Shared Mobility Trends: 2015 - 2016

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Overview

- Shared-Use Mobility Trends & Developments
  - Ecosystem Overview
  - Carsharing
  - Bikesharing
  - Ridesourcing
  - E-Hail
- Summary
- Acknowledgements
Ecosystem Overview

Core & Incumbent Services
- Car Rental
- Liveries/Limos
- Paratransit
- Pedicabs
- Public Transit
- Shuttles
- Taxis

Innovative Services
- Carpool
- Vanpool
- Casual Carpool
- Bikesharing
- Carsharing
- Courier Network Services
- e-Hail
- High-Tech Company Shuttles
- Microtransit
- P2P Bikesharing
- P2P Vehicle Sharing
- Ridesourcing/TNCs
- Scooter Sharing

Forthcoming: FHWA
Global Carsharing Trends

<table>
<thead>
<tr>
<th>Year</th>
<th>Members</th>
<th>Membership Growth Rate</th>
<th>Vehicles</th>
<th>Fleet Growth Rate</th>
<th>Member-Vehicle Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>346,610</td>
<td>39%</td>
<td>11,501</td>
<td>30%</td>
<td>30.1</td>
</tr>
<tr>
<td>2008</td>
<td>670,822</td>
<td>32%</td>
<td>19,403</td>
<td>28%</td>
<td>34.6</td>
</tr>
<tr>
<td>2010</td>
<td>1,163,645</td>
<td>24%</td>
<td>31,967</td>
<td>17%</td>
<td>36.4</td>
</tr>
<tr>
<td>2012</td>
<td>1,788,027</td>
<td>65%</td>
<td>43,554</td>
<td>55%</td>
<td>41.1</td>
</tr>
<tr>
<td>2014</td>
<td>4,842,616</td>
<td></td>
<td>104,125</td>
<td></td>
<td>46.5</td>
</tr>
</tbody>
</table>

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Global Carsharing Trends

### Roundtrip and One-way Global Membership

<table>
<thead>
<tr>
<th>Region</th>
<th>Round-trip</th>
<th>One-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>926,280</td>
<td>29,600</td>
</tr>
<tr>
<td>Europe</td>
<td>1,834,418</td>
<td>372,466</td>
</tr>
<tr>
<td>North America</td>
<td>1,179,930</td>
<td>445,722</td>
</tr>
<tr>
<td>South America</td>
<td>0</td>
<td>3,500</td>
</tr>
<tr>
<td>Oceania</td>
<td>50,000</td>
<td>700</td>
</tr>
<tr>
<td>Global</td>
<td>3,990,628</td>
<td>851,988</td>
</tr>
</tbody>
</table>

Shaheen and Cohen, 2015

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### Global Carsharing Trends

#### Roundtrip and One-way Global Membership

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<thead>
<tr>
<th>Region</th>
<th>Round-trip</th>
<th>One-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>20,199</td>
<td>145</td>
</tr>
<tr>
<td>Europe</td>
<td>39,904</td>
<td>18,043</td>
</tr>
<tr>
<td>North America</td>
<td>18,267</td>
<td>5,943</td>
</tr>
<tr>
<td>South America</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Oceania</td>
<td>1,500</td>
<td>24</td>
</tr>
<tr>
<td>Global</td>
<td>79,859</td>
<td>24,266</td>
</tr>
</tbody>
</table>

Shaheen and Cohen, 2015

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Some Carsharing Highlights: 2015-16

- Zipcar announces ZipLabs will work with University of Michigan on shared automated vehicles
- Carma Carpooling acquires City CarShare in 2015
- Audi to launch “Audi at Home” carsharing in San Francisco and Miami
- Fare integration between HOURCAR and Metro Transit in the Twin Cities
- P2P carsharing, RelayRides, rebrands as “Turo”
- Scoot Networks introduced the Nissan-branded Twizy (electric quadricycle)
Worldwide and US Bikesharing

**World:**
- 980 cities with IT-based bikesharing accounting for 1,258,500 bicycles and 9,300 e-bikes (December 2015)

**U.S.**
- 30,750 bikes at 3,200 stations across 87 IT-based public bikesharing programs in the United States (October 2015)

(Meddin, 2015)
Some Bikesharing Highlights: 2015-16

- North American Bike Share Association (NABSA) establishes open data standard
- Free-floating bikesharing (SoBi)
- P2p Bikesharing (Spinlister)
- Campus-based systems (Zagster, SoBi)
- E-bikesharing & carsharing
- Launch of first e-bikesharing program in Birmingham, AL in October 2015
- Keyless bike locks (e.g., BitLock)
- Partnership between BCycle and RideScout’s mobile payment subsidiary, GlobeSherpa
Ridesourcing/E-Hail Market Trends: 2015-16

- Sidecar ceases operations
- Lyft: 195 cities; over 315,000 drivers
- Uber: 68 countries; over 360 cities; hundreds of thousands of drivers signing up globally per month
- Easy Taxi: 18 countries; 400 cities
- Curb: 60 cities; 90 cab companies; over 35,000 taxis
- mytaxi: 5 countries; 20 cities
- Flywheel: 6 cities; over 5,000 drivers
Ridesourcing Highlights: 2015-16

- Continued expansion of ridesplitting: LyftLine and UberPOOL
- Uber rolls out back-to-back trips feature allowing drivers to be matched with nearby ride requests before completing a ride in-progress
- GM investment of $500M in Lyft and gets a seat on its board
  - Opportunity to link automated and connected vehicle technologies with ridesourcing
E-Hail Highlights: 2015-16

- San Francisco’s oldest taxi firm (DeSoto) rebrands itself as Flywheel
- California Division of Measurement Standards approves Flywheel’s smartphone taxi meter (TaxiOS)
  - TaxiOS will offer new features such as fare splitting, dynamic pricing, last-mile deliveries, and app-based payments
- San Francisco’s Yellow Cab files for bankruptcy
E-Hail Highlights: 2015-16

- NYC launches Arro taxi app after beta testing with 7,000 cabs
- Bandwagon (taxi sharing app) expands to JFK and LaGuardia airports
- The Ride app launched in 35 Canadian cities in December 2015

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Published Research Highlights: 2015

- Bikesharing in San Francisco white paper
- EV carsharing white paper
- Insurance carsharing study (2016 TRB presentation)
- Blablacar carpooling equity study (2016 TRB presentation)
- Holistic guide to shared mobility
- Zipcar employer carsharing impact study
- Shared mobility services and vehicle automation paper

For more about these and other studies, please visit http://tsrc.berkeley.edu and http://imr.berkeley.edu

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Research Highlights: 2016

- Two forthcoming reports on Shared Mobility
  - FHWA – Primer and Webinar (est. Feb 2016)
  - American Planning Association (est. Feb/March 2016)
- Forthcoming FHWA Primer on Smartphone Apps
- NRDC/TSRC conducting a study of the impacts of Lyft and Uber (Hewlett Foundation)
Research Highlights: 2016

- Bikesharing GHG impacts study
- One-way carsharing study
- P2P GHG impacts study
- Mobility On Demand (MOD) study for FHWA
Acknowledgments

- Carsharing, bikesharing, ridesharing, ridesourcing, and taxi organizations
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- Adam Cohen, Elliot Martin, Apaar Bansal, Nelson Chan, Mike Fratoni, Adam Stocker, TSRC
- Russell Meddin, The Bike-sharing World Map