ARAPAHOE COUNTY PLANNING COMMISSION STUDY SESSION October 21, 2025 6:30 P.M.

SUBJECT: CASE NO. LDC25-001 – EV CHARGING STATIONS – LAND DEVELOPMENT CODE AMENDMENT

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PURPOSE AND REQUEST

To obtain input from the Planning Commission on the proposed code amendment to include electric vehicle (EV) standards as required by House Bill 24-1173 (HB24-1173).

BACKGROUND

The Colorado State Legislature passed HB24-1173, and Governor Polis signed it into law on May 21, 2024. The law requires subject municipalities (with 10,000 or more residents) and counties (with 20,000 or more residents) to implement one of the three compliance EV charger options into their land development codes. The goal of HB24-1173 is to expand EV use, cost-effectiveness, convenience, and viability across the state and to advance Colorado's goals to reduce local air pollution and greenhouse gas emissions. This bill also encourages a more standardized and streamlined local permitting process for EV charging development.

As per HB24-1173, "A county permitting agency shall approve, conditionally approve, or deny an application for an EV Charger permit using the county's administrative review process to determine if the proposed electric motor vehicle charging system is in compliance with the county's objective standards." This code amendment needs to be incorporated into the Arapahoe County LDC on or before December 31, 2025. However, the Colorado Energy Office (CEO), which is the agency assisting the applicable cities and counties to update their codes as per HB24-1173, has indicated to County staff that code adoption could occur in early 2026 due to the amount of review required by the public, staff, Planning Commission, and Board of County Commissioners that needs to occur.

HB 24-1173's three compliance options include: Compliance Option 1: EV Charging Model Code Adoption; Compliance Option 2: Statutory Code Adoption; and Compliance Option 3: Retain Existing Permitting Process and Standards. These options are further discussed below.

Compliance Option 1: EV Charging Model Code Adoption

Adopt the permitting standards and processes from the CEO's Colorado Electric Vehicle Charging Model Land Use Code and Guidance document. The Model Code, which was published in March 2025, provides definitions, site development, and other standards, and a streamlined process.

Compliance Option 2: Statutory Code Adoption

Adopt an ordinance or resolution that establishes a permitting process for "EV Charger Permit" applications, consistent with the permitting standards and process requirements of C.R.S. 30-28-213 (4) and (5). Subject jurisdictions that choose this compliance path should refer to the statute

to ensure they understand the requirements. The CEO provided technical assistance, and training is not available if one pursues this compliance path.

Compliance Option 3: Retain Existing Permitting Process and Standards

Keep the existing EV charging permitting process and review standards in the land development code.

In a study session on July 21, 2025, staff met with the Board of County Commissioners to obtain direction on which compliance option they wished staff to pursue. Compliance Option 1 was selected, and staff have proceeded in drafting the regulations.

DISCUSSION

Staff propose implementing the CEO's basic model code and adopting design standards and definitions options within this code that are appropriate for the County. The following is a bullet-point summary of the proposed regulations. Please refer to the attached code.

Proposed Regulations Summary

- Applicability Standards
- Permitting by Zoning Districts
- Parking Standards
- Setback Standards
- Equipment Standards
- Screening and Landscaping Standards
- Lighting
- Pavement Marking and Striping
- Visibility
- Landscaping
- Signage
- Weather Canopies
- Definitions

Public Outreach

The EV standards were posted on the Arapahoe County website for public comment on September 10, 2025, and the comment period ended on October 3, 2025. Staff emailed EV and utility companies to notify them that the proposed code had been placed on the County's website for comment. Staff also contacted several fire districts to discuss EV charging facilities. The comments received include the following:

1. The Model Solar Ready Code referenced within HB 24-1173 provides for Cost Differential Waivers for multifamily development of over 10,000 SF. Will Arapahoe County provide its own form for accessing this waiver?

Staff Response: Arapahoe County's code is drawn from the Colorado Electric Vehicle Model Land Use Code and Implementation Guidance developed by the Colorado Energy Office, and this document complies with HB24-1173. In this document, there is no mention of Cost Differential Waivers, and therefore, it has not been considered as part of this code amendment.

