



# MULTI-STATE ZEV TASK FORCE

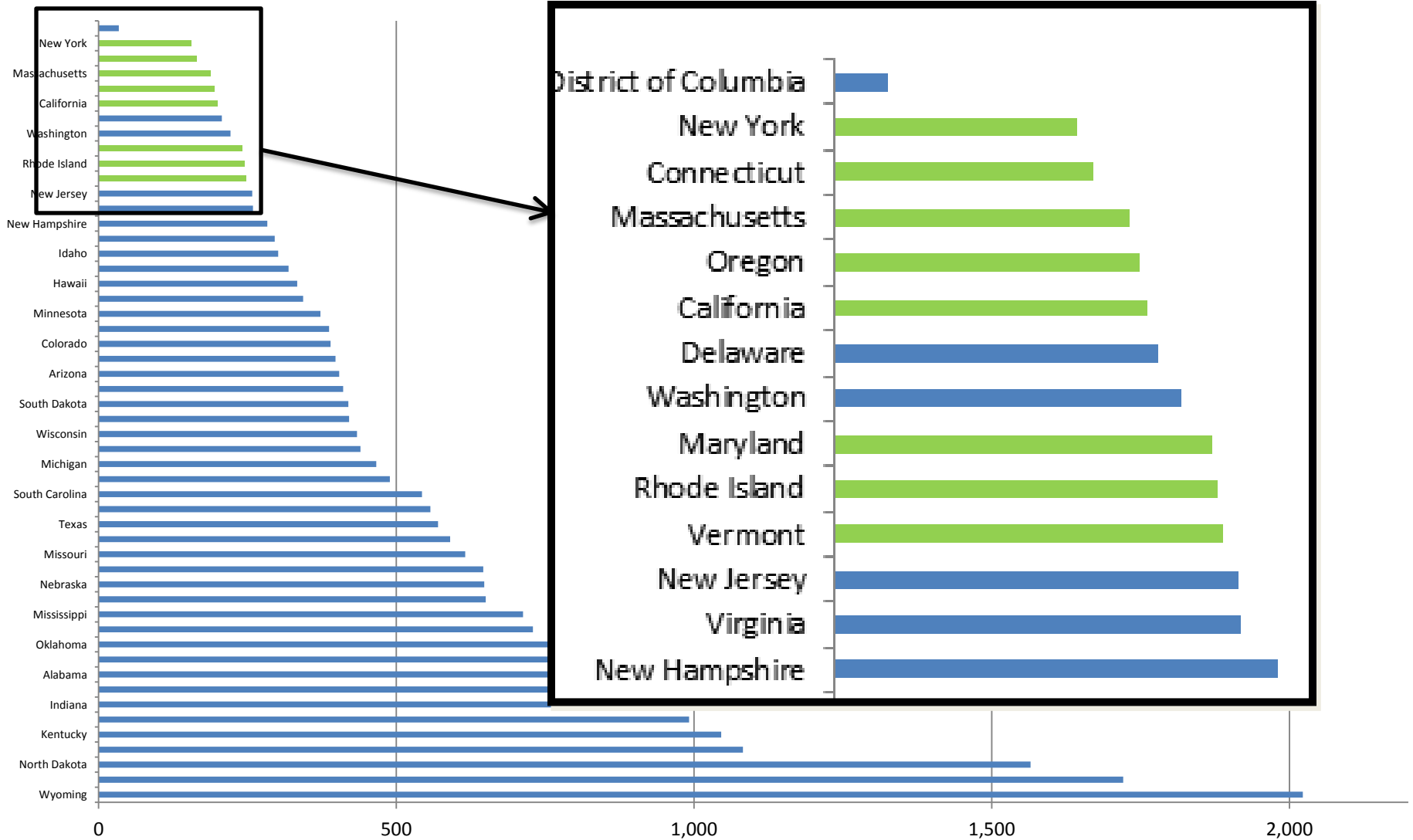


## Status Update

### EV Roadmap Conference

July 20, 2016

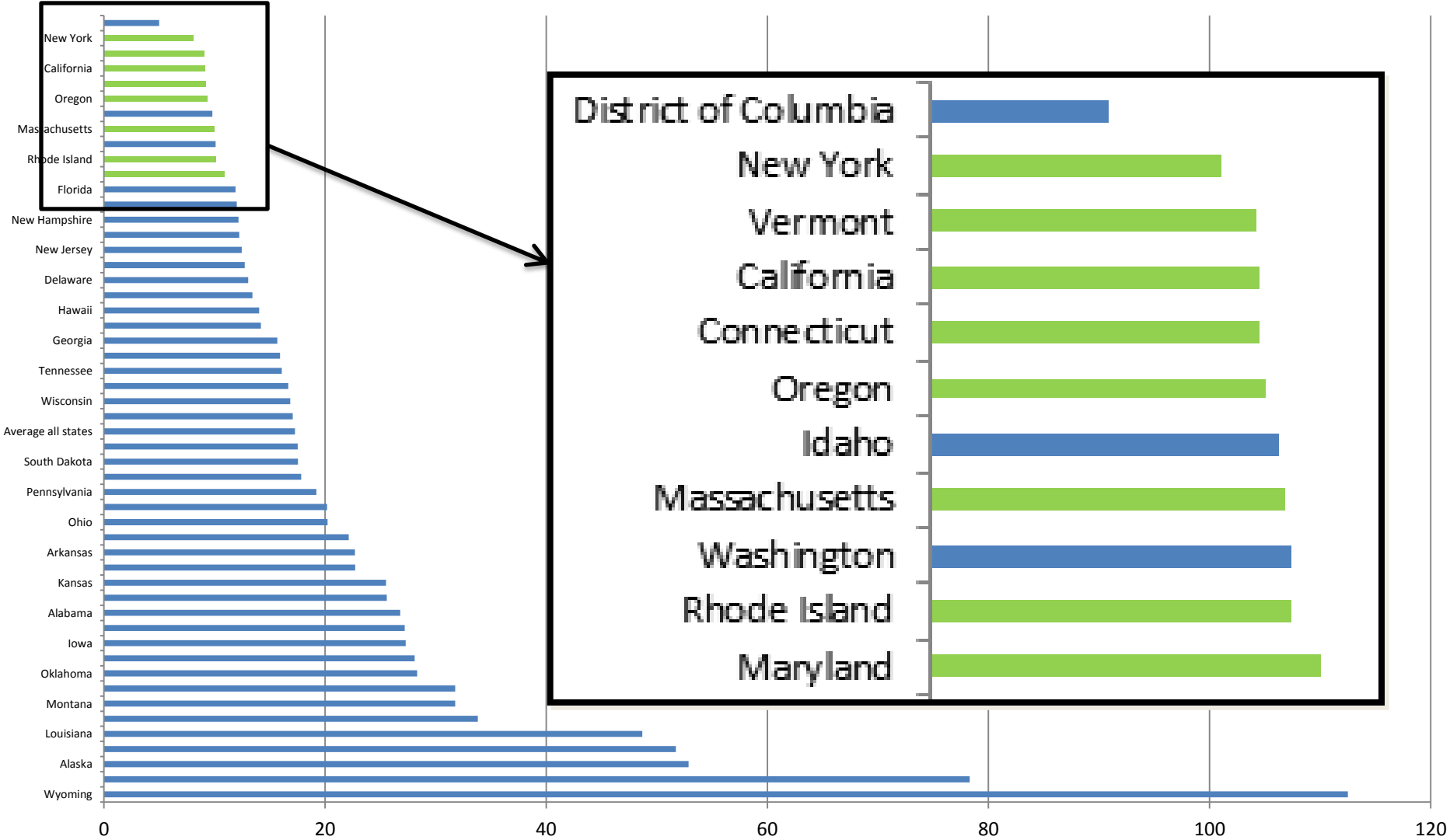
# Energy-Related CO<sub>2</sub> Intensity, 2011



