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#### Andrew Dick, Transportation Analyst

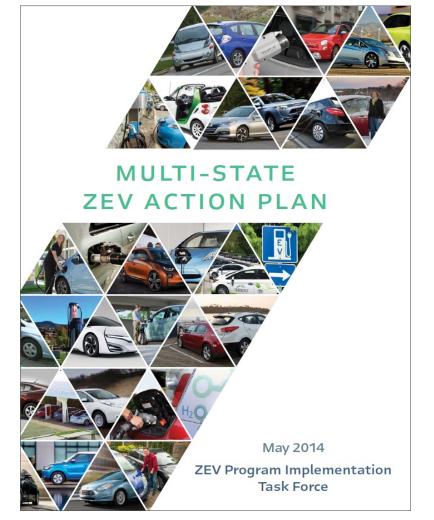
EV Roadmap 8 July 28, 2015 Portland, OR



## **Background and Overview**

- Eight ZEV Program states
- MOU signed October 2013
- Action Plan released May 2014









# **Implementation Workgroups**



- Incentives
- Dealers
- Fleets
- Hydrogen
- Infrastructure Planning
- Infrastructure Regulatory
- Outreach
- Workplace Charging





#### **State Progress on Incentives**



- Four states offered ZEV purchase incentives in 2014 (CA, MD, MA, VT)
- Legislation for purchase incentives proposed in three states in 2015 (CT, OR, RI)
- Five states offered purchase incentives for EVSE in 2014 (MD, NY, OR, MA, CT)





# **Connecticut Incentive Program-**



- Connecticut established point-of-sale EV rebate in May 2015
- \$3,000 for FCV or EV with battery pack > 18kWh
- \$1,500 for 7-18 kWh
- \$750 for < 7 kWh
- Rebate processed at dealership at time of vehicle purchase, reflected in final purchase price



MULTI-STATE ZEV TASK FORCE

## Dealerships

#### **Current Workgroup Activities:**

- Publishing Dealership
  Recognition document on
  ZEVStates.us website
- Highlighting state dealership recognition programs and leading ZEV dealers on website
- Developed and deployed tool to track vehicle availability in ZEV markets







## **State Progress on Dealerships**

#### **ZEV MOU states have:**

- Issued dealership recognition awards in California, Connecticut, and Vermont
- Conducted training/ education on consumer incentives
- Included an incentive for dealers who sell ZEVs in the Connecticut CHEAPR incentive program







#### **State Progress on Fleets**

All ZEV MOU states are taking action to add ZEVs to public fleets:

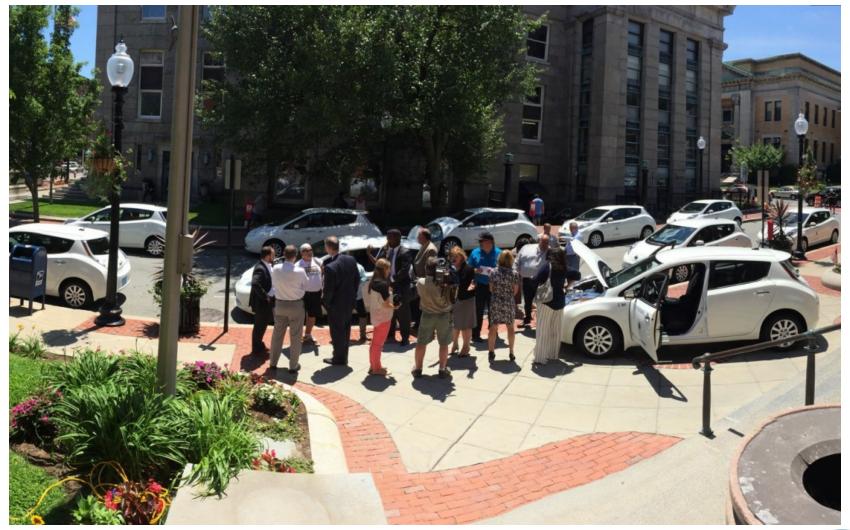
- Working on TCO tools for state fleet operators
- Establishing state fleet purchase targets
- Adding ZEVs to state fleet procurement lists
- Acquiring PEVs
- Installing charging stations
- Offering incentives to add PEVs to fleets







