

# Transportation Electrification: Austin Climate Equity Plan

**Cameron Freberg**

Manager, Electric Vehicles and Emerging Technologies



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# Supporting the Community-Led Transition to Electric Transportation



Austin will achieve net-zero community-wide greenhouse gas emissions by 2040.



## GOAL 1:



By 2030, 40% of total vehicle miles traveled in Austin are electrified, and electric vehicle ownership is culturally, geographically, and economically diverse. This translates to approximately 460,000 electric vehicles on the road.

## GOAL 2:



By 2030, Austin has a compelling and equitably distributed mix of level 1, 2, and DC fast charging infrastructure to accommodate 40% of total vehicle miles traveled in the city. This translates to 226 megawatts of electrical load and could mean more than 37,000 charging ports.

## GOAL 3:



The Austin-Round Rock-San Marcos area is a leader in transportation electrification by adopting policies and technologies that maximize economic and health benefits while supporting the growth of this emerging industry.

# Recommended Discussion Points:

**Emissions impact:** What sub-strategies and related actions have been identified by the City as having the highest emissions reduction potential?

**Equity impact:** What sub-strategies and related actions have been identified by the City as having the highest potential for positive equity impacts?

**Low-hanging fruit:** What are the low-hanging fruit for both? What are some of the actions that have been identified by the City, Austin Energy, CapMetro, external partners, or other stakeholders?

**Barriers and challenges:** Which sub-strategies and actions face the greatest barriers? What are those barriers or challenges specifically?

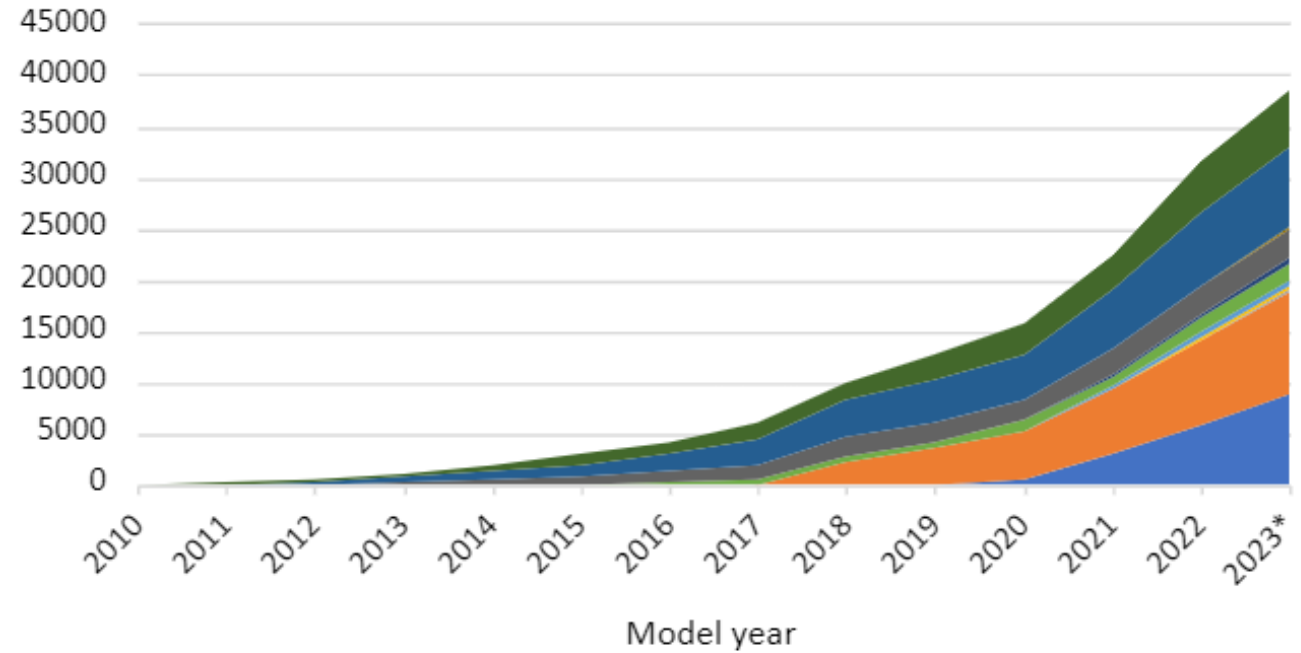


# Electric Vehicle Growth in Austin

## 39,415 EVs

in the Austin metro

- 20% of all EV registrations in Texas
- 12% of all new vehicle registrations in Austin



