

EV Codes Roundtable

Carolyn Burns Air Quality Planner

Regional EV Infrastructure Working Group July 30, 2025





Welcome & Housekeeping

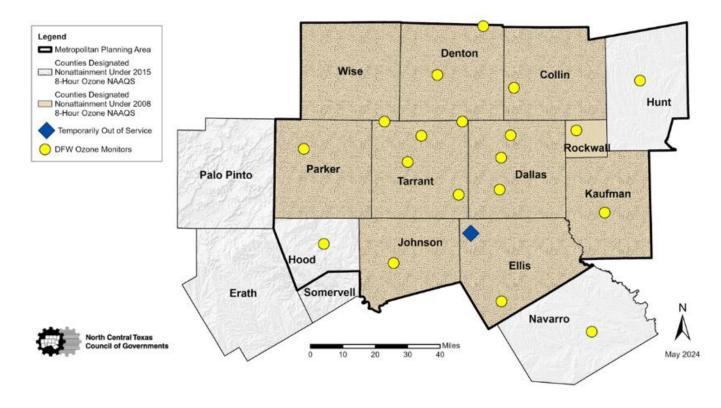
- 1. Please keep you microphone muted.
- 2. If you have a question, put it in the chat or use the "Raise Your Hand" feature.
- 3. Please put your name and organization in the chat.
- 4. The presentation will be recorded up until we reach the Q&A and open discussion portion.
- 5. The webinar slides and audio recording will be posted on the Conserve North Texas website under News/Events → Event Archive and on the DFWCC Events webpage under Materials from Past Meetings/Events. Follow-up emails to come.

Agenda

- 1. NCTCOG/DFWCC Introduction
- 2. IECC EV-Ready Codes Background
- 3. Roundtable Discussion
- 4. NCTCOG Updates



Who We Are





Regional Planning Agency



Metropolitan Planning Organization (MPO)



Local Clean Cities and Communities Coalition





State Energy Conservation Office (SECO) Acknowledgement



This material is based upon work supported by the State Energy Conservation Office (SECO) through the Texas Comptroller's Office under Contract CM23004. The views expressed herein do not necessarily represent the views of SECO or the State of Texas.

EV Parking Infrastructure Specifications



EV CAPABLE SPACE

Electrical Panel Capacity + Conduit



EV READY SPACE

EV Capable + Installed Full Circuit



EVSE SPACE

Install EV Charging Station

Graphics Source: Southwest Energy Efficiency Project

4x-6x more expensive

The cost to install EV Ready infrastructure post-construction compared to at time of new construction.

Source: Alternative Fuels Data Center



EV-Ready Building Codes and Standards

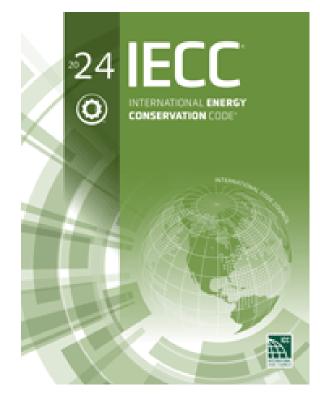
International Code Council:

International Energy Conservation Codes (IECC) - Updated May 2024

- Minimum parking space requirements for EV Capable, EV Ready, and EVSE Spaces*
- System capacity and circuit capacity requirements
- Commercial: Appendix CG Electric Vehicle Charging Infrastructure
- Residential: Appendix RE Electric Vehicle Charging Infrastructure

Benefits of integrating 2024 IECC into building and parking requirements

- Help your community be EV ready
- Earn points toward Charging Smart designation
- Cost savings to facility owner and utility for including in new construction vs retrofit



Graphics Source: International Codes Council

dfwcleancities.org/evreadiness



Commercial: Table CG101.2.1

Required EV Power Transfer Infrastructure

Occupancy	EVSE Space	EV Ready Space	EV Capable Space
Group A	10%	0%	10%
Group B	15%	0%	30%
Group E	15%	0%	30%
Group F	2%	0%	5%
Group H	1%	0%	0%
Group I	15%	0%	30%
Group M	15%	0%	30%
Group R-1	20%	5%	75%
Group R-2*	20%	5%	75%
Group R-3 and R-4	2%	0%	5%
Group S exclusive of parking garages	1%	0%	0%
Group S-2 parking garages	15%	0%	30%

^{*}Based on total number of dwelling units or parking spaces, whichever is less



Commercial EV Charging Infrastructure

Number of required of EV Capable, EV Ready, and EVSE spaces is determined below and per Table CG101.2.1 based on total number of parking spaces.

