





MaaS and the Effect of AVs on People, Place and Policy

Daniel Peterson, PE, PTOE, PTP

Autonomous Vehicles



Mobility as a Service









Mobility as a Service





























Cars, Trucks & Buses in the US

- US Passenger Car fleet: 240 million
- Average Age of PC fleet: 11.5 years
- Single Unit Trucks: 8.3 million
- Combination (Tractor Trailers): 2.58 million
- Transit Buses: 62,450

Rental Car fleet: 5 million



Mobility as a Service



People: Right Sized for Task



People: Save Money

- \$8,700/year average cost to own a car
- Does nothing 95% of the day



People: Save Money

- Family Car Subscription ~ Phone Bill (\$200/mo.)
- \$6,300 a year back into your pocket



People: Access to Mobility

- 20% of U.S. population can't drive
- Many can't afford a car; and rural transit is time consuming, inefficient & dehumanizing





People: Better Service

First/last mile, now first/last 10 miles



Stuff



Transit

People: Carpooling is cool & fun!



Key Research

THE EARTH INSTITUTE COLUMBIA UNIVERSITY

TRANSFORMING PERSONAL MOBILITY

Lawrence D. Burns, Director, Program on Sustainable Mobility
William C. Jordan, President, Jordan Analytics LLC
Bonnie A. Scarborough, Program Manager, Program on Sustainable Mobility
The Earth Institute, Columbia University

http://sustainablemobility.ei.columbia.edu/files/2012/12/Transforming-Personal-Mobility-Jan-27-2013.pdf



Place: Repurpose parking



Policy: You can keep on driving!



Policy: Safer and efficient roads



Policy: Reducing mayhem

- Killed in vehicle collisions: 1.3 million/year
- Including injuries:
 40 million disability adjusted life years annually
- Cost? \$170 billion/year



Policy: Displaced workers









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