



Cleaner Vehicles and Technologies: What's on Central Texas Roads?

Clean Air Force Air Quality Professionals Forum
January 13, 2022 * Elizabeth Munger

National Network of ~90 Clean Cities Coalitions

Lone Star Clean Fuels Alliance is the Clean Cities Coalition serving Central Texas

cleancities.energy.gov

Clean Cities Coalitions



Map Date: 2/1/21

How Do Clean Cities Coalitions Fit Within DOE?

Vehicle Technologies Office



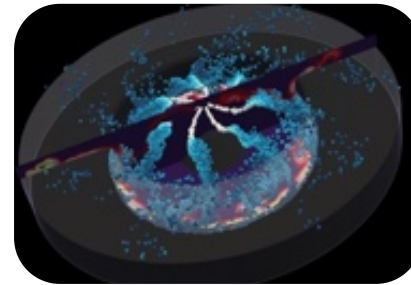
Batteries and
Electrification



Materials
Technologies



Energy Efficient
Mobility Systems



Advanced Engine and
Fuel



Technology
Integration

- ✓ Improve energy **efficiency**
- ✓ Increase domestic energy **security**
- ✓ Reduce operating **cost** for consumers and business
- ✓ Improve global **competitiveness** of U.S. economy

Clean Cities Portfolio



**Light-,
Medium-, and
Heavy-Duty
Vehicles**



**Alternative and
Renewable
Fuels and
Infrastructure**



**Idle Reduction
Measures and
Fuel Economy
Improvements**



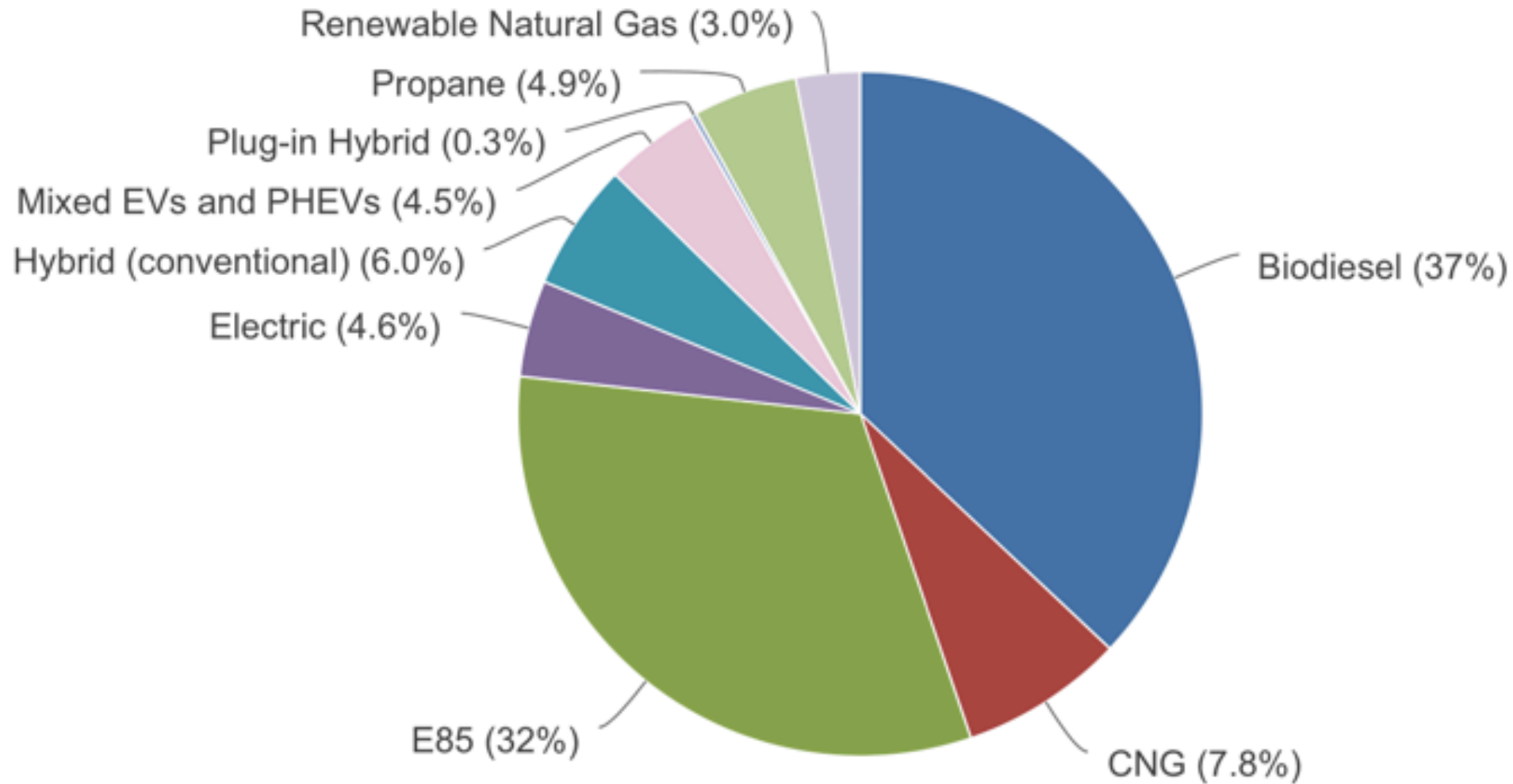
**New Mobility
Choices and
Emerging
Transportation
Technologies**

