EVOLUTION OF MOBILITY: A SHIFT TOWARDS ALTERNATIVE OWNERSHIP
About the Study

2015

Ride & Car Sharing Trend Research
2,464 Consumers

2018

Evolution of Mobility

1,250 consumers
Range of Mobility Models Expanding Consumer Options

- TRADITIONAL OWNERSHIP
- PUBLIC TRANSPORTATION
- TAXI
- CAR-SHARING (launch 2000)
- RIDE-HAILING (launch 2009)
- SUBSCRIPTION (launch 2014)
RIDE-HAILING IS MAINSTREAM; CAR-SHARING REMAINS NICHE
Car-sharing Has Been Around Twice as Long as Ride-hailing

RIDE-HAILING

2000

2005

2008

2009

2011

2012

2013

2015

2016

2018

CAR-SHARING

zipcar

Enterprise Car Share

CAR2GO

Getaround

DriveNow

Turo

Hertz 24/7

Audi

MAVEN

ReachNow
Ride-hailing Awareness Nearly Ubiquitous Across Markets; Car-sharing More Prevalent in Top Mobility Markets

Top Mobility Markets

Awareness of Alternative Transportation Methods

“Heard of This”

<table>
<thead>
<tr>
<th>Market</th>
<th>Ride-hailing</th>
<th>Car-sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Mobility Markets</td>
<td>89%</td>
<td>87%</td>
</tr>
<tr>
<td>Non-Top Mobility Markets</td>
<td>62%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Source: 2018 Cox Automotive Evolution of Mobility Study
While Ride-hailing Usage Has Skyrocketed, Car-sharing is Flat at a National Level

Ride-Hailing Usage

- 2015: 22%
- 2018: 39%
- Increase: +17%

Car-Sharing Usage

- 2015: 12%
- 2018: 14%
- Increase: +2%
Ride-hailing Growing More Mainstream, with Usage Expanding Beyond Top Mobility Markets

Top Mobility Markets

Ride-Hailing Usage

Source: 2018 Cox Automotive Evolution of Mobility Study
Ride-hailing Growth More Prominent in Rural & Suburban Markets, Rural Usage Doubles in 3-Year Timeframe

Ride-hailing Usage

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>43%</td>
<td>61%</td>
</tr>
<tr>
<td>Suburban</td>
<td>19%</td>
<td>40%</td>
</tr>
<tr>
<td>Rural</td>
<td>9%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Source: 2018 Cox Automotive Evolution of Mobility Study
Ride-Hailing Growth Consistent Across All Age Groups

Ride-hailing Usage

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2015 Usage</th>
<th>2018 Usage</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Z</td>
<td>43%</td>
<td>65%</td>
<td>+22%</td>
</tr>
<tr>
<td>Millennials</td>
<td>34%</td>
<td>55%</td>
<td>+21%</td>
</tr>
<tr>
<td>Gen X</td>
<td>20%</td>
<td>28%</td>
<td>+8%</td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>10%</td>
<td>23%</td>
<td>+13%</td>
</tr>
</tbody>
</table>

Source: 2018 Cox Automotive Evolution of Mobility Study
Car-sharing Usage Steady in Top Mobility Markets, Experiencing Slight Growth Elsewhere

Top Mobility Markets

Car-sharing Usage

Source: 2018 Cox Automotive Evolution of Mobility Study
Car-sharing Slowly Growing among Gen Z and Millennials

Car-sharing Usage

- Gen Z: 3% to 9% (↑6)
- Millennials: 19% to 25% (↑6)
- Gen X: 11% to 9% (↓2)
- Baby Boomers: 6% to 4% (↓2)

Source: 2018 Cox Automotive Evolution of Mobility Study
Car-sharing Considered Less Accessible than Other Transportation Alternatives

Transportation Method Accessible

Source: 2018 Cox Automotive Evolution of Mobility Study
Convenience and Safety Present Biggest Barriers to Car-sharing Adoption

