

# Strategic Vision



City Resolutions to promote the environmental, community, utility, national security, and economic benefits:

- PEV Incentives & Leadership (050301-48)
- PEV Feasibility Report (040729-78)
- Energy Research; Pecan Street Inc. (20080925-084 & 20090806-033)
- Supports Imagine Austin Plan
- Supports Climate Protection & Gen. Plan



Austin Energy PEV programs are fully compliant with COA Resolutions



# Key Programs

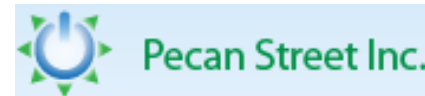


## Plug-In EVerywhere™

- \* Under \$5/month for unlimited station access or \$2/hour; powered by renewable GreenChoice®
- \* Up to \$1,500 rebate for home PEV Level-2 charging stations
- \* Up to \$4,000 rebate for public, workplace, multifamily, and fleet Level-2 PEV charging stations



**Pecan Street PEV Pilot** - Study the largest, non-fleet PEV adoption in the country



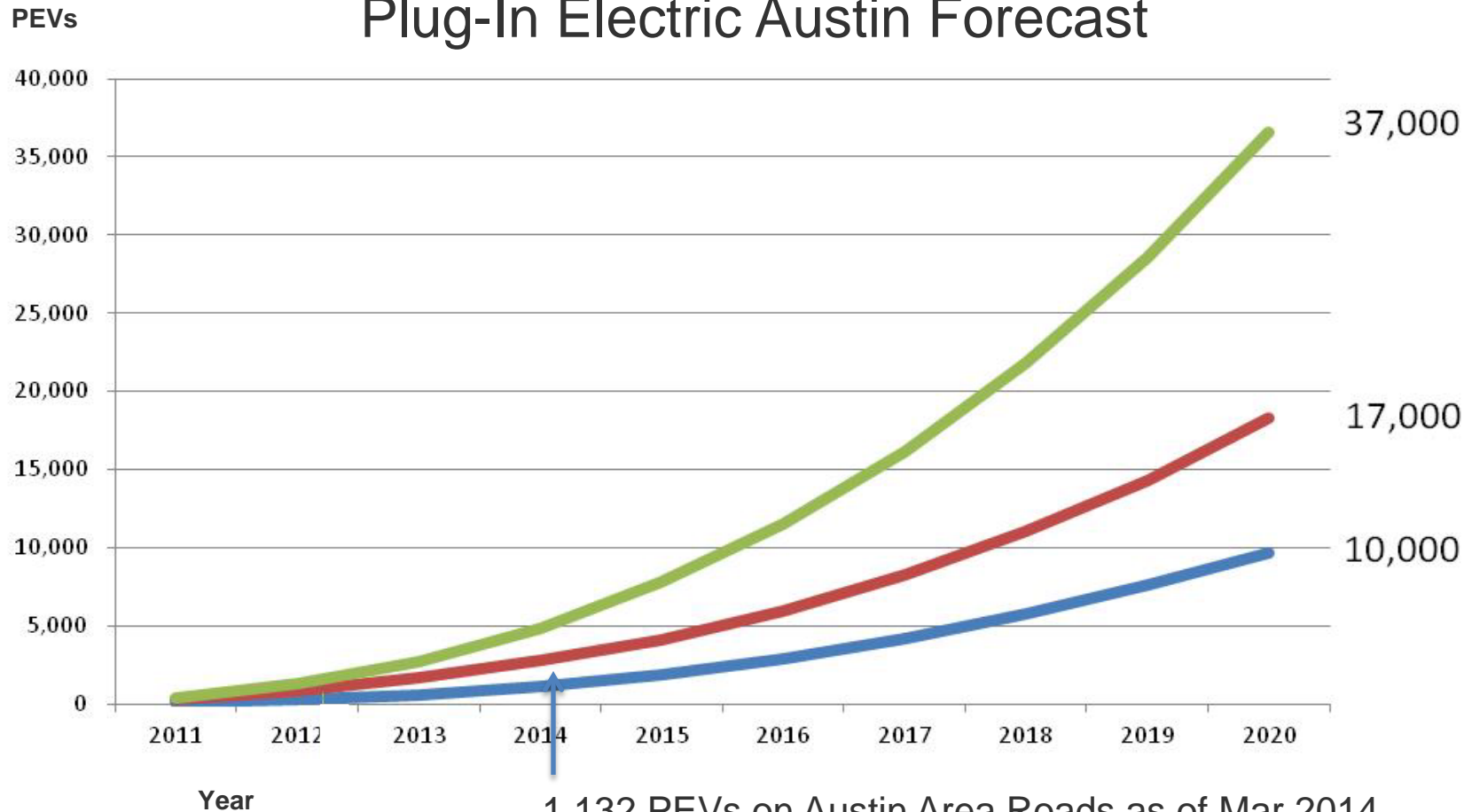
**E-Ride Program** – Up to \$300 rebate from the purchase of electric bikes & scooters



