



# EV Program Update

Joint Sustainability Committee Update

**Cameron Freberg**

Electric Vehicles & Emerging Technologies



December 2021

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# Safety Moment



- Remember, if it's too cold for you, it's probably too cold for your pet, so keep your animals inside.
- Be cognizant of winter plants that you put in your home as many can be toxic to pets
- Pets burn extra energy by trying to stay warm in wintertime. Feeding your pet a little bit more during the cold weather months can provide much-needed calories, and making sure they have plenty of water to drink will help keep them well-hydrated and their skin less dry



# Austin Climate Equity Plan - Transportation Electrification Goals

**Goal 1:** By 2030, 40% of total vehicle miles traveled in the City of Austin are electrified and electric vehicle ownership is diverse culturally, geographically and economically. This translates to approximately 460,000 electric vehicles on the road.

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

**Goal 3:** The Austin-Round Rock-San Marcos MSA will be a global leader in transportation electrification by adopting policies and technologies that maximize the economic and health benefits for all while evolving with and defining the growth of this emerging industry.

Today:  
~1% VMT

Goal:  
40% VMT  
by 2030

Formally  
Adopted  
9/30/2021





# A Comprehensive Strategy Approach



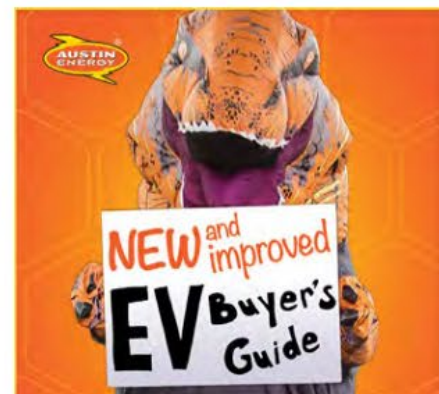
Charging  
Infrastructure



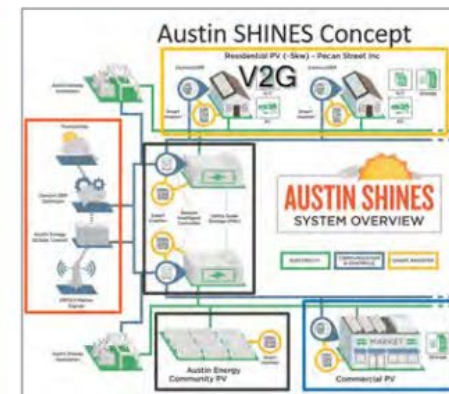
Equity &  
Affordability



Fleets &  
New Mobility



Outreach &  
Education

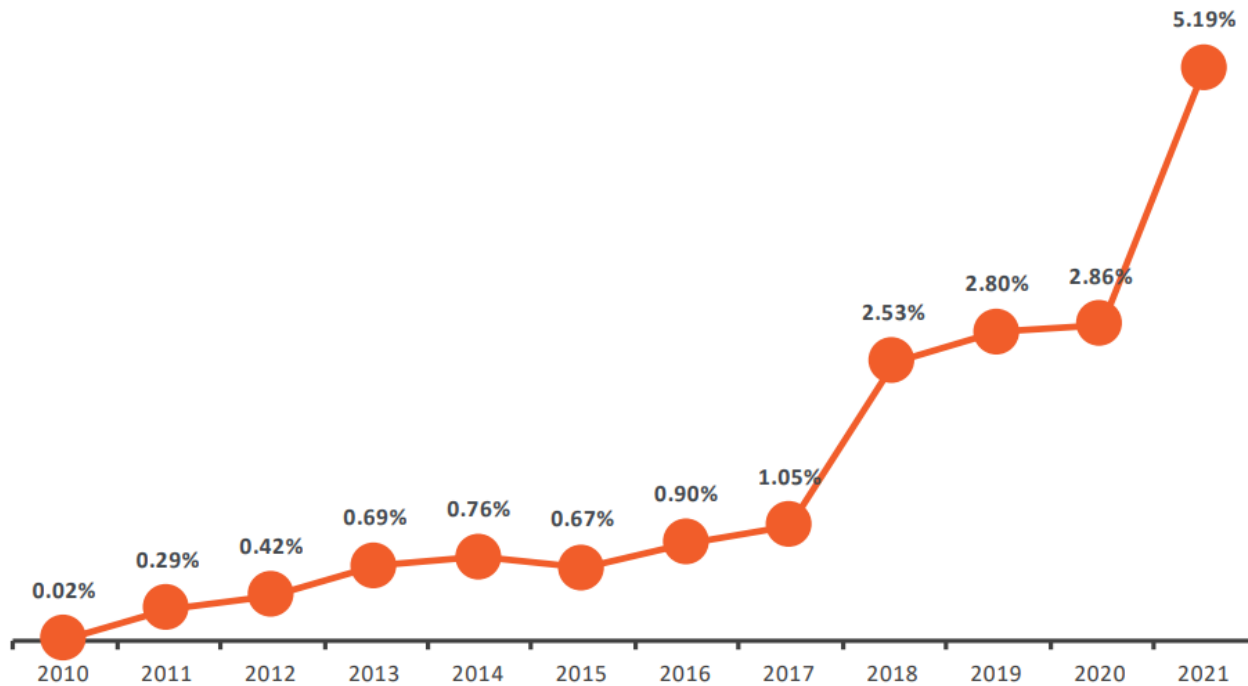


Grid Integration



# Austin Area EV Growth

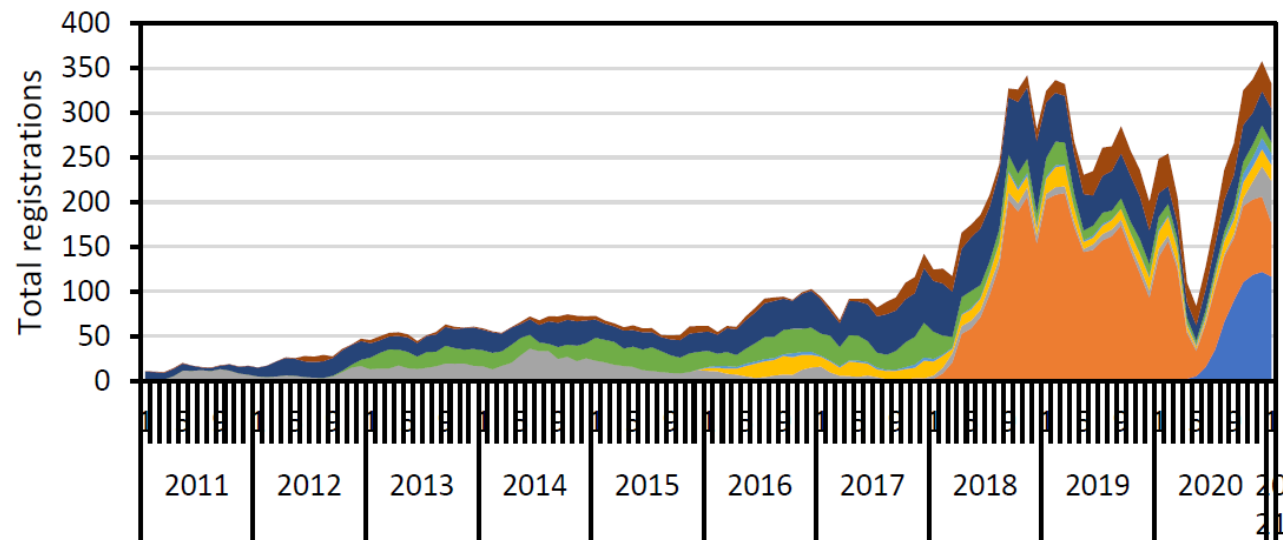
Annual EV Adoption as a Percentage of  
Total Vehicles Registered



