Arlington:

Car-Sharing vs. Private Vehicle Ownership Costs (household basis)
Economic Analysis

This analysis utilizes **Arlington and Virginia specific data** to estimate:

Household cost of owning a vehicle or using a car-share service

- on a per mile basis
- over a five year period
- at 1,000, 2,000 and 6,000 vehicle miles traveled (VMT) annually
Private Vehicle Ownership

1. Purchased New - Honda Civic Sedan LX 2017 (with loan)
2. Purchased Used - Honda Civic Sedan LX 2012 (with loan)
3. Purchased Used - Honda Civic Sedan LX 2003 (no loan)
4. Keep car after 5 years - Honda Civic Sedan LX 2003 (no loan)

Note: Parking related costs, such as RPP decals, metered, and reserved parking are not included in the private car-ownership calculation.
Free-Floating Car-Share Service
1. car2go Smart for two (reduced rate)
2. car2go Smart for two (normal rate)
3. car2go Mercedes Benz CLA/GLA

Note: Parking costs are included in the price per mile.

Reserved-Space Car-Share Program
1. ZipCar – reserved-space carshare service (round-trip)
2. ZipCar – reserved-space carshare service (one-way)

Note: Parking in car-share spaces is included in the price per mile; additional meter parking costs may accrue.
All car-share scenarios are economically more sustainable on a household level than owning a vehicle.
At < 90 VMT annually, all car2go services are economically more sustainable on a household basis than ZipCar.
Economic Analysis

Car Ownership versus Car-Share over 5 years at 2,000 VMT annually (38.5 miles a week)

- Car-sharing is economically equal or more sustainable on a household basis than most car-ownership scenarios.

A. Personal Vehicle - Purchased New (with Loan)
B. Personal Vehicle - Purchased Used (with Loan)
C. Personal Vehicle - Purchased Used (without Loan)
D. Personal Vehicle (keep after loan pay-off)
ZipCar (Base Rate - Occasional driving plan - roundtrip Arlington)
ZipCar (Base Rate - Occasional driving plan - One-Way)
car2go Mercedes Benz
car2go smartfor2 (normal rate)
car2go smartfor2 (reduced rate)
Linear (C. Personal Vehicle - Purchased Used (without Loan))
Linear (D. Personal Vehicle (keep after loan pay-off))

Economic Analysis: Car-sharing is economically equal or more sustainable on a household basis than most car-ownership scenarios.
No car-share option is economically more sustainable on a household basis than ownership scenarios C and D.
Summary:

In Arlington County:

• Up to 1,000 VMT annually (19 miles a week) all car-share options are economically more sustainable on a household level than private car-ownership (minimum savings over 5 year period ~ $2500).

• Over 6,000 VMT annually (115 miles a week) private car-ownership is in most cases economically more sustainable on a household level than car-share.

• Car-share services are best used either as a regular first-last mile connector or for infrequent trip taking.

• Arlington families/residents owning more than one vehicle or individuals considering buying their first vehicle are most likely to realize considerable savings through using car-share instead.
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