Car-sharing vs. Ride-hailing
(among those who have used both)

DISADVANTAGES OF CAR-SHARING (% POINT GAP)

-29 Convenience
-28 Safety
-24 Peace of mind
-22 Overall cost

ADVANTAGES OF CAR-SHARING (% POINT GAP)

+7 Ability to drive the vehicles I want
While Car-sharing Usage is Fragmented Across Brands, Ride-hailing Has a Clear Leader

<table>
<thead>
<tr>
<th>Ride-hailing Brand Usage</th>
<th>Car-Sharing Brand Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(among the 39% using Ride-hailing)</td>
<td>(among the 14% using Car-sharing)</td>
</tr>
<tr>
<td><strong>UBER</strong> ONLY</td>
<td><strong>zipcar</strong></td>
</tr>
<tr>
<td>45%</td>
<td>21%</td>
</tr>
<tr>
<td><strong>UBER</strong> + <strong>lyft</strong> ONLY</td>
<td><strong>CAR2GO</strong></td>
</tr>
<tr>
<td>41%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>lyft</strong> ONLY</td>
<td><strong>Enterprise CarShare</strong></td>
</tr>
<tr>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>UBER</strong> = 86%</td>
<td><strong>Hertz 24/7</strong></td>
</tr>
<tr>
<td></td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td><strong>MAVEN</strong></td>
</tr>
<tr>
<td></td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: 2018 Cox Automotive Evolution of Mobility Study
CAR SUBSCRIPTION IS GAINING TRACTION IN EARLY STAGE
Car Subscription is New Kid on the Block
One in Four Are Aware of Car Subscription Services

25%
Among 18-64 have heard of car subscription services

Source: 2018 Cox Automotive Evolution of Mobility Study
Car Subscription Most Appealing to Younger Generations

10% will opt for a subscription vs. owning/leasing next time they’re in market

% WOULD OPT FOR SUBSCRIPTION

11% Gen Z
16% Millennials
6% Gen X
8% Baby Boomers

Source: 2018 Cox Automotive Evolution of Mobility Study
Car Subscription and Car-Sharing Have Similar User Profiles

### Demographics

<table>
<thead>
<tr>
<th></th>
<th>Interested in Car Subscription</th>
<th>Have Used Car-Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>67%</td>
<td>66%</td>
</tr>
<tr>
<td>Average Age</td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td>Urban Resident</td>
<td>15%</td>
<td>24%</td>
</tr>
<tr>
<td>Income</td>
<td>$64K</td>
<td>$79K</td>
</tr>
</tbody>
</table>

### Vehicle Behaviors

<table>
<thead>
<tr>
<th></th>
<th>Interested in Car Subscription</th>
<th>Have Used Car-Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased Vehicle New</td>
<td>68%</td>
<td>69%</td>
</tr>
<tr>
<td>Owns Luxury Vehicle</td>
<td>12%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: 2018 Cox Automotive Evolution of Mobility Study
Access to Technology, Care-free Maintenance, and Flexibility Are Top Benefits of Car Subscription Model

Top Perceptions of Car Subscription

Among Those Aware

- **44%** Allows me to access the best/newest in-vehicle technology
- **36%** Minimal effort in maintaining/repairing the vehicle
- **35%** Ability to drive the vehicles I want
- **35%** Offers flexibility

Source: 2018 Cox Automotive Evolution of Mobility Study
**Millennials Value Tech More than Other Generations**

“In-car tech makes or breaks my decision to purchase”

% Agree

- **44%** Generation Z
- **54%** Millennials
- **36%** Generation X
- **31%** Baby Boomers

#1 BENEFIT OF CAR SUBSCRIPTION

Allows me to access the best/newest in-vehicle technology

Source: 2018 Cox Automotive Evolution of Mobility Study
Minimal Maintenance Resonates More With Gen X and Boomers

