

COMMUTER CONNECTIONS STATE OF THE COMMUTE SURVEY

Summary Results for Arlington County, VA Commuters Who Live in Arlington County Commuters Who Work in Arlington County

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SECTION 1 INTRODUCTION

Overview

In 2001 and 2004, the Commuter Connections program of the Metropolitan Washington Council of Governments (COG) conducted regional State of the Commute (SOC) Surveys, random sample telephone surveys of employed persons living in the 12-jurisdiction Washington metropolitan region.

The surveys documented 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. The surveys also asked commuters about sources of information on alternative modes, their reasons for choosing alternative modes for commuting, and their awareness and use of commute alternative programs that might influence commuting behavior.

Both the 2001 and 2004 surveys interviewed 7,200 respondents, with the total sample divided evenly among the 12-jurisdictions in the region. One of these jurisdictions was Arlington County, Virginia. In the 2004 survey, 600 of the total 7,200 respondents lived in Arlington County and 552 worked in Arlington County. These two data sub-sets (live in Arlington and work in Arlington) overlapped for 189 respondents who both worked and lived in the County. The statistical confidence levels for the two populations of live in Arlington and work in Arlington were $95\% \pm 4.0\%$ and $95\% \pm 4.2\%$ respectively.

The 2001 SOC sub-set sample for Arlington, VA also included 600 respondents who lived in the County and 527 respondents who worked in Arlington County. Again, these two data sub-sets (live in Arlington and work in Arlington) overlapped for 193 respondents who both worked and lived in the County. In 201, the statistical confidence levels for the two populations of live in Arlington and work in Arlington were $95\% \pm 4.0\%$ and $95\% \pm 4.4\%$ respectively.

To align the sampled survey results with published numbers for the study area, the data in each jurisdiction were expanded to represent the number of employed people in that jurisdiction. The expansion methodology allowed the proper representation of employees in each of the 12 jurisdictions included in the survey area.

Readers who desire more information on the survey methodology and survey data expansion procedures are referred to the SOC reports prepared by Commuter Connections in 2001 and 2004. These reports, “Commuter Connections State of the Commute Survey 2004, Survey Report, December 2004,” and “State of the Commute 2001, Survey Results from the Washington Metropolitan Region, June 2002.” These reports are available from Commuter Connections. Additional details of the survey method also are presented in Appendix A of this report. A copy of the 2004 questionnaire is provided in Appendix B.

Organization of Results

The balance of this report presents the survey results. This report documents SOC results for both respondents who lived in Arlington County and respondents who worked in the County. Because the 2004 survey is assumed to be more representative of current travel behavior, this report primarily focuses on the 2004 results. However, when significant differences existed between 2001 and 2004, the 2001 results also are shown. If no dates are provided in tables and figures, the data should be assumed to be from the 2004 SOC survey.

Further, the report presents selected comparisons between Arlington County and residents of the entire region. Percentages presented in the results tables and figures show percentages weighted to the total working population. When the number of respondents who answered a question was substantially less than the total sample for the respondent group (all region = 7,200, Live in Arlington = 600, Work in Arlington = 552), the tables/figures also show the raw number of respondents (e.g., n=___).

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

Section 2 – Characteristics of the sample

Section 3 – Commute patterns

Section 4 – Telecommuting

Section 5 – Availability of and attitudes toward transportation options

Section 6 – Awareness of commute advertising and assistance services

Section 7 – Commuter assistance services provided by employers

SECTION 2 CHARACTERISTICS OF THE 2004 SOC SAMPLE

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

Arlington resident respondents closely mirrored the regional population of workers in the distribution by sex and household income. But Arlington residents were on average younger than the regional average and a larger share of Arlington residents were Caucasian than was the case for the regional population.

Arlington workers by contrast, tended to be older than the regional average and have annual household incomes higher than the regional average. And as with Arlington residents, a larger share of respondents who worked in Arlington was Caucasian than was found for respondents in the regional population.

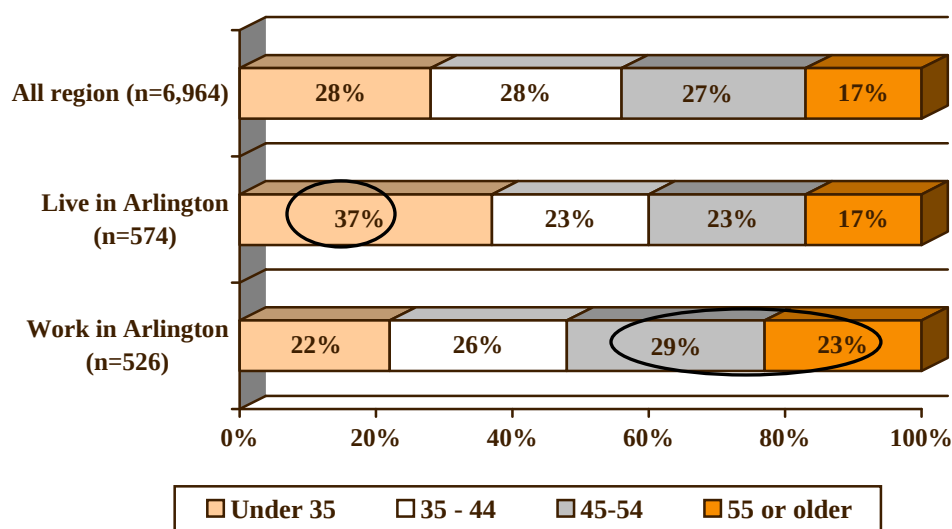
Demographic Characteristics

Sex – Among all regional respondents, most respondents (55%) were female; 45% were male. Arlington resident respondents were divided essentially equally, with 51% female and 49% male. Less than half (45%) of the respondents who worked in Arlington were male; 55% were female.

Age – Arlington residents tended to be younger than the average for the region and respondents who worked in Arlington were slightly older than the regional average. As shown in Figure 1, about one-quarters of all regional respondents (28%) were younger than 35 and slightly over half (55%) were between the ages of 35 and 54. But more than a third (37%) of Arlington resident respondents were younger than 35 and only 46% were between 35 and 54.

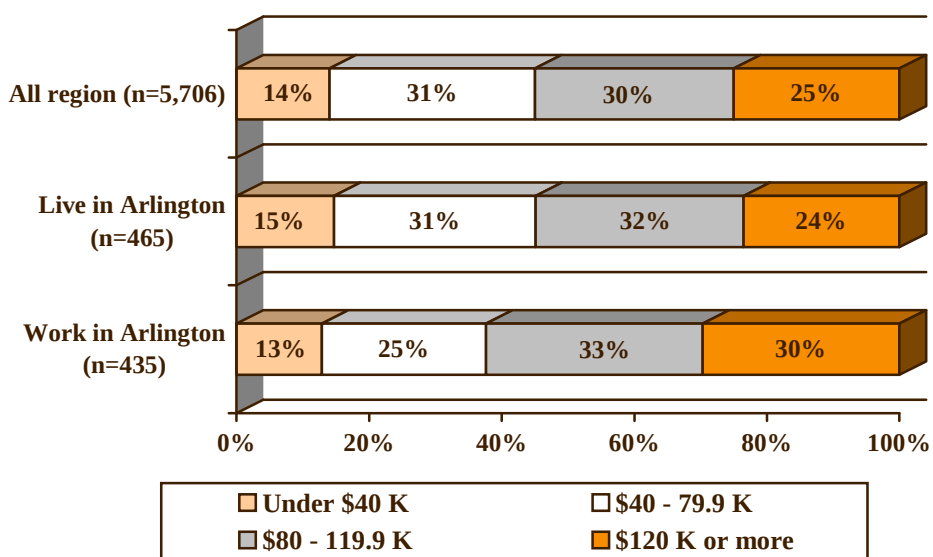
By contrast, only 22% of respondents who worked in Arlington were younger than 35. Among Arlington employees, half were 45 years or older, compared with only 37% of Arlington residents and 41% of all respondents in the region.

Figure 1
Respondent Age



Income – Figure 2 shows that Arlington residents’ incomes were quite similar to those of the regional employee population. Slightly over half (55%) of all regional respondents had household incomes of \$80,000 or higher, about the same percentage as for Arlington residents (56%). But respondents who worked in Arlington had, on average, higher incomes. Nearly two-thirds (63%) of respondents who worked in Arlington had household incomes of \$80,000 or more.

Figure 2
Annual Household Income



Ethnic Background – Table 1 presents the distribution of respondents by ethnic background.

Table 1
Ethnic Background

Ethnic Group	All Region (n=6,801)	Live in Arl (n=560)	Work in Arl (n=514)
White/Caucasian	64%	78%	71%
African-American	23%	6%	16%
Hispanic/Latino	6%	8%	7%
Asian	5%	6%	3%

As illustrated, about two-thirds of all regional respondents were Caucasian and about a quarter were African-American. Caucasians represented a larger percentage of Arlington residents (78%), with the remaining residents evenly divided among African-American, Hispanic/Latino, and Asian respondent. The distribution of Arlington employees more closely mirrored that of the region, with African-Americans comprising 16% of respondents who worked in Arlington.

Home Locations – Table 2 presents the distribution of respondents by their home states. About equal shares of all regional respondents lived in Maryland (45%) and Virginia (44%). The remaining 11% of respondents lived in the District of Columbia. Because the survey only interviewed residents of the 12-jurisdiction COG region, no respondents lived outside these areas.

About a quarter of respondents who worked in Arlington County also lived in the County. Another 49% lived in another Virginia jurisdiction and a quarter (24%) lived in Maryland. Only six percent lived in the District of Columbia.

Work Locations – As also shown in Table 2, work locations for all regional respondents were more evenly divided. The largest number of respondents worked in Virginia (36%), but Maryland and the District of Columbia, with 32% and 29% of respondents respectively, were close behind in employment numbers.

More than four in ten Arlington residents said they worked in the District of Columbia. And another 53% worked either in Arlington (33%) or in another Virginia jurisdiction (21%). Only six percent said they worked in Maryland.

Table 2
Home and Work Locations

Area	All Region (n=7,200)	Live in Arl (n=600)	Work in Arl (n=552)
Home Location			
Arlington County	5%	100%	22%
Other Virginia	39%	0%	49%
District of Columbia	11%	0%	6%
Maryland	45%	0%	23%
Work Location			
Arlington County	6%	33%	100%
Other Virginia	30%	21%	0%
District of Columbia	29%	41%	0%
Maryland	32%	6%	0%
Other	3%	0%	0%

* 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 12-jurisdiction region. Maryland and Virginia locations outside this area are counted in the “other” category.

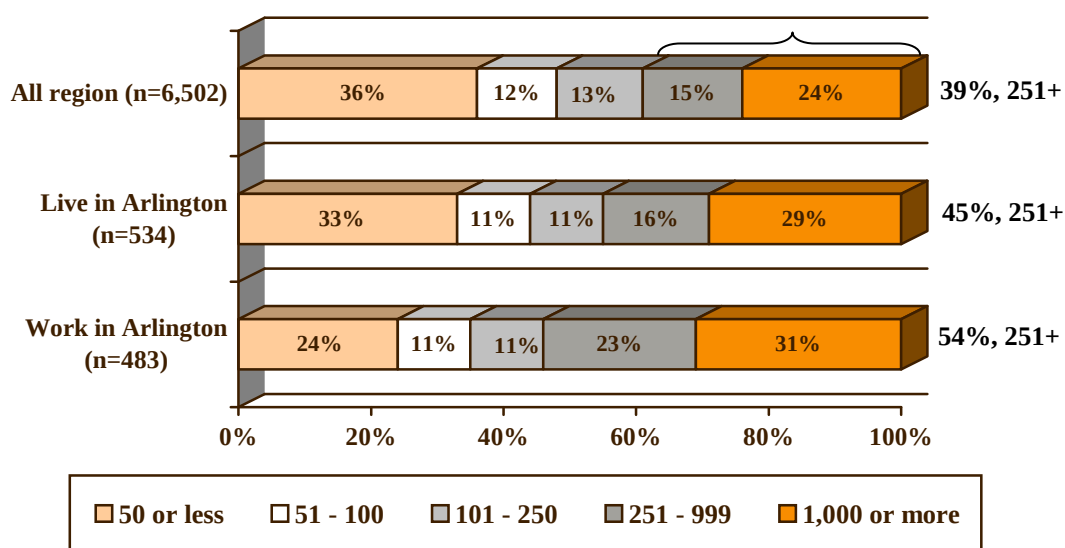
Employment Characteristics

Respondents who worked in Arlington were less likely to work for private employers and more likely to work for federal agencies than were either Arlington residents or other regional workers. They also were more likely to work for large employers than were Arlington residents and other regional workers.

Respondents were asked the number of employees at their worksites and the type of employer for which they worked. These results are shown in Figure 3 and Table 3, respectively.

Size of Employer – The distribution of respondents who lived in Arlington by the size of their employer generally followed the distribution of the region as a whole. About 33% of Arlington residents and 36% of all regional workers worked for employers with 100 or fewer employees. And 45% of Arlington residents and 39% of all regional employees worked for employers that have more than 250 employees.

Figure 3
Employer Size



Respondents who worked in Arlington County were more likely to work for a large employer. More than half (54%) worked for employers with more than 250 employees and only a quarter (24%) worked for very small employers.

Type of Employer – As shown in Table 3, nearly half (49%) of all regional respondents worked for a private sector employer. Government agencies employed about one-third, divided between federal agencies with 22% and state and local agencies with 13%. About one in ten (10%) worked for a non-profit organization and the remaining seven percent were self-employed.

Table 3
Employer Type

Employer Type	All Region (n=7,030)	Live in Arl (n=585)	Work in Arl (n=535)
Private sector	49%	47%	37%
Federal agency	22%	24%	37%
State/local agency	13%	9%	11%
Non-profit	10%	14%	11%
Self-employed	7%	6%	5%

The employer types of respondents who lived in Arlington closely mirrored the regional distribution. Nearly half (47%) worked for private sector firms and about a quarter (24%) worked for federal agencies. One in ten (10%) was employed by a state or local agency and 14% worked for a non-profit organization.

The distribution of employer types of respondents who worked in Arlington was different. Just over a third (37%) of these respondents worked for a private sector firm and an equal share (37%) worked for federal agencies. The shares of respondents who worked in Arlington who worked for non-profits (11%) and state/local agencies (11%) were similar to the percentages for all regional respondents.

Occupations – Respondents represented many occupations, as shown in Table 4, but the majority in each of the three population groups worked in professional or executive/managerial occupations. The distribution of respondents by occupation was similar for the three populations of respondents: all regional respondents, respondents who lived in Arlington, and respondents who worked in Arlington.

Table 4
Occupation

Occupation	All Region (n=6,767)	Live in Arl (n=557)	Work in Arl (n=503)
Professional	39%	45%	41%
Executive/managerial	21%	21%	25%
Administrative support	10%	7%	7%
Technicians/support	7%	7%	8%
Sales	6%	6%	3%
Service	6%	3%	3%
Precision craft, production	4%	4%	2%
Protective services	2%	<1%	3%
Military	2%	3%	6%
Other*	3%	3%	2%

SECTION 3 COMMUTE PATTERNS

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

- Work schedules and commute times
- 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

Work Schedules

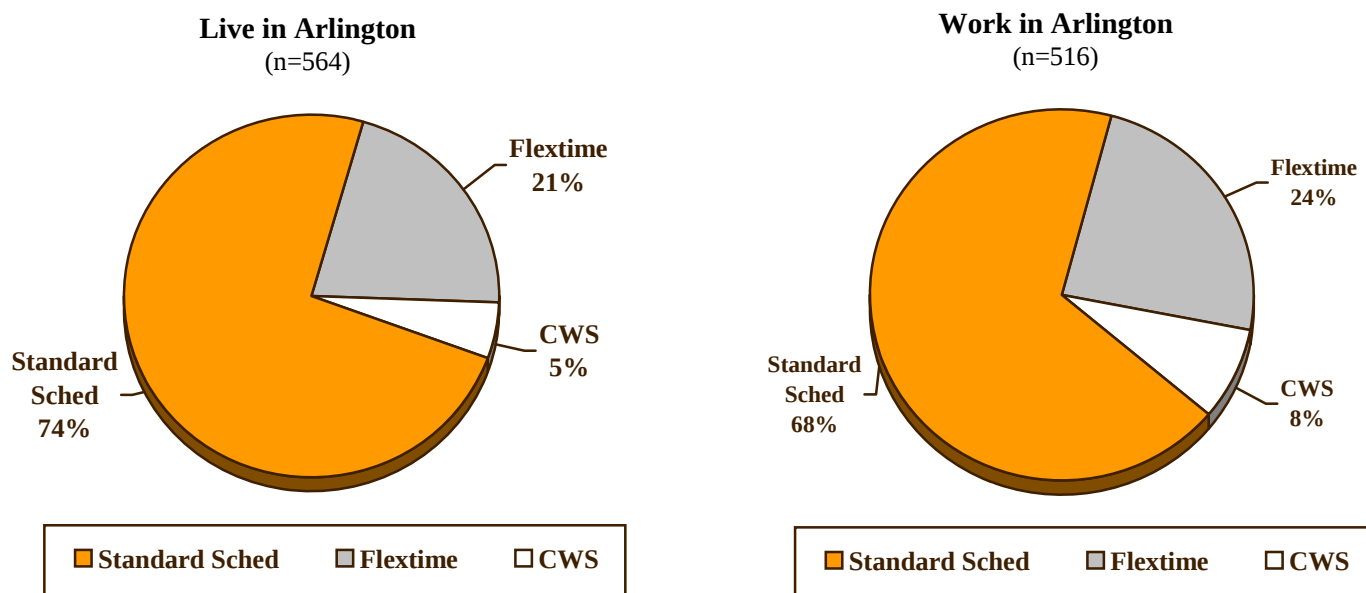
Respondents who worked in Arlington started work considerably earlier in the morning than did respondents who lived in Arlington. Arlington employees also were slightly more likely than were Arlington residents to work a compressed or flexible work schedule.

Full-Time vs Part-Time – Nearly all (90%) of Arlington resident respondents worked full-time, defined as 35 or more hours per week. The full-time percentage was similar, 91%, for respondents who worked in Arlington.

Non-Standard Work Schedules Used – Figure 4 displays the percentages of Arlington residents and Arlington employees who used each of three types of schedules: standard 5-day week with fixed hours, flextime schedule, in which employees have flexible start and stop times, and compressed work schedule (CWS), in which employees work a full work week (35-40 hours) in fewer than five days.

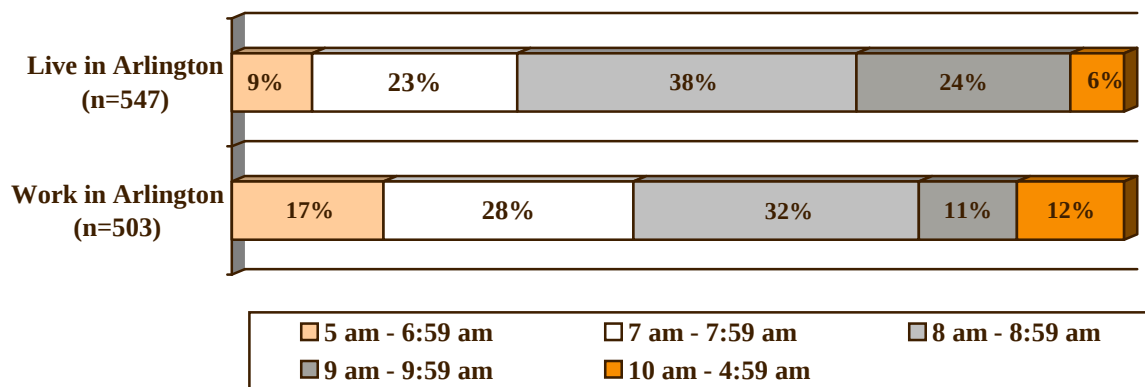
About two-thirds (68%) of respondents who worked in Arlington said they work a standard schedule. About a quarter (24%) had a flexible schedule and eight percent said they worked a CWS. Flextime and CWS were less common schedules for respondents who lived in Arlington. About three-quarters of Arlington residents said they work a standard schedule, while only 20% worked a flexible schedule and five percent used CWS.

Figure 4
Non-Standard Schedule Types Used



Commute Times – As shown in Figure 5, the large majority of both Arlington residents (85%) and Arlington employees (71%) said they arrived at work between 7:00 am and 9:59 am. But a larger percentage of respondents who worked in Arlington traveled at the earlier end of the morning rush period; 45% of Arlington employees started work before 8:00 am, while only 32% of Arlington residents started work this early. Nearly two-thirds (64%) of Arlington residents said they started work between 8 am and 9:59 am, compared to only 43% of Arlington employees.

Figure 5
Arrival Time at Work



Current Types of Commute Transportation

Arlington residents were much less likely to drive alone to work than were all regional commuters and more likely to travel by train. Respondents who worked in Arlington also drove alone less than did other regional commuters; they were more likely to use train or use a carpool or vanpool for their trip to work.

A large majority of both respondents who lived in Arlington (98%) and those who worked in Arlington (98%) used one type of transportation three or more days per week for travel to work.

The drive alone mode share for Arlington residents appears to have decreased between 2001 and 2004 and the share of work trips made by train has increased. The commute mode split of respondents who worked in Arlington did not change significantly between 2001 and 2004.

Work at Home – About six percent of the Arlington resident respondents said they never commuted to a work location outside their homes. Most of these respondents (5% of total respondents) said they were self-employed and had no other work location. The remaining one percent said they telecommuted from home every day they worked.

