC Percentage** (n=6,896)
Currently teleworking	18.7%	12.8%
Not teleworking		
- Job responsibilities allow teleworking and INTERESTED in teleworking ("could and would")	24%	16%
- Job responsibilities allow teleworking, but NOT INTERESTED in teleworking	6%	6%
- Job responsibilities would NOT allow teleworking	52%	65%

The table also summarizes the current and potential telework percentages measured in 2004. As shows in the table, the percentage of current plus potential telework rose substantially between 2004 and 2007, from about 29% of all commuters to 43%., while the percentage of commuters who said their jobs were incompatible with teleworking dropped (from 65% to 52%).

Because it seems unlikely that the composition of jobs changed substantially in the region, these results suggest a shift in commuters' ability, or perception of their ability, to perform their work at home or another location away from their primary work location. It appears that a larger share of commuters believe they could telework, at least occasionally. This could be related to increasing availability of communication and computer technology, such as broadband internet, lower cost telephone options, and computer networking, or perhaps from greater understanding of more flexible telework options.

Teleworking by Personal Characteristics – Teleworking is not distributed equally by demographic group. Table 28 compares teleworking by respondents' sex, ethnic group, age, income, commute distance, and state of residence and employment. The third column shows the percentage of each demographic group who telework today (e.g., 18% of men and 19% of women telework). The last column shows the percentage of non-teleworkers in the group who "could and would" telework if given the opportunity (e.g., 27% of non-teleworking women would telework). Note that this should be compared against the 29% of all non-teleworkers in the region who "could and would."

Table 28
Teleworkers by Demographic and Travel Characteristic

Demographic Group	All Respondents		Non-Teleworkers	
	(n=__)*	Percentage Who Currently Telework	(n=__)**	Percentage who "could and would" Telework***
Sex				
Male	2,972	18%	2,362	31%
Female	3,290	19%	2,672	27%
Ethnic Group				
White	4,005	23%	3,175	33%
Hispanic	467	12%	414	13%
African-American	970	11%	863	28%
Age				
Under 25 years	209	8%	192	14%
25 – 34	990	16%	830	30%
35 – 44	1,939	23%	1,723	35%
45 – 54	1,737	20%	1,420	28%
55 or older	1,258	17%	1,040	29%
Income				
Less than $30,000	256	5%	245	8%
$30,000 – $59,999	809	5%	761	21%
$60,000 – $99,999	1,456	14%	1,259	28%
$100,000 – $139,999	1,214	26%	989	37%
$140,000+	1,195	31%	841	40%

Some demographic groups telework more than do others. For example, whites were more likely to telework than were either African-Americans or Hispanics. Teleworking appeared to increase with age up to the 35-44 years old group, peaking at 23%, then declining as age increased further. And teleworking increased as income increased; 26% of workers with household incomes between $100,000 and $139,999 teleworked, compared with only five percent of workers with incomes under $60,000. A third (31%) of respondents with annual household incomes of $140,000 or more teleworked.

As shown in Table 28 (cont.), below, teleworking also increased with increasing commute distance. Nearly a quarter (23%) of respondents who commuted 30 miles or more teleworked, compared with 19% of respondents who commuted between 10 and 29 miles and 15% of respondents who commuted fewer than 10 miles. Finally, Virginia and Maryland residents were slightly more likely to be teleworkers (21% and 18% respectively) than were residents of the District of Columbia (13%). And slightly larger shares of respondents who worked in Virginia (21%) teleworked than did respondents who were employed in Maryland (18%) or the District of Columbia (18%).

Table 28 (cont.)
Teleworkers by Demographic and Travel Characteristics

Demographic Group	All Respondents		Non Teleworkers	
	(n=__)*	Percentage Who Currently Telework	(n=__)**	Percentage who "could and would" Telework***
Commute Distance				
Less than 10 miles	1,966	15%	1,682	28%
10 – 29 miles	2,231	19%	1,850	34%
30 miles +	1,268	23%	984	31%
State of Residence				
District of Columbia	545	13%	466	28%
Maryland	2,819	18%	2,337	27%
Virginia	2,798	21%	2,230	32%
State of Employment				
District of Columbia	1,762	18%	1,445	34%
Maryland	2,040	18%	1,704	24%
Virginia	2,223	21%	1,766	29%

* All respondents in the demographic group, both teleworkers and non-teleworkers

** Respondents in the demographic group who do not currently telework

*** Respondents whose job responsibilities would allow teleworking and who would be interested in teleworking, at least occasionally

Table 28 also illustrates which groups have the greatest potential for future teleworking. That is, in which groups would non-teleworkers be most likely to telework in the future, if given the opportunity? The last column in the table shows percentages of non-teleworkers who believe their job responsibilities would allow teleworking and who would like to telework. In general, the groups with the highest current teleworking show the greatest additional potential and groups with low current teleworking also show low potential.

But some groups had noticeably higher potential than the 29% average among all non-teleworkers. These included high-income respondents ($100,000 or more annual income) and respondents with moderate (11-29) to long commute distances (30 or more miles).

Teleworking by Employment Characteristics – The survey data also showed some differences in the distribution of teleworkers and potential teleworkers by employment characteristics. As shown in Table 29, non-profit agencies (21%) and private employers (21%) had higher teleworking rates than did government agencies, either state/local (7%) or federal (16%).

Generally, teleworking increased with increasing employer size. Nineteen percent of respondents who worked for employers with 1,000 or more employees teleworked and 21% of employers with between 251-999 employees teleworked, compared with only 11% of respondents who worked for employers with 26-100 employees. The exception to this rule was for respondents who worked for very small employers, those with 1-25 employees. About 20% of these respondents said they telework. This is likely informal teleworking, in which the employee teleworks under an informal agreement between the employee and the supervisor, rather than a formal telework program.

Some occupations had higher teleworking rates than average, including sales (30%), professional (24%), executive/managerial (24%), and business/financial operations (technicians). Three common occupations with below average telework rates included administrative support (9%), service (6%), and precision craft/production (6%).

Table 29 also illustrates the potential for teleworking among these employment groups. As with the demographic groups, the relative percentages of non-teleworkers who could and would telework if given the opportunity generally mirrored the relative percentages of respondents who were teleworking in each group. A few groups did have higher potential than the 24% average for all non-teleworkers, however.

Two groups with latent potential for teleworking were employees of federal government agencies and non-profit organizations. More than a third of non-teleworking workers in these categories said their jobs would allow them to telework and that they would like to telework. Similarly, potential appears to exist among employers with 250 or more employees. About a third of non-teleworkers in this group said they could and would telework if given the opportunity.

Table 29
Teleworkers by Employment Characteristics

Employment Characteristics	All Respondents		Non-Teleworkers	
	(n=__)*	Percentage Who Currently Telework	(n=__)**	Percentage who "could and would" Telework***
Employer Type				
Private employer	3,027	21%	2,414	26%
Non-profit org.	635	21%	497	42%
Federal agency	1,337	16%	1,116	35%
State/local agency	756	7%	694	21%
Employer Size				
1 – 25	1,483	20%	1,220	27%
26 – 100	1,263	11%	1,131	23%
101 – 250	747	14%	642	30%
251 – 999	855	21%	679	34%
1,000+	1,402	19%	1,133	36%
Occupation				
Sales	306	30%	215	46%
Executive, manager	1,155	24%	881	44%
Professional	2,329	24%	1,799	33%
Business/financial operations	314	23%	242	24%
Administrative support	567	9%	515	21%
Service	412	6%	374	13%
Precision craft, production	271	6%	255	13%

* All respondents in the group, both teleworkers and non-teleworkers

** Respondents in the group who do not currently telework

*** Respondents whose job responsibilities would allow teleworking and who would be interested in teleworking, at least occasionally

Reasons for Teleworking – All respondents who teleworked were asked why they started teleworking. Responses to this question are shown in Table 30. The table also provides the results for this question from the 2004 and 2001 SOC surveys.

Table 30
Reasons for Teleworking

Reasons	**2007 SOC** (n= 1,132)	**2004 SOC** (n= 876)	**2001 SOC** (n= 1,025)
New option that became available	22%	18%	13%
Personal circumstance (weather, repairman, sick)	16%	10%	4%
Convenient	12%	8%	3%
To get more work done	11%	9%	12%
To save time	10%	19%	14%
To stay with family or children	8%	7%	12%
Changed jobs/work hours	8%	6%	6%
Special program at work	7%	4%	7%
Initiated request on my own	6%	10%	7%
Tired of driving	4%	6%	7%
Pressure/encouragement from employer	4%	4%	9%
Save money	3%	4%	7%
Wanting/needing quiet/uninterrupted work time	4%	4%	5%
Avoid congestion	4%	4%	5%
Employer/worksite moved	2%	1%	<1%
Other*	6%	5%	3%

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

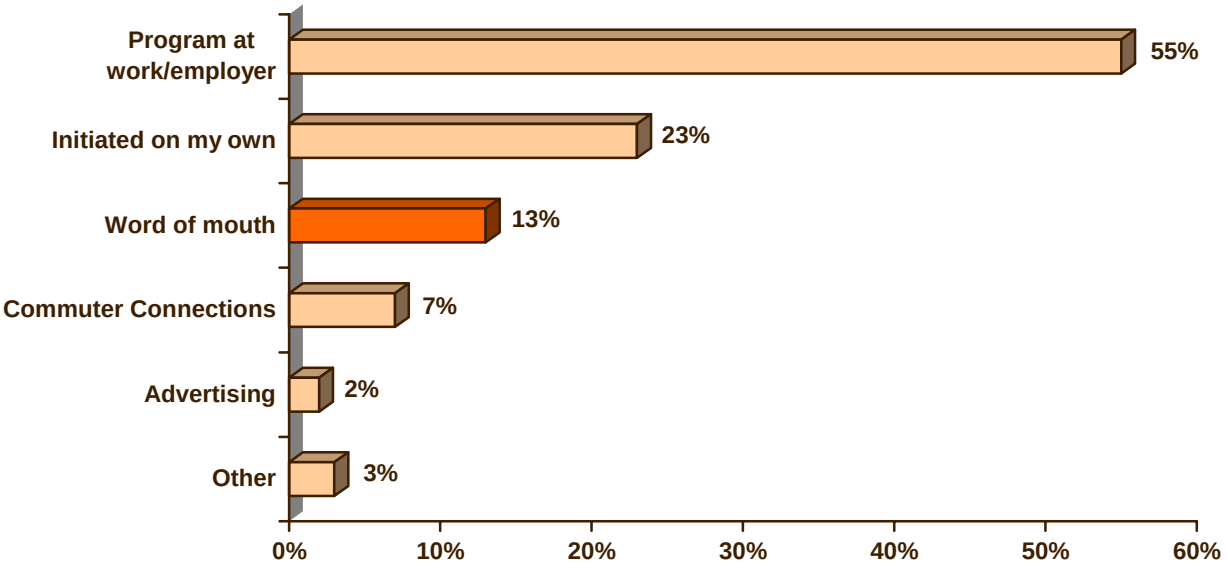
The most frequently mentioned reason was that a "new option became available" (22%). As seen in the table, this reason was at or near the top in both the 2004 and 2001 surveys, but gained in importance in the 2007 survey. One possible reason is that a larger number of employers are offering teleworking as a formal option

Other common reasons for started to telework included "personal circumstance" such as waiting for a repair or delivery person or because of weather conditions (16%), "convenient," (12%) "to get more work done" (11%), and to "save time" (10%). Most of these responses also were noted as primary reasons in 2004 and in 2001.

Sources of Telework Information – Respondents who teleworked were asked how they had learned about teleworking and if they had received teleworking information directly from Commuter Connections or

MWCOG, either from Commuter Connections or from an MWCOG web site. The most frequently mentioned sources are shown in Figure 5.

Figure 5
Sources of Information About Telework
(n=1,132)



The largest source of information, by far, was "special program at work/employer," named by more than half (55%) of the respondents. This percentage was the same as in 2004, but considerably higher than in the 2001 survey, in which only 34% of teleworkers said they learned of teleworking at work or through their employer. Seven percent of teleworkers said they received teleworking information directly from Commuter Connections or MWCOG. This was about the same percentage as mentioned Commuter Connections/MWCOG in both 2004 (5%) and in 2001 (4%). About a quarter said they "initiated the request on their own" (23%) and 13% said they learned of teleworking through "word of mouth" (13%)

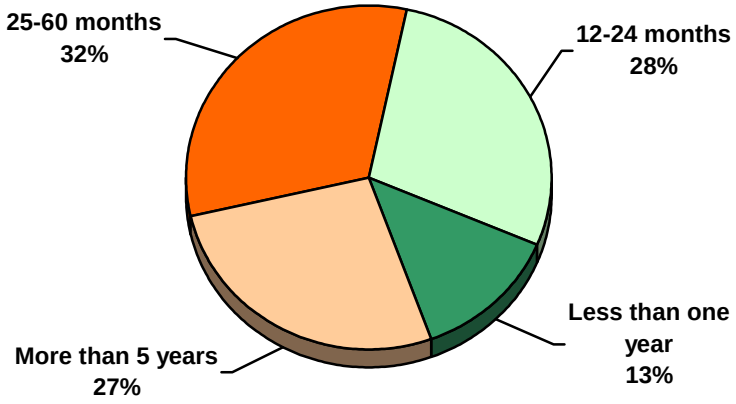
About two percent said they learned about teleworking through advertising. Although this is not necessarily advertising from Commuter Connections, MWCOG has advertised teleworking, so that this response could indicate additional teleworkers who learned about teleworking from outreach and promotion conducted by Commuter Connections. A portion of the "special program at work/employer" also could be the result of Commuter Connections' outreach and assistance to encourage employers to implement telework.

Telework Patterns

Respondents who said they teleworked, at least occasionally were asked a series of questions about their teleworking characteristics including: length of time teleworking, use of informal or formal telework arrangement, telework location, frequency of teleworking, and access mode to telework locations outside the home.

Length of Time Teleworking – As illustrated in Figure 6, approximately four in ten (41%) respondents who teleworked started teleworking within the past two years and 13% started within the past year. More than a quarter (27%) said they had been teleworking more than five years. On average, respondents had been teleworking about 53 months.

Figure 6
Length of Time Teleworking
(n=1,132)



The duration of telework appeared to have increased somewhat since 2004. In the 2004 SOC survey, nearly half (49%) of teleworkers started teleworking within the past two years and only 19% said they had been teleworking more than five years. The average duration was 42 months.

Formal or Informal Telework Arrangement – Teleworkers were asked if they teleworked under a formal telework program or if it was an informal arrangements between the teleworker and the supervisor. Respondents who did not telework were asked if their employer had a telework program, either formal or informal, even though the respondent did not use it.

As shown in Table 31, about four in ten respondents said their employers allowed some telework, either under a formal program (19%) or under an informal arrangement between an employee and a supervisor (22%). The majority (59%) of respondents said their employers did not have any telework program or that they didn't know about any program. The incidence of some form of telework arrangement, either

formal or informal, appeared to increase since 2004; in the 2004 SOC survey, only 35% of respondents noted that their employer allowed telework, compared to 41% in 2007.

Table 31
Formal or Informal Telework Arrangements
All respondents and Teleworkers vs Non-Teleworkers

Program Type	All respondents (n=6,168)	Teleworkers (n=1,132)	Non-teleworkers (n=5,036)
Formal program	19%	39%	15%
Informal arrangement	22%	53%	16%
No program	59%	8%	69%

Arrangements for Teleworkers and Non-Teleworkers – Table 31 also presents the distribution of telework options for respondents who currently teleworked and those that did not. Teleworkers were much more likely than were other respondents to work for an employer with a formal telework program. Approximately four in ten (39%) said they teleworked under a formal arrangement and 53% said they teleworked under an informal arrangement with their supervisor. A small group (8%) said their employers did not have any telework program or that they didn't know about any program.

By contrast, only 15% of non-teleworkers said their employers had a formal telework program and only 16% said teleworking was permitted under informal arrangements. More than two-thirds (69%) said the employer had no program or they didn't know if a program existed.

Arrangement by Employer Type – The availability of teleworking arrangements varied widely by respondents' employer types, as illustrated in Table 32.

Table 32
Formal or Informal Telework Arrangements
By Employer Type

Program Type	Federal Agencies (n=1,272)	State/local Agencies (n=716)	Non-profit Organizations (n=613)	Private Employers (n=2,908)
Formal program	**43%**	9%	17%	14%
Informal arrangement	19%	12%	**29%**	**27%**
No program	39%	**79%**	54%	59%

Formal programs were most common among respondents who worked for a federal government agency. More than four in ten (43%) respondents who worked for federal agencies said their employer had a formal program, compared to only about 17% of respondents who worked for non-profit organizations, 14% who worked for private employers, and nine percent who were employed by state/local agencies. Respondents who worked for non-profit organizations or private employers were most likely to have informal teleworking. More than a quarter of respondents in these two groups said their employers permitted informal teleworking. State/local government agencies were least likely to permit teleworking under any arrangement. More than three-quarters (79%) of these respondents said their employer did not permit teleworking.

Arrangement by Employer Size – Teleworking arrangements also varied by the number of employees at respondents' worksites. These results are presented in Table 33.

Table 33
Formal or Informal Telework Arrangements
By Employer Size

Program Type	1-100 Employees (n=3,104)	101-250 Employees (n=719)	251-999 Employees (n=808)	1,000+ Employees (n=1,323)
Formal program	9%	19%	26%	34%
Informal arrangement	22%	21%	28%	25%
No program	69%	59%	46%	41%

Respondents who worked for large employers were more likely to have access to teleworking program and to have access to a formal program. More than half of these respondents said their employer had a formal program (34%) or permitted informal teleworking (25%). By contrast, only three in ten respondents who worked for employers with 100 or fewer employees had access to either formal (9%) or informal (22%) teleworking.

Telework Frequency – The frequency with which respondents teleworked is detailed in Table 34. About two in ten respondents who teleworked did so infrequently, either for special projects (10%) or less than once per month/only in emergencies (8%). About a quarter (26%) said they teleworked a few times each month. But more than half (56%) said they teleworked at least one day per week.

On average, respondents who said they were teleworkers used this arrangement about 1.5 days per week. This overall average 1.5 days per week frequency represents an increase from the 1.3 days per week average observed in the 2004 SOC survey and a further increase from the 1.1 days per week average estimated for teleworking in 2001.

Table 34
Frequency of Telework
(n=1,132)

Frequency	Percentage
Occasionally for special projects	10%
Less than once per month/emergency	8%
1 – 3 times per month	26%
1 day per week	18%
2 days per week	16%
3 or more times per week	22%
Average (mean) days per week	**1.5**

Note that this 1.5 days per week frequency is lower than the 2.6 days per week frequency indicated earlier for respondents who teleworked during the survey week. But the 1.5 day per week overall telework frequency accounts for both the actual frequency of respondents who teleworked during the survey week and an expected weekly frequency for respondents who did not telework during the survey week, but said they occasionally teleworked (e.g., one to three times per month).

As with the rate of teleworking, the frequency of teleworking varied by personal and employment characteristics of respondents. Respondents in the following groups teleworked substantially more days per week than the average of 1.5 days per week:

- Teleworked from a location other than home 2.3 days per week
- Teleworked under a formal arrangement 1.9 days per week
- Worked in sales occupations 1.8 days per week
- Worked for very small employers (1-25 employees) 1.8 days per week
- Worked in Virginia 1.7 days per week

Respondents in the following groups teleworked fewer days per week than average:

- Teleworked under an informal arrangement with supervisor 1.2 days per week
- Respondents who worked for state/local organizations 1.2 days per week
- Worked in the District of Columbia 1.2 days per week
- Worked for Federal government agencies 1.1 days per week
- Worked for employers with 251 or more employees 0.9 days per week

Telework Locations – As shown in Table 35, the overwhelming percentage (95%) of teleworkers said they teleworked exclusively from home. A very few teleworkers named another telework location. About two percent mentioned that they teleworked some days from home, but some days also from an-

other location, such as a satellite office. Nine respondents (less than one percent) said they teleworked from one of the 16 telework centers located in the Washington metropolitan region.

Table 35
Telework Work Place
(n=1,132)

Locations	Percentage
Home	95%
Both home and other location	2%
Satellite office provided by employer	1%
Telework center	<1%
Other*	1%

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

Distance to Telework Location Outside the Home – About five percent of teleworkers telework from a location outside their homes. They traveled an average distance of 7.5 miles to these locations. The distribution by distance categories is displayed in Table 36.

Table 36
Distance from Home to Non-Home Telework Location
(n=26)*

Distance (miles)	Percentage
1 mile or less	15%
2 – 5 miles	30%
6 – 10 miles	32%
11 – 29 miles	10%
30 miles or more	13%
Mean*	**7.5 miles**

* Base and mean exclude 3 respondents who said they traveled 50 or more miles to the telework locations outside the home.

More than three-fourths (77%) of these respondents traveled 10 miles or less to the location. A tenth (10%) traveled between 11 and 29 miles and the remaining 13% said they traveled 30 or more miles.

Access Mode to Non-Home Telework Locations – Respondents who teleworked from locations other than home were asked what mode of travel they used to reach those locations. Results are shown in Table 37. The majority of respondents drove alone (78%). About two in ten used an alternative mode: bicycle/walk (8%), transit (7%), or carpool (5%).

Table 37
Access Mode to Non-Home Telework Locations
(n=37)

Access Mode	Percentage
Drive alone	78%
Bicycle/walk	8%
Transit	7%
Carpool/vanpool	5%
Taxi	2%

Other Work Performed Away From Main Workplace (Non-Telework)

As was noted in the introduction to this section, the survey included only full-day and single-location working arrangements as telework. But several new questions were asked in the 2007 SOC survey to assess the incidence of other situations in which workers work away from a main office, either for part of a day, at clients' office, or at several locations during the course of a day, such as an equipment repair technician or sales person might do in the course of the day.

The survey defined this alternative "work away" case as, "working at home or at a location other than your central work place during your normal work hours." This definition would allow for part-day work away and multiple location work away, situations that would not have been considered telework, under the SOC survey definition. The survey asked respondents: 1) if they occasionally worked under such an arrangement, 2) where they worked in these cases, and 3) how often they worked this way.

About one in eight (13%) commuters said they did not telework, but occasionally worked away from their main work location under a non-telework arrangement. Nearly seven in ten (69%) of these respondents worked in professional or executive / managerial jobs and 60% had household incomes of $100,000 or more.

Table 38 shows the locations at which this work was performed. Nearly three-quarters (73%) said they worked at home on these days. This is considerably less than the 95% of all-day teleworkers who said they teleworked from home. The difference between telework and the "work away" situations reflects work performed at "client's or customer's office (10%), "satellite office or other office of my employer" (10%) or at a "community or business center" (5%).

Table 38
Summary of Other Work Away from Main Workplace (Non-Telework)
All Respondents who are not Self-Employed/Work at Home
(n=6,186)

Work Away from Main Workplace	Percentage
Currently working away from main workplace	13%
Other work locations used (n=801)	
- Home	73%
- Client/customer office	10%
- Satellite office/other office of my employer	10%
- Community or business center	5%
- Other	2%

Frequency of Work Away from the Main Workplace – Table 39 shows the frequency with which respondents worked at these other workplaces. More than four in ten of these respondents said they worked these other arrangements infrequently, either occasionally for special projects (24%) or less than once per month/only in emergencies (19%). Three in ten (30%) said they worked this arrangement a few times each month. The remaining 27% said they worked away from the main workplace at least one day per week. On average, respondents worked away from the main workplace only about 0.7 days per week, or about how the frequency of those who said they teleworked

Table 39
Frequency of Work Away from the Main Workplace
(n=804)

Frequency	Percentage
Occasionally for special projects	24%
Less than once per month/emergency	19%
1 – 3 times per month	30%
1 day per week	10%
2 days per week	9%
3 or more times per week	8%
Average (mean) days per week	**0.7**

3-D AVAILABILITY OF AND ATTITUDES TOWARD TRANSPORTATION OPTIONS

The third major section of the State of the Commute Survey examined the availability of transportation options, such as transit, and respondents' attitudes toward these options.

Availability of Transportation Options

Public Transportation – Respondents who worked outside their homes were asked to name any public transportation companies that they provided service in the area where they lived and the area where they worked. Respondents also were asked how far their homes were from the nearest bus stop and the nearest train station.

Transit Companies Operating – Table 40 presents the results for the first question. As shown, a large majority (83%) of respondents said that they knew the name of some public transportation that provided service in their home area. More than half (52%) said they knew of both bus and rail service, another quarter (27%) said they knew of bus service but not rail, and five percent said they knew of train service but not bus service. The remaining respondents said either that no bus or train companies provided service (10%) or that they thought service operated but didn't know the name of the companies (7%).

Table 40
Transit Service Operating in Home Area and Work Area
(n=6,055)

Transit Service Operating	Home Area Percentage	Work Area Percentage
Bus and train	52%	51%
Bus only - no train service	27%	20%
Train only – No bus service	5%	7%
Service operated but don't know companies	7%	13%
No bus or train service	10%	8%

The percentage who said they knew names of transit companies that provided service in their work area was slightly lower, but still more than three-quarters (78%). Half (51%) said they knew of both bus and train service, two in ten (20%) said they knew of bus service only, and seven percent said they knew only that train service was provided. One in ten said that no transit companies operated either bus or rail service in their work area (8%) and 13% said they believed some service was available but didn't know the names of companies that provided service.

The specific companies that respondents could name are presented in Table 41. Not surprisingly, the two companies mentioned most frequently for both home and work area were those that operate throughout the region. About half (49%) noted Metrobus provided service in their home area and a

slightly higher percentage (53%) said Metrobus provided service in the area where they worked. Similar percentages said that Metrorail/subway operated in their home area (45%) and at work (51%).

Table 41
Public Transportation Companies that Provide Service in Home Area and Work Area
(n=6,055)

Transit Available	Home Area Percentage	Work Area Percentage
Bus Available – Bus Companies		
Metrobus	49%	53%
Ride On	10%	7%
Fairfax Connector	6%	5%
THE BUS	5%	2%
Loudoun Commuter Bus	3%	1%
OmniRide	3%	2%
Alexandria DASH	2%	2%
MTA Bus	2%	2%
Other	10%	5%
Train Available – Train Companies		
Metrorail/subway	45%	51%
MARC	7%	6%
Virginia Railway Express	6%	5%
AMTRAK/ACELA	3%	2%

*Might add to more than 100% because multiple responses were permitted.

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

Three bus companies that provide service in part of the region were noted by at least five percent of respondents. Ten percent of respondents said RideOn, operated in their home area (Montgomery County, MD), six percent mentioned Fairfax Connector, serving Fairfax County, VA, and five percent named THE BUS, which serves Prince George's County, MD. These bus companies also topped the list of services available in respondents' work areas, but they were mentioned by slightly lower percentages of respondents.

In addition to Metrorail, respondents noted names of three commuter rail companies. MARC, operating several lines in Maryland, and Virginia Railway Express (VRE), serving Northern Virginia areas, were cited by seven percent and six percent of respondents, respectively. Three percent of respondents said AMTRAK provided service from their home area. These services also were noted as serving work areas, but percentages similar to those for the home areas.

Distance to Bus Stop and Train Station – The results presented above reflect respondents' perception of transit availability; they are not an objective measure of transit availability or level of transit access. A respondent who is willing to drive to a bus stop or rail station might consider service that operates within five miles of his home to be "in my home area," while another respondent who lives within one mile could feel that "no transit operates." The survey also did not address other factors that might enter into a respondent's assessment of the practical feasibility of using transit, such as the directness of the trip or the time needed to make the trip. It's possible some respondents considered these factors in assessing whether "service was provided" and others might have excluded them from their assessment.