Top Perceptions of Car Subscription
Among those Aware

**GEN Z/MILLENNIALS**
- **46%** Access to in-vehicle technology
- **37%** Ability to drive the vehicles I want
- **36%** It offers flexibility
- **30%** Minimal effort maintenance & repair

**GEN X/BOOMERS**
- **45%** Access to in-vehicle technology
- **43%** Minimal effort maintenance & repair
- **35%** Ability to drive the vehicles I want
- **34%** It offers flexibility

Source: 2018 Cox Automotive Evolution of Mobility Study
Desire to Drive Multiple Vehicles is Most Prominent with Younger Consumers

“I’d prefer to drive a variety of vehicles”

% Agree

<table>
<thead>
<tr>
<th>Generation</th>
<th>% Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Z</td>
<td>29%</td>
</tr>
<tr>
<td>Millennials</td>
<td>35%</td>
</tr>
<tr>
<td>Generation X</td>
<td>21%</td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: 2018 Cox Automotive Evolution of Mobility Study
Car Subscription Provider Preference is Up for Grabs

**CAR SUBSCRIPTION PROVIDER PREFERENCE**

- **47%** No preference
- **24%** Automakers
- **7%** Third Party
- **22%** Dealerships

**CAR SUBSCRIPTION FLEET PREFERENCE**

- **53%** Cross-manufacturer
- **47%** Manufacturer-specific

Source: 2018 Cox Automotive Evolution of Mobility Study
MOBILITY SERVICES ARE CHIPPING AWAY AT OWNERSHIP
83% of consumers drive their vehicle weekly (nationwide)

<table>
<thead>
<tr>
<th>Transportation Methods Used at Least Weekly</th>
<th>Urban</th>
<th>Suburban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driving your own vehicle</td>
<td>62%</td>
<td>86%</td>
<td>86%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>30%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Carpooling</td>
<td>12%</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>Riding a bike</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Borrowing vehicle from friend/family</td>
<td>6%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Ride-hailing</td>
<td>7%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Car-sharing</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: 2018 Cox Automotive Evolution of Mobility Study
Vehicle Ownership Still Offers Many Benefits Over Alternatives

Top Reasons for Purchasing vs. Other Alternatives

89% Convenience
87% Cost
87% Safety
81% Freedom

Source: 2018 Cox Automotive Evolution of Mobility Study
The Cost Benefit of Ownership is Eroding, Especially for Millennials

“Owning/Leasing a Vehicle is Becoming Too Expensive”

% Agree

42%  48%

2015  2018

Source: 2018 Cox Automotive Evolution of Mobility Study
Consumer Attitudes about the Necessity of Ownership Are Changing

“Having Transportation is Necessary, but Owning a Vehicle is Not”

% Agree

35% 39%

2015 2018

Source: 2018 Cox Automotive Evolution of Mobility Study
And This Shift is More Pronounced in Urban and Rural Areas

“Having Transportation is Necessary, but Owning a Vehicle is Not”

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>44%</td>
<td>57%</td>
</tr>
<tr>
<td>Suburban</td>
<td>34%</td>
<td>35%</td>
</tr>
<tr>
<td>Rural</td>
<td>27%</td>
<td>40%</td>
</tr>
</tbody>
</table>

% Agree

Source: 2018 Cox Automotive Evolution of Mobility Study
Gen Z Leading The New Way of Thinking About Ownership

“Having Transportation is Necessary, but Owning a Vehicle is Not”

% Agree

55%  Gen Z
45%  Millennials
34%  Gen X
28%  Boomers

Source: 2018 Cox Automotive Evolution of Mobility Study
Conclusions

1. A shift away from ownership has begun and will continue as younger generations find mobility services increasingly appealing and ownership too expensive.

2. Ride-hailing has become more mainstream, though it has not displaced vehicle ownership. Car sharing is unlikely to see a significant change in growth without continued ramp up in awareness and presence.