#### June 25 – New Bedford, MA adds 10 Leafs to fleet





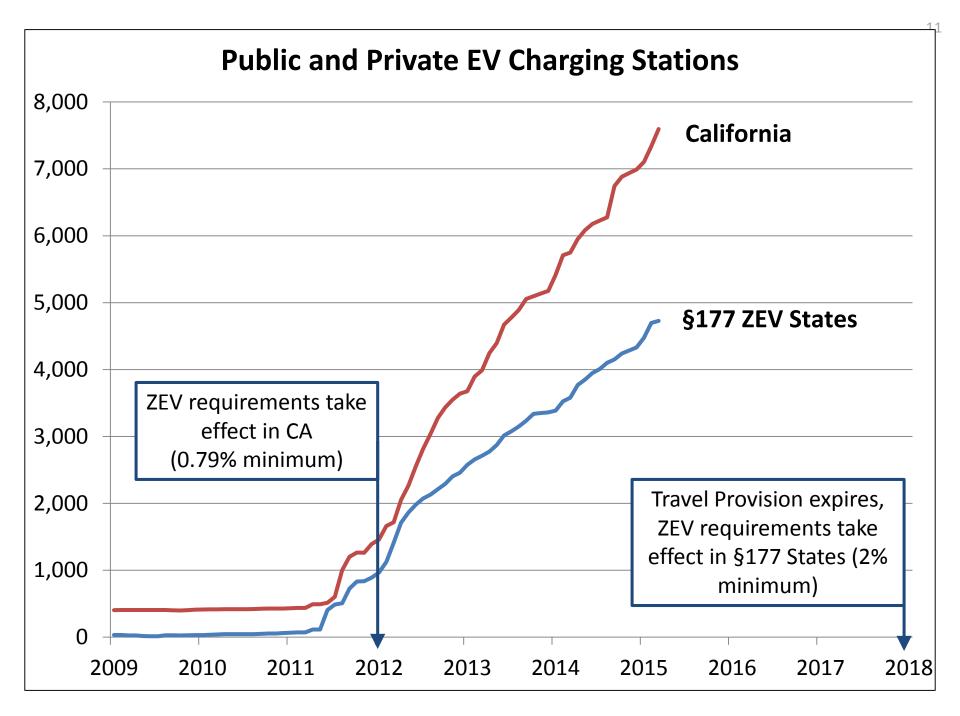


## **Infrastructure Planning**

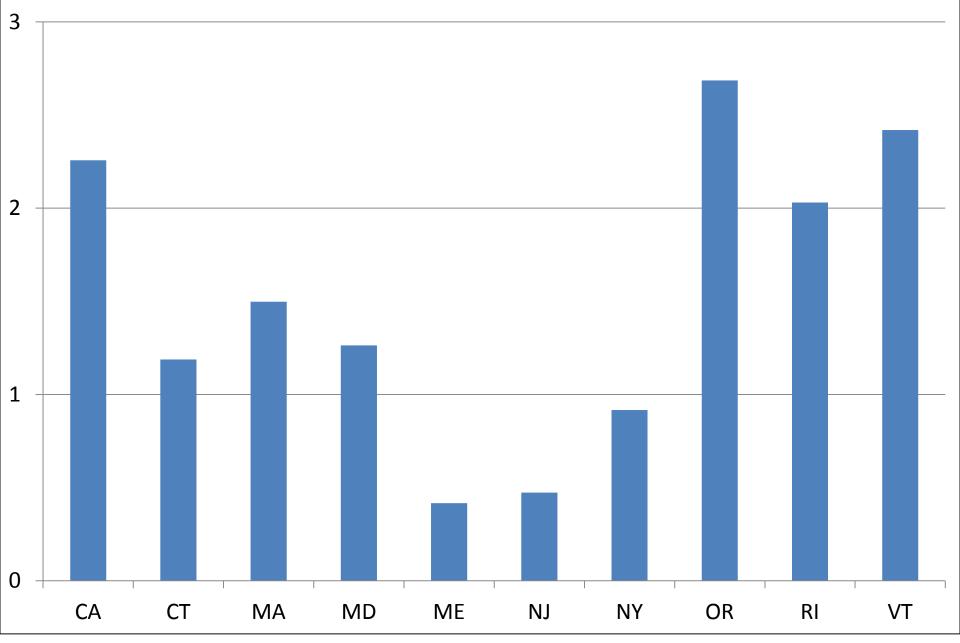


- Sent letter to FHWA seeking legal interpretation regarding EV charging on federal highways
- Published EV Signage Recommended
  Practices document in collaboration with
  FHWA
- Adding DC fast chargers
- Installing EVSE at park and rides and mass transit locations
- Establishing charging corridors