To assess a measure of the closeness of transit, all respondents, including those who said no transit operated, were asked the distance from their homes to the nearest bus stop and nearest train station. Table 42 shows the distribution of access distance. More than half of the respondents said they lived within one-half mile of a bus stop and more than 80% said they lived within two miles of a bus stop. Over all respondents, the average distance was 1.5 miles.

Table 42
Distance from Home to Bus Stop and Train Station

Distance	**Bus Stop** (n=5,003)	**Train Station** (n=5,013)
Less than 0.5 mile	52%	7%
0.5 – 0.9 miles	16%	10%
1.0 – 1.9 miles	13%	18%
2.0 – 5.9 miles	11%	33%
6.0 miles or more	7%	33%
Mean	1.5 miles	6.4 miles

Train stations were quite a bit farther away for most respondents. Only seven percent said they were within one-half mile of a Metrorail or commuter rail station and fewer than two in ten lived within a mile. More than two-thirds said they were at least two miles away from the nearest train station. On average, respondents lived an average of 6.4 miles away.

Table 43 presents a comparison of the transit access distance for the five transit categories in Table 42. Again, it is important to emphasize that "service provided" was defined by respondents' perception. Respondents who said both bus and train service operated reported the shortest distance to transit access points, 0.7 miles to the nearest bus stop and 3.5 miles to the nearest train station.

Table 43
Mean Distance from Home to Bus Stop and Train Station
By Type of Transit Service Operating in Home Area

Service Provided	Bus Stop	Train Station
Bus and train provided (bus n = 2,426, train n = 2,488)	0.7 miles	3.5 miles
Bus only - no train service provided (bus n = 1,548, train n = 1,372)	1.6 miles	10.1 miles
Train only – No bus service provided (bus n = 221, train n = 283)	2.5 miles	4.8 miles
Service provided but don't know companies (bus n = 289, train n = 304)	2.3 miles	9.7 miles
No bus or train service provided (bus n = 524, train n = 566)	7.1 miles	15.0 miles

Respondents who said only bus operated in their home area lived on average 1.6 miles from a bus stop but 10.1 miles from a train station. Among respondents who reported only access to train, the bus stop distance was greater than in the "bus operates" category but the train station distance was nearly as close as for respondents who had both bus and train available.

Respondents were asked to estimate the distance to bus and rail, even if they said neither bus nor rail operated in the area where they lived. Not surprisingly, as seen in Table 43, these respondents reported the greatest access distances, 7.1 miles to the nearest bus stop and 15.0 miles to the nearest rail station. Because these respondents reported no service operating, these distances were clearly beyond the area these respondents classified as their "home area."

Transit Service Provided by Home Area – The analysis examined availability of transit services by the location of respondents' home, with the region divided into three categories representing concentric rings around the central core. The core area included the City of Alexandria, Arlington County, and the District of Columbia. The inner ring included Fairfax, Montgomery, and Prince George's counties. The outer ring included Calvert, Charles, Frederick, Loudoun, and Prince William counties. Table 44 presents the percentage of respondents in each area who said bus and/or rail operated in their home area and the average distance from their homes to bus stops and train stations.

As expected both bus and train service were more available in the central part of the region than in the outer jurisdictions. In the core area, 72% of respondents said both bus and train service operated in their home area and an additional 23% said either bus or train operated. By contrast, only about half of respondents in the inner ring said both bus and train operated and another 31% said either bus or rail companies provided service. Transit availability dropped off markedly in the outer ring; only 25% of respondents said both bus and train operated and only two-thirds said they had access to any transit.

Table 44
Bus and Train Service by Home Area

	Core Area	Inner Ring	Outer Ring
Transit Operating	1,644	1,629	2,782
Bus and train	72%	56%	25%
Bus only - no train service	18%	28%	31%
Train only – No bus service	5%	3%	8%
Service operated but don't know companies	4%	5%	12%
No bus or train service	1%	8%	23%
Access Distance			
Nearest bus stop distance (core n=1,522, inner n=1,460, outer n=2,011)	0.3 miles	1.0 miles	4.8 miles
Nearest rail station distance (core n=1,490, inner n=1,409, outer n=2,115)	1.5 miles	5.2 miles	14.8 miles

Not surprisingly, the average transit access distance was the shortest for respondents who lived in the core area; just 0.3 miles to the nearest bus stop and 1.5 miles to the nearest train station. Respondents in the inner ring said they would have to travel 1.0 miles to the nearest bus stop and 5.2 miles to the nearest train station. Respondents who lived in the outer ring reported that the nearest bus stop was an average of 4.8 miles away and train was 14.8 miles away.

Distance to Bus Stops and Train Stations by Home Location – As noted above, respondents were asked the distance to the nearest bus stop and train station even if they said no transit service operated in their home areas. Table 45 displays, for each of the three home areas, the average distances and distributions of distances for respondents who said transit service (either or both bus and train) operated in their home area and for those who said no transit service operated. The top section of the table shows results for bus stop distance and the bottom section presents results for distance to the nearest train station.

As would be expected, respondents who reported that transit service was available reported shorter distances than did respondents who said transit did not operate. For example, respondents who lived in the core area and who said transit operated in their home area reported an average distance of 0.3 mile to the nearest bus stop, while respondents who lived in this area but said transit service was not available reported an average distance of 2.7 miles to the nearest bus stop. Similar gaps in bus access distance were noted for the inner ring and outer ring.

Table 45
Distance to Bus and Train Service by Home Area and Transit Available

Distance to Transit Stop	Core Area		Inner Ring		Outer Ring	
	Transit Available	No Transit	Transit Available	No Transit	Transit Available	No Transit
Bus Stop						
(n = __)	1,558	22	1,417	124	1,734	695
Ave Distance	0.3 mi	2.7 mi	0.7 mi	4.4 mi	3.5 mi	9.7 mi
0.1 – 0.9 mi	88%	45%	71%	18%	27%	6%
1.0 – 1.9 mi	6%	14%	13%	18%	16%	6%
2.0 – 5.9 mi	1%	7%	8%	15%	23%	14%
6 or more mi	0%	5%	1%	18%	15%	36%
Don't know	5%	29%	7%	31%	19%	37%
Train Station						
(n = __)	1,558	22	1,417	124	1,734	695
Ave Distance	1.5 mi	6.4 mi	4.8 mi	9.5 mi	13.3 mi	20.0 mi
0.1 – 0.9 mi	44%	2%	10%	2%	2%	1%
1.0 – 1.9 mi	26%	10%	18%	4%	4%	1%
2.0 – 5.9 mi	18%	21%	37%	19%	24%	5%
6 or more mi	3%	19%	25%	46%	55%	60%
Don't know	9%	47%	11%	28%	15%	33%

The table also shows the percentage distribution of respondents by the distances they reported. Again as expected, in each home area, higher percentages of respondents who said transit was available reported short distances to bus stops than did those who said transit was not available. In the core are, 94% of respondents who said transit was available said they lived less than two miles from the nearest bus stop. In the inner ring, 84% who said transit was available lived within two miles. In the outer ring, this percentage was 43%.

But in each area, some respondents who said transit was not available reported relatively short distances to bus stops. For example, in the core area, nearly half (45%) of respondents who said transit did not operate in their home area said they lived less than one mile from the nearest bus stop. The corresponding percentages for the inner ring and outer ring were considerably lower; 18% and 6%, respectively, reported that no transit service operated in their home area but that the nearest bus stop was less than one mile away. These results suggest respondents in the core area had a quite narrow perception of the

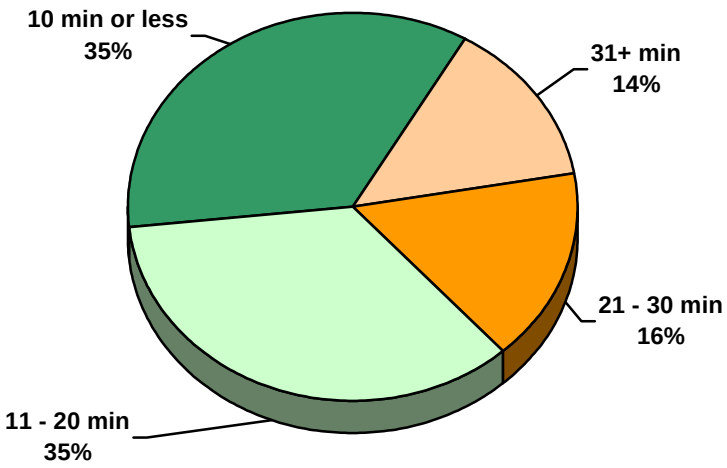
distance covered by "home area," while inner ring and outer ring residents view of their "home area" was more expansive.

Table 45 also presents results for the distance to the nearest train station. In all home area groups, access distances for rail were greater than for bus, but the same patterns were observed for train as for bus. Residents of the core area reported shorter average distances to rail than did respondents in either the inner ring or outer ring. And respondents who reported that transit was not available were likely to report considerably longer access distances than were respondents who said transit was available.

Availability and Use of HOV Lanes – The survey also examined the availability and use of High Occupancy Vehicle (HOV) lanes. More than one in four (28%) of the respondents who commuted one or more days per week said there was a special HOV lane along their route to work and 27% of these commuters said they used these lanes. This equated to about eight percent of total respondents who did not work at home full-time. These were essentially the same percentages as reported HOV availability and HOV use in 2004.

Respondents who regularly used the HOV lane for commuting estimated that using the lane saved them an average of 21 minutes for each one-way trip. As displayed in Figure 7, a third (35%) said they saved 10 minutes or less and another third (35%) saved between 11 and 20 minutes. The remaining HOV users were evenly split between savings of 21 to 30 minutes and greater than 30 minutes one-way.

Figure 7
Travel Time Saving of HOV Users
(n=408)



HOV Lanes by Home Area – Table 46 shows availability and use of HOV lanes by respondents' jurisdictions of residence. Virginia residents had higher HOV availability than did residents of Maryland or the District of Columbia. At least one-third of respondents in each of the five Virginia jurisdictions said an

HOV lane was available to them and in Prince William County more than half (54%) of the respondents reported HOV lanes available.

Table 46
Availability and Use of HOV Lanes
by County of Residence

County	All Respondents		Respondents With HOV Available	
	(n=___)	Percentage with HOV lane available	(n=___)*	Percentage using HOV lane
Washington metro region	5,923	28%	1,641	27%
Virginia jurisdictions				
Prince William County, VA	557	54%	299	**47%**
Alexandria, VA	531	42%	227	21%
Fairfax County, VA	508	42%	211	26%
Loudoun County, VA	538	41%	220	29%
Arlington County, VA	532	36%	188	22%
Maryland jurisdictions				
Frederick County, MD	546	30%	167	**36%**
Montgomery County, MD	529	25%	134	22%
Prince George's, Co., MD	553	14%	77	22%
Charles County, MD	571	6%	32	19%
Calvert County, MD	539	5%	26	15%
District of Columbia	519	12%	60	15%

* Respondents in the county who have an HOV lane available along their route to work.

By comparison, less than one-third of residents in any Maryland jurisdiction reported HOV availability and in only two Maryland jurisdictions, Frederick County (30%) and Montgomery County (25%), did more than 15% of respondents have access to HOV lanes.

The last column of Table 46 illustrates the use of HOV lanes by county of residence for respondents who said they had HOV access. More than a quarter (27%) of all regional respondents who had HOV access on their route to work used HOV. HOV use when lanes were available was fairly consistent across the region with about 20% to 25% of respondents using the lanes, but two counties were exceptions to this general pattern. Nearly half (47%) of Prince William residents and 36% of Frederick County residents how had access to HOV lanes said they used them for their trip to work.

HOV Lane Influence on Commute Choice – HOV lanes appear to have an impact on choice of commute modes. Half (50%) of the respondents who used the lanes for commuting said availability of the HOV lane influenced their decision to carpool, vanpool, or ride transit for their commute. The influence on carpooling is best illustrated by the drive alone and carpool/vanpool mode shares when HOV lanes are available and when they are not.

As shown in Table 47, about 11% of respondents who said an HOV lane was available to them were carpooling or vanpooling one or more days per week, compared with six percent of respondents who did not have access to HOV. And the drive alone rate for respondents who had access to HOV was 69%, compared to 74% for respondents who could not use HOV.

Table 47
Current Commute Modes (1+ days per week) by
Availability of HOV Lanes

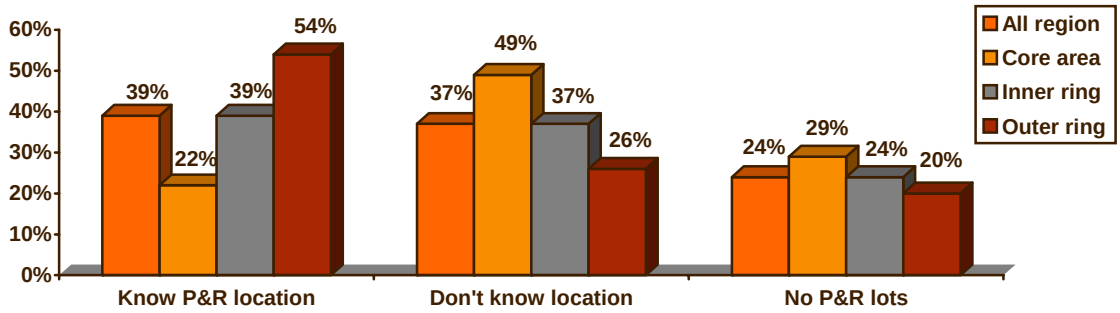
Primary Mode	**HOV Available *** (n=1,644)	**HOV Not Available *** (n=4,279)
Drive alone	69%	74%
Carpool/vanpool	11%	6%
Bus	5%	5%
Train	14%	12%
Bike/walk	<1%	3%

* Might add to more than 100% because some respondents used more than one mode

Park & Ride Lot Availability and Use – Figure 8 depicts respondents' awareness of the locations of Park & Ride lots along their route to work. About four in ten respondents (39%) across the region said they knew the locations of Park & Ride lots along their commuting route. About a third (37%) said they did not know the locations. A quarter (24%) said there were no Park & Ride lots along their route to work.

The figure also shows that awareness / availability of P & R lots varied substantially by home location in the region. Respondents who lived in the core area were least likely (22%) to say they knew of a P & R lot on their route; only 22% of these respondents knew of a lot, while 39% of respondents who lived in the inner ring and 54% of residents of the outer ring knew of a lot along their route to work.

Figure 8
Awareness of Park & Ride Lots Along Route to Work – By Home Location
(regional n=6,045, core area n=2,269, inner ring n=1,989, outer ring n=1,412)



Of those who knew the locations, 19% had used these lots when commuting during the past year. These respondents represented seven percent of the total respondents in the survey, about the same percentage of respondents who reported use of Park & Ride lots in both the 2004 and 2001 SOC surveys.

Attitudes Toward Transportation Options

Respondents who did not ride a bus to work were asked why they did not use this service. Similarly, respondents who did not use the train and those who did not carpool or vanpool were asked why they did not use these modes. Table 48 shows reasons mentioned by respondents, grouped by mode and by three reason categories: service availability, service characteristics, and personal preferences/needs.

As illustrated, respondents cited some prominent reasons in each of the three categories. The top three reasons cited for each mode are shown in bold type. For example, about one in five respondents said they did not use the bus because it was not available (16%) or they did not know if it was available (3%). About half of all respondents said these were their reasons for not riding the train. "Don't know anyone to carpool or vanpool with" topped the list of reasons for respondents who did not carpool. It was named by nearly half (48%) of respondents.

Respondents who did not use bus or train also noted several characteristics of the services as barriers to their use. The overwhelming reason in this group was "takes too much time," but respondents also noted "don't like to ride with strangers, prefer to be alone" and "service is/could be "unreliable." Respondents also noted not wanting to ride with strangers as a deterrent to carpooling.

Common reasons in the personal preferences/needs category included "need my car for work" and "need my car before or after work." "Irregular work schedules" was noted as a barrier to carpooling by 18% of respondents. "Trip is too long/too far" was named by 10% of respondents regarding bus use.

Table 48
Reasons for Not Riding the Bus, Train or Using Carpool / Vanpool to Work*

Reasons	Bus (n=5,823)	Train (n=5,255)	CP/VP (n=6,051)
Service Availability **			
No service available in home/work area	**16%**	**27%**	N/A
Don't know if service is available/location of service	3%	3%	N/A
Don't know anyone to carpool/vanpool with	N/A	N/A	**48%**
Service Characteristics			
Takes too much time	**31%**	**22%**	5%
Bus/train/carpool partner could be unreliable/late	5%	2%	1%
Don't like to ride with strangers, prefer to be alone	6%	5%	4%
Too expensive	2%	4%	<1%
Have to transfer/too many transfers	4%	3%	N/A
Have to wait too long for service	2%	<1%	NA
Use other alternative mode	3%	N/A	2%
Too uncomfortable/crowded	2%	N/A	NA
Doesn't save time	<1	<1	5%
Personal Preferences/Needs			
Need my car for work	**16%**	**14%**	**9%**
Work schedule irregular	8%	5%	**18%**
Trip is too long/distance too far	10%	6%	<1%
Need car before/after work	9%	4%	11%
Live close to work, can walk, use other mode	3%	2%	3%
Need car for emergencies/overtime	<2%	<1%	3%
Other***	6%	13%	5%

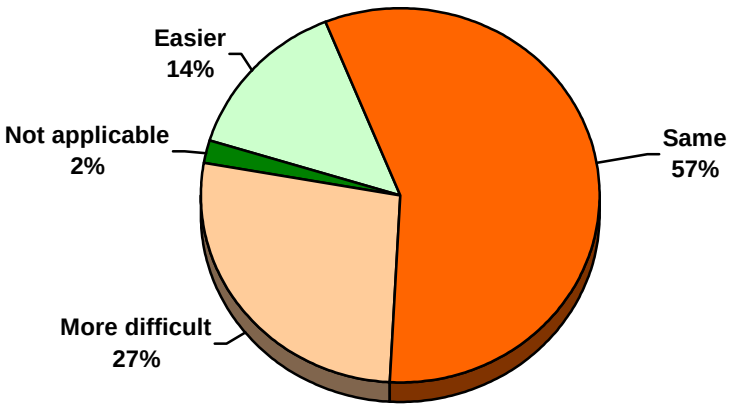
*Might add to more than 100% because multiple responses were permitted.

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

*** Note that respondents who said no train or bus service was available also were permitted to answer other reasons why they could not use bus or train

Ease of Commute Compared to Last Year – Respondents who did not telework or work at home all the time were asked if their commute time was easier, more difficult, or about the same as it was a year prior. As seen in Figure 9, the majority of respondents (57%) said their commute is about the same. About a quarter (27%) said their commute was more difficult and 14% said their commute was easier. About two percent of respondents said they were not commuting in the Washington region a year ago, so could not provide a comparison.

Figure 9
Commute Easier, More Difficult, or Same as Last Year
(n=6,068)



Respondents who said their commute had changed were asked in what way it was easier or more difficult. The top section of Table 49 lists reasons that respondents' commutes had improved and the bottom section shows the reasons that respondents' commutes had worsened.

Easier Commute – The most common reason for an easier commute was that it was shorter, cited by 36% of these respondents. This is likely due to a change in either a work location or home location. About a quarter of respondents said the trip was faster (26%) or the route they used was less congested (27%). One in ten respondents (9%) said the commute was less stressful. About one in ten respondents said their commute was easier because they had started using a different mode for commuting (e.g., started using bus, train, carpool, driving alone, walking, or bicycling).

More Difficult Commute – An overwhelming majority (75%) of respondents who said their commute was more difficult said their route had become more congested. About a tenth of respondents said either the distance was longer (12%) or the trip took more time (12%). About seven percent said the trip was more stressful and a similar percentage said that construction was occurring along the route.

Table 49
Reasons for Easier or More Difficult Commute

Reasons	Percentage
Easier Commute (n=810)	
Shorter distance	36%
Trip is faster, takes less time	26%
Route is less congested	27%
Trip is less stressful	9%
Changed work locations or work hours	5%
Started driving alone to work	4%
Started using bus or train to work	4%
Started carpooling/vanpooling to work	2%
Started using HOV lane	2%
Other	7%
More Difficult Commute (n=1,726)	
Route is more congested	75%
Longer distance	12%
Trip is slower, takes more time	12%
Trip is more stressful	7%
Construction along route	7%
Train, bus, Metro more crowded	3%
Other	6%

*Might add to more than 100% because multiple responses were permitted.

Influence of Changes in Residence or Work Location – Because it was expected that a commute might have become easier or more difficult because the origin and/or destination of the commute changed, all respondents were asked if they had made a change in their work location and/or home location in the past year. Table 50 displays results of commute ease for respondents who did and did not make a move.

About 17% made a change and 83% made no change. Eighty percent said they moved within the Washington metropolitan region. The other 20% moved from a location outside the Washington area. Because those who moved from outside the region could not provide a before-the-move comparison, they were excluded form the base for Table 50.

Table 50
Commute Compared to Last Year
by Made a Change in Work or Residence Location

Changed Home or Work Location	(n =__)	Easier	More Difficult	About the Same
No change	4,876	10%	26%	63%
Yes	1,043	34%	33%	33%
Type of change made				
Changed home	336	26%	33%	41%
Changed work	504	38%	34%	28%
Changed home and work	203	35%	30%	35%

The percentages shown in the table suggest the ease or difficulty of the commute appears to have been related to moves for at least some of the respondents. The majority (63%) of respondents who did not move said their commutes were about the same. About 10% said their commute had improved and about a quarter (25%) said it had gotten more difficult. A similar percentage (33%) of respondents who moved said they had a more difficult commute. But the percentage of these respondents who said their commute had improved was much higher, 34%, than the percentage of respondents who had an easier commute without a move. This suggests that the move might have played a role in either improving or worsening a commute, but that the move more often improved the commute.

The table also shows a breakdown of change in commute conditions by the type of move made: home only, work only, or both home and work. The differences between responses for these groups are small and with one exception are within the statistical margin of error. The only statistically significant difference was for the percentage of "about the same" for respondents who said they made only a home location change (41%) and the percentage who made only a work location change (28%).

Commuting as a Factor in Location Change Decisions – In recent years, anecdotal reports have suggested that some commuters might move their residences and/or seek new jobs at least in part because they wanted to make their commute easier or less costly. Several new questions were added to the SOC survey in 2007 to examine if commute factors were influencing residents of the area to make home or work location changes. Respondents who said they had made a change were asked what factors they considered in making the change and how important to their decision the ease of the trip to work was compared to other factors they considered. Table 51 displays the decision factors respondents mentioned.

About two in ten respondents cited a commute-related factor as one factor that they considered in the moving decision. Length or ease of commute was cited by 16%; smaller percentages said the cost of commuting or the range of commuting options available at the new location had been a factor.

Table 51
Factors Considered in Home or Work Location Changes
Respondents who Made a Change in Work or Residence Location

Location Change Decisions	Percentage (n=1,058)
Commute Factors	
Length of ease of commute	16%
Cost of commuting	3%
Commuting options that would be available	3%
Residential Factors	
Size of house	8%
Closeness to family or friends	6%
Quality of neighborhood	6%
Cost of living	5%
Cost of housing	4%
Quality of schools, stay in same school system	2%
Entertainment, shopping, services nearby	1%
Job Factors	
Career advancement	19%
Job satisfaction	13%
Income, salary	11%
Job transfer	6%
Job opportunities for spouse	3%
Other	11%

The job factor of career advancement was noted by 19% of respondents as a factor in the decision; job satisfaction (13%) and income/salary (11%) were named by at least one in ten respondents. About a third named a residential factor, such as the size of the house (8%), quality of the neighborhood (6%) or closeness to family and friends (6%) as factors they considered.

These respondents next were asked how important commuting factors had been in their decision, relative to the other factors they considered. Table 52 shows that a quarter (28%) said the commute factors were more important the others, four in ten (41%) said they were about equally important, and 25% said commuting factors were less important.

Table 52
Importance of Commute Ease Relative to Other Factors Considered in Home or Work Location Changes
Respondents who Made a Change in Work or Residence Location
(n=981)

Importance of Commute Ease	Percentage
More important than other factors	28%
About the same importance as other factors	41%
Less important than other factors	25%
Don't know	7%

Finally, employees who made a residential location change were asked if their employers had offered any information about financial incentives that might be available if the respondent moved to a home that was closer to the work location or moved closer to a bus stop or transit station.

These questions were designed to provide a baseline against which to measure the future impact of a new program Commuter Connections will be implementing during 2007. The "Live Near Your Work" program will encourage employers to inform employees of several state and/or federal financial incentives offered to employees who choose a home location that reduces the distance they travel to work or who choose a home location near a transit stop. The survey found that seven percent of respondents who had moved their homes had received information from their employers. Five percent said they receive information on financial incentives to move closer to transit.

3-E AWARENESS OF COMMUTE ADVERTISING AND SERVICES

Commute Advertising Recall

The next set of questions in the survey inquired about respondents' awareness of commute information advertising. Just over half (52%) of all respondents said they had seen, heard, or read advertising about commuting in the six months prior to the survey. This was just slightly less than the 55% awareness that had been reported in the 2004 SOC survey.

Message Recall – These respondents were then asked what messages they recalled from this advertising. Approximately two-thirds (65%) could cite a specific message, approximately the same as the 63% who could recall a message in 2004. Table 53 lists messages respondents in the 2007 survey remembered and the percentage of respondents who cited each message. It also shows similar results for the 2004 and 2001 SOC surveys. The messages are divided into two categories: general rideshare and commute programs/services.

General Rideshare Messages – The top reason noted was a general rideshare message, "use the bus, train, Metrorail," which was recalled by 18% of respondents. This was more than twice as high as the seven percent who named this reason in 2004 and 2001. Smaller numbers of respondents mentioned rideshare benefit messages in 2007: "it reduces traffic" (5%), "it would help the environment" (5%), "it saves time" (3%), and "it's less stressful" (3%). Recall of all of these messages was essentially the same as in 2004, but below the recall noted in the 2001 survey.

Commute Program/Service Messages – Commuters cited several commute program or service messages. About 14% mentioned "you can call for carpool/vanpool information" and seven percent said they had heard that "new trains or buses are coming." These were similar percentages to those found for these messages in 2004.

One message that had dropped in awareness was that of Guaranteed Ride Home. In 2007, six percent volunteered this response, half the number who mentioned it in 2004. This is likely related to the change in Commuter Connections' regional marketing campaign, which curtailed GRH advertising as a specific message. Respondents also recalled other message specifically about Commuter Connections program or service, including, "call 1-800-745-RIDE/call Commuter Connections" (4%) and "Telework Center or teleworking" (3%). These percentages were about the same as were noted in 2004.

Table 53
Recall and Influence of Advertising Messages

Message Recalled	2007 SOC* (n=3,396)	2004 SOC* (n=4,014)	2001 SOC* (n=4,036)
General Ridesharing Messages			
Use the bus, train, Metrorail	18%	7%	7%
It reduces traffic	5%	3%	5%
It would help the environment	5%	2%	4%
It saves time	3%	2%	10%
It saves money	3%	<1%	<1%
It is less stressful	2%	1%	2%
Share a ride/ridesharing	<1%	<1%	3%
Commute Program/Service Messages			
You can call for carpool/vanpool info	14%	17%	9%
New trains or buses are coming	7%	7%	4%
Guaranteed Ride Home	6%	12%	3%
Call 1-800-745-RIDE/Commuter Connections	4%	6%	5%
HOV lanes	3%	2%	12%
Telework Center/teleworking	3%	3%	2%
Employer would give Metrochek benefits	1%	2%	3%
None, don't know	35%	37%	30%
Other **	10%	6%	6%

* Might add to more than 100% because multiple responses were permitted.