Metric Tons CO<sub>2</sub> per Million Dollars of GDP

Source: EIA (<http://www.eia.gov/environment/emissions/state/analysis/#1>)

# Energy-Related CO<sub>2</sub> Emissions per Capita, 2011

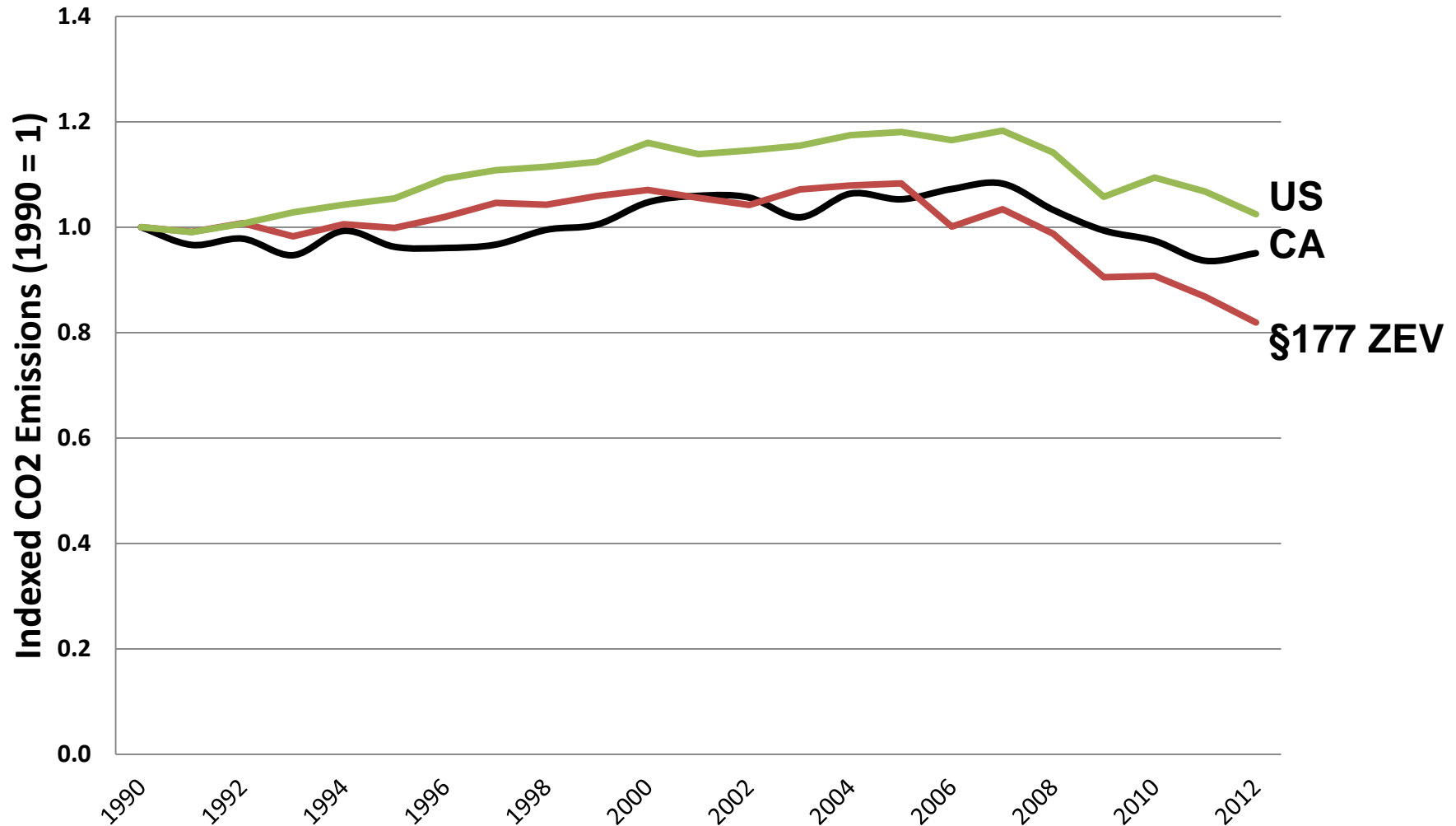


Energy-Related CO<sub>2</sub>, Metric Tons per Capita

Source data: [www.eia.gov/environment/emissions/state/analysis/](http://www.eia.gov/environment/emissions/state/analysis/)



