Sustainability and Shared Mobility Models

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Why did we select this research?

Shared mobility or mobility in the sharing economy is characterized by the sharing of a vehicle instead of ownership, and the use of technology to connect users and providers. Four models can be said to be emerging: (1) peer to peer provision with a company as a broker, providing a platform where individuals can rent their cars when not in use; (2) short term rental of vehicles managed and owned by a provider; (3) companies that own no cars themselves but sign up ordinary car owners as drivers; and (4) on demand private cars, vans, or buses, and other vehicles, such as big taxis, shared by passengers going in the same direction.

Key findings:

- (Limited) evidence showing that peer to peer and short term rental models will never replace the modes currently used for commuting trips.
- Although apps are clearly helping boost the short term rental model, the (again, limited) evidence shows that households may give up a second or third car rather than become car-less and completely rely on these services.
- On demand private vehicles' model, which entails individuals not only sharing a vehicle, but actually traveling together at the same time, is promising in terms of congestion and CO2 emissions reductions, but also the most challenging one, given the dis-benefits in terms of waiting and travel time, comfort, and convenience, relative to the private car.

Reference:

Santos, G. (2018). Sustainability and Shared Mobility Models. *Sustainability*, *10*(9), 3194.