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

Recall of Advertising Sponsors – About four in ten (40%) said they remembered who sponsored the ad. These respondents mentioned the organizations listed in Table 54. The Washington Metropolitan Area Transit Authority (WMATA, Metro) was named by 20% of respondents. Commuter Connections or COG were named by nine percent of respondents, slightly less than the 13% who gave this response in 2004. Numerous other organizations were cited as sponsors in 2007, but each was named by less than one percent of respondents.

Table 54
Recall of Advertising Sponsors
(n=2,275)

Advertising Sponsor	Percentage
Metro, WMATA	20%
Commuter Connections, MWCOG	9%
Virginia Railway Express, VRE	0.9%
Virginia Dept. of Transportation (VDOT)	0.8%
District Dept. of Transportation (DDOT)	0.7%
Arlington County Commuter Services	0.7%
Maryland Mass Transit Administration (MTA)	0.6%
Fairfax County	0.5%
Don't remember, don't know	60%
Other *	14%

* Each response in the "Other category" mentioned by less than one-half of one percent of respondents.

Advertising Sources/Media – Table 55 presents the primary sources or media through which respondents heard, saw, or read commute advertising.

About a third (35%) of respondents who recalled an ad said they heard it on the radio. This was a significant drop from the 55% who mentioned radio as their source in 2004. By contrast, substantially higher percentages of 2007 respondents noted that they saw the ad in a newspaper (22% in 2007 vs 12% in 2004) or on a sign on a transit vehicle or at a bus stop or Metro station (20% in 2007 vs 9% in 2004). In both 2007 and 2004, about a quarter (25%) said they saw the ad on television. A few respondents mentioned other sources.

Advertising Source by Advertising Sponsor – As might be expected, not all advertising sponsors used the same media to disseminate their messages. Table 55 also shows a comparison for sources mentioned by two advertising sponsors, Commuter Connections / COG and WMATA / Metro. As indicated, the media through which respondents said they heard of advertising was different for the two sponsors. Nearly two-thirds (64%) of respondents who mentioned CC/COG said they heard the ad on the radio, while only 24% of respondents who mentioned Metro said radio was the source. Conversely, half (50%) of respondents who mentioned Metro as the source noted they saw or heard this ad on a train/bus or in a train station or at a bus stop.

Table 55
Advertising Source/Media
(n=2,275)

Advertising Source/Media *	2007 SOC vs 2004 SOC		By Ad Sponsor	
	2007 SOC	2004 SOC	COG/CC	WMATA
Sample size (n= __)	2,275	4,133	225	449
Radio	35%	55%	64%	24%
Television	25%	25%	19%	25%
Newspaper	22%	12%	10%	17%
Sign on transit vehicle, or at bus stop or Metro station	20%	9%	14%	52%
At work	5%	<1%	3%	4%
Website/internet	2%	2%	5%	2%
Roadside billboard/ad	2%	2%	0%	1%
Postcard in the mail	3%	1%	2%	2%
Don't remember	5%	3%	8%	3%
Other **	3%	4%	2%	3%

* Might add to more than 100% because multiple responses were permitted.

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

Commute Advertising Impact

Persuasiveness of Advertising Messages – The advertising appeared to have an effect for some respondents. About one in five (18%) respondents who had seen, heard, or read advertising said that they were more likely to consider ridesharing or using public transportation after seeing or hearing the advertising, the same percentage as in 2004. Table 56 presents the advertising messages that seemed more and less persuasive than average in 2007.

The most persuasive messages appealed to respondents' personal interest or needs. A third of respondents said they were more likely to consider using an alternative after hearing ads about "saving the environment," and a quarter who recalled ads for "it saves money," "it is less stressful," "use the bus, use Metrorail," or "Guaranteed Ride Home." All other ads were at about or lower than the average (18%) level in their "persuasiveness."

The respondents who were most persuaded by the advertising were those who were already using transit modes during the survey week. About 36% of bus riders, 25% of Metrorail riders, and 21% of carpoolers and vanpoolers said they were likely to consider using an alternative after hearing the ads, compared

with only 15% of respondents who were driving alone. It is possible that some respondents who said they were likely to consider alternative modes after hearing or seeing the ads and who were using alternatives at the time of the survey shifted to alternatives after hearing or seeing the ads. But this conclusion was not tested with the survey data.

Table 56
Likely to Consider Using Alternative Modes
After Seeing / Hearing Commute Advertising

Advertising Message Recalled	(n=___)*	Percentage Likely to Consider Alternative
It would help the environment	149	32%
It saves money	97	26%
It is less stressful	61	23%
Use the bus, train, Metrorail	548	23%
Guaranteed Ride Home	208	22%
Employer would give Metrochek/SmarTrip benefits	26	20%
It reduces traffic	145	19%
All messages		**18%**
Telework Center/teleworking	77	17%
New trains or buses are coming	196	17%
It saves time	66	16%
Call 1-800-745-RIDE/Commuter Connections	143	15%
Regional service available to help with commuting	43	13%
You can call for carpool/vanpool info	444	13%

* Respondents who recalled ad message.

Commute Actions Taken After Hearing or Seeing Commute Advertising – Respondents who said they were more likely to consider alternative modes after hearing the ads were asked if they had taken any actions to try to change how they commuted. About 16% of these respondents said they did take some action. Specific actions noted are presented in Table 57.

The majority of respondents who took an action said they sought information about commuting, primarily on the internet (4%). Five percent said they inquired about a specific commute service, such as HOV lanes, GRH, or teleworking and two percent said they looked for a carpool partner.

Less than one percent said they tried or started using an alternative mode for commuting. This reflected change by only four respondents, so no further analysis can be done on this small sample. Of the four respondents, two started to use transit and two started carpooling. Prior to starting these new modes, three of the respondents had been driving alone to work and one did not report the previous mode.

Table 57
Actions Taken to Change Commute After Hearing / Seeing Commute Advertising
(n=383)

Actions Taken	Percentage*
Sought info about commute service (e.g., GRH, HOV, telework)	5%
Looked for commute info on the internet	4%
Looked for a carpool/vanpool partner	2%
Contacted local/regional organization for commute info	1%
Changed route to work, started going to work earlier or later	1%
Asked family member or co-worker for commute info	<1%
Tried/started using alternative mode	<1%
No action	84%
Don't know	2%
Other **	3%

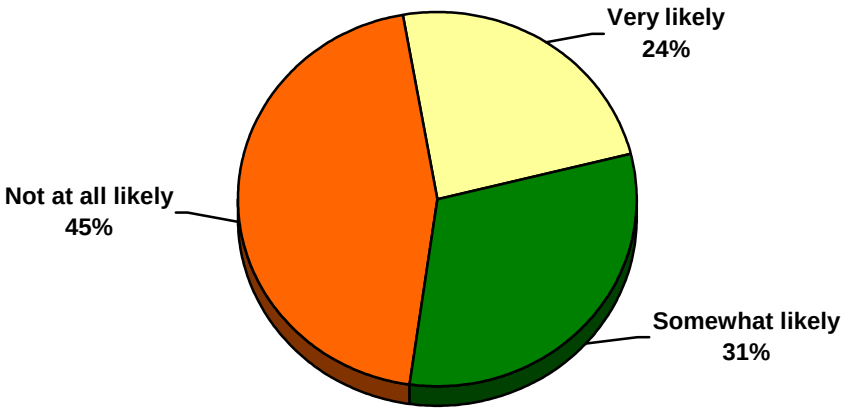
* Might add to more than 100% because multiple responses were permitted.

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

Influence of Ads on Commute Change Actions – More than two-thirds (67%) of respondents who had taken some action said the advertising they saw or heard encouraged the action. And more than 70% of respondents who took an action were driving alone at that time. This suggests that the advertising, although having a small impact on mode shifts, is acquainting drive alone commuters with other commuting opportunities and encouraging them to seek more information on these options.

This conclusion is supported by results of one additional question asked in this section about commute advertising. Respondents who sought information but had not made a commute mode change were asked how likely they were to try a form of transportation other than driving alone for their commute within the next year. As shown in Figure 10, 24% said they were very likely and 31% said they were somewhat likely to try an alternative mode. This is likely an overstatement of actual future changes, but it suggests that an initial effort to seek information might lead to commute changes at a later time.

Figure 10
Likely to Try Using an Alternative Mode Within the Next Year
(n=50)



3-F AWARENESS AND USE OF COMMUTER ASSISTANCE RESOURCES

Awareness of Commuter Assistance Numbers/Websites

The next set of questions in the survey investigated commuters' knowledge and use of regional commute assistance services. First, respondents were asked if they were aware of a telephone number or web site they could use to obtain information on ridesharing, public transportation, HOV lanes, and teleworking in the Washington region. In total, 51% of respondents said they knew such a number existed. This was higher than the 46% of respondents who said, in the 2004 SOC survey, that they knew a number to call for this information and higher still than the 33% of 2001 SOC survey respondents who said they knew a number or website existed.

The remaining respondents either said there was not such a phone number or website (31%) or that they did not know if a phone number or web site existed (18%).

Recall of Web Sites and Phone Numbers – When respondents who had said there was a regional phone number or web site were questioned on their recall of the actual number or website, about four in ten could name a specific number or web site. Table 58 summarizes the awareness of all numbers/web sites, as percentages of the regional population. About 11% named a WMATA phone number or web site. Commuter Connections was second only to WMATA as a regional information source, named by about two percent of all respondents. Other individual numbers or web sites were named by less than one percent of respondents who said they knew of such a resource.

When asked how they found out about the web sites/numbers they named, three in ten (30%) respondents said they learned about it from radio ad and 10% mentioned the television as the source. About one in ten (10%) cited the internet, 11% mentioned the employer, and 16% mentioned a sign or billboard. Twelve percent said they learned about the number or web site by word of mouth.

Table 58
Recall of Regional Commuter Assistance Telephone Number or Web site
(2007 n=6,600, 2004 n = 7,200)

Number or Web site		2007 SOC Percentage*	2004 SOC Percentage*
Not aware of phone number/web site		31%	38%
Don't know if a phone number exists		18%	16%
Aware of phone number/web site, but cannot name it		30%	31%
Aware of phone number/web site and can name it		21%	15%
Telephone numbers recalled:			
1-800-745-RIDE (7433)	**Commuter Connections/COG**	**0.8%**	**1.5%**
202-637-7000	METRO, WMATA	3.5%	1.4%
301-565-5870	Montgomery Transit Info Call Center	0.4%	0.2%
703-324-1111	Fairfax County Ridesources	0.4%	0.1%
866-Ride-MTA		0.4%	N/A
Web sites recalled:			
www.mwcog.org		**0.2%**	**0.2%**
www.commuterconnections.org		**0.3%**	**0.3%**
www.commuterconnections.com		**1.0%**	**1.0%**
wwww.wmata.com		6.8%	6.8%
www.vre.org		0.3%	0.3%
www.MetroOpensDoors.com		0.5%	N/A
www. Maryland.com (MARC)		0.5%	N/A
Other**		4.7%	3.0%

* Might add to more than 100% because multiple responses were permitted.

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

Awareness and Use of Commuter Connections Program

The "awareness" section of the questionnaire also explored respondents' awareness of the Commuter Connections Network and the services it offers commuters. Some indications of respondents' awareness of the program appeared in unprompted questions about regional commute advertising messages, advertising sponsors, and regional commuter information resources.

As noted earlier, two percent of the regional population named Commuter Connections as a regional information source without being prompted with the organization's name. But when directly asked if they had heard of an organization in the Washington region called Commuter Connections, an additional 51% of respondents said they had heard of the program for a total of 53%. This was slightly

lower name recognition than was observed n 2004. In the 2004 SOC survey, two-thirds (66%) said they had heard of Commuter Connections, either unprompted or prompted.

Referral Sources to Commuter Connections Program – Table 59 displays the methods by which respondents reported learning about Commuter Connections in 2007 and in 2004. In 2007, four in ten (43%) respondents cited the radio as their source of information and about 16% named television. A similar percentage named television in 2004, but the percentage who named radio was considerably higher in 2004 than in 2007. Word of mouth / referrals (8%), sign/billboard (7%), and newspaper ads or articles (7%) each were named by about one in twelve respondents. Smaller percentages cited other source, including internet (3%), employer (4%), or brochure (1%). About 14% said they didn't remember how they heard about Commuter Connections.

Table 59
Commuter Connections Program Referral Sources

Information Source	**2007 SOC Percentage** (n=3,614)	**2004 SOC Percentage** (n=4,133)
Radio	43%	56%
Television	16%	19%
Word of mouth, friend, co-worker	8%	5%
Sign/billboard	7%	5%
Newspaper ads/article	7%	4%
Internet	3%	2%
Employer	4%	2%
Sign on transit vehicle	2%	N/A
Brochure	1%	1%
Don't know	14%	10%
Other *	3%	4%

* Each response in "Other category" mentioned by less than one percent of respondents.

Awareness and Use of Commuter Connections' Services – Respondents who knew of Commuter Connections were asked what services the organization provided. Their responses are shown in Table 60. Respondents largely cited services that Commuter Connections actually does provide. About one third (39%) said they didn't know specific services, but almost half knew the organization offered either general rideshare information (24%) or help finding a carpool or vanpool partner (22%). A quarter (23%) knew that Commuter Connections sponsored a GRH program, much less than said they knew about this program in 2004. About six percent said Commuter Connections offered transit route and schedule information, which can be accessed through links on Commuter Connections' web site.

Table 60
Awareness of Commuter Connections Services

Commuter Connections Services	2007 SOC Percentage (n=3,614)	2004 SOC Percentage (n=4,133)
Guaranteed Ride Home (GRH)	23%	40%
Rideshare (carpool/vanpool) information	24%	28%
Help finding carpool/vanpool partners	22%	16%
Transit route/schedule information	6%	5%
Telework information	1%	2%
Park & Ride information	1%	N/A
Don't know	39%	36%
Other *	3%	1%

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

Respondents who knew of Commuter Connections also were asked if they had contacted the program or visited a Commuter Connections or COG website in the past year and if so, what information or services they were seeking. Five percent of respondents who knew of Commuter Connections had contacted the program. Table 61 lists the information respondents said they were seeking in this contact.

Table 61
Information and Services Sought in Contact to Commuter Connections
(n=200)

Commuter Connections Services	Percentage
Transit route/schedule information	33%
Rideshare (carpool/vanpool) information	21%
Guaranteed Ride Home (GRH)	19%
Help finding carpool/vanpool partners	14%
Driving directions	6%
MetroChek / SmarTrip	3%
Telework information	1%
Park & Ride lot information, parking information	1%
Other *	9%

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

The largest share of respondents who contacted Commuter Connections said they were seeking transit route or schedule information (33%). About two in ten were looking for general rideshare (car-pool/vanpool) information and 14% said they were looking for help finding a carpool or vanpool partner (14%). Two in ten (19%) said they were looking for information about Guaranteed Ride Home

Awareness and Use of Local Commuter Assistance Programs

Finally, respondents were asked about their awareness and use of local jurisdiction commuter programs that delivered commute assistance services in the areas where they lived and/or worked. Table 62 presents the percentage of respondents who said they had heard of each of the nine organizations, when prompted with the organizations' names.

Table 62
Heard of and Used Local Jurisdiction Commute Assistance Program

Organization	(n=___)	Percentage	
		Aware of Program	Used Program Service
Alexandria Rideshare (City of Alexandria, VA)	746	28%	<1%
Arlington County Commuter Services, The Commuter Store (Arlington County, VA)	879	37%	7%
Tri-County Council of Southern Maryland (Calvert and Charles Counties, MD)	1,223	35%	2%
Fairfax County RideSources (Fairfax County, VA)	1,331	11%	1%
TransIT Services of Frederick County (Frederick County, MD)	626	47%	4%
Loudoun County Office of Transportation Services (Loudoun County, VA)	662	31%	5%
Montgomery County Commuter Services, Bethesda Transportation Solutions, North Bethesda Transportation Center (Montgomery County, MD)	923	13%	1%
RideSmart (Prince Georges County, MD)	886	16%	1%
PRTC OmniMatch (Prince William County, VA)	630	49%	9%

Awareness of Local Programs – As shown awareness of these local programs ranged from 11% to 49% of respondents who were asked about a particular program. Six of the nine programs were known to at least a quarter of their target area respondents and four were known to a third or more.

Use of Local Jurisdiction Services – Table 62 also shows the percentage of respondents who said they had contacted the organizations. This again is the percentage of all respondents who lived or worked in the area served by the program. Nine percent of respondents in the PRTC OmniMatch area said they had contacted this organization and seven percent of respondents who lived or worked in Arlington County

said they contacted Arlington County Commuter Services or The Commuter Store. Five percent of respondents in Loudoun County and four percent of commuters in Frederick County contacted the commuter service organizations in their areas. All other local organizations had lower contact levels.

Respondents who had contacted a local jurisdiction program were asked what information or services they were seeking. The services desired are shown in Table 63. By far, the most prominent service sought by respondents was transit information, sought by 60% of respondents who contacted a local program. Much smaller percentages said they were looking for rideshare information (8%) or help finding a carpool or vanpool partner (6%). The predominance of transit information is reasonable, given that several of the local programs are administered by transit organizations

Table 63
Information and Services Sought from Local Commute Assistance Programs
(n =223)

Commuter Connections Services	Percentage
Transit route/schedule information	60%
Rideshare (carpool/vanpool) information	8%
Help finding carpool/vanpool partners	6%
Travel directions	6%
MetroChek / SmarTrip	4%
Guaranteed Ride Home (GRH)	2%
Park & Ride lot information, parking information	<1%
Other *	18%

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

3-G EMPLOYER-PROVIDED COMMUTER ASSISTANCE SERVICES

Services Offered by Employers

The SOC survey also included questions on commute assistance services and benefits that employer might provide to employees. Respondents were asked about two types of services:

- Alternative mode incentives and support services
- Parking facilities and services

This section presents results regarding respondents' availability and use of these services in 2007. Results also are presented for 2004 and 2001, as observed in the 2004 and 2001 SOC surveys. It is important to note that in 2007 and 2004, the series of questions on this topic were different from those asked in 2001. In 2001, respondents were asked if the employer offered each of a series of commute services, then were asked, in a single question, to name any services they had used. In 2004 and 2007, respondents were asked a two-question series about each service: did the employer offer it and, if it was offered, did the respondent use that service? It is likely that this approach could have resulted in higher recall of use for some services in 2007 and 2004 than was noted in 2001, with the single, non-service specific, question about service use.

Incentives/Support Services – Over half of the respondents (54%) said their employer offered one or more incentives or support services. This is essentially the same percentage as offered these services in 2004 and slightly higher than the percentage that offered incentives or support services in 2001. The percentages for individual services are shown in Table 64.

Table 64
Alternative Mode Incentives and Support Services Offered by Employers – 2007, 2004, 2001

Alternative Mode Incentives and Support Services	**Employer Offered Service ***		
	2007 SOC (n=6,076)	**2004 SOC** (n=6,866)	**2001 SOC** (n=6,860)
Metrochek/other subsidies for transit/vanpool	33%	31%	29%
Information on commute options	20%	22%	25%
Bike/pedestrian facilities or services	17%	14%	9%
Preferential parking for CP/VP	16%	16%	19%
GRH for emergencies/unscheduled overtime	12%	12%	19%
Financial incentives/subsidies for CP	3%	4%	7%
None – employer doesn't offer any services	46%	47%	49%

* Might add to more than 100% because multiple responses were permitted.

About four in ten (39%) respondents said their employers offered one or two of these services. An additional 15% said their employers offered three or more services. The most commonly offered services were Metrochek/other subsidies for transit/vanpool, provided by 33% of employers, and information on commuter transportation options, offered by 20% of employers. About one in six respondents said their employers offered services for bikers and walkers (17%), preferential parking (16%), or GRH (12%). Only about three percent said their employers offered carpool subsidies.

As shown by the third and fourth columns of the table, availability of transit/vanpool subsidies and bike/pedestrian facilities appeared to have risen slightly between 2001 and 2007, as reported in the 2001 SOC survey, while availability of commute information and preferential parking appear to have dropped slightly. The percentage of respondents who said their employers offered GRH dropped between 2001 and 2004, but had no change between 2004 and 2007. The lower availability of employer-sponsored GRH could indicate a shift to Commuter Connections' regional GRH program.

Parking Facilities and Services – Respondents also were asked about the parking services available at their worksites. These results are displayed in Table 65.

Table 65
Parking Facilities / Services Offered by Employers – 2007, 2004, 2001

Parking Facilities and Services	Employer Offered Service		
	2007 SOC (n=5,426)	**2004 SOC** (n=6,866)	**2001 SOC** (n=6,860)
Free on-site parking	65%	66%	65%
Free off-site parking	4%	3%	3%
Employee pays all parking charges	21%	21%	23%
Employee and employer share parking charge	7%	6%	6%
Parking discounts for CP/VP*	15%	14%	14%

* Note that percentages of parking discounts for CP/VP are calculated on a base of respondents who do not have free parking available. These sample sizes were (2007 n=1,674; 2004 n=1,752; 2001 n=1,985)

The majority of respondents (65%) said their employers provided "free parking" at the worksite. An additional 4% said they had access to "free parking off-site." About three in ten said they paid at least part of the cost of parking; 21% paid the total cost and 7% paid a portion of the cost with the balance paid by their employers. The availability of free parking appears to be the same as in 2004 and in 2001.

Services Offered by Employer Type – Respondents who worked for federal agencies were most likely to have incentives/ support services available at their worksites; 85% of federal employees said they had commuter services, compared with 58% of respondents who worked for non-profit organizations, and

40% of respondents who worked for state/local agencies. Respondents who worked for private employers were least likely to have incentives/support services; only 45% had services.

Table 66 present a comparison of the percentages of employers that offered various incentives/support services and parking services by employer type.

Table 66
Commuter Services/Benefits Offered
by Employer Type

Commuter Service/Benefit	Percentage of Employers Offering Services *			
	Federal (n=1,338)	**State/local** (n=758)	**Non-profit** (n=638)	**Private** (n=3,037)
Incentives/Support Services				
Metrochek/transit/VP subsidy	76%	18%	37%	20%
Commute information	40%	17%	18%	13%
Preferential parking	39%	10%	9%	9%
Bike/walk services	30%	16%	19%	12%
GRH	11%	9%	13%	13%
Carpool subsidy	8%	2%	4%	2%
Parking Facilities/Services				
Free parking (on-site or off-site)	53%	83%	61%	71%
Employee pays some or all of the parking charge	39%	15%	34%	23%
No parking/don't know	8%	2%	5%	6%

* Might add to more than 100% because multiple responses were permitted.

Commute Incentives/Support Services – Not surprisingly, Federal agency employees also had greater access than other respondents to individual incentive/support service. This was especially true for transit/vanpool subsidies, which were offered to 76% of Federal employees, but to only one-third of non-profit employees and less than one in five employees of private firms and state/local agencies. Commute information and preferential parking also were disproportionately available to Federal agency employees. The single exception was in GRH; availability of this service was not significantly different at any employer type.

Parking Services – Federal agency employees and employees of non-profit organizations were least likely to have free parking, either on-site or off-site. About 53% of respondents who worked for Federal agencies and 61% of respondents who worked for a non-profit said their employer provided free park-

ing. The remaining respondents either had no parking at all or had to pay all or part of the cost of parking. By contrast, 83% of respondents who worked for state and local agencies and 71% of respondents who worked for private employers said they had free parking.

Commuter Services Offered by Employer Size – Large employers were more likely to offer commuter services than were small employers. Only one-third (37%) of respondents who worked for employers with 100 or fewer employees and half (52%) of respondents who worked for employers with 101-250 employees said they had any services. By contrast, two-thirds (69%) of respondents employed by large (251-999 employees) employers and more than three-quarters (78%) of respondents who worked for very large firms (1,000+ employees) had one or more employer-provided commuter service. Table 67 compares availability of specific commuter assistance services by employer size.

Table 67
Commuter Services/Benefits Offered
by Employer Size (number of employees)

Commuter Service/Benefit	Percentage of Employers Offering Services *			
	1-100 (n=2,752)	**101-250** (n=749)	**251-999** (n=857)	**1,000+** (n=1,408)
Incentives/Support Services				
Metrochek/transit/VP subsidy	23%	31%	47%	60%
Commute information	13%	18%	26%	37%
Preferential parking	10%	11%	16%	36%
GRH	19%	11%	13%	11%
Bike/walk services	13%	17%	25%	31%
Carpool subsidy	1%	2%	5%	12%
Parking Services				
Free parking (on-site or off-site)	76%	75%	64%	57%
Employee pays some or all of the parking change	21%	22%	33%	39%
No parking, don't know	3%	3%	3%	4%

* Might add to more than 100% because multiple responses were permitted.

Commute Incentives/Support Services – In general, respondents had greatest access to each incentive/support service if they worked for a large employer. This trend of increasing services with increasing size was particularly evident with transit/vanpool subsidies, commute information, and preferential parking, services offered by one-third of employers with 1,000 or more employees, but fewer than two in ten employers with 100 or fewer employees. The one exception to this rule was for GRH, which had

exactly the reverse trend; 19% of small employers offered GRH, compared with only 11% of employers with 1,000 or more employees.

Parking Services – Respondents who worked for large employers were less likely to have free parking. Fewer than six in ten (57%) respondents who were employed by employers with 1,000 or more employees had free parking, compared with more than seven in ten respondents who worked for employers with 250 or fewer employees.

Services Offered by Employer Location – Finally, the analysis examined availability of services by the location of respondents' work locations, divided into three categories, representing concentric rings around the central core of Alexandria, Arlington County, and the District of Columbia. The inner ring included Fairfax, Montgomery, and Prince George's counties. The outer rind included Calvert, Charles, Frederick, Loudoun, and Prince William counties and any location outside this area.

Commute Services / Benefits – As shown in Table 68, the pattern of commuter services offered by location in the region showed a definite trend for most services. Nearly all services were far more likely to be offered in the core jurisdictions, two-thirds of respondents who worked for a core area employer were offered transit subsidies, compared to a third of respondents who worked in the inner ring, and only four percent of respondents who worked in the outer ring.

Table 68
Commuter Services Offered
by Employer Location

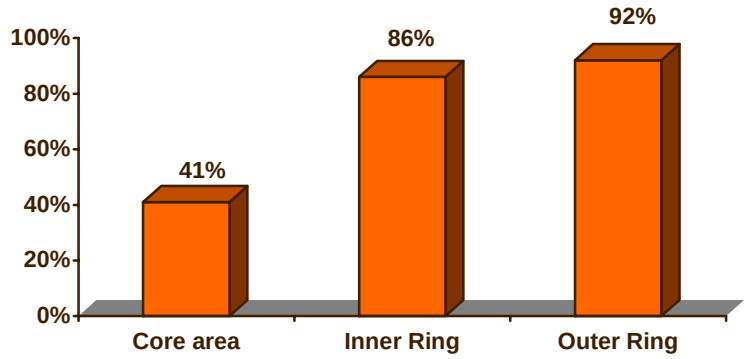
Commuter Service/Benefit	Percentage of Employers Offering Service *		
	Core (n=2,473)	**Inner Ring** (n=2,070)	**Outer Ring** (n=1,448)
Incentives/Support Services			
Metrochek/transit subsidy	65%	31%	4%
Commute information	24%	18%	11%
Preferential parking	18%	15%	9%
GRH	12%	12%	12%
Bike/walk services	22%	16%	9%
Carpool subsidy	4%	3%	2%
Parking Services			
Free parking (on-site or off-site)	41%	86%	92%
Employee pays some or all of the parking charge	48%	10%	5%
No parking, don't know	11%	4%	3%

* Might add to more than 100% because multiple responses were permitted.

