ECONOMIC AND FISCAL IMPACT STATEMENT STD. 399
FOR PROPOSED BUILDING STANDARDS
OF THE CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
2025 CALIFORNIA GREEN BUILDING STANDARDS CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11
ATTACHMENT A
(HCD 04/24)

Background:

The California Department of Housing and Community Development (HCD) proposes to adopt mandatory and voluntary green building standards for residential occupancies within its authority and make modifications and clarifications to the 2022 California Green Building Standards (CALGreen) Code. The intent of the code is to: (1) promote greener construction through the reduction of greenhouse gas (GHG) emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) respond to the directives to develop a green building code.

HCD's proposed action will support the implementation of the Governor's Executive Orders, B-48-2018 and N-79-20 to achieve a benchmark for having over 1.5 million zero-emission vehicles (ZEVs) on California roadways by 2025, 5 million ZEVs on California roadways by 2030, and 100 percent sales of ZEVs by 2035, respectively. The California Air Resources Board (CARB) has adopted stronger ZEV requirements in response to N-79-20, putting in place binding requirements on automakers to achieve 100 percent sales of ZEVs and plug-in hybrid electric vehicles (PHEVs) by 2035. CARB projects this will lead to 5.7 million ZEVs and PHEVs on the road by 2030, and 12.6 million by 2035.

The California Energy Commission (CEC) estimates that California will need approximately 313,000 Level 1 and Level 2 chargers in multifamily dwellings to support 5 million ZEVs by 2030. HCD's proposal will help meet the goals as stated in Governor's Executive Orders B-48-2018 and N-79-20 and provide crucial access to home charging for current and future plug-in vehicle drivers.

The proposed changes to the building standards with statewide application will lead to substantial environmental benefits through reduction in GHG emissions and fossil fuel dependency leading to improved public health, and potentially result in significant cost savings (avoided costs) associated with installation of electric vehicle (EV) charging stations at multifamily buildings, hotels, and motels.

Note: HCD has incorporated cost estimates and projections for implementation as developed by CARB for purposes of completing the Economic and Fiscal Impact Statement STD. 399 and this attachment.

A. ESTIMATED PRIVATE SECTOR COST IMPACTS

2. Estimate the economic impact of the proposed amendments:

Statewide cost estimates for the proposed amendments were calculated over a period between the effective date of January 1, 2026, through December 31, 2028. Statewide costs over this 3-year period were estimated to total between $155.9 million to $298.2 million for new construction multifamily dwellings and $52.7 million to $113.3 million for hotels and motels, for a combined total of $208.6 million to $411.5 million.

3. Total number of businesses impacted:

HCD can only estimate the total number of businesses impacted for new hotel and motel buildings, which is equal to the total number of new hotel and motel buildings constructed. During the 3-year lifetime of these proposed amendments HCD estimates that 585 hotels and motels will be constructed. Therefore, approximately 585 businesses will be impacted by the proposed EV charging amendments. The total number of developers planning new construction of multifamily housing is not available and is not included in this estimate.

Describe the types of businesses (include nonprofits):

The types of businesses impacted by the EV charging proposal are any businesses funding the development of new hotels and motels, or funding work on existing facilities that would trigger the deployment of EV charging equipment and installations.

The total businesses impacted that are small businesses:

California's Department of General Services (DGS) defines small businesses as an independently owned and operated business located in California with 100 or fewer employees and average gross receipts of $15 million or less over the last three tax years. This type of information is not readily available for developers planning new construction of multifamily housing in California. Therefore, HCD is unable to estimate how many small businesses are impacted by the proposed amendments.

B. ESTIMATED COSTS

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime?

The total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its 3-year lifetime is $1,058.9 million to $ 1,893.6 million[1]. HCD estimates the average cost of a low power Level 2 EV charging receptacle is $894.5 to $1,886.9.

All New Construction Residential Spaces (Combined Multifamily, Hotels, and Motels):

For all newly constructed multifamily dwellings, hotels, and motels, HCD estimates a total of 168,402 to 176,014 spaces will be required to have EV

[1] Represented on the STD. 399 as 1059-1894 mill due to character limitations.

charging capabilities (Low Power Level 2 Charging Receptacle or Level 2 EVSE). The total construction costs for newly constructed multifamily dwellings, hotels, and motels over the lifetime of these proposals range from $ 118.8 million to $ 259.4 million for Low Power Level 2 Charging Receptacles and $89.8 million to $ 152.2 million for Level 2 EVSE.