# CO<sub>2</sub> Emissions Indexed to 1990



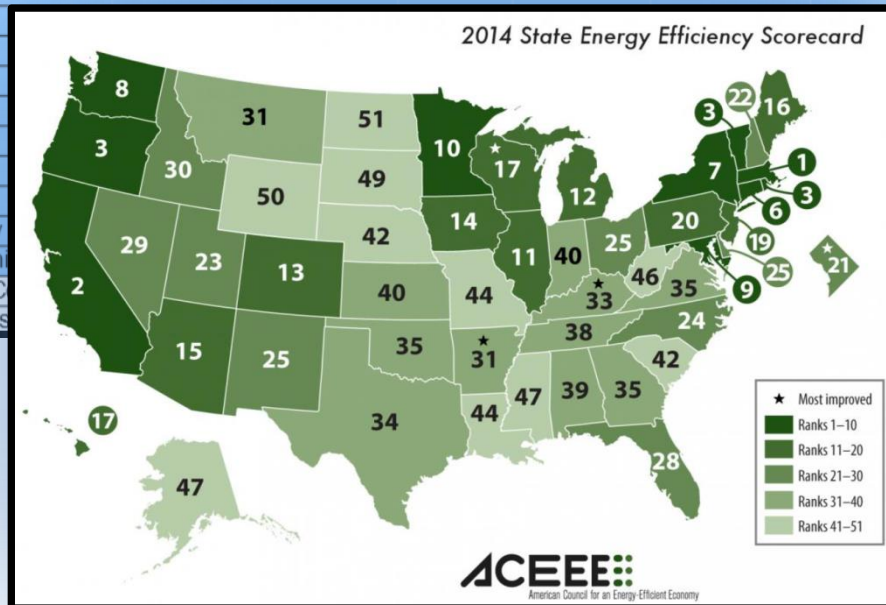
# ACEEE Statewide Efficiency Rankings

Table 2. Summary of state scores in the 2014 State Scorecard

Rank	State	Utility & public benefits programs & policies (20 pts.)	Transportation policies (9 pts.)	Building energy codes (7 pts.)	Combined heat & power (5 pts.)	State government initiatives (7 pts.)	Appliance efficiency standards (2 pts.)
1	Massachusetts	20	7	5.5	4.5	5	0
2	California	12.5	8.5	7	4	6.5	2
3	Oregon	15	7	5.5	3.5	5.5	1
3	Rhode Island	20	5	6	3	3	0.5
3	Vermont	18.5	6	6	3	4	0
6	Connecticut	14	5	5	4.5	6	1
7	New York	13.5	8	5.5	2	6	0
8	Washington	13	7	6	2.5	4.5	0.5
9	Maryland	10.5	5	6	3	5	0.5
10	Minnesota	14	3.5	4.5	1.5	5.5	0
11	Illinois	9	5	6	1.5	5.5	0
12	Michigan						
13	Colorado						
14	Iowa						
15	Arizona						
16	Maine						
17	Hawaii						
17	Wisconsin						
19	New Jersey						
20	Pennsylvania						
21	District of C						
22	New Hamp						

Table 4. Leading states in the State Scorecard, by years at the top

State	Years in top 5	Years in top 10
California	8	8
Oregon	8	8
Massachusetts	7	8
New York	6	8
Vermont	6	8
Connecticut	4	8
Rhode Island	1	7
Washington	0	8
Minnesota	0	7
Maryland	0	4
Maine	0	2
New Jersey	0	2
Wisconsin	0	1
Illinois	0	1



# 2050 GHG Reduction Goals

STATE	GOAL
MA	80% below 1990
CT	80% below 2001
RI	80% below 1990
VT	80% below 1990
NY	80% below 1990

# California's Unique Role in Reducing State Transportation Emissions

- Clean Air Act §209 preempts all states, except for California, from establishing their own motor vehicle emission standards.
- Clean Air Act §177 permits other states to adopt and enforce emission standards as long as they are identical to California's.

# What is the “Travel” Provision?

- Limits volume requirements to percentage of California sales, regardless of size and number of 177 ZEV states.
- Lets manufacturers earn credit in every ZEV state for a vehicle placed in any ZEV state.



# Intended Effect of “Travel” Provision

Extending travel for BEVs through MY 2017 “will likely result [in] over 40,000 fewer BEVs placed in the Section 177 ZEV states...”

## -ISOR for 2012 ZEV Amendments

“Starting in 2018 model year, the travel provision will no longer apply to BEVs, and therefore Section 177 states can expect vehicles to be placed outside of California...”

## -FSOR for 2012 ZEV Amendments

# Multi-State ZEV MOU



## State Zero-Emission Vehicle Programs Memorandum of Understanding

WHEREAS, the Signatory States have adopted regulations requiring increasing sales of zero-emission vehicles (ZEVs), or are considering doing so; and

WHEREAS, accelerating the ZEV market is a critical strategy for achieving our goals to reduce transportation-related air pollution, including criteria air pollutants, mobile source air toxics and greenhouse gas emissions (GHGs), enhance energy diversity, save consumers money, and promote economic growth; and

WHEREAS, our states are committed to reducing air pollution, including the emission of GHGs and other air pollutants from the mobile source sector; and

WHEREAS, many of our states have obligations or otherwise seek to reduce GHGs consistent with science-based targets by 2050; and

WHEREAS, motor vehicles are among the largest sources of GHGs and criteria air pollutants that adversely affect the health and well-being of our citizens in all of our states; and

WHEREAS, providing transportation alternatives such as ZEVs will help improve air quality, reduce the use of petroleum-based fuels in the transportation sector, protect consumers against volatile energy prices, and support the growth of jobs, businesses and services in a clean energy economy; and