Commute information, preferential parking, and bike/walk services also showed a pattern of highest availability in the core area, lesser availability in the inner ring, and significantly lower availability in the outer ring. The only service that did not follow this pattern was GRH, which had a consistent level of availability throughout all three areas.

Parking Services – Dramatic differences between respondents who worked in different parts of the region also are evident for parking availability. As can be seen in Figure 11, only four in ten (41%) respondents employed in the regional core said they had free parking on-site or off-site, compared to nearly nine in ten (86%) respondents who worked in the inner ring and more nine in ten (92%) of respondents who worked in the outer ring.

Figure 11
Free Parking Availability by Work Area
Core area n = 1,715, Inner ring n=1,999, Outer ring n = 2,145



Use of Commuter Assistance Services/Benefits

Respondents whose employers offered incentives/support services were asked if they had ever used these services. There results are provided in Table 69.

The most commonly used incentives/support services were commute information, used by 46% of respondents whose employers offered this service and Metrochek/transit or vanpool subsidy, used by 40% of respondents who had access to this benefit. About a quarter (24%) said they had used GRH and one in five had used preferential parking. Of respondents who were offered bike/walk services, 12% used this benefit and 15% of respondents whose employers offered carpool subsidies had used them.

Table 69
Employer-Provided Incentives/Support Services
Employees Who Used Services When Offered

Incentive/Support Service	Respondents Who Used Services when Offered	
	(n=__)**	Percentage *
Metrochek, VP/transit subsidy	786	40%
Commute information	548	46%
Preferential parking	180	20%
GRH	205	24%
Bike/walk services	130	12%
Carpool subsidy	37	15%

* Might add to more than 100% because multiple responses were permitted.

** Base equals the number of respondents whose employers provide these services

Commute Mode by Commuter Assistance Services/Benefits Offered – Table 70 shows the percentages of respondents who used various commute modes by whether or not their employer provides commuter assistance services or benefits. The results are divided into the two commuter service categories used in several previous tables: alternative mode incentives and support services, and parking services, specifically, free parking.

As the table clearly illustrates, respondents whose employers provided alternative mode incentives and support services were less likely to drive alone (62%) than were respondents whose employers did not provide these services (78%). Respondents who had these services at their worksites used all alternative modes at higher rates than did respondents who did not have these services. Train use was particularly higher; 19% of respondents whose employers offered incentives/support services rode the train to work, compared with six percent of respondents whose employer did not offer these services.

These differences were significant at the 95% confidence level, but it is not possible to say that the availability of these services was the only reason, or even the primary reason, for the differences in mode use. As noted before, employers in the central core of the region were much more likely than were employers in the inner or outer rings to offer commuter assistance services and drive alone rates were much lower for respondents who work in the core (49%) than for residents who work in either the inner ring (82%) or outer ring (86%).

Table 70
Current Primary Commute Mode
by Commuter Services/Benefits Offered

Services/Benefits Offered	(n=___)	Current Primary Commute Mode				
		DA	CP/VP	Bus	Train	B/W
Incentives/Support						
Yes	3,242	62%	9%	5%	19%	3%
No	2,834	78%	5%	4%	6%	2%
Free Parking *						
Yes	4,063	83%	6%	3%	4%	2%
No	1,926	48%	10%	8%	26%	3%

* Free on-site or off-site parking

But respondents who work in the core area could be faced with greater impediments to driving alone. For example, respondents who work in the core area travel an average of 39 minutes to work, compared to 33 minutes for respondents working in the inner ring and 20 minutes for respondents who work in the outer ring. And respondents in the core also might experience greater congestion levels and have greater availability of commute options, such as transit, than would be experienced by workers outside this area. Any of these factors might have been at least as important in influencing respondents' commute mode choices.

The table also presents a comparison of mode use rates for respondents who had free, on-site parking and those who either had to pay for parking or who had no parking at all. The difference in drive alone rates for these two groups was dramatic; 83% of respondents who had free parking drove alone, compared with less than half (48%) of respondents who did not have this benefit. Respondents who had to pay for parking used all alternative modes at higher rates than did respondents who had free parking. The difference was especially striking for use of the train; train mode share was more than six times as high for respondents who did not have free parking as for respondents who did.

Many other surveys and research studies have documented the important role parking availability and cost play in commute decisions. But as was noted above, many factors influence commuters' mode choice.

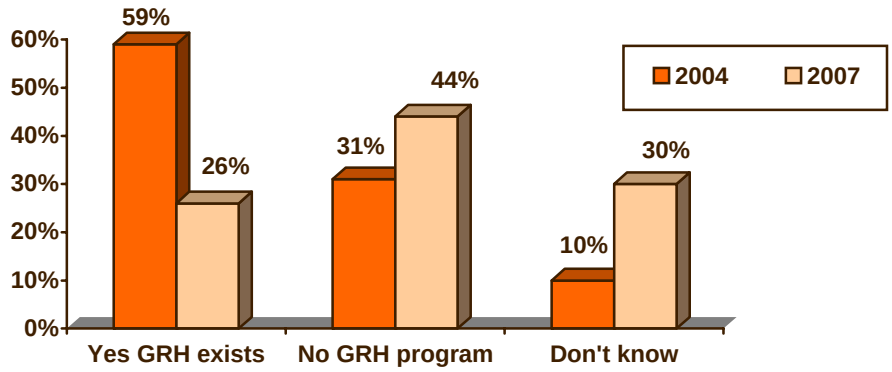
3-H GUARANTEED RIDE HOME

Since 1997, Commuter Connections has offered Guaranteed Ride Home to eliminate alternative mode users' fear of being without transportation in the case of an emergency. The program provides free rides in a taxi or rental car in the event of an unexpected personal emergency or unscheduled overtime. Some employers also offer GRH programs, as was shown in the previous section of this report.

Awareness and Use of GRH

Awareness of GRH – Survey respondents who did not work at home all the time were questioned on their awareness and use of GRH programs. First, they were asked if they knew of a regional GRH program available for commuters who rideshare or use public transportation. As shown in Figure 12, about a quarter (26%) replied there was such a program, 44% mentioned there was no such program, and the remaining 30% were unsure. The figure also shows GRH awareness for 2004. As shown, awareness of GRH was much lower in 2007 than in 2004. In the 2004 survey, 59% of respondents said a regional GRH program existed.

Figure 12
Awareness of Regional GRH Program – 2007 and 2004
(n=6,867)



Awareness of GRH by Commute Mode – As shown in Table 71, awareness of GRH services varied by the commute modes respondents were using at the time of the survey. Respondents who primarily rode a commuter train were much more likely than were other respondents to be aware of the regional GRH program, but the sample size for this mode is small. Awareness was similar for users of other modes, with the exception of respondents who biked or walked to work. They were less likely to know about GRH than were other mode users.

Table 71
Awareness of Regional GRH Program
by Current Primary Mode

Current Primary Mode		Percentage Aware of GH Program		
		2007 SOC	2004 SOC	2001 SOC
Drive alone	(2007 n = 3,005)	26%	61%	19%
Carpool/vanpool	(2007 n = 352)	29%	66%	26%
Bus	(2007 n = 216)	22%	52%	22%
Metrorail	(2007 n = 437)	26%	55%	24%
Commuter train	(2007 n = 34)	56%	55%	24%
Bike/walk	(2007 n = 103)	15%	43%	13%

Use of GRH – Two percent of regional commuters said they had registered for or used a GRH service within the past two years. These respondents included respondents who had previously mentioned that they registered for or used a GRH service offered by their employer.

Sponsor of GRH Program – The 341 respondents who had registered for or used any GRH service were asked who sponsored this service. Nearly six in ten (57%) respondents said their employers sponsored the programs they had used. Note that the base for this distribution includes respondents who mentioned in a previous question that they had used an employer-provided GRH service. They were not asked who sponsored the GRH program they had used, but they were included in the results to this question.

About a third (37%) of respondents noted Commuter Connections or MWCOG/COG as the sponsor of the program. This was an increase from the 21% who mentioned Commuter Connections as the sponsor in 2004 and the 13% who had mentioned Commuter Connections in the 2001 SOC survey. Two percent named VRE commuter rail as the sponsor.

3-I NEW REGIONAL COMMUTE PROGRAM CONCEPTS

Commuter Connections is currently developing or considering implementing new regional commuter assistance services and used the SOC as an opportunity to explore commuters' potential interest in the services. The results of these question are presented below.

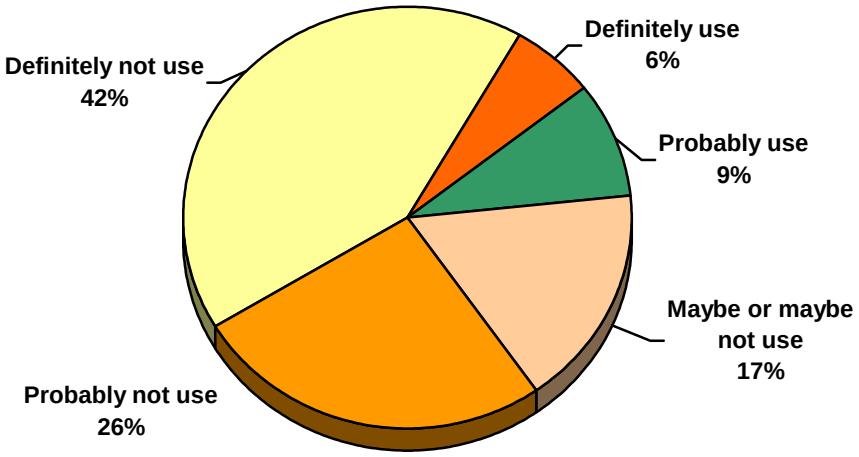
Internet Ridematching

The first of the programs, current under development, is an internet-based ridematching system, in which commuters who want a carpool or vanpool partner will be able to enter information about their home and work location, work hours, and other information about their commute and themselves and search an online database for commuters who have similar travel patterns and want to carpool or vanpool.

Survey respondents were read a description of this service and asked how likely they would be to use a services like this if it was available in the Washington region and commuters who participated were guaranteed that their personal contact information would be kept confidential.

As shown in Figure 13, about 15% of respondents said they would "definitely use" or "probably use" the ridematching service. Seventeen percent said they would "maybe or maybe not" use it. But the majority of respondents said they were unlikely to use the service; a quarter said they would "probably not use" it and 42% said they would "definitely not use" it.

Figure 13
Likely to Use Internet Ridematching
(n=6,054)



Respondents who said they would "probably not use" or "definitely not use" the service were asked why they would not be interested. Table 72, which presents these results, indicates that most respondents would not find the service useful because they were not interested in carpooling or vanpooling. About four in ten (38%) of respondents said they could not carpool or vanpool due to personal circumstances. Six percent said they were concerned about privacy or didn't want to provide personal information on the internet.

Table 72
Reasons for Not Being Interested in Internet Ridematching
(n=4,068)

Reason	Percentage*
Not interested in carpooling or vanpooling	53%
Cannot carpool or vanpool due to personal circumstances	38%
Concerned about privacy, don't want personal information on internet	6%
Already carpooling	3%
No access to internet	2%
Other	3%

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

Respondents who said they would "definitely use," "probably use." or "maybe or maybe not use" the service were asked what forms of contact information they would be willing to provide to other commuters. Table 73 shows that more than half (58%) of respondents were willing to share their email address and a quarter (24%) were willing to provide a phone number. But two in ten were not willing to provide any of this contact information.

Table 73
Willingness to Provide Contact Information for Internet Ridematching
(n=1,920)

Contact Information	Percentage*
Email address	58%
Phone number	24%
Postal address	14%
Not willing to provide any of this information	22%
Don't know	5%

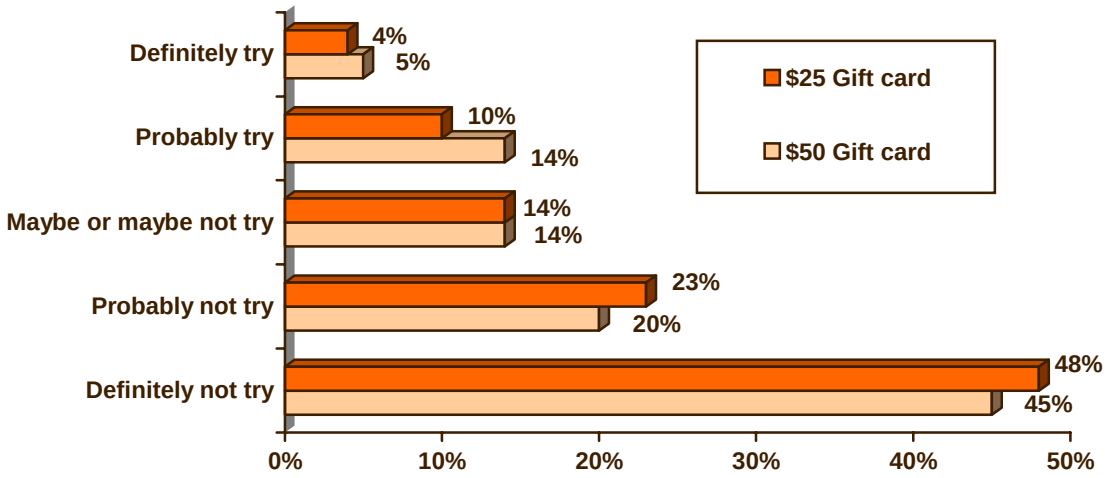
* Might add to more than 100% due to multiple responses were permitted

Financial Incentive

The second program, currently being considered by Commuter Connections, would offer a financial benefit to commuters who would carpool. The benefit tested was a monthly gift card that could be used for purchases at area merchants. The program as described was assumed to provide an ongoing benefit, with no time limit.

Respondents who were driving alone full-time were asked first how likely they would be to try carpooling to receive a $25 monthly gift card. As shown in Figure 14, about four percent of respondents said they would definitely try carpooling and another 10% said they would probably try carpooling to receive the $25 gift card. About 14% said they would maybe or maybe not try carpooling. The remaining 71% of respondents said they were not likely to try carpooling.

Figure 14
Likely to Try Carpooling to Receive $25 or $50 Monthly Gift Card
(n=4,316)



Respondents were then asked their likelihood to carpool if the value of the card was $50. Figure 14 also shows these results. A slight increase was noted in respondents' interest; at the $50 level, about five percent of respondents said they would definitely try carpooling and 14% said they probably would try carpooling. Two-thirds (65%) of respondents said they still were not interested and were not likely to try carpooling to receive the $50 card.

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3-J COMMUTE INFORMATION KIOSKS

Use of Kiosks

Awareness of Kiosks – Finally, the survey examined respondents' awareness of and use of twelve self-service transportation information kiosks located around the Washington area. These kiosks provide a variety of commute information, along with some information unrelated to transportation. The survey specifically asked respondents to exclude kiosks used to purchase train or transit tickets, such as those provided by airlines and train operators in terminals and stations.

Slightly more than one in ten (11%) of respondents said they had seen one of these kiosks in the past two years. Of those who had ever seen a kiosk, approximately one in seven (14%) had used one of these kiosks to obtain commute or other transportation information in the past two years. This equated to about 1.4% of the total regional commuters. Respondents reported using kiosks in the locations listed in Table 74 below.

Table 74
Location of Kiosks Used
(n=85)

Kiosk Location	Percentage*
Springfield Mall (VA)	11%
Ballston Common Mall (VA)	5%
Tysons Corner Center (VA)	5%
Montgomery County (MD)	2%
Union Station (DC)	17%
Fairfax County (VA)	1%
Pentagon City Mall (VA)	5%
Fair Oaks Mall (VA)	2%
Don't know	20%
Other	32%

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

Information Obtained from Kiosks – Respondents cited a variety of types of information that they obtained from the kiosks. These results are detailed in Table 75.

Table 75
Information Obtained from Kiosks
(n=85)

Information	Percentage*
Transportation/Commute Information	
Transit route/schedule info	51%
Maps and guides	19%
General rideshare information	5%
Springfield construction information	3%
Traffic information (SmarTraveler)	2%
Carpool/vanpool matchlist	<1%
Other Information	
Mall/retail center information	5%
Other**	16%

* Might add to more than 100% because multiple responses were permitted.

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

The most common types of information obtained included: transit route/schedule information, noted by half of respondents (51%) and maps and guides, cited by 19% of respondents. Smaller percentages of respondents noted general rideshare information (5%), information on the Springfield interchange construction, or traffic information (SmarTraveler) (2%).

Influence of Kiosk Information on Commute Behavior

Respondents who said they had used a kiosk (n=85) next were asked if the information they received at the kiosk encouraged them to try a different type of transportation for their commute to work. About a quarter (26%) of respondents said the information had influenced their decision to try an alternative mode that they were not using before they obtained the information.

Commute Modes Used Before and After Using Kiosk – Table 76 lists the number of respondents who tried each alternative mode after obtaining information from the kiosk and the number who used these alternatives or driving alone before trying the new alternative mode. Because the total number of respondents who made a travel change was small, the distribution of responses is shown as number of respondents, rather than as weighted percentages.

Table 76
Type of Transportation Tried After Obtaining Information from Kiosk
(n=18)

Type of Transportation	Number of Respondents*	
	Before Using Kiosk	After Using Kiosk
Drive alone	12	N/A
Train	3	11
Bus	1	8
Carpool/vanpool	1	3
Other	2	0

*Number of respondents are shown instead of percentages due to small base.

Bus and train were the modes that the largest number of respondents said they tried. A few respondents tried carpooling or vanpooling. The majority of respondents said they had been driving alone prior to making these changes.

Length of Time Using Alternative Mode – Respondents who tried alternative modes after obtaining information from a kiosk were asked how long they used those modes. As shown in Table 77, the majority of respondents used these new alternative modes only temporarily. Nine of the 18 respondents used the alternative mode for three months or less.

Table 77
Length of Time Using Alternative Modes
After Obtaining Information from Kiosk
(n=18)

Length of Time	Number of Respondents*
Less than 1 month	2
1–3 months	7
4-9 months	1
Over 9 months	6
Don't Know	2

*Numbers are shown instead of percentages due to small base.

SECTION 4 – SUMMARY AND CONCLUSIONS

This section of the report summarizes the highlights of the results presented in Section 3 and presents major conclusions from the analysis of the survey.

A primary function of the SOC survey was to examine regional trends in commute behavior, awareness, and attitudes. The results of this 2007 survey would be compared against past results as measured in the 2004 and 2001 SOC surveys, the most recently performed regional commute surveys to identify any commute trends.

A second objective of the SOC survey was to collect data to support the upcoming TERM evaluation, scheduled to be performed in the spring of 2008. Additional analysis of SOC data is underway for this purpose and results of these analyses will be included in a TERM evaluation report to be produced in June 2008.

Following is a summary of the key results from the SOC survey for the following topics:

- Commute patterns
- Telecommuting
- Awareness and attitudes toward transportation options
- Awareness of commute advertising
- Awareness of commute assistance resources
- Commuter assistance services provided by employers
- Guaranteed Ride Home
- New regional commuter service concepts
- InfoExpress kiosks

Commute Patterns

Use of drive alone appears to have fallen slightly since 2004.

- Drive alone continued to be the most popular commute mode in the Washington metropolitan region. About 71.0% of weekly commute trips made to worksites outside the home were made by driving alone. This represented a decrease from the 74.1% of weekly trips that were drive alone in 2004.
- Weekly trips made by all alternative modes increased from 2004 to 2007. Train use increased from 12.8% in 2004 to 13.5% and bus use grew from 4.7% to 5.2%. Carpool and vanpool trips increased from 6.1% to 7.6% of weekly trips. Bike/walk use increased slightly from 2.4% to 2.7% of weekly commute trips.
- More than a quarter (26.9%) of regional commuters said they used an alternative mode (carpool, vanpool, public bus, buspool, Metrorail, commuter rail, bicycle, or walk) as their primary mode, that is, the mode they used most days in a typical week. An additional 3.5% of commuters used an alternative mode one or two days per week, resulting in three in ten (30.4%) of commuters using an alternative at least once per week.

- The most popular alternative mode was train, which was used by 12.6% of respondents as their primary mode. An additional 1.4% of commuters said they used the train one or two days per week.
- Bus was the primary commute mode for 4.7% of respondents. An addition 0.7% occasionally rode the bus to work.
- Carpooling/vanpooling was used by 7.0% of commuters most days during the week and 1.0% used these modes one or two days per week. The majority of carpoolers continued to use a "traditional" form of carpooling, with the same partner(s) all the time. About 7% of carpoolers/vanpoolers "casual" carpooled (slug).

Regional commuters continue to try new alternative modes.

- Approximately 14% of respondents said they had used or tried any alternative mode, other than one they were currently using, within the two years prior to the survey, fewer than the 22% who said in the 2004 survey that they tried another mode.
- Train was the mode mentioned most often; 52% of respondents said they had used or tried the train. One-third (32%) of respondents who tried/used another alternative mode tried the bus and 11% had tried carpooling. These were essentially the same percentages of trial and/or temporary use of alternatives as were observed in both 2004 and 2001.
- Prior to starting to use their current modes, about a third (34%) of respondents who were using alternative modes previously drove alone to work. About a third (35%) had used a different alternative mode. The remaining respondents said they either had always used the alternative mode (23%) or were not working in the metropolitan area then (15%).

A large portion of commuters who use alternative modes are long-time users of these modes.

- About 17% of the 2007 respondents said they started using their current alternative mode within the past year. But nearly two-thirds (63%) of respondents who used alternative modes said they had used these modes for more than two years and 40% had used the modes for five or more years. The average time using alternative modes was 80 months. This was a significant increase over the 70 months estimated in the 2004 SOC survey and is a considerably longer duration than had been generally assumed as the duration of an alternative mode arrangement

A sizeable portion of commuters who use alternative mode drive alone part of the trip.

- Nearly three in ten (28%) of commuters who used an alternative mode said they drove alone to the alternative mode meeting spot (park & ride lot, train station, etc.) and left their cars at those places. Respondents traveled an average of 3.1 miles to these meeting points. A third (35%) of respondents walked to the meeting point and the remaining respondents who used an alternative mode either took transit, or were dropped off by a carpool partner or picked up at home.

Commute lengths remained the same as in 2004.

- Respondents traveled on average of 16.3 miles and 35 minutes in 2007, essentially the same as in 2004 (16.2 miles and 34 minutes).

Telework

Teleworking grew substantially between 2004 and 2007, but potential exists for additional telework growth.

- About 18.7% of regional commuters said they teleworked at least occasionally. This percentage is based on workers who were not self-employed and would otherwise travel to a worksite outside their homes if not teleworking.
- The percentage of regional telework, increased substantially from the 2004 level of 12.8%. And telework incidence grew in nearly every demographic and employer segment in which telework is feasible.
- The 2007 survey also showed that an additional 24% of commuters who do not telecommute today "could and would" telecommute if given the opportunity. These respondents said their job responsibilities would allow them to telecommute and they would like to telecommute. About two-thirds of these interested respondents said they would like to telecommute "regularly," while one-third would like to telecommute "occasionally."

Telework is concentrated in certain demographic and employment groups.

- Teleworkers were statistically more likely to be: between 35 and 54 years old, of white ethnic background, with household incomes above $60,000, and commute distance greater than 30 miles.
- Teleworkers also were statistically more likely to be: employees of non-profit organizations or private employers; employees of very small employers (fewer than 25 employees) or employers with 251 to 999 employees; employed in technical, professional, and executive/managerial occupations.
- Telework incidence among federal agency workers continues to grow. In 2007, 16% of respondents who worked for federal agencies teleworked, compared to 12% in 2004 and only seven percent in 2001.
- The potential for additional telework seems to be primarily in the sub-groups in which telework is now common.

"Informal" telework arrangements predominate, but formal programs have increased since 2004.

- About 19% of all respondents (both teleworkers and non-teleworkers) said their employer had a formal telework program and 22% said telework is permitted under informal arrangements between a supervisor and employee. Formal programs were most common at Federal agencies and among large employers.
- Among current teleworkers, nearly four in ten (39%) said they teleworked under a formal arrangement. The remaining teleworkers worked under an informal agreement with their supervisor. This suggests employers are more willing to craft individual agreements for selected employees than to institutionalize telework. But formal programs have increased over the past six years. In 2004, 32% of teleworkers had a formal arrangement and in 2001, the percentage was only 27%. This appears to signal a greater acceptance of formal telework.

Most teleworkers telework from home.

- The overwhelming majority of teleworkers (95%) teleworked exclusively from home. The remaining five percent teleworked from a satellite office provided by an employer, a telework center, or both home and other location.

The average frequency of telework seems to have increased slightly from 2004.

- Teleworkers teleworked about 1.5 days per week on average. This was an increase in telecommute frequency from the 1.3 days per week estimated in the 2004 survey and the 1.2 days per week calculated in the 2001 survey.

Teleworkers get information on telework from a variety of sources.

- More than half of the teleworkers surveyed said they obtained information on telework from a "special program at work" and one in eight heard about it from "word of mouth." About one in four said they "initiated request on my own."
- Seven percent of telecommuters surveyed said they received telecommute information directly from Commuter Connections or MWCOG. This was slightly higher than the five percent who noted COG or Commuter Connections in 2004.
- An additional two percent said they learned about telecommuting through advertising. Although this was not necessarily advertising from Commuter Connections, COG has advertised widely about telecommuting, so this response could indicate some additional telecommuters who learned about telecommuting from Commuter Connections' outreach. A portion of "special program at work" also could be the result of Commuter Connections' outreach and assistance to employers.

Additional workers occasionally work away from the main workplace for part of a day.

- About 13% of respondents said they did not telework, but occasionally worked for part of a day away from their main workplace. About three-quarters said they typically worked at home but 20% said they worked at a client's/customer's office or another office of the respondent's employer. On average, these work arrangements were used less frequently than was telework; the average frequency of "work away from the main workplace" was 0.7 days per week.

Awareness and Attitudes Toward Transportation Options

A large percentage of respondents reported that either bus or train service operated in their home area.

- Respondents were asked to name bus and train companies that provided service in the areas where they lived and worked. More than eight in ten (84%) said either bus or train operated in their home area and 78% said some transit was available in the area where they worked.
- About half of respondents said Metrobus operated near their home (49%) and a similar percentage (53%) said it operated in the area where they worked. Nearly as many respondents said that Metrorail operated: 45% said it operated in their home area and 51% said Metrorail operated where they worked.

- About half of respondents (52%) said they lived within ½ mile of a bus stop and 68% said they lived within a mile. Train station access was less convenient; only 17% lived within one mile of a train station. The average distances were 1.5 miles to the nearest bus stop and 6.4 miles to the nearest train station. But respondents who lived in the core jurisdictions of the District of Columbia, Alexandria, and Arlington said bus access was an average of 0.3 miles away and a train station was 1.5 miles away on average.

Over a quarter of respondents have access to HOV lanes for their commutes.

