

**COMMUTER CONNECTIONS
RESPONSE TO COMMENTS ON CARSHARE SURVEY REPORT
June 30, 2008 Draft Version**

This document summarizes comments received by Commuter Connections on the draft 2008 Carshare Survey Report.

1. While the survey requested information about the changes in travel by the carshare member, it did not obtain similar data for the entire household. It is possible that an individual's membership in a carshare program allows other household members to change their travel behavior (e.g. by making a car available to them that would otherwise have been used by the carshare member). Thus, the survey does not measure the impact of carsharing on travel by an entire household. This point should be emphasized in the report.

Response: Yes, it is possible that respondent's travel patterns might not be mirrored by others in the household. Carsharing by one household member could result in increased travel by another member, if a vehicle previously used by the carshare user now is available to another household member. On the other hand, if the availability of carsharing eliminates a household vehicle, other household members could have diminished access to a vehicle, thus drive less. So the annual driving miles and/or number of driving trips could be different if the questions were applied to the entire household, rather than simply to the respondent. Notes to this effect were added on page 26.

2. In some instances, it is not clear whether the information related to changes in auto travel by carshare members represents changes in use of their personal vehicle only, or whether the data also includes carshare usage. All comparisons of auto trips, mileage, etc. made before and after joining a carshare program should include trips made via carsharing (e.g. trips via personal vehicle PLUS trips made via a carshare vehicle).

Response: The survey did not include questions that would enable the comparison requested. Respondents were asked several general questions about travel in carsharing and specific questions about one (last) carshare trip. But no information was collected about use of personal autos vs carshare vehicles.

3. All comparisons of trip-making before and after joining a carshare program should be stratified into two groups: (a) carshare members who changed either their home or work location, and (b) carshare members who did not change either home or work location. In the absence of this information, it is not possible to isolate the changes in tripmaking that are solely attributable to carsharing.

Response: See changes beginning on page 44 (new Table 16). Changes in auto ownership, commute travel, and annual miles driven are presented for respondents who moved and those who did not. The differences between these two groups were very slight for auto ownership and commute travel. Differences were greater for annual driving miles - respondents who moved drove an average of 285 fewer annual miles than did those who did not move (1825 vs 1540 = 19% greater reduction), but movers also were more likely than non-movers to increase driving miles. This is likely due the result that some moves would have been to more transit accessible locations and others would have been to less transit accessible areas.

4. The report presents a number of tables that stratify the responses into various sub-groups (e.g. by age, etc.). The differences shown for many such statistics are relatively small. For example Table 9 shows the percentages of respondents who changed to an alternative mode, sorted by household vehicles per driver. The values range from 79% to 83%.

Another example is presented by the data in Table 10, a subset of which is copied below. With reference to this table, the report states:

"Respondents who said they made a change in either their work or home location since joining carsharing were more likely to increase use of alternative modes." (p.35)

However, it appears that the 95% confidence levels of the responses about using alternative commuting modes by those who moved home or work, may actually overlap. Since the ranges overlap, can we be 95% confident that these populations are different?

Table 10
Commute Mode Change Since Joining Carshare – By Travel Pattern Characteristic (excerpt)

Respondent Characteristic	Change in Use of Alternative Modes for Commuting	
	No Change	Started or Increased Use
Moved residence or work location		
No change (n = 2,333)	84%	16%
Change in home or work (n = 1,770)	80%	20%

95% confidence level for

n = 2333 = $\pm 2.0\%$

n = 1770 = $\pm 2.3\%$

Range of 95% confidence

No change in residence or work location = 82% - 86%

Change in residence or work location = 77.7% - 82.3%

The report should indicate the extent to which the differences in such situations are statistically significant. If they are not, the accuracy and clarity of the report would be improved if these distinctions were omitted.

Response: We have checked these comparison results and made changes where necessary to clarify the significance of results. The particular examples provided in the comment all are statistically significant.

5 Page 4 – Demographic Characteristics

Comment: since 80% of the carshare members live in Washington and Arlington, it is misleading to compare their demographic characteristics with those of the region as a whole. A more reasonable comparison would be with the demographic characteristics of those two jurisdictions.

Response: The point of the comparison was to show that carshare members as a group are not representative of all regional workers. Thus, we believe the comparison to regional workers is valid. However, we have added sample comparisons of DC/Arlington carshare users to DC/Arlington commuters for age and household vehicles. These show that carshare users even in these jurisdictions differ dramatically from all commuters in these jurisdictions. In short, carshare users are more like each other, regardless of where they live, than they are to other commuters who live in their home jurisdiction.

6 Page 14 – “About 30% of respondents who lived in the carshare “core” jurisdictions of Alexandria, Arlington County, Montgomery County, and Washington, DC rented at least once in the past month, compared with only 60% of respondents in Prince George’s County and 54% of respondents who lived in Fairfax County.”

Comment: The point is not clear. It would seem that, if 30% is being compared with 60% and 54%, the word “only” should refer to the 30%

Response: The sentence should read: “About 70% of respondents who lived in the carshare “core” ... rented at least once in the past month ... This has been corrected.

7 Page 15 – “Carshare Trip Purposes – As noted earlier, only five percent of carshare accounts were through employers, . . .”

Comment: It appears that the 5% value refers to Figure 7, in which the 5% refers to Flexcar. Since most surveys were conducted of Zipcar members, is the 5% still correct?

Response: The sentence has been changed to show the employer share of both Zipcar and Flexcar accounts. Five percent was the Flexcar number; the Zipcar percentage was seven percent.

- 8 Page 32 – Figure 26 indicates that 314 responses were received in response to the question about the likelihood of making a change in mode without the availability of carsharing. Using the data provided in Table 8 it is estimated that 804 respondents indicated that they made a change in mode since joining carshare (18% of 4468 responses).

Comment: If 804 respondents made a change in mode since joining carshare, but only 314 responded to the likelihood of making the change without carsharing, it appears that the majority of respondents did not answer the question about the likelihood of changing commute mode without carshare. Elsewhere when the report discusses the changes in annual mileage driven by carshare members, it notes the relatively low percentage of respondents to this question (pages 37, 63). Since the percentage of respondents who provided information about the likelihood of changing commuting behavior without carsharing also appears to be low, it would seem that this point should be noted. Does this low response rate affect any conclusions regarding the impact of carsharing on commuting?

Response: The follow-up question on likelihood to make the change without carsharing was asked only of respondents who made a change from driving alone. Respondents who shifted from one alternative mode to another were not asked this question. The paragraph has been revised to clarify this point.

- 9 Page 43 – The title of Figure 29 should be corrected.

Response: The title has been corrected.

- 10 Page 48 – Several cells in Table 17 are shaded, but no explanation is provided.

Response: The shading was included to highlight prominent responses, but it has been removed to avoid confusion.

- 11 Page 57 - “Carshare users also appear to reduce their weekly driving trips by about and . . .”
Comment: The number is missing.

Response: This has been corrected.

- 12 An interesting report but it appears that Carsharing does not account for much VMT reduction.

Response: That does appear to be the case. Carsharing trips are short and many carshare users did not own vehicles even before they joined carsharing. Thus, while carsharing has some VMT reduction benefit, it is at least as much a mobility enhancement strategy as a trip and VMT reduction strategy.

- 13 17% seems to be a low response rate.

Response: The response rate is not dramatically lower than for other online surveys. We would have liked a higher response rate, but the length of the survey could have deterred some respondents from completing the survey.

- 14 Questions for Zipcar - During screening of applicants, is there a process to weed out drivers with poor driving records/insurance issues?

Response: COG will refer this comment to Zipcar