16,800  
EVs Registered  
in Austin

# EV Registrations - Austin

Monthly registrations by vehicle



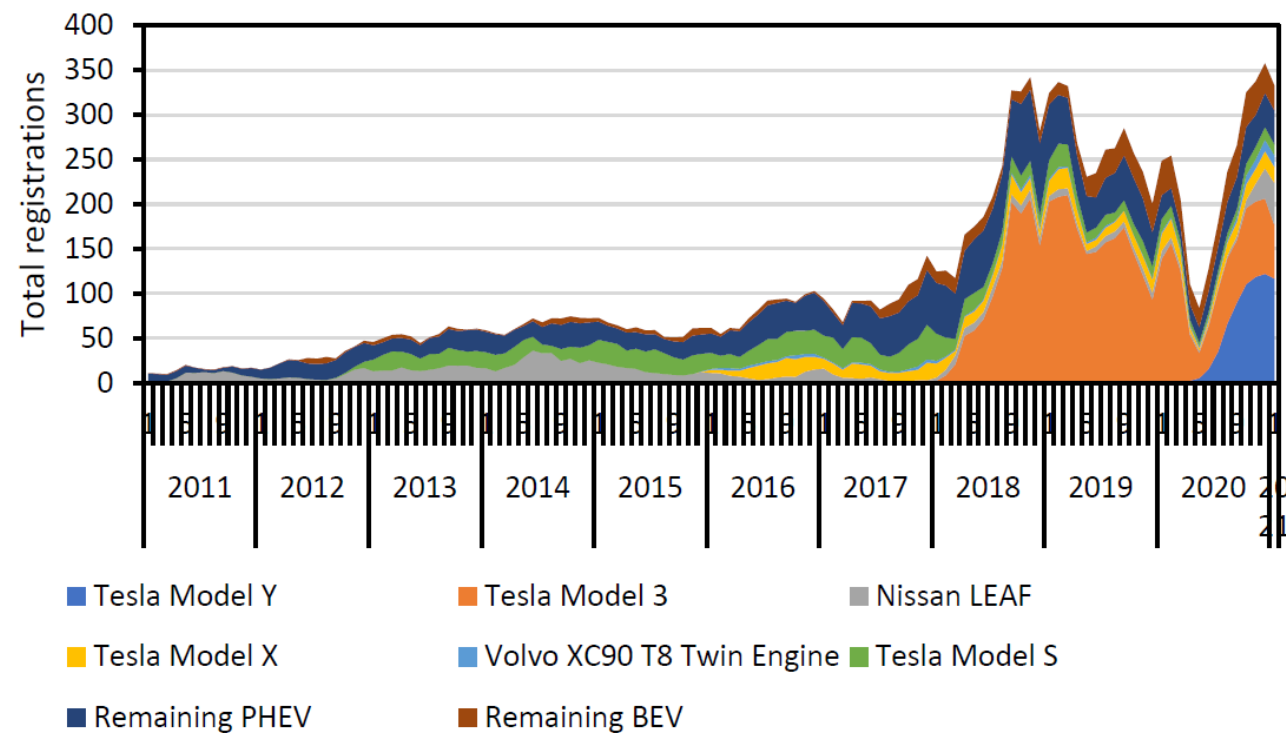
What one new model can do to the adoption curve...





# EV Registrations - Austin

Monthly registrations by vehicle



What one new model can do to the adoption curve...



# EV News Highlights

## Lucid Air named MotorTrend Car of the Year



By Peter Valdes-Dapena, CNN Business

Updated 11:39 AM ET, Mon November 15, 2021



First time the award was given to a manufacturer's first production vehicle.



## Rivian is America's biggest IPO since Facebook



By Julia Horowitz, CNN Business

Updated 4:20 PM ET, Wed November 10, 2021



### Market Cap as of 12/1/2021

Rivian: \$103B

Lucid: \$90B

GM: \$87B

Ford: \$81B

Tesla \$1,170B

*"Market cap measures what a company is worth on the open market, as well as the market's perception of its future prospects, because it reflects what investors are willing to pay for its stock."*



## Tesla moves headquarters from California to Texas

**Tesla will spend at least \$1.06 billion on Texas 'Gigafactory' and hopes to finish it this year, filings show**





# Capital Metro Bus Electrification

- Cap Metro collaborated with Austin Energy in the development of their North Ops Bus Depot to build a smart charging facility for over 200 electric buses
- Cap Metro currently has 12 battery-electric buses with plans to expand rapidly
- By collaborating early in the process, Cap Metro was able to future proof the electric capacity of their facility to expedite expansion while reducing costs



KUT 90.5

Austin's NPR Station

News ▾ Features ▾ Life & Arts ▾ Podcasts Support ▾ About ▾ Music ▾

## Cap Metro Says This Lot Will House The Electric Bus Facility 'Of The Future'

By MOSE BUCHELE, KUT • 16 HOURS AGO

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## Capital Metro Board Approves Nation's Largest Electric Vehicle Procurement

Transit agency takes major step in fulfilling the Project Connect vision of a cleaner future