- More than a quarter of respondents (28%) said there was an HOV lane along their route to work. Virginia residents were more likely to have access to HOV lanes than were residents of either Maryland or the District of Columbia.
- About a quarter (27%) of commuters who had access to HOV lanes used them and half (50%) of these respondents said availability of the HOV lane influenced their decision to use an alternative mode for commuting.
- Respondents who used the lanes said they saved an average of 21 minutes for each one-way trip.

About seven percent of regional commuters use Park & Ride lots.

- About four in ten respondents (39%) said they knew the locations of Park & Ride lots along their route to work. Of those who knew the locations, 19% said they had used these lots when commuting during the past year. These respondents equate to about seven percent of the regional population. These results were nearly identical to those observed in 2004.

Commuters' reasons for not using public transit or ridesharing varied by mode.

- The majority of respondents who did not use the bus for commuting said that the bus "takes too much time" (31%), that they "need car for work" (16%), or that there was "no service available in home/work area" (16%).
- "No service available" was the primary reasons for not using the train (27%). Smaller percentages of commuters said they did not use the train because the train "takes too much time" (22%) or because they "need car for work" (14%).
- The overwhelming reason that commuters did not carpool was that they "didn't know anyone to carpool/vanpool with" (48%). Other reasons were that the commuters had "irregular work schedules" (18%) or "need car for work" (9%).

Commutes appear to be getting somewhat more difficult, but commuters are making changes to improve their commutes.

- About a quarter (27%) of respondents said their commute was more difficult than it was a year ago. The primary reason for it being worse was that the route was more congested now (75%).
- About 14% of respondents said their commute was easier than last year. The primary reasons were that the trip was a shorter distance (36%), took less time (26%), or was less congested (27%). But six percent said the commute was easier because they started using an alternative mode and two percent said they improved their commute by using HOV lanes.

Respondents considered ease of commuting when making job or home changes.

- About 17% of respondents said they made a job or home change in the past year. More than one in five of these respondents said they considered a commuting factor, such as the ease or cost of commuting to the new location, when making their location decision and 28% said commute ease was more important than other facrors in the decision.

Awareness of Commute Advertising

Awareness of commute information advertising remained high, but different messages are recalled than in 2004.

- Over half (52%) of respondents said they had seen, heard, or read advertising for commuting in the six months prior to the survey and two-thirds of these respondents could cite a specific advertising message. This was approximately the same result as was observed in the 2004 survey.
- Recall of most messages remained the same as in 2004, with some exceptions. Awareness of general rideshare messages, such as "use the bus, train, or Metrorail" increased from 2004, but awarness of Guaranteed Ride Home messages dropped substantially, from 12% in 2004 to six percent in 2007. This is likely due to the absence of GRH advertising in the past year.
- About four in ten respondents who had heard ads could name the sponsor. WMATA was named by 20% as the advertising sponsor and Commuter Connections was named by nine percent.

Commute advertising also appears to be having an effect on commuters' consideration of travel options.

- About 18% of respondents who had seen advertising said they were more likely to consider ridesharing or public transportation after seeing or hearing the advertising. This was the same percentage as was observed in 2004.
- The most persuasive messages appealed to respondents' personal interest or needs. A third of respondents said they were more likely to consider using an alternative after hearing ads about "saving the environment," and a quarter who recalled ads for "it saves money," "it is less stressful," "use the bus, use Metrorail," or "Guaranteed Ride Home."
- Respondents who were using alternative modes were more likely to be influenced by the advertising. More than a third of bus riders, 25% of Metrorail riders, and 21% of carpooolers/vanpoolers said they were likely to consider alternative modes after hearing the ads, compared with 15% of commuters who drove alone.
- About 16% of respondents who said they were likely to consider ridesharing or public transportation for commuting had taken some action to try to change their commute. These respondents cormprised slighly more than one percent of all regional commuters.
- The majority of these respondents said they sought information about commuting on the internet, from a family member or co-worker, or from a regoinal commute service organization.
- More than two-thirds (67%) of respondents who took an action said the advertising they saw or heard encouraged the action. And more than 70% of respondents who took an action were driving

alone at that time. This suggests that the advertising is acquainting drive alone commuters with other commuting opportunities and encouraging them to seek more information on these options.

Awareness of Commute Assistance Resources

Awareness of commuter information and assistance resources has grown since 2001.

- About half (51%) of respondents said they knew of a telephone number or web site they could use to obtain commute information. This was slighlty higher than the 46% who knew of these resources in 2004 and considerably higher than the 33% of respondents who knew of these resouces in 2001
- About 21% of respondents could name a specific number or web site; 11% named a Metro/WMATA phone number or website and two percent named a phone number or website administered by Commuter Connections.

Awareness of Commuter Connections remains high but has fallen since 2004.

- In 2007, about 55% of all regional commuters said they had heard of an organization in the Washington region called Commuter Connections. This was a decline from the 66% who knew of Commuter Connections in 2004.
- Respondents largely cited services that Commuter Connections actually does provide. About four in ten (39%) respondents said they didn't know specific services, but almost half knew the organization offered either general rideshare information (24%) or help finding a carpool or vanpool partner (22%). These was slightly higher awareness for rideshare assistance compared to 2004, but awareness of the GRH program fell substantially. In 2007, 23% of respondents knew that Commuter Connections sponsored a GRH program, but the percentage had been 40% in 2004.

Most local jurisdiction services are known to at least a quarter of their target commuters.

- Respondents were asked about local commute assistance services provided in the counties where they lived and worked. Awareness of these programs ranged from 11% to 49% of respondents who were asked the questions. Six of nine programs examined were known to at least a quarter of the target area respondents and four were known to a third or more. Between one and nine percent of the target respondents said they had used these services.

Commuter Assistance Services Provided by Employers

Availability of worksite commute assistance services is about the same as in 2004.

- Over half of respondents (54%) said their employers offered one or more alternative mode incentives or support services to employees at their worksites. This is the same percentage as was noted in the 2004 survey.
- The most commonly offered services were Metrochek/transit/vanpool subsidies (33% of employers) and commute information (20% of employers). About one in six respondents said their employers offered preferential parking (16%), services for bikers and walkers (17%), or GRH (12%), again these were essentially the same percentages as were observed in 2004.

- Respondents who worked for federal agencies were most likely to have incentive/support services available (85%), compared with 40-60% of respondents who worked for other types of employers. Respondents also were most likely to have access to all types of incentive/support services if they worked for large firms than for small firms. And incentives and support services were far more common among respondents who worked in the core area jurisictions (Alexandria, Arlington, and District of Columbia); eight in ten of these respondents had access to services compared to about half of those in the inner ring (Fairfax, Montgomery, and Prince George's Counties) and four in ten of those in jurisdictions outside these areas.

Most commuters continue to have free worksite parking.

- The majority of respondents (65%) said their employers offered free, on-site of off-site parking, about the same percentage as that resported in 2004 (66%) and 2001 (65%).
- Federal agency employees were least likely to have free parking (53%) compared with more than 70% of employees working for private firms and 83% of respondents who worked for state/local governments. Free parking also was much less common in the core area of the region. Only four in ten of respondents who worked in these areas had free parking, compared with at least three-quarters of other respondents.

Worksite commuter assistance services appear to encourage use of alternative modes.

- Commute information and Metrochek/transit/vanpool subsidies were the most widely used commuter assistance services, used, respectively, by 46% and 40% of employees who had access to these incentives.
- Driving alone was less common for commuters who had access to incentive/support services. Only 62% of commuters with these services drove alone to work, compared with 78% of commuters whose employers did not provide these services.
- Respondents whose employers did not offer free parking also used alternative modes at much higher rates. Less than half (48%) of respondents who did not have free parking drove alone, compared with 83% of respondents who did have free parking.

Guaranteed Ride Home

Awareness of GRH has fallen substantially since 2004, but Commuter Connections appears to have a larger share of the GRH market.

- About a quarter (26%) of regional respondents knew there was a regional GRH program. This was a large decrease from the 59% who said they knew of such a program in 2004.
- Respondents who primarily used commuter rail were much more likely to know about GRH than were other respondents. Awareness of the program was similar for users of other modes.
- Two percent of respondents said they registered for or used a GRH service within the past two years. About a third (37%) noted Commuter Connections as the sponsor, an increase over the 21% who named Commuter Connections in 2004 and the 13% who mentioned Commuter Connection in 2001.

New Regional Commute Program Concepts

One in six respondents was interested in internet ridematching.

- Fifteen percent of respondents said they would be interested in using a self-service internet-based ridematching system to find a carpool or vanpool partner. Of those who were not interested, the primary reasons were that they did not want to carpool or vanpool (53%) or that they could not carpool or vanpool due to personal circumstances (38%).
- More than half of respondents who were interested in the service said they would be willing to provide an email address and a quarter said they would provide a phone number.

One in five drive alone respondents would consider carpooling to receive a $50 monthly gift card.

- Fifteen percent of respondents who drove alone full-time said they would definitely or probably try carpooling to receive a $25 monthly gift card that they could use at area merchants. When the value of the card was increased to $50, the percent who were interested increased to 19%.

Kiosks

Information kiosks offer commuters an additional outlet for transportation information.

- About one in ten (11%) respondents said they had seen a transportation information kiosks in the Washington area. Of these respondents, one in seven (14%), or about 1.4% of the total surveyed respondents, said they had used one of these kiosks to obtain transportation information.
- Respondents who were using alternative modes at the time of the survey were more likely to have used a kiosk than were respondents who were driving alone.
- The information most commonly obtained from kiosks included: transit route/schedule information (51%) and maps and guides (19%).
- More than a quarter (26%) of respondents who had used a kiosk said the information had influenced their decision to try a new alternative mode.
- About 66% of the respondents who tried an alternative mode after receiving information from a kiosk were driving alone before they obtained the information.

APPENDICES

Appendix A – Survey Data Expansion

Appendix B – Final Dialing Disposition

Appendix C – Survey Questionnaire

Appendix D – Instructions and Definitions of Terms

Appendix E – Comparison of Key 2007 SOC Results with 2004 and 2001 SOC Results

APPENDIX A – SURVEY DATA EXPANSION

Survey responses from the State of the Commute 2007 were expanded numerically to align the sampled survey results with published, employment information for the study area. The process developed for the 11-area, Washington, DC metropolitan region is described below in detail.

Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS) for January – March, 2007 were used to expand responses to employed persons. This methodology is the same as the method used for the 2004 State of the Commute. Additionally, interviews were tested for bias for the distribution of race/ethnicity. As a result, the distribution for race/ethnicity was adjusted for three jurisdictions.

Table A-1 – Estimate of Workers by Survey Area

Survey Area	Estimated Employed Workers Totals from Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS) Program (1st Q – 2007)	Working HH Sample (# Surveyed)	Rounded Worker Expansion Factor	Total Worker Estimates
Alexandria City, VA	86,287	600	144	86,400
Arlington Co., VA	125,917	600	210	126,000
Calvert Co., MD	45,901	600	77	46,200
Charles Co., MD	72,521	603	120	72,360
District of Columbia	299,246	600	499	299,400
Fairfax Co., VA	578,691	601	963	578,763
Frederick Co., MD	120,628	602	200	120,400
Loudoun Co., VA	150,207	603	249	150,147
Montgomery Co., MD	505,685	600	843	505,800
Prince George's, MD	436,397	600	727	436,200
Prince William Co., VA	192,829	601	321	192,921
Total	2,614,309	6,610		2,614,591

Estimates of employed workers were obtained from BLS for each jurisdiction in the study area for the first quarter of 2007, i.e., January – March. This timeframe was chosen to approximate the survey period. Dividing the BLS estimate by the number of interviews yields the expansion factor by jurisdiction. Only the integer portion of the expansion factor was retained to allow consistent cross-footing during analysis. The resulting control totals by jurisdiction differ only slightly from the estimate provided by BLS. For example in Montgomery County, MD, the BLS estimate of 505,685 workers is divided by 600 surveys to obtain a representation of 843 workers per complete survey. When 843 is multiplied by 600 surveys, the resulting estimate of 505,800 workers is produced for Montgomery County, MD.

The expansion factors allow for the proper representation of workers in each geographical area when analyzing the survey results. For example, without the expansion factor, the final estimated 46,200 workers in Calvert County would have the same representation as the estimated 578,763 workers in Fairfax County. By

using the expansion factor shown in the table above for each sub-area, the number of workers has been adjusted so that each worker is equally represented within the region.

Statistical Distributional Comparison Between Sample and Known Household Distributions

To be consistent with the 2004 analysis, the distribution for race/ethnicity was compared with published statistics. This was particularly important for the District of Columbia, where the survey distribution of ethnicity was shown to be skewed. All 11 jurisdictions were tested using the Chi Squared test. In addition to the District of Columbia, Alexandria City, VA, Arlington County, VA, and Fredrick County, MD were found to be significantly different than the published distribution.

The population distribution from the U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171) Summary File, Table 1 "Population by Race and Hispanic or Latino Origin for 18 Years and Over" was used for the bias adjustment. Although not an identical match, the 18 years and over population data allowed an acceptable comparison for workers 16 years and over from the survey.

The results after adjusting for race/ethnicity are shown in Table A-2. Expansion factors applied to survey results reflect the U.S. Census race/ethnicity distribution after the bias adjustment. Non-response for the race/ethnicity question is distributed in the same proportion as the valid percent.

Table A-2 – Bias Adjustment Factor

Survey Area	Hispanic	White	African-American	All Others
Alexandria City, VA	234	110	242	302
Arlington Co., VA	315	171	354	392
District of Columbia	475	324	710	623
Frederick Co., MD	74	211	245	116

The integer portion of the expansion factor is used. After adjustment, the working households are redistributed to more accurately reflect the ethnicity of the area.

Level of Confidence for Analysis

The level of confidence for analysis of the region and the county/city sub-areas will differ, because the sample sizes in each category differ. Table A-3 shows the level of confidence for each of these geographic divisions for the State of the Commute 2007 survey sample. In addition, the level of confidence has been calculated for several other, non-geographic key statistics sub-populations of interest in the study.

Table A-3 – Level of Confidence for Analysis

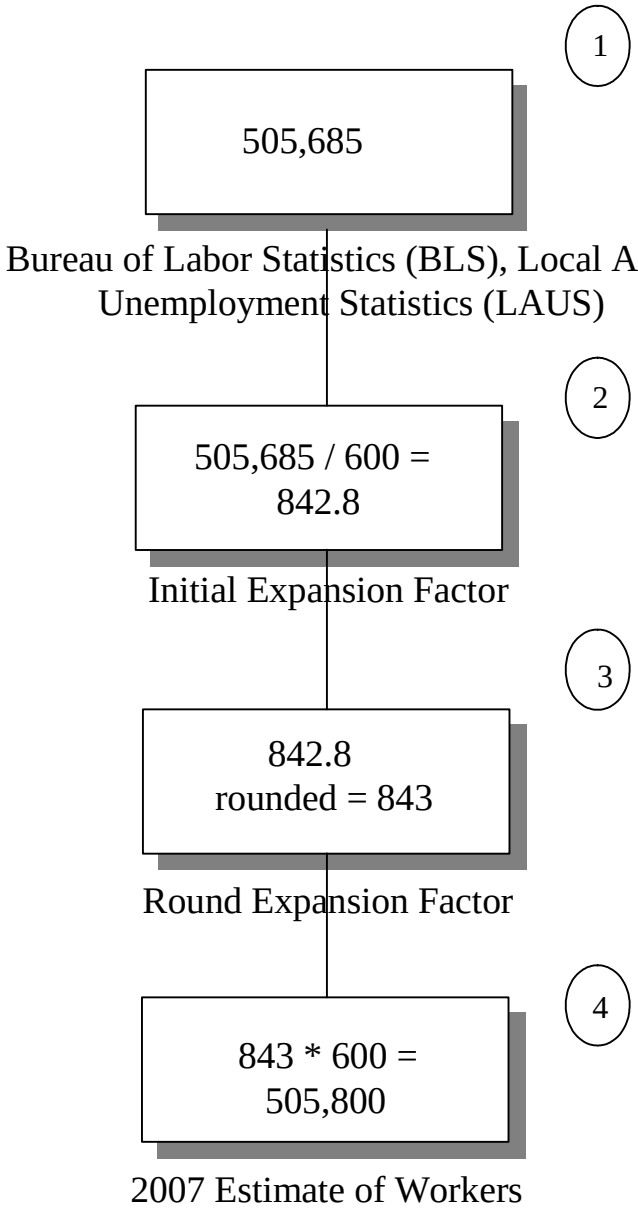
Sub-Area or Sub-Population	Sample Size	Level of Confidence
Geographic Sub-Areas		
Study Region – Eleven Areas	6,610	95% ± 1.2%
Study Portion of Virginia	3,005	95% ± 1.8%
Study Portion of Maryland	3,005	95% ± 1.8%
District of Columbia	600	95% ± 4.0%
Individual County or City Level	600	95% ± 4.0%
Sub-Area or Sub-Population	**Sample Size**	**Level of Confidence**
Sub-Populations		
Telecommuters	1,134	95% ± 2.9%
Carpoolers (with casual)/Vanpoolers	520	95% ± 4.3%
Transit Users	1,038	95% ± 3.0%
Bike Users or Walkers	183	95% ± 7.2%
Kiosk Users	85	95% ± 10.6%
Commuters Aware of GRH	1,646	95% ± 2.4%

Summary

The survey data have been weighted to reflect the number of workers within the geographic areas of the study. These expansion factors permit the proper influence of each geographic area to be included when discussing the study area as a whole or by state. Expansion factors within and Alexandria City, VA, Arlington County, VA, the District of Columbia, and Fredrick County, MD were adjusted for race bias in sampling.

EXPANSION FOR WORKING HOUSEHOLDS

Example: Montgomery County, MD



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[1] Estimate of employment January - March, 2007

[2] Initial expansion factor per SOC 2007 survey

[3] Rounded expansion factor = 843

[4] Final Estimate of Workers in Montgomery County, Md

APPENDIX B – STATE OF THE COMMUTE 2007
FINAL DIALING DISPOSITION

		Total Count
New Result	Answering Machine	10,960
	No Answer	21,187
	Call Backs	1,663
	Busy	4,673
	Over quota	90
	Total Lives	**38,573**
	Not in service	28,160
	Business	7,577
	Fax	9,518
	Refusals	16,814
	Other language	1,061
	Terminates during interview	778
	Terminates – screened out	5,610
	Never available	509
	Blocked Number	3,713
	Total Deads	**73,740**
	Total Completes	**6,610**
	Total Sample	**118,923**

Total Dialings: 411,449
Average Number of Dialings per Complete: 62.2

Disposition by Jurisdiction Table

Final Disposition	Alexandria City	Arlington	Calvert	Charles	District of Columbia	Fairfax County	Frederick	Loudoun	Montgomery	Prince George's	Prince William	Total
LIVES												
Answering Machine	395	573	902	1,576	1,074	762	1,143	775	1,299	1,325	1,136	10,960
No Answer	2,421	2,596	1,044	1,916	3,294	1,428	1,574	1,731	1,528	2,290	1,365	21,187
Call Backs	76	52	193	282	133	49	198	188	43	210	239	1,663
Busy	289	537	64	275	619	296	513	502	480	645	453	4,673
Over Quota	12	20	3	7	4	4	7	6	3	8	16	90
Total Lives	3,193	3,778	2,206	4,056	5,124	2,539	3,435	3,202	3,353	4,478	3,209	38,573
DEADS												
Not in Service	3,579	2,852	2,144	4,118	2,981	2,312	1,782	1,590	2,164	2,818	1,820	28,160
Business/Fax	1,844	1,650	1,222	1,839	2,185	1,352	1,305	1,486	1,432	1,691	1,089	17,095
Refusals	1,282	1,350	1,797	2,288	1,432	1,132	1,600	1,379	1,344	1,811	1,399	16,814
Other Language	132	133	27	59	96	143	30	103	128	121	89	1,061
Terminate - During interview	67	55	68	80	76	74	64	61	82	82	69	778
Terminate - Screened out	402	464	557	1,009	645	355	459	326	454	574	365	5,610
Never Available	41	45	48	68	53	34	35	52	43	74	16	509
Blocked Number	185	166	395	817	374	193	280	274	256	730	43	3,713
Total Deads	7,532	6,715	6,258	10,278	7,842	5,595	5,555	5,271	5,903	7,901	4,890	73,740
Total Completes	600	600	600	603	600	601	602	603	600	600	601	6,610
Total Sample	11,325	11,093	9,064	14,937	13,566	8,735	9,592	9,076	9,856	12,979	8,700	118,923

APPENDIX C – SURVEY QUESTIONNAIRE

Greater Washington, D.C., State of the Commute Survey – FY07
V11 – 2/5/07 – Changes after Pre-test

INTRODUCTION
Hello. My name is _____. I'm calling (from CIC Research) on behalf of the Metropolitan Washington Council of Governments__. We're talking to residents of Maryland, Virginia, and the District of Columbia about their travel to work. (**IF NECESSARY**: This is a genuine survey. No attempt will be made to sell you anything. Your answers will be kept completely confidential and will be used only together with those of other respondents.). Is now a good time? (**ARRANGE CALL BACK**)

SCREENING QUESTIONS

S1 Is anyone in your household employed? By employed, I mean a wage or salaried employee, military or self-employed…

INTERVIEWERS: SCREEN OUT KEEPING OWN HOUSE (HOUSEWIFE), DISABLED, RETIRED, STUDENT, VOLUNTEER OR UNEMPLOYED-LOOKING FOR WORK

1 yes (**SKIP TO QS4**)
2 no (**THANK AND TERMINATE**)

S4 Are you an employed person who is at least 16?

1 yes (**SKIP TO Q1**)
2 no (**ASK QS5**)

S5 Is anyone else in your household employed either full-time or part-time?

1 yes (**ASK FOR THAT PERSON AND REPEAT INTRO, THEN GO BACK TO QS4 OR ARRANGE CB**)
2 no (**THANK AND TERMINATE**)

EMPLOYMENT STATUS AND HOME/WORK LOCATION

1 What is your employment status right now -- are you employed 35 hours or more per week, or less than 35 hours?

1 Employed full-time (35 hours or more) (**CONTINUE**)
2 Employed part-time (less than 35 hours) (**CONTINUE**)
3 Not employed, keeping house, retired, disabled, full-time student, looking for work (**GO BACK TO QS5**)
8 Don't know (**THANK & TERMINATE**)
9 Refuse (**THANK & TERMINATE**)

1a What is your home zip code?

_____

AUTOCODE COUNTY FOR CHANTILLY
IF Q1a = 20151, AUTOCODE Q2 = 6 (Fairfax), THEN SKIP TO Q3
IF Q1a = 20152, AUTOCODE Q2 = 8 (Loudoun), THEN SKIP TO Q3

AUTOCODE ALEXANDRIA (EXCEPT 22311)
IF Q1a = 22301, 22302, 22304, 22305, OR 22314, AUTOCODE Q2 = 1 (Alexandria), THEN SKIP TO Q3
IF Q1a = 22303, 22306, 22307, 22308, 22309, 22310, OR 22315, AUTOCODE Q2 = 6 (Fairfax), THEN SKIP TO Q3

AUTOCODE TAKOMA PARK, MD, TAKOMA DC
IF Q1a = 20903, 20910, 20912, 20913, AUTOCODE Q2 = 9 (Montgomery), THEN SKIP TO Q3
IF Q1a = 20011 OR 20012, AUTOCODE Q2 = 5 (DC), THEN SKIP TO Q3

AUTOCODE LAUREL
IF Q1a = 20707 OR 20708, AUTOCODE Q2 = 10 (Prince Georges), THEN SKIP TO Q3
IF Q1a = 20723 OR 20724, AUTOCODE Q2 = 12 (Other –out of area), THEN THANK AND TERMINATE

AUTOCODE SILVER SPRING (EXCEPT 20903)
IF Q1a = 20901, 20902, 20904, 20905, 20906, OR 20910, AUTOCODE Q2 = 9, THEN SKIP TO Q3

AUTOCODE STERLING
IF Q1a = 20164, 20165, OR 20166, AUTOCODE Q2 = 8 (Loudoun), THEN SKIP TO Q3

AUTOCODE FAIRFAX AND FALLS CHURCH CITIES
IF Q1a = 22030, 22041, 22042, 22043, 22044, OR 22046, AUTOCODE Q2 = 6 (Fairfax), THEN SKIP TO Q3

AUTOCODE WALDORF (EXCEPT Q20601)
IF Q1a = 20602 OR 20603, AUTOCODE Q2 = 12 (Other - out of area), THEN THANK AND TERMINATE

AUTOCODE MANASSAS, MANASSAS PARK
IF Q1a = 20110 OR 20113, AUTOCODE Q2 = 11, THEN SKIP TO Q3

IF Q1a = ANY OTHER ZIP CODE, ASK Q2

QUOTA SCREENER – NEED 600 IN EACH OF 11 AREAS 1 - 11

2 In what county (or Independent City) do you live now? (**DO NOT READ**)

1 Alexandria City, VA
2 Arlington Co., VA
3 Calvert Co., MD
4 Charles Co., MD
5 Washington, DC (District of Columbia)
6 Fairfax Co., VA (City of Falls Church, City of Fairfax)
7 Frederick Co., MD (City of Frederick)
8 Loudoun Co., VA (South Riding)
9 Montgomery Co., MD (City of Rockville, City of Gaithersburg, City of Takoma Park, Silver Spring)
10 Prince George's Co., MD(City of Greenbelt, City of College Park, City of Bowie)
11 Prince William Co., VA (City of Manassas, City of Manassas Park)
12 Other (SPECIFY) _____ (**THANK AND TERMINATE**)
88 Don't know (THANK AND TERMINATE)
99 Refused (THANK AND TERMINATE)

3 In what county (or independent city) do you work? **(IF "ALL OVER", ASK:** Where do you work the most?)

1 Alexandria City (VA)
2 Anne Arundel Co. (MD)
3 Arlington Co. (VA)
4 Calvert Co. (MD)
5 Charles Co. (MD)
6 Washington, DC (District of Columbia)
7 Fairfax Co. (VA)
8 Fairfax City (VA)
9 Falls Church City (VA)
10 Frederick Co. (MD)
11 Howard Co. (MD)
12 Loudoun Co. (VA)
13 Manassas City (VA)
14 Manassas Park City (VA)
15 Montgomery Co. (MD)
16 Prince George's Co. (MD)
17 Prince William Co. (VA)
18 Stafford Co. (VA)
19 Baltimore County (MD)
20 Carroll County (MD)
21 Other _____
88 Don't know
99 Refuse

COMMUTE PATTERNS

Now, I'd like to ask you some questions about your commute to and from work. If you have more than one job, just tell me about your primary job.