WHEREAS, an increasing variety of vehicles that operate on hydrogen and low-cost electricity are commercially available and have the potential to significantly reduce emissions of criteria pollutants and GHGs, enhance consumer choice, and allow for home fueling; and

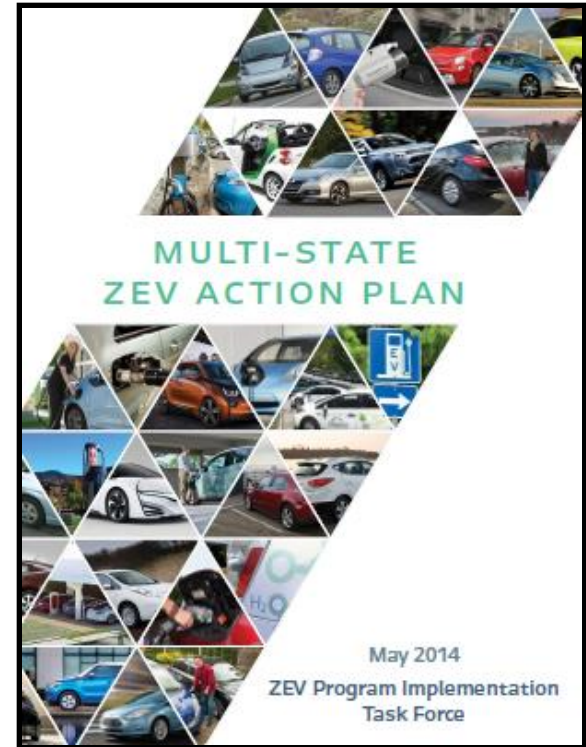
In October 2013, eight Governors announced an initiative to put 3.3 million ZEVs on their roads by 2025 to:

- Reduce GHG emissions
- Improve air quality and public health
- Enhance energy diversity
- Save consumers money
- Promote economic growth

**Multi-State ZEV Action Plan to be released in May 2014**

# Multi-State Action Plan

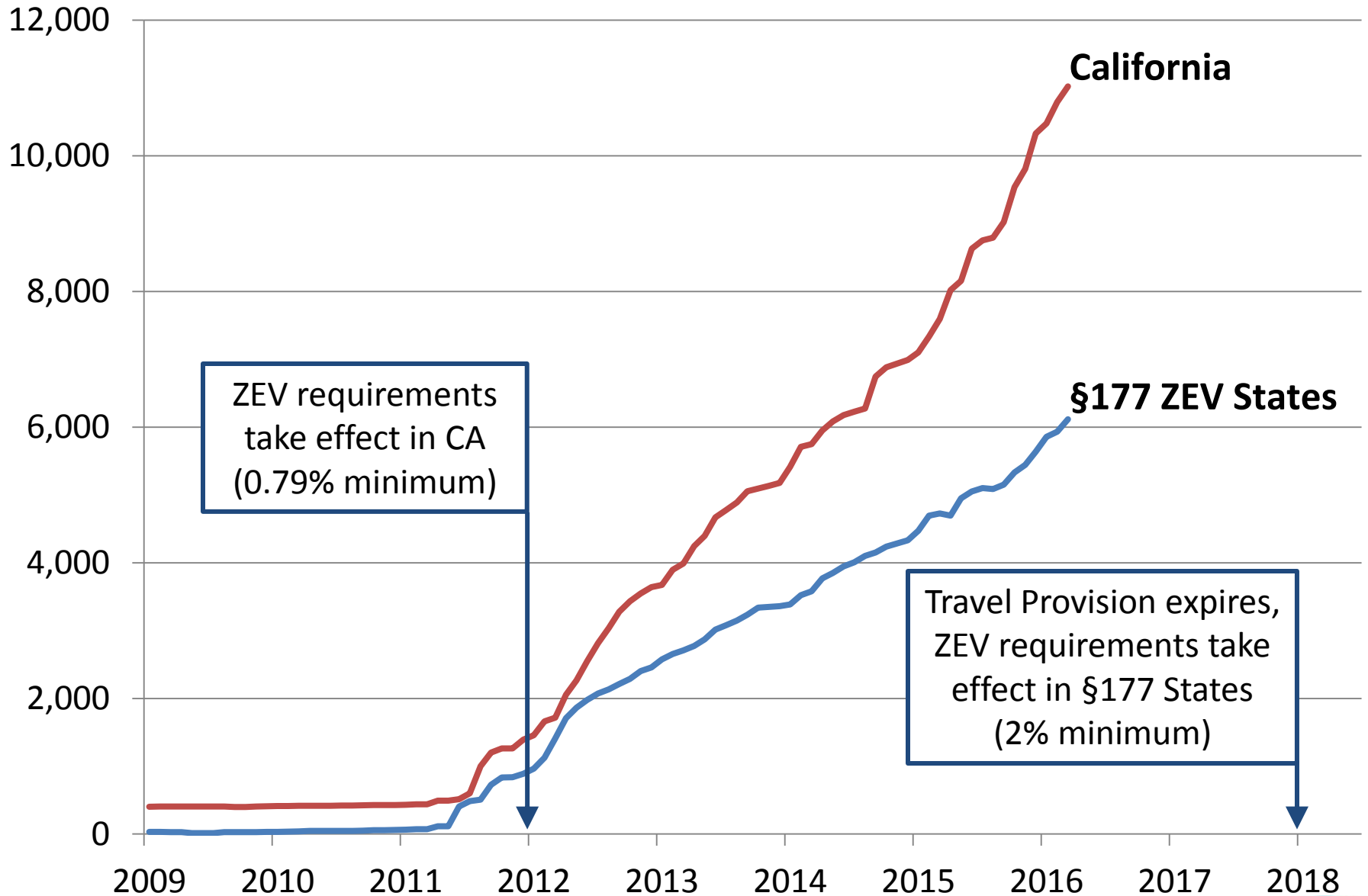
- Released May 2014
- 11 specific recommendations to:
  - support MOU goals
  - guide interstate coordination
  - advise state-specific action
- Informed by intensive stakeholder process
- States formed ZEV Task Force to implement Action Plan
- Stakeholder engagement ongoing