#### Public EVSE per 10,000 LDVs, 2015



Source: Alternative Fuels Data Center, National Automobile Dealers Association.



#### Infrastructure – Regulatory



- Working on a "best practices" guide for PUC regulatory action
- Will be published on ZEVStates website in August
- Reviewing state building code
  provisions facilitating installation of
  EVSE to identify/synthesize best
  practices





### Infrastructure – Regulatory

- EVSE providers exempted from regulation as utilities in six states
  - CA, CT, MD, MA, NY, OR
- RI is working on a PUC petition
- Six ZEV MOU states have, or are considering, TOU rates
  - CA, CT, MD, MA, NY, OR
- Two ZEV MOU states have building codes promoting EVSE ready buildings
  - CA, VT





#### **Outreach and Education**

- ZEVStates.us website launched in April as portal and clearinghouse for state ZEV info
- Conducting survey with UC Davis on customer knowledge and attitudes on PEVs
- Sharing knowledge between states on public events and other outreach efforts





## Workplace Charging

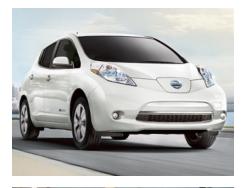
- Significant state progress expanding access to public charging
- States looking carefully at ways to support workplace charging
- Surveys show that 85% of charging is done at home and at work
- Workplace charging can be tipping point for consumers
- Effectively doubles the range of the vehicle





## What's on the Horizon

# In one generation (2012-2017) affordable BEVs will have increased range by about 2.5x at similar prices.



(2012) Nissan Leaf: \$29,010 / 84 miles



(2017) Chevrolet Bolt: \$37,500 / 200 miles

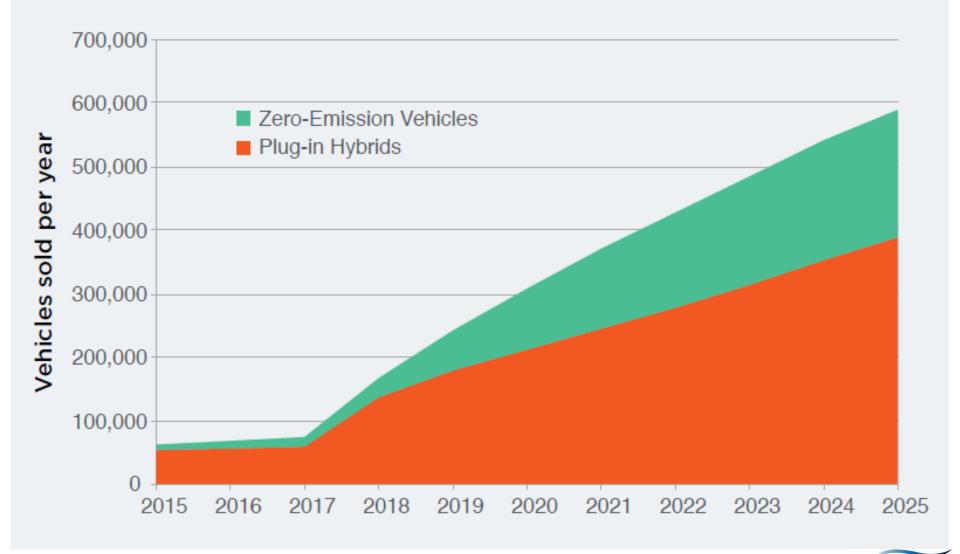


(2017) Tesla Model 3: \$35,000 / 200 miles





#### Projected ZEV Compliance Scenario for the MOU States



Source: Multi-State ZEV Action Plan

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