4 First, in a TYPICAL week, how many days are you assigned to work?

_____ days
____ "0", not currently working (**GO BACK TO QS5**)

5 How many of those days are weekdays (Monday-Friday)?

_____ days
____ "0", (**CODE AS WKALL, THEN SKIP TO Q57**)

6 And how many weekdays do you commute to a work location outside your home? (**IF RESPONDENT SAYS, "VARIES BY WEEK" OR "DON'T KNOW", PROMPT "**What would you say would be most typical**?" IF RESPONDENT STILL SAYS "DON'T KNOW," CODE AS 8**)

10 None (**SKIP TO Q8**)
1 One
2 Two
3 Three
4 Four
5 Five
8 Don't know (**SKIP TO Q61**)
9 Refuse (**SKIP TO Q61**)

7 At what time do you usually arrive at work? (**DO NOT READ**)

1 5 am to 5:29 am
2 5:30 am to 5:59 am
3 6 am to 6:29 am
4 6:30 am to 6:59 am
5 7 am to 7:29 am
6 7:30 am to 7:59 am
7 8 am to 8:29 am
8 8:30 am to 8:59 am
9 9 am to 9:29 am
10 9:30 am 9:59 am
11 10 am to 5:59 pm
12 6 pm to 12 midnight
13 12:01 am to 4:59 am
88 Don't know
99 Refuse

SKIP TO Q11

8 So to be sure I understand, you work at home every weekday you work. Is that right?

1 Yes (**CONTINUE**)
2 No (**INTERVIEWER PROMPT, "SO YOU COMMUTE TO A WORK LOCATION OUTSIDE YOUR HOME ONE OR MORE WEEKDAYS, IS THAT CORRECT?) GO BACK TO Q5**)

9 Are you self-employed with your primary work location at home?

1 Yes (**PROGRAMMER, CODE AS HOMEALL**) (**SKIP TO INSTRUCTIONS BEFORE Q15**)
2 No (**CONTINUE**)

10 Do you telecommute every weekday you work?

1 Yes (**PROGRAMMER, CODE AS TELEALL, SKIP TO INSTRUCTIONS BEFORE Q13**)
2 No (**SPECIFY SITUATION, THEN THANK AND TERMINATE**)

11 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**)

12 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 5 or more days per week, 35 or more hours per week (RECODE Q11 = 2)
6. other (SPECIFY) _____

INSTRUCTIONS BEFORE Q13
IF TELEALL (FROM Q10), AUTOCODE Q13 = 1, THEN SKIP TO Q13a

13 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 Q14a**)
9 DK/Ref (**SKIP TO Q14a**)

13a Does your employer have a formal telecommuting program at your workplace or do you telecommute under an informal arrangement between you and your supervisor?

1 formal program
2 informal arrangement
3 N/A
9 DK/Ref

IF TELEALL AND Q5 = 1, AUTOCODE Q14 = 4, THEN SKIP TO INSTRUCTIONS BEFORE Q15
IF TELEALL AND Q5 = 2, AUTOCODE Q14 = 5, THEN SKIP TO INSTRUCTIONS BEFORE Q15
IF TELEALL AND Q5 = 3, 4, 5, 6, OR 7, AUTOCODE Q14 = 6, THEN SKIP TO INSTRUCTIONS BEFORE Q15

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

1 occasionally for special project
2 Less than one time per month/only in emergencies (e.g., sick child, snowstorm)
3 1-3 times a month
4 one day a week
5 two days a week
6 3 or more times a week
7 other (**SPECIFY**) _____
9 DK/Ref.

SKIP TO Q15

14a Do you at least occasionally work at home or at a location other than your central work place during your normal work hours? (**IF ASKED:** Normal work hours means the hours that you work, which may or may not be the normal business hours of your employer.)

1 yes
2 no (**SKIP TO Q14d)**
9 DK/Ref (**SKIP TO Q14d**)

14b On these days, where do you typically work? (DO NOT READ RESPONSES)

1 home
2 client/customer's office
3 satellite office, other office of my employer
4 community/business location (e.g., library, Kinkos, business center)
5 telework center
6 other _____
9 DK/Ref

14c How often do you usually work at this or these locations? (DO NOT READ)

1 occasionally for special project
2 Less than one time per month/only in emergencies (e.g., sick child, snowstorm)
3 1-3 times a month
4 one day a week
5 two days a week
6 3 or more times a week
7 other (SPECIFY) _____
9 DK/Ref.

14d Does your employer have a formal telecommuting program at your workplace or permit employees to telecommute under an informal arrangement with the supervisor?

1 yes, formal program
2 yes, informal arrangement
3 no
9 DK/Ref

IF Q14a = 1, AUTOCODE Q14e = 1, THEN SKIP TO Q14f

14e Would your job responsibilities allow you to work at a location other than your main work place at least occasionally?

1 yes
2 no **(SKIP TO Q15)**
9 DK/Ref **(SKIP TO Q15)**

IF Q14c = 1, 2, 3, OR 7, AUTOCODE Q14f = 1, THEN SKIP TO Q15
IF Q14c = 4, 5, OR 6, AUTOCODE Q14f = 2, THEN SKIP TO Q15

14f Would you be interested in telecommuting on an occasional or regular basis?

1 yes, occasional basis
2 yes, regular basis
3 no
9 DK/Ref

CURRENT COMMUTE PATTERNS

INSTRUCTIONS BEFORE Q15

IF HOMEALL FROM Q9, DON'T ASK Q15. AUTO FILL Q15, RESPONSE 18 = Q5, THEN SKIP TO Q61

IF TELEALL FROM Q10, DON'T ASK Q15. AUTO FILL Q15, RESPONSE 2 = Q5, THEN SKIP TO INSTRUCTIONS BEFORE Q34

15 Now thinking 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 Q12 = 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 Q14 = 4, 5, OR 6 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, OR VAN, 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 Q5 ARE ACCOUNTED FOR BY MODES 1-15 IN Q15 BEFORE ALL WEEKDAYS ARE COUNTED, ASK: **You said you typically work only (number of weekdays reported in Q5) 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 16; OTHERWISE CONTINUE AND RECORD MODES USED FOR THOSE DAYS

IF RESPONDENT MENTIONS "SICK, VACATION, HOLIDAY" (RESPONSE 17) FOR ANY DAY, CODE RESPONSE 17, 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, or van	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. regular day off (non-CWS)	16	16	16	16	16
17. sick, vacation, holiday, work out of area, etc. (prompt for travel on non sick, vacation day)	17	17	17	17	17
18. work at home – self-employed	18	18	18	18	18
19. taxi	19	19	19	19	19
20. N/A					
21. N/A					
88. N/A					

16 How long is your typical daily commute one way? Please tell me both how many minutes and how many miles. First, how many minutes?

Number of minutes _____
Time varies _____
888 Don't know
999 Refuse

17 And how many miles? (**IF LESS THAN 1 MILE, RECORD AS 0.5**)

Number of miles _____
888 Don't know
999 Refuse

USE OF ALTERNATIVE MODES

IN Q18, <MODE Q15> = ALL MODES 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19 NAMED IN Q15

18 How long have you been using <MODE Q15> to get to work? **(DO NOT READ)**

IF MORE THAN ONE <MODE Q15>, REPEAT FOR OTHER <MODE Q15>
ADD TO BRIEFING DOCUMENT INSTUCTIONS IF RESPONDENT SAYS, "DO YOU MEAN HOW LONG HAVE I BEEN USING <MODE Q15, THIS TYPE OF TRANSPORTATION> OR HOW LONG I'VE BEEN IN THIS PARTICULAR <MODE Q15, bus route, carpool, vanpool, etc.>," INTERVIEWER SHOULD SAY, "USING <**MODE Q15**, this type of transportation>.

CODE MONTHS FOR EACH MODE CURRENTLY USED
IF LESS THAN ONE MONTH, CODE 1 MONTH
IF RESPONDENT SAYS "always used" OR "only used" FOR ANY <MODE Q15>, CODE MONTHS AS 666.
IF RESPONDENT SAYS, "don't know" FOR ANY <MODE Q15>, CODE MONTHS AS 999

		Number of months
1	N/A	
2	N/A	_____
3	drive alone	_____
4	motorcycle	_____
5	carpool	_____
6	casual carpool (slugging)	_____
7	vanpool	_____
8	buspool	_____
9	bus	_____
10	Metrorail	_____
11	MARC	_____
12	VRE	_____
13	AMTRAK, other train	_____
14	Bicycle	_____
15	Walk	_____
16	N/A	
17	N/A	
18	N/A	
19	Taxi	_____

DEFINE RECENT MODE = Q18 MODE WITH FEWEST MONTHS
IF TIE FOR RECENT MODE, DESIGNATE BOTH MODES AS RECENT MODE

IF Q18 = 666 FOR RECENT MODE, AUTOCODE Q19a = 20, THEN SKIP TO Q20

19a Before starting to <RECENT MODE Q15> to work, what type or types of transportation did you use to get to work? (**ALLOW MULTIPLE MODES 1 – 15, 19. DO NOT ACCEPT MULTIPLES FOR 16, 17, 18, 20, 21 OR 99**)

IF Q12 = 1, 2, OR 3 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 at that time?"

IF Q14 = 4, 5, OR 6 AND RESPONDENT DOES NOT MENTION "Telecommute" (RESPONSE 2), ASK: **"You said you typically telecommute one or more days per week now. Did you telecommute at that time?"** (DO NOT READ OTHER RESPONSES)

1 compressed work schedule
2 telecommute
3 drive alone in your car, truck, van
4 motorcycle
5 carpool, including carpool with family member, dropped off
6 casual carpool (slugging)
7 vanpool
8 buspool
9 bus
10 Metrorail
11 MARC
12 VRE
13 AMTRAK, other train
14 Bicycle
15 walk
16 N/A
17 N/A
18 N/A
19 Taxi
20 always used, only used <RECENT MODE Q15>
21 not working then, not in DC area then
99 Don't know, refused

20 What were the reasons you began using <RECENT MODE Q15>? **(DO NOT READ; CHECK ALL THAT APPLY) (Probe for the 3 most important and only record 3)**

Personal circumstances/preferences
1 changed jobs/work hours
2 moved to a different residence
3 employer or worksite moved
4 spouse started new job
5 save money
6 save time
7 gas prices too high
8 tired of driving
9 prefer to drive, wanted to drive
10 safety
11 no vehicle available
12 car became available, additional car in household
13 to stay with family/children
14 HOV lanes too congested
15 Congestion (other)
16 always used
17 close to work or transportation pick up/drop off location
18 afraid of or didn't like previous form of transportation
19 stress
20 weather
21 bought hybrid vehicle
22 convenient (NOT AN ANSWER, PROBE FOR WHY IT'S CONVENIENT)
23 to get exercise

Commute Services/Programs

24 new option that became available
25 special program at work
26 pressure or encouragement from employer
27 GRH
28 Ozone action/Code Red days
29 no parking
30 parking expense, parking cost too high
31 found carpool partner
32 NuRide (VA carpool incentive)
33 Metrochek, SmartTrip, transit subsidy, vanpool subsidy
34 Commuter Choice Maryland

Information/Promotion

35 advertising
36 initiated request/looked for information on my own
37 info. from Commuter Connections/Council of Governments/COG/800 number
38 Commuter Connections Website
39 other Website
40 word of mouth/recommendation
41 information from transit agency
42 saw highway sign
43 yellow pages
44 Other _____

88 Don't know
99 Refuse

22 In the past two years, have you used or tried any other type of transportation between home and work that you've not already mentioned?

1 yes
2 no (**SKIP TO Q28**)

23 What was that type of transportation? (**DO NOT READ; CHECK ALL THAT APPLY. IF Q23 = Q15 ANY DAY OR Q19a, INTERVIEWER PROMPT, "YOU ALREADY MENTIONED <MODE Q15, Q19a>, DID YOU TRY ANY OTHER TYPE OF TRANSPORTATION?"**

1 compressed work schedule day off
2 telecommute
3 drive alone
4 motorcycle
5 carpool, including carpool with family member, dropped off
6 casual carpool (slugging)
7 vanpool
8 buspool
9 bus
10 Metrorail
11 MARC
12 VRE
13 AMTRAK, other train
14 bicycle
15 walk
16 N/A
17 N/A
18 N/A
19 taxi
20 N/A
21 N/A
99 don't know, refused

24 How long did you use <Q23 mode(s)>? (**DO NOT READ**)

_____ months (**CONVERT YEARS TO MONTHS**)
0 less than one month
888 occasionally (tried one, emergency use)
999 still using (**ASK Q25**)
-997 Don't know

SET Q23LONG = Q24, LONGEST DURATION
IF Q24 = STILL USING FOR ANY MODE, THAT MODE = Q23 LONG
IF Q24 = 888 (occasionally) FOR ANY MODE, THAT MODE = Q23LONG, UNLESS RESPONDENT MENTIONED BOTH OCCASIONAL MODE AND OTHER MODE, THEN USE OTHER MODE

SKIP TO Q26

25 How many days would you say you now < Q23LONG> in a typical **month**?

_____ DAYS PER MONTH
99 don't know, refused

26 What prompted you to use or try this type of transportation? **(DO NOT READ; CHECK ALL THAT APPLY) (Probe for the 3 most important and only record 3)**

Personal circumstances/preferences
1 changed jobs/work hours
2 moved to a different residence
3 employer or worksite moved
4 spouse started new job
5 save money
6 save time
7 gas prices too high
8 tired of driving
9 prefer to drive, wanted to drive
10 safety
11 no vehicle available
12 car became available, additional car in household
13 to stay with family/children
14 HOV lanes too congested
15 congestion (other)
16 always used
17 close to work or transportation pick up/ drop off location
18 afraid of or didn't like previous form of transportation
19 stress
20 weather
21 bought hybrid vehicle
22 convenient (NOT AN ANSWER, PROBE FOR WHY IT'S CONVENIENT)
23 to get exercise

Commute Services/Programs
24 new option that became available
25 special program at work
26 pressure or encouragement from employer
27 GRH
28 Ozone action/Code Red days
29 no parking
30 parking expense, parking cost too high
31 found carpool partner
32 NuRide (VA carpool incentive)
33 Metrochek, SmartTrip, transit subsidy, vanpool subsidy
34 Commuter Choice Maryland

Information/Promotion

35 advertising
36 initiated request/looked for information on my own
37 info. from Commuter Connections/Council of Governments/COG/800 number
38 Commuter Connections Website
39 other Website
40 word of mouth/recommendation
41 information from transit agency
42 saw highway sign
43 yellow pages
44 Other _____

88 Don't know
99 Refuse

IF Q23 = Q15, ANY DAY, ANY MODE, OR Q24 = STILL USING, SKIP TO Q28

27 Why didn't you continue < Q23LONG>? **(DO NOT READ; CHECK ALL THAT APPLY)**

1 too inconvenient
2 cost too much
3 took too much time
4 safety concerns
5 job changes - job, work site, schedule
6 need vehicle during or after work
7 vehicle became unavailable/unreliable
8 moved home location
9 didn't like pool partners
10 new/changes in employer program
11 bus or rail schedule or route change
12 child-related activities (e.g., school)
13 circumstantial (e.g., car became available)
14 used only temporarily (e.g., car in shop)
15 weather related
16 parking issue
17 lost carpool partner
18 bought a hybrid or compressed natural gas (CNG) vehicle
19 Other (SPECIFY) _____

ALTERNATIVE MODE PATTERNS

IF Q15 = 5, 6, 7, CONTINUE, OTHERWISE, SKIP TO Q29

28 Now I'd like to ask you about your current car/van pool (FROM Q15). Including yourself, how many people usually ride in your carpool or vanpool? (If more than 1 answer in Q15, select 1 using this priority: vanpool, carpool, casual carpooling/slug.)

_____ total people in pool (must be more than 1)

IF Q15 = 5, 6, 7, 8, 9, 10, 11, 12, OR 13, CONTINUE USING THE MOST COMMON ALTERNATIVE MODE, OTHERWISE, SKIP TO INTRO BEFORE Q34

29 How do you get from home to where you meet your <Q15 ALT MODE: carpool, vanpool, buspool, bus, or train>?

1 picked up at home by car/van pool (**SKIP TO INSTRUCTIONS BEFORE Q34**)
2 drive alone to driver's home or drive alone to passenger's home
3 drive to a central location, like park & ride, or train or subway station
4 dropped off or another car/van pool
5 bicycle
6 motorcycle
7 walk
8 I am the driver of car pool/van pool (**SKIP TO INSTRUCTIONS BEFORE Q34**)
9 bus/transit
10 other (**SPECIFY**) _____

30 How many miles is it one way from your home to where you meet your <**Q15 ALT MODE**: carpool, vanpool, buspool, bus, or train>? **(IF LESS THAN 1 MILE, ENTER 0.5**)

_____ miles

TELECOMMUTE

INSTRUCTIONS BEFORE Q34

IF Q13 = 1 OR Q15 = 2 ANY DAY, CONTINUE, OTHERWISE, SKIP TO INTRO BEFORE Q44
IF TELEALL, DO NOT READ INTRO TO Q34, SKIP DIRECTLY TO Q34

INTRO TO Q34: Now I have a few more questions about telecommuting.

34 How long have you been telecommuting?

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

IF TELEALL, AUTOCODE Q36 = 1, THEN SKIP TO Q40

36 Where do you work when you telecommute? Do you work at home, in a telework center, a satellite office provided by your employer, or someplace else? (**IF NECESSARY**: Telework Centers are federally funded facilities located around the Washington area that allow government and non-government employees to work closer to home some or all of the time.)

1 Home (**SKIP TO Q40**)
2 Telework Center
3 Both home and Telework Center
4 Satellite office provided by employer
5 Both home and satellite office
6 Business service center (Kinkos) or other "retail" location
7 Both home and business service center (Kinkos) or other "retail" location
8 Library or community center
9 Both home and library or community center
10 Executive office suites
11 Both home and executive office suites
12 other location (**SPECIFY**) _____

IF Q36 = 3, 5, 7, 9, OR 11, CONTINUE, OTHERWISE, SKIP TO Q38

37 How many days per week, on average, do you telecommute from the location outside your home?

_____ days per week

38 How many miles is it one way from your home to this location? (IF LESS THAN ONE MILE, RECORD “1”)

_____ miles (no decimals)

39 And how do you get from home to this location?

1 N/A
2 N/A
3 drive alone
4 motorcycle
5 carpool, including carpool with family member, dropped off
6 casual carpool (slugging)
7 vanpool
8 buspool
9 bus
10 Metrorail
11 MARC
12 VRE
13 AMTRAK, other train
14 bicycle
15 walk
16 N/A
17 N/A
18 N/A
19 taxi
99 DK/Ref

40 Why did you start to telecommute? (DO NOT READ) (ALLOW MULTIPLE ANSWERS)

1 changed jobs/work hours
2 save money
3 save time
4 new option that became available
5 advertising
6 special program at work
7 moved to a different residence
8 pressure or encouragement from employer
9 safety
10 no vehicle available
11 tired of driving
12 initiated request on my own
13 info. From Commuter Connections / COG (Council of Governments) / Web (SKIP TO INTRO TO Q44)
14 employer or worksite moved
15 get more work done
16 quiet, uninterrupted
17 stay with family or children
18 avoid congestion
19 convenient
20 personal circumstances (weather, repair man, sick)
21 other (SPECIFY) _____
99 DK/Ref

IF Q40 = 5, AUTOCODE Q42 = 1, THEN INSERT “advertising” AS <Q40 REASON> IN Q42
IF Q40 = 6, AUTOCODE Q42 = 2, THEN INSERT “a special program at work” as <Q40 REASON> IN Q42
IF Q40 = 13, AUTOCODE Q42 = 4, THEN INSERT “information from Commuter Connections or the Council of Governments” AS <Q40 REASON> IN Q42

42 **IF ANY RESPONSES AUTOCODED IN Q42, ASK**, "You mentioned <Q40 REASON> as a reason you started to telecommute. Did you learn about telecommuting from any other source?"

IF NO RESPONSES AUTOCODED IN Q42, ASK, "How did you find out about telecommuting?" (DO NOT READ)

1 advertising (radio, newspaper or TV)
2 special program at work/employer provided information
3 initiated request on my own
4 information from Commuter Connections / COG (Council of Governments)
5 word of mouth
6 newspaper or magazine article
7 Commuter Connections Website
8 Other Website
9 County or jurisdiction program
10 other (SPECIFY) _____
99 DK/Ref

IF Q42 = 4 OR 7, AUTOCODE Q43 = 1, THEN SKIP TO INTRO BEFORE Q44

43 Did you receive any information about telecommuting from Commuter Connections or from the Telework Resource Center at the Council of Governments?

1 yes (SKIP TO **INTRO BEFORE Q44**)
2 no
9 DK/Ref

AVAILABILITY OF TRANSPORTATION OPTIONS

IF TELEALL, SKIP TO Q61

INTRO BEFORE Q44: Next, I want to ask you about transportation services that might be available in your area.

44 Regardless of whether or not you use them, what train or bus companies provide service in the area where you live? (**DO NOT READ; PROBE WELL FOR BOTH BUS AND TRAIN; ACCEPT MULTIPLE RESPONSES FOR 2-12 AND FOR 14-19**)

Buses
1 No buses provide service (DO NOT ALLOW MULTIPLES WITH 2-12)
2 Alexandria DASH
3 Fairfax Connector
4 Fairfax Cue
5 Loudoun Commuter Bus
6 Metrobus
7 MTA bus
8 Omni Ride
9 Ride On
10 "The Bus"
11 TransIT Bus
12 Bus (PROBE FOR NAME) _____

Train
13 No trains provide service (DO NOT ALLOW MULTIPLES WITH 14-18)
14 AMTRAK/ACELA
15 MARC (Maryland commuter rail)
16 MetroRail/subway
17 Virginia Railway Express (VRE)
18 Train (PROBE FOR NAME) _____

19 Other (SPECIFY) _____
99 Don't know/Refused

44a About how far from your home is the nearest bus stop? (NOTE IF MILES OR BLOCKS)

Number of miles _____
Number of blocks _____
999 Don't know

44b How far from your home is the nearest train station? (NOTE IF MILES OR BLOCKS)

Number of miles _____
Number of blocks _____
999 Don't know

44c What train or bus companies provide service in the area where you **work**? (**DO NOT READ; PROBE FOR BOTH BUS AND TRAIN, ALLOW MULTIPLE RESPONSES FOR 2-12 AND FOR 14-19**)

Buses
1 No buses provide service (DO NOT ALLOW MULTIPLES WITH 2-12)
2 Alexandria DASH
3 Fairfax Connector
4 Fairfax Cue
5 Loudoun Commuter Bus
6 Metrobus
7 MTA bus
8 Omni Ride
9 Ride On
10 "The Bus"
11 TransIT Bus
12 Other Bus (PROBE FOR NAME) _____

Trains
13 No trains provide service (DO NOT ALLOW MULTIPLES WITH 14-18)
14 AMTRAK/ACELA
15 MARC (Maryland commuter rail)
16 MetroRail/subway
17 Virginia Railway Express (VRE)
18 Other Train (PROBE FOR NAME)_____

19 Other (SPECIFY)
99 Don't know/Refused

Q46. Is there a special HOV (High Occupancy Vehicle) lane that can be used only by carpools, vanpools and buses along your route to work?

1 Yes
2 No (**SKIP TO Q52**)
9 Refuse/Don't know (**SKIP TO Q52**)

IF Q15 = 14, 15, ALL DAYS, AUTOCODE Q47 = 2, THEN SKIP TO Q54

47 Do you use the HOV lane to get to or from work?

1 Yes
2 No (**SKIP TO Q52**)
9 Refused/Don't know (**SKIP TO Q52**)

50 How much time does the HOV lane save you in your one-way trip to or from work?

_____ minutes
999 DK/Ref.

51 Did the HOV lane influence your decision to use your current way of commuting?

1 Yes
2 No
9 Refused/Don't know

52 Do you know the locations of Park 'n Ride lots along the route that you take to work?

1 yes
2 no (**SKIP TO INSTRUCTIONS BEFORE Q54**)
3 there aren't any (**SKIP TO INSTRUCTIONS BEFORE Q54**)
8 Don't know (**SKIP TO INSTRUCTIONS BEFORE Q54**)
9 Refuse (**SKIP TO INSTRUCTIONS BEFORE Q54**)

53 In the past year have you used Park 'n Ride lots when commuting to work?

1 yes
2 no
9 DK/Ref.

ATTITUDES TOWARD TRANSPORTATION MODES

INSTRUCTIONS BEFORE Q54
If Q15 = 8, 9 OR Q29 = 9, SKIP TO Q55
If Q23 = 8, 9 AND Q24 = 999 (still using), SKIP TO Q55
If Q44 = 1 OR Q44c = 1, AUTOCODE Q54 = 1 AND AUTCODE Q55 = 1, THEN SKIP TO Q56

54 You said earlier that you do not ride the bus regularly for your commute to work. Why don't you ride the bus? (**DO NOT READ, ACCEPT MULTIPLE RESPONSES**)

1 No bus service available (in home area or in work area/bus too far away
2 Don't know if service is available/don't know location of bus stops
3 Need my car for work
4 Need car before or after work
5 Need car for emergencies/overtime
6 It might not be safe/I don't feel safe (on bus or at bus stops)
7 Bus is unreliable/late
8 Trip is too long/distance too far
9 Takes too much time
10 Don't like to ride with strangers
11 Prefer to be alone during commute
12 Work schedule irregular
13 Too expensive
14 Too uncomfortable/crowded
15 Buses too dirty
16 Have to transfer/too many transfers
17 Had a bad experience with the bus in the past
18 Have to wait too long for the bus or between buses
19 Other (specify) _____
99 DK/Ref

IF Q15= 10, 11, 12, 13 (TRAIN), SKIP TO Q56
If Q23 = 10, 11, 12, 13 AND Q24 = 999 (still using), SKIP TO Q56

55 You said that you do not ride the train to work. Why not? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

1 No train service available (in home area or in work area)/train too far away
2 Don't know if service is available/don't know location of train stations
3 Need my car for work
4 Need car before or after work
5 Need car for emergencies/overtime
6 It might not be safe/I don't feel safe (on train or at train stations)
7 Train is unreliable/late
8 Trip is too long/distance too far
9 Takes too much time
10 Don't like to ride with strangers
11 Prefer to be alone during commute
12 Work schedule irregular
13 Too expensive
14 Too uncomfortable/crowded
15 Train too dirty
16 Have to transfer/too many transfers
17 Had a bad experience with the train in the past
18 Have to wait too long for the train or between trains
19 Other (specify) _____
99 DK/Ref

IF Q15 = 5, 6, 7 OR Q29 = 1, 4, OR 8 SKIP TO Q57
If Q23 = 5, 6, 7 AND Q24 = 999 (still using), SKIP TO Q57

56 You said that you do not use a carpool or vanpool for your trip to work. Why don't you carpool or vanpool? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

1 Don't know anyone to carpool/vanpool with
2 Need my car for work
3 Need car before or after work
4 Need car for emergencies/overtime
5 It might not be safe/I don't feel safe
6 Carpool/vanpool partners are/could be unreliable/late
7 Trip is too long/distance too far
8 Takes too much time
9 Doesn't save time
10 Don't like to ride with strangers
11 Prefer to be alone during commute
12 Work schedule irregular
13 Too expensive
14 Had a bad experience with carpooling/vanpooling in the past
15 Other (specify) _____
99 DK/Ref

CURRENT COMMUTE COMPARED TO LAST YEAR

57 Would you say your commute is easier, more difficult, or about the same now as it was one year ago?

1 easier (**ASK Q58**)
2 more difficult (**ASK Q59**)
3 about the same (**SKIP TO Q60**)
4 not applicable (**SKIP TO Q60**)
9 DK/Ref (**SKIP TO Q60**)

58 In what way is it easier?

1 shorter distance
2 trip is faster, takes less time
3 route is less congested
4 started carpooling/vanpooling to work
5 started using bus, train to work
6 started driving alone to work
7 less stressful
8 bought a hybrid or compressed natural gas (CNG) vehicle
9 started using HOV lanes
10 other _____
19 Refused/Don't know

59 In what way is it more difficult?

1 longer distance
2 trip is slower, takes more time
3 more congested
4 started carpooling/vanpooling to work
5 started using bus, train to work
6 started driving alone to work
7 more stressful
8 construction on route to work
9 trains, buses, metro more crowded
10 gas prices are higher, costs more
11 other _____
19 DK/Ref.

