



NCTCOG PRESENTATION

Electric Vehicle Infrastructure Building Standards

BAILEY MULLER | ENERGY GREEN ADVISORY BOARD | 4.7.2021

Electric Vehicles by the Numbers



14,179

Electric Vehicles in North Texas in March 2021



32.5%

Average Annual Growth Rate of EVs in North Texas from 2015-2020



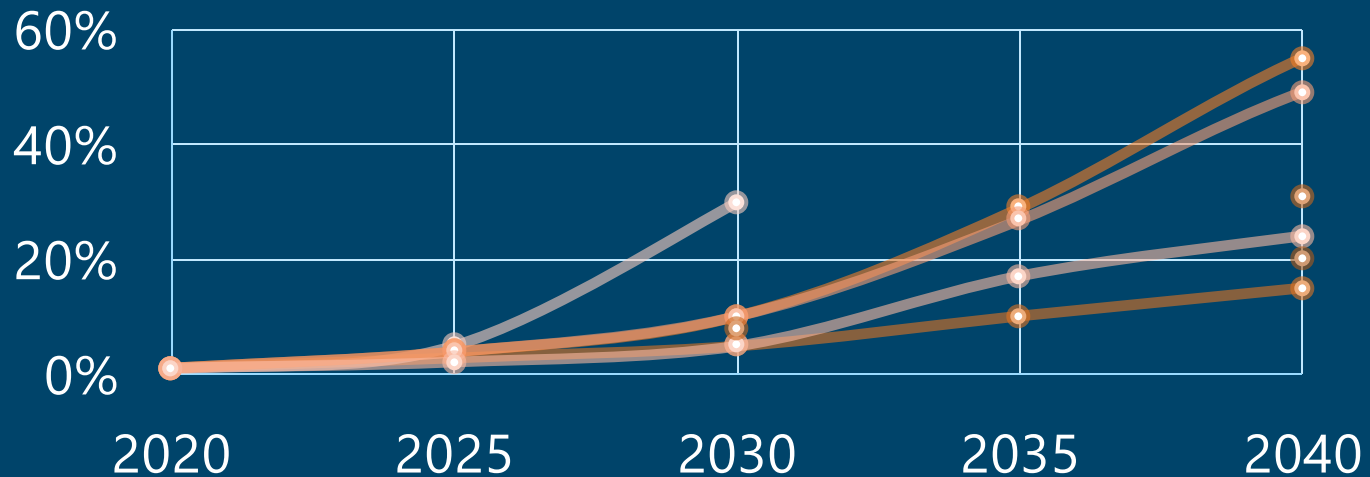
0.58%

EV percentage of total vehicles in North Texas in March 2021



UP TO 55%

EV percentage of total vehicles forecasted by 2040



Forecast sources:
Exxon Outlook for Energy, Bloomberg New Energy Finance, BP Energy Outlook, International Energy Agency

International Codes Background

Commercial and Residential EV Infrastructure Requirements were proposed as part of the 2021 International Energy Conservation Codes (IECC)

Covered

EV Capable and EV Ready minimum parking space standards based upon amount of total available parking spaces for Commercial and Residential new construction

Overtaken by Board

Spring 2020: Proposed EV requirements approved by the online vote of ICC Members

October 2020: ICC Board of Directors voted to overturn the proposal for EV readiness through an appeal, claiming that these updates do not meet the stated intent of the model code to conserve energy.

EV Parking Infrastructure Specifications



EV-CAPABLE

Electrical Panel Capacity
+ Branch Circuit
+ Raceway



EV-READY

EV-Capable
+ 240-volt outlet



EV-INSTALLED

Install a Minimum
Number of Level 2 EV
Charging Stations



Build
Ahead
Save
Money

The cost to install EV-Capable infrastructure during new construction is **four to six times less expensive** than during a stand-alone retrofit.

Source: Energy Solutions, 2019

Total added cost to new construction project to add EV-ready for commercial and residential: **0.1%-0.2% of total cost of project**

Source: California Air Resources Board, 2018

NEXT STEPS

GOAL: Develop Regional Resources to Provide Consistency in EV-Capable and EV-Ready Construction



To Join the Working Group, Contact Bailey at bmuller@nctcog.org

CONTACT US



Bailey Muller

Senior Planner, NCTCOG Transportation Department

bmuller@nctcog.org



Lori Clark

Program Manager, NCTCOG Transportation Department

lclark@nctcog.org