# Austin Energy EV Customer Programs

- **Plug-In EVerywhere™ Driver Program**
  - \$4.17/mo unlimited charging at Level-2 ports for members
  - **New** \$0.21/min DC Fast charging connection
- **Plug-In EVerywhere™ Infrastructure Rebate Program**
  - Up to \$1,200 rebate for home Level-2 wi-fi enabled (\$900 non wi-fi)
  - Up to \$4,000 rebate for commercial/public Level-2 stations
  - Up to \$10,000 rebate for public DC Fast stations
- **Fleet & Public Infrastructure Pilot Tariff**
  - **New** optional EV infrastructure commercial tariff promotes efficiency and high usage
- **EV360 Pilot**
  - Flat rate of \$30/mo for off peak home charging + Plug-In EVerywhere
- **EVs for Schools**
  - EV charging stations for staff, students, parents, and visitors
  - **New** - curriculum is now available online nationally and in Spanish
- **E-Ride Program** Up to \$400 rebate from the purchase of electric bikes, includes individuals and bike fleet applications

Powered By GreenChoice® 100%  
renewable wind power

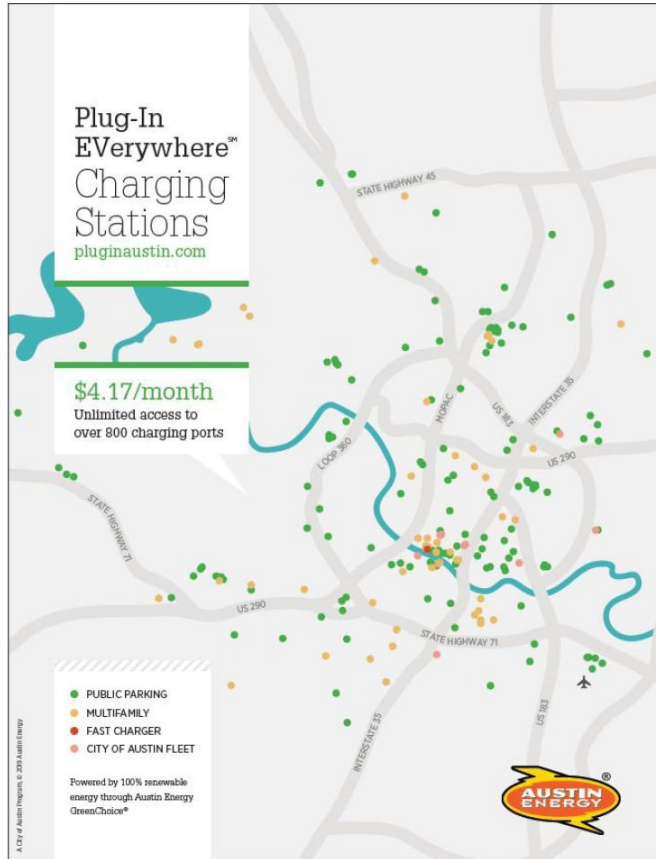


Akins High School teacher, Jay H., plugs in his EV at an “EVs for Schools” charging station





# EV Host/Public Installations



30

DC Fast Charging Stations

1230

Plug-In Everywhere  
Charging Ports





# “E-Bikes are for EVeryone” Campaign



- Austin Energy is leading a collaborative effort with MetroBike, CapMetro, and HACA to conduct e-mobility safety training for residents in affordable housing
- The project also includes general public training to promote e-Bike adoption





# Equity & Inclusion – “EVs for EVeryone”

**Goal - create a future of mobility that is equitable, affordable, and accessible while helping the environment.**

- Provide electric vehicle outreach, program development and deployment with a focus on marginalized communities
- Conducted 100s of e-bike access and safety trainings for underserved community members
- 86+ multifamily communities have charging including Affordable Housing properties that are home to over 27,800 residents.
- New full-time employee program lead hired Jan 4, 2021
- EVs for Schools expansion...