- 1. Where more than one parking facility is provided on a building site, number of parking spaces required to have EV power transfer infrastructure is calculated separately for each parking facility.
- 2. Where one shared parking facility serves multiple building occupancies, required number of spaces is determined proportionally based on the floor area of each building occupancy.
- 3. Installed EVSE spaces that exceed the minimum requirements may be used to meet the minimum requirements for EV Ready and EV Capable spaces.
- 4. Installed EV Ready spaces that exceed the minimum requirements may be used to meet the minimum requirements for EV Capable spaces.
- 5. Where the number of EV Ready spaces allocated for R-2 occupancies is equal to the number of dwelling units or to the number of parking spaces allocated to R-2 occupancies, whichever is less, requirements for EVSE spaces for R-2 occupancies shall not apply.
- 6. Requirements for a Group S-2 parking garage is determined by the occupancies served by that parking garage. Where new automobile spaces do not serve specific occupancies, the values for Group S-2 parking garage in Table CG101.2.1 is used.

Exception: Parking facilities serving occupancies other than R2 with fewer than 10 parking spaces.



Residential EV Charging Infrastructure

Appendix RE Electric Vehicle Charging Infrastructure



New one- and two-family dwellings and townhouses with a designated attached or detached garage or other on-site private parking provided adjacent to dwelling unit

 Provide one EV Capable Space, EV Ready Space or EVSE Space per dwelling unit



 Provide EV Capable Space, EV Ready Space or EVSE Space for 40% of the dwelling units or parking spaces, whichever is less



Texas Cities EV-Ready Requirements

City	Residential	Commercial	Compared to 2024 IECC
Austin	Hotels and apartments: 35% EV capable spaces; One and two-family dwellings: 5% EV Capable spaces	Up to 30% EV Capable spaces, dependent on occupancy classification	Residential: somewhat consistent Commercial: less exhaustive
Dallas	1- to 2-family units: 1 EV ready space/unit	3 or more units + Commercial: calculated % based on total number of spaces	Residential: somewhat consistent Commercial: less exhaustive
Lewisville	100+ parking spaces must have 5% EV Ready Spaces	100+ parking spaces must have 5% EV Ready Spaces	Residential: less exhaustive Commercial: less exhaustive
Little Elm	Multi-family: Infrastructure for one EVSE for every 25 parking spaces	Infrastructure for one EVSE for every 25 parking spaces	Residential: N/A Commercial: N/A



SPEER

Randy Plumlee
Energy Code Program Manager
South-central Partnership for Energy Efficiency as a Resource (SPEER)
rplumlee@eepartnership.org

Houston:

Added requirements to their 2021 IECC adoption

Austin:

- Adopted with the 2024 IECC
- Specifically, Appendices RE and CG

Corinth:

 Require dedicated EV-designated parking spaces with signage in commercial lots over 50 spaces







Houston:

Adopted Appendix CD for Commercial and Appendix RD for residential

Residential:

- New one- or two-family home must include at least one EV-Ready space
- Dedicated 40-amp circuit at 240 volts, with receptacle or junction box installed within 3-feet of the parking space
- Must be labeled EVSE

Commercial:

- R-2 Buildings must provide 20% EVSE-installed,
 5% EV-Ready, and 75% EV-Capable spaces
- Offices require 15% EVSE-installed and 30% EV-Capable

EV-Capable means the conduit and panel capacity are there, but no wiring or outlet is installed yet







Austin:

Starting July 10, 2025, will enforce the 2024 IECC with local amendments, specifically Appendices RE and CG

Residential:

- Every new single-family or townhome with a garage or parking space must include one EV-Ready, EV-Capable, or fully installed EVSE space
- Circuit must support at least 6.2 kilovolt-amps, or 30 amps at 240 volts

Commercial:

- R-2 Buildings must provide 5% EV-Ready and 35% EV-Capable spaces
- Offices, schools, and retail: up to 30% EV-Capable
- Parking garages that serve as long-term parking must provide 10% EV-Capable at a minimum

Removed the requirement to install actual charging stations (EVSE) in most cases – focusing instead on preparing the infrastructure during construction, which is much more cost-effective







Corinth:

While not requiring wiring or circuitry

• Requires dedicated EV-designated parking spaces with signage in commercial lots over 50 spaces

This is more of a zoning ordinance and not a building code requirement, but it shows that even smaller cities are acknowledging the EV shift







SPEER – South Central Partnership for Energy-Efficiency as a Resource

Take advantage of discounted Early Bird Registration while you can!

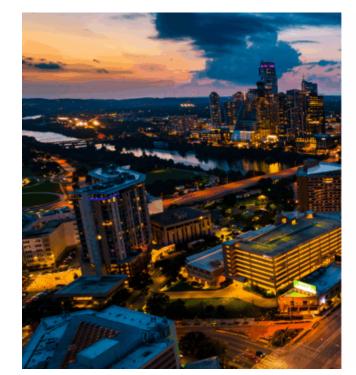
The agenda is live – save your spot now and join us at SPEER's 2025 Industry + Policy Workshop

September 18-19 at the AT&T Hotel & Conference Center in Austin

While last year's record-setting event will be hard to top, we're excited to set the bar even higher this year in a larger venue

Several sponsorship packages are still available

Head over to eepartnership.org to learn more!





September 18-19
AT&T Hotel & Conference Center
Austin, TX







City of Dallas

Steven Ramirez
Planning and Development Administrator
City of Dallas
steven.ramirez1@dallas.gov

Albin Keggs
Electrical Chief
City of Dallas
albin.kneggs@dallas.gov

City of Little Elm

Wesley Brandon
Director of Development Services/ Town Engineer
City of Little Elm
WBrandon@littleelm.gov



Roundtable Discussion

- 1. What prompted the adoption of these EV codes?
- 2. What was the process/timeline of adopting these codes?
- 3. What was the public feedback, if any?
- 4. What was the input from the local building/construction industry?
- 5. Has there been any challenges or pushback so far?
- 6. What benefits have you seen so far?

Charging Smart

- Technical assistance and national designation program that guides cities to become EVready through streamlining administrative policies
 - Cohort session recordings available <u>here</u>
 - The City of Arlington has achieved Bronze designation!
 - Eight other cities progressing towards designation
- Awards points for incorporating EV infrastructure requirements in building/zoning codes
 - o Ex: Require EV-capable or EV-ready spaces in new construction of single-family units
 - Ex: Allow all EVSE parking stalls to count toward minimum parking requirements



FHWA CFI Community Call for Projects

Eligible Projects: Install charging stations on public sector property in the 16-county NCTCOG region

• Examples: Sports complexes, parks, city halls, community centers, libraries, multi-use service centers, transit stations, public schools

Eligible Applicants: Public agencies, including local governments, transit agencies, school districts, and universities

Funding: Federal share up to 80% of the deployment capital costs, 20% non-federal share contributed by EV charging station vendor(s)

Application Assistance: Professional services available at no cost to public sector applicants from Kimley-Horn and Associates, contact EVDreamTeam@kimley-horn.com

- Kimley-Horn and Associates can provide one-on-one application support
- NCTCOG and Kimley-Horn and Associates hosting application workshops throughout the region

Deadline: 5:00 p.m. CT on Friday, October 31, 2025

Program Details, including workshop information: nctcog.org/EVcharginggrant



Contact Us



Carolyn Burns
Air Quality Planner II
cburns@nctcog.org



Joslyn Billings Air Quality Planner III jbillings@nctcog.org



Jared Wright
Senior Air Quality Planner
jwright@nctcog.org