Technology Integration Program Clean Cities Areas of Assistance



2020 Greenhouse Gas Emissions Reduced by Fuel Type for Alternative Fuel Projects

7,908 tons



Stakeholders (not inclusive!):

City of Austin:

Biodiesel, E85 (ethanol), Electricity, Hybrid, Natural Gas, Propane, Renewable Natural Gas

School Districts: Austin, Eanes, Georgetown, Leander, San Marcos: propane school & para transit buses

Fast Park & Ride: CNG shuttles

Park & Zoom: Electric shuttles

Capital Area Rural Transportation System: Propane buses

City of Cedar Park: EVs

Travis County: Hybrids, propane

TxDOT: EVs light duty, CNG & propane, medium- & heavy-duty

Capital Metro: EV buses and passenger cars

University of Texas: Hybrids, Propane

Site Visit

Eanes ISD Propane School Bus Yard



Site Visit:

AYRO low speed
electric vehicle

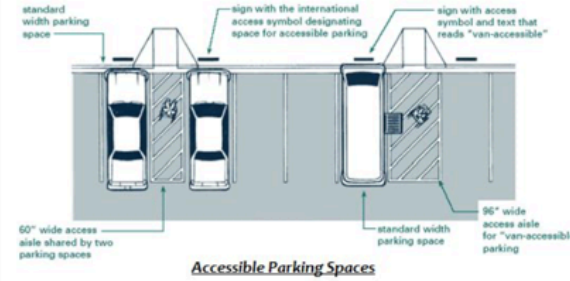


Online Workshops

Smart Charge America - EV Readiness



SINGLE: Set-up junction boxes in front of parking slot



DUAL: Set-up junction boxes in between two parking slots

Smart Charge America - EV Readiness

SMART CHARGE AMERICA Installation Photos



Smart Charge America - EV Readiness



Smart Charge America - EV Readiness

Ride-n-Drive ZERO Motorcycle



UT eTruck project



Recruit fleets interested in demoing a box truck for 3 months

Year 1: Austin

Year 2: Houston, San Antonio

Year 3: DFW



eCab Bastrop project

Project Manager: testing on-demand low speed electric vehicles for first / last mile applications to supplement existing service.



Information & Education:

Alternative Fuels Data Center

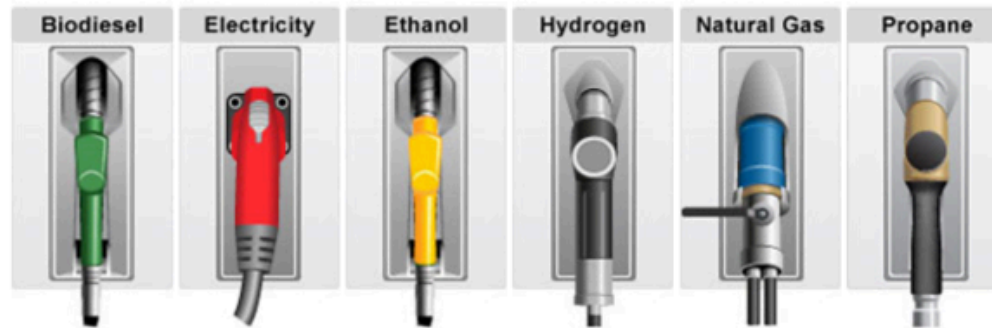
Search the AFDC

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Fuels & Vehicles ▶



Battery Policies and Incentives

Search a new database for batteries developed for EVs and energy storage.