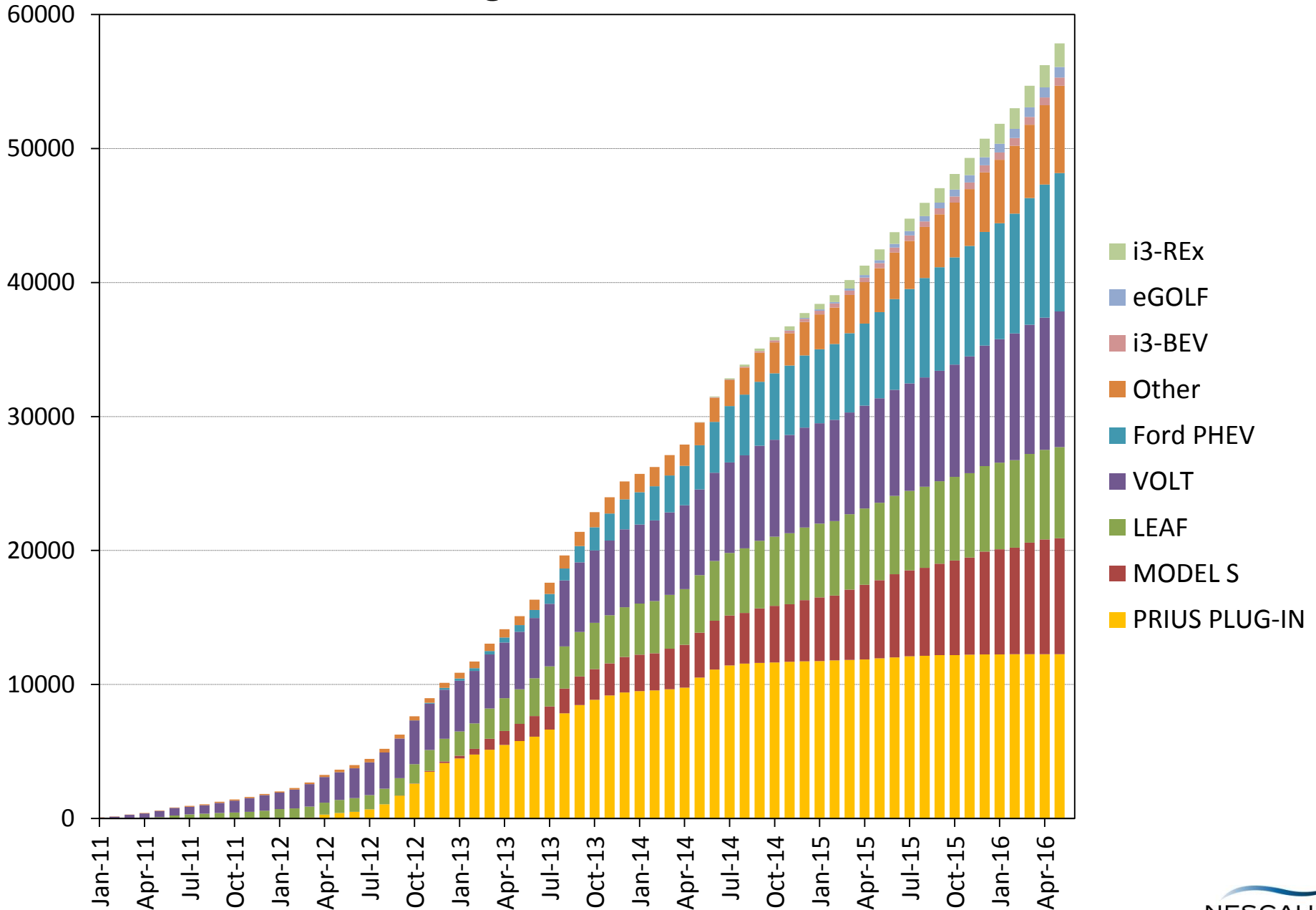
# ZEV MOU State Incentives

STATE	Purchase Incentive	EVSE	Fleets	Workplace Charging	HOV
CT	X	X	X		
MD	X	X	X		X
MA	X	X	X	X	
NY	X	X			X (and reduced tolls)
OR		X	X		
RI	X	X	X	X	n/a
VT	X	X		X	n/a