Source: EPRI Analysis of Experion Data



# Austin Energy's 5-Pillar Transportation Electrification Strategy



**Charging Infrastructure**



**Equity & Affordability**



**Fleets & New Mobility**



**Outreach & Education**



**Grid Integration**



# Charging Infrastructure



## Plug-In Austin Infrastructure Rebate Program

For home and public stations



## Plug-In EVerywhere™ Driver Program

Access to over 1500 Level 2 ports



## DC Fast Charging

30 stations in network



# Equity & Affordability

## E-Bike Rebate & MetroBike Expansion

- Rebate doubled on January 1, 2023
- Increased rebate (\$1,300) for CAP customers

## EVs for Schools Program

Educational Living Lab including charging infrastructure and curriculum at local schools



## Get green for going green: Austin Energy to double its rebate for customers buying e-bikes

**Heather Osbourne** Austin American-Statesman

Published 7:00 a.m. CT Nov. 19, 2022

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Is your New Year's resolution to be more climate-conscious? If so, you might want to consider buying an e-bike during Black Friday after Austin Energy announced this week it would double its rebate program for electric bikes, scooters, mopeds and motorcycles.



Michael Natenberg and his children Parker, 4, and Sybil, 6, ride an e-bike home from Zavala Elementary School this month. Austin Energy is doubling its rebate program for customers who buy electric bikes, scooters, mopeds and motorcycles. Jay Janner / American-Statesman

# Fleets & New Mobility



## Powering the City's Fleet

- Now 275 EVs (and growing)
- Savings tracking 50% ahead of projection
- New “Quick-Turnaround” EV charging station permitting process

## Bus Electrification

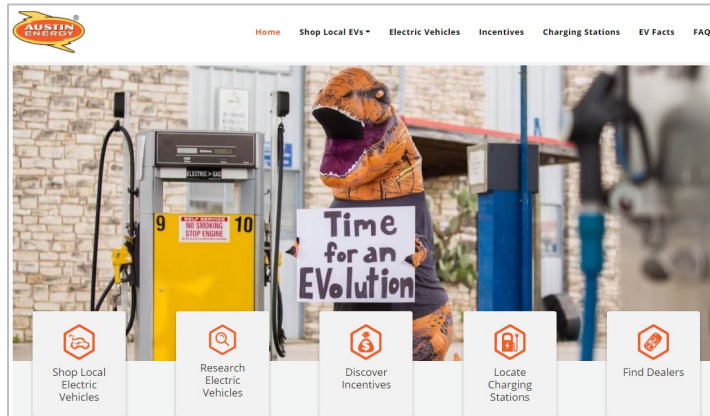
- Capital Metro
- Fleet and Infrastructure Rate Developed





# Outreach & Education

## EV Buyers Guide



### EV.AustinEnergy.com

- Real-time local inventory
- New and used EVs
- English and Spanish



## Electrify Expo



### Experiencing Electric Mobility

- 13,411 Attendees
- 4,232 In-vehicle EV demos
- 10,695 Micro-mobility demos total:
  - 7,338 E-bike demo rides
  - 1,265 E-scooter and E-skate
  - 2,092 Kids Zone demo rides

## EVs for Schools



### Mentoring Future Leaders

*"I received excellent feedback from the students, and they were excited about possible career opportunities associated with renewables!"*

– Akins STEM Engineering Teacher

# EV Grid Integration

## Managed Charging

- EV360 – Residential off-peak pilot
- Power Partner demand response program – active charge management
- Vehicle to Grid pilot – part of larger energy storage project



# Highest Emissions Reduction Potential

## GOAL 1:



By 2030, 40% of total vehicle miles traveled in Austin are electrified, and electric vehicle ownership is culturally, geographically, and economically diverse. This translates to approximately 460,000 electric vehicles on the road.

