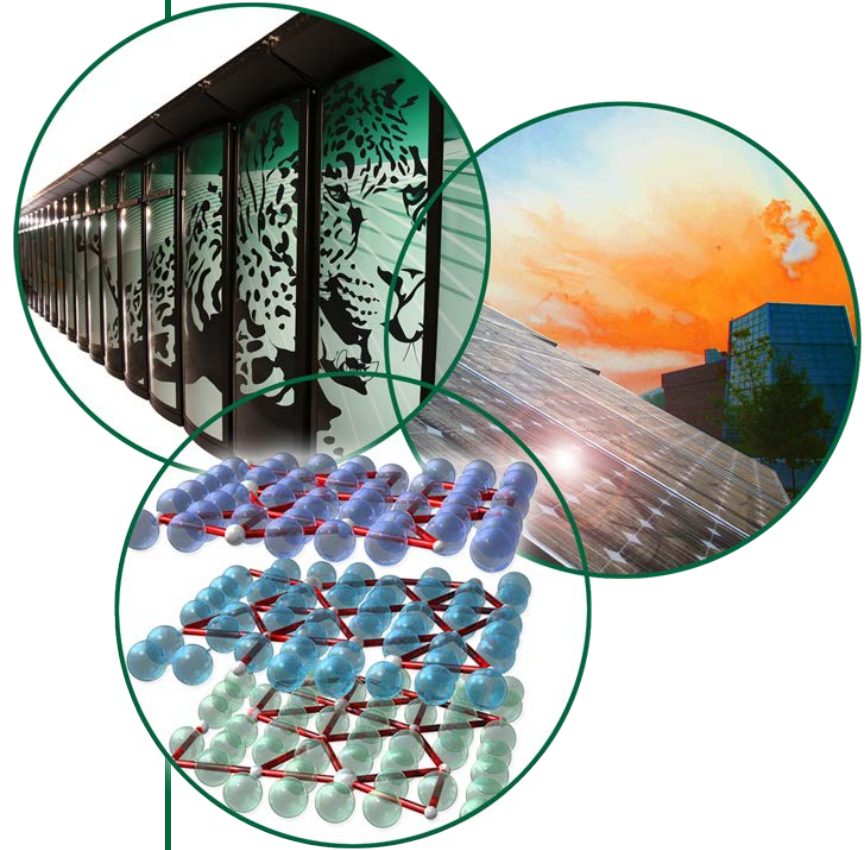


# Forecasts of Plug-in Electric Vehicles Adoption

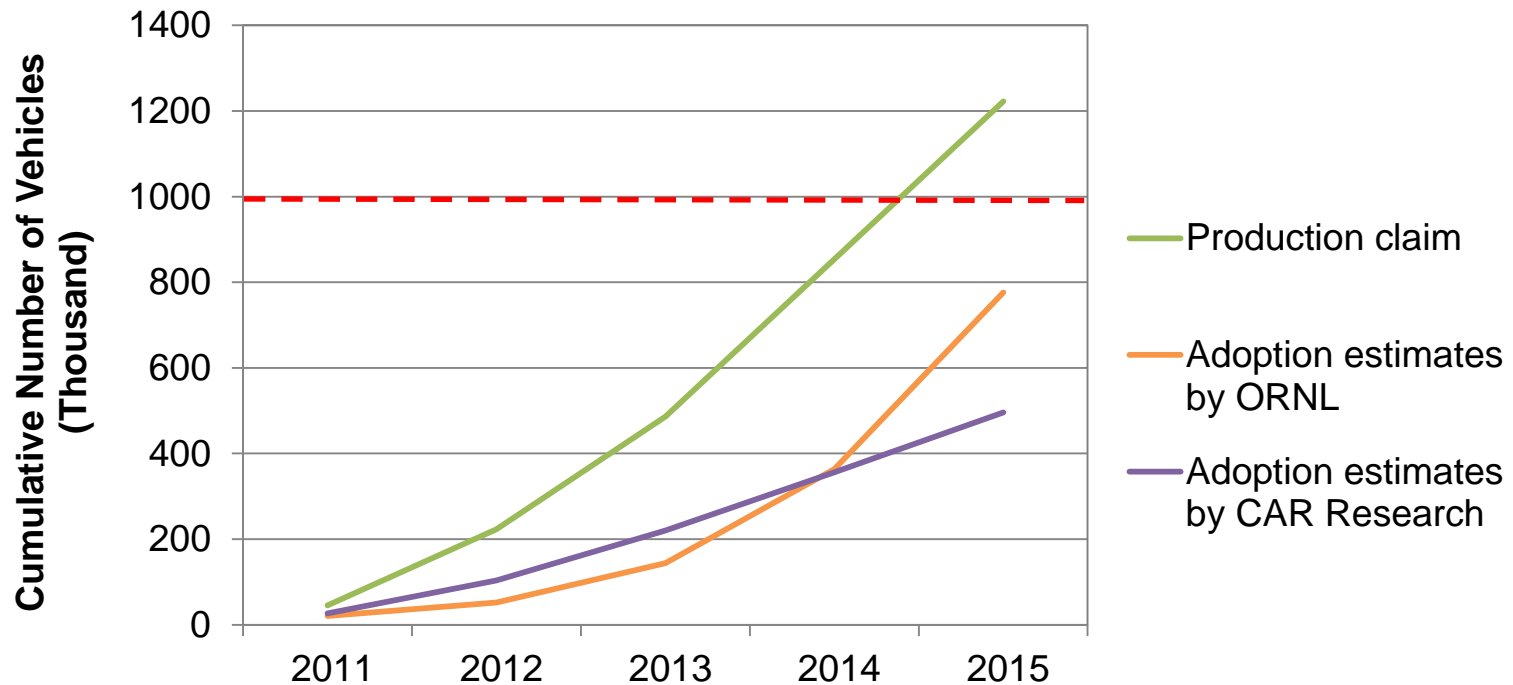
## Paths to One Million PEV on U.S. Roads by 2015

*Jing Dong  
Center for Transportation Analysis  
Oak Ridge National Laboratory  
Knoxville, Tennessee*



