

Oregon's Electric Mobility Cluster

*Oregon Business
Summit*

December 2015



Summary

- **What is Drive Oregon?**
- **The Future of Mobility**
- **Benefits of Electric Vehicles**
- **Oregon Opportunities**
- **Oregon's Strategy: The Living Lab**



Drive Oregon

Nonprofit (501c6 & 501c3)

Established: 2011

Mission is to grow the electric vehicle industry and promote electric transportation in Oregon

Funded by Oregon Innovation Council (state lottery) and member companies

Membership 100+ companies, utilities, local governments, other stakeholders

www.driveoregon.org

business
oregon



Current Mobility System

Underutilized:

Cars parked over 95% of their lives

Average occupancy 1.08

Expensive:

Mobility is the 2nd highest expense for U.S. families (appx \$9,000 per year)

Just In Case

ICE Vehicles

Personal
Vehicle-Centric

Dirty:

ICEs emit 1.2 Gigatons of CO₂ each year, along with NO_x and SO_x air pollution

Inefficient:

About 1% of total energy used goes to actually moving people

Congested:

Gridlock traffic, stress, and other indirect costs amount to almost \$2T in societal expenditure in the existing system

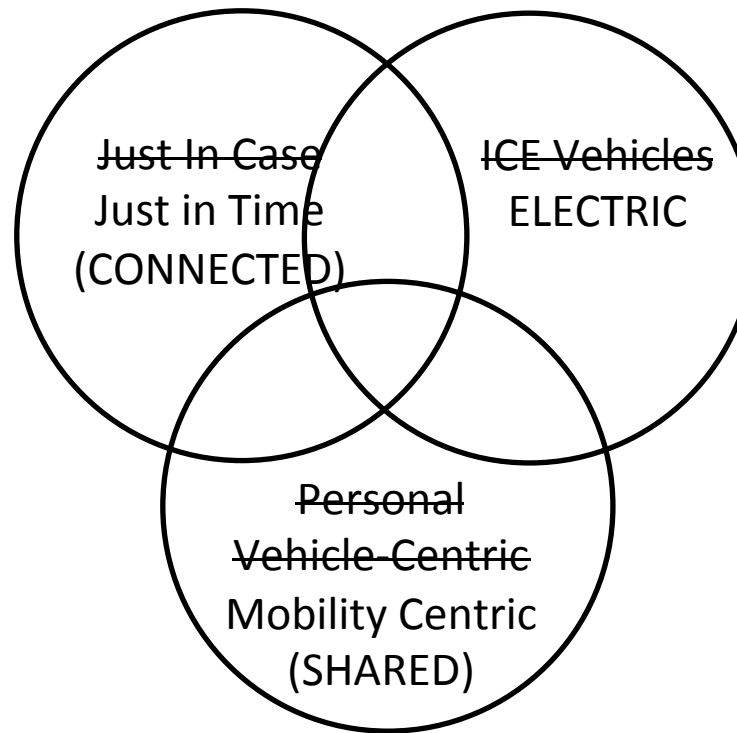
Dangerous:

Automobile accidents kill 100,000s of people each year

Adapted from



The Future: Electric, Connected, and Shared

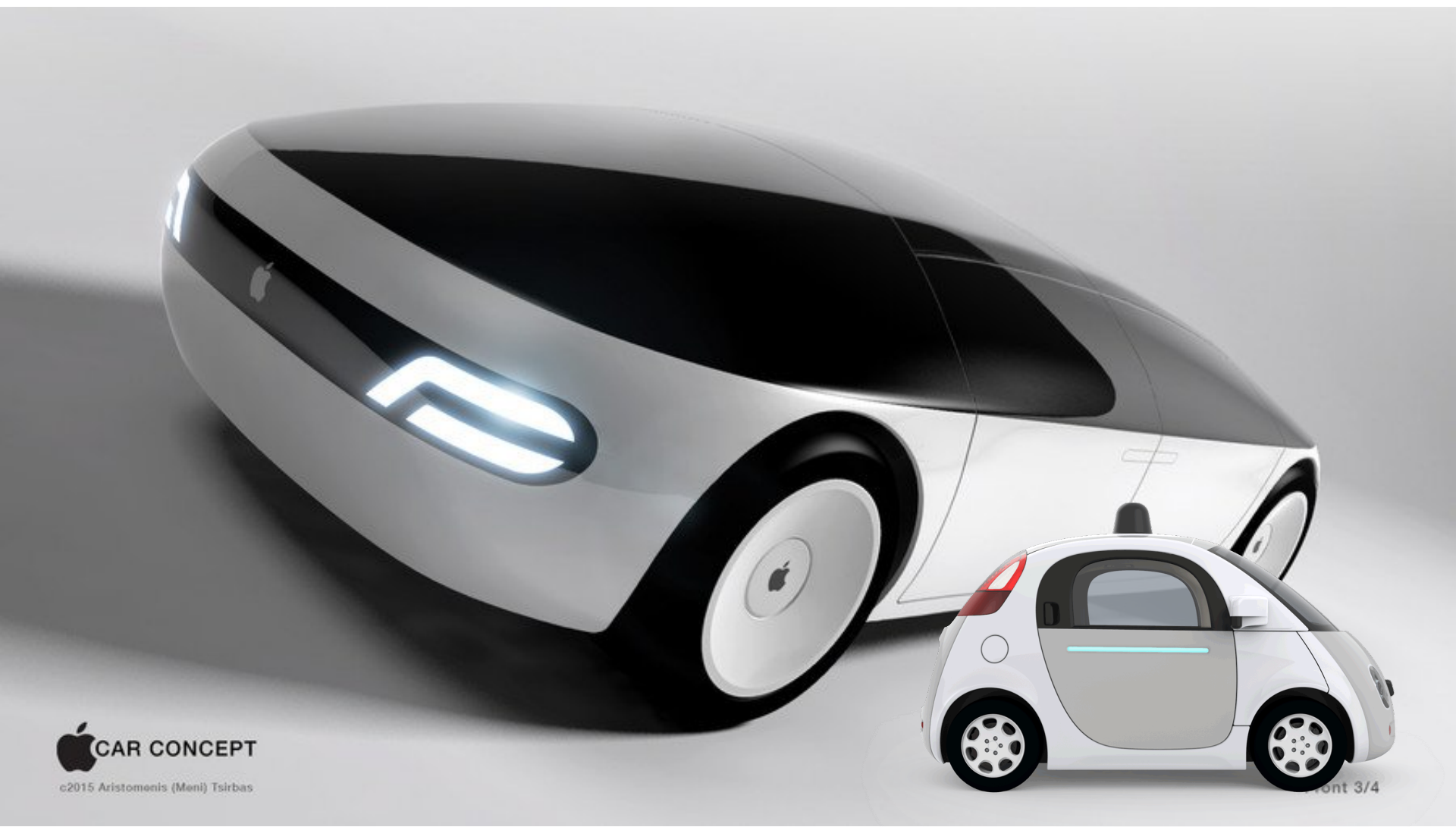


Adapted from



\$700 BILLION PER YEAR ON THE TABLE

THE ULTIMATE MOBILE DEVICE



 **CAR CONCEPT**
c2015 Aristomenis (Meni) Tsirbas

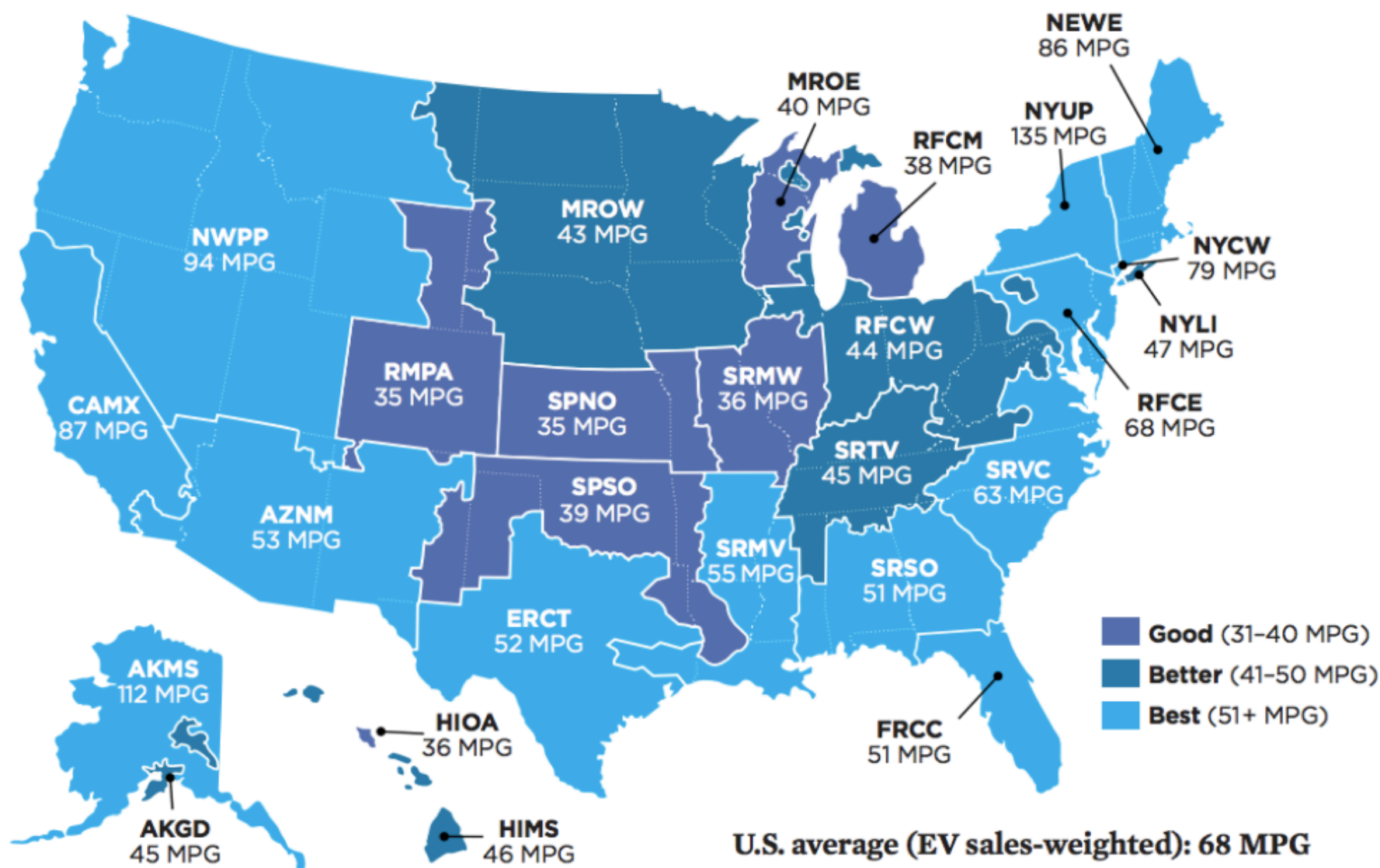
“The car is the ultimate mobile device”
– Apple Sr. VP Jeff Williams

Benefits: For Drivers...



Benefits: For the Environment...

FIGURE ES-1. Electric Vehicle Global Warming Pollution Ratings and Gasoline Vehicle Emissions Equivalents by Electricity Grid Region



Benefits: For the Economy...

- **Lower & stable operating costs (\$1 per “egallon”)**
- **\$7 billion leaves Oregon for fuel every year**
- **Every dollar shifted from oil creates 16X more jobs (UC Berkeley study)**
- **Every electric car purchased -> additional \$500-\$1,500 in state/local tax revenue (Drive Oregon/OSU study)**
- **Increasing EV sales increases GDP (Keybridge study)**

Oregon Opportunities

- **Charging equipment - \$3.8 billion by 2020**
- **Industrial/Commercial equipment - \$128 billion by 2025**
- **Li-ion batteries - \$24.1 billion in 2023**
- **“Connected cars” – \$100 billion by 2020**
- **Automotive electronics - \$240 billion in 2020**
- **Cars – between 7-35% electric/hybrid by 2025**
- **All new vehicles sold electric by 2050**

Oregon Opportunities



Oregon's Strategy

- **Strong tech-loving “early adopter” market**
- **Supportive public policies**
- **Welcoming business climate**
- **Easy market access**
- **Collaborative, innovative approach**
- **Drive Oregon = “Plug and Play”**



Oregon's Pitch To Electric-Car Industry: Come Test New Stuff Here!



John Voelcker

16 Comments

2,674 views

Nov 5, 2015

[Follow John](#)

[Take Us With You!](#)

How you can “plug in”

- Take a test drive
- Sign up for our free e-news
- Join our monthly events
- Support your employees with workplace charging
- EV Roadmap Conference
www.evroadmapconference.com
- Join Drive Oregon
- Let us know how we can help!





**Drive
Oregon**

Innovation in Electric Mobility

business
oregon.

Questions?

Jeff Allen

Jeff.allen@driveoregon.org

(503) 724-8670

www.driveoregon.org

Twitter: @DriveOregon