Austinite Maria, participates in an Austin Energy e-Bike demonstration and safety event

# Equity & Inclusion – “EVs for Schools” Update

## “EVs for Schools” Program, pilot prioritized deployment and outreach for economically disadvantaged students at title-one schools

- 795 teachers at 122 schools in Central Texas are utilizing the EV lessons
- As a response to COVID19, curriculum was made online and free of charge to families locally and nationally to support at home learning
- Now offered in Spanish
- 6,850+ students experiencing the living lab with 65% of those students economically disadvantaged
- Companion Virtual Reality (VR) experience
- Curriculum incorporated by other entities nationwide to include Madison Gas and Electric, Southern California Edison, Metropolitan Area Planning Council of Boston, and Sacramento area schools

## Austin American-Statesman

Charging stations at schools to power electric vehicles, student minds





How many Central Texans will attend a stand-alone EV and E-Bike ride & drive event?



## Outreach & Education



Electric charging stations included in \$1 Trillion infrastructure bill while City of Austin makes push to expand fleet



kxan



## Electrify Expo - Nov 12-14<sup>th</sup> Circuit of the Americas, Austin

- 21,150 attended
- 4,234 EV demo rides
- 12,274 e-Bike/Scooter demo rides

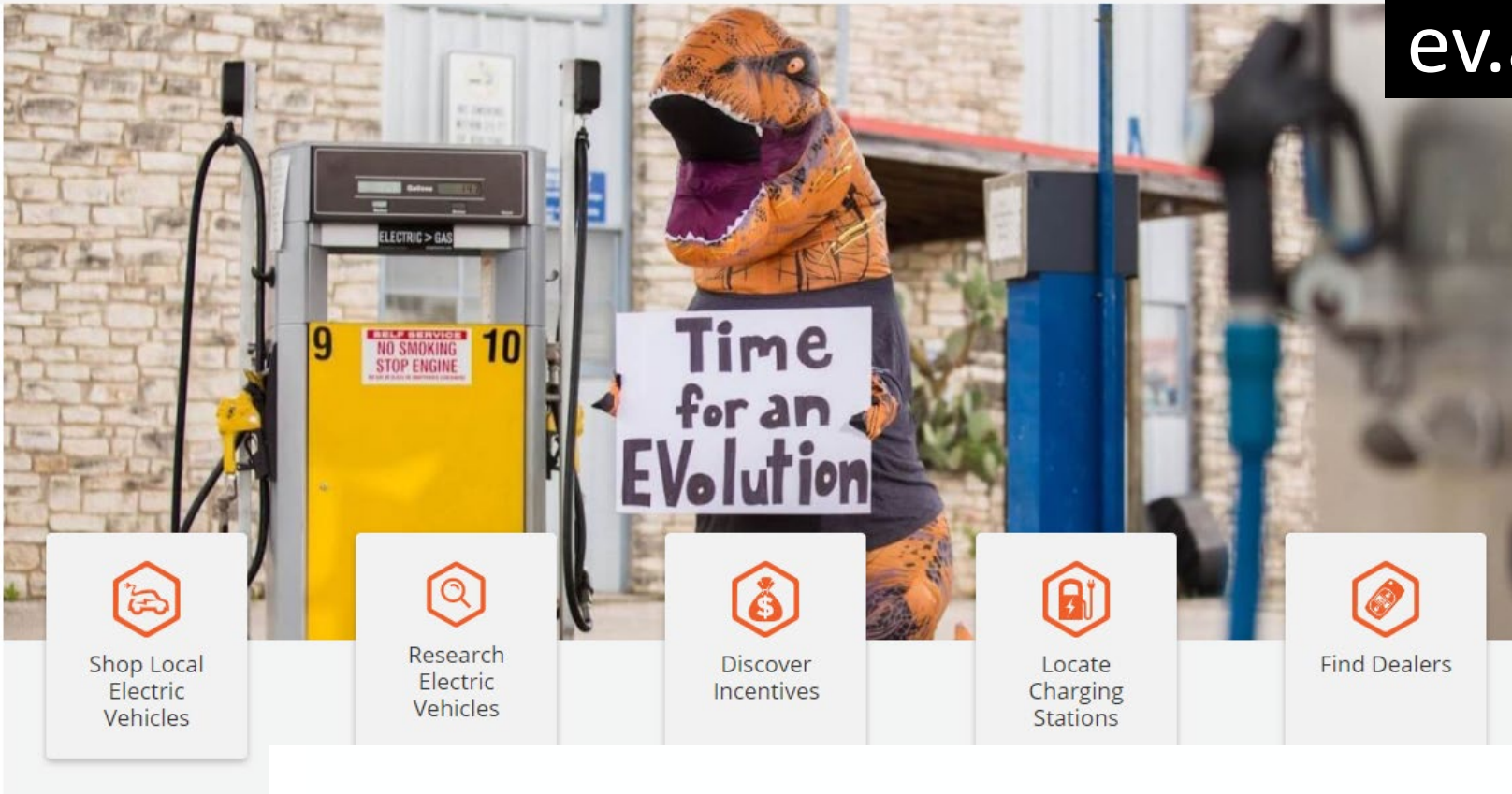
Largest “ride and drive” EV event in the U.S. to include Austin as #1 in attendance from this touring show