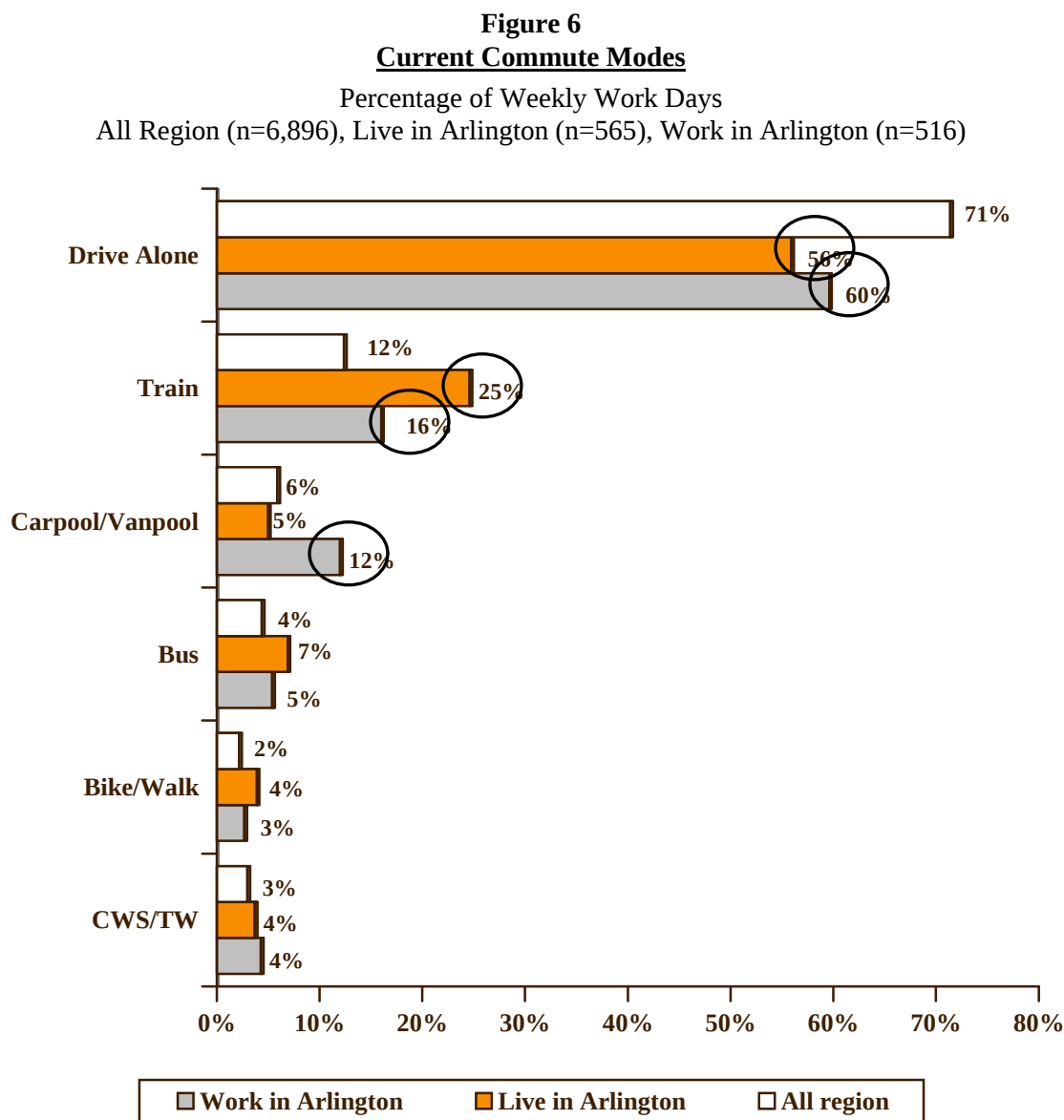
These percentages were similar for respondents who worked in Arlington; five percent said they worked entirely at home, with four percent self-employed and one percent full-time teleworkers. These percentages also were similar for the regional employee population; about five percent of all regional workers were self-employed, working at home and one percent telecommuted from home full-time.

Respondents who said they did not travel outside their homes for work were not asked further questions about commute patterns, but were included in questions about awareness of commute advertising and demographics. Additionally, respondents who telecommuted five days per week were asked questions about their telecommute experience.

Respondents who said they did travel outside their homes to work were asked what types of transportation 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 6 through 8 present several different views of modal distribution.

Weekly Trips by Types in 2004 – Figure 6 presents shares of types of transportation as a percentage of weekly “work days,” that is, days that employees are assigned to work. The five traditional types are shown for days employees travel to a work location outside their homes: drive alone, train (subway/commuter rail), carpool/vanpool, bus, and bike/walk. One additional category, teleworking / compressed work schedule (TW/CWS), also is shown. Telework and CWS are not actually types of transportation, but this figure includes them to show the percentage of weekly work trips that were avoided through use of these work schedule options.

The figure shows the distribution of transportation types for three groups of respondents: all regional respondents, respondents who lived in Arlington, and respondents who worked in Arlington.



All Region – As shown, the majority (71%) of work trips in the region were made by driving alone. The second most popular type was train, including Metrorail and commuter rail, which accounted for about 12% of regional commute trips. Carpool/vanpool and bus were used for six percent and four percent of trips, respectively. A small percentage (2%) of weekly trips was made by bike or walking. TW/CWS accounted for the remaining three percent of weekly trips. As noted earlier, these “trips” actually were not made, but these days were officially assigned as part of the work week, so were included in this distribution.

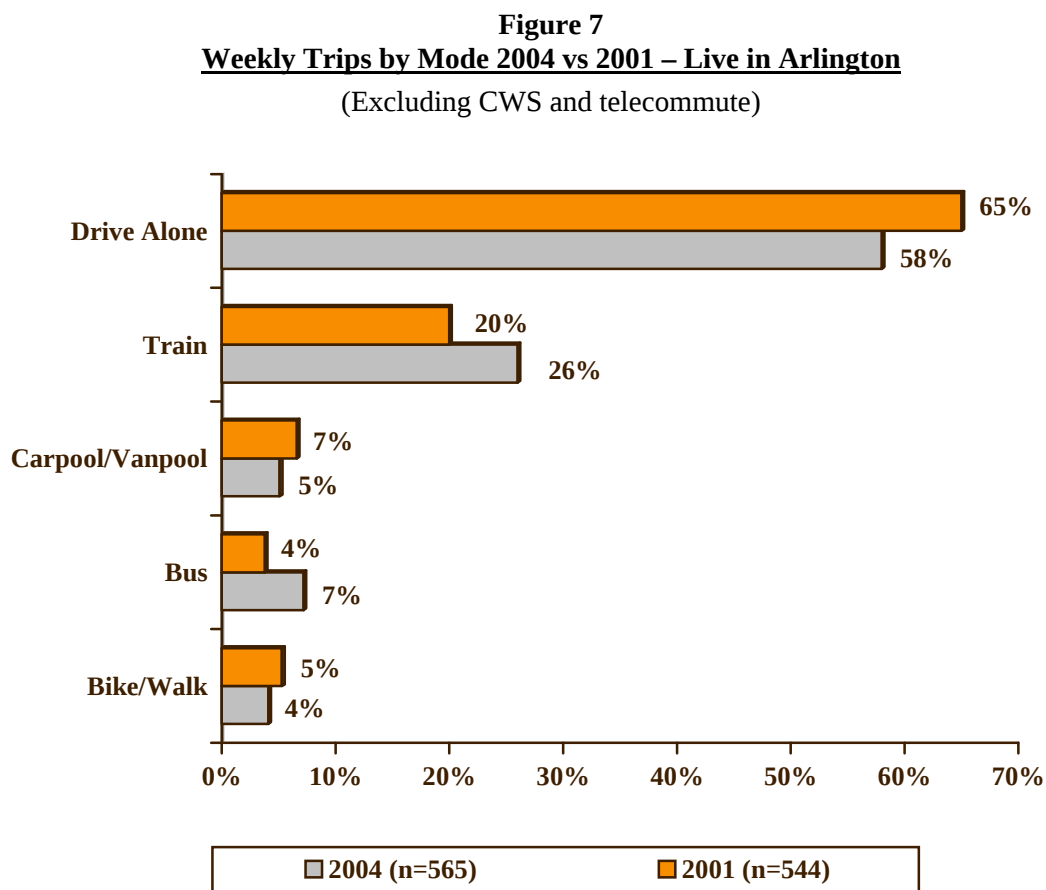
Live in Arlington – Arlington residents showed substantially different commute choice. The drive alone share was only 56%, significantly below the 71% for all regional employees. And train use was twice the regional average; 25% of Arlington residents rode a train to work, compared with 12% of the regional population. The shares of trips made by bus (7%) and bike/walk (4%) also were slightly higher for Ar-

lington residents than for the region as a whole. Carpool/vanpool and TW/CWS shares were about the same as for the region.

Work in Arlington – Commuters who worked in Arlington also were less likely to drive alone to work (60%) than were all regional workers. And train use was slightly higher, at 16%, than the 12% regional average. But the major difference for these respondents was in carpool/vanpool share; 12% of Arlington employees used these modes, compared to 6% of workers in the region. Percentages of trips made by bus, bike/walk, and CWS/TW by respondents who worked in Arlington were similar to the percentages for all regional workers.

Weekly Trips by Type 2004 vs 2001 – As noted earlier, the State of the Commute survey also was conducted in 2001. Following are comparisons of mode split between 2001 and 2004 for respondents who lived in Arlington and those who worked in Arlington.

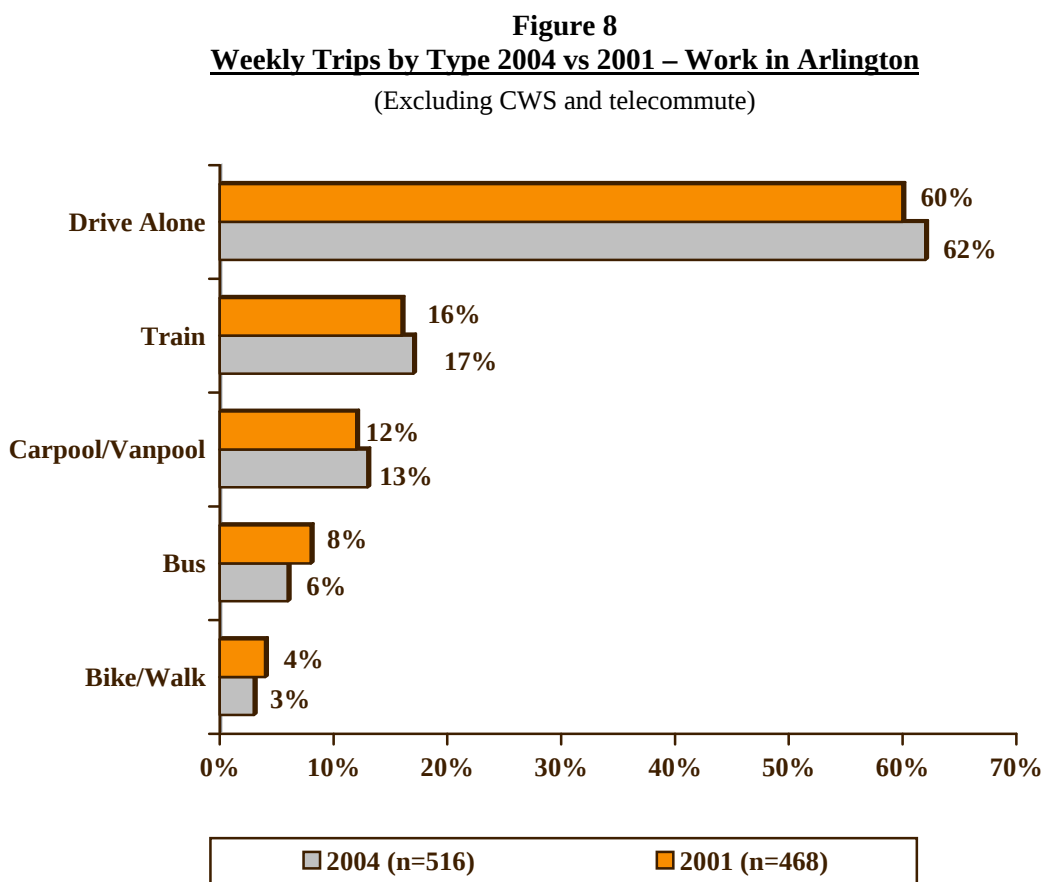
Live in Arlington – Figure 7 shows types of transportation used by Arlington residents in 2004 compared to 2001. Note that this figure shows percentage of weekly commute trips made to job locations outside the home, that is, the mode split of traffic “on the road” on an average day. Five traditional groups are shown: drive alone, train (subway/commuter rail), carpool/vanpool, bus, and bike/walk. Telework and CWS are excluded from this figure.



The comparison shows that the drive alone percentage dropped between 2001 and 2004, from 65% to 58%. The gain was primarily made by train, which increased from 20% to 26% of weekly trips. Bus use also appeared to grow, from four percent to seven percent, but this was not a statistically significant difference. Changes in carpool/vanpool and bike/walk shares also were not statistically significant.

Changes in the distribution of transportation types were more modest for the region as a whole. Drive alone trips increased about one percent, from 73% to 74% of regional trips and carpool trips fell from 8% to 6%. Although small, these differences were statistically significant. All other types remained essentially the same in 2004 as in 2001. This suggests that the changes in Arlington were related to Arlington-specific conditions, rather than to changes in factors affecting all regional travel.

Work in Arlington – Figure 8 shows a similar mode split comparison for 2001 and 2004, but for respondents who work in Arlington. The comparison shows a slight drop in the drive alone percentage and modest changes in other modes. But all of these differences are within the range of statistical error, given the sample size. Thus, no apparent changes occurred in commute mode shares for respondents who worked in Arlington between 2001 and 2004.



Frequency of Current Use – Table 5 shows mode split for 2004 from a second perspective – as the percentage of respondents who used each type of transportation. The table presents the percentages of Arlington residents and respondents who worked in Arlington who used each type as their “primary” mode, defined as the type used three or more days per week, and the percentage who used each type one or two days per week, that is, as a secondary mode.

Table 5
Primary and Secondary Commute Transportation Types
 Primary (3+ days per week) vs Secondary Use (1-2 days per week)

Type	Live in Arlington (n=565)			Work in Arlington (n=516)		
	3 + days	1-2 days	Ave Days	3+ days	1-2 days	Ave Days
Drive alone	55%	5%	4.5	59%	7%	4.4
Carpool/Vanpool	5%	1%	4.3	12%	1%	4.4
Train	24%	2%	4.3	16%	2%	4.3
Bus	7%	1%	4.2	5%	1%	4.4
Bike	<1%	1%	4.0	<1%	1%	1.9
Walk	4%	<1%	4.0	2%	1%	4.1
CWS	0%	3%	1.2	0%	5%	1.2
TW	2%	3%	2.7	3%	3%	2.8

Nearly all (98%) respondents in both categories said they used a single type of transportation three or more days per week. This also would include respondents who used a type four or five days per week. The remaining two percent of respondents said they did not use any single transportation type three or more days per week. This could be because they used several types in a typical week but used each type fewer than three days, or because they worked fewer than three days per week.

Live in Arlington – About half (55%) of commuters who lived in Arlington said they primarily drove alone to work. An additional five percent said they drove alone occasionally. A quarter (24%) of Arlington residents primarily used Metrorail and another two percent used this type one or two days per week. Bus, carpool/vanpool, bike, and walk appeared to have fewer occasional users; only one percent of residents said they used each these types occasionally.

No respondents reported having three or more compressed work schedule days off, but about three percent said they had one or two CWS days off. About two percent of resident respondents said they telecommuted three or more days per week and an additional three percent said they teleworked one or two days per week.

Work in Arlington – The share of occasional drive alone use was higher for commuters who worked in Arlington than for Arlington residents; seven percent of employees said they occasionally drove to work alone. Occasional use of other modes was about the same for the two groups of respondents.

Average Days Used – Table 5 also shows the average number of days per week each type of transportation was used. All of the traditional commute types, excluding bike, telework, and compressed schedules, were used at least four days per week on average. This is consistent with other results in the survey, which show that most respondents use one type of transportation most of the time for their commute. Telework and compressed work schedules also showed low average use, compared to other types of transportation. Arlington residents who teleworked reported using this arrangement an average of 2.7 days during the survey week and respondents who worked compressed schedules had an average of 1.2 days off per week. The average number of days using these types was similar for Arlington employees.

It should be noted that the average days per week for telework and compressed schedules included only respondents who actually telecommuted or had a CWS day off during the survey week. Many more respondents said they telecommute 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 Transportation by Demographic Group – Analysis of survey data for respondents who lived in Arlington showed no significant differences in choice of primary type of transportation (mode used 3+ days per week) among various demographic groups. Men and women were approximately equally likely to drive alone as were respondents from the four main ethnic groups (African-American, Asian, Hispanic, and White). Similarly, no significant differences were noted for respondents in different age groups (under 35 year old, 35–44, 45–54, and 55 and older), and respondents in different income groups. It should be noted, however, that the sample sizes for these sub-groups often were quite small, so any apparent differences were within the statistical error ranges.

Statistically significant differences were found only for residents who worked in different states and residents whose household owned different numbers of vehicles. These results are presented below.

State of Employment – Table 6 displays types of transportation used for commuting by state of employment. Arlington residents 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. Only one-third (37%) of District workers drove alone, compared to 88% of Maryland workers and 73% of those who worked in Virginia. Residents who worked in the District were much more likely to use transit and somewhat more likely to carpool or vanpool than were Maryland or Virginia workers.

Table 6
Primary Type of Transportation (3+ days) by State of Employment

Live in Arlington

State of Employment	(n= __)	Primary Type of Commute Transportation			
		DA	CP/VP	Transit	B/W
DC	242	37%	10%	53%	1%
Maryland	34	88%	0%	9%	3%
Virginia	275	73%	2%	18%	7%

Vehicles Available – Table 7 shows the distribution of types of transportation used 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 travel to work by transit 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. Carpooling was fairly equal, however, regardless of the number of vehicles available.

Table 7
Primary Type of Transportation (3+ days) by Number of Vehicles in Household

Live in Arlington

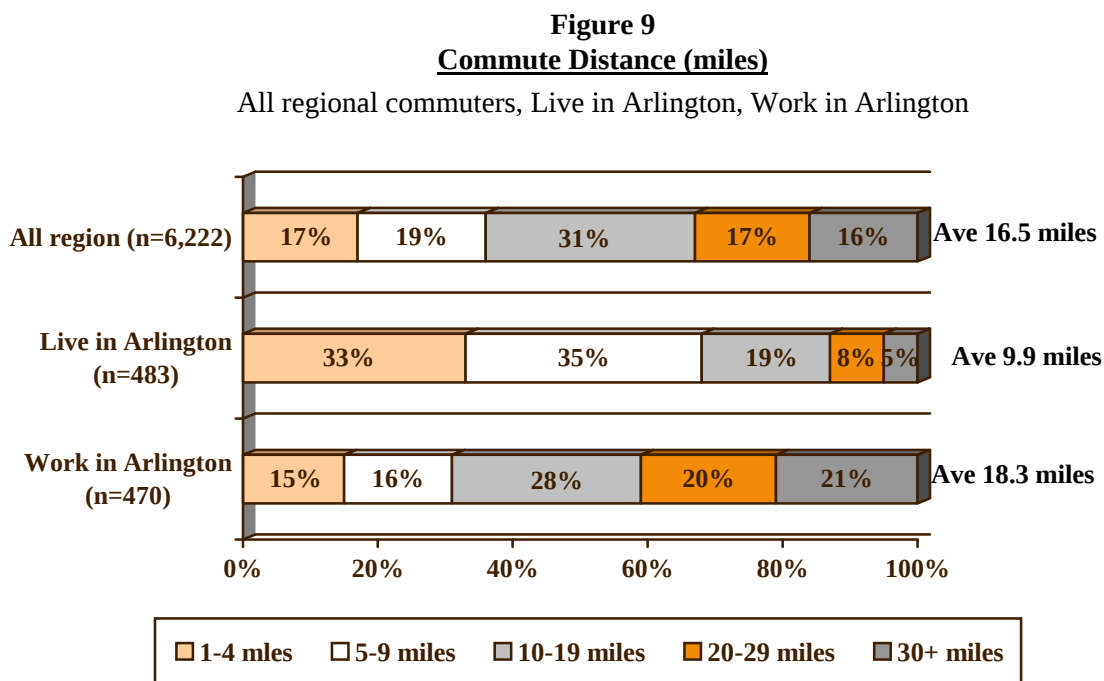
Number of Vehicles	(n= __)	Primary Type of Commute Transportation			
		DA	CP/VP	Transit	B/W
0	40	3%*	3%	95%	0%
1	254	53%	5%	38%	5%
2	224	72%	6%	17%	5%
3 or more	80	67%	4%	25%	4%

* Respondents in this group could be passengers in taxi

Length of Commute

Commute distances for Arlington residents were much shorter than for all regional commuters. Commute times also were shorter than the regional average, but not proportionately shorter. Respondents who worked in Arlington traveled both longer distances and longer times than did the average regional commuter.

Number of Miles – Figure 9 shows the average travel distance and the distribution of distance by mileage groups for all commuters in the region, for respondents who lived in Arlington, and those who worked in Arlington.



The average one-way commute distance for all respondents in the region was 16.5 miles, one-way. As shown in the figure, more than one-third (36%) of regional commuters commuted fewer than 10 miles one-way. Another third (31%) said they traveled between 10 and 19 miles. About 33% had commute distances of 20 miles or greater.