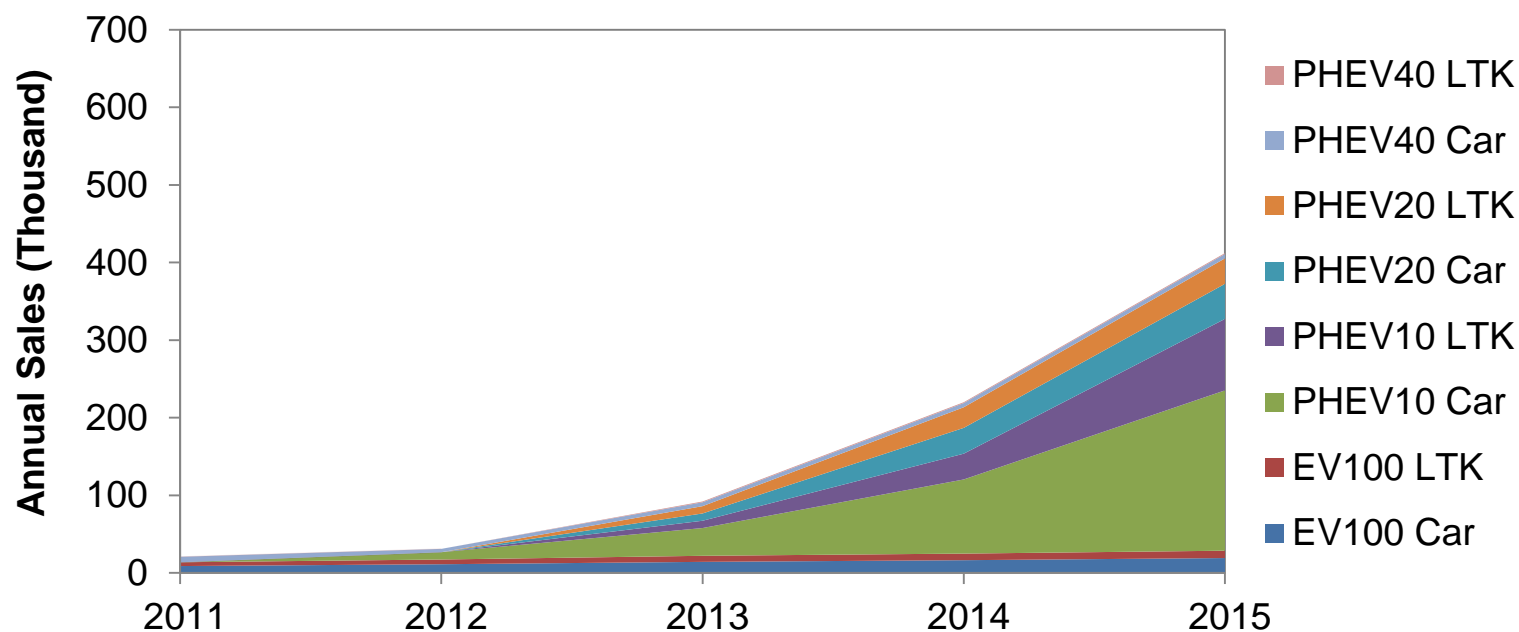
# PEV Supply and Demand 2011-2015

- One million PEVs on the road by 2015
  - manufacturers' **production claims** accumulate 1.2 million
  - forecasts of **consumer adoption** are less optimistic



# Market Acceptance of Advanced Automotive Technologies Model

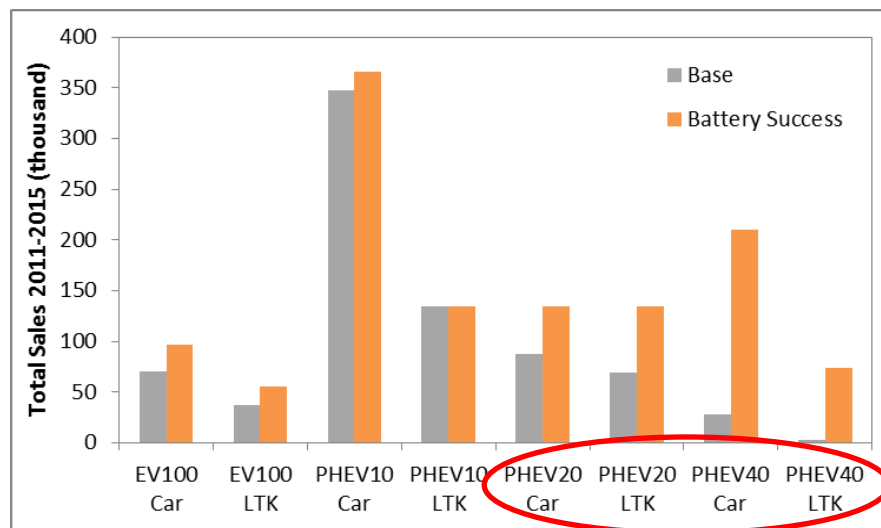
- MA3T model for projecting U.S. demand for PEVs
  - PHEV (-10, -20, -40) and BEV
  - Light duty vehicles: cars and light duty trucks