Austin Energy pushed a “call to action” program with conference speakers and QR code placement and saw a 40% increase in the Austin EV Buyer’s Guide activity during the event



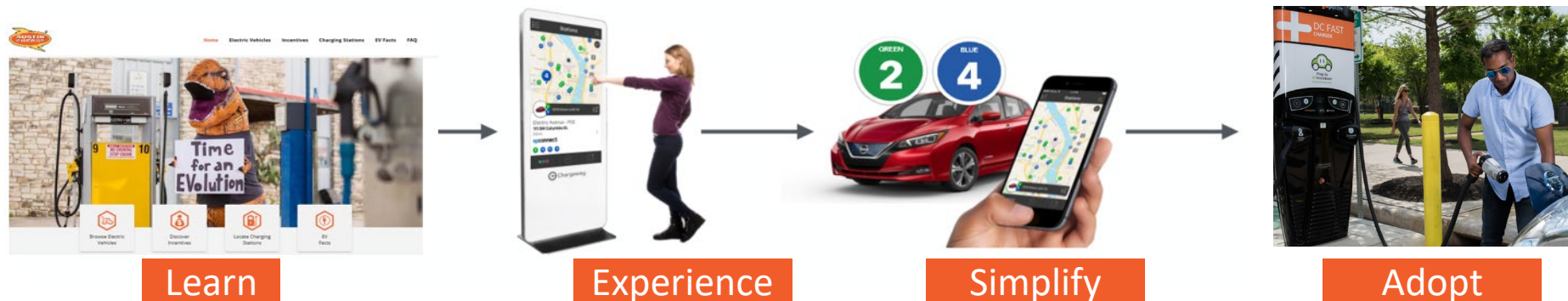


ev.austinenergy.com



Exceeding 10,000 Unique visitors per month in Austin's growing market that is selling 350 EVs per month

124,000  
EV Buyers Guide Views





# Regional Approach



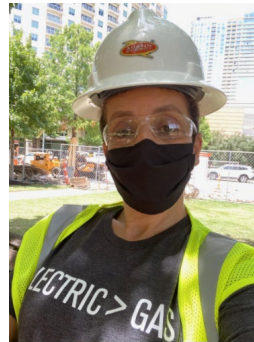
Texas Public Power Corridor (TXPPC)  
EV Working Group



# Staff Recognition

## Customer Driven

- “One of the best customer service experiences I have ever had with any organization – public or private.” -*Craig L.*
- “The ease, kindness, understanding and efficiency with which he assisted me was commendable.” -*Stephanie D.*
- One more great program from Austin Energy. If only the entire state was served by Austin Energy, Texas would be a better place to live.  
-EV Program Customer Survey
- “Just writing to thank your team for such quick and courteous assistance. Y'all have a great team and service.” -*Gibrán L.*



# Backup Slides





# Transportation Electrification

**Goal 1: By 2030, 40% of total vehicle miles traveled in the City of Austin are electrified and electric vehicle ownership is diverse culturally, geographically and economically. This translates to approximately 460,000 electric vehicles on the road.**

- Conduct an EV Community Needs Assessment
- Create Equitable Incentives for Buying and Leasing EVs
- Reduce Tolls for EV's in the Eastern Crescent
- Launch an e-Bike + Electric Car Sharing Program
- Electrify Public Sector Fleet Vehicles
- Electrify Private Sector Fleet Vehicles

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

- Create a Network of Low-cost, Accessible Charging Stations
- Incentivize Internet-Connected Smart Charging
- Adopt New Energy and Building Codes
- Expand Outreach to Underserved Groups

**Goal 3: The Austin-Round Rock-San Marcos MSA will be a global leader in transportation electrification by adopting policies and technologies that maximize the economic and health benefits for all while evolving with and defining the growth of this emerging industry.**

- Create a Regional Coalition to Support EV's
- Pilot and Adopt New Technology
- Prioritize a Just Transition
- Expand the EV-related Business Ecosystem



# DC Fast Infrastructure Rollout



DC Fast stations enable corridor traffic, multi-family, and ride-hail/taxi electrification with up to 125kW (paired) fueling 215 miles of range per half-hour.



