

ALEX KEROS

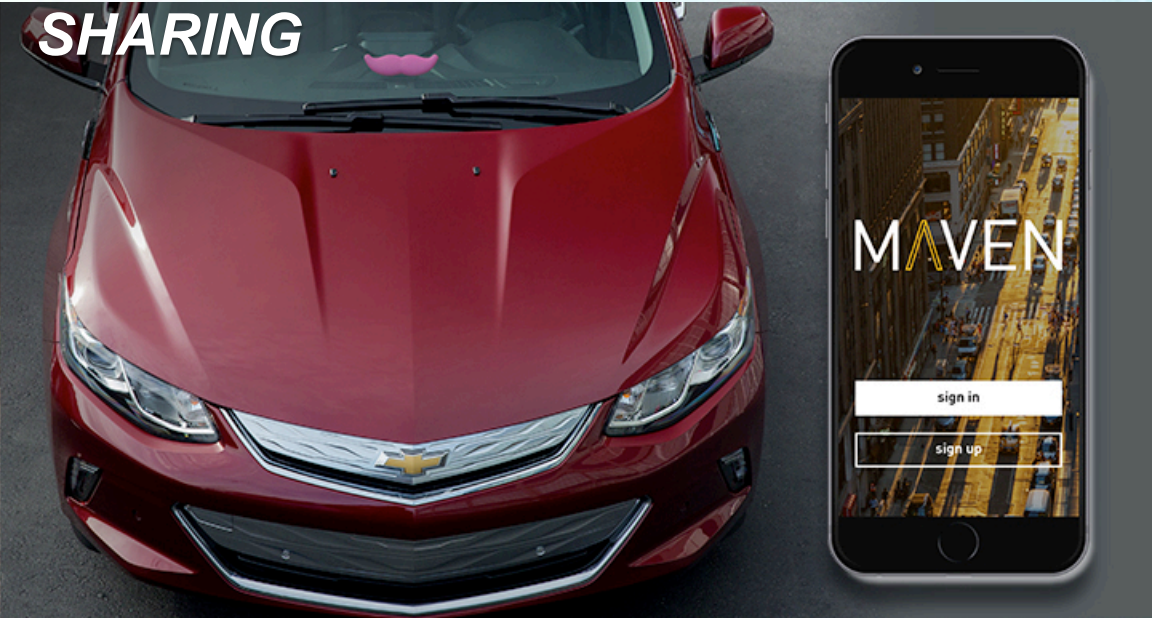
Manager, Vehicle and Advanced Technology Policy



GENERAL MOTORS



MOBILITY IS CHANGING...AND CHANGING QUICKLY



PUTTING IT ALL TOGETHER

Mobility development shaped by multiple factors...

We want options that customers not only choose to purchase.....



...but **LOVE** to own & use!!