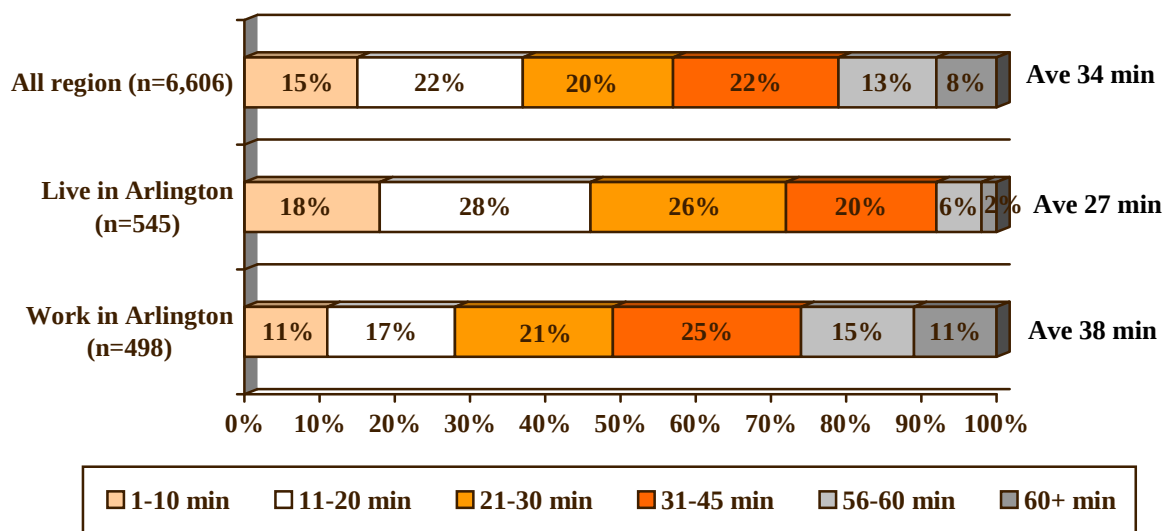
Commuters who lived in Arlington traveled much shorter distances, on average. Their average distance was only 9.9 miles one-way and more than two-thirds (68%) traveled fewer than 10 miles. Only 13% said they traveled 20 or more miles. By contrast, commuters who worked in Arlington traveled farther to work than did all regional commuters and nearly twice as far, 18.3 miles on average, as did Arlington residents. More than four in ten (41%) traveled 20 or more miles one-way.

Commute Travel Time – Figure 10 presents the average commute time for all regional commuters and for the two groups of Arlington commuters. As shown, the average regional commute time is 34 minutes. About a third (37%) of regional commuters traveled 20 minutes or less and 43% commuted between 21 and 45 minutes. The remaining 21% traveled more than 45 minutes.

The travel time for commuters who lived in Arlington (27 minutes) was less than the regional average, but not a proportionately lower time compared to the differences in commute miles. But nearly half (46%) of Arlington resident commuters said they traveled 20 minutes or less and a full 72% traveled 30 minutes or less.

Figure 10
Commute Distance (minutes)

All regional commuters, Live in Arlington, Work in Arlington



Commuters who worked in Arlington spent more time commuting than did all regional commuters; 38 minutes compared to 34 minutes for the regional average. More than half (51%) traveled longer than 30 minutes one-way and 26% traveled more than 45 minutes.

Commute Distance By Type of Transportation Used – As noted above, Arlington residents traveled both shorter distances and shorter times than did all regional commuters, but the time difference was less dramatic than was the distance difference. This is because more Arlington resident commuters walked/biked or used transit than was common for other commuters in the region and trips by these types of transportation tended to be shorter distance but longer time than trips by other types of transportation.

Table 8 lists the overall average distance of 9.9 miles and the average commute distances and times for commuters who used various types of transportation. Commuters who traveled by carpool/vanpool traveled the farthest, 11.4 miles one-way. But bus and train riders spent the longest time commuting, about 39 minutes and 31 minutes one-way, respectively, compared to about 27 minutes for all respondents.

Table 8
Commute Distance and Time by Primary Type of Transportation (3+ days per week)
 Live in Arlington

Primary Type of Transportation	Average Distance (mi.)		Average Time (min.)	
	(n=___)	Average	(n=___)	Average
Overall average	483	9.9 mi.	545	27 min.
Drive alone	282	10.9 mi.	302	25 min.
Carpool/Vanpool	26	11.4 mi.	28	25 min.
Bus	27	13.8 mi.	36	39 min.
Train	107	7.9 mi.	139	31 min.
Bike/walk	22	2.0 mi.	22	17 min.

Alternative Transportation Use Characteristics

Commuters who worked in Arlington were more likely to have started using an alternative mode within the past three years than were Arlington residents. Arlington residents were more likely to have been long-time alternative mode commuters.

More than half of Arlington residents who were using an alternative type of transportation said they either had previously used another alternative type or had “always used” their current type of transportation.

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 the length of time they had been using the alternative mode they used most often. Results are presented in Table 9 for all regional workers, Arlington residents, and respondents who worked in Arlington.

Table 9
Length of Time Using Alternative Transportation

Time Using Alternative Modes	All Region (n=1,719)		Live in Arl (n=242)		Work in Arl (n=209)	
Less than one year	23%	47%	19%	50%	26%	59%
12 – 35 months	24%		31%		33%	
36 – 59 months	14%	53%	14%	50%	11%	41%
60+ months	39%		36%		31%	

In all three groups, 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 (39%) regional commuters had used their current alternative mode for more than five years and more than half (53%) had used this mode for three or more years.

Results were similar for respondents who lived in Arlington. About a third (36%) had been using their current alternative modes for five or more years and 50% had been using these modes for at least three years. But commuters who worked in Arlington were more likely to have started using their alternative modes slightly more recently. Nearly six in ten (59%) had started using their current alternative type of transportation within the past three years.

Types Used Before Starting Current Alternative Types of Transportation – Respondents who used an alternative type of transportation during the survey week were asked what types they used before starting these alternatives. Table 10 displays these results.

Table 10
Type of Transportation Used Before Starting Current Alternative Transportation*

Type of Transportation	All Region (n=1,513)	Live in Arl (n=188)	Work in Arl (n=171)
Drive alone	47%	40%	55%
Bus	13%	10%	11%
Metrorail/commuter rail	10%	19%	12%
Carpool/vanpool	8%	3%	2%
Bike/walk	7%	9%	4%
Always used this mode	15%	19%	15%

*Does not include respondents who said they did not live or work in the Washington region prior to starting to use the alternative mode

In each of the three respondent groups, at least four in ten said their previous mode had been driving alone. But a sizeable portion of alternative mode users said they had shifted from another alternative mode, for example, from train to carpool, or from bus to vanpool. Shifts within alternative modes were most common for Arlington residents; 29% said they had previously been using a bus or train and nine percent had previously been walking or bicycling to work.

It is also notable that about one in six respondents in each group said they had “always used this mode,” and thus had no previous mode to report. Additionally, some respondents, particularly those living in Arlington, said they were not working in the Washington metropolitan area prior to starting to use their current alternative mode. These respondents were not included in the table.

Carpool and Vanpool Occupancy – The average number of occupants in Arlington residents’ car-pools/vanpools was 2.6 people. The occupancy was higher, at 3.1, for respondents who worked in Arlington, due to some vanpooling among Arlington employees.

Access to Alternative Mode Meeting Points – Table 11 presents how carpoolers, vanpoolers, and transit riders traveled to where they met their rideshare partners or where they started their transit trip.

Among all regional workers, nearly four in ten respondents (39%) walked to the meeting place. Transit riders were most likely to walk; 83% of bus riders and 43% of Metrorail riders said they used this method to get to the meeting point. About 15% said they were picked up at home by the carpool or vanpool driver and nine percent of respondents said they took transit to the meeting point. Five percent said they drove to the location, but then continued on as the carpool/vanpool driver.

Table 11
Means of Getting from Home to Transit / Rideshare Meeting Place

Access Mode to Alternative Mode	All Region (n=1,577)	Live in Arl (n=219)	Work in Arl (n=188)
Walk/bicycle	39%	69%	28%
Picked up at home	15%	9%	15%
Drive to central location (e.g., Park-Ride)	18%	5%	28%
Drive alone to driver’s/passenger’s home	11%	4%	16%
Bus/transit	9%	8%	10%
I am the carpool/vanpool driver	5%	4%	3%
Distance to meeting point	3.1 miles	1.0 miles	3.8 miles
Percentage traveling less than 1 mile	59%	82%	47%

More than a quarter of respondents (29%) 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 and these trips should be reflected in an air quality analysis.

Live in Arlington – The results were strikingly different for Arlington residents. Nearly seven in ten (69%) said they walked/bicycled to the meeting point and eight percent said they used a bus or other transit. Only nine percent said they drove to the meeting point and parked their cars for the rest of the day.

Work in Arlington – Commuters who worked in Arlington, on the other hand, were more likely to drive a portion of the trip and park their cars than were all regional workers and much more likely to do so than were Arlington residents. More than four in ten (44%) said they either drove to a central meeting point or to the home of their pool partners. Only about a quarter (28%) said they walked to the meeting point.

In general, access trips to alternative mode meetings points were short. Commuters across the region traveled an average of 3.1 miles one-way and more than half (59%) said the distance was one mile or less. Arlington residents traveled 1.0 miles on average, with 82% saying they traveled one mile or less. This is consistent with the high percentage of residents who said they walked to the meeting point. The average access distance for respondents who worked in Arlington was about 3.8 miles one way. About half of these respondents traveled one mile or less.

Use of Other Alternative Types of Transportation for Commuting

About a quarter of commuters who lived in Arlington said they used or tried a non-drive alone type of transportation in the past two years that they were not using at the time of the survey.

Among commuters who worked in Arlington, nearly a third had tried a type or another type of non-drive alone transportation for their trip to work.

Commuters who used alternative types of transportation primarily did so to “save time,” “save money,” because they “changed jobs or work hours,” or because they “did not have a vehicle available” for commuting.

Alternative Type of Transportation Tried – Respondents who did not work at home full-time were asked about alternative types of transportation they might have used for commuting 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 type. Respondents who were using an alternative type when the survey was conducted were asked if they had used another type of alternative transportation, other than the type they were currently using. Table 12 displays these results.

Table 12
Previous Use of Alternative Types of Transportation and Types Used/Tried

Alternative Types of Transportation Tried	All Region (n=6,136)	Live in Arl (n=564)	Work in Arl (n=516)
Used/tried other alternatives	22%	28%	31%
Types used/tried			
Train - Metrorail	11%	16%	19%
Train - commuter rail	1%	<1%	2%
Bus	7%	7%	7%
Carpool	3%	3%	4%
Vanpool	<1%	0%	1%
Walk	2%	3%	3%
Bicycle	1%	3%	1%

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

Approximately one in five regional commuters (22%) said they used or tried an alternative mode they were not currently using. But respondents who lived and/or worked in Arlington used or tried alternative types of transportation at higher rates. More than one-quarter (28%) of Arlington residents and 31% of Arlington employees said they had used or tried another alternative.

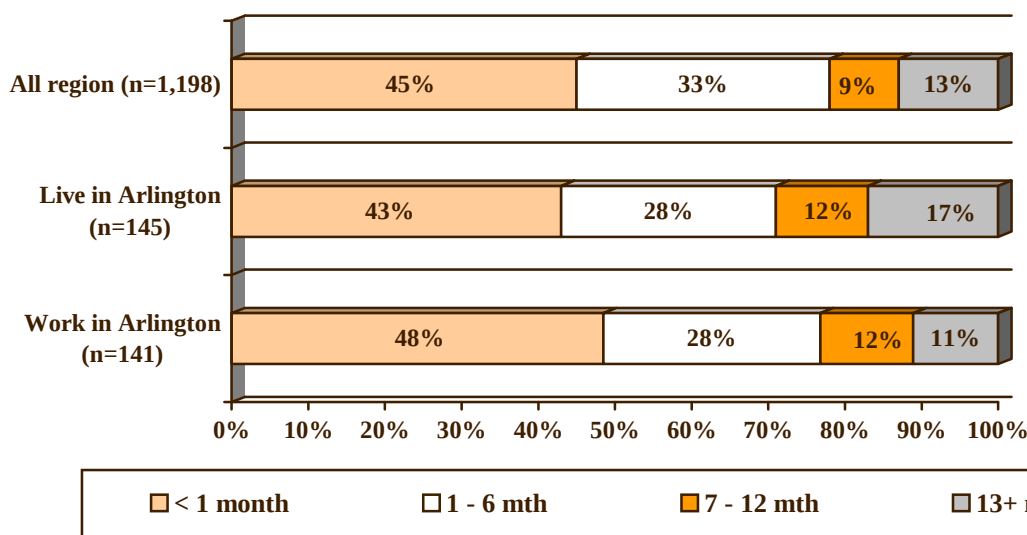
Train was the type of transportation mentioned most frequently in all three groups. About one in eight (12%) regional workers tried or used a train and 16% of Arlington residents and 19% of commuters who worked in Arlington tried either Metrorail or commuter rail. Rates of trial/recent use of other types were similar across the three groups.

Length of Time Using Other Alternatives – Respondents who tried or used alternative types of transportation other than one they were currently using generally used them for a short time. Figure 11 indicates that at least four in respondents used these types for less than one month. This result was similar for all regional workers, commuters who lived in Arlington, and commuters who worked in Arlington.

Figure 11
Length of Time Using Alternative Types of Transportation Used/Tried in Past Two Years

(Types Not Used Currently)

All regional commuters, Live in Arlington, Work in Arlington



About three in ten respondents in each group used or tried the new type for one month to six months. The remaining respondents used these other alternatives for at least seven months. Arlington residents were slightly more likely to have used/tried the alternatives for longer periods of time. About 29% said they used/tried the alternative for more than seven months, compared to 21% of all regional workers and 23% of Arlington employees.

These results were considerably different from the generally long duration for current alternative users, previously presented in Table 9. The short duration of use found in this question reflects the exploratory

or trial nature of use for some 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 Types of Transportation – Respondents who used an alternative type of transportation, either during the survey week or within the past two years were asked why they began using those types. The reasons are listed in Table 13 for four groups of respondents: live in Arlington and work in Arlington, for both current users and past users/trial users.

Table 13
Reasons for Using Alternative Types of Transportation

Live in Arlington and Work in Arlington
Current Users and Past Users/Trial Users

Reasons	Current Users		Past Users / Trial Users	
	Live in Arl (n=244)	Work in Arl (n=211)	Live in Arl (n=170)	Work in Arl (n=162)
Commute related reasons				
- Save time	16%	30%	15%	15%
- Save money	15%	14%	11%	18%
- Avoid congestion	8%	11%	6%	10%
- Tired of driving	7%	10%	5%	8%
- No parking, parking expense	5%	1%	5%	2%
- New option available	3%	3%	2%	3%
- Financial incentive offered	0%	3%	0%	0%
Personal circumstances reasons				
- Changed jobs/work hours	20%	16%	7%	10%
- No vehicle available	10%	6%	21%	16%
- Moved to new residence	13%	5%	2%	<1%
- Convenient, close to work	7%	5%	6%	7%
- Always used	6%	5%	5%	4%
- Employer/worksites moved	2%	3%	0%	1%
- Get exercise	2%	3%	5%	2%
- Weather	1%	<1%	10%	7%
Other	7%	6%	8%	8%

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

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

In each group, most reasons reflected commuting preferences (e.g., save time), a change in personal circumstances (e.g., changed jobs/work hours), or a personal need (e.g., get exercise). But some differences were noted when the four groups were compared. These differences are highlighted.

Current Alternative Users – The second and third columns show responses for live in Arlington and work in Arlington respondents who used alternative types of transportation the time of the survey. The most common commute-related reasons included: save money, save time, avoid congestion, and tired of driving. Resident and employee respondents were equally likely to mention wanting to save money, but Arlington employee respondents were more likely to note wanting to save time (30% of employees compared for 16% of residents).

Substantial percentages of both Arlington residents (20%) and Arlington employees (16%) said they had started their new alternative type of transportation because they had changed jobs or work hours. About one in eight Arlington resident respondents who were using alternatives (13%) said they had made this change because they had changed their home location. Three other responses, “no vehicle available,” “close to work, convenient,” and “always used” this type, also were noted by five or more percent in both the Arlington resident and Arlington employee groups. Five percent of Arlington residents also said their reason was lack of parking or need to pay for parking; this reason was noted by only one percent of Arlington employees.

Respondents Who Previously Used or Tried Other Alternative Types of Transportation – The fourth and fifth columns of Table 13 show reasons given by Arlington resident and Arlington employee respondents who tried or used an alternative type of transportation that they were not using at the time of the survey. In other words, these were reasons given for using types that respondents had previously used or tried, but were no longer using.

The top commute-related reasons generally mirror those that current alternative users offered; save time, save money, avoid congestion, and tired of driving were the most common commute-related reasons. But past users/trial users were much more likely to note two personal reasons for the change; no vehicle available and weather, than were current alternative users. This suggests these users started or tried the alternative out of necessity or for a short-term or occasional use reason.

Reasons for Not Continuing with Alternative Types of Transportation- Another useful question to ask respondents who tried or used alternative type of transportation in the past but do not now is why did they stopped using these types? These reasons are detailed in Table 14 for all regional commuters and for respondents who lived in Arlington and those who worked in Arlington employees.

The results were very similar for all three groups. The most frequently mentioned reasons for not continuing to use an alternative type of transportation included that it was “too inconvenient” or that it “took too much time.” Commuters who worked in Arlington were slightly more likely to note these reasons than were either Arlington residents or all regional commuters. At least one in ten respondents in all three groups noted making a “job change” as their reason or that they only intended to use the alternative temporarily, for example, because the car was in the repair shop.

Table 14
Reasons for Not Continuing Other Alternative Types of Transportation
Arlington Residents, Arlington Employees, All Regional Commuters

Reasons	All Region (n= 1,212)	Live in Arl (n=170)	Work in Arl (n=144)
Too inconvenient	20%	23%	31%
Took too much time	20%	19%	24%
Job changes	13%	12%	16%
Only used temporarily (e.g., car was in shop)	11%	10%	10%
Car became available	8%	8%	8%
Costs too much	8%	5%	5%
Need vehicle during/after work	5%	5%	5%
Weather related	4%	5%	5%
Vehicle unavailable/unreliable	4%	0%	0%
Moved residence	3%	7%	7%
Child-related activities	2%	3%	3%
Parking issue	0%	3%	3%
Other*	10%	3%	5%

Percentages might add to more than 100% because multiple responses were permitted

*Each “Other” response was mentioned by less than three percent of respondents

SECTION 4 TELECOMMUTING

The SOC survey also explored respondents' telecommute experience. This section presents these results for 2004. For purposes of this survey, telecommuters 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 was a different definition than had been used in the 2001 survey; “*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.*”

The definition was changed in 2004 to reflect a more accurate representation of what Commuter Connections considers telecommuting. For example, the 2001 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.

An important issue is that the 2001 definition could have included respondents who worked a portion of the normal workday at home, but traveled to the regular workplace for another part of the day. For example, a respondent who worked at home in the morning while waiting for a delivery, then traveled to the regular work place in the afternoon could be counted in the 2001 definition, but not in the 2004 definition. The examples cited above are not generally considered telecommuting for transportation-related purposes, thus the 2004 definition was rewritten to exclude these workers.

To enable a valid comparison between 2004 and 2001, the telecommute results from the 2001 survey were revised to exclude respondents who would not have been counted as telecommuters under the 2004 definition. The sections that follow present some comparisons of the 2004 data to results from 2001.

Current and Potential Telecommuting

The telecommute percentage for commuters who lived in Arlington (12.5%) was similar to that for all regional commuters (12.8%) and for commuters who worked in Arlington (13.2%).

About a quarter of Arlington resident commuters who did not telecommute said their job responsibilities would allow some telecommuting and that they were interested in using this arrangement. The percentage of “could and would” telecommuting potential was similar for non-telecommuting commuters who worked in Arlington.

More than half of telecommuters who worked in Arlington and seven in ten of telecommuters who lived in Arlington said they heard about telecommuting from their employer.

Respondents who Currently Telecommute – Respondents were read the above definition of telecommuting and asked if they would consider themselves telecommuters based on this definition. About one in eight (11.8%) Arlington residents said they telecommute, either regularly or occasionally. A slightly higher percentage (12.7%) of respondents who worked in Arlington said they telecommuted.

But telecommuters accounted for a higher percentage, 12.8%, of commuters, that is, workers who travel to a main work location on non-telecommute days. This base of commuters excludes workers who are self-employed and for whom home is their only workplace, workers who never make commute trips.

This calculation reflects the role of telecommuting in eliminating commute trips, thus is relevant for assessing travel and air quality benefits of telecommuting. About 12.5% of Arlington resident commuters and 13.2% of Arlington employee commuters telecommuted. As shown in the first row of Table 15, these percentages were very similar to the 12.8% of all regional commuters who telecommuted.

Table 15
Summary of Current and Potential Telecommuting
All Respondents who are not Self-Employed/Work at Home

Telecommuting Status	All Region (n=6,896)	Live in Arl (n=565)	Work in Arl (n=516)
Currently telecommuting	12.8%	12.5%	13.2%
Not telecommuting			
- Job responsibilities would NOT allow TC	65%	62%	67%
- Job responsibilities allow telecommuting	22%	25%	20%
- Interested in regular TC	6%	8%	6%
- Interested in occasional TC	10%	12%	10%
- NOT interested in TC	6%	5%	4%

Interest in Telecommuting – Respondents who said they were not telecommuting and who worked at a work location outside their homes were asked if their job responsibilities would allow them to work at a location other than their main work place, at least occasionally. Table 15 also presents these results. Most respondents said their jobs would not allow them to telecommute, but approximately one quarter (25%) of Arlington resident commuters and two in ten (20%) commuters who worked in Arlington said this would be possible.

Respondents for whom telecommuting was a possibility were asked if they would want to telecommute. Most (20% of Arlington resident commuters and 16% of Arlington employee commuters) said they would be interested in telecommuting on an occasional or regular basis. These respondents “could and would” telecommute, if given the opportunity. These results suggest additional telecommute growth potential exists among both Arlington residents and commuters who worked in Arlington.

The potential for additional telecommuting among commuters who worked in Arlington was most apparent for those worked for larger employers and those who worked for federal agencies. For example, of non-telecommuters who worked in Arlington, 21% who worked for an employer with more than 100 employees said they “could and would” telecommute, compared with 10% of non-telecommuters who worked for smaller employers. And nearly a quarter (24%) of non-telecommuters who worked for a federal agency said they “could and would” telecommute, if given the opportunity, compared with 11% - 13% of commuters who worked for non-federal employers.

