

Metropolitan Washington Council of Governments (MWCOG)
Commuter Connections Program
2008 Carshare Survey

Arlington Carshare User Summary

Survey Methodology Summary

Several jurisdictions and agencies in the Washington Metropolitan region, including Washington, DC; Arlington County, VA; City of Alexandria, VA; Montgomery County, MD; and the Washington Metropolitan Area Transit Authority (WMATA), sponsor or support the operation of carshare program in the region. These entities were interested in learning more of carshare users' experience with the program and exploring the impact of carsharing on travel patterns in the region. In March 2008, the Commuter Connections program of the Metropolitan Washington Council of Governments (COG) conducted a survey of carshare users. The Carshare survey was conducted for three primary purposes:

- Examine characteristics of carshare trips
- Examine travel changes made in response to carshare availability
- Examine auto ownership and use changes in response to carshare availability

Sample Selection – The Carshare survey was administered online to registered members of the Zipcar carshare program. Zipcar sent an email with a link to the survey website to approximately 28,000 carshare members. During the survey period, 4,932 responses were received. Of these responses, 544 were received from carshare users who lived in Arlington County, VA. This brief report presents results of the survey for these respondents.

Questionnaire Development – The survey questionnaire was developed jointly by COG/TPB staff, LDA Consulting, and CIC Research, with assistance from a Carshare Survey review panel comprised of members of Commuter Connections' jurisdiction partners and Zipcar and Flexcar staff. The questionnaire also was reviewed by the Commuter Connections TDM Evaluation Group and the Commuter Connections Subcommittee. The questionnaire collected data on eight major topics:

- Carshare participation background
- General carshare use patterns
- Details of last carshare use/trip
- Work travel patterns
- Travel pattern changes since joining carshare
- Changes in vehicle ownership and residential/work location since joining carshare
- Carshare satisfaction
- Demographics

Survey Data Expansion – COG originally planned to review the demographic distribution of the survey respondents and determine if the sample should be weighted to reflect the population accurately. The only variable that appeared available for weighting purposes was respondent home jurisdiction. An initial examination of several survey variables indicated that responses differed by jurisdiction. Unfortunately, due to privacy concerns, Zipcar was unable to provide any information on the distribution of carshare members by geographic area. Thus the results could not be tested or adjusted on this measure. This is noted to alert readers that the results might not be representative of the full carshare member population.

Survey Results

Demographic Characteristics

- Washington DC carshare members dominated the carshare market in the Washington metro region – 67% of carshare members lived in DC and 73% worked in DC. For this reason, carshare member characteristics were strongly defined by DC members' characteristics.
- Arlington represented the second largest base of carshare members in the Washington region – 13% lived in Arlington and 9% worked in Arlington.
- Only one other jurisdiction, Montgomery County, MD, had more than 5% of the carshare members – 7% of members lived in Montgomery and 7% worked in Montgomery. Other members lived in other metro area jurisdictions (Prince Georges – 4%, Alexandria – 3%, Fairfax – 3%, Other – 4%).
- Arlington carshare members shared some demographic characteristics with carshare members who lived in DC and some with members who lived in other jurisdictions:

Average age – same average age (34 years) in Arlington and DC, other jurisdictions had older average age (39 years)

Car ownership – Arlington and Montgomery had similar car ownership characteristics (45% owned one or more HH vehicle). Car ownership rate was higher than for DC carshare members (25%), but lower than for members in other jurisdictions (62%).

Income – Arlington resident members had similar income profiles to carshare members in Montgomery and DC but lower incomes than carshare members in other jurisdictions. 37% of Arlington members had HH incomes of \$100,000 or more, compared to 32% of DC members, 33% of Montgomery members, and 45% of members in other jurisdictions.

Work location – Arlington resident carshare members were more likely than were DC resident members to work outside their home jurisdiction - 29% of members who lived in Arlington also worked in Arlington. By comparison, 83% of DC resident members also worked in DC. In other jurisdictions, the "work outside" percentage was similar to Arlington's (31%).