The Information Source for Alternative Fuels and Advanced Vehicles

Information by State ▶

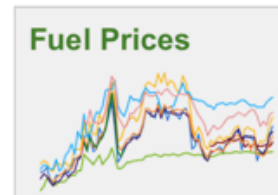


Information by Fleet Application ▶



Maps & Data ▶

- U.S. Alternative Fueling Stations by Fuel Type
- U.S. Hybrid Electric Vehicle Sales by Model
- Light-Duty Alternative Fuel Vehicle Registrations

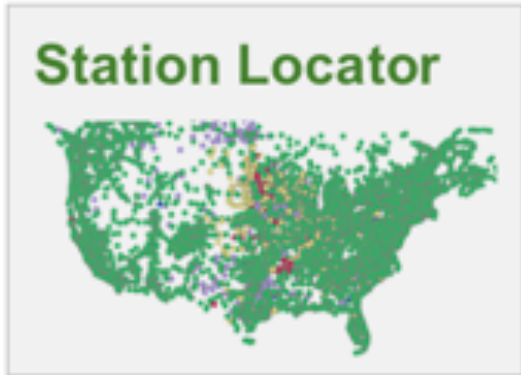


Tools ▶

- Laws & Incentives
- Electricity Sources & Emissions



Tools: AFDC Station Locator



Download [iPhone app](#)
or [Android app](#)

Public Stations | Advanced Filters | Fuel Corridors

Filter by Station Details

Location | **Fuel** | **Station**

Access: Public, Private

Status: Available, Planned, Temporarily Unavailable

Owner: All

Payment: All

[clear all filters](#)

Map Results

590 station locations

1,285 EVSE ports

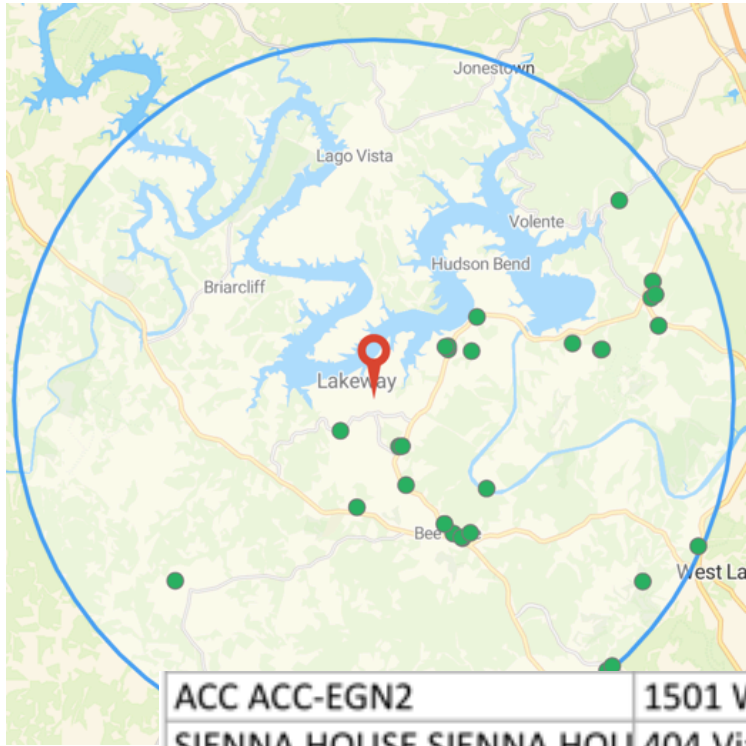
Filters chosen:

Within 30 mi of: Travis County

Electric
Types: DC Fast, Level 2

Access: Public

Tools



Department of Energy's Station Locator

SAS SAMSUNG 5

12100 samsung blvd
Austin, TX 78754

A Directions
📞 888-758-4389

Level 2

Report a change + More

<https://afdc.energy.gov>

| | | | | | | |
|-------------------------|-------------------------|-------|--------------|-------|---------|--------------------------|
| ACC ACC-EGN2 | 1501 W. US HWY 290 | 78621 | Elgin | 78621 | Public | 24 hours daily |
| SIENNA HOUSE SIENNA HOU | 404 Via De Sienna Blvd | | Georgetown | 78628 | Public | 24 hours daily |
| HEB HEB LAKEWAY #1 | 2000 Ranch Rd 620 S | | Lakeway | 78734 | Public | 24 hours daily |
| HEB HEB LAKEWAY #2 | 2000 Ranch Rd 620 S | | Lakeway | 78734 | Public | 24 hours daily |
| H-E-B #714 | 2000 Ranch Rd 620-S | | Lakeway | 78734 | Public | 24 hours daily |
| ACC SAN GABRIEL 1 | 640 Mel Mathis Blvd | | Leander | 78641 | Public | 24 hours daily |
| ACC SAN GABRIEL 2 | 640 Mel Mathis Blvd | | Leander | 78641 | Public | 24 hours daily |
| KOHL'S 11280 LEANDER1 | 1245 Lacy Dr | | Leander | 78641 | Public | Mon 7:00am - 10:00pm; |
| SHADOWGLEN STATION1 | 12500 Shadowglen Trace | | Manor | 78653 | Public | 24 hours daily |
| CARCHARGING WALGREENS# | 1821 Farm to Market 685 | | Pflugerville | 78660 | Public | 24 hours daily |
| Round Rock Nissan | 3050 N IH-35 | | Round Rock | 78681 | Private | |
| Oncor Electric | 350 Texas Ave | | Round Rock | 78664 | Private | Employee and visitor use |
| The Ace Apartment Homes | 1401 Satellite View | | Round Rock | 78665 | Private | MON: 24 hours TUE: 24 |
| ACC ROUNDROCK STAT4 | 4400 College Park Dr | | Round Rock | 78665 | Public | 24 hours daily |