# Adoption Curves (Low, Med, High)



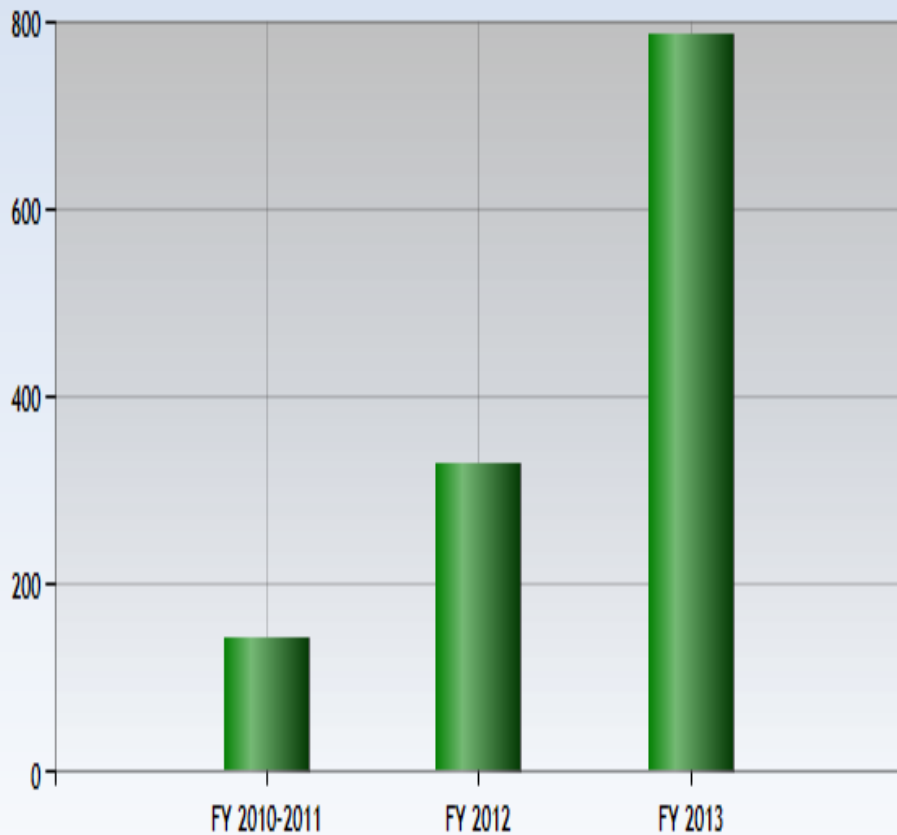
## Electric Power Research Institute (EPRI) Plug-In Electric Austin Forecast