Reasons for Telecommuting – Respondents who telecommuted were asked why they started telecommuting. Responses to this question are shown in Table 16. The table shows results for this question for respondents who lived in Arlington and those who worked in Arlington.

Table 16
Reasons for Telecommuting
Live in Arlington, Work in Arlington

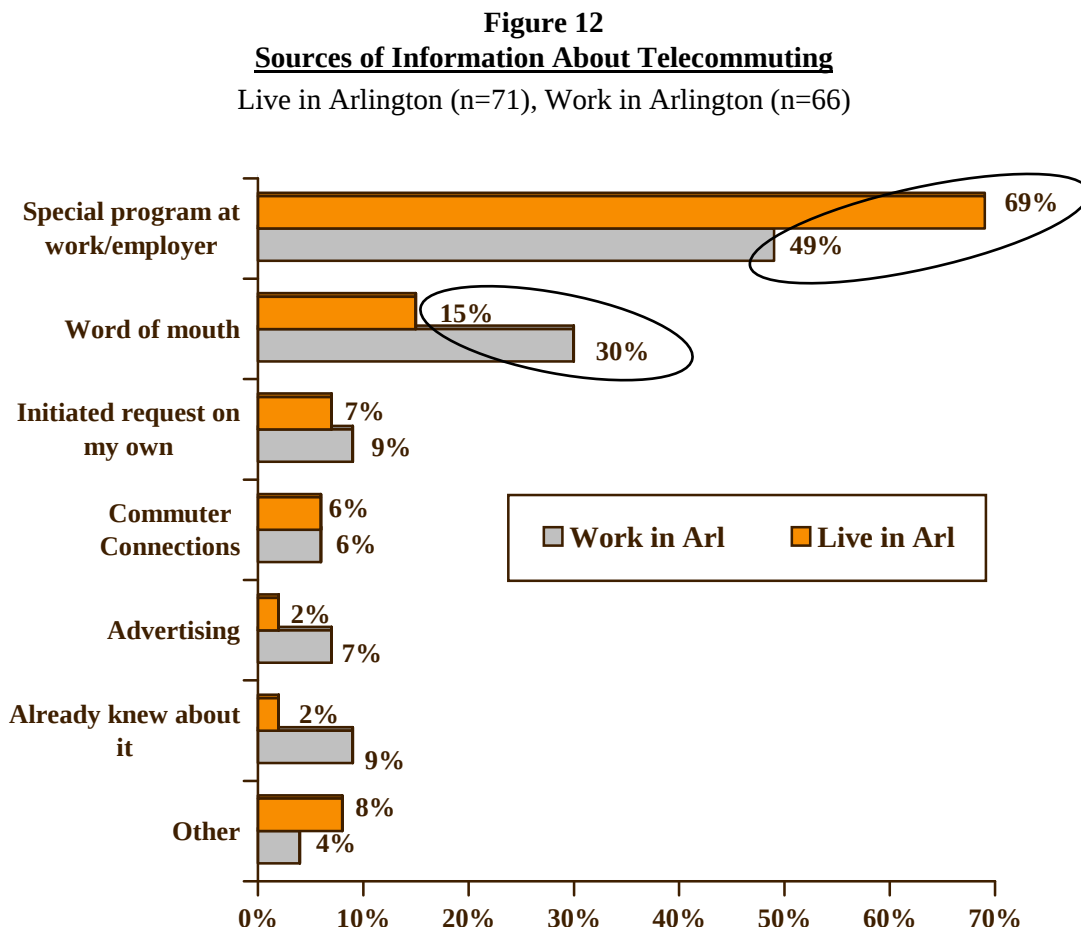
Reasons	Live in Arl (n=71)	Work in Arl (n=66)
To save time	17%	12%
New option that became available	17%	14%
Initiated request on my own	13%	7%
To get more work done	11%	13%
Convenient	11%	12%
Changed jobs/work hours	9%	11%
Save money	9%	3%
Personal circumstance (weather, repairman, sick)	6%	11%
Pressure/encouragement from employer	6%	6%
To stay with family or children	4%	7%
Special program at work	4%	6%
Tired of driving	1%	6%
Avoid congestion	1%	7%
Wanting/needing quiet/uninterrupted work time	0%	11%
Other*	9%	5%

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

Live in Arlington – Among respondents who lived in Arlington, the most frequently mentioned reasons were “to save time” (17%) and that it was a “new option that became available” (17%). About one in ten said they started telecommuting “to get more work done” (11%), because it was “convenient” (11%), because they “changed jobs or work hours” (9%) or because they wanted to “save money” (9%).

Work in Arlington – Respondents who worked in Arlington cited similar reasons for starting to telecommute. But they were slightly less likely than residents to mention wanting “to save time” (12%) or “save money” (3%), and slightly more likely to say they started telecommuting to accommodate “personal circumstance” such as waiting for a repair or delivery person or because of weather conditions (11%). And one in ten (11%) of these respondents said they “wanted or needed quiet time or uninterrupted work time.”

Sources of Telecommute Information – Respondents who telecommuted were asked how they had learned about telecommuting. They also were asked directly if they had received telecommuting information directly from Commuter Connections or MWCOG. The most frequently mentioned sources are shown in Figure 7.



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

Live in Arlington – The largest source of information for Arlington residents, by far, was “special program at work/employer,” named by more than two thirds (69%) of these respondents. This percentage was considerably higher in 2004 than in 2001. In the 2001 survey, only 31% of Arlington residents who telecommuted said they learned of telecommuting at work or through their employer. About one in six Arlington resident respondents who telecommuted said they learned of telecommuting through “word of mouth” (15%). Seven percent of these respondents said they “initiated the request on their own” and six percent said they received telecommuting information directly from Commuter Connections or MWCOG.

Work in Arlington – A large share (49%) of respondents who worked in Arlington also mentioned that a “special program at work/employer” was the source of their telecommute information, about the same percentage (47%) as named this source in the 2001 SOC survey. But respondents who worked in Arlington were more likely than were Arlington resident to say they heard of telecommuting through other

sources, including: “word of mouth” (30%), “initiated the request on their own” (9%), Commuter Connections (6%), advertising (7%), or that they “already knew about telecommuting (9%).

Telecommute Patterns

Respondents who said they telecommuted, at least occasionally were asked a series of questions about their telecommuting characteristics including: length of time telecommuting, use of informal or formal telecommute arrangement, telecommute location, and frequency of telecommuting.

Most Arlington telecommuters started using this arrangement recently. Nearly two-thirds of the telecommuters who lived in Arlington and over half of those who worked in Arlington started telecommuting with the past two years.

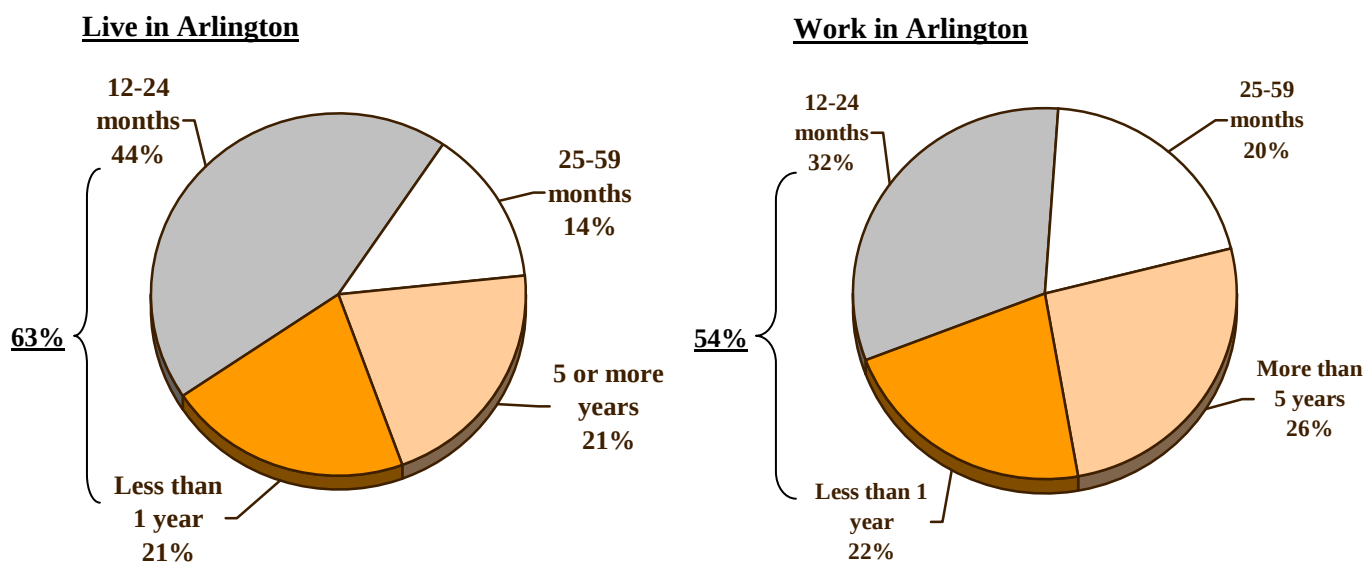
About two-thirds of Arlington telecommuters said they telecommuted under an “informal” arrangement with a supervisor, rather than under a formal organization policy.

On average, Arlington resident telecommuters telecommuted about 1.3 days per week. Telecommuters who worked in Arlington telecommuted an average of 1.4 days per week.

Length of Time Telecommuting – As illustrated in Figure 13, a large share of Arlington residents who telecommuted had started telecommuting relatively recently; 65% said they started telecommuting within the past two years and almost a quarter (21%) started within the past year. Two in ten said they had been telecommuting more than five years. On average, respondents had been telecommuting about 33 months.

Figure 13
Length of Time Telecommuting

Live in Arlington (n=71), Work in Arlington (n=66)



Among telecommuters who worked in Arlington, just over half (54%) started telecommuting in the past two years. And 26% started telecommuting more than five years ago. On average, these respondents had been telecommuting about 38 months.

Formal or Informal Telecommute Arrangement – Telecommuters were asked if they telecommuted under a formal telecommute program or if it was an informal arrangements between the telecommuter and the supervisor. Respondents who did not telecommute were asked if their employer permitted employees to telecommute, either under a formal program or informally, even though the respondent did not use it.

Live in Arlington – Nearly half of all Arlington resident respondents said their employer had either a formal telecommuting program (18%) or permitted employees to telecommute under an informal arrangement between an employee and a supervisor (27%). The remaining 55% said their employers did not have any telecommute program or that they didn’t know about any program.

Work in Arlington – Slightly fewer of the respondents who worked in Arlington said their employers allowed telecommuting; 19% said their employer had a formal telecommuting program and 19% said their employer permitted employees to telecommute under an informal arrangement. The remaining 62% said their employers did not have any telecommute program or that they didn’t know about any program.

Arrangements for Telecommuters and Non-Telecommuters – Table 17 presents the distribution of arrangements for respondents who currently telecommuted and for those that did not for both respondents who lived in Arlington and those who worked in Arlington.

Table 17
Formal or Informal Telecommuting Arrangements
 Telecommuters vs Non-Telecommuters

Program Type	Live in Arl	Work in Arl
Telecommuters	(n=71)	(n=66)
- Formal program	37%	27%
- Informal arrangement	62%	68%
- No program/don’t know	1%	4%
Non-telecommuters	(n=494)	(n=450)
- Formal program	15%	18%
- Informal arrangement	22%	12%
- No program/don’t know	63%	70%

As indicated, telecommuters were much more likely than were non-telecommuters to say their employers had a formal telecommute program. Nearly one in four (37%) Arlington resident telecommuters said they telecommuted under a formal arrangement. Among telecommuters who worked in Arlington, about a quarter (27%) said they telecommuted under a formal program. By contrast, only 15% of non-

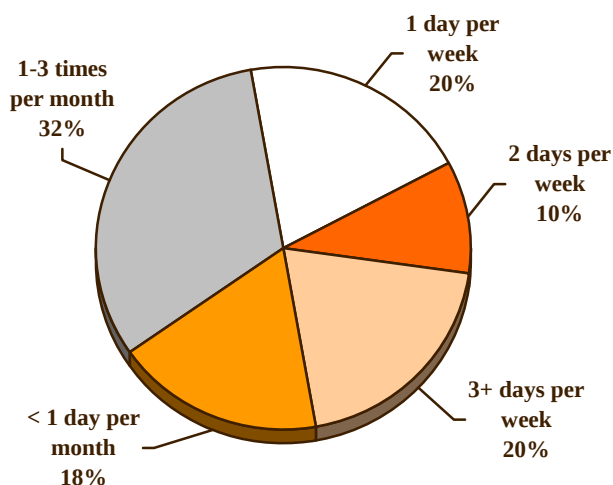
telecommuters who lived in Arlington and 18% of non-telecommuters who worked in Arlington said their employers had a formal telecommute program. About two in ten (22%) of Arlington residents and 12% of Arlington employees said their employers permitted telecommuting under informal arrangements.

Telecommute Frequency – The frequency with which respondents telecommuted is detailed in Figure 14.

Figure 14
Frequency of Telecommuting
 Live in Arlington (n=71), Work in Arlington (n=66)

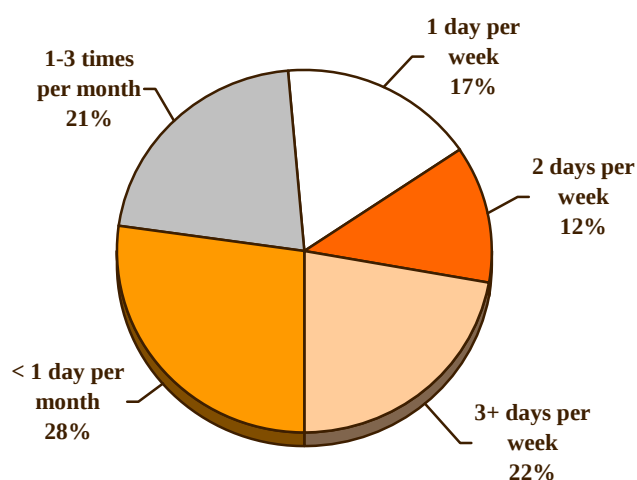
Live in Arlington

Average 1.3 days per week



Work in Arlington

Average 1.4 days per week



Live in Arlington – About two in ten (18%) Arlington resident telecommuters said they telecommuted less than once per month or only in emergencies or for special projects. About one-third (32%) said they telecommuted a few times each month. The remaining 50% telecommuted at least one day per week. About one in five (20%) telecommuted most of their work days (three or more days per week).

Work in Arlington – About a quarter (27%) of telecommuters who worked in Arlington used the arrangement less than once per month. Two in ten telecommuted one to three days per month and the remaining 51% telecommuted one day a week or more.

The average telecommute frequency was similar for respondents who lived in Arlington (1.3 days per week) and those who worked in Arlington (1.4 days per week). The average frequency for Arlington residents appears to be an increase from the 1.0 days per week measured in the 2001 SOC survey. The average frequency for those who work in Arlington was approximately the same in 2004 as in 2001.

We note that the average days per week frequency was lower than the frequency indicated earlier for respondents who telecommuted during the survey week (2.7 days per week for live in Arlington and 2.8 days per week for work in Arlington). But the overall telecommute frequency accounts for both the actually frequency of respondents who telecommuted during the survey week and an expected weekly frequency for respondents who did not telecommute during the survey week, but said they occasionally telecommuted (e.g., one to three times per month).

Telecommute Locations – All of the Arlington residents who telecommuted said they telecommuted exclusively from home. Among telecommuters who worked in Arlington, 97% telecommuted from home. The remaining three percent said they teleworked from a “satellite office provided by the employer” or from a telework center.

SECTION 5 **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

Nearly nine in ten commuters who lived in Arlington and three-quarters of those who worked in Arlington said public transportation service operated between their home and work areas. By contrast, only two-thirds of all regional commuters said they had access to public transportation for their trip to work.

Commuters who worked in Arlington were more likely to have HOV lanes available on their commute route (52%) than were either commuters who lived in Arlington (30%) or all regional commuters (29%). They also were more likely to use HOV lanes for commuting.

Commuters who lived in Arlington were much less likely to say that they knew locations of Park & Ride lots along their trip to work (21%) than were either all regional commuters (42%) or commuters who worked in Arlington (42%).

Availability of Public Transportation – Respondents who worked outside their homes were asked if they knew what public transportation companies provided service from their homes to the area where they worked. Two-thirds (65%) of all regional commuters said that public transportation was available to them for their trip to work. Three-quarters (75%) of commuters who worked in Arlington said transit service operated between their home and work locations. The percentage was even higher, at 86%, for commuters who lived in Arlington. These respondents were asked to identify specific transit companies that provided service in their areas. Responses to this question are listed in Table 18.

Not surprisingly, the two companies mentioned most frequently were those that operate throughout the region: Metrobus and Metrorail/subway. Among Arlington residents, fully half said these services were available for their work trip. Availability was slightly less, at 44% for Metrobus and 41% for Metrorail, for commuters who worked in Arlington. One in ten commuters who worked in Arlington also said they had access to the Virginia Railway Express (VRE), a commuter rail company serving Northern Virginia. Availability of other individual services, all of which served limited geographic areas, was noted by only small percentages of commuters.

Table 18
Public Transportation Companies that Provide Service From Home to Work
 Percentage of all commuters in the geographic sub-group

Transit Companies	All region (n=7,060)	Live in Arl (n=564)	Work in Arl (n=510)
Transit Available	65%	86%	75%
Bus Companies			
Metrobus	36%	56%	44%
Ride On	7%	0%	3%
Fairfax Connector	5%	1%	4%
OmniRide	2%	1%	6%
Alexandria DASH	2%	1%	2%
THE BUS	2%	1%	2%
Train Companies			
Metrorail/subway	31%	48%	41%
Virginia Railway Express	3%	1%	9%
MARC	2%	1%	5%
Don't know specific company name	7%	10%	9%
Other **	11%	8%	7%

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

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

Availability and Use of HOV Lanes – The survey also examine the availability and use of High Occupancy Vehicle (HOV) lanes. As indicated in Table 19, more than one in four (29%) regional commuters said there was a special HOV lane along their route to work and 28% of these commuters said they used these lanes. This equated to about eight percent of all regional commuters.

Commuters who lived in Arlington reported similar HOV availability and use as did all regional commuters; 30% said HOV lanes were available and eight percent of Arlington residents said they used the lanes. But commuters who lived in Virginia jurisdictions other than Arlington reported both higher availability and use. More than four in ten (44%) commuters who lived in other parts of Northern Virginia jurisdictions said an HOV lane was available to them and 15% of these commuters used the lanes. Commuters who said they worked in Arlington noted even higher HOV availability and use. More than half (52%) of these commuters reported HOV availability and nearly a quarter (22%) said they used the HOV lanes.

Table 19
Availability and Use of HOV Lanes

Jurisdiction	(n=___)	Percentage with HOV lane available	Percentage using HOV lane
All regional commuters	6,724	29%	8%
Live in Arlington	564	30%	8%
Live in VA, outside Arlington		44%	15%
Work in Arlington	516	52%	22%

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

Arlington residents who regularly used the HOV lane for commuting estimated that using the lane saved them an average of 16 minutes for each one-way trip. This was not as large a saving as the 30 minutes saved by commuters who lived in other Northern Virginia jurisdictions or the 28 minutes saving noted by commuters who worked in Arlington.

Park & Ride Lot Availability and Use – Table 20 depicts commuters’ awareness of the locations of Park & Ride lots along their route to work. About four in ten respondents (42%) regional commuters said they knew the locations of Park & Ride lots along their commuting route. About a third (34%) said they did not know the locations. A quarter of respondents (24%) said there were no Park & Ride lots along their route to work.

Table 20
Awareness of Park & Ride Lots Along Route to Work
All Region, Live in Arlington, Work in Arlington

Transit Companies	All region (n=6,677)	Live in Arl (n=562)	Work in Arl (n=515)
Yes, know location of P&R	42%	21%	42%
No, don’t know P&R location	34%	47%	33%
No P&R available	24%	32%	25%

Awareness of Park & Ride lots among commuters who worked in Arlington was the same as for all regional commuters; 42% said they knew the locations of lots. But Arlington residents were much less likely to say they knew Park & Ride lot locations. Only two in ten said they knew the locations. The low awareness among Arlington residents could be because more of these commuters do not have any P&R lot available. But it is also likely that awareness of specific locations could be low because a much larger share of Arlington resident commuters walk to the location where they start their transit or

carpool trip, thus do not need to park at a Park & Ride lot. Only about one percent of commuters who lived in Arlington said they had used a P&R lot when commuting during the past year. This was less than the seven percent of all regional commuters who had used P&R lots and much less than the 12% of commuters who worked in Arlington who said they had used a P&R lot when commuting during the past year.

Attitudes Toward Transportation Options

The top reasons why Arlington resident commuters said they did not use the bus for commuting included: “no service available in home or work area,” “takes too much time,” and “need car during work day or before or after work.” These were also the top three reasons named by commuters who worked in Arlington.

Reasons given for not carpooling or vanpooling included: “don’t know anyone to ride with,” “work schedule is irregular,” and “need car during work day or before or after work.”

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 types of transportation. Table 21 shows reasons mentioned by commuters who lived in Arlington and those who worked in Arlington, with reasons grouped by the type of transportation. As illustrated, respondents cited some prominent reasons in each of the three categories.

Reasons for Not Riding Bus – The top two reasons for not riding the bus were the same for both commuters who lived in Arlington and those who worked in Arlington. Both “no service available in the home and/or work area” and that the bus “takes too much time” were cited by at least a quarter of the two groups of commuters. About one in ten commuters said they needed their cars during the work day or before or after work. All other reasons, shown in Table 21, were named by small numbers of commuters.