eMotional Vehicles



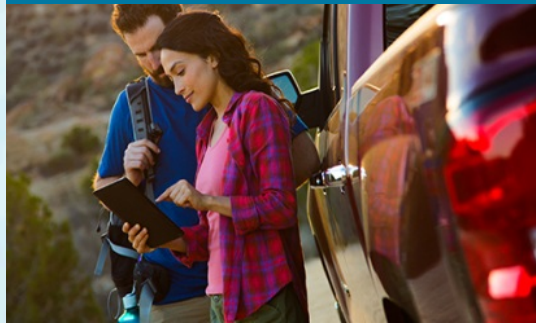
CONNECTIVITY



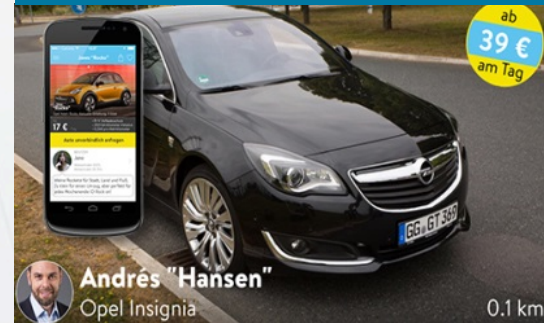
GENERAL MOTORS

CONNECTIVITY IS A FOUNDATIONAL ENABLER FOR MANY GM INITIATIVES

CUSTOMER EXPERIENCE



URBAN MOBILITY



SAFETY



SUPER CRUISE



OVER THE AIR UPDATES



PRO-ACTIVE ALERTS



VEHICLE DATA



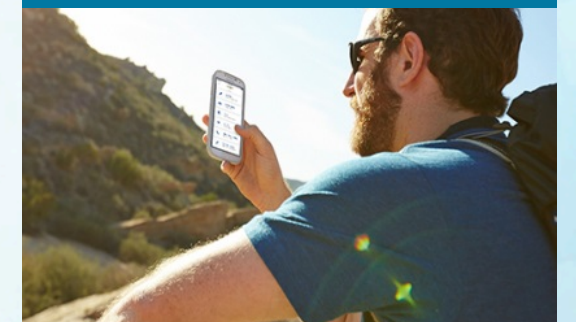
AUTONOMOUS



PERSONALIZATION



REMOTE FUNCTIONS



CONNECTIVITY

GM HAS 20 YEARS OF CONNECTIVITY LEADERSHIP THROUGH ONSTAR



3M+ 4G LTE Connected

Vehicles Deployed Globally



RemoteLink

2.6M Mobile App Users

Globally



133,000,000
INTERACTIONS IN 2015



ANNUAL GROWTH

2015
2,426,932

2014
1,702,392

2013
945,581

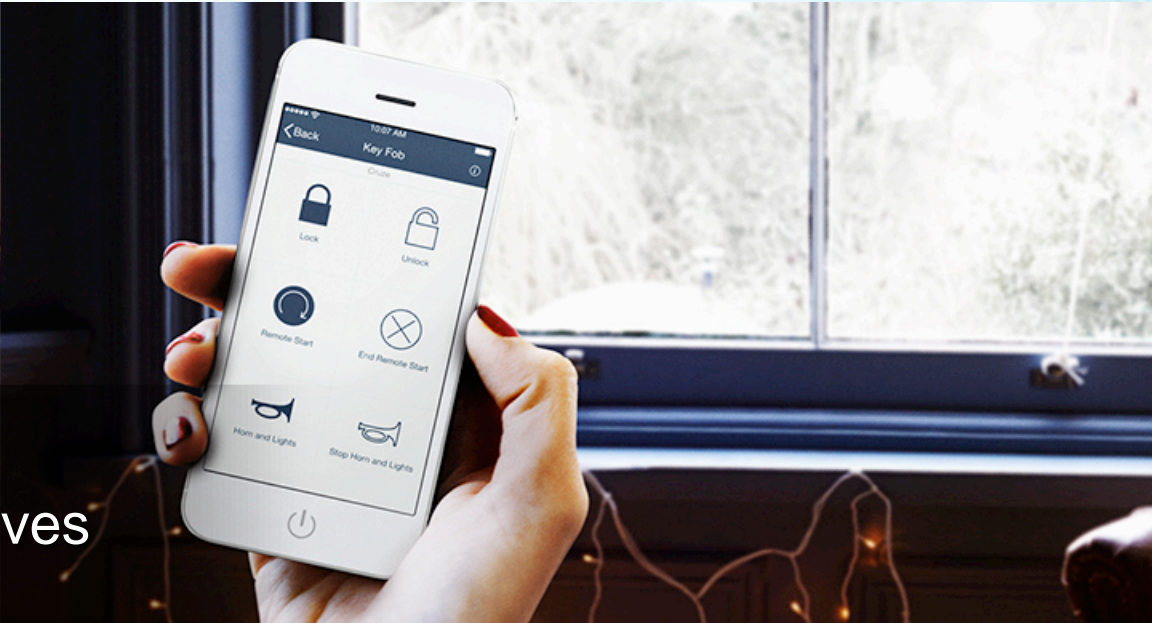
CURRENT GROWTH RATE OF
100K-120K PER MONTH