# Factors Influencing PEV Adoption

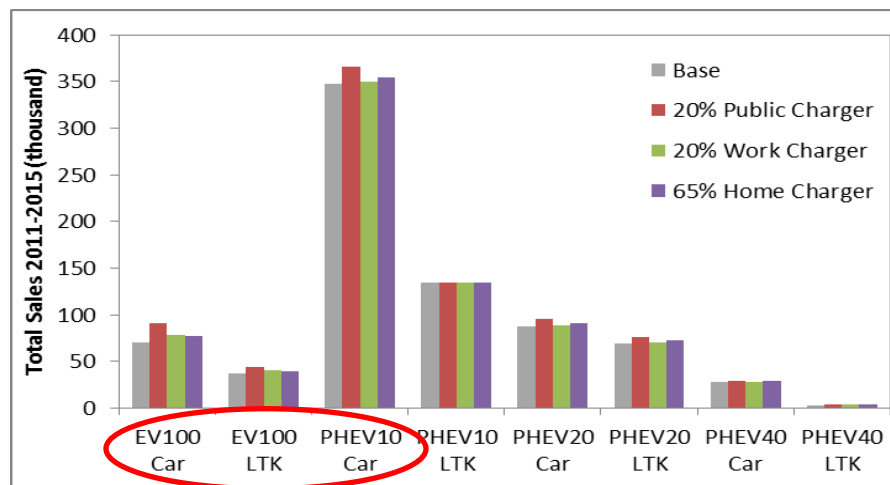
- Battery cost

- \$700/kWh in 2011
- \$300/kWh by 2015
- A significant increase in PHEV20 and PHEV40 sales



- Charging infrastructure

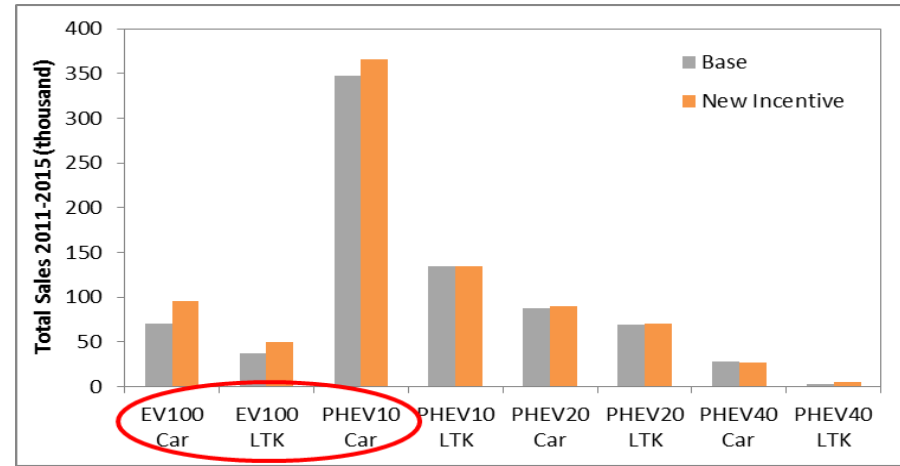
- Base: 52% home, 5% work and no public charger coverage
- **Public chargers** help to increase EV100 and PHEV10 car sales