Reasons for Not Riding Train – The top three reasons commuters cited for not riding the train were the same as for not riding the bus, but “no service available” was noted by a significantly higher share of commuters. More than half (56%) of commuters who lived in Arlington and nearly as high a percentage (48%) of those who worked in Arlington cited this reason. About two in ten said the bus “takes too much time” and one in ten commuters in both the live in Arlington and work in Arlington groups said they needed their cars during the work day or before or after work. Again, all other reasons were named by smaller numbers of commuters.

Reasons for Not Using Carpool/Vanpool – “Don’t know anyone to carpool or vanpool with” topped the list of reasons for respondents who did not use carpool or vanpool. It was named by nearly equal percentages of commuters who lived in Arlington (42%) and those who worked in Arlington (46%). Other major reasons for not using carpool or vanpool included “needing car during the work day or before or after work” and because the commuter had an “irregular schedule,” which presumably would make it difficult to adhere to a common carpool or vanpool schedule. These reasons were named by 14% to 20% of Arlington residents and Arlington employees.

Table 21
Reasons for Not Riding the Bus, Train or Using Carpool/Vanpool to Work*

Reasons	Live in Arl	Work in Arl
Why Not Ride Bus?	(n=455)	(n=420)
No service available in home/work area	27%	33%
Takes too much time	28%	25%
Need my car for work, before/after work	13%	11%
Trip is too long/distance too far	7%	6%
Work schedule irregular	6%	6%
Use other alternative type of transportation	6%	2%
Don't know if service is available/location of service	5%	4%
Have to transfer/too many transfers	4%	3%
Bus/train/carpool partner could be unreliable/late	3%	4%
Don't like to ride with strangers, prefer to be alone	2%	4%
Too expensive	2%	5%
Other **	10%	11%
Why Not Ride Train?	(n=312)	(n=349)
No service available in home/work area	56%	48%
Takes too much time	17%	20%
Need my car for work, before/after work	12%	9%
Work schedule irregular	5%	3%
Trip is too long/distance too far	5%	5%
Too expensive	2%	6%
Other **	7%	8%
Why Not Use Carpool/Vanpool?	(n=514)	(n=409)
Don't know anyone to carpool/vanpool with	42%	46%
Work schedule irregular	16%	20%
Need my car for work, before/after work	14%	17%
Doesn't save time	9%	5%
Takes too much time	6%	4%
Don't like to ride with strangers, prefer to be alone	5%	7%
Use other alternative type of transportation	5%	1%
Other **	11%	9%

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

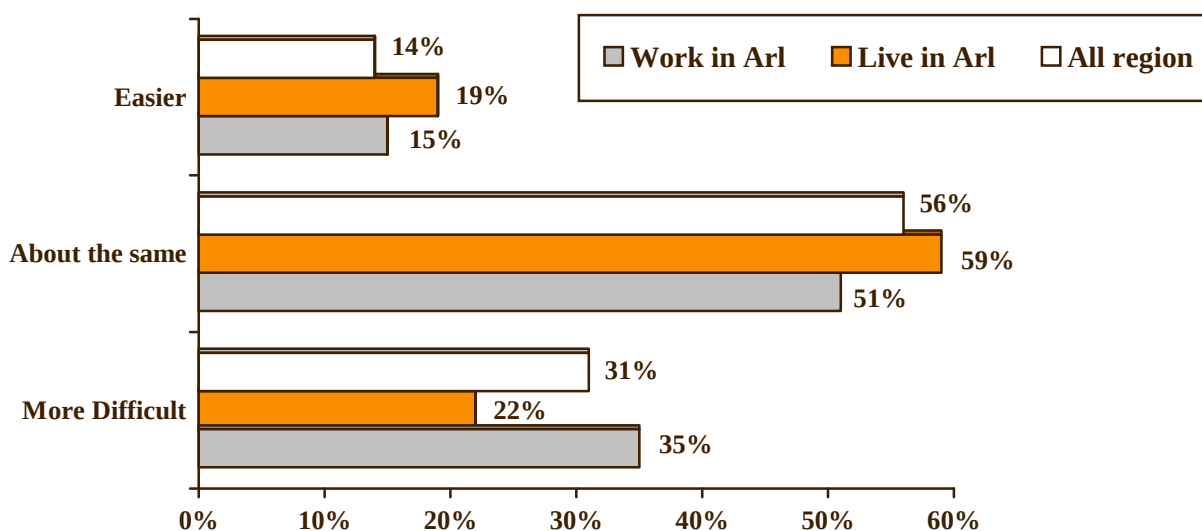
**Responses in the "other" category all noted by fewer than three percent of respondents.

Ease of Commute Compared to Last Year

Eight in ten commuters who lived in Arlington reported that their commute was easier (19%) or about the same (59% as a year ago). But more than a third (35%) of commuters who worked in Arlington said their commute was more difficult than last year. Only 15% said the commute was easier and 51% said they did not see a change.

Commuters who traveled to an outside work location were asked if their commute was easier, more difficult, or about the same as it was a year prior. As seen in Figure 15, seven in ten regional commuters said their commute was either easier (14%) or about the same (56%). The remaining three in ten (31%) said their commute was more difficult.

Figure 15
Commute Easier, More Difficult, or Same as Last Year
 All region (n=6,824), Live in Arlington (n=564), Work in Arlington (n=515)



Among commuters who lived in Arlington, nearly eight in ten reported that their commute was easier (19%) or about the same (59%). Only 22% said it was more difficult. But commuters who worked in Arlington had a less positive report. More than a third (35%) said their commute was more difficult than last year. Only 15% said the commute was easier and 51% said they did not see a change.

Commuters who said their commute had changed were asked in what way it was easier or more difficult. The top section of Table 22 lists reasons that respondents' commutes had improved and the bottom section shows the reasons that respondents' commutes had worsened.

Table 22
Reasons for Easier or More Difficult Commute

Reasons	Live in Arl	Work in Arl
Easier Commute	(n=100)	(n=90)
Shorter distance	51%	35%
Trip is faster, takes less time	28%	29%
Route is less congested	9%	30%
Trip is less stressful	7%	14%
Started using alternative type of transportation	5%	6%
Other	14%	17%
More Difficult Commute	(n=119)	(n=165)
Route is more congested	66%	82%
Longer distance	13%	13%
Trip is slower, takes more time	12%	13%
Trip is more stressful	6%	3%
Other	13%	7%

Easier Commute – The most common reason for an easier commute was that it was shorter, but it was noted by a higher percentage of Arlington residents (51%) than Arlington employees (35%). By contrast, Arlington employees were much more likely to note that the route was less congested (30%) or less stressful (14%) compared to fewer than one in ten Arlington resident commuters who gave each these responses. About equal percentages of commuters who lived in Arlington and who worked in Arlington noted that their trip is faster or takes less time.

More Difficult Commute – An overwhelming majority (82%) of commuters who worked in Arlington and who said their commute was more difficult said their route had become more congested. Among Arlington resident commuters, about two-thirds (66%) gave this response. About a tenth of commuters who lived in Arlington and an equal percentage of commuters who worked in Arlington noted either the distance was longer or the trip took more time.

Changes in Residence or Work Location – All respondents were then asked if they had made a change in their work location or residence in the past year. About 28% of commuters who lived in Arlington and 21% of commuters who worked in Arlington had made a change. But as Table 23 indicates, the ease or difficulty of the commute appears to have been related to moves for at least some of the respondents.

Table 23
Commute Compared to Last Year
 by Made a Change in Work or Residence Location

Changed Home or Work Location	Commute Easier	Commute More Difficult	Commute About the Same
Live in Arlington			
Didn't move (n=404)	10%	22%	68%
Moved (n=160)	42%	22%	36%
Work in Arlington			
Didn't move (n=382)	15%	49%	36%
Moved (n=134)	38%	33%	28%

Live in Arlington – More than two-thirds (68%) of commuters who lived in Arlington and had not moved said their commutes were about the same as last year. One in ten (10%) who had not moved said their commutes were easier and 22% said their commutes were more difficult. A similar percentage (22%) of Arlington resident commuters who had moved reported a more difficult commute, but a much higher percentage (42%) who had moved said their commutes were easier. This suggests that the move might have played a role in improving or worsening the commute, but that the move more often improved the commute.

Work in Arlington – For commuters who worked in Arlington, some commute benefit appeared likely from the move. Among those who had not moved, nearly half (49%) said their commute was worse and 15% said it was easier. But among those who had moved, only about a third (33%) said it was more difficult and 38% said their commute was easier.

SECTION 6 AWARENESS OF COMMUTE ADVERTISING AND ASSISTANCE SERVICES

Commute Advertising Recall

About six in ten Arlington resident commuters and a slightly higher percentage of commuters who worked in Arlington said they remembered hearing, seeing, or reading commute advertising within the past six months.

About a third of commuters in each group could name a specific message they remembered. About four in ten who recalled ads could name the sponsor.

About one in five Arlington commuters who heard or saw ads said they were more likely to consider using an alternative type of transportation after hearing or seeing the ads.

The next set of questions in the survey inquired about respondents' awareness of commute information advertising. Just over half (55%) of all regional commuters said they had seen, heard, or read advertising about commuting in the six months prior to the survey. This was about the same percentage as reported in the 2001 SOC survey that they had recently seen, heard, or read commute program advertising. A similar percentage of Arlington resident commuters (57%) and a slightly higher percentage of commuters who worked in Arlington (64%) recalled seeing, hearing, or reading advertising for commute programs.

Message Recall – Respondents were then asked what messages they recalled from this advertising. About a third of commuters in each of the three groups could cite a specific message; 34% of all regional commuters, 33% of commuters who lived in Arlington, and 38% of commuters who worked in Arlington could name a specific message. Table 24 lists the percentages of respondents who named messages in two categories: general rideshare and commute programs/services.

General Rideshare Messages – One general rideshare message, “use the bus, train, Metrorail” was recalled by seven percent of all regional respondents. Slightly higher percentages of commuters who lived in Arlington (11%) and those who worked in Arlington (10%) said they recalled this message. All other responses in this category were named by smaller percentages of commuters.

Commute Program/Service Messages – By contrast, higher percentages of commuters said they recalled messages about specific commute assistance programs or services. At least one in ten in each of the three commuter groups recalled “you can call for carpool/vanpool information,” or “Guaranteed Ride Home.” Slightly lower percentages noted message about “new buses and trains coming” and messages about contacting the regional Commuter Connections assistance program.

Table 24
Recall and Influence of Advertising Messages

Message Recalled	All region (n=4,014)	Live in Arl (n=329)	Work in Arl (n=345)
General Ridesharing Messages			
Use the bus, train, Metrorail	7%	11%	10%
It reduces traffic	3%	3%	2%
It would help the environment	2%	<1%	3%
It saves money	3%	2%	5%
It saves time	2%	2%	4%
Commute Program/Service Messages			
You can call for carpool/vanpool info	17%	14%	10%
Guaranteed Ride Home	12%	10%	11%
New trains or buses are coming	7%	9%	9%
Call 1-800-745-RIDE/Commuter Connections	6%	5%	6%
Wilson bridge reconstruction, Bridge Bucks	4%	2%	6%
Telework Center/telecommuting	3%	4%	4%
None, don't know	37%	40%	40%
Other *	11%	15%	11%

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

Recall of Advertising Sponsors – Among commuters who recalled ads, slightly less than half (46%) of those who lived in Arlington said they remembered who sponsored the ad. About a quarter (27%) named the Washington Metropolitan Area Transit Authority (WMATA, Metro) and another 16% named Commuter Connections or the Metropolitan Washington Council of Governments.

Recall of ad sponsors was similar for commuters who worked in Arlington; 41% who heard or saw ads remembered the ad sponsor; 17% named WMATA/Metro, 11% named Commuter Connections/MWCOG, and five percent named either the Virginia Department of Transportation or the Virginia Department of Rail and Public Transportation.

Advertising Sources/Media – Table 25 presents the primary sources or media through which respondents heard, saw, or read commute advertising. The top media / sources for commuters’ awareness of commute ads were essentially the same for commuters who lived in Arlington and for those who worked in Arlington. About half of respondents in both groups said they heard it on the radio and about two in ten said they saw the ad on television. Other often mentioned sources included newspapers and a sign on a transit vehicle or at a bus stop or Metro station.

Table 25
Advertising Sources/Media

Advertising Source/Media	Live in Arl (n=199)	Work in Arl (n=205)
Radio	50%	51%
Television	18%	23%
Newspaper	18%	14%
Sign on transit vehicle, or at bus stop or Metro station	14%	13%
Website/internet	6%	3%
Billboard/ad on side of the road	3%	2%
Postcard in the mail	5%	3%
Don't remember, don't know	5%	2%
Other **	3%	2%

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

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

Commute Advertising Impact

Likely to Consider Alternative Types of Transportation – The advertising appeared to have an effect for some respondents. About one in five (18%) commuters who lived in Arlington and 17% of commuters who worked in Arlington 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.

Commute Actions Taken After Hearing or Seeing Commute Advertising – Respondents who said they were more likely to consider alternative types of transportation after hearing the ads were asked if they had taken any actions to try to change how they commuted.

Among commuters who lived in Arlington, about 10% of those who said the ads made them likely to consider another type of transportation actually did take some action, such as looking for more information about commute options or trying another type of transportation for commuting. These commuters equaled about half of one percent of the total Arlington resident commuters interviewed.

A slightly higher percentage (20%) of commuters who worked in Arlington and said they were more likely to consider another type of transportation took an action to change their commute. In all cases, these commuters said they looked for more commute information. These commuters equaled about one percent of the commuters who worked in Arlington.

Awareness and Use of Commuter Assistance Resources

About half of Arlington resident commuters and nearly six in ten commuters who worked in Arlington said they knew a regional transportation information number or website existed. About two in ten commuters in both of these groups could name a specific number or website.

Among commuters who did not know about such a resource, six in ten Arlington commuters said they would look first on the internet if they wanted this information.

Awareness of Commuter Assistance Numbers/Websites – Commuters also were asked about their 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 telecommuting in the Washington region.

About half (46%) of all regional commuters said they knew such a number existed. About the same percentage (45%) of Arlington resident commuters said they knew such a source. Awareness was higher among commuters who worked in Arlington; 58% said they knew of a telephone number or website.

Likely Sources of Transportation Information – The remaining respondents either said there was not such a phone number or website or that they did not know if a number or web site existed. These respondents were asked where they would look if they wanted to find this type of information. These responses are presented in Table 26.

Table 26
Potential Sources of Commute Information

Information Source	Live in Arl (n=191)	Work in Arl (n=231)
Internet	58%	58%
Phone book, yellow pages	9%	9%
Television	9%	6%
Employer	2%	5%
Brochure	2%	2%
Newspaper ads	1%	4%
Radio	1%	2%
Newspaper article	1%	2%
Other *	8%	4%

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

By a large margin, respondents said they would look on the internet for this information. Nearly six in ten commuters who lived in Arlington (58%) and an equal percentage of those who worked in Arlington (58%) mentioned this source. The second most common response, named by nine percent of both commuters who lived in Arlington and those who worked in Arlington, was the phone book or yellow pages. Television was named by nine percent of Arlington residents and six percent of commuters who worked in Arlington.

Recall of Web Sites and Phone Numbers – Respondents who had said they knew there was a regional phone number or web site were questioned on their recall of the actual number or website. About 18% of all commuters who lived in Arlington and an equal percentage of those who worked in Arlington could name a specific number or web site.

Table 27 summarizes the awareness of all numbers/web sites, as percentages of the total populations of workers who live in Arlington and those who work in Arlington. About 14% of respondents who lived in Arlington and about one in ten (8%) of those who worked in Arlington named a number or website of the Washington Metropolitan Area Transit Authority (WMATA) or Metro. One percent of respondents in each category named one of the two commuter service websites hosted by Arlington County Commuter Services: www.commuterpage.com or www.commuterdirect.com. Numbers or web sites for other organizations were named by small percentages of respondents.

Table 27
Recall of Regional Commuter Assistance Telephone Number or Web site

Number or Web site	Live in Arl (n=600)	Work in Arl (n=552)
Not aware of phone number/web site	39%	35%
Don't know if a phone number exists	16%	8%
Aware phone number/web site exists, but cannot name it	27%	39%
Aware of phone number/web site and can name it *	18%	18%
WMATA, Metro 202-637-7000, www.wmata.com	14%	8%
Commuter Connections / COG 1-800-745-RIDE (7433), www.commuterconnections.org , www.commuterconnections.com , www.mwcog.org	1%	3%
Arlington County Commuter Services www.commuterdirect.com , www.commuterpage.com	1%	1%
Virginia Rail Express, www.vre.org	<1%	1%
Fairfax Ridesources, 703-324-1111	0%	1%
Other**	4%	7%

* Multiple responses permitted

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

Use of Commuter Assistance Numbers/Web Sites – A very high percentage (89%) of Arlington resident commuters who could name a specific regional commuter assistance number or web site said they had used it in the past year. This translates into 14% of the total population or respondents who lived in Arlington. By comparison, about 10% of all regional respondents said they contacted a commute information website or phone number. The primary site/number used by respondents who lived in Arlington was WMATA’s; 13% of respondents used either a WMATA phone number or website in the past year.

Use of commute information resources was slightly lower among respondents who worked in Arlington; 78% of those who could name a number or website used the site in the past year. This equated to about 10% of total respondents in this group. Again, WMTA was the top used site/number, used by about seven percent of respondents who worked in Arlington.

Awareness of Commuter Connections Program – The last series of questions in the “awareness” section of the questionnaire explored respondents’ awareness of the Commuter Connections program 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.

Nearly six in ten (58%) workers throughout the Washington region said they knew of an organization called Commuter Connections. The percentage was slightly lower (54%) among respondents who lived in Arlington and slightly higher (65%) among respondents who worked in Arlington.

About six in ten workers in the region knew about Commuter Connections. Awareness of Commuter Connections was similarly high among respondents who lived in Arlington and those who worked in Arlington.

Commuter Connections’ Services – Respondents who knew of Commuter Connections were asked what services the organization provided. Their responses are shown in Table 28.

About four in ten (39%) Arlington resident workers and a similar percentage (41%) of workers who worked in Arlington said they didn’t know specific services, but most respondents cited services that Commuter Connections does provide. About a third of both workers who live in Arlington and workers who worked in Arlington knew that Commuter Connections sponsored a GRH program and about than four in ten knew the organization offered either general rideshare information or help finding a carpool or vanpool partner. Smaller percentages said Commuter Connections offered transit route and schedule information, information that can be accessed through links on Commuter Connections’ web site.

Table 28
Awareness of Commuter Connections Services

Commuter Connections Services	Live in Arl (n=317)	Work in Arl (n=342)
Guaranteed Ride Home (GRH)	37%	34%
Rideshare (carpool/vanpool) information	24%	25%
Help finding carpool/vanpool partners	15%	11%
Transit route/schedule information	7%	6%
Telecommute information	3%	4%
Don't know	39%	41%
Other *	2%	4%

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

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 of GRH – Survey respondents who traveled to outside work locations 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. Six in ten regional respondents (59%) replied there was such a program, 31% mentioned there was no such program, and the remaining 10% were unsure.

About the same percentage (58%) of workers who lived in Arlington reported knowing about regional GRH. Respondents who worked in Arlington were slightly more likely to know about the program; 65% said they knew of a regional GRH program.

Use of GRH – Four percent of all regional respondents 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. Percentages of GRH use were similarly low for Arlington resident respondent (2%) and respondents who worked in Arlington (6%).

Sponsor of GRH Program – A large share of respondents who had registered for or used any GRH service said the program was sponsored by their employer. Three-quarters of (74%) of all regional respondents said their employers had sponsored the programs they used and 21% said they used Commuter Connections’ GRH program. All (100%) of GRH users who lived in Arlington said their employers sponsored

the programs they had used. Among respondents who worked in Arlington and had registered for GRH, responses were more varied. Nearly half (4%) named the employer, but 42% said they used Commuter Connections' program and eight percent said VRE sponsored the GRH program.

InfoExpress 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 "InfoExpress" 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.

About one percent of regional respondents said they had used one of these kiosks to obtain commute or other transportation information. Approximately the same percentage of respondents who lived in Arlington and respondents who worked in Arlington indicated they used an InfoExpress kiosk.

Information Obtained from Kiosks – Respondents cited a variety of types of information that they obtained from the kiosks. The most common type of information obtained was transit route/schedule information, noted by 60% of kiosk users who lived in Arlington and 41% of kiosk users who worked in Arlington. Other information obtained included: general rideshare information, maps and guides, traffic information (SmartTraveler), or GRH information or registration, all noted by small percentages of users.

SECTION 8 COMMUTER ASSISTANCE SERVICES PROVIDED 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: 1) alternative transportation incentives and support services, and 2) parking facilities and services

Respondents who lived in Arlington and those who worked in Arlington were more likely than were other regional commuters to have access to commute assistance services. Two-thirds of Arlington resident commuters and three-quarters of Arlington employees said their employers offered commute assistance services. This was compared to only 54% of all regional commuters who had access to these services.

Nearly half (46%) of respondents who lived in Arlington and 59% of respondents who worked in Arlington said their employers offered Metrochek/transit subsidies to employees.

Respondents who lived in Arlington and those who worked in Arlington were less likely than were other commuters in the region to have free parking at work.

Commute Incentive / Support Services Offered by Employers

Over half (54%) of the all regional workers said their employer offered one or more commute incentives or support services. Arlington respondents were more likely to have access to these services; 64% of respondents who lived in Arlington and nearly three-quarters (73%) of respondents who worked in Arlington said their employers offered one or more commute assistance services.

Change from 2001 to 2004 – The percentage of all regional workers who had access to commute services had remained essentially the same between 2001 (51%) and 2004 (54%). But availability of services increased between 2001 and 2004 for workers who lived in Arlington. In 2001, 54% of Arlington residents said their employers offered services. In 2004, the percentage had grown to 64%. Among respondents who worked in Arlington, the increase was even more striking. In 2001, 60% of these respondents said they had access to commute services. In 2004, 73% said their employers offered services.