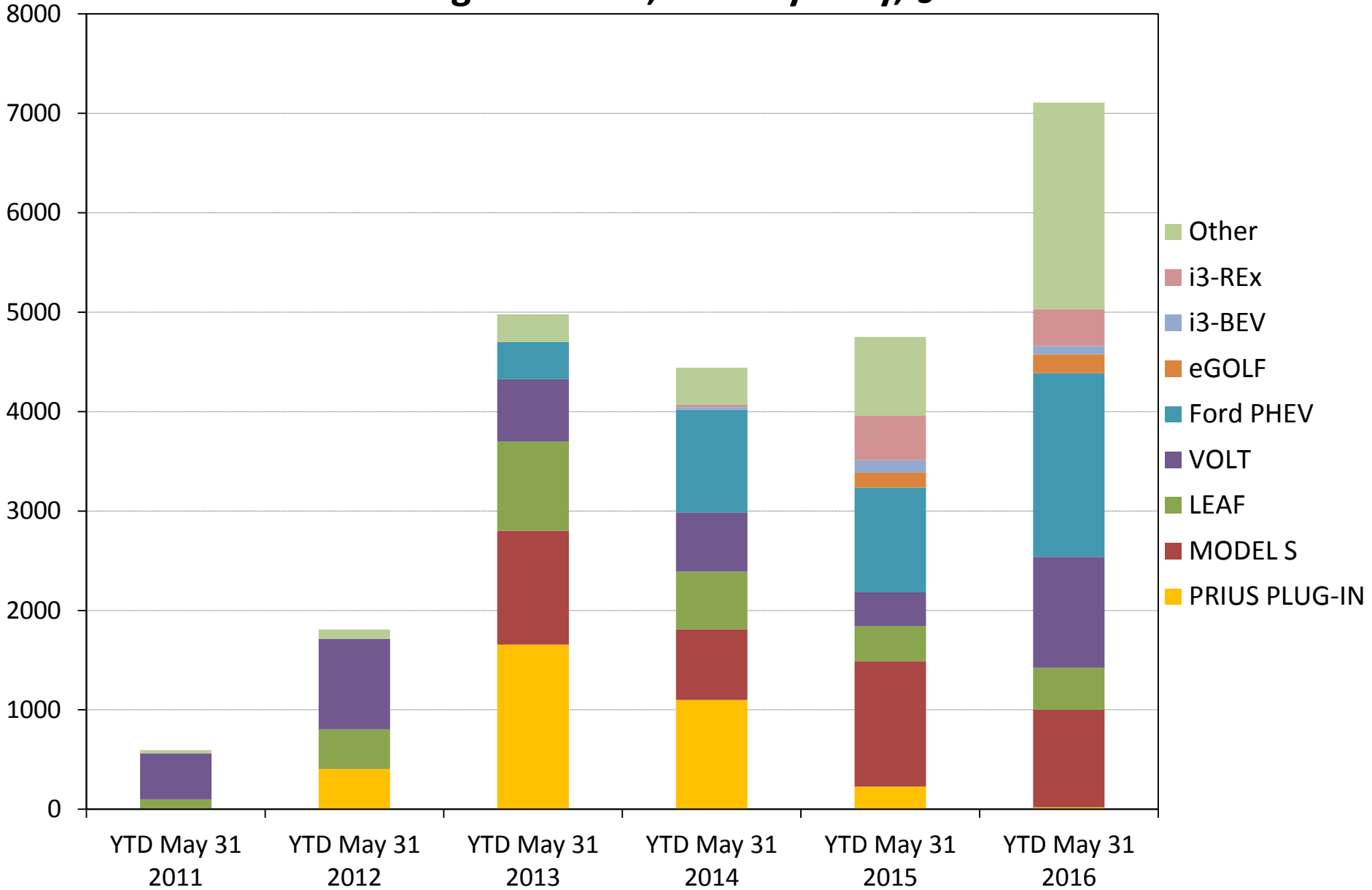
# Public and Private EV Charging Outlets



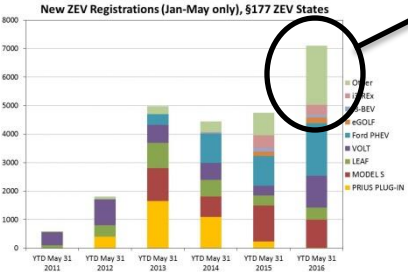
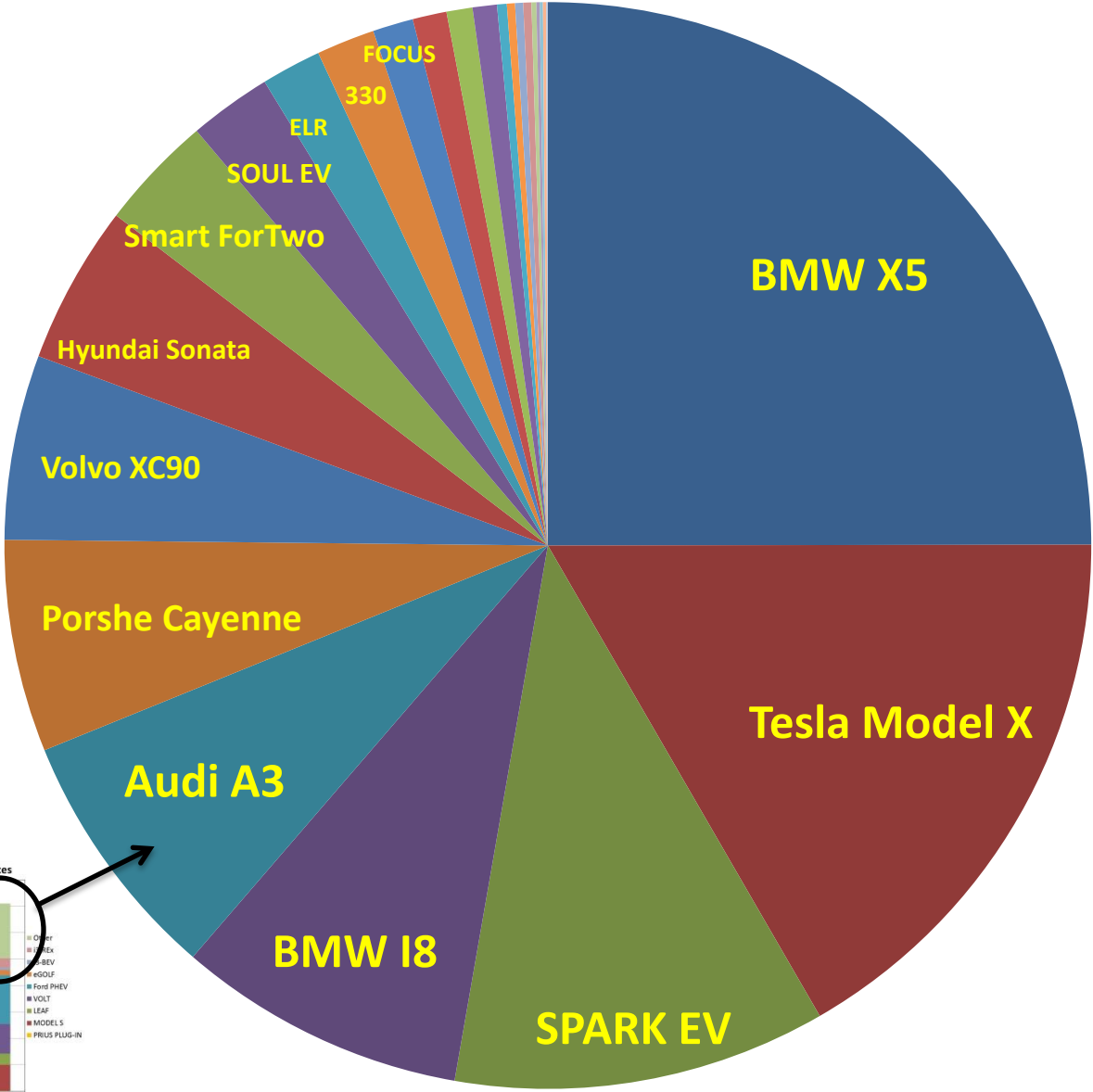
# Cumulative Registrations, §177 ZEV States