# Factors Influencing PEV Adoption (Cont'd)

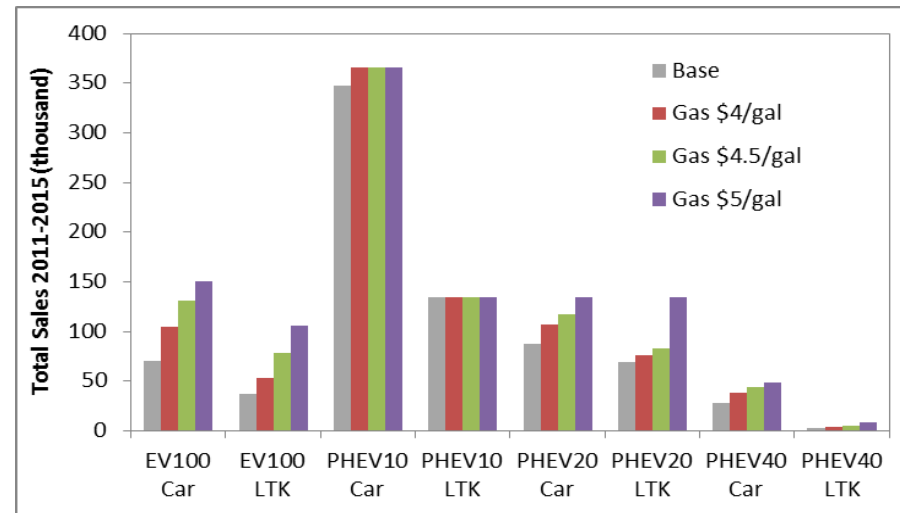
## • Federal Incentive

- ARRA: \$2,500~\$7,500
- New: \$3,000~\$10,000
- More tax credit for EV100 than for PHEV40



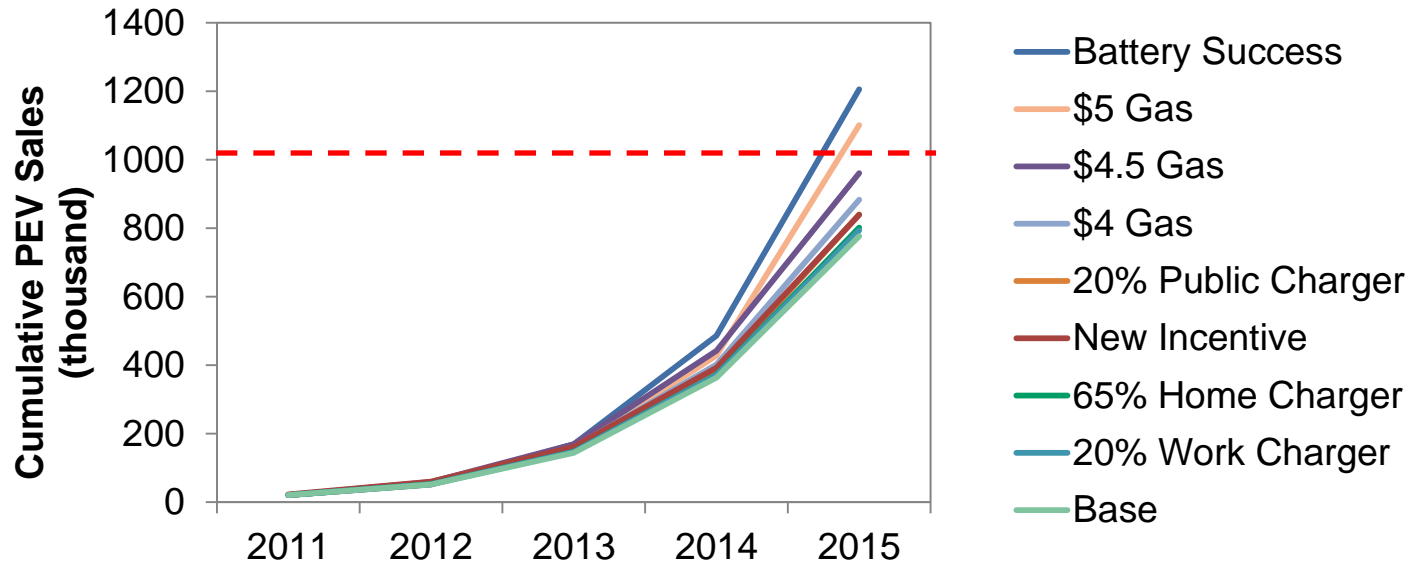
## • Gas Price

- Base: AEO estimates a national average of \$3/gallon by 2015
- The economic impact of high gas prices could affect consumers' ability to buy PEVs



# Paths Towards Achieving The One-Million PEV Goal

- Battery technology success
- Oil price surge
- A combination of new tax credit, charger deployment and higher gasoline prices



**Thanks!**  
**Q & A**