2. Principal use charging stations should not be allowed in the indicated area types. There are significant fire hazards with EVs and EV charging.

Staff Response: The charging station facility equipment shall be professionally installed by a certified electrician and must adhere to all applicable building division codes, the National Fire Protection Association, and the National Electric Code. In addition, all charging components must be listed or identified for use by a Nationally Recognized Testing Laboratory.

Staff discussed fire risks with the CEO's consultant, and they indicated that while there is some fire risk, this risk associated with EV charging is quite low compared to "similar" uses, such as gas stations. This consultant indicated that one of the key topics discussed was fire risk when the advisory committee was developing the EV Charging Model Land Use Code, and often, the concerns were unfounded. The most critical and effective component of EV charging development to prevent fire risk is proper installation and maintenance.

3. Fire Districts – Staff received comments from the South Metro Fire Rescue. They stated that they have no issues or concerns regarding EV charging stations and have the technology and equipment to fight EV fires. To date, this district hasn't had any EV fires. This district also indicated that when reviewing site plans with EV charging stations, they ensure that these facilities don't impede the accessibility of their fire trucks.

SCHEDULE

Text amendments of the LDC require public hearings before both the Planning Commission and the Board of County Commissioners. The following is the proposed review and adoption schedule:

October 21, 2025: Planning Commission Study Session

November 17, 2025 Board of County Commissioners Study Session

January 2025 Planning Commission Public Hearing

February 2025 Board of County Commissioners Public Hearing

ACTION REQUESTED

Staff would like the Planning Commission to evaluate these draft code regulations and provide feedback and recommendations so that staff can incorporate any recommended changes to the draft regulations in advance of taking the final version to public hearings.

Attachment

Amended code

1-1 PERMITTED USE TABLE

See Table 3-2.1 below.

The Airport Influence Area (AIA-O), Centennial Airport Environs Planning Area (CAE –O) and the Mineral Resources and Geologic Hazard Area (MRG-O) Overlay Districts are not included in the Table. These overlay districts impose restrictions and other requirements on uses. Applicants proposing development in areas affected by these overlay districts will need to consult the applicable subsections of Section 2-5, Overlay Districts, for these restrictions and additional requirements.

1-1: Permitted Use Table

TABLE 3-2.1 PERMITTED USE TABLE

P = Permitted, A = Accessory, SR = Use by Special Review, SE = Use by Special Exception, T= Temporary Use/Temporary Use Permit Required, Blank = Not Permitted

	Agriculture and Residential ^[1]												Non-Residential ^[1]								PUD Districts [2]	Overlay	Use Specific Standard
	A-E	A-1	RR-A	RR-B	RR-C	R-1-A	R-1-B	R-1-C	R-1-D	R-2-A	R-2-B	R-M	B-1	B-3	B-4	B-5	1-1	1-2	F(3)	0	PUD	SBC-0	Code Section
Residential Uses																							
Commercial and Industrial																							
Transportation																							
Helipad operations													SE	SE	SE	SE	SE	SE		SE			1-1A
Airport																				SE	Per Approved		
Landing Strip for Private Aircraft and/or aircraft-related recreational facilities	SE	SE																		SE	General, Specific Preliminary or Final Development Plan		
Electric Charging Stations (Principal) Use)	SR	SR									SR		P	P	P	P	P	P		SR	See section (insert code section here)		<mark>3-3.11</mark>
Electric Charging Stations (Accessory Use)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	See section (insert code section here)		3-3.11