60 Have you changed your work or home location in the last year? IF YES, AND RESPONDENT DOES NOT VOLUNTEER INFORMATION, ASK, "Did you change your home or work location?"

1 Yes, changed home location
2 Yes, changed work location
3 Yes, changed both home and work locations
4 No (SKIP TO Q61)
9 DK/Ref. (SKIP TO Q61)

60a Was your previous location also in the Washington metropolitan region?

1 Yes
2 No
9 DK/Refused

60b What factors did you consider in your decision to make this change? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

<u>Commute Factors</u>
1 Length, ease of commute
2 Cost of commuting
3 Commuting options that would be available (e.g., transit)

<u>Residential Factors</u>
4 Quality of schools, stay in same school system
5 Cost of house
6 Cost of living
7 Size of house
8 Quality of neighborhood
9 Closeness to family or friends
10 Entertainment, shopping, services nearby

Job Factors

11 Income, salary
12 Job satisfaction
13 Career advancement
14 Job opportunities for spouse

15 Other (SPECIFY) _____
19 DK/Refused

60c How important to your decision was the ease of your trip to work compared to the other factors you just mentioned? Was it less important than other factors, more important, or about the same importance?

1 Less important
2 More important
3 About the same importance
9 DK/Refused

IF Q60 = 1 OR 3, ASK Q60d and Q60e, OTHERWISE, SKIP TO Q61

60d Did your employer offer you any information about financial incentives that might be available to you if you moved your home to a location close to work?

1 Yes
2 No
9 DK/Refused

60e Did your employer offer you any information about financial incentives that might be available if you moved your home to a location close to a bus stop or train station?

1 Yes
2 No
9 DK/Refused

AWARENESS OF ADVERTISING

61 Have you heard, seen, or read any advertising about commuting in the past year?

1 yes
2 no (**SKIP TO Q81**)
9 DK/Ref (**SKIP TO Q81**)

62 What messages do you recall from this advertising? (DON'T READ, ACCEPT MULTIPLE RESPONSES)

1 none (**SKIP TO Q81**)
2 that you should rideshare, carpool, vanpool) (**NOT ACCEPTABLE ANSWER; PROBE FOR WHY AND RECORD ELSEWHERE**)
3 that new trains and/or buses are coming
4 that you can call for carpool or vanpool info
5 call 1-800-745-RIDE / call Commuter Connections
6 Commuter Choice Maryland
7 contact the Commuter Connections website (www.commuterconnections.org, www.commuterconnections.com)
8 it saves money
9 it saves time
10 it is less stressful
11 guaranteed ride home (GRH)
12 employer would give me MetroChek benefits, SmartTrip benefits
13 it would help the environment
14 it reduces traffic
15 it saves wear and tear on the car
16 Ozone Action Days / Code Red Days
17 Telework Center / telecommuting
18 HOV lanes
19 regional services/programs are available to help with commute
20 Springfield interchange reconstruction
21 Wilson bridge reconstruction, Bridge Bucks
22 use the bus or train, use Metrobus
23 Way to Go, Way to Go Arlington
24 other (SPECIFY) _____
99 DK/Ref. (**SKIP TO Q81**)

63 What organization or group sponsored the ad you recall? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

1 Commuter Connections
2 Metropolitan Washington Council of Governments, MWCOG, COG
3 Metro, WMATA
4 MARC, Maryland Commuter Rail
5 VRE, Virginia Railway Express
6 VDOT (Virginia Department of Transportation)
7 DDOT (District of Columbia Department of Transportation)
8 MDOT (Maryland Department of Transportation)
9 VDRPT, Virginia Department of Rail and Public Transportation
10 Maryland State Highway Administration
11 MTA, Maryland Mass Transit Administration
12 Maryland Department of the Environment
13 WABA, Washington Area Bicycling Association
14 Arlington County Commuter Services
15 other (specify) _____
99 DK/Ref.

64 And where did you see, hear, or read this advertisement? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

1 Commuter Connections website
2 other website, internet (specify _____)
3 radio
4 TV
5 postcard in mail
6 newspaper
7 in train station
8 on train or bus
9 at work
10 other (_____)
19 DK/Ref.

IF HOMEALL, SKIP TO Q81
IF TELEALL, SKIP TO Q81
IF WKALL, SKIP TO Q81

Attitude changes/actions taken after hearing ads

65 After seeing or hearing this advertising, were you more likely to consider ridesharing or public transportation?

1 yes
2 no (**SKIP TO Q81**)
9 DK/Ref (**SKIP TO Q81**)

66 After seeing or hearing this advertising, did you take any actions to try to change how you commute? **IF YES**… "What actions did you take? (**DO NOT READ**)

No action
1 didn't take any action (**SKIP TO Q81**)

Sought information
2 looked for commute information on the internet
3 asked friend, family member, or co-worker for commute information (referral)
4 contacted a local or regional organization for commute information
5 looked for a carpool or vanpool partner
6 called a transit operator to ask about schedules or routes
7 asked employer about telecommuting opportunities
8 asked employer about Metrochek or SmartTrip
9 looked for information about guaranteed ride home (GRH) program
10 looked for information about HOV lanes

Started participating in commute service/program
11 registered for guaranteed ride home (GRH) program
12 purchased alternative fuel vehicle (e.g., electric car, hybrid car, CNG-fueled vehicle)
13 started using HOV lane to get to work

Changed personal situation, work schedule, or commute route
14 moved my home or job location, changed jobs
15 started going to work earlier or later
16 changed or reduced number of days I work
17 changed route to work

Tried another way of getting to work, started using another form of transportation

18 tried or started driving alone to work
19 tried or started carpooling to work
20 tried or started vanpooling to work
21 tried or started using bus to get to work
22 tried or started using train to get to work
23 tried or started bicycling or walking to work
24 tried or started telecommuting/teleworking

Other

25 other action (specify_____) (**SKIP TO Q81**)

99 DK/Ref (**SKIP TO Q81**)

Autocode reasons for change for respondent currently using alt mode (Q15) named in Q66
IF Q66 = 19 AND Q15 = 5 OR 6, CODE Q67 = Q20, DO NOT ASK Q67
IF Q66 = 20 AND Q15 = 7, CODE Q67 = Q20, DO NOT ASK Q67
IF Q66 = 21 AND Q15 = 8 OR 9, CODE Q67 = Q20, DO NOT ASK Q67
IF Q66 = 22 AND Q15 = 10, 11, 12, OR 13, CODE Q67 = Q20, DO NOT ASK Q67
IF Q66 = 23 AND Q15 = 14 OR 15, CODE Q67 = Q20, DO NOT ASK Q67
IF Q66 = 24 AND Q15 = 2, CODE Q67 = Q20, DO NOT ASK Q67

Autocode reasons for change for respondent who tried alt mode named in Q66 within past two years (Q23)
IF Q66 = 19 AND Q23 = 5 OR 6, CODE Q67 = Q26, DO NOT ASK Q67
IF Q66 = 20 AND Q23 = 7, CODE Q67 = Q26, DO NOT ASK Q67
IF Q66 = 21 AND Q23 = 8 OR 9, CODE Q67 = Q26, DO NOT ASK Q67
IF Q66 = 22 AND Q23 = 10, 11, 12, OR 13, CODE Q67 = Q26, DO NOT ASK Q67
IF Q66 = 23 AND Q23 = 14 OR 15, CODE Q67 = Q26, DO NOT ASK Q67
IF Q66 = 24 AND Q23 = 2, CODE Q67 = Q26, DO NOT ASK Q67

67 What were the reasons you decided to take this action? **[DO NOT READ, ALLOW MULITPLE RESPONSES]**

Personal circumstances/preferences

1 changed jobs/work hours
2 moved to a different residence
3 employer or worksite moved
4 spouse started new job
5 save money
6 save time
7 gas prices too high
8 tired of driving
9 prefer to drive, wanted to drive
10 safety
11 no vehicle available
12 car became available, additional car in household
13 to stay with family/children
14 HOV lane too congested
15 congestion
16 always used
17 close to work or transportation pick up/drop off location
18 afraid of or didn't like previous form of transportation
19 stress
20 weather
21 bought hybrid vehicle
22 convenient (**NOT AN ANSWER, PROBE FOR WHY IT'S CONVENIENT)**
23 to get exercise

Commute Services/Programs

24 new option that became available
25 special program at work
26 pressure or encouragement from employer
27 GRH
28 Ozone action/Code Red days
29 no parking
30 parking expense, parking cost too high
31 found carpool partner
32 NuRide (VA carpool incentive)
33 Metrochek, SmartTrip, transit subsidy, vanpool subsidy
34 Commuter Choice Maryland

Information/Promotion

35 advertising
36 initiated request/looked for information on my own
37 info. From Commuter Connections/Council of Governments/COG/800 number
38 Commuter Connections Website
39 other Website
40 word of mouth/recommendation
41 information from transit agency
42 saw highway sign
43 yellow pages, phone book
44 Other _____
88 Don't know
99 Refused

IF Q67 = 35 (advertising), CODE Q68 = 1, DO NOT ASK Q68

68 Did the advertising you saw or heard encourage you to take this action?

1 yes
2 no (**SKIP TO Q70**)
9 DK/Ref (**SKIP TO Q70**)

IF Q68 = 1 AND RESPONDENT MENTIONED MORE THAN ONE MESSAGE IN Q62, ASK Q69, OTHERWISE, SKIP TO Q70

69 You mentioned that you recall several advertising messages. Which message was most important in encouraging you to start or try this type of transportation? Was it … (**READ RESPONSES FROM Q62**)

_____ message from Q62

IF Q66 = 2, 3, 4, 5, 6, 7, 8, 9, OR 10, AND Q66 NE 19, 20, 21, 22, 23, OR 24 ASK Q70, OTHERWISE, SKIP TO Q71

70 How likely is it that you will try another type of transportation for your commute to work, other than driving alone, taxi, or motorcycle, within the next year? Would you say it is … (**READ RESPONSES 1-3. DO NOT READ RESPONSE 9**)

1 very likely
2 somewhat likely
3 not likely
9 DK/Ref

Collect info on mode/modes used before trying/starting new alt mode – skip out respondents who did not try alt mode and respondents who answered this question in Q19
IF Q66 NE 19, 20, 21, 22, 23, OR 24, SKIP TO Q81

Autofill mode duration for respondents currently using alternative mode (Q15) named in Q66
IF Q66 EQ 19 AND Q15 = 5 OR 6, AUTOFILL Q71 = "still using," THEN SKIP TO Q72a
IF Q66 EQ 20 AND Q15 = 7, AUTOFILL Q71 = "still using," THEN SKIP TO Q72a
IF Q66 EQ 21 AND Q15 = 8 OR 9, AUTOFILL Q71 = "still using," THEN SKIP TO Q72a
IF Q66 EQ 22 AND Q15 = 10, 11, 12, 13, AUTOFILL Q71 = "still using," THEN SKIP TO Q72a
IF Q66 EQ 23 AND Q15 = 14,15, AUTOFILL Q71 = "still using," THEN SKIP TO Q72a
IF Q66 EQ 24 AND Q15 = 2, AUTOFILL Q71 = "still using," THEN SKIP TO Q72a

Autofill duration for respondents who tried alt mode named in Q66 in past two years (Q23)
IF Q66 = 19 AND Q23 = 5 OR 6, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72a
IF Q66 = 20 AND Q23 = 7, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72a
IF Q66 = 21 AND Q23 = 8 OR 9, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72a
IF Q66 = 22 AND Q23 = 10, 11, 12, OR 13, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72a
IF Q66 = 23 AND Q23 = 14 OR 15, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72a
IF Q66 = 24 AND Q23 = 2, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72a

71 How long did you <ALT MODE FROM Q66> to work? (**IF MORE THAN ONE ALT MODE NOTED IN Q66, ASK DURATION FOR ALL**)

_____ months (**CONVERT YEARS TO MONTHS**)
_____ less than one month
_____ occasionally (tried one, emergency use) (**SKIP TO Q81**)
_____ still using

999 DK/Ref.

IF Q66 = 19, 20, 21, 22, 23, 24 (MORE THAN ONE OF THESE), THEN CHOOSE ALT MODE USED LONGEST TIME FOR Q72a. IF MORE THAN ONE ALT MODE USED SAME AMOUNT OF TIME, CHOOSE BOTH MODES.

72a Before trying <ALT MODE FROM Q66> to work, what type or types of transportation did you use to get to work? (**ACCEPT MULTIPLE RESPONSES, PROGRAMMER, LIST MODES FOR USE IN Q72b**)

FOR EACH MODE MENTIONED IN Q72a, ASK…

72b About how many days per week did you use <MODE FROM Q72a>?

IF SUM OF DAYS FROM Q72b NE Q5, ASK "And how did you commute on other days you were assigned to work?" **ACCEPT OPTION OF "didn't work, regular day off**."

IF Q7 = 1, 2, OR 3 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 at that time?"

IF Q14 = 4, 5, OR 6 AND RESPONDENT DOES NOT MENTION "Telecommute" (RESPONSE 2), ASK: **"You said you typically telecommute one or more days per week now. Did you telecommute at that time?"**

Mode/Day typically used per week		Number of days using mode				
1	compressed work schedule day off	1	2	3	4	5
2	telecommute	1	2	3	4	5
3	drive alone in your car, taxi	1	2	3	4	5
4	motorcycle	1	2	3	4	5
5	carpool, including carpool with 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	bus	1	2	3	4	5
10	Metrorail	1	2	3	4	5
11	MARC	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	didn't work, regular days off	1	2	3	4	5
17	N/A					
18	N/A					
19	Taxi	1	2	3	4	5
20	N/A					
21	not working then, not in DC area then					5
99	don't know, refused					5

AWARENESS OF COMMUTE PROGRAMS/SERVICES

Now I have a few questions about services that might be available to commuters in your home or work areas.

81 Is there a phone number or website you can use to obtain information on ridesharing, public transportation, HOV lanes, and telecommuting in the Washington region?

1 Yes
2 No (**ASK Q86**)
9 DK/Ref (**ASK Q86**)

83 What is it? (DON'T READ, ACCEPT MULTIPLES)

1.	800-745-RIDE (7433)	Commuter Connections (COG)
2.	888-730-6664	Potomac Rappahannock Transportation
3.	703-324-1111	Fairfax County RideSources
4.	301-770-POOL	Montgomery County Commuter Services
5.	240-777-RIDE	Montgomery County Commuter Services
6.	202-637-7000	METRO (Washington Metro. Area Transit Authority)
7.	www.mwcog.org	Commuter Connections (COG)
8.	www.commuterconnections.org	Commuter Connections (COG)
9.	www.commuterconnections.com	Commuter Connections (COG)
10.	www.vre.org	Virginia Railway Express (VRE)
11.	www.commuterdirect.com	Arlington County Commuter Services
12.	www.commuterpage.com	Arlington County Commuter Services
13.	703-228-RIDE	Arlington County Commuter Services
14.	www.springfieldinterchange.com	Springfield Interchange (VDOT)
15.	www.maryland.com	Maryland Mass Transit Admin. (MTA) MARC Commuter Rail
16.	www.wmata.com	WMATA, Metro
17.	www.HOVcalculator.com	VDOT
18.	www.commuterchoicemaryland.com	Commuter Choice Maryland
19.	866-RIDE-MTA (1-800-743-3682)	
20.	Other (SPECIFY) _____	

84 Have you used this number or website in the past year? (**CHECK FOR ALL RESPONSES IN Q83**)

1 Yes
2 No
8 Don't know
9 Refuse

IF Q83 = ONLY 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, SKIP TO Q86

85 How did you find out about this number or website? (**DO NOT READ; RECORD FIRST MENTION ONLY**)

1 TV
2 magazine
3 newspaper ad
4 newspaper article
5 sign/billboard
6 mail/postcard
7 brochure
8 transportation fair/special event
9 radio
10 employer
11 library
12 phonebook, yellow pages
13 word of Mouth (family, friend, co-worker)
14 internet/Web
15 InfoExpress kiosks
16 Ozone Action/Code Red days
17 other _____
88 Don't know
99 Refuse

86 **IF Q83 = 1 OR 6, CODE Q86 = 1, THEN SKIP TO Q87**
Have you heard of an organization in the Washington region called Commuter Connections?

1 yes
2 no (**SKIP TO Q88c**)
8 Don't know (**SKIP TO Q88c**)
9 Refuse (**SKIP TO Q88c**)

87 How did you learn about Commuter Connections? (**DO NOT READ; ACCEPT MULTIPLE RESPONSES)**

1 TV
2 magazine
3 newspaper ad
4 newspaper article
5 sign/billboard
6 mail/postcard
7 brochure
8 transportation fair/special event
9 radio
10 employer
11 Library
12 phonebook, yellow pages
13 word of mouth (family, friend, co-worker)
14 internet/Web
15 InfoExpress kiosks
16 Ozone Action/Code Red days
17 Other _____
88 Don't know
99 Refuse

88 What services does Commuter Connections provide? (**DO NOT READ, ACCEPT MULTIPLE RESPONSES**)

1 guaranteed ride home
2 rideshare (carpool/vanpool) information
3 help finding carpool/vanpool partners, matchlists
4 transit schedule/route information
5 HOV lane information
6 park & ride lot information, parking information
7 telecommute information
8 bicycle/walking information
9 road construction information
10 kiosks, InfoExpress
11 Metrochek, SmartTrip
12 other (specify) _____
88 don't know
99 Refuse

IF Q83 = 1 OR 6, AND Q84 = 1 FOR ONE OR BOTH OF THOSE PROGRAMS, AUTOCODE Q88a = 1, THEN SKIP TO Q88c (Define Local Program)

88a Have you contacted Commuter Connections in the past year or visited a website sponsored by this organization?

1 Yes
2 No (**SKIP TO Q88c)**
8 Don't know **(SKIP TO Q88c)**
9 Refuse (**SKIP TO Q88c)**

88b What information or services were you seeking? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

1 transit schedule/route information
2 carpool, vanpool (rideshare) information
3 help finding carpool/vanpool partners, matchlists
4 guaranteed ride home
5 Ozone alerts
6 park & ride lot information, parking information
7 telecommute, telework information
8 bicycle, walking information
9 road construction information
10 MetroChek / SmarTrip
11 travel directions, driving directions
12 other (specify) _____
88 don't know
99 Refuse

Define Local Program for Q88c - Q88f

88c **SET ORGANIZATIONS TO ASK ABOUT IN Q88c-Q88f (DO NOT READ)**

IF Q2 = 1 OR Q3 = 1 (Alexandria), INSERT Alexandria Rideshare as <PROGRAM> in Q88c - Q88f
IF Q2 = 2 OR Q3 = 3 (Arlington), INSERT Arlington County Commuter Services or The Commuter Store as <PROGRAM> in Q88c - Q88f
IF Q2 = 3 OR Q3 = 4 (Calvert), INSERT Tri-County Council for Southern Maryland as <PROGRAM> in Q88c - Q88f
IF Q2 = 4 OR Q3 = 5 (Charles), INSERT Tri-County Council for Southern Maryland as <PROGRAM> in Q88c - Q88f
IF Q2 = 6 OR Q3 = 7, 8, OR 9 (Fairfax Co, Ffx City, Falls Church), INSERT Fairfax County RideSources as <PROGRAM> in Q88c - Q88f
IF Q2 = 7 OR Q3 = 10 (Frederick), INSERT TransIT Services of Frederick County as <PROGRAM> in Q88c - Q88f
IF Q2 = 8 OR Q3 = 12 (Loudoun), INSERT Loudoun County Office of Transportation Services as <PROGRAM> in Q88c - Q88f
IF Q2 = 9 OR Q3 = 15 (Montgomery), INSERT Montgomery County Commuter Services, Bethesda Transportation Solutions, or North Bethesda Transportation Center as <PROGRAM> in Q88c - Q88f
IF Q2 = 10 OR Q3 = 16 (Prince Georges), INSERT RideSmart as <PROGRAM> in Q88c - Q88f

IF Q2 = 11 OR Q3 = 13, 14, OR 17 (Prince William, Manassas, Manassas Park), INSERT PRTC OmniMatch as <PROGRAM> in Q88c-Q88f

1 Alexandria Rideshare
2 Arlington County Commuter Services, The Commuter Store
3 Tri-County Council of Southern Maryland (Calvert, Charles)
4 Fairfax County RideSources
5 TransIT Services of Frederick County
6 Loudoun County Office of Transportation Services
7 Montgomery County Commuter Services, Bethesda Transportation Solutions, North Bethesda Transportation Center
8 RideSmart (Prince Georges)
9 PRTC OmniMatch (Prince William)

88d Have you heard of an organization or service called <PROGRAM**>?**
IF YES AND Q88c = 2 OR 7, CLARIFY WHICH PROGRAM OR PROGRAMS ARE KNOWN. THEN CODE THAT/THOSE PROGRAMS IN 88d

1 Alexandria Rideshare
2 Arlington County Commuter Services, The Commuter Store
3 Tri-County Council of Southern Maryland (Calvert, Charles)
4 Fairfax County RideSources
5 TransIT Services of Frederick County
6 Loudoun County Office of Transportation Services
7 Montgomery County Commuter Services, Bethesda Transportation Solutions, North Bethesda Transportation Center
8 RideSmart (Prince Georges)
9 PRTC OmniMatch (Prince William)

88 Don't know (SKIP TO Q88g)
99 Refuse (SKIP TO Q88g)

ASK Q88e FOR ANY RESPONSE CODED YES IN Q88d

88e Have you contacted <**Q88d PROGRAM OR SERVICE**> in the past year or visited a website sponsored by this organization?

1 Alexandria Rideshare
2 Arlington County Commuter Services, The Commuter Store
3 Tri-County Council of Southern Maryland (Calvert, Charles)
4 Fairfax County RideSources
5 TransIT Services of Frederick County
6 Loudoun County Office of Transportation Services
7 Montgomery County Commuter Services, Bethesda Transportation Solutions, North Bethesda Transportation Center
8 RideSmart (Prince Georges)
9 PRTC OmniMatch (Prince William)

88 Don't know (SKIP TO Q88g)
99 Refuse (SKIP TO Q88g)

IF ONE OR MORE <Q88e PROGRAM OR SERVICE> CODED YES IN Q88e, ASK Q88f, DO NOT ASK ABOUT EACH PROGRAM INDIVIDUALLY

88f What information or services were you seeking? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

1 transit schedule/route information
2 carpool, vanpool (rideshare) information
3 help finding carpool/vanpool partners, matchlists
4 guaranteed ride home
5 Ozone alerts
6 park & ride lot information, parking information
7 telecommute, telework information
8 bicycle, walking information
9 road construction information
10 MetroChek / SmarTrip
11 travel directions, driving directions
12 other (specify) _____
88 don't know
99 Refuse

88g **IF Q83 = 11, AUTOCODE Q88g = 2, THEN SKIP TO Q88h**
IF Q83 = 12, AUTOCODE Q88g = 1, THEN SKIP TO Q88h
Have you heard of a service called CommuterPage.com or CommuterDirect.com?

1 yes, know CommuterPage.com
2 Yes, know CommuterDirect.com
3 no (**SKIP TO Q88c**)
8 Don't know (**SKIP TO Q88c**)
9 Refuse (**SKIP TO Q88c**)

88h **IF Q84 = 1 for CommuterDirect.com or CommuterPage.com, AUTOCODE Q88h = 1, THEN SKIP TO Q89**
Have you used one of these services in the past year?

1 Yes
2 No
8 Don't know
9 Refuse

EMPLOYER SERVICES

IF HOMEALL SKIP TO Q105
IF TELEALL SKIP TO Q105

89 Next, please tell me if your employer makes any of the following commute services or benefits available to you. How about information on commuter transportation options?

1 yes
2 no (**SKIP TO Q90**)
9 Don't know/Ref (**SKIP TO Q90**)

89a Have you received or used this information from your employer?

1 yes
2 no
9 DK/Ref

90 What about free on-site parking? Does your employer make that available to all employees at your worksite?

1 yes
2 no (**SKIP TO Q91**)
9 Don't know/Ref (**SKIP TO Q93**)

90a Have you used this free parking?

1 yes
2 no
9 DK/Ref

SKIP TO Q93

91 Does your employer pay part of your parking cost or do you have to pay the entire cost if you drive to work?

1 employer pays part/employee pays part
2 employee pays all
3 free offsite parking
9 DK/Ref

92 Does your employer offer parking discounts for carpools or vanpools?

1 yes
2 No (**SKIP TO Q93**)
9 Don't know/Ref (**SKIP TO Q93**)

92a Have you used this parking discount?

1 yes
2 no
9 DK/Ref

93 Does your employer set aside special parking spaces for carpools or vanpools?

1 yes
2 no (**SKIP TO Q94**)
9 Don't know/Ref (**SKIP TO Q94**)

93a Have you used one of these special spaces?

1 yes
2 no
9 DK/Ref

94 Does your employer offer MetroChek, SmarTrip, or other subsidies for public transportation or vanpooling?

1 yes
2 no (**SKIP TO Q95**)
9 Don't know/Ref (**SKIP TO Q95**)

94a Have you used the transit or vanpool subsidy?

1 yes
2 no
9 DK/Ref

95 Does your employer offer cash payments or other subsidies for carpooling?

1 yes
2 no (**SKIP TO Q96**)
9 Don't know/Ref (**SKIP TO Q96**)

95a Have you used the carpool subsidy?

1 yes
2 no
9 DK/Ref

96 Does your employer offer any facilities or programs to employees who bike or walk to work?

1 yes
2 no (**SKIP TO Q97**)
9 Don't know/Ref (**SKIP TO Q97**)

96a Have you used any of these facilities or programs?

1 yes
2 no (**SKIP TO Q97**)
9 DK/Ref (**SKIP TO Q97**)

96b What have you used? (**DO NOT READ**)

1 Bike lockers or racks
2 Personal shower or lockers
3 Cash or subsidies for bike or walk
4 Bike club
5 Bike equipment or clothing
6 Participation in Bike to Work Day
7 Other _____
9 DK/Ref

97 And last, does your employer provide guaranteed rides (GRH) home in case of emergencies or unscheduled overtime? (**NOTE: DOESN'T HAVE TO BE A PART OF A FORMAL GRH PROGRAM**)

1 yes
2 no (**SKIP TO Q102**)
9 Don't know/Ref (**SKIP TO Q102)**

97a Have you used this service or have you participated in this program? (**DO NOT READ**)

1 yes, used GRH trip / participate in the program (e.g., registered/signed up for, eligible for)
2 no
9 DK/Ref

GUARANTEED RIDE HOME

102 Do you know if there is a regional GRH or Guaranteed Ride Home program available in the event of unexpected emergencies and unscheduled overtime for commuters who rideshare or use public transportation?

1 yes, there is
2 no , there isn't (**SKIP TO Q104a**)
9 DK/Ref (**SKIP TO Q105**)

IF Q97a = 1, CODE Q103 = 1, CODE Q104 = 2, THEN SKIP TO Q104a

103 In the past two years, have you registered for or used any guaranteed Ride Home service?

1 Yes
2 No (**SKIP TO Q104a**)
9 DK/Ref (**SKIP TO Q104a**)

104 Who sponsored or offered the service? (**DO NOT READ**)

1 Commuter Connections/Council of Governments/COG
2 Employer
3 VRE
4 TMA (TyTran)
5 Other _____
9 Don't know/Refuse

NEW PROGRAM OPTIONS

104a In some U.S. cities, commuters can find carpool partners through an internet website. Commuters who want to carpool enter information about when and where they work and a phone number or email address where they can be contacted. They also can search for other commuters who have similar travel and want to carpool.