CONNECTIVITY

SOON EVERY CAR MADE WILL BE CONNECTED AND ENABLE NEW BUSINESS MODELS



More than just entertainment
A fully connected extension of people's lives



Autonomous vehicle sensors have the potential
for many other applications of vehicle data



A light blue Chevrolet Bolt EV is shown driving on a winding road during sunset. The car is in motion, with a blurred background of trees and a road that curves to the right. The sky is a mix of orange, yellow, and blue, suggesting the time is either dawn or dusk. The car's headlights are on, and the Chevrolet logo is visible on the front grille.

ELECTRIFIED PROPULSION

GENERAL MOTORS

Chevrolet Volt



Chevrolet Malibu Hybrid



Cadillac CT6 Plug-In Hybrid



Chevrolet Bolt EV



238

MILES

**EPA-ESTIMATED
RANGE**



A top-down view of a red Chevrolet car. The car is centered in the frame, with its hood and front grille clearly visible. The Chevrolet bowtie logo is prominent on the grille. On the dashboard, a pink, stylized mustache is placed, adding a humorous touch. The car is parked on a dark, textured surface. The text 'URBAN MOBILITY' is overlaid on the right side of the car's hood.

**URBAN
MOBILITY**

GENERAL MOTORS

SIGNIFICANT URBAN MOBILITY PROJECTS

GOOGLE PILOT



SJTU EN-V 2.0



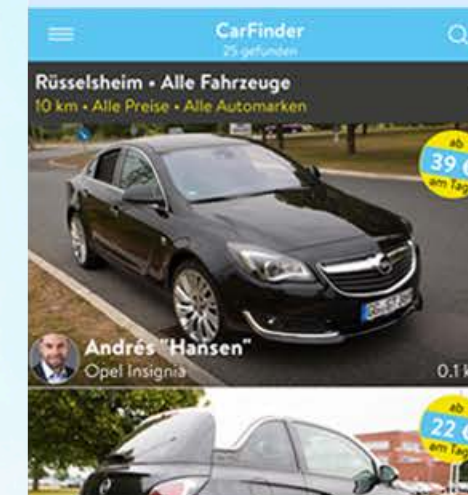
WARREN TECH CENTER SHARING



MAVEN CITY-WIDE CAR SHARING



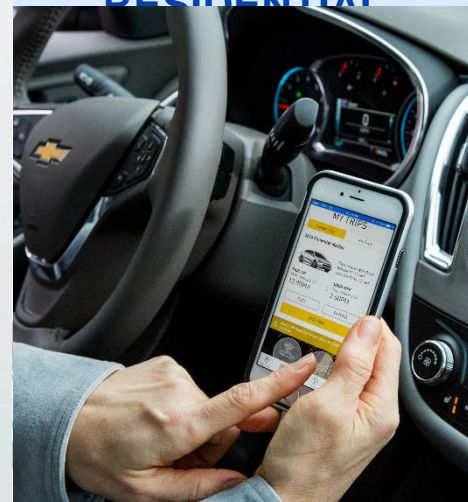
OPEL CarUnity



LET'S DRIVE NYC



MAVEN RESIDENTIAL



eBike concept



APPLE WATCH



CAR-SHARING AND EVS

GM's car-sharing service launched this year