NOTES

- [1] Overlay District Regulations may apply: Airport Influence Area (AIA), Centennial Airport Environs Planning Area (CAEPA) and/or Mineral Resource and Geologic Hazard Areas. See Sections Error! Reference source not found., Error! Reference source not found.
- [2] Prior to April 1, 2017, the Permitted and Special Review uses are established by previously approved PUDs, including R-PSF, R-PM, R-PH, SH, MU and C. All existing PUDs with these zone district designations will continue to be governed by the existing approved PUD Preliminary and Final Development Plans. Temporary Uses listed in the Table may be permitted in non-residential portions of a PUD with an approved Temporary Use Permit. Temporary uses in residential portions of a PUD are allowed as shown in the Table with an approved Temporary Use Permit.
- [3] The uses and improvements listed as Permitted or Use by Special Review in the Floodplain District may be considered for approval within a floodplain if it is determined that the proposed use or improvement is in conformance with Section Error! Reference source not found., Floodplain Management, floodplain management goals, and is otherwise consistent with the zoning district standards of the Land Development Code. It must be demonstrated that none of the conditions in subsection Error! Reference source not found., will occur as a result of the proposed use or improvement.
- [4] May include stacked multi-family units, including second-story multi-family units above office and retail uses.
- [5] Provided that no permanent structure or shelter is located within the floodplain.
- [6] Includes truck, farm equipment and implement sales/service and repair, including indoor auto and truck bodywork and painting.
- [7] May include equipment yards and company vehicle storage.
- [8] Indoor uses are limited to 10% of site.
- [9] Underground utilities are permitted so long as adequate cover exists to protect the utilities.

3-3.11. Transportation

A. HELIPAD

Helipad operations are allowed provided the facility is:

- 1. Approved by the Federal Aviation Administration (F.A.A.) and
- 2. Not located closer than 1,000 feet to any existing or planned residential dwelling unit.

B. ELECTRIC VEHICLE

EV Charging consists of Principal Use EV Charging Stations and Accessory Use EV Charging Stations. Accessory Use for Electric Charging Stations is an incidental or subordinate use to the principal use on the Subject Property.

- 1. EV Charging projects are allowed per the applicable allowances in the Use Table and the Procedures specifications within this Code.
- 2. The absence of a principal use on a given parcel of land does not preclude the establishment of an Electric Vehicle Project as a Principal Use, in the following districts: A-E, A-1, R-R-B, & O.

3. Existing Principal Use Conformance Updates

Arapahoe County will not require existing land uses on the same subject property as a proposed Accessory Use EV Charging project to make site improvements or otherwise conform with land use regulations, unless the EV Charging application proposes simultaneous changes to their use, structures, or site that would otherwise require such conformance.

4. Regulation of Principal Use EV Charging Stations

a. County will apply existing regulations from the Land Development Code to Principal Use EV Charging Projects. The regulations will not be more restrictive than other land uses.
 Principal Use EV Charging regulations will also align with the Model Code base standards that apply to Principal Use EV Charging, including sections 6 (Parking), 8 (Equipment) and 9 b. (Electrical Equipment Safety).

b. Agricultural zoned properties shall be permitted to have two (2) principal uses, provided that one of the uses is an Electric Vehicle (EV) Charging Station.

5. PUD

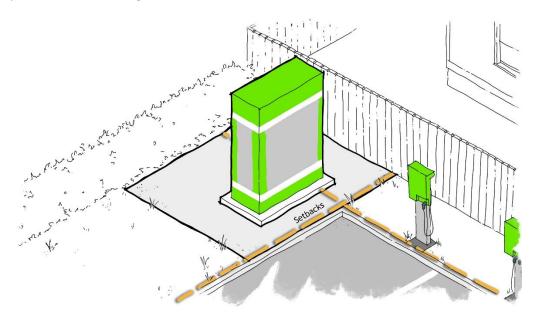
- a. Principal Use EV Charging Projects are allowed in Business and Industrial zones as a permitted use.
- b. Accessory EV Charging Projects are allowed as a permitted use in all zones, except for Floodplain (F).

6. Parking

- a. Any parking space served by an EV Charging port or any parking space used to site EV Charging Stations or Equipment will be counted toward applicable minimum parking requirements.
- b. Accessible parking spaces shall be provided in accordance with the Americans with Disabilities Act Accessibility Standards for parking space size and quantities.
- c. A minimum of one parking space that is served by EV charging shall be designed to accommodate persons with disabilities but not be restricted only for use by persons with disabilities. Any reduction in total parking spaces does not render the site in non-compliance.