3. Subscription services present a promising alternative to ownership, providing access to the latest technology to younger generations and a low maintenance alternative to older consumers.

4. The time to take action is now! Industry players need to rethink existing business models, extending core capabilities with an eye towards mobility.
Survey Definitions of Services

Ride-sharing/hailing
Services where you pay for rides on a per trip basis (e.g., Uber, Lyft). You can request a ride in a vehicle on demand using an app on a smartphone and a driver will pick you up and take you to your destination. This does not include traditional taxi or limo companies; your driver typically owns his/her own vehicle.

Car-sharing
Service where you pay by the hour (some by minute or day) to use a car (some services also require a membership fee to access the service). Examples include Zipcar, Getaround, and Car2Go. Pick-up/return of the vehicle is self-service from designated lots, and each person who uses it keeps it clean and refills the tank with a provided gas card. This is different than a traditional car rental.

Car Subscription
This service gives you possession of a vehicle (similar to leasing), and also offers the ability to swap your vehicle by the week/month for something different. Users pay a one-time membership fee and a subscription payment for their vehicle access (either weekly or monthly) that includes all expenses except gas (such as insurance, maintenance, roadside assistance). Examples include BOOK by Cadillac, Care by Volvo, Clutch, and Flexdrive.
### Definitions of Urban, Suburban, & Rural

<table>
<thead>
<tr>
<th>Category</th>
<th>Household Counts per Land Area (Square Miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>2,560+ households</td>
</tr>
<tr>
<td>Suburban</td>
<td>64 to &lt;2,560 households</td>
</tr>
<tr>
<td>Rural</td>
<td>&lt;64 households</td>
</tr>
</tbody>
</table>
Uber & Lyft Are Now Known by Most Consumers, with Lyft Especially Making Substantial Gains in Awareness over the Last Three Years

### Awareness

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>change</th>
<th>2018</th>
<th>change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uber</strong></td>
<td>65%</td>
<td>+12↑</td>
<td>77%</td>
<td>+38↑</td>
</tr>
<tr>
<td><strong>Lyft</strong></td>
<td>32%</td>
<td></td>
<td>70%</td>
<td></td>
</tr>
</tbody>
</table>

- **Curb**: 4%
- **Juno**: 3%
- **Side-car**: 2%
- **Bandwagon**: 1%
- **Gett**: 1%
Nearly All Ride-hailing Users Prefer Uber Only or in Combination with Lyft

<table>
<thead>
<tr>
<th></th>
<th>Uber Only (A)</th>
<th>Uber and Lyft (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>43%</td>
<td>54%</td>
</tr>
<tr>
<td>Gen Z</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>Millennials</td>
<td>35%</td>
<td>47%(^A)</td>
</tr>
<tr>
<td>Gen X</td>
<td>29%</td>
<td>24%</td>
</tr>
<tr>
<td>Baby Boomer</td>
<td>22%(^B)</td>
<td>11%</td>
</tr>
<tr>
<td>Urban resident</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Suburban resident</td>
<td>68%</td>
<td>66%</td>
</tr>
<tr>
<td>Rural resident</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Avg. Income</td>
<td>$71,400</td>
<td>$74,300</td>
</tr>
</tbody>
</table>

Lyft Only users not profiled due to small base.

Ride-hailing Users

<table>
<thead>
<tr>
<th></th>
<th>Uber Only</th>
<th>Uber and Lyft</th>
</tr>
</thead>
<tbody>
<tr>
<td>U B E R</td>
<td>ONLY 45%</td>
<td>ONLY 41%</td>
</tr>
<tr>
<td>U B E R</td>
<td>ONLY 41%</td>
<td></td>
</tr>
<tr>
<td>lyft</td>
<td>ONLY 11%</td>
<td></td>
</tr>
</tbody>
</table>

Note: lyft only users not profiled due to small base.