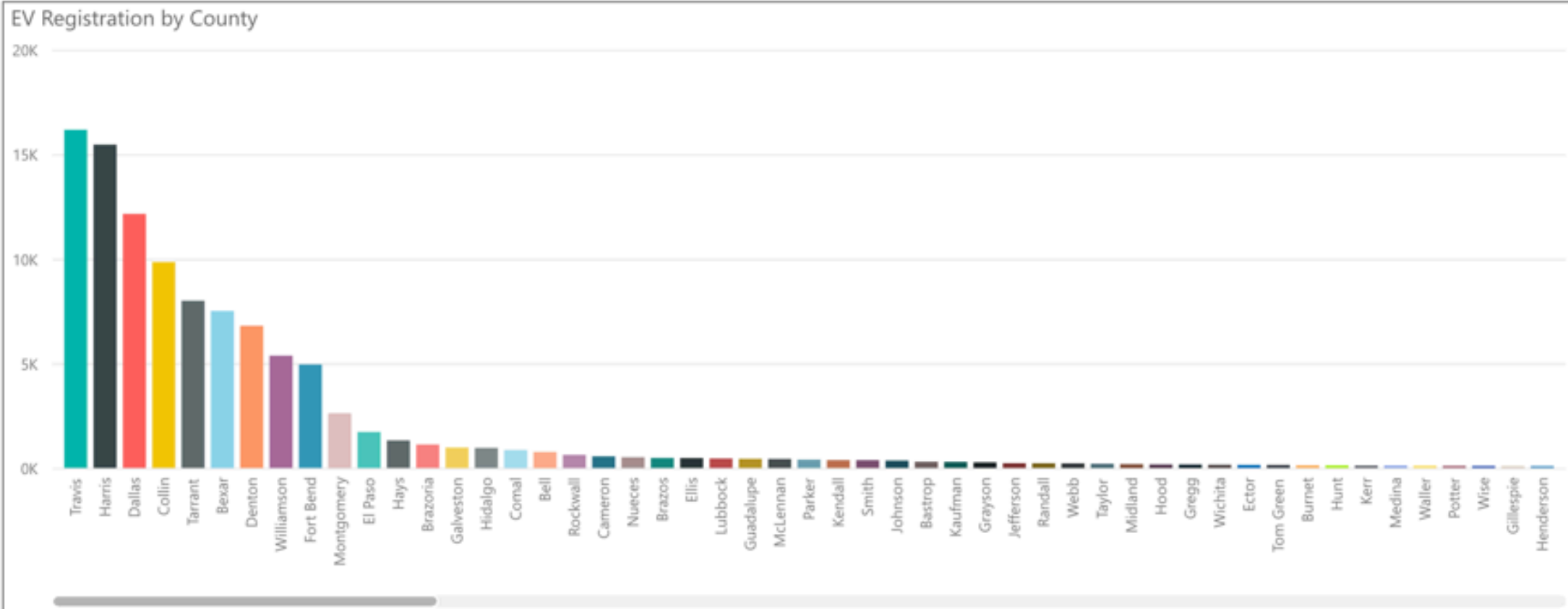
Texas Electric Vehicle (EV) Registration Tool