7. Setbacks

For Accessory Use EV Charging Projects, EV Charging Stations and Equipment and any required screening material are not permitted within designated setbacks of the subject property unless developers demonstrate in their application that siting such equipment outside of setbacks is infeasible. Weather canopies are not permitted in the designated setbacks.



8. Station & Equipment Design

The appearance, materials, and dimensions of EV Charging Stations and Equipment shall be determined by current EV Charging manufacturing standards and utility design standards.

Projects located within residential zones will not be permitted to have design features such as large digital advertising screens or bright lighting that is stylistic rather than functional and may result in light pollution or nuisances to neighboring properties.

9. Screening

Screening is required for EV Charging Projects according to the following conditions and requirements:

- a. Screening is only required for visual separation between EV Charging Equipment and adjoining lots.
- b. Screening is only required where EV charging Equipment is located
- c. Screening is only required along the length of the EV Charging Equipment and parallel to the property line between the EV Charging Equipment and the adjoining lot (not wrapped around the entire perimeter of the equipment).
- d. Screening materials may include:
- i) An earthen berm with average side slopes no greater than 3:1 and minimum height of 3 feet.
 - ii) An opaque fence or wall with a minimum of 3 three feet.
 - iii) A shrub hedge with a minimum height of three feet.
- e. Applicants may request an exception to these screening requirements by demonstrating in their application that site-specific conditions negate the need for visual separation or where easements and space limitations preclude it. Requests for exceptions shall be processed as part of the stipulated review process based on the applicable allowances in the Use Table and the Procedures specifications within this Code. All exceptions are approved by the Planning Division Manager.

10. Equipment Access

Any screening, landscaping, signage, or light fixtures included in EV Charging Projects cannot be located within the electrical equipment safety and access distances as per National Fire Protection Association (NFPA) standards, and the National Electric Safety Code (NESC), a

11. Lighting

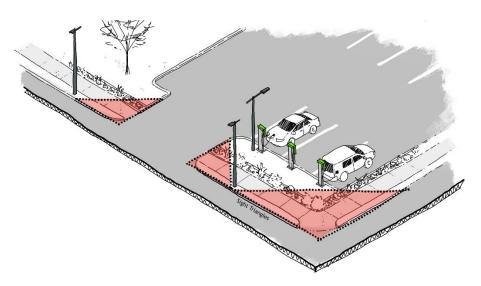
Charging Stations proposed as part of an EV Charging Project must be within the Horizontal Illuminance of on-site lighting, as defined in Section 4-1.6. Lighting may be provided by existing on-site lighting and/or by new lighting fixtures integrated into EV Charging Stations or Equipment or by new separate light fixtures.

12. Pavement Marking and Striping

EV Charging Projects must comply with marking standards for parking spaces, as applicable, in accordance with Section 4-1.2.

13. Visibility

EV Charging Stations and EV Charging Equipment must comply with regulations for sight lines/ triangles, per Section 4-2.9.B



14. Landscaping

When existing landscape plants on a Subject Property are removed during the installment of an Accessory Use EV Charging Project, they shall be replaced with similar plants so as to maintain the property's compliance with landscaping standards for the property's existing uses. Applicants should note which plants will need to be removed, what they will be replaced with, and highlight the affected area on the Site Plan.

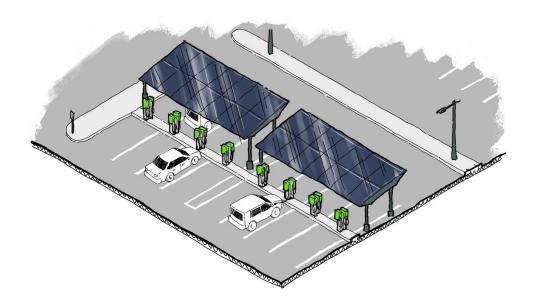
15. Signage

Signage may be provided as part of an EV Charging Project to provide information about charging types, voltages, fees, parking management, wayfinding, or other information. Any signage provided is subject to the applicable standards per Section 4-1.7.