# Growth; Year over Year

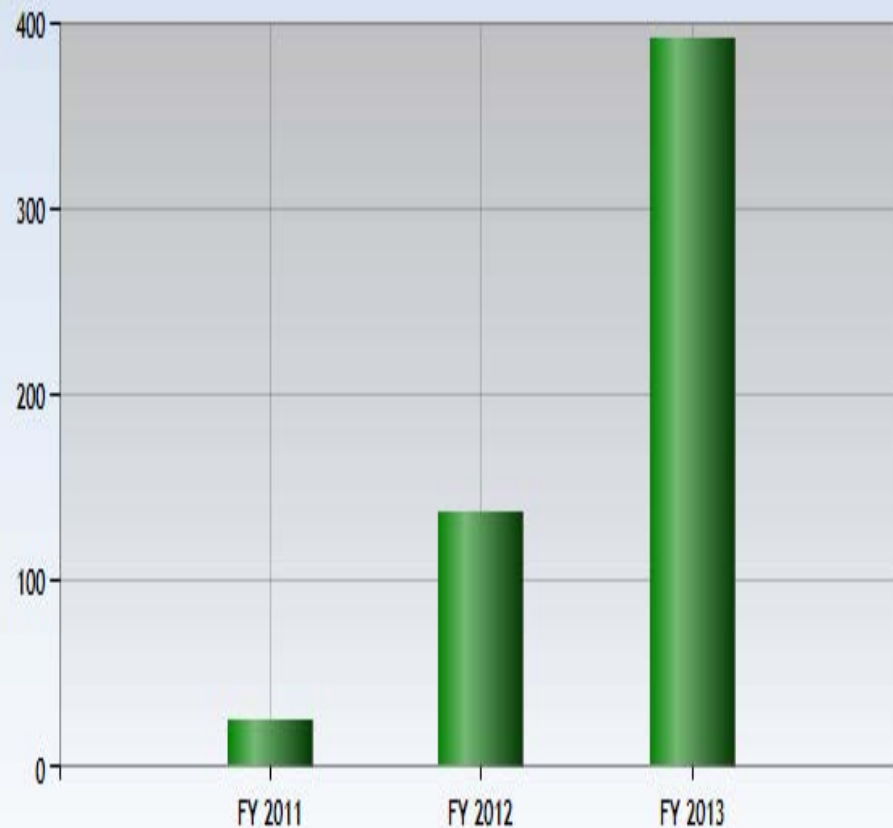


## Four Wheel PEVs in the Austin Area



■ Accumulated

## Plug-In EVerywhere Subscribers



■ Accumulated



# EV Grid Management



	Uncontrolled Charge	EV Time of Use (Passive Control)	Grid to Vehicle (1-way control)	Vehicle to Grid/Home (2-way control)
Status	Default configuration	Gathering requirements	Pilot Phase 1 Complete	Researching
Pros	<ul style="list-style-type: none"> <li>•No specific utility resources required</li> <li>•Maximum convenience to the customer</li> </ul>	<ul style="list-style-type: none"> <li>•Direct opportunity sharing between customer and utility; supports peak, reliability, cust. service</li> </ul>	<ul style="list-style-type: none"> <li>•Ability to address peak via DR &amp; potential for AS</li> <li>•Supports grid reliability</li> </ul>	<ul style="list-style-type: none"> <li>•Ability to address peak &amp; the most potential for AS</li> <li>•Supports grid reliability</li> </ul>
Cons	<ul style="list-style-type: none"> <li>•Expected largest peak load</li> </ul>	<ul style="list-style-type: none"> <li>•New Tariff</li> <li>•May create new peak (4-5am)</li> </ul>	<ul style="list-style-type: none"> <li>•Requires infrastructure costs</li> </ul>	<ul style="list-style-type: none"> <li>•Requires infrastructure costs</li> </ul>
Constraints	<ul style="list-style-type: none"> <li>•None</li> </ul>	<ul style="list-style-type: none"> <li>•Billing System and Metering Infrastructure requirements</li> </ul>	<ul style="list-style-type: none"> <li>•Evolving industry standards (e.g. Open ADR2.0b)</li> <li>•Lack of mature products</li> </ul>	<ul style="list-style-type: none"> <li>•May void car warranty</li> <li>•Lack of mature products</li> </ul>

# Austin Energy Pilot - DR Event

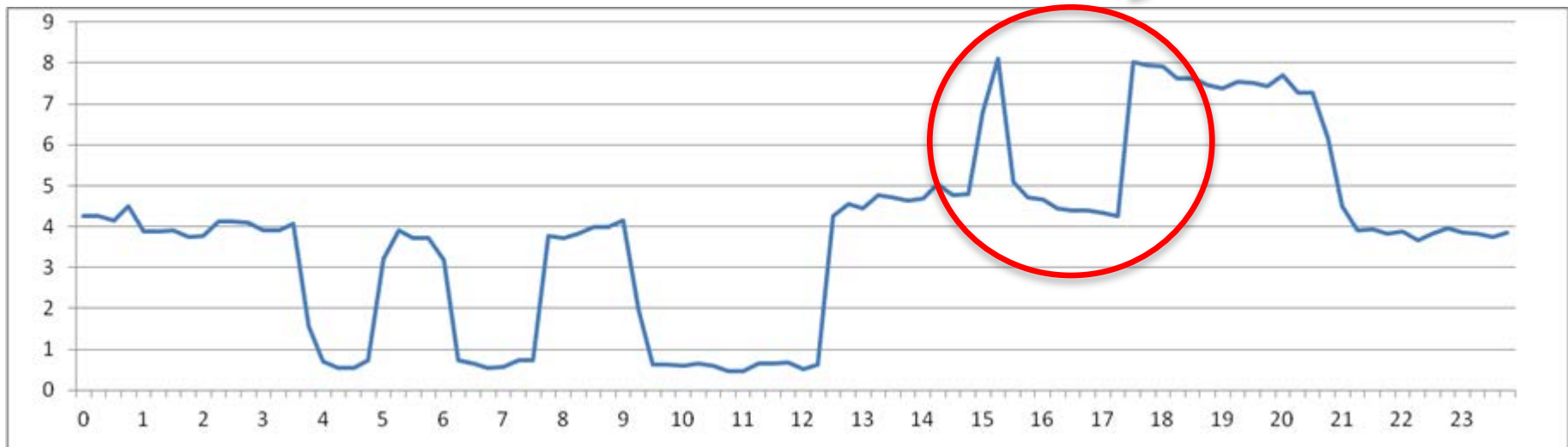


Home EV Demand Response Pilot

Event Date: July 12, 2013

Single-home, 24hour load curve

kW



Hour

Midnight

Noon

Midnight

# Key Milestones



## FY13 Milestones

- Workplace charging program
- Multi-Family charging program
- Auto dealer and fleet program
- Airport cargo operations electrification (20 stations)
- Demand Response Pilot, grant-funded
- Billing system integration
- All TRC grant deliverables on-time and within budget
- CTFIP grant award & launch

## FY14 Plans

- Expand multi-family & workplace programs
- Expand charging solutions to include DC Fast & Level-1
- Plug-In Austin campaign
- Continued charge management research & findings
- PEV awareness website (grant funded):  
[www.texasfuelindependence.org](http://www.texasfuelindependence.org)