Types of Services Offered – Table 29 shows the percentages of employers that offered each of several services. The most commonly offered service was Metrochek/other subsidies for transit/vanpool, provided by 31% of all regional employers, 46% of the employers of respondents who lived in Arlington, and 59% of employers of respondents who worked in Arlington.

Significant percentages of respondents in each of the three groups also said their employers offered information on commute options and preferential parking. About two in ten respondents who lived in Arlington and a similar share of respondents who worked in Arlington said their employers offered services for bikers and walkers. And about one in ten respondents in each of the three groups said their employers offered a Guaranteed Ride Home program.

Table 29
Alternative Mode Incentives and Support Services Offered by Employers

Alternative Transportation Incentives and Support Services	Employer Offered Service*		
	All region (n=6,866)	Live in Arl (n=565)	Work in Arl (n=516)
Employer offers any services	54%	64%	73%
Metrochek/other subsidies for transit/vanpool	31%	46%	59%
Information on commute options	22%	28%	33%
Preferential parking for carpools/vanpools	16%	17%	23%
Bike/pedestrian facilities or services	14%	18%	21%
GRH for emergencies/unscheduled overtime	12%	11%	11%
Financial incentives/subsidies for carpools	4%	5%	6%
None – employer doesn’t offer any services	47%	36%	27%

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

Services by Employer Types and Sizes – As noted in the introduction section of this report, the two groups of “Arlington respondents,” those who lived in Arlington and those who worked in Arlington, actually comprise three groups, with some overlap. Some Arlington respondents were included in both groups, that is, they both lived and worked in Arlington, while others either lived in Arlington and worked elsewhere or worked in Arlington but lived outside the County. The availability of commute services was strikingly different for these three groups, as shown in the top line of Table 30.

Table 30
Alternative Mode Incentives and Support Services Offered by Employers

	Live in Arl / Work in Arl (n=193)	Live in Arl / Work Outside (n=407)	Work in Arl / Live Outside (n=359)
Employer offers any services	58%	66%	77%
Percentage working for federal agency	21%	26%	40%
Percentage working for employer with 250 or more employees	39%	48%	58%

About six in ten (58%) respondents who both lived and worked in Arlington had access to commute services. Among those who lived in Arlington but worked outside the County, two-thirds (66%) said their employers offered commute services. Among respondents who worked in Arlington and lived in another jurisdiction, more than three-quarters (77%) had access to commute services.

Availability of Services by Type of Employer – But as shown in the bottom two rows of Table 29, there were other differences in these groups that could help to explain the differences in commute service availability. First, 40% of respondents who worked in Arlington but lived outside Arlington worked for a federal agency, compared to only 21% and 26% respectively of respondents in the “live and work in Arlington” and “live in, work outside Arlington” groups.

This is consistent with analysis of all regional respondents that showed that respondents who worked for federal agencies were most likely to have incentives/ support services available at their worksites; 86% of federal employees said they had commuter services, compared with 61% of respondents who worked for non-profit organizations, and 45% of respondents who worked for state/local agencies. Only 42% of respondents who worked for private employers said their employers offered incentives/support services.

Availability of Services by Employer Size – Second, respondents who worked in Arlington but lived outside the County were much more likely than were other Arlington respondents to work for a large employer. Nearly six in ten (58%) worked for an employer with more than 250 employees. By contrast, only 39% of respondents who lived and worked in Arlington and 49% of respondents who lived in Arlington and worked outside were employed by similarly large employers.

But again, analysis of all regional respondents showed that large employers were more likely to offer commuter services than were small employers. Only one-third (35%) of respondents who worked for employers with 100 or fewer employees and half (51%) of respondents who worked for employers with 101-250 employees said they had any services. By contrast, two-thirds (65%) 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 62 compares availability of specific commuter assistance services by employer size.

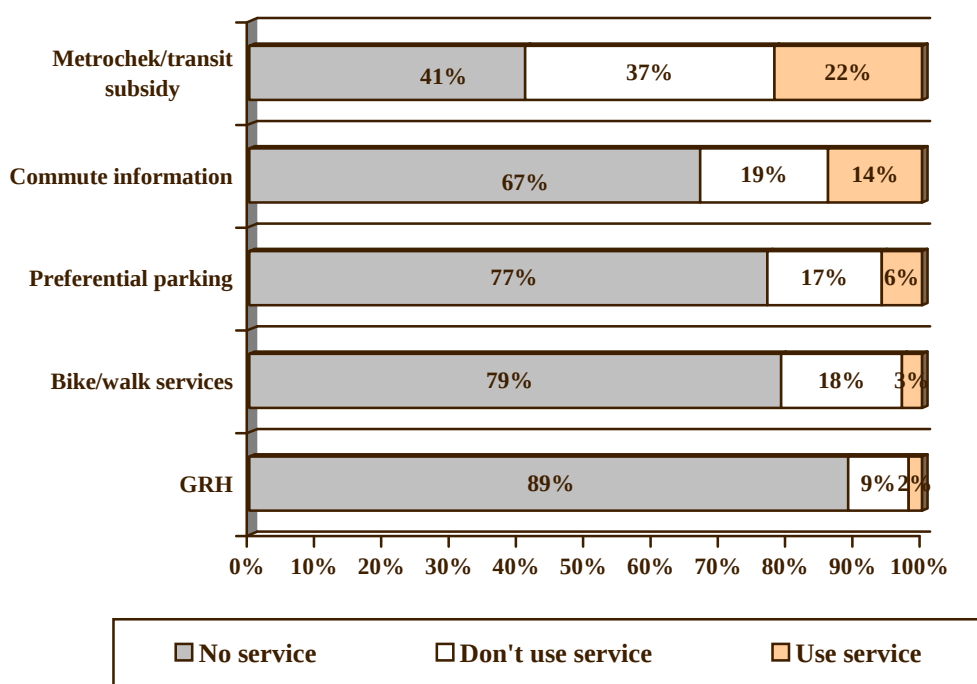
Use of Commuter Assistance Services/Benefits

Respondents whose employers offered incentives/support services were asked if they had ever used these services. There results are provided in Figure 16 for respondents who worked in Arlington. The bars in the figure show for the services listed: percentage of respondents who do not have the service available, percentage of respondents who do have the service available and use the service, percentage of respondents who have the service available and use it.

As shown by the top bar, 22% of respondents said their employers offered Metrochek/transit subsidies and they had used them. Another 37% said their employers offered transit subsidies but they did not use them. The remaining 41% said they did not have access to a transit subsidy at work. The other bars show that 14% of respondents had used commute information and six percent had used preferential parking. Small percentages said they had used bike/walk services (3%) or employer-provided GRH (2%).

Figure 16
Employer-Provided Incentives/Support Services

Availability and Use of Services by Respondents who Work in Arlington (n=516)



Parking Facilities and Services

Respondents also were asked about the parking services available at their worksites. These results are shown in Table 31.

Availability of Parking – The majority (66%) of respondents in the region said their employers provided “free parking” at the worksite. An additional 3% said they had access to “free parking off-site.” About a quarter said they had to pay at least part of the cost of parking; 21% paid the total cost and 6% paid a portion of the cost with the balance paid by their employers. A small percentage (4%) of respondents said their employers offered parking fee discounts to carpools and vanpools, but these discounts would only apply at worksites where employees paid a parking charge.

Free parking was not as common for respondents who lived in Arlington or for those who worked in Arlington. Only about half of respondents in these groups said free parking was available either on-site or off-site. More than four in ten (43%) of Arlington resident respondents said they either paid the entire cost of parking (33%) or part of the cost (10%) if they drove to work. Similar percentages of respondents who worked in Arlington had to pay for parking.

Table 31
Parking Facilities and Services Offered by Employers

Parking Services	Employer Offered Parking Services		
	All region (n=6,866)	Live in Arl (n=564)	Work in Arl (n=516)
Free on-site parking	66%	49%	50%
Free off-site parking	3%	3%	2%
Employee pays all parking charges	21%	33%	34%
Employee and employer share parking charge	6%	10%	11%
Parking discounts for carpools/vanpools	4%	6%	9%

Parking Services by Employer Type and Size – As with commuter assistance services, availability of parking depended on the type and size of respondents’ employers. Federal agency employees and employees of non-profit organizations were least likely to have free parking. About 59% of all regional respondents who worked for Federal agencies and 56% of respondents who worked for a non-profit said their employer provided free parking. By contrast, 77% of respondents who worked for state and local agencies and 74% of respondents who worked for private employers said they had free parking.

Respondents who worked for large employers were less likely to have free parking. Only about six in ten 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.

Commute Mode by Commuter Assistance Services/Benefits Offered – Table 32 shows use of different types of transportation by respondents who worked in Arlington. The top of the table show percentages by whether or not their employer provides commuter assistance services or benefits. The bottom of the table shows mode share percentages by availability of free parking at the worksite.

As the table clearly illustrates, respondents whose employers provided commute incentives and support services were less likely to drive alone (54%) than were respondents whose employers did not provide these services (74%). Respondents who had these services at their worksites used carpool/vanpool and transit at significantly higher rates than did respondents who did not have these services.

The table also presents a comparison of mode use rates for respondents who had free parking and those who either had to pay for parking or who had no parking at all (no free parking). The difference in drive alone rates for these two groups was equally dramatic; 69% of respondents who had free parking drove alone, compared with less than half (47%) 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.

Table 32
Primary Type of Transportation
 by Availability of Commuter Services and Free Parking

Services/Benefits Offered	(n=___)	Primary Type of Transportation			
		DA	CP/VP	Transit	B/W
Incentives/Support					
Yes	347	54%	15%	24%	3%
No	195	74%	5%	13%	3%
Free, On-site Parking					
Yes	274	69%	9%	15%	2%
No	229	47%	15%	29%	4%

It is important to note that it's not possible to say that the availability of commute services and/or availability of parking were the only reasons for the differences in mode use. Many factors influence commuters' choice of transportation, including personal needs and specific travel and site characteristics. For example, parking charges are most often found in locations that are more densely developed and that have typically higher levels of congestion and greater availability of transit than would be experienced by workers in less dense locations. These other factors might also influence respondents' commute mode choices. But many other surveys and research studies have documented the important role parking availability and cost play in commute decisions and these results are consistent with these other studies.

APPENDICES

Appendix A – Summary of Survey Methodology

Appendix B – Survey Questionnaire

Appendix C – Comparison of key 2004 SOC Results for all Regional Commuters, Commuters who live in Arlington County, VA, and Commuters who Work in Arlington County, VA

APPENDIX A – SUMMARY OF SURVEY METHODOLOGY

The geographic scope of both the 2001 and 2004 SOC surveys encompassed the 12 counties and four independent cities that make up the Washington metropolitan region. All households within this geographic area that had at least one employed person residing in the household were eligible for selection in the studies. In each survey, a total of 600 random telephone surveys were conducted in each of the 12 jurisdictions of the study area, resulting in 7,200 completed surveys. 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.

Questionnaire Design

LDA Consulting, CIC Research, and COG developed the 2001 survey questionnaire, with substantial input from a TDM Evaluation Advisory Panel comprised of representatives from the District of Columbia, Maryland, and Virginia. Before drafting the questionnaire, the consultants and COG reviewed several regional transportation questionnaires, including the 1999 Regional TDM Household Survey (TDM Survey) conducted by COG, and regional commuter surveys conducted in other U.S. regions. Wherever possible, an attempt was made to replicate questions used in the 1999 TDM Survey to allow some trend analysis.

The 2004 SOC questionnaire was based on the 2001 SOC questionnaire, although some changes were made when the revisions were expected to add substantially to the accuracy of the data. Additionally, significant new questions were added to collect data for evaluation of the Mass Marketing TERM.

Both the 2001 and 2004 questionnaires were pretested before the full survey was conducted. Using the responses to the pretests, the questionnaires were finalized and translated into Spanish. The survey instruments were programmed for telephone administration using Computer Assisted Telephone Interviewing (CATI). A copy of the English questionnaire for 2004 is included in Appendix C. The 2001 questionnaire is available upon request.

Survey Administration

Both the 2001 and 2004 surveys were conducted in CIC's telephone survey facilities. Surveys were conducted using CATI (Computer Assisted Telephone Interviewing) 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 interviews with questionnaire flow
- Practice session on CATI systems in full operational mode

Survey interviews for the 2001 survey were conducted between January 25 and April 12, 2001. Interviews for the 2004 survey were conducted between February 7 and May 2, 2004. Additional Fairfax County interviews were conducted in 2004 between June 5 and June 15, 2004.

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 four callback attempts over different days throughout the data collection period. CIC adopted measures to assure confidentiality of responses. When the call was answered by an answering machine, the interviewer left a message asking the person to call back on a 1-800 number. Bilingual interviewers surveyed all Spanish-speaking respondents using the Spanish questionnaire. Approximately two percent of interviews were completed in Spanish in both 2001 and 2004.

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, reviewing completed surveys, and passing respondents to an available station when they called in on the 1-800 line. To insure quality control, the survey supervisor conducted periodic random monitoring.

In both 2001 and 2004, 600 interviews were completed in each of the 12 counties, resulting in a total sample size of 7,200 completed surveys. The refusal rate for the survey was 24% in 2001 and 24.4% in 2004¹. For each completed interview, an average of 32.3 call attempts were made in 2001 and 45.0 call attempts in 2004.

In 2004, interviews for Fairfax County were conducted separately, when the initial dialing specifications were found to cover the City of Fairfax only. A total of 586 additional interviews were completed to provide an accurate representation for all of Fairfax County. Fourteen surveys from the City of Fairfax were retained from the original interviewing period. The refusal rate for these interviews was 18.8%, while an average of 47.5 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. At the recommendation of COG staff, the expansion methodology was changed for 2004 to utilize data from the Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS). These data provided an acceptable, straightforward approach to estimating 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 Washington, DC. The 2004 process is described below.

Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS) for January – March, 2004 were used to expand responses to employed persons. This methodology was adopted over the multi-stepped methodology developed in 2001, as a simpler, more direct approach to expanding results to known, published statistics. The main advantage of the 2004 methodology lies in the fact that estimates of working households are not dependent upon survey data. To insure that using both the 2001 and the 2004 methods would produce comparable results; each method was tested and used to expand the 2004

¹ Refusal rates are calculated as the number of initial refusals plus the number terminated during the interview, divided by the total sample.

survey responses. The results showed a difference of only 1.2% between the two methods. The use of the LAUS method was suggested and approved by COG.

Table A-1 – Estimate of Workers by Survey Area

Survey Area	Estimated Employed Workers from BLS LAUS (1st Q – 04)	Working HH Sample (# Surveyed)	Rounded Worker Expansion Factor	Total Worker Estimates
Alexandria City, VA	82,418	600	137	82,200
Arlington Co., VA	115,946	600	193	115,800
Calvert Co., MD	40,578	600	68	40,800
Charles Co., MD	64,468	600	107	64,200
District of Columbia	281,000	600	468	280,800
Fairfax Co., VA	585,320	600	976	585,600
Frederick Co., MD	108,113	600	180	108,000
Loudoun Co., VA	118,426	600	197	118,200
Montgomery Co., MD	498,563	600	831	498,600
Prince George's, MD	453,285	600	755	453,000
Prince William Co., VA	190,529	600	318	190,800
Stafford Co., VA	52,635	600	88	52,800
Total	2,589,278	7,200	1,692	2,590,800

Estimates of employed workers were obtained from BLS for each jurisdiction in the study area for the first quarter of 2004, 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 Arlington County, VA, the BLS estimate of 115,946 workers is divided by 600 surveys to obtain a representation of 193 workers per complete survey. When 193 is multiplied by 600 surveys, the resulting estimate of 115,800 workers is produced for Arlington County, VA.

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 40,800 workers in Calvert County would have the same representation as the estimated 585,600 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 2001 analysis, demographic variables were compared with published statistics. This was particularly important for the District of Columbia, where the survey distribution of ethnicity was shown to be skewed. The population distribution from the U.S. Census Bureau, Census 2000 Redis-

tracting Data (P.L. 94-171) Summary File, Table 1 “Population by Race and Hispanic or Latino Origin for 18 Years and Over” was recommended 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 data.

The method used for adjusting the ethnicity results from the survey is shown in Table A-2. First, the 39 refusals (6.5%) in the ethnic distribution of the 600 District of Columbia households were redistributed in the same proportion as the valid percent.

Table A-2 – Bias Adjustment Factor for District of Columbia

Q122/Q123. Ethnic Background	Distribution of Ethnicity From 2004 Survey	Distribution of Ethnicity From 2000 Census	Bias Adjusted Distribution of Workers	Number of Survey Responses	Bias Adjusted Factor
Hispanic	5.9	7.3	20,498	36	569
White	53.7	31.8	89,294	313	285
African-American	36.2	55.7	156,406	225	695
Other	4.2	5.2	14,602	26	562
Total	100.0	100.0	280,800	600	

Next, the distribution from the 2000 Census, “Population by Race and Hispanic or Latino Origin for 18 Years and Over” was applied to the survey responses to adjust the expansion factor (468) within the District of Columbia. Multiplying the percentage distribution of ethnicity from the 2000 Census by the total number of workers, 280,800 for District of Columbia, resulted in the bias adjusted distribution of workers. Dividing the number of workers in each ethnic category by the number of survey responses in the same category resulted in the bias adjusted expansion factor.

For example, to adjust the number of Hispanic households surveyed to reflect the 2000 Census race distribution, the following formula is followed: $.073 * 280,800 = 20,498$. This number is divided by the number of survey responses (plus the redistribution of non-response); for Hispanic, 36 responses. Once again, the integer portion of the expansion factor is used. Now, instead of each working household representing an equal weight within the District of Columbia, the working households are redistributed to more accurately reflect the ethnicity of the area. The same distribution is used to adjust workers within the geographic sub-areas.

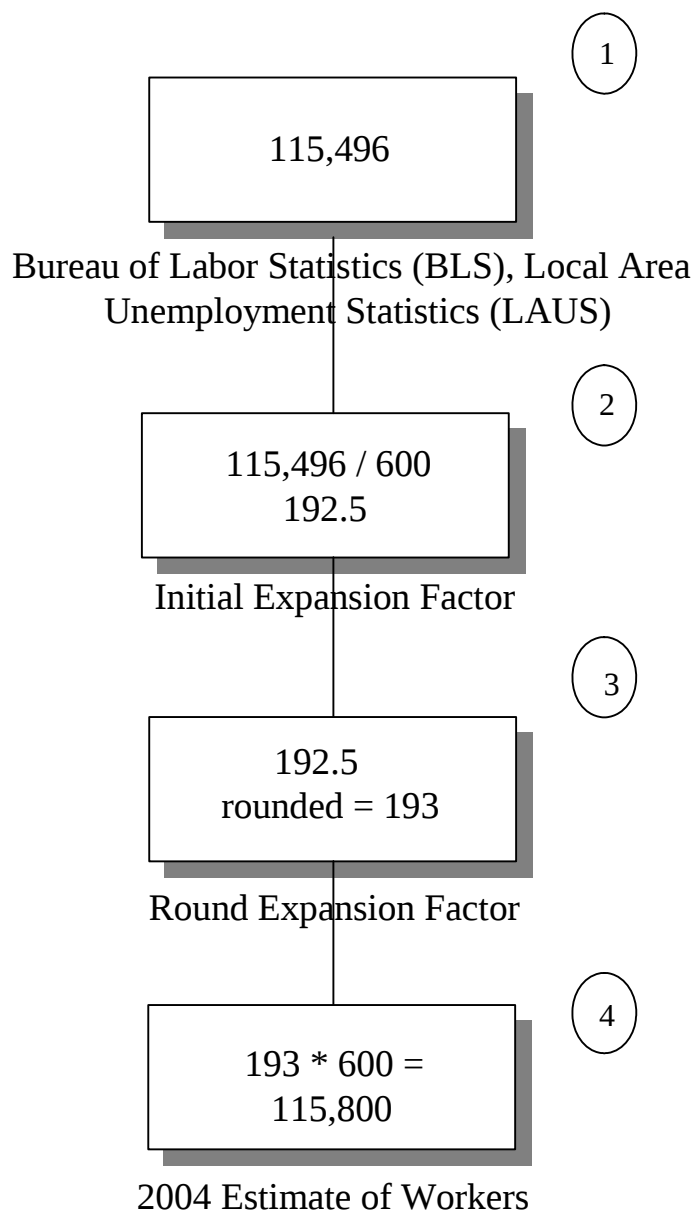
Level of Confidence for Analysis

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 2004 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
<i>Geographic Sub-Areas</i>		
Study Region – Twelve Areas	7,200	95% $\pm$ 1.2%
Study Portion of Virginia	3,600	95% $\pm$ 1.6%
Study Portion of Maryland	3,000	95% $\pm$ 1.8%
District of Columbia	600	95% $\pm$ 4.0%
Individual County or City Level	600	95% $\pm$ 4.0%
Sub-Area or Sub-Population	Sample Size	Level of Confidence
<i>Sub-Populations</i>		
Telecommuters	876	95% $\pm$ 3.3%
Carpoolers (with casual)/Vanpoolers	527	95% $\pm$ 4.3%
Transit Users	1,095	95% $\pm$ 3.0%
Bike Users or Walkers	180	95% $\pm$ 7.3%
Kiosk Users	96	95% $\pm$ 10.0%
Commuters Aware of GRH	4,047	95% $\pm$ 1.5%

Example: Arlington County, VA



¹ Estimate of employment January - March, 2004

² Initial expansion factor per SOC 2004 survey

³ Rounded expansion factor = 193

⁴ Final Estimate of Workers in Arlington County, VA

APPENDIX B – SURVEY QUESTIONNAIRE

Greater Washington, D.C., State of the Commute Survey – FY04

Final – 2/12/04

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)

QS1. 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 (ASK QS2)

QS2. 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 99.