16. Weather Canopies

If weather canopies are included as part of an EV Charging Project, they shall comply with the specifications below:

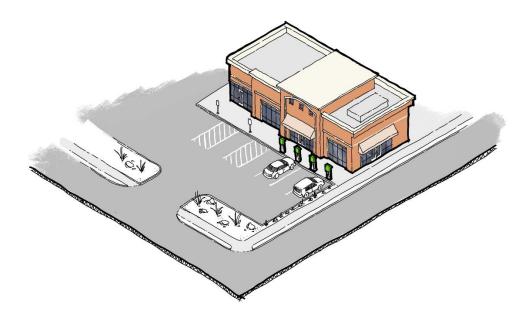
- a. Height of the canopy from the ground to the underside of the canopy shall not exceed 18 feet.
- b. The canopy shall not interfere with sight triangles or line of sight.
- c. The canopy structure shall not be enclosed.
- d. And any other applicable siting, dimensional, setback, appearance, materials, and other standards as per the zone district of the subject property.



1-2 DEFINITIONS

Accessory Use EV Charging Project

A proposed development of DCFC Charging Stations and Equipment that are incidental and subordinate to the Principal Use on the Subject Property.



Direct Current Fast Charging (DCFC)

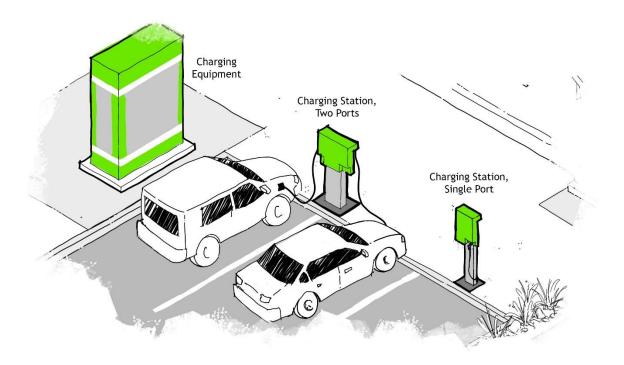
DCFC is high speed charging that provides about 50-350+ kW of power per hour and uses a 480 V three phase outlet.

Electric Vehicle (EV)

A motor vehicle which relies partially or entirely on electrical energy to power its movement, requiring periodic electrical current charging of its battery.

EV Charging Equipment

All equipment necessary to provide electrical current charging for EVs, except for EV Charging Stations. This may include power conversion equipment, electrical distribution equipment such as transformers, switchgear boxes, distribution lines, and other supportive equipment.



EV Charging Project

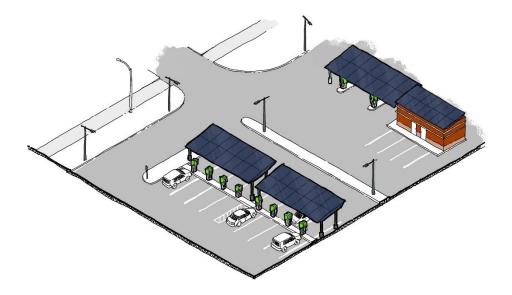
A proposed development of Principal or Accessory Use EV Charging Stations and Equipment, which may include other supporting site improvements like landscaping, lighting, or weather canopies.

EV Charging Station

Equipment that provides electrical current charging for EVs, located adjacent to dedicated space(s) for the vehicle(s) while they charge. One EV Charging Station may provide power for one or more vehicles.

Principal Use EV Charging Project

Any proposed development of DCFC EV Charging Stations and Equipment that serves as the principal function and land use on the Subject Property.



Subject Property

The property on which new development, redevelopment, or other investments subject to the regulations within this Land Development Code are proposed.

Horizontal Illuminance

The area on a horizontal surface in which a light fixture provides direct or high intensity light.