Dallas-Fort Worth
CLEAN CITIES

108,845 EVs

EV's in Texas as of January
4, 2022



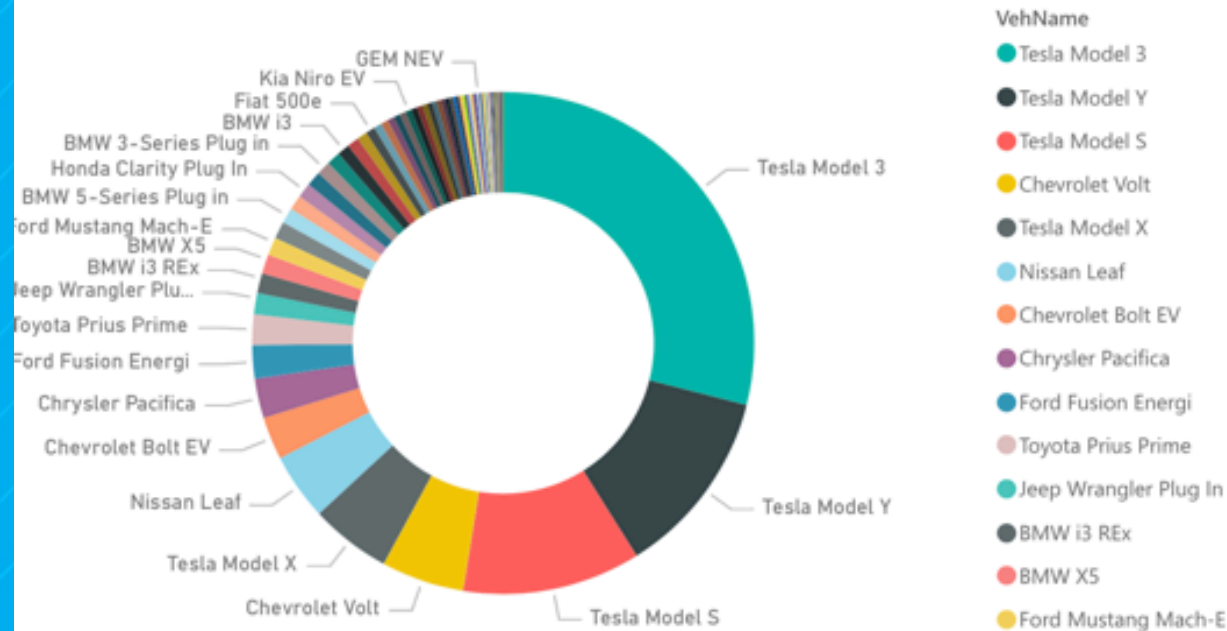
Registered Vehicles by County

| County | All Vehicles | EV Count | Ratio of EVs to Total Vehicles |
|---------|--------------|----------|--------------------------------|
| Travis | 970,309 | 16,177 | 1.67% |
| Harris | 3,438,332 | 15,467 | 0.45% |
| Dallas | 2,127,403 | 12,155 | 0.57% |
| Collin | 854,282 | 9,856 | 1.15% |
| Tarrant | 1,724,144 | 7,999 | 0.46% |

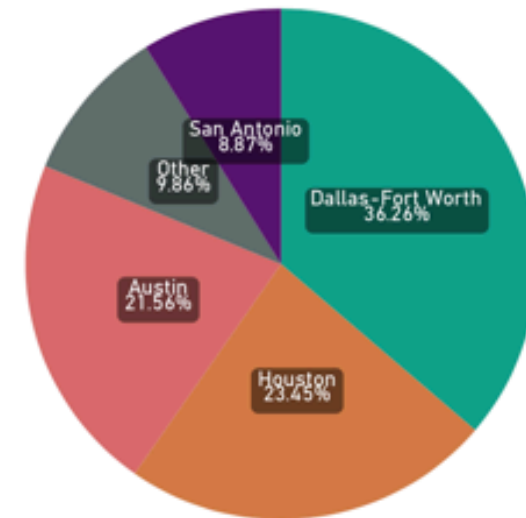
Registered Vehicles by City

| City | All Vehicles | EV Count | Ratio of EVs to Total Vehicles |
|-------------|--------------|----------|--------------------------------|
| AUSTIN | 842,511 | 15,090 | 1.79% |
| HOUSTON | 2,330,319 | 10,896 | 0.47% |
| DALLAS | 1,046,473 | 7,720 | 0.74% |
| SAN ANTONIO | 1,428,797 | 6,599 | 0.46% |
| FRISCO | 153,094 | 3,208 | 2.10% |
| FORT WORTH | 757,734 | 2,879 | 0.38% |

EV Registration by Model



EV Registration by Region



Contact

Elizabeth Munger

Director, Clean Cities Coordinator
Lone Star Clean Fuels Alliance

elizabeth@lonestarcfa.org ~ lonestarcfa.org



Upcoming events:

- XL Fleet's EV Pickup Demonstration TBD Feb 22 -26
- Konnectronix Low Power Charging Options - early Feb
- Fleet EV Readiness Roundtable - Feb 17th

Interested? elizabeth@lonestarcfa.org