Carshare Use Characteristics

- Distance to carshare pickup location – 82% of Arlington carshare members lived within 5 blocks of the closest carshare location. Only DC members had higher access – 90% lived within 5 blocks. Members who lived in other jurisdictions lived farther away – 56% of Montgomery County members, 37% of Alexandria, and 31% of Prince George's County were within 5 blocks.
- Type of carshare parking location – A large majority (79%) of Arlington resident carshare members picked up cars from on-street spaces. This was quite a different pattern from other jurisdictions. In DC, 22% used on-street spaces and fewer than 10% of members from other jurisdictions used on-street parking. In these other jurisdictions, off-street private spaces and garage/lot spaces were more common.
- Frequency of rental – Arlington resident carshare members rented vehicles at about the same rate as did carshare members in DC and Montgomery County – about 70% in these jurisdictions rented at least once in the past month. Carshare members in other jurisdictions rented less often – about 60% of these members rented at least once in the past month.
- Carshare trip purpose – Arlington resident carshare members rented vehicles for the same purposes as did other carshare members – there were not statistical differences in carshare use.
- How to make most recent trip if carshare not available – Arlington resident members were slightly less likely than were DC resident members to say they "would not have made" their most recent carshare trip if carshare had not been available (Arlington 45% vs DC 50%). In this characteristic, Arlington resident members were more like members from other suburban jurisdictions.

Changes in Auto Ownership and Travel Patterns Since Joining Carsharing

- Auto ownership – About 28% of Arlington resident members reduced the number of cars in their household after joining carsharing. This was about the same percentage as in DC (26%) and Montgomery (27%), but higher than in other jurisdictions (17%).
- Avoided purchasing vehicle – Carsharing appears to be influential in Arlington resident members not purchasing a household vehicle. Arlington members were more likely than all other jurisdictions to say they would have purchased a vehicle if carsharing were not available – Arlington - 70%, Montgomery - 63%, DC - 61%, other jurisdictions – 52%. This is probably due in part to lower pre-carshare car ownership in Arlington than in the other (suburban) jurisdictions.
- Commute mode – Arlington resident members' commute patterns were similar to those of DC resident members; 5% of Arlington members drove alone, compared to 4% of DC members. Drive alone rates were higher for members from other jurisdictions (Montgomery – 10%, Alexandria 10%, Prince Georges – 14%, and Fairfax – 19%).
- Commute changes since joining carshare – Arlington and DC resident members were less likely to have made a commute change than were respondents in other jurisdictions Arlington – 83%, DC – 82%, Montgomery – 79%, Other jurisdictions – 74%. But data from the State of the Commute survey indicated Arlington and DC had lower drive alone rates than did other jurisdictions, thus it seems likely these areas had higher use of alternative modes even before carsharing.
- Changes in annual driving miles since joining carshare – Arlington resident members were less likely than were DC resident members to have reduced annual driving miles (Arlington – 24% reduced miles vs DC – 32% reduced). But a higher share of Arlington residents reduced miles than did residents of other non-DC jurisdictions (Montgomery – 18% reduced miles, Other jurisdictions – 21% reduced miles).
- Expected actions if carshare no longer available – Arlington residents were most likely of all carshare members to say they would buy a car if carshare were not available (Arlington – 35%, Montgomery – 31%, DC – 27%, Other jurisdictions – 23%). This is likely due to lower current car ownership in Arlington, compared to other (non-DC) jurisdictions. In Arlington, carshare provides a feasible alternative to car ownership for many members. The lower DC rate of likely car purchase is probably related to the high share of members who also work in DC, reducing the need for a car for daily use.

Carshare Satisfaction

- Overall satisfaction – Arlington resident members reported high carshare satisfaction, on a par with other members – Arlington – 86% rated 4 or 5 (very satisfied), Montgomery – 87%, DC – 86%, Other jurisdictions – 81%.
- Likely to recommend – 79% of Arlington resident members said they were very likely to recommend carsharing to others and 17% said they were somewhat likely to recommend it. These rates were similar to members in other jurisdictions.
- Ratings for carshare characteristics – Arlington resident members gave similar ratings for carshare features as did members from other jurisdictions, with two exceptions:
 - Safety of pick-up locations – Arlington members gave the highest satisfaction ratings for this feature: Arlington - 95% rated safety a 4 or 5, Montgomery – 87%, DC – 84%, Other jurisdictions – 90%.
 - Availability of vehicles when needed – Arlington members gave the highest satisfaction ratings for this feature: Arlington - 80% rated availability a 4 or 5, Montgomery – 71%, DC – 73%, Other jurisdictions – 72%.