Strategy 5: Electrify public sector fleet vehicles

Strategy 6: Electrify private sector fleet vehicles

## GOAL 2:



By 2030, Austin has a compelling and equitably distributed mix of level 1, 2, and DC fast charging infrastructure to accommodate 40% of total vehicle miles traveled in the city. This translates to 226 megawatts of electrical load and could mean more than 37,000 charging ports.

Strategy 1: Create a network with more low-cost, accessible charging stations

Strategy 2: Incentivize internet-connected smart charging



# Highest Equity Impact Potential

## GOAL 1:



By 2030, 40% of total vehicle miles traveled in Austin are electrified, and electric vehicle ownership is culturally, geographically, and economically diverse. This translates to approximately 460,000 electric vehicles on the road.

Strategy 1: Conduct an EV Community Needs Assessment

Strategy 4: Launch an e-bike and electric car-sharing program

## GOAL 2:



By 2030, Austin has a compelling and equitably distributed mix of level 1, 2, and DC fast charging infrastructure to accommodate 40% of total vehicle miles traveled in the city. This translates to 226 megawatts of electrical load and could mean more than 37,000 charging ports.

Strategy 4: Expand outreach to systematically excluded groups



# Barriers & Challenges

## GOAL 1:



By 2030, 40% of total vehicle miles traveled in Austin are electrified, and electric vehicle ownership is culturally, geographically, and economically diverse. This translates to approximately 460,000 electric vehicles on the road.

Strategy 1: Conduct an EV Community Needs Assessment

Strategy 3: Reduce tolls for EVs in the Eastern Crescent

## GOAL 3:



The Austin-Round Rock-San Marcos area is a leader in transportation electrification by adopting policies and technologies that maximize economic and health benefits while supporting the growth of this emerging industry.

Strategy 4: Expand the EV-related business ecosystem

- Scoping a needs assessment
- Responsible entity of reducing tolls?
- Defining success for business ecosystem growth?

# Collaboration = Success

## Community and Engagement

- TX Electric Transportation Alliance
- Austin Forum on Technology & Society
- Foundation Communities
- Austin Pathways/Smart Mobility Ambassadors
- American Public Power Association
- TX Public Power Association
- TX Energy Poverty Research Institute
- Austin Auto Dealership Association
- Local E-Bike retailers

## Education

- Austin Independent School District
- Pflugerville Independent School District
- Del Valle ISD
- EcoRise
- Huston-Tillotson University
- University of Texas LBJ School of Public Affairs
- Bike Texas
- Austin Community College

## Government

- City of Austin
- Housing Authority of the City of Austin
- Travis County
- Congressman Lloyd Doggett's Office
- CapMetro
- Texas Commission on Environmental Quality
- US Department of Energy





**Customer Driven.  
Community Focused.<sup>SM</sup>**



## GOAL 1:



**By 2030, 40% of total vehicle miles traveled in Austin are electrified, and electric vehicle ownership is culturally, geographically, and economically diverse. This translates to approximately 460,000 electric vehicles on the road.**

Strategy 1: Conduct an EV Community Needs Assessment

Strategy 2: Create equitable incentives for buying and leasing EVs

Strategy 3: Reduce tolls for EVs in the Eastern Crescent

Strategy 4: Launch an e-bike and electric car-sharing program

Strategy 5: Electrify public sector fleet vehicles

Strategy 6: Electrify private sector fleet vehicles



## GOAL 2:



By 2030, Austin has a compelling and equitably distributed mix of level 1, 2, and DC fast charging infrastructure to accommodate 40% of total vehicle miles traveled in the city. This translates to 226 megawatts of electrical load and could mean more than 37,000 charging ports.

Strategy 1: Create a network with more low-cost, accessible charging stations

Strategy 2: Incentivize internet-connected smart charging

Strategy 3: Adopt new energy and building codes

Strategy 4: Expand outreach to systematically excluded groups

## GOAL 3:



The Austin-Round Rock-San Marcos area is a leader in transportation electrification by adopting policies and technologies that maximize economic and health benefits while supporting the growth of this emerging industry.

Strategy 1: Create a regional coalition to support EVs

Strategy 2: Pilot and adopt new technology

Strategy 3: Prioritize a just transition

Strategy 4: Expand the EV-related business ecosystem