Refuse

QS3. 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
9. Montgomery Co., MD (City of Rockville, City of Gaithersburg, City of Takoma Park)
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. Stafford Co., VA
13. Other (SPECIFY) _____
88. Don't know
99. Refused

RECORD INFORMATION AND THEN, THANK & TERMINATE

QS4. Are you an employed person who is at least 16?

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

QS5. 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 (GO BACK TO QS2)

Q1. 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)
88. Don't know (THANK & TERMINATE)
99. Refuse (THANK & TERMINATE)

QUOTA SCREENER – NEED 600 IN EACH OF 12 AREAS

Q2. 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
 9. Montgomery Co., MD (City of Rockville, City of Gaithersburg, City of Takoma Park)
 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. Stafford Co., VA
 13. Other (SPECIFY) _____
 88. Don't know
 99. Refused
- } (THANK & TERMINATE)

Q3. 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.

- Q4. First, in a TYPICAL week, how many days are you assigned to work?
_____ days _____ "0", not currently working (GO BACK TO QS5)
- Q5. How many of those days are weekdays (Monday-Friday)?
_____ days _____ "0", (CODE AS WKALL, THEN SKIP TO Q57)
- Q6. 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)

- Q7. At what time do you usually arrive at work?

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

- Q8. 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)

- Q9. Are you self-employed with your primary work location at home?

- 1 Yes (PROGRAMMER, CODE AS HOMEALL) (SKIP TO Q61)
- 2 No (CONTINUE)

- Q10. Do you telecommute every weekday you work?

- 1 Yes (PROGRAMMER, CODE AS TELEALL, SKIP TO Q34)
- 2 No (SPECIFY SITUATION, THEN THANK AND TERMINATE)

Q11. 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)

Q12. What type of schedule do you use?

1. 4/40 (4 10-hour days per week, 40 hours)
1. 9/80 (9 days every 2 weeks, 80 hours)
2. 3/36 (3 12-hour days per week, 36 hours - police, fire, hospitals)
3. flex-time or flexible work hours (core hours with flexible start & stop)
4. other (SPECIFY) _____

Q13. 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 Q15)
9. DK/Ref (SKIP TO Q15)

Q14. How often do you usually telecommute? (DO NOT READ)

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

(PROGRAMMER: IF TELEALL OR HOMEALL FROM Q9, Q10, AUTO FILL Q15 & DON'T ASK)

Q15. 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 = 3, 4, OR 5 AND RESPONDENT DOES NOT MENTION "Telecommute" (RESPONSE 2), ASK: "You said you typically telecommute one or more days per week. Did you telecommute last week?"

(IF 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.

Mode/Day of Week	Go to Work				
	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, taxi	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. N/A					
20. N/A					
88. N/A					

Q16. 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

Q17. And how many miles? (IF LESS THAN 1 MILE, RECORD AS "1")

Number of miles _____
 888. Don't know 999. Refuse

(If Q15 = 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or 15 ASK ABOUT MOST COMMON ALTERNATIVE <MODE Q15>. OTHERWISE, SKIP TO Q21)

Q18. You said that you <MODE Q15>. How long have you been using <MODE Q15> to commute to work? **(DO NOT READ) (ADD TO BRIEFING DOCUMENT INSTRUCTIONS IF RESPONDENT SAYS, "DO YOU MEAN HOW LONG HAVE I BEEN USING THIS MODE OR HOW LONG I'VE BEEN IN THIS PARTICULAR ARRANGEMENT," INTERVIEW SHOULD SAY, "USING THIS TYPE OF TRANSPORTATION")**

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

Q19a. Before starting to <MODE Q15> to work, what type or types of transportation did you use to get to work? (PROGRAMMER, LIST MODES FOR USE IN Q19b)

FOR EACH MODE MENTIONED IN Q19a, ASK,...

Q19b. About how many days per week did you use <MODE FROM Q19a>?

(IF SUM OF DAYS FROM Q19b 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 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 = 3, 4, OR 5 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?"

<u>Mode/Day typically used per week</u>	<u>Number of days using mode</u>				
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. always used <MODE Q15>					5
20. not working then, not in DC area then					5
99. don't know, refused					5

Q20. What were the reasons you began using <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. tired of driving
8. prefer to drive, wanted to drive
9. safety
10. no vehicle available
11. car became available, additional car in household
12. to stay with family/children
13. congestion
14. always used
15. close to work or transportation pick up/drop off location
16. afraid of or didn't like previous form of transportation
17. stress
18. weather
19. convenient (NOT AN ANSWER, PROBE FOR WHY IT'S CONVENIENT)
20. to get exercise

Commute Services/Programs

21. new option that became available
22. special program at work
23. pressure or encouragement from employer
24. GRH
25. Ozone action/Code Red days
26. no parking, parking expense
27. found carpool partner
28. NuRide (VA carpool incentive)
29. Metrochek, SmartTrip, transit subsidy, vanpool subsidy

Information/Promotion

30. advertising
31. initiated request/looked for information on my own
32. info. from Commuter Connections/Council of Governments/COG/800 number
33. Commuter Connections Website
34. other Website
35. word of mouth/recommendation
36. information from transit agency
37. saw highway sign
38. yellow pages
39. Other _____
88. Don't know
99. Refuse

SKIP TO Q22

Q26. 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. tired of driving
8. prefer to drive, wanted to drive
9. safety
10. no vehicle available
11. car became available, additional car in household
12. to stay with family/children
13. congestion
14. always used
15. close to work or transportation pick up/ drop off location
16. afraid of or didn't like previous form of transportation
17. stress
18. weather
19. convenient (NOT AN ANSWER, PROBE FOR WHY IT'S CONVENIENT)
20. to get exercise

Commute Services/Programs

21. new option that became available
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23. pressure or encouragement from employer
24. GRH
25. Ozone action/Code Red days
26. no parking, parking expense
27. found carpool partner
28. NuRide (VA carpool incentive)
29. Metrochek, SmartTrip, transit subsidy, vanpool subsidy

Information/Promotion

30. advertising
31. initiated request/looked for information on my own
32. info. from Commuter Connections/Council of Governments/COG/800 number
33. Commuter Connections Website
34. other Website
35. word of mouth/recommendation
36. information from transit agency
37. saw highway sign
38. yellow pages
39. Other _____
88. Don't know
99. Refuse

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

Q27. 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)

Q28. 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 Q31)

Q29. How do you get from home to where you meet the <Q15 MODE>?

1. picked up at home by car/van pool or driver (SKIP TO INTRO BEFORE Q31)
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. driver of car pool/van pool (SKIP TO Q21)
9. bus/transit
10. other (SPECIFY) _____

Q30. How many miles is it one way from your home to where you meet your carpool, vanpool, buspool, or public transportation <Q15 MODE>? (IF LESS THAN 1 MILE, ENTER A "1")

_____ miles (no decimals)

TELECOMMUTE

INTRO BEFORE Q31: Now I have a few more questions about telecommuting.

IF Q13 = 1 OR Q15 = 2 any day, SKIP TO Q34

Q31. You said earlier that you do not telecommute now. Would your job responsibilities allow you to work at a location other than your main work place at least occasionally?

- | | |
|---------------------|-------------------------|
| 1. yes | 9. DK/Ref (SKIP TO Q33) |
| 2. no (SKIP TO Q33) | |

Q32. 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

Q33. 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. N/A
- 9. DK/Ref

(NOW SKIP TO INTRO BEFORE Q43)

Q34. How long have you been telecommuting?
_____ months (CONVERT YEARS TO MONTHS)
999. Don't know/refused

Q35. 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. yes, formal program
- 2. yes, informal arrangement
- 3. N/A
- 9. DK/Ref

IF TELEALL, SKIP TO Q40

Q36. 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 (ENTER NUMBER FROM LIST) _____ (IF RESPONDENT DOES NOT KNOW LOCATION, ASK STATE _____)
3. Both home and Telework Center (ENTER TELEWORK CENTERS NUMBER FROM LIST) _____ (IF RESPONDENT DOES NOT KNOW LOCATION, ASK STATE _____)
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 (WHAT STATE) _____
11. Both home and executive office suites (IN WHAT STATE IS EXECUTIVE OFFICE SUITE) _____
12. other location (SPECIFY) _____

Maryland

1. Bowie State University Telecommuting Center (White Oak)
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 (George Mason University) 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)

99. Don't know (ASK STATE)

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

Q37. How many days per week, on average, do you telecommute from the location outside your home?
_____ days per week

Q38. How many miles is it one way from your home to this location? (IF LESS THAN ONE MILE, RECORD "1")
_____ miles (no decimals)

Q39. And how do you get from home to this location?

1. N/A
2. N/A
3. drive alone, taxi
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. N/A
20. N/A
99. DK/Ref

Q40. 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 Q43)
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

Q41. 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 Q43)
2. no
9. DK/Ref

(IF Q40 = 5, 6, 12, OR 13 SKIP TO Q43, OTHERWISE, CONTINUE)

Q42. 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

AVAILABILITY OF TRANSPORTATION OPTIONS

(IF TELEALL, SKIP TO Q61)

INTRO BEFORE Q43: Next, I want to ask you about transportation services available in your area.

(IF Q15 = 9, 10, 11, 12, or 13 , SKIP TO Q45)

Q43. Regardless of whether or not you use it, can you tell me if public transportation such as buses or trains provide service from the area where you live to the area where you work?

- | | | |
|---|---|---------------|
| <ol style="list-style-type: none">1. Yes, there is2. No, there isn't8. Don't know9. Refuse | } | (Skip to Q46) |
|---|---|---------------|

Q44. What train or bus companies are those? (DO NOT READ; PROBE WELL; ACCEPT MULTIPLE RESPONSES)

1. Alexandria DASH
2. AMTRAK/ACELA
3. Fairfax Connector
4. Fairfax Cue
5. Loudoun Commuter Bus
6. MARC
7. Metrobus
8. MetroRail/subway
9. MTA bus
10. Omni Ride
11. Ride On
12. "The Bus"
13. TransIT Bus
14. Virginia Railway Express
15. Bus (PROBE FOR NAME) _____
16. Train (PROBE FOR NAME) _____
17. Other (SPECIFY) _____
99. Don't know/Refused

(NOW, SKIP TO Q46)

Q45. What train or bus companies provide service from the area where you live? (DO NOT READ CHOICES; PROBE WELL FOR NAME OF BUS OR TRAIN COMPANY; CHECK ALL THAT APPLY BELOW)

1. Alexandria DASH
2. AMTRAK/ACELA
3. Fairfax Connector
4. Fairfax Cue
5. Loudoun Commuter Bus
6. MARC
7. Metrobus
8. MetroRail/subway
9. MTA bus
10. Omni Ride
11. Ride On
12. "The Bus"
13. TransIT Bus
14. Virginia Railway Express (VRE)
15. Bus (PROBE FOR NAME) _____
16. Train (PROBE FOR NAME) _____
17. 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, SKIP TO Q54)

Q47. 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)

IF Q47 = 1 AND Q15 = 3 (DRIVE ALONE), ALL DAYS, ASK Q48, OTHERWISE, SKIP TO Q49

Q48. Do you drive an alternative fuel vehicle to work, for example, an electric or hybrid vehicle or one that uses compressed natural gas instead of gasoline?

1. Yes
2. No
9. Refused/Don't know

Q49. About how many days per week do you use the HOV lane for commuting?

1. One
2. Two
3. Three
4. Four
5. Five
6. Varies from one week to another
9. Refused/Don't know (SKIP TO Q52)

Q50. How much time does the HOV lane save you in your one-way trip to or from work?

_____ minutes
999 DK/Ref.

Q51. Did the HOV lane influence your decision to use your current way of commuting?

1. Yes
2. No
9. Refused/Don't know

Q52. Do you know the locations of Park 'n Ride lots along the route that you take to work?

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

Q53. 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

(IF Q15 = 8, 9, **OR** Q23 = 8, 9, **OR** Q29 = 9, SKIP TO Q55) (IF Q43 = NO, SKIP TO Q56)

Q54. 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), **OR** Q23 = 10, 11, 12, 13, SKIP TO Q56)

Q55. 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** Q23 = 5, 6, 7 **OR** Q29 = 1, 4, OR 8 SKIP TO Q57)

Q56. 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

Q57. 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 Q61)
4. not applicable (SKIP TO Q61)
9. DK/Ref (SKIP TO Q61)

Q58. 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

Q59. 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. other _____
9. DK/Ref.

Q60. Have you changed your work or home location in the last year?

1. Yes
2. No
9. DK/Ref.

AWARENESS OF COMMUTE PROGRAMS/SERVICES

Q61. Have you heard, seen, or read any advertising about commuting in the past 6 months?

1. yes
2. no (SKIP TO Q73)
9. DK/Ref (SKIP TO Q73)

Q62. What messages do you recall from this advertising? (DON'T READ, ACCEPT MULTIPLE RESPONSES)

1. none (SKIP TO Q73)
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. contact the Commuter Connections website (www.commuterconnections.org, www.commuterconnections.com)
7. it saves money
8. it saves time
9. it is less stressful
10. guaranteed ride home (GRH) (ASK Q79)
11. employer would give me MetroChek benefits, SmartTrip benefits
12. it would help the environment
13. it reduces traffic
14. it saves wear and tear on the car
15. Ozone Action Days / Code Red Days
16. Telework Center / telecommuting
17. HOV lanes
18. regional services/programs are available to help with commute
19. Springfield interchange reconstruction
20. Wilson bridge reconstruction, Bridge Bucks
21. use the bus or train, use Metrobus
22. other (SPECIFY) _____
99. DK/Ref. (SKIP TO Q73)

Q63. 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. other (specify) _____
99. DK/Ref.

Q64. And where did you see, hear, or read this advertisement? (DO NOT READ, ACCEPT MULTIPLE RESPONSES)

1. Commuter Connections web site
2. other web site, internet
3. radio
4. TV
5. postcard in mail
6. newspaper
7. other (_____)
9. DK/Ref.

IF HOMEALL, SKIP TO Q81

IF WKALL, SKIP TO Q81

Attitude changes/actions taken after hearing ads

Q65. After seeing or hearing this advertising, were you more likely to consider ridesharing or public transportation, ?

1. yes
2. no (SKIP TO Q73)
9. DK/Ref (SKIP TO Q73)

Q66. 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 Q73)

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 Q73)
99. DK/Ref (SKIP TO Q73)

(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

Q67. What were the reasons you decided to take this action? **[DO NOT READ, ALLOW MULTIPLE 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. tired of driving
8. prefer to drive, wanted to drive
9. safety
10. no vehicle available
11. car became available, additional car in household
12. to stay with family/children
13. congestion
14. always used
15. close to work or transportation pick up/drop off location
16. afraid of or didn't like previous form of transportation
17. stress
18. weather
19. convenient (NOT AN ANSWER, PROBE FOR WHY IT'S CONVENIENT)
20. to get exercise

Commute Services/Programs

21. new option that became available
22. special program at work
23. pressure or encouragement from employer
24. GRH
25. Ozone action/Code Red days
26. no parking, parking expense
27. found carpool partner
28. NuRide (VA carpool incentive)
29. Metrochek, SmartTrip, transit subsidy, vanpool subsidy

Information/Promotion

30. advertising
31. initiated request/looked for information on my own
32. info. From Commuter Connections/Council of Governments/COG/800 number
33. Commuter Connections Web site
34. other Web site
35. word of mouth/recommendation
36. information from transit agency
37. saw highway sign
38. yellow pages
39. Other _____
99. Don't know, refused

IF Q67 = 30 (advertising), CODE Q68 = 1, DO NOT ASK Q68

Q68 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

Q69 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

Q70. 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 Q73

(Autofill previous modes for respondents currently using alternative mode (Q15) named in Q66)

IF Q66 EQ 19 AND Q15 = 5 OR 6, AUTOFILL Q72 = Q19, THEN SKIP TO Q73

IF Q66 EQ 20 AND Q15 = 7, AUTOFILL Q72 = Q19, THEN SKIP TO Q73

IF Q66 EQ 21 AND Q15 = 8 OR 9, AUTOFILL Q72 = Q19, THEN SKIP TO Q73

IF Q66 EQ 22 AND Q15 = 10, 11, 12, 13, AUTOFILL Q72 = Q19, THEN SKIP TO Q73

IF Q66 EQ 23 AND Q15 = 14,15, AUTOFILL Q72 = Q19, THEN SKIP TO Q73

IF Q66 EQ 24 AND Q15 = 2, AUTOFILL Q72 = Q19, THEN SKIP TO Q73

(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 Q72

IF Q66 = 20 AND Q23 = 7, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72

IF Q66 = 21 AND Q23 = 8 OR 9, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72

IF Q66 = 22 AND Q23 = 10, 11, 12, OR 13, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72

IF Q66 = 23 AND Q23 = 14 OR 15, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72

IF Q66 = 24 AND Q23 = 2, ANY DAY, AUTOFILL Q71 = Q24, THEN ASK Q72

Q71. 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 Q73)

_____ 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 Q72. IF MORE THAN ONE ALT MODE USED SAME AMOUNT OF TIME, CHOOSE IN ORDER: TRAIN, BUS, VANPOOL, CAPOOL, BIKE/WALK, TELECOMMUTE.

State of the Commute Survey Results – Arlington County, VA

Q72a. Before trying <ALT MODE FROM Q66> to work, what type or types of transportation did you use to get to work?
(PROGRAMMER, LIST MODES FOR USE IN Q72b)

FOR EACH MODE MENTIONED IN Q72a, ASK...

Q72b. 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 before trying <ALT MODE FROM Q66>?"

(IF Q14 = 3, 4, OR 5 AND RESPONDENT DOES NOT MENTION "Telecommute" (RESPONSE 2), ASK: "You said you typically telecommute one or more days per week now. Did you telecommute before trying <ALT MODE FROM Q66>?"

<u>Mode/Day typically used per week</u>	<u>Number of days using mode</u>				
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. N/A					
20. not working then, not in DC area then					5
99. don't know, refused					5

IF Q66 = 24, SKIP TO Q79

IF Q62 = 16, CODE Q73 = 1, THEN SAY "You mentioned that you saw or heard advertising for telecommuting," THEN SKIP TO Q76, OTHERWISE, CONTINUE

Q73. Have you heard, seen, or read any advertising about telecommuting/telework in the past 6 months?

1. yes
2. no (SKIP TO Q79)
9. DK/Ref (SKIP TO Q79)

IF Q15 = 2, ANY DAY OR TELEALL, ASK Q74, OTHERWISE, SKIP TO Q76

Q74. Were you telecommuting before you saw or heard the telecommute advertising?

1. yes (SKIP TO Q79)
2. no (CONTINUE)
9. DK/Ref (SKIP TO Q79)

Q75. Did the advertising encourage you to start telecommuting?

1. yes
2. no
9. DK/Ref

SKIP TO Q79

Q76. After seeing or hearing this advertising, were you more likely to consider telecommuting?

1. yes
2. no (SKIP TO Q79)
9. DK/Ref (SKIP TO Q79)

IF Q66 = 7, SKIP TO Q79

Q77. Did you ask your employer about telecommuting opportunities at your work place?

1. yes
2. no (SKIP TO Q79)
9. DK/Ref (SKIP TO Q79)

Q78. Did you try telecommuting?

1. yes
2. no
9. DK/Ref

IF Q66 = 9 OR 11, SKIP TO Q80

IF Q62 = 10, CODE Q79 = 1, THEN SAY, "You mentioned that you saw or heard advertising for Guaranteed Ride Home." THEN SKIP TO Q79a

Q79. Have you heard, seen, or read any advertising about Guaranteed Ride Home or GRH in the past 6 months?

1. yes
2. no (SKIP TO Q80)
9. DK/Ref (SKIP TO Q80)

Q79a. After seeing or hearing this ad, did you seek information about GRH or register for a GRH program?

1. yes, sought information about GRH from regional program or from employer
2. yes, registered for GRH
3. no
9. DK/Ref

IF Q66 = 10 OR 13, SKIP TO Q81

IF Q62 = 17, ASK Q80, OTHERWISE, SKIP TO Q81

Q80. You mentioned that you saw or heard advertising for HOV lanes. Did you seek information about HOV lanes or start using HOV lanes for your commute after hearing or seeing the ad?

1. yes, sought information about HOV lanes
2. yes, started using HOV lanes for commuting
3. no
9. DK/Ref

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Q81. Is there a phone number or web site you can use to obtain information on ridesharing, public transportation, HOV lanes, and telecommuting in the Washington region?

1. Yes (SKIP TO Q83)
2. No (ASK Q82)
9. DK/Ref (ASK Q82)

Q82. If you wanted to find this type of information for the Washington region, where would you look? (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. N/A
17. other _____
88. Don't know
99. Refuse

SKIP TO Q86

Q83. 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. 301-565-5870 | Montgomery Transit Information Call Center |
| 5. 202-637-7000 | METRO (Washington Metro. Area Transit Authority) |
| 6. www.mwcog.org | Commuter Connections (COG) |
| www.commuterconnections.org | Commuter Connections (COG) |
| www.commuterconnections.com | Commuter Connections (COG) |
| 7. www.vre.org | Virginia Railway Express (VRE) |
| 8. www.commuterdirect.com | Arlington |
| www.commuterpage.com | Arlington |
| 9. www.springfieldinterchange.com | Springfield Interchange (VDOT) |
| 10. www.maryland.com | Maryland Mass Transit Admin. (MTA) |
| | MARC Commuter Rail |
| 11. www.wmata.com | WMATA, Metro |
| 12. www.HOVcalculator.com | VDOT |
| 13. Other (SPECIFY) _____ | |

Q84. Have you used this number or web site 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, SKIP TO Q86

Q85. How did you find out about this number or web site? (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

IF Q83 = 1,6, CODE Q86 = 1, THEN SKIP TO Q87

Q86. Have you heard of an organization in the Washington region called Commuter Connections?

