

Chapter 10 Getting There

Moving to a motive world that is primarily electric will be a monumental accomplishment. Some sectors will be transformed in the relative blink of an eye, much like the transformation that occurred 100 years ago when horses were replaced with horsepower. Others for technological as well as historical reasons will be slow to change. Aviation and Marine transport may lag, but electric cars, scooters, and bikes are coming at a speed we would have never imagined just 10 years ago.

During the last months of 2022, TxETRA and the TxETRA Education Fund held a series of meetings to develop the Recommendations that our members, owners, and key constituents considered to be important to the creation of an environment conducive to the develop of a robust electric transportation sector while also managing this sea change efficiently.

These RECOMMENDATIONS and the actors who must manage or bring them about were considered important enough to be singled out.

The Texas Legislature:

1. The Texas Legislature should create a statewide electric transportation planning council. The planning council should plan charging buildout after Federal funds are distributed.
2. Metropolitan planning organizations, city councils and developers will ensure that communities affected are included in conversations about building and discussing electric transportation infrastructure and plans.
3. The Texas Legislature should establish an electric vehicle consortium(s) similar to the consortium structures (National Cooperative Research Act) that accelerates the electric transportation industry by fostering common technological architecture to create Texas jobs and manufacturing.
4. The Legislature should amend Texas Emissions Reduction Program to lift the cap on the number of electric vehicle incentives; allow rebates to be given as an incentive at the time of purchase; create two incentive levels and allow more for V2G EVs (for grid resiliency) and expand the number of grants for medium- and heavy-duty trucks and fund the charging equipment necessary to power them.
5. The Texas Legislature should adopt goals and incentives for electric vehicle manufacturing jobs.

TxDOT:

6. The Department of Transportation should develop directional signs and regulations for charging equipment locations.

Texas Public Utilities Commission:

7. The Texas Public Utilities Commission should enable the development of industry standards, V2H and V2G solutions/systems deploy in Texas and empower ERCOT to develop protocols.
8. The Texas Public Utilities Commission should allow mobile storage and stationary storage to powershift energy onto the electric grid at peak, and back into storage when generation exceeds load.
9. The PUC should encourage any public electric utility to offer programs to reduce charging during grid peak and encourage charging during off-peak to lower costs, and improve environmental and grid conditions.
10. Texas utilities should join other electric transportation compacts to ensure interstate electric travel.

TCEQ:

11. The TCEQ should be authorized to adopt battery recycling and reuse programs and establish goals.

The Texas Department of Licensing and Regulation (TDLR):

12. The Texas Department of Licensing and Registration (TDLR) should create an electric vehicle charger training program to certify charging and electric automotive technicians.
13. The Texas Department of Licensing and Registration should establish regulations to maintain high standards of charger reliability.

University and Community Colleges:

14. Community colleges should establish training programs for electric vehicle charging technicians and vehicle technicians.
15. State universities should compare the lifetime cost effectiveness of internal combustion engine vehicles versus electric vehicles in procurement of buses and fleets and provide electric vehicle charging facilities for faculty and students.

Local Governments and MPOs:

16. Federal, state and local governments and nonprofit organizations should provide funding and technical assistance to community-based organizations to assist in developing grant and other funding opportunities.

17. Local government should consider building codes that require new construction, including multifamily dwellings and workplaces, to be electric vehicle ready.
18. Local governments and/or public/private co-ops should create programs that help get affordable, reliable electric transportation in the hands of low- and moderate-income Texans.
19. Independent school districts should transition their diesel fleets to electric transportation by 2035.
20. Public transportation agencies should transition their diesel fleets to electric transportation by 2035.
21. Cities and counties should transition their diesel fleets to electric transportation by 2035.
22. To protect the public health, Texas cities and counties should be allowed to prepare for the regulation of internal combustion engines in their air sheds.
23. Cities should allow installation of wayfinding signs for electric vehicle charging on their right-of-way streets.
24. Municipalities should encourage programs and infrastructure that prioritize support for workplace and multifamily charging. The State agencies should prepare for electric vehicle sales and market penetration through 2033. (Approximately 50% of sales by 2033)

Manufacturers:

25. Vehicle manufacturers should be incentivized to offer a wide variety of battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs) in rural Texas counties.
26. Early electric vehicle adopters should be considered as future technology arrives. (Ex. Adapters for early electric vehicles should be available)

Getting Credit for Emissions Reductions:

27. Texas should adopt a regional carbon market so that carbon reductions achieved through electric transportation can be monetized.
28. Corporations and other business entities that reduce emissions through electrification of their fleets, telework, and electric transportation programs for their employees would be able to participate in the regional carbon market.

