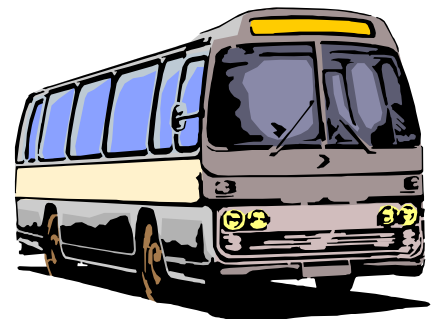




HANDOUTS

From previous meeting

July 20, 2004



MWCOG/Commuter Connections State of the Commute (SOC) Survey

Adjustment to 2001 Washington Metropolitan Region TC Estimate to Reflect Expected TC Results under 2004 TC Definition July 18, 2004

Issue

In the 2004 State of the Commute (SOC) survey, the definition of telecommuting was changed from the definition used in the 2001 SOC survey. The change was made to reflect a more accurate representation of what Commuter Connections considers telecommuting, but the 2004 definition was narrower in scope than the 2001 definition and would have excluded some commuters who likely would have been counted as telecommuters in 2001. It is very likely that some, and perhaps all, of the TC reduction observed from 2001 (15.1%) to 2004 (12.8%) is due to this change.

2004 Definition: *“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.”*

2001 Definition: *“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.”*

Likely Overrepresentations

The 2001 definition likely included several groups of commuters who would not have been counted in 2004, such as:

- Workers, such as sales or equipment repair staff, who travel to multiple customer locations during the course of the day
- Workers who telecommute at client sites inside or outside of the Washington region
- Workers who worked a portion of the normal workday at home or another location, 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 or worked at a job site for part of a day.

Adjustment Process

The following TC characteristics were examined to identify individual respondents who considered themselves telecommuters under the 2001 definition, but likely would not have been included in the 2004 definition. These included:

- Telecommuting incidence in various occupations – percentage of workers in an occupation who said they telecommuted
- Distribution of telecommuting by TC location – percentage of telecommuters who said they telecommuted from non-home locations
- Frequency of telecommuting compared to actual use of telecommuting during the survey week – percentage of telecommuters who said they “usually” telecommute 1+ days per week and actually did telecommute 1+ days during the survey week

Occupation

Several occupational groups appeared to have significantly lower incidence in 2004 compared to 2001:

	<u>2004</u>	<u>2001</u>
• Sales	10.1%	20.8%
• Machine operators	0.0%	12.4%
• Farming/forestry	1.5%	9.6%
• Precision craft	2.9%	8.9%
• Equipment handlers	0.0%	3.3%
• Transportation/material movers	0.2%	1.8%

These all are occupations that are not typically associated with telecommuting and the significant drop from 2004 to 2001 suggests these occupations were over-represented in the 2001 survey. Additionally, two occupations, executive/management and professional, that typically do show high telecommuting, showed declines of 25% incidence from 2001 to 2004. This is unexpected given the technological advances that might have made telecommuting more available to these groups of workers.

Location

In 2004, 97% of respondents who provided information on telecommute locations said they telecommuted from home, compared to 89% who responded this way in 2001. As with occupation, several non-home locations appeared to be over-represented in 2001, compared to 2004:

	<u>2004</u>	<u>2001</u>
• Client office	0.0%	3.1%
• Home/other	0.8%	3.6%
• Satellite office	1.7%	2.9%
• Telework center	0.5%	1.1%
• Retail location (e.g., Kinko's)	0.1%	0.7%

Reported Frequency vs Actual Frequency

Finally, the 2004 and 2001 surveys showed dramatically different results between the percentage of respondents who said they “usually” telecommute one or more days per week and the percentage who actually reported having a telecommute day during the survey week. In 2004, 85% of respondents who said they usually telecommute 1+ days per week reported a telecommute day during the survey week. By contrast, in 2001, only 23% of respondents who said they usually telecommuted 1+ days per week had a telecommute day in the survey week.

The higher incidence of telecommuting during the survey week in 2004 could have resulted from the definition change, by eliminating from telecommuters, respondents who worked only part of the day outside the main work place. In 2001, these respondents would have defined themselves as telecommuters, but when asked how they traveled to work during the survey week, they would have reported a trip to their regular work place on these “half-telecommute” days.

Additionally, in the 2004 survey, two telecommute questions: “Based on this definition, are you a telecommuter?” and “How often do you usually telecommute?” were asked before questions about last week’s commute. In the 2001 survey, they were asked later in the survey. The 2004 placement might have prompted some respondents to identify telecommuting as a “type of travel.”

Also, the 25% of respondents who said they usually telecommute 1+ days per week but did not report telecommute during the survey week were prompted about telecommuting. When they were asked: “You said you usually telecommute one or more days per week. Did you have a telecommute day last week?” about one third (9% of usual 1+ days telecommuters) said they did have a telecommute day.

Review of Respondent Records

Respondents who were defined as telecommuting in 2001 and who fell into one of the occupation, location, or frequency categories described above were flagged for possible recoding as a non-telecommuter. All three factors were considered together to determine if a record should be recoded. When it was possible, but not clear that a record should be recoded, several additional telecommuter characteristics were examined, including:

- Distance to work (respondents with distances less than 5 miles were considered possible candidates for recoding)
- Distance to telecommute location (if not home – used with location to identify respondents who traveled equal or longer distances to TC locations than to their regular workplace)
- Formal vs informal telecommute program (informal programs considered less likely for TC than formal)
- Reason for telecommuting
- Number of days off/sick/vacation during the work day (used with TC frequency to eliminate respondents who might have reported a telecommute day if they had worked an entire week)

After all the recoding was completed, the occupation, location, and frequency distributions were examined for the remaining telecommuters, to determine if the resulting distributions appeared reasonable, compared to the 2004 distributions.

Summary of Telecommute Adjustments

The table below summarizes the proposed adjustments to the 2001 telecommute estimate. The base (no adjustment) case included 386,650 telecommuters, equal to 14.7% of the regional worker population. When all the recoding was completed, the total number of telecommuters in 2001 dropped from 386,650 to 290,319, a reduction of 96,331. With the revised TC number, telecommuters accounted for 11.0% of the total regional workforce and 11.3% of regional commuters (workers who were not self-employed and full-time home-based).

	<u>Adjustment</u>	<u>Total TC</u>	<u>% of workers</u>	<u>% of commuters</u>
2001 Base (no adj)		386,650	14.7%	15.1%
2001 Adjusted	- 96,331	290,319	11.0%	11.3%
2004		318,130	12.3%	12.8%