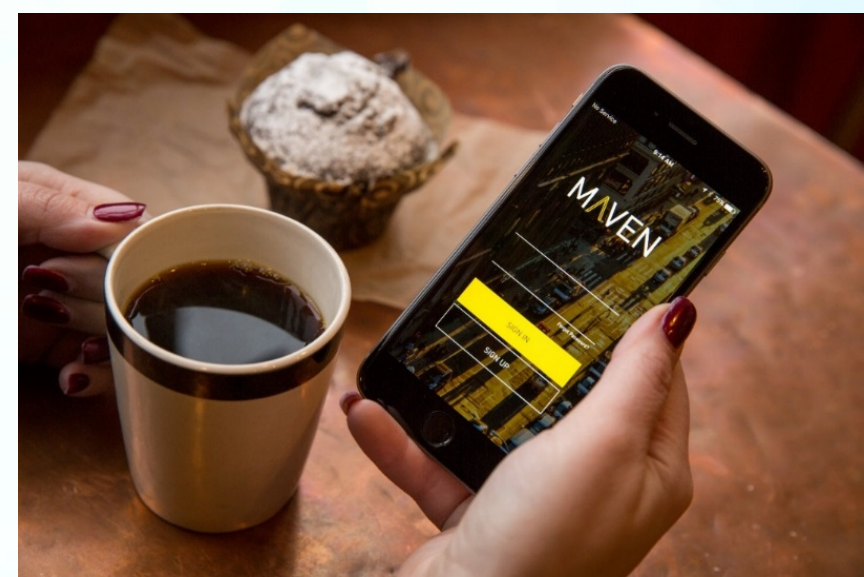
- Operates in Ann Arbor, NYC, Chicago, Boston, DC
- Announced San Francisco, LA, Denver

City: **MAVEN**

Maven is an open sharing model allowing members to make reservations for station-based round-trip use of a variety of vehicles located around the city

Residential: **MAVEN**
Residential

Maven+ is an exclusive offering featuring a dedicated fleet for residential communities with added white-glove service and member perks



MAVEN



Volt is one of the most popular vehicles in the Maven fleet and will help drive broader EV awareness and market acceptance

RIDE-SHARING AND EVS

Lyft and GM's Express Drive Expands to Colorado and California

Welcomes Chevrolet Bolt EV in California

2016-07-11

...Express Drive's California members will have access to vehicles from the **largest electric vehicle fleet in ridesharing**, including the 2017 Chevrolet Bolt EV (available late 2016) and the extended-range electric 2016 Chevrolet Volt...

Goal is to create largest EV fleet in ridesharing

- **High mileage** application for ZEV technology
- **High exposure** for riders and drivers alike to the benefits of EVs
- **Express Drive** (GM rentals to Lyft drivers) operates in Chicago, Boston, DC, Baltimore, SF, LA. Denver planned.



Express Drive

Allows ride-share drivers to make extended rentals of a quality vehicle at a great value including insurance and maintenance



A Bolt EV in a rideshare fleet will provide real-world experience with ZEV technology for a large, much more diverse number of drivers and passengers.