# New ZEV Registrations , January-May, §177 ZEV States



# Model Composition of the "Other" Category, Jan-May 2016



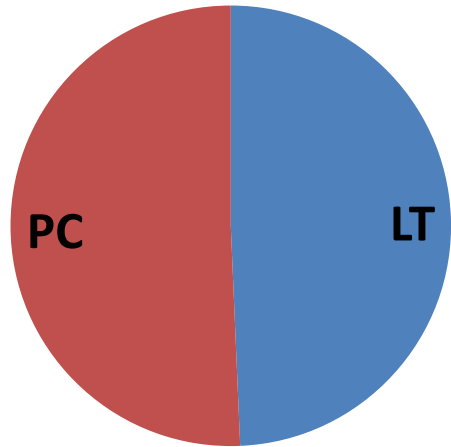




# Questions?

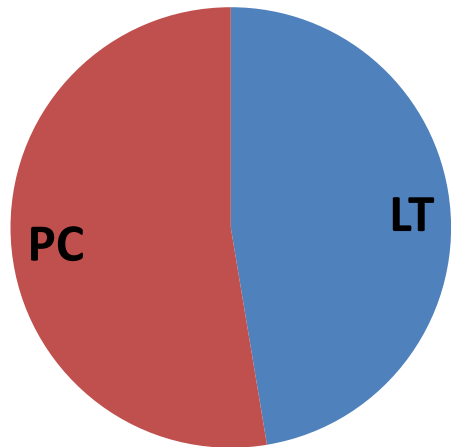
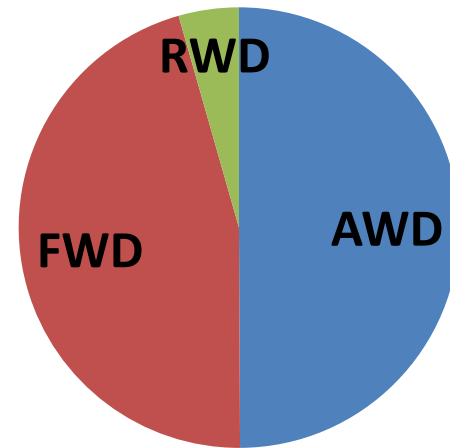
# Background Slides