If a service like this was available in the Washington metro area and your personal information was kept confidential, how likely would you be to use it? Would you …definitely use it, probably use it, maybe or maybe not use it, probably not use it, or definitely not use it?

1 definitely use **(SKIP TO Q104c)**
2 probably use **(SKIP TO Q104c)**
3 maybe or maybe not use (**SKIP TO Q104c)**
4 probably not use
5 definitely not use
9 DK/Ref **(DO NOT READ, SKIP TO Q104d)**

104b For what reasons would you not be interested in using this service? **(DO NOT READ RESPONSES; CHECK ALL THAT APPLY)**

1 not interested in carpooling or vanpooling
2 cannot carpool or vanpool because of circumstances (work hours irregular, need car for work,,…)
3 already carpool
4 concerned about privacy, don't want personal information on internet
5 no access to internet
6 other _____
9 DK/Ref

SKIP TO Q104d

104c Would you be willing to provide any of the following information on this website for other commuters to use to contact you…? (**READ CHOICES 1 - 3) (ALLOW MULTIPLE RESPONSES, 1 – 3**)

1 A postal address
2 An email address
3 A phone number
4 Not willing to provide any of this information
9 DK/Ref **(DO NOT READ)**

104d **IF Q15 = 5-15, ANY DAY, SKIP TO Q105**
Suppose commuters who carpool to work could receive a monthly $25 gift card for purchases at area merchants. How likely would you be to try carpooling to receive the gift card? Would you … definitely try, probably try, maybe or maybe not try, probably not try, or definitely not try carpooling?

1 definitely try **(SKIP TO Q105)**
2 probably try **(SKIP TO Q105)**
3 maybe or maybe not try
4 probably not try
5 definitely not try
9 DK/Ref **(DO NOT READ)**

104e What if the monthly gift card was for $50? In this case, would you … definitely try, probably try, maybe or maybe not try, probably not try, or definitely not try carpooling?

1 definitely try
2 probably try
3 maybe or maybe not try
4 probably not try
5 definitely not try
9 DK/Ref **(DO NOT READ)**

KIOSKS

105 Have you ever seen any self-service computer kiosks, located in shopping malls and other public places in the Washington area, which offer information on transit and ridesharing, and other travel information?

1 Yes
2 No (**SKIP TO Q113**)
9 DK/Ref. (**SKIPT O Q113**)

106 In the past two years, have you used one of these kiosks to obtain commute or other transportation information, other than to purchase transit or train tickets?

1. Yes
2 No (**SKIP TO Q113**)
9 DK/Ref. (**SKIP TO Q113**)

107 Where was the kiosk that you used located? (**READ ONLY IF NECESSARY; CHECK ALL THAT APPLY**)

1 Ballston Common Mall
2 Fair Oaks Mall
3 La Promenda at L'Enfant Plaza
4 Pentagon
5 Reston Town Center
6 Springfield Mall
7 Tysons Corner Center
8 Union Station
9 Montgomery County (White Flint Mall, County Executive Building)
10 Fairfax County(libraries, government center, etc.)
11 United States Department of Agriculture - Alexandria,
12 United States Department of Agriculture, Washington, DC
13 Dulles Town Center
14 Manassas Mall
15 Pentagon City Mall.
16 Hoffman Center, Alexandria
17 Mitre Corp, McLean, VA
18 Other _____
99 DK/Ref.

108 What information did you obtain from the kiosk? (**DO NOT READ, CHECK ALL THAT APPLY; GET TOP 3 ANSWERS ONLY**)

1 general rideshare information
2 carpool/vanpool matchlist
3 transit route/schedule info
4 P&R info
5 GRH information or registration
6 telecommuting information
7 HOV lane information
8 Mall/retail center information
9 Weather information
10 Traffic information (SmartTraveler)
11 Fairfax County Information
12 Maps and guides
13 Springfield Interchange construction information
14 Ozone Action/Code Red days
15 Other _____

IF TELEALL OR HOMEALL, SKIP TO Q113

109 Did any of the information you received encourage you to use or try another type of transportation, other than driving alone, even if only temporarily, for your commute to work?

1. Yes
2. No (**SKIP TO Q113**)
9. DK/Ref. (**SKIP TO Q113**)

110 What was that type of transportation? (**DO NOT READ; CHECK ALL THAT APPLY) (NOTE: DRIVE ALONE IS NOT A VALID ANSWER; PROBE FOR OTHER ANSWER. IF DRIVE ALONE IS ONLY ANSWER, SNAP BACK AND CHANGE Q109 TO "NO.**")

1 N/A
2 N/A
3 drive alone in your car (N/A)
4 motorcycle (N/A)
5 carpool
6 casual carpool (slugging)
7 vanpool
8 buspool
9 bus
10 Metrorail
11 MARC
12 VRE
13 AMTRAK, other train
14 bicycle
15 walk
16 N/A
17 N/A
18 N/A
19 N/A
20 N/A
21 N/A
22 other _____

111 How long did you use or have you used that type of transportation?

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

112 How did you usually travel to work before you obtained information from the kiosk?

1 N/A
2 N/A
3 drive alone in your car
4 motorcycle
5 carpool
6 casual carpool (slugging)
7 vanpool
8 buspool
9 bus
10 Metrorail
11 MARC
12 VRE
13 AMTRAK, other train
14 bicycle
15 walk
16 N/A
17 N/A
18 N/A
19 N/A
20 N/A
21 N/A
22 other _____

DEMOGRAPHICS

113 In total, how many motor vehicles, in working condition, including automobiles, trucks, vans, and highway motorcycles are owned or leased by members of your household? _____

114 How many persons live in your home? Please count yourself, family and friends, and anyone who may be unrelated to you such as live-in housekeepers or boarders.

_____ persons

88 Don't know (**SKIP TO Q118**)
99 Refuse (**SKIP TO Q118**)

IF Q114 = 1, AUTOCODE 1114a = 0, AUTOCODE Q115 = 1, THEN SKIP TO Q116

114a And how many of these household members are under the age of 16?

_____ household members
888 Don't know
999 Refuse

IF TELEALL OR HOMEALL SKIP TO Q119

Now I have a few last questions for classification purposes.

118 First, about how many employees work at your worksite? Is it . . . (**READ CHOICES**)

1 1 – 25
2 26-50
3 51-100.
4 101-250
5 251-999.
6 1,000 or more
9 DK/Ref.

119 What is your occupation? _____

IF HOMEALL SKIP TO Q121, AUTO CODE "5" IN Q120

120 What type of employer do you work for? Is your employer a federal agency, a state or local government agency, a non-profit organization or association, a private employer, or are you self-employed?

1 federal agency
2 state, or local government agency
3 non-profit organization/association
4 private sector employer
5 self-employed
6 other (SPECIFY) _____
9 DK/Ref.

120a What is your zip code at work? _____

121 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 (**DON'T READ)**

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

1 Yes
2 No
9 DK/Ref.

123 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 Refused

124 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
99 Refused (**DON'T READ**)

Thank you very much for your time and cooperation!

(**RECORD SEX**:) 1 male 2 female

(**RECORD LANGUAGE OF INTERVIEW**:) 1 English 2 Spanish

APPENDIX D – INSTRUCTIONS AND DEFINITION OF TERMS FOR 2007 SOC (STATE OF COMMUTE) - #818

Q11: Flexible work schedule/"Flex-time". Employees select their own starting and finishing times within a set daily period of time, e.g., between 7am and 7pm, to make up the hours they need to work daily. Flex-time is generally not available to staff who are required to work shifts.

Q15, Q18, Q19a, Q23, Q72, Q110, Q112:

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 car-pool 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 down-town 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 or 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, fire-men, hospital employees, etc.
flex-hours (core hours with flexible start & stop times)

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

MTA. Maryland Transit Authority. Light rail

VRE. Virginia Railway Express. Light rail.

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.

SmarTrip and Metrochek are a tax-free commute benefit that companies can offer to employees in the Washington metropolitan area. SmarTrip is a permanent, rechargeable fare card and is embedded with a special computer chip that keeps track of the value of the card. Metrochek looks and works like a Metrorail farecard and can be redeemed on area public transit.

Q17: Miles traveled. Distance from home to work not including side trips, unless they are regular stops (e.g., dropping off a child at day care).

Q20, Q26, Q62, Q66, Q67, Q97, Q97a, Q99, Q102–Q104, 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.

Q13, Q14: Teleworking. Also known as telecommuting, means using information technology and telecommunications to replace work-related travel. Simply put, it means working at home or closer to home. With teleworking, employees work at home or perhaps at a local *telework center* one or more days per week.

Q13, Q14, Q36, Q62: Telework Centers. Federally funded facilities located around the Washington area that allow government and non-government employees to work closer to home some or all of the time.

Q20, Q26, Q46-Q51, Q58, Q62, Q66, Q67, Q81, Q88, Q108:

HOV lane. "high occupancy vehicle" lane/carpool lane/diamond lane

Q82, Q85, Q87, Q88, Q105-Q112:

Kiosks: Commuter Connections offers a regional network of information kiosks through out the Washington region. InfoExpress kiosks have a wealth of information and services for area commuters. InfoExpress kiosks are equipped with touch screen monitors & easy to use interface.

Purpose of survey:

The State of the Commute Survey is being conducted in the Washington Metropolitan area on behalf of the Washington Metropolitan Council of Governments. The purpose of the study is to provide an updated view of commuting in the Washington D.C. area for transportation policymakers from Washington D.C., Maryland and Virginia.

The study responses will be expanded to represent the commute patterns for employed households within the twelve jurisdictions of the study area. The results will be used to measure current commute patterns and program effectiveness, as well as commuter awareness and attitudes.

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:

When trying to reach households in the Metropolitan Washington, D.C. area, we start with your area code and the 3-digit prefix that begins your phone number. Then, a computer randomly selects the last 4 digits to make up a 7-digit phone number. We have no name or address, nor will we ask for one. We are just trying to gather information from households in your area.

You work for:
CIC Research, Inc.
San Diego, CA
(800) 892-2250 or (858) 637-4000
Supervisors: Susan Landfield, Dave Harper, Scot Evans

Flexible working hours (Flex-time)

Employees select their own starting and finishing times within a set daily period of time, for example between 7:00 a.m. and 7:00 p.m., to make up the hours they need to work daily. All Staff work a common, core period of hours each day, for example, from 10 a.m. to 2 p.m., within the period specified. Flex-time is generally not available to staff who are required to work shifts. Flex-time does not have to be a company policy.

And flex-time and flexible working hours are the same thing.

Q36. List of Telework Centers for SOC 2007

Maryland

1. Bowie State University Telecommuting Center (Whiteoak)
2. Frederick Telework Center
3. Hagerstown Telework Center
4. Laurel Lakes Telecommuting Center
5. Calvert Telecommuting Center (Prince Frederick Telecommuting)
6. Waldorf Telecommuting Center (Charles County)

Virginia
7. GMU Fairfax Telework and Training Center
8.Fredericksburg Regional Telework Center (Fredericksburg)
9.GMU Herndon Telework and Training Center
10.Manassas Telecommuting Center
11. Fredericksburg Regional Telework Center (Stafford)
12. GMU Sterling Telework and Training Center
13. Shenandoah Valley Telecommuting Center (NetTech Center of Winchester)
14. Woodbridge Telework Center

Washington, D.C.
15. Executive Office Club
West Virginia
16. Jefferson County TeleCenter (BIZTECH - The Telecenter at the Business and Technology Community Center of Jefferson County)

APPENDIX E – COMPARISON OF KEY SOC RESULTS – 2007, 2004, AND 2001

Current Travel Information

- **Current mode split** – Percentage of weekly commute trips (including CWS and TW days)

	2007	**2004**	**2001**
DA/Motorcycle	66.9%	71.4%	70.3%
CP	6.4%	5.6%	6.9%
VP	0.2%	0.3%	0.5%
Bus	4.9%	4.4%	4.5%
Metrorail	12.0%	11.5%	11.5%
Commuter Rail	0.7%	0.9%	0.8%
Bike/walk	2.5%	2.2%	2.3%
CWS	0.6%	0.7%	0.9%
Telework	5.1%	2.3%	2.3%

- **Regular mode use** – Percentages of weekly "on the road" commuter trips (without TC/CWS)

	2007	**2004**	**2001**
DA/Motorcycle	71.0%	74.1%	72.6%
CP/VP	7.6%	6.1%	7.6%
Bus	5.2%	4.7%	4.6%
Train	13.55	12.8%	12.7%
Bike/walk	2.7%	2.3%	2.4%

- **Time of arrival at work**

	2007		**2004**		**2001**
5 am to 6:59 am	15%		14%		
7 am to 7:59 am	24%	91%	24%	90%	91%
8 am to 8:59 am	31%		34%		
9 am to 9:59 am	21%		18%		
10 am to 5:59 pm	7%		8%		
6 pm to midnight	1%	9%	1%	10%	9%
12:01 am to 4:59 am	1%		1%		

- **Average length of commute**

	2007	**2004**	**2001**
Distance	16.3 miles	16.5 miles	15.5 miles
Time	35 minutes	34 minutes	32 minutes

- **Work Non-standard/flexible schedules**

	2007	2004	2001
No	67%	69%	72%
Yes	33%	31%	28%
4/40	1%	2%	3%
9/80	2%	3%	2%
Flextime	27%	26%	22%

- **Length of time using current alternative modes** – regional commuters who currently use alternative modes

	2007		2004		2001
1 – 11 months	17%		23%		28%
12 – 24 months	21%		23%		23%
25 – 36 months	10%		9%		
37 – 60 months	13%	62%	12%	54%	49%
More than 60 months	39%		33%		
Average duration (months)	**80 months**		**70 months**		**N/A**

- **Carpool/Vanpool occupancy**

	2007	2004	2001
Carpool/slug	2.5	2.6	2.6
Vanpool	9.6	10.0	11.4

- **Access mode to rideshare/transit modes**

	2007	2004	2001
Picked-up at home	12%	15%	16%
Drive to driver's home	10%	11%	11%
Drive to central location	18%	18%	14%
Another pool/dropped off	1%	1%	1%
Walk	35%	39%	39%
Drive CP/VP	10%	6%	9%
Bus/transit	12%	9%	10%
Average access distance	3.1 miles	3.1 miles	2.6 miles

- **Reasons for using alt modes** – regional commuters who currently use alternative modes.

	2007	2004	2001
Changed jobs	18%	16%	5%
Save money	18%	14%	21%
Save time	13%	18%	20%
Always used	11%	7%	2%
No parking / parking expense	9%	3%	4%
No vehicle available	8%	11%	19%
Moved residence	8%	9%	3%
Avoid congestion	5%	7%	8%
Convenient / close to work	4%	1%	4%
Gas prices too high	4%	0%	0%
Tired of driving	4%	6%	8%

- **Switching among modes** – Modes used previously by commuters who use alternative modes now. Not all shifts to alt modes are from drive alone. Some shifting occurs from one alt mode to another

	2007	2004
Not in Washington area then	15%	17%
Always used this mode	23%	12%
Made a change from another mode	62%	71%
Previous modes used		
Drive alone	55%	56%
Metrorail	18%	11%
Bus	15%	15%
Carpool/Vanpool	10%	10%
Bike/walk	6%	8%
CWS/Telework	6%	4%
Commuter Rail	2%	1%

- **Used or tried other alternative modes** – Respondents used or tried an alt mode they are <u>not using now</u> within the past two years (all regional commuters)

	2007		2004		2001
Yes	14%		22%		24%
<u>Other Alternatives Tried</u>					
Carpool/casual carpool	11%		14%		14%
Vanpool	0%		1%		<1%
Bus	32%		32%		33%
Metrorail	45%	52%	11%	12%	13%
Commuter Rail	7%		1%		
Bike/walk	15%		13%		9%

Telecommute

- **Telecommute incidence in region** – all commuters (workers who are not self-employed and working only at home)

	2007	2004	2001
% regional workers telecommuting	18.7%	12.8%	11.3%
Home-based telecommuters	95%	95%	98%

- **Employer telecommute programs –** all regional commuters + FT telecommuters

	2007	2004	2001
Employers with formal program	19%	15%	N/A
Employers with informal TC	22%	20%	N/A

- **Potential for additional regional telecommuting –** regional commuters who do not telecommute

	2007	2004	2001
Non-telecommuters (percent of total commuters)	81%	87%	89%
Job responsibilities allow TC ("could TC")	30%	25%	31%
Interested in TC if offered ("could and would TC")	24%	19%	21%

- **Telecommute frequency** – current telecommuters

	2007	2004	2001
Occasionally/special projects	10%	10%	17%
< once per month/emergency	8%	12%	12%
1 – 3 times per month	26%	32%	28%
1 day per week	18%	15%	16%
2 days per week	16%	12%	9%
3 or more times per week	22%	19%	16%
Mean (days per week)	**1.5**	**1.3**	**1.1**

- **Length of time telecommuting** – current telecommuters

	2007	2004	2001
Less than one year	14%	22%	23%
One to two years	29%	27%	29%
More than two years	58%	51%	48%

- **Reasons for telecommuting** – current telecommuters

	2007	2004	2001
Save time	10%	19%	14%
New option became available	22%	18%	14%
Personal circumstances (e.g. weather)	16%	10%	4%
Get more work done	11%	9%	12%
Convenient	12%	8%	3%
Stay with family or children	8%	7%	12%
Changed jobs	8%	6%	6%
Tired of driving	4%	6%	7%
Save money	3%	4%	7%
Special program at work	7%	4%	7%
Pressure/encouragement from employer	4%	4%	9%
Initiated request on my own	6%	10%	7%
Quiet/uninterrupted	4%	4%	5%
Avoid congestion	4%	5%	5%

- **How learned about telecommuting** – current telecommuters

	2007	2004	2001
Program at work/employer provided info	55%	56%	34%
Word of mouth	13%	18%	18%
Initiated request on my own	23%	16%	26%
Commuter Connections/COG	**1%**	**5%**	**6%**
Advertising	2%	3%	6%

Awareness/Attitudes Toward Transportation Options

- **HOV lane availability and use** – all regional commuters

	2007	2004	2001
Commuters with lane available on route to work	29%	29%	27%
Use lanes	27%	8%	7%
Average time saving – one way trip	21 min.	25 min.	22 min.

- **Park & Ride availability and use** – all regional commuters

	2007	2004	2001
Know locations of P&R lots	38%	40%	42%
Used P&R in past year	7%	7%	7%

- **Reasons for not riding bus** – regional commuters who don't currently use bus

	2007	2004	2001
Trips takes too much time	31%	32%	27%
Need car for work	16%	15%	19%
No bus service, don't know if service available	19%	16%	21%
Work schedule irregular	8%	8%	7%
Trip too long – distance too far	10%	7%	7%
Bus unreliable/late	5%	5%	5%
Need car before or after work	9%	5%	6%
Don't like riding with strangers, prefer to be alone	6%	4%	3%

- **Reasons for not riding train** – regional commuters who don't currently use train

	2007	2004	2001
No train service, don't know if service	30%	38%	43%
Trips takes too much time	22%	21%	16%
Need car for work	16%	14%	18%
Trip too long – distance too far	6%	6%	5%
Work schedule irregular	7%	5%	5%
Need car before or after work	8%	4%	4%
Don't like riding with strangers, prefer to be alone	5%	2%	2%
Too expensive	4%	4%	5%

- **Reasons for not carpooling/vanpooling** – regional commuters who don't currently CP or VP

	2007	2004	2001
Don't know anyone to CP/VP with	48%	47%	48%
Work schedule irregular	18%	20%	18%
Need car for work	9%	12%	12%
Need car before or after work	11%	7%	7%
Doesn't save time	5%	5%	4%
Takes too much time	5%	4%	4%
Don't like riding with strangers, prefer to be alone	4%	4%	4%

- **Commute easier, more difficult, or same as one year ago** – all regional commuters

	2007	2004	2001
Easier	14%	14%	N/A
More difficult	27%	29%	N/A
About the same	57%	54%	N/A
Reasons commute is easier			
Shorter distance	36%	44%	N/A
Route less congested	27%	19%	N/A
Faster trip, less time	28%	21%	N/A
Less stressful	9%	9%	N/A
Started going to work earlier / later	5%	5%	N/A
Started using bus, train to work	4%	4%	N/A
Started driving alone to work	4%	4%	N/A
Reasons commute is more difficult			
Route more congested	75%	81%	N/A
Longer distance	12%	11%	N/A
Slower trip, more time	12%	11%	N/A
More stressful	7%	5%	N/A
Construction on route to work	7%	<1%	N/A

Advertising/Messages

- **Heard, seen, or read commute advertising in past 6 months** – all respondents (includes both commuters and respondents who work at home/telework from home full-time)

	2007	2004	2001
Yes	51%	55%	55%
Ad messages recalled			
Use bus/train, Metro	18%	7%	7%
You can call for CP/VP info	14%	17%	9%
New buses/trains coming	7%	7%	4%
GRH	6%	12%	3%
It would help the environment	5%	2%	4%
It reduces traffic	5%	3%	5%
Call Commuter Connections, CC web site	4%	6%	5%
Telecommuting	3%	3%	2%
It saves money	3%	<1%	<1%
It saves time	3%	2%	10%
HOV lanes	3%	2%	12%

- **Attitudes/actions after hearing/seeing commute ads** (respondents who remembered ads)

	2007	2004	2001
More likely to consider RS/transit	18%	18%	28%
Took actions to change commute	<1%	2%	N/A
Advertising encouraged action taken (of respondents who took action)	67%	68%	N/A
Actions taken			
Sought commute info (internet, family, commute organization, other source)	0.7%	1.6%	N/A
Tried alt mode	< 0,1%	0.2%	N/A

- **Awareness and use of regional commute info phone/web site** – all respondents

	2007	2004	2001
Know regional number/web site available	51%	46%	33%
Named CC as source (unprompted)	4%	6%	5%
Used CC number/web site in past year	3%	1%	N/A

- **Know of CC** (prompted or unprompted) – all respondents

	2007	2004	2001
Yes – unprompted (named CC w/o prompt)	2%	6%	5%
Yes – prompted (knew of CC with prompt)	53%	66%	N/A
CC services recalled (respondents aware of CC)			
GRH	19%	40%	N/A
CP/VP, ridematch info	24%	28%	N/A
Help finding CP/VP partners	22%	16%	N/A
Transit information	6%	5%	N/A
Telecommute info	1%	2%	N/A

Employer Services

- **Employer offers parking services** – all non-self employed commuters

	2007	2004	2001
Free on-site parking	65%	66%	65%
Free off-site parking	4%	3%	3%
Employee pays full parking charge	21%	21%	23%
Employer pays part of parking charge	7%	6%	6%
CP/VP parking discount (when parking not free)	15%	14%	14%

- **Employer offers TDM services** – all non-self employed commuters

	2007	2004	2001
Discount/free transit pass	33%	31%	29%
Information on commute options	20%	22%	25%
Preferential parking for CPVP	16%	16%	19%
Bike/ped facilities or services	17%	14%	9%
GRH	12%	12%	19%
CP financial incentive	3%	4%	7%
None – employer doesn't offer any	46%	47%	49%

- **Respondent used TDM services** (respondents who have access to services)*

	2007	2004	2001
Discount/free transit pass	41%	41%	31%
Information on commute options	46%	45%	3%
Preferential parking for CPVP	20%	20%	2%
Bike/ped facilities or services	12%	16%	3%
Bike lockers or racks	8%	11%	17%
Personal showers/lockers	6%	9%	10%
GRH	25%	25%	18%
Parking discounts for CP/VP	27%	28%	N/A
CP financial incentive	15%	18%	3%

* Note that in 2004 and 2007, this series of questions was asked differently than n 2001. In 2001, respondents were asked if the employer offered each of the services listed above, then were asked a general question to name any services they had used. In 2004 and 2007, respondents were asked a two-question series about each service: did the employer offer it and, if it was offered, did the respondent use that service. It is likely that the 2001 approach could have resulted in lower recall of use for some services in 2004 than was noted in 2001, with the single, non-service specific, question about service use.

Kiosks

- **Awareness and use of kiosks** – all regional commuters

	2007	2004	2001
Seen kiosks in past two years	11%	11%	15%
Used kiosks for commute info			
Of respondents who saw kiosks	14%	13%	13%
Of all respondents	1.4%	1.3%	2%
Info obtained (respondents who used kiosks)			
Transit route/schedule info	51%	46%	46%
Rideshare info	5%	18%	18%
Maps and guides	19%	7%	21%
SmartTraveler	2%	4%	2%
GRH info	0%	2%	4%
Carpool/vanpool matchlist	1%	1%	3%

- **Used info to try alt mode** (respondents who obtained commute info from kiosks, note sample sizes are small for all years: 2001 – 27 respondents, 2004 – 18 respondents, and 2007 – 18 respondents)

	2007	2004	2001
Yes	26%	17%	22%
Alt Modes Tried			
Bus	42%	45%	41%
Train	49%	41%	37%
Carpool/vanpool	10%	8%	26%
Bike	0%	6%	0%
Previous Modes Used			
Drive alone	68%	76%	52%
Bus	8%	6%	4%
Train	11%	4%	19%
Carpool/vanpool	1%	8%	26%
Bike	0%	2%	0%

Demographics

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

	Residence			Employment		
	2007	2004	2001	2007	2004	2001
DC	12%	11%	12%	30%	29%	30%
MD	45%	45%	48%	32%	32%	32%
VA	43%	44%	41%	36%	37%	34%
Other/Ref	0%	0%	0%	2%	2%	4%

- **Employer type** – all respondents

	2007	2004	2001
Federal agency	20%	22%	20%
State/local government	12%	13%	14%
Non-profit organization	11%	10%	10%
Private sector	47%	49%	50%
Self-employed	10%	7%	7%

- **Employer size** – all respondents

	2007	2004	2001
1 – 25 employees	26%	25%	30%
26 – 50 employees	10%	12%	12%
51 – 100 employees	12%	12%	11%
101 – 250 employees	13%	13%	12%
251 – 999 employees	15%	15%	14%
1,000 employees	24%	25%	22%

- **Age** – all respondents

	2007	2004	2001
Under 24	4%	7%	10%
25 – 34	16%	21%	23%
35 – 44	28%	28%	29%
45 – 54	30%	27%	25%
55 – 64	18%	14%	10%
65 or older	4%	3%	3%

- **Gender** – all respondents

	2007	2004	2001
Female	54%	55%	54%
Male	46%	45%	46%

- **Income** – all respondents

	2007		2004		2001
Under $20,000	2%		2%		3%
$20,000 – $29,999	4%		4%		6%
$30,000 – $39,999	5%		8%		9%
$40,000 – $59,999	12%		14%		18%
$60,000 – $79,999	14%		17%		19%
$80,000 – $99,999	15%		16%		15%
$100,000 – $119,999	14%		14%		
$120,000 – $139,999	9%	48%	7%	39%	30%
$140,000 – $159,999	7%		5%		
$160,000 or more	18%		13%		

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

	2007	2004	2001
Hispanic/Latino	9%	6%	6%
White	62%	64%	61%
Black/African-American	22%	23%	23%
Asian	4%	5%	5%
Other/Mixed	3%	2%	5%