**Up to 125 kW (paired)**  
**DC Fast Charging \$0.21/minute**

29 DC Fast AE Owned & Operated

Host / Site	Address	# Stations
PARD-AISD	2001 W Cesar Chavez St.	4
Saltillo-Whole Foods	905 East 5th St.	4
Electric Drive	811 Electric Dr.	8
Mueller Market	1801 E 51st St.	4
Village at Westlake	701 S Capital of Texas	4
Travis County	700 Lavaca Sr.	1
ABIA Cell Phone Lot	2716 Spirit of TX Hwy	2
Austin Film Society	1901 E 51st St.	2



# Electric Vehicles & Emerging Technologies Team

10 year Anniversary!



EVs for Schools



EV Engagement



E-Visionary  
City of the Year 2020



Plug-in America  
EV Utility of the Year 23

# Council Resolution- EV Adoption by City Employees

Item 106: Approve a resolution directing the City Manager to develop a strategy to encourage electric vehicle adoption by City of Austin Employees. Sponsors: Council Member Leslie Pool, Mayor Steve Adler, Council Member Alison Alter, Council Member Paige Ellis, and Council Member Ann Kitchen

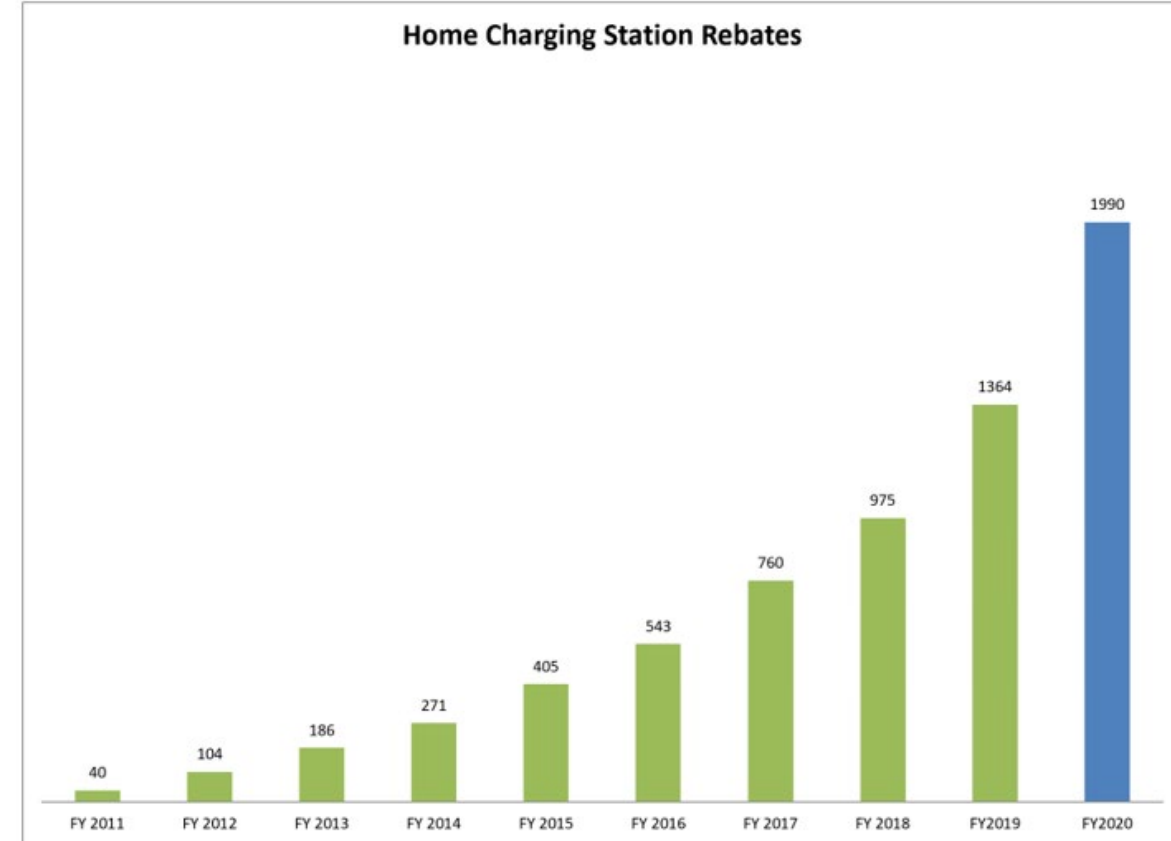
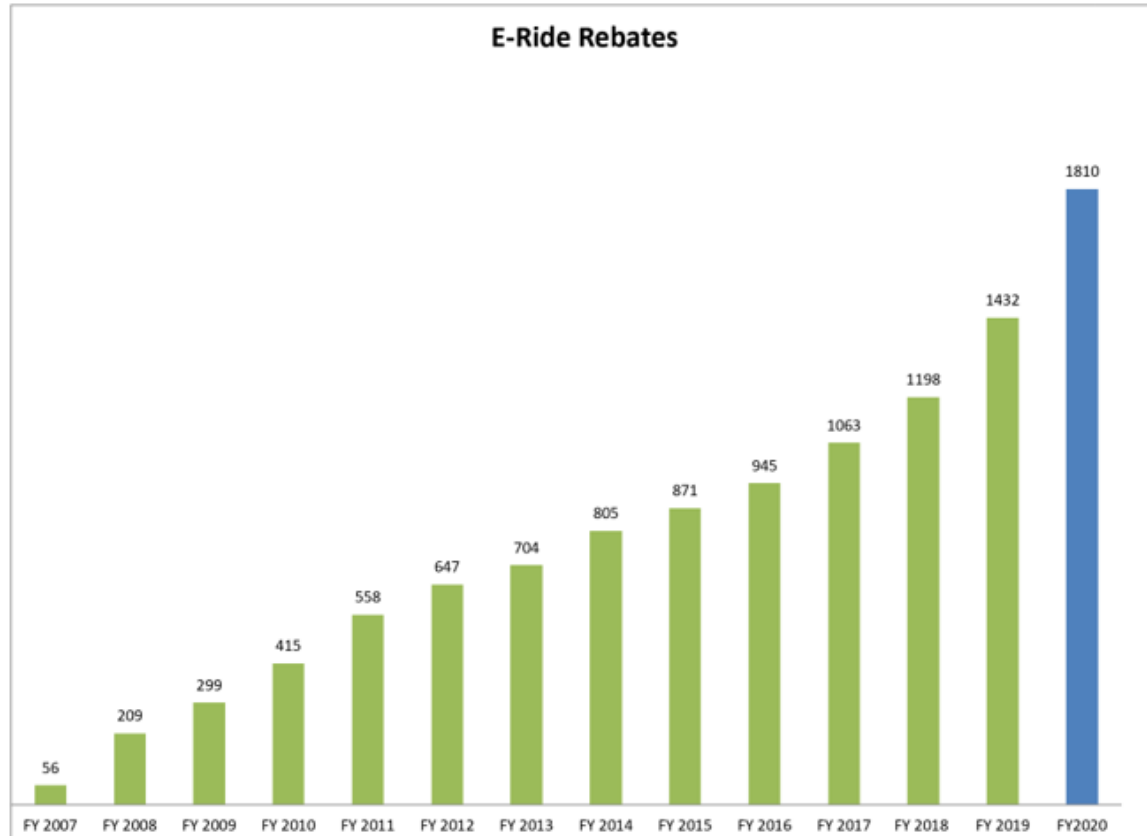
BE IT RESOLVED BY THE COUNCIL OF THE CITY OF AUSTIN:

The City Manager is directed to develop a strategy with specific actions to encourage EV adoption by City of Austin Employees and report back to Council on steps taken by March 30, 2022. Specific actions of a workforce EV engagement strategy may include outreach and education on EV and e-Bike ownership and existing city/utility incentives, employee discounts for EV leases/purchases from local auto dealerships, and short-term leasing discounts from third-party providers.





# Electrification Program Growth – FY20 Surge



*Participants from Texas Bicycle Coalition to include 19 e-bikes in FY20 from Austin Energy E-Ride Fleet Program*