## In-Use Fleet Mix

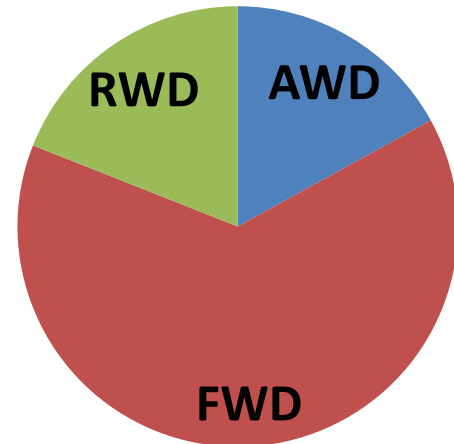


**§177 ZEV States**

## Drivetrain Market Share



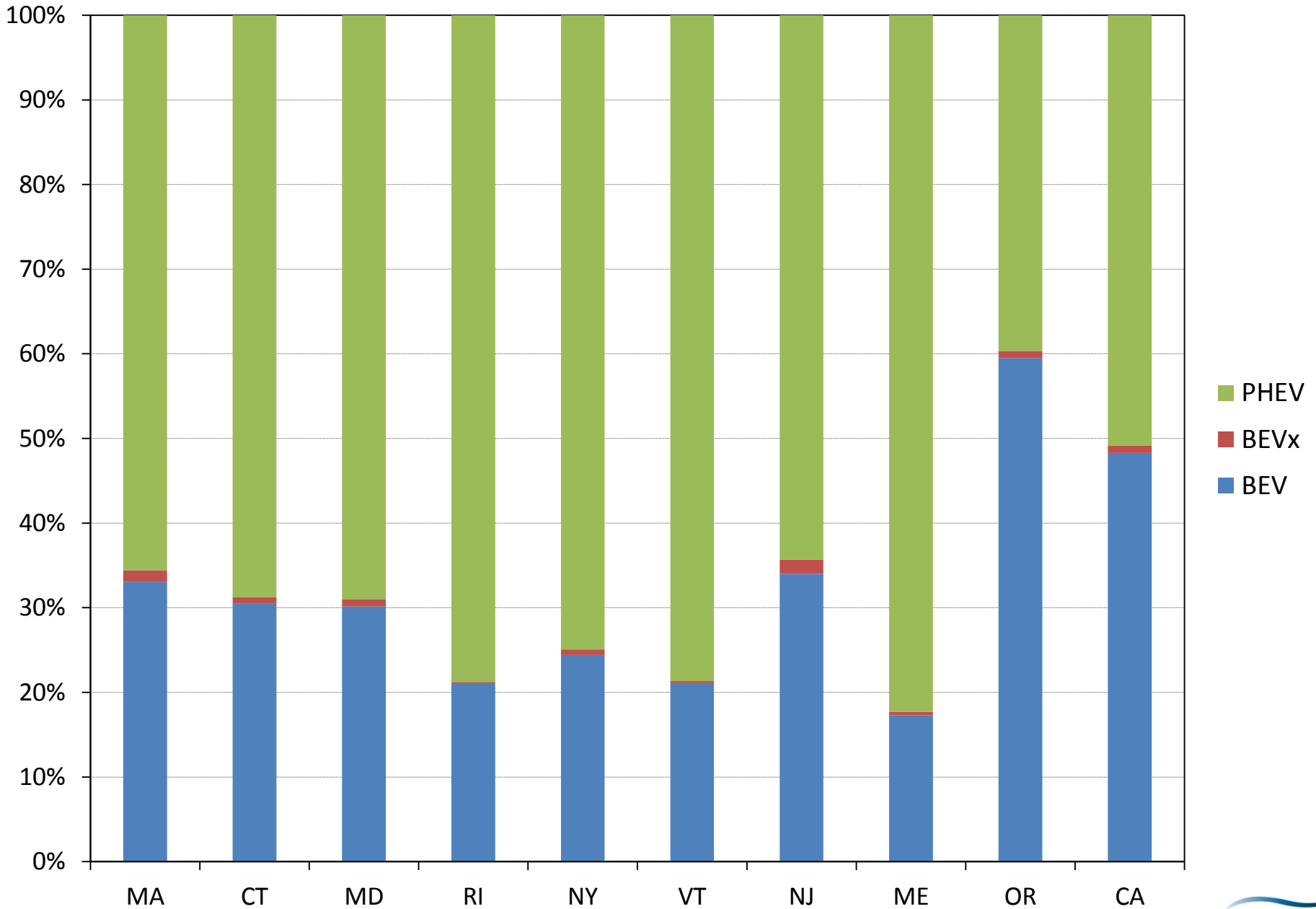
**California**



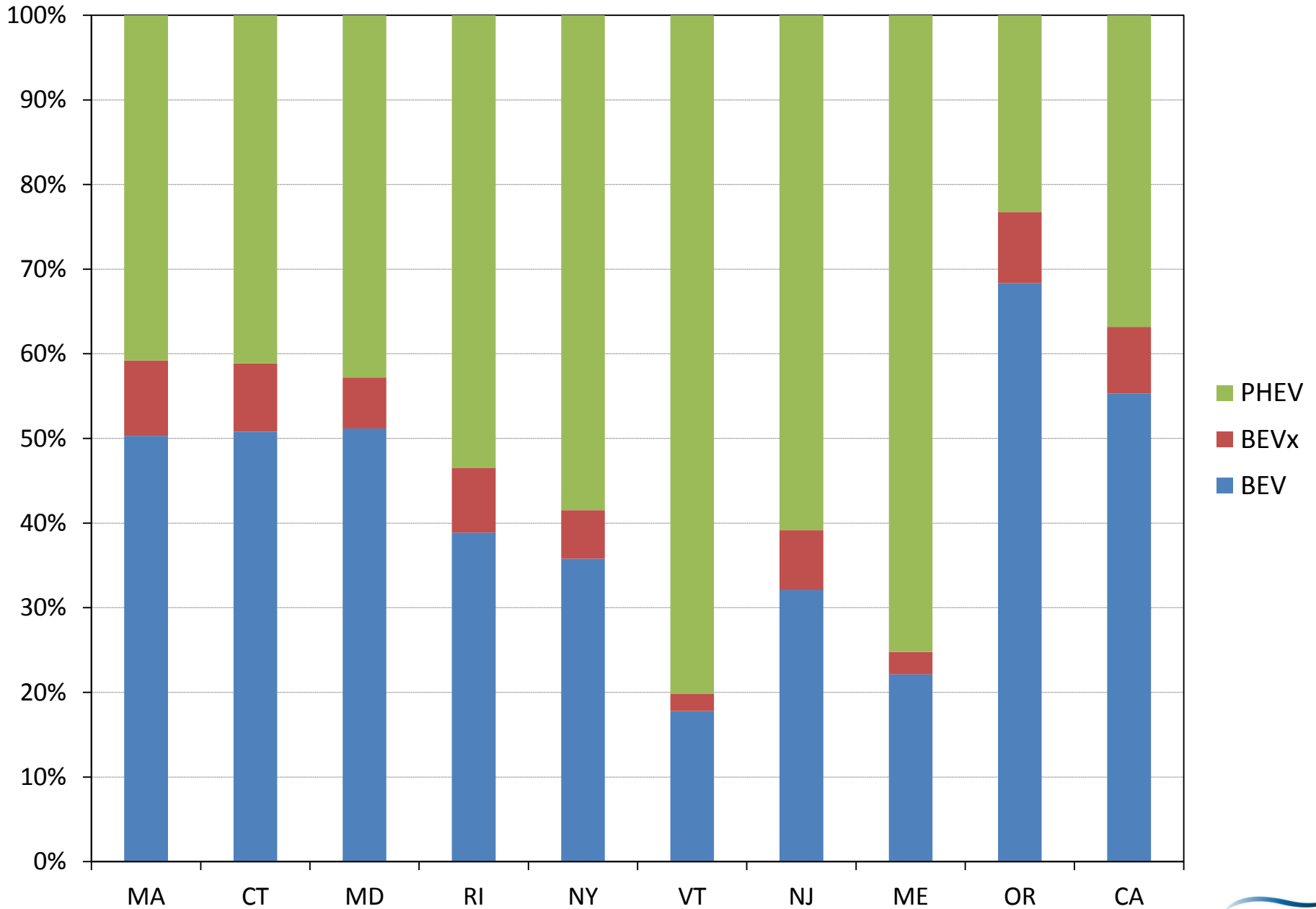
2014 In-use fleet mix from NADA Data 2014. <https://www.nada.org/nadadata>

2013 drivetrain market share data from Car and Driver based on data from Ward's. <http://blog.caranddriver.com/differential-distribution-where-rwd-awd-and-fwd-vehicles-are-sold-in-the-u-s-infographic/>

# PEV Sales Mix by State, 2011-2014



# PEV Sales Mix by State, 2015



# PEV Sales Mix by State, 2016 (Jan-May)