1. yes
2. no (SKIP TO Q89)
8. Don't know (SKIP TO Q89)
9. Refuse (SKIP TO Q89)

Q87. 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

Q88. 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

EMPLOYER SERVICES

(IF HOMEALL SKIP TO Q105)

(IF TELEALL SKIP TO Q105)

Q89. 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)

Q89a. Have you received or used this information from your employer?

1. yes
2. no
9. DK/Ref

Q90. 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)

Q90a. Have you used this free parking?

1. yes
2. no
9. DK/Ref

SKIP TO Q93

Q91. 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

Q92. 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)

Q92a. Have you used this parking discount?

1. yes
2. no
9. DK/Ref

Q93. 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)

Q93a. Have you used one of these special spaces?

1. yes
2. no
9. DK/Ref

Q94. 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)

Q94a. Have you used the transit or vanpool subsidy?

1. yes
2. no
9. DK/Ref

Q95. 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)

Q95a. Have you used the carpool subsidy?

1. yes
2. no
9. DK/Ref

Q96. 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)

Q96a. Have you used any of these facilities or programs?

1. yes
2. no (SKIP TO Q97)
9. DK/Ref (SKIP TO Q97)

Q96b. 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

Q97. 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)

Q97a. 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

IF Q79 = 1 (YES, SEEN ADVERTISING), THEN AUTO FILL Q102 = 1, AND SKIP TO Q103.

Q102. 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 Q105)
3. DK/Ref (SKIP TO Q105)

IF Q97 = 1, 2, OR 3, CODE Q103 = 1, CODE Q104 = 2, THEN SKIP TO Q105

Q103. In the past two years, have you registered for or used any guaranteed Ride Home service?

1. Yes
 2. No
 9. DK/Ref
- } SKIP TO Q105

Q104. Who sponsored or offered the service? (DONOT READ)

1. Commuter Connections/Council of Governments/COG
2. Employer
3. VRE
4. TMA (TyTran)
5. Other _____
9. Don't know/Refuse

KIOSKS

Q105. 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
 9. DK/Ref.
- } SKIP TO Q113

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Q106. 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 | |
| 9. DK/Ref. | } SKIP TO Q113 |

Q107. 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. National Foreign Service Training Center – Arlington, VA
5. Pentagon
6. Reston Town Center
7. Springfield Mall
8. Tysons Corner Center
9. United States Department of State (State Department)
10. Union Station
11. Montgomery County (White Flint Mall, County Executive Building)
12. Fairfax County (libraries, government center, etc.)
13. Other _____
99. DK/Ref.

Q108. 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

Q109. 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 | |
| 9. DK/Ref. | } SKIP TO Q113 |

Q110. 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 _____

Q111. How long did you use or have you used that type of transportation?

_____ months (CONVERT YEARS TO MONTHS)

Q112. 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

Q113 . In total, how many motor vehicles, in working condition, including automobiles, trucks, vans, and highway motor-cycles are owned or leased by members of your household? _____

Q114. 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 (IF ONE, SKIP TO Q118)

88. Don't know (SKIP TO Q118)

99. Refuse (SKIP TO Q118)

Q115. How many of these household members are employed outside the home? (INCLUDING RESPONDENT)
_____ employed

888. Don't know
999. Refuse } (SKIP TO Q118)

Q116. How many work at outside job or jobs 35 hours or more per week?

_____ household members (IF = Q115, SKIP TO Q118)

888 Don't know
999 Refuse

Q117. And how many work at outside job or jobs less than 35 hours per week?

_____ household members

889 Don't know
999 Refuse

(IF TELEALL OR HOMEALL SKIP TO Q119)

Now I have a few last questions for classification purposes.

Q118. First, About how many employees work at your worksite? Is it . . . (READ CHOICES)

1. 1 – 25	3. 51-100	5. 251-999	9. DK/Ref.
2. 26-50	4. 101-250	6. 1,000 or more	

Q119. What is your occupation? _____

IF HOMEALL SKIP TO Q121, AUTO CODE "5" IN Q120

Q120. 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.

Q121. 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)

Q122. Do you consider yourself to be Latino, Hispanic, or Spanish?

- | | |
|--------|------------|
| 1. Yes | 2. No |
| | 9. DK/Ref. |

Q123. 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 RESPONSE ONLY)

- | | |
|-------------------------------------|--|
| 1. White | 5. Native Hawaiian or Other Pacific Islander |
| 2. Black or African-American | 6. Other (SPECIFY) _____ |
| 3. American Indian or Alaska Native | 9. Refused |
| 4. Asian | |

Q124. 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 C – COMPARISON OF KEY 2004 SOC RESULTS FOR ALL REGIONAL COMMUTERS, COMMUTERS WHO LIVE IN ARLINGTON COUNTY, VA, AND COMMUTERS WHO WORK IN ARLINGTON COUNTY, VA

Current Travel Information

- **Current mode split** – Percentage of weekly commute trips (including CWS and TW days)

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
DA/Motorcycle	55.9%	59.6%	71.4%
CP	4.8%	11.6%	5.6%
VP	0.2%	0.4%	0.3%
Bus	6.9%	5.4%	4.4%
Metrorail	24.3%	14.8%	11.5%
Commuter Rail	0.3%	1.2%	0.9%
Bike/walk	3.9%	2.7%	2.2%
CWS	0.8%	1.1%	0.7%
Telework	2.9%	3.2%	2.3%
<u>2001</u>			
DA/Motorcycle	62.5%	58.8%	70.3%
CP	6.2%	10.6%	6.9%
VP	0.2%	0.7%	0.5%
Bus	4.1%	7.3%	4.5%
Metrorail	19.0%	14.2%	11.5%
Commuter Rail	0.0%	1.7%	0.8%
Bike/walk	5.2%	4.1%	2.3%
CWS	1.1%	0.7%	0.9%
Telework	1.6%	2.0%	2.3%

- **Regular mode use** – Percentages of weekly “on the road” commuter trips (without TC/CWS)

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
DA/Motorcycle	58.0%	62.3%	74.1%
CP/VP	5.1%	12.5%	6.1%
Bus	7.2%	5.6%	4.7%
Train (Metro/commuter rail)	25.5%	16.8%	12.8%
Bike/walk	4.1%	2.8%	2.3%
<u>2001</u>			
DA/Motorcycle	64.5%	60.4%	72.6%
CP/VP	6.6%	11.6%	7.6%
Bus	3.8%	7.5%	4.6%
Train (Metro/commuter rail)	19.7%	16.4%	12.7%
Bike/walk	5.3%	4.2%	2.4%

- Average length of commute**

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Distance	9.9 miles	18.3miles	16.5 miles
Time	27 minutes	38 minutes	34 minutes
<u>2001</u>			
Distance	9.9 miles	16.1 miles	15.5 miles
Time	24 minutes	35 minutes	32 minutes

- Work Non-standard/flexible schedules**

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
No	74%	68%	69%
Yes	26%	32%	31%
Compressed schedule	5%	8%	5%
Flextime	21%	24%	26%
<u>2001</u>			
No	72%	71%	72%
Yes	28%	29%	28%
Compressed schedule	6%	5%	5%
Flextime	22%	24%	23%

- Access mode to rideshare/transit modes**

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Picked-up at home	9%	15%	15%
Drive to driver's home	4%	16%	11%
Drive to central location	5%	28%	18%
Another pool/dropped off	<1%	<1%	1%
Walk/bicycle	69%	28%	39%
Drive CP/VP	4%	3%	6%
Bus/transit	8%	10%	9%
Average access distance	1.5 miles	4.1 miles	3.1 miles
<u>2001</u>			
Picked-up at home	17%	16%	16%
Drive to driver's home	4%	18%	11%
Drive to central location	1%	19%	14%
Another pool/dropped off	<1%	2%	1%
Walk/bicycle	62%	29%	39%
Drive CP/VP	5%	8%	9%
Bus/transit	9%	8%	10%
Average access distance	1.7 miles	4.1 miles	2.6 miles

- **Reasons for using alt modes** – regional commuters who currently use alternative modes

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Save time	16%	30%	18%
Changed jobs	20%	16%	16%
Save money	14%	14%	14%
No vehicle available	10%	6%	11%
Moved residence	13%	5%	9%
Avoid congestion	8%	11%	7%
Always used	6%	5%	7%
Tired of driving	7%	9%	6%
No parking, parking cost	5%	1%	3%
Close to work/pick-up point	7%	5%	4%
<u>2001</u>			
Save time	20%	19%	20%
Changed jobs	6%	6%	5%
Save money	23%	25%	21%
No vehicle available	21%	18%	19%
Moved residence	4%	4%	3%
Avoid congestion	6%	8%	8%
Always used	2%	2%	2%
Tired of driving	11%	10%	8%
No parking, parking cost	5%	3%	<1%
Close to work/pick-up point	4%	4%	<1%

- **Used or tried other alternative modes** – Respondents used or tried an alt mode they are not using now within the past two years (all commuters)

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
Yes - 2004	28%	31%	22%
Yes - 2001	34%	31%	24%
<u>2004</u>			
<u>Other Alternatives Tried</u>			
Carpool, vanpool	3%	5%	4%
Bus	7%	7%	7%
Metrorail/commuter rail	17%	22%	12%
Bike/walk	6%	4%	3%
<u>2001</u>			
<u>Other Alternatives Tried</u>			
Carpool, vanpool	3%	6%	4%
Bus	10%	9%	8%
Metrorail/commuter rail	20%	20%	13%
Bike/walk	4%	2%	2%

Telecommute

- **Telecommute incidence** – all commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
% workers telecommuting	12.6%	13.7%	12.8%
Home-based telecommuters	100%	97%	95%
<u>2001</u>			
% workers telecommuting	13.8%	11.4%	11.3%
Home-based telecommuters	99%	100%	98%

* Note: in 2004, the definition of “telecommuter” was changed from the definition used in the 2001 survey. In 2001, the definition was, “*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.*” In 2004, the definition was, “*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.*” The 2001 definition would have included workers who work at client sites and/or who travel from one customer location to another during the course of the day and workers who worked part of a day at home or at another location, but traveled to the main work place for the remainder of the day. The 2004 definition was rewritten to exclude these workers. To provide an appropriate comparison, the 2001 telecommute results were revised to remove workers who would have been excluded under the 2004 definition. The results shown in this section reflect the revised 2001 results.

- **Potential for additional regional telecommuting** – all commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Non-telecommuters (percent of commuters)	87%	87%	87%
Job responsibilities allow TC (“could TC”)	25%	21%	25%
Interested in TC if offered (“could and would TC”)	20%	17%	19%
<u>2001</u>			
Non-telecommuters (percent of commuters)	86%	89%	89%
Job responsibilities allow TC (“could TC”)	32%	29%	31%
Interested in TC if offered (“could and would TC”)	24%	20%	21%

- **Telecommute frequency** – current telecommuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
< once per month/occasionally	18%	27%	22%
1 – 3 times per month	32%	21%	32%
1 day per week	20%	17%	15%
2 days per week	10%	13%	12%
3 or more times per week	20%	22%	19%
Mean (days per week)	1.3	1.4	1.3
<u>2001</u>			
< once per month/occasionally	28%	32%	29%
1 – 3 times per month	36%	22%	28%
1 day per week	17%	13%	16%
2 days per week	4%	6%	9%
3 or more times per week	16%	28%	16%
Mean (days per week)	1.0	1.5	1.1

- **Length of time telecommuting** – current telecommuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Less than one year	21%	22%	22%
One to two years	44%	32%	27%
More than two years	36%	46%	51%
<u>2001</u>			
Less than one year	27%	27%	23%
One to two years	28%	40%	29%
More than two years	46%	32%	48%

Awareness/Attitudes Toward Transportation Options

- **Transit availability between home and work** – all commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
Yes - 2004	86%	75%	65%
Yes - 2001	85%	79%	65%

- **HOV lane availability and use** – all commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
HOV lane on route to work	29%	50%	29%
Use lanes	7%	21%	8%
<u>2001</u>			
HOV lane on route to work	32%	45%	27%
Use lanes	5%	14%	7%

- **Park & Ride availability and use** – all commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Know locations of P&R lots	21%	41%	40%
Used P&R in past year	2%	12%	7%
<u>2001</u>			
Know locations of P&R lots	26%	42%	42%
Used P&R in past year	3%	10%	7%

- **Reasons for not riding bus** – commuters who don't currently use bus who have transit available

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Trips takes too much time	28%	25%	32%
No bus service	27%	33%	13%
Need car for work	10%	9%	15%
Work schedule irregular	6%	6%	8%
Trip too long – distance too far	7%	6%	7%
Bus unreliable/late	3%	4%	5%
Too expensive	2%	5%	3%
Need car before/after work	3%	2%	5%
<u>2001</u>			
Trips takes too much time	32%	25%	27%
No bus service	12%	13%	14%
Need car for work	17%	16%	19%
Work schedule irregular	5%	7%	7%
Trip too long – distance too far	9%	4%	7%
Don't know routes/stops	7%	7%	4%
Bus unreliable/late	5%	6%	5%
Too expensive	5%	7%	5%
Need car before/after work	2%	6%	2%

- **Reasons for not riding train** – commuters who don't currently use train who have transit available

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
No train service	56%	48%	37%
Trips takes too much time	17%	20%	21%
Need car for work	10%	8%	14%
Trip too long – distance too far	5%	5%	6%
Work schedule irregular	5%	3%	5%
Train unreliable	<1%	2%	2%
Too expensive	2%	6%	4%
Need car before/after work	2%	<1%	4%
<u>2001</u>			
No train service	36%	33%	36%
Trips takes too much time	20%	18%	16%
Need car for work	18%	16%	18%
Trip too long – distance too far	6%	3%	5%
Work schedule irregular	5%	8%	5%
Train unreliable	4%	2%	2%
Too expensive	3%	9%	5%
Need car before/after work	<1%	7%	4%

- **Reasons for not carpooling/vanpooling** – commuters who don't currently CP or VP

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Don't know anyone to CP/VP with	42%	46%	47%
Work schedule irregular	16%	20%	20%
Need car for work	9%	10%	12%
Need car before or after work	5%	7%	7%
Doesn't save time	9%	5%	5%
Live close to work	3%	2%	3%
Takes too much time	7%	4%	4%
<u>2001</u>			
Don't know anyone to CP/VP with	48%	42%	48%
Work schedule irregular	15%	17%	18%
Need car for work	9%	12%	12%
Need car before or after work	5%	6%	7%
Doesn't save time	5%	3%	4%
Live close to work	5%	4%	3%
Takes too much time	5%	4%	4%

- **Commute easier, more difficult, or same as one year ago** – all regional commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Easier	18%	15%	14%
More difficult	21%	33%	29%
About the same	57%	49%	54%

2001 – Not available – question not asked in 2001

2004

Reasons commute is easier

Shorter distance	51%	35%	44%
Route less congested	9%	30%	19%
Faster trip, less time	28%	29%	21%
Less stressful	7%	14%	9%
Started using bus/train/CP/VP	5%	6%	6%
Started driving alone	4%	4%	4%

Reasons commute is more difficult

Route more congested	66%	82%	81%
Longer distance	13%	13%	11%
Slower trip, more time	12%	13%	11%
More stressful	6%	3%	5%

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)

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
Yes - 2004	57%	63%	55%
Yes - 2001	57%	57%	55%
<u>2004</u>			
<u>Ad messages recalled</u>			
You can call for CP/VP info	14%	10%	16%
GRH	10%	11%	12%
Contact Commuter Connections	5%	6%	6%
Use bus/train, Metro	11%	10%	7%
New buses/trains coming	9%	9%	7%
Saves money	2%	5%	3%
Saves time	2%	4%	2%
HOV lanes	2%	2%	2%
Less stressful	2%	2%	1%
Telecommuting	4%	4%	3%
Help environment	<1%	3%	2%
Reduce traffic	3%	2%	3%
<u>2001</u>			
<u>Ad messages recalled</u>			
You can call for CP/VP info	6%	9%	9%
GRH	3%	3%	3%
Contact Commuter Connections	4%	5%	5%
Use bus/train, Metro	0%	0%	0%
New buses/trains coming	4%	4%	4%
Saves money	6%	8%	7%
Saves time	13%	10%	11%
HOV lanes	9%	7%	11%
Less stressful	5%	2%	3%
Telecommuting	3%	3%	2%
Help environment	3%	3%	4%
Reduce traffic	3%	4%	5%

- **Attitudes/actions after hearing/seeing commute ads** (respondents who remembered ads)

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
More likely to consider RS/transit - 2004	18%	17%	18%
More likely to consider RS/transit - 2001	25%	24%	28%
<u>2004</u>			
Too actions to change commute	1%	1%	2%
Sought commute info (internet, family, commute organization, other source)	0.5%	1.0%	1.6%
Changed route to work	0.0%	0.0%	0.1%
Tried alt mode	0.5%	0.0%	0.2%

2001 – questions about actions taken were not asked in 2001

- **Awareness and use of regional commute info phone/web site** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Know regional number/web site	45%	58%	46%
Used any number/web site in past year	14%	10%	11%
<u>2001</u>			
Know regional number/web site	40%	42%	33%
Used any number/web site in past year	10%	15%	10%

Employer Services

- **Employer offers TDM services** – all non-self employed commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Discount/free transit pass	44%	59%	31%
Information on commute options	27%	33%	22%
Preferential parking for CPVP	17%	23%	16%
Bike/ped facilities or services	18%	21%	14%
GRH	10%	11%	12%
Parking discounts for CP/VP	6%	9%	4%
CP financial incentive	5%	6%	4%
None – employer doesn't offer any	36%	27%	47%
<u>2001</u>			
Discount/free transit pass	36%	44%	29%
Information on commute options	31%	34%	25%
Preferential parking for CPVP	20%	23%	19%
Bike/ped facilities or services	9%	7%	9%
GRH	17%	16%	19%
Parking discounts for CP/VP	8%	8%	4%
CP financial incentive	7%	12%	7%
None – employer doesn't offer any	46%	40%	49%

- **Employer offers parking services** – all non-self employed commuters

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Free on-site parking	49%	49%	66%
Free off-site parking	3%	2%	3%
Employee pays full charge	33%	32%	21%
Employer pays part of charge	10%	11%	6%
<u>2001</u>			
Free on-site parking	54%	44%	65%
Free off-site parking	4%	4%	3%
Employee pays full charge	32%	42%	23%
Employer pays part of charge	8%	10%	6%

Demographics

- States of Residence** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
DC	0%	6%	11%
MD	0%	23%	45%
Arlington County	100%	22%	4%
Other VA	0%	49%	40%
Other	0%	0%	0%
<u>2001</u>			
DC	0%	5%	12%
MD	0%	24%	48%
Arlington County	100%	26%	5%
Other VA	0%	45%	36%
Other	0%	0%	0%

- States of Employment** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
DC	42%	0%	29%
MD	6%	0%	33%
Arlington County	32%	100%	6%
Other VA	21%	0%	31%
Other	0%	0%	1%
<u>2001</u>			
DC	35%	0%	30%
MD	8%	0%	34%
Arlington County	32%	100%	6%
Other VA	24%	0%	29%
Other	0%	0%	1%

- Gender** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Female	51%	45%	55%
Male	49%	55%	45%
<u>2001</u>			
Female	49%	49%	54%
Male	51%	51%	46%

- **Age** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Under 25	7%	5%	7%
25 – 34	30%	17%	21%
35 – 44	23%	26%	28%
45 – 54	23%	29%	27%
55 – 64	14%	20%	14%
65 or older	3%	3%	3%
<u>2001</u>			
Under 25	12%	10%	10%
25 – 34	33%	25%	23%
35 – 44	24%	29%	29%
45 – 54	20%	21%	25%
55 – 64	9%	11%	10%
65 or older	3%	4%	3%

- **Income** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Under \$30,000	7%	8%	6%
\$30,000 – \$39,999	8%	5%	8%
\$40,000 – \$59,999	16%	10%	14%
\$60,000 – \$79,999	15%	15%	17%
\$80,000 – \$99,999	14%	18%	16%
\$100,000 – \$119,999	18%	15%	14%
\$120,000 – \$139,999	7%	8%	7%
\$140,000 – \$159,999	5%	6%	5%
\$160,000 or more	12%	16%	13%
<u>2001</u>			
Under \$30,000	12%	10%	9%
\$30,000 – \$39,999	8%	8%	9%
\$40,000 – \$59,999	17%	18%	18%
\$60,000 – \$79,999	16%	15%	19%
\$80,000 – \$99,999	14%	17%	15%
\$100,000 – \$119,999	33%	32%	30%
\$120,000 – \$139,999			
\$140,000 – \$159,999			
\$160,000 or more			

- **Employer type** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Federal agency	24%	37%	22%
State/local government	9%	11%	13%
Non-profit organization	14%	11%	10%
Private sector	47%	37%	49%
Self-employed	7%	5%	7%
<u>2001</u>			
Federal agency	20%	34%	20%
State/local government	9%	7%	14%
Non-profit organization	11%	8%	10%
Private sector	52%	44%	50%
Self-employed	8%	8%	7%

- **Employer size** – all respondents

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
1 – 25 employees	22%	18%	25%
26 – 50 employees	11%	6%	12%
51 – 100 employees	11%	11%	12%
101 – 250 employees	11%	11%	13%
251 – 999 employees	16%	23%	15%
1,000 employees	29%	31%	25%
<u>2001</u>			
1 – 25 employees	28%	21%	30%
26 – 50 employees	12%	11%	12%
51 – 100 employees	10%	12%	11%
101 – 250 employees	12%	13%	12%
251 – 999 employees	15%	17%	14%
1,000 employees	23%	27%	22%

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

	<u>Live in Arl</u>	<u>Work in Arl</u>	<u>All Region</u>
<u>2004</u>			
Hispanic/Latino	8%	7%	6%
White	78%	71%	64%
Black/African-American	6%	16%	23%
Asian	6%	3%	5%
<u>2001</u>			
Hispanic/Latino	13%	7%	6%
White	74%	62%	61%
Black/African-American	5%	21%	23%
Asian			