AUTONOMOUS TECHNOLOGIES



GENERAL MOTORS

CRUISE AUTOMATION



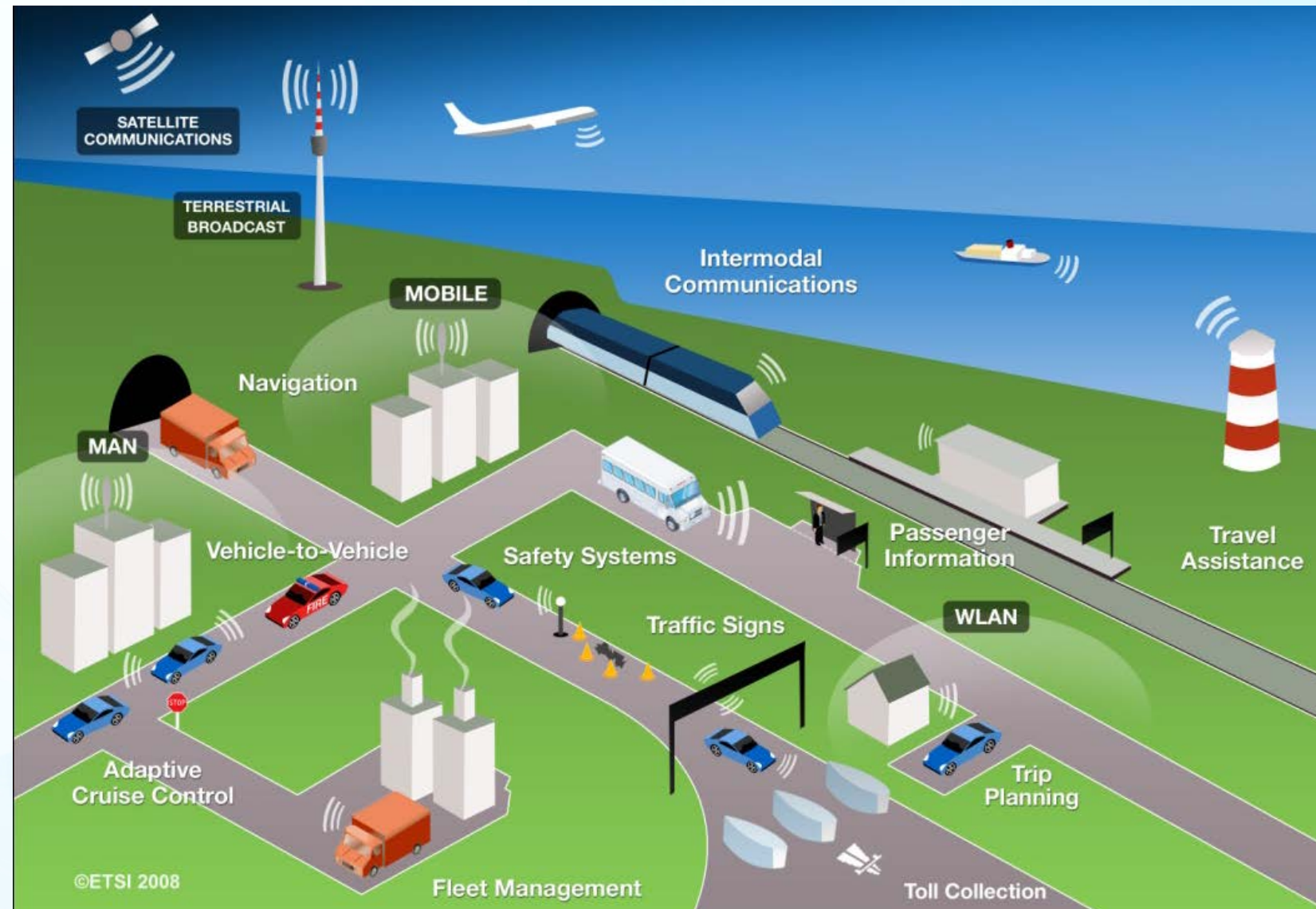
AUTONOMOUS VEHICLE TESTING

SAN FRANCISCO



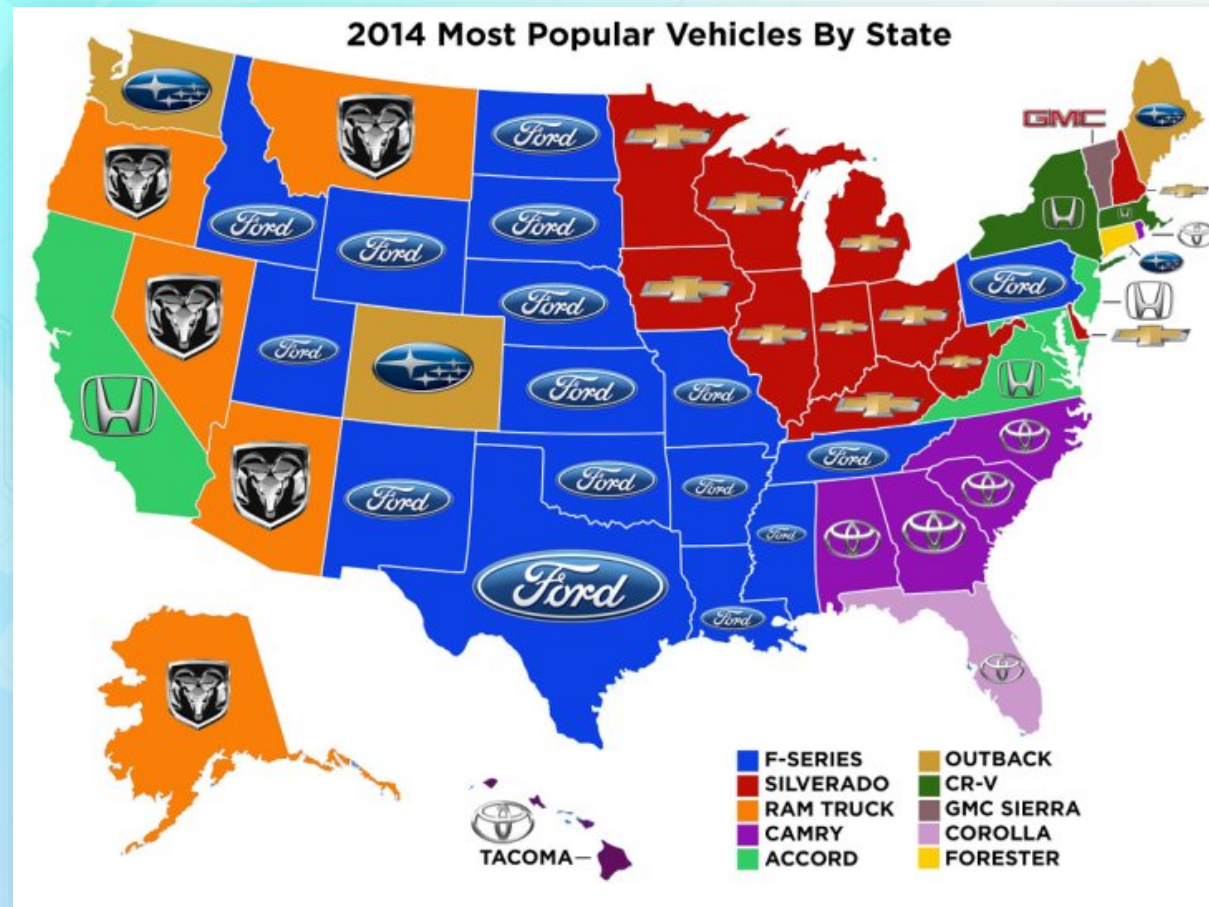
INTELLIGENT TRANSPORTATION IN THE NEXT DECADE (2025)

- ▶ Automated highway driving
- ▶ Partial/full urban driving
- ▶ Extensive V2V (and V2P) capability
- ▶ Acceleration of intelligent infrastructure
- ▶ High-volume/high-speed integrated connectivity
- ▶ Efficiency/electrification
- ▶ Shared mobility



...AND DOING ALL OF THIS SUCCESSFULLY IN VARIABLE MARKET CONDITIONS

Yahoo! Autos February 20, 2015



Data: IHS Automotive/Graphic: Yahoo Autos.

<https://autos.yahoo.com/blogs/motoramic/the-most-popular-new-vehicle-in-each-state--not-what-you-might-expect-181118005.html>

LA Times, February 14, 2015.

Accord Cruises to No. 1 in Sales.

...The rankings reflect the car-centric nature of the California auto market, [Libby said].

“The difference in vehicle mix varies so much between states it is almost like they are different countries,” Libby said. “At the other end of the Spectrum is Texas which skews toward big pickups and then domestic products.”

...“California just doesn’t have the ‘buy American’ culture of the Midwest and other places where the American car Companies manufacturer their vehicles,” [Jake] Fisher said. The environment also has been a bigger issues in California car sales...”



THANK YOU!