New Construction Multifamily Dwellings and Hotel/Motel Parking

	Number of Spaces	Cost ($)	Net Benefit ($)	Annual GHG benefits (metric tons of CO2e)
Multifamily Dwelling	111,436	$99.7 million - $210.3 million	$569.8 million - $791.8 million	409,000 - 523,000
Hotel/Motel	21,341 - 26,025	$19.1 million - $49.1 million	$100.3 million - $189.1 million	79,000 - 122,000
Total	132,777 - 137,461	$118.8 million - $259.4 million	$670.1 million - $980.9 million	488,000 - 645,000

New Construction Multifamily Dwellings and Hotel/Motel Parking

	Number of Spaces	Cost ($)	Net Benefit ($)	Annual GHG benefits (metric tons of CO2e)
Multifamily Dwelling	22,287	$56.2 million - $88.0 million	$68.0 million - $122.1 million	164,000 - 209,000
Hotel/Motel	13,338 - 16,266	$33.6 million - $64.2 million	$29.2 million - $96.5 million	98,000 - 153,000
Total	35,625 - 38,553	$89.8 million - $152.2 million	$97.2 million - $218.6 million	262,000 - 362,000

Existing Multifamily Dwellings and Hotels/Motel Parking Retrofit:

For all additions and alternations of parking facilities serving existing multifamily buildings, hotels, and motels, HCD estimates a total of 248,945 to 254,056 spaces will be required to retrofit for EV charging capabilities (Low Power Level 2 Charging Receptacle or Level 2 EVSE). The total estimates do not include any benefits associated with removing the EV Capable requirement. The total construction costs for retrofit of existing parking facilities over the lifetime of this proposal range from $222.7 million to $479.4 million for Low Power Level 2 Charging Receptacles, and $627.6 million to $1,002.7 million for Low Power Level 2 EVSE.

Existing Multifamily Dwellings and Hotel/Motel Parking Retrofit

	Number of Spaces	Cost ($)	Net Benefit ($)	Annual GHG benefits (metric tons of CO2e)
Multifamily Dwelling	225,658	$201.9 million - $425.8 million	$1,153.8 million - $1,603.4 million	828,000 - 1,058,000
Hotel/Motel	23,287 - 28,398	$20.8 million - $53.6 million	$109.4 million - $206.4 million	29,000 - 45,000
Total	248,945 - 254,056	$222.7 million - $479.4 million	$1,263.2 million - $1,809.8 million	857,000 - 1,103,000

Existing Multifamily Dwellings and Hotel/Motel Parking Retrofit

	Number of Spaces	Cost ($)	Net Benefit ($)	Annual GHG benefits (metric tons of CO2e)
Multifamily Dwelling	225,658	$568.9 million - $890.6 million	$689.0 million - $1,236.3 million	1,656,000 - 2,116,000
Hotel/Motel	23,287 - 28,398	$58.7 million - $112.1 million	$50.9 million - $168.5 million	57,000 - 89,000
Total	248,945 - 254,056	$627.6 million - $1,002.7 million	$739.9 million - $1,404.8 million	1,713,000 - 2,205,000

b. Initial costs for typical businesses:

The proposed EV charging amendments require newly constructed multifamily buildings with any size parking facility to install low power Level 2 receptacles and Level 2 EVSE HCD estimates that 585 hotels/motels are expected to be built over the 3-year lifetime of these amendments, for an estimated cost of $1,058.9 million to $1,893.6 million.

The proposal would also require that newly constructed hotels and motels install Low Power Level 2 Receptacles and Level 2 EVSE, for a total of construction cost of $118.8 million to $259.4 million for receptacles, and $89.8 million to $152.2 million for Level 2 EVSE.

Altogether, this leads to approximately $90,113 to $193,682 in costs per typical project.

4. Will this regulation directly impact housing costs?

According to the CEC's Residential Forecast and data from the United States Census Bureau, there are approximately 111,436 new multifamily units created in a three-year period in California that will likely need to comply with these proposed building standards. HCD estimates at least

one parking space per unit, and at least one receptacle for each unit in a multifamily dwelling, resulting in an estimated additional annual cost per multifamily housing unit of $1,398.74 to $2,676.26.

5. Are there comparable Federal regulations?

Currently there are no federal regulations for mandatory EV infrastructure installations. These proposed EV charging amendments support the implementation of the Governor's Executive Orders B-48-2018 and N-79-20 to achieve a benchmark for having over 5 million ZEVs on California roadways by 2030 and 100 percent sales of EVs by 2035.

C. ESTIMATED BENEFITS

Briefly summarize the benefits of the regulation, which may include among others, the health and welfare of California residents, worker safety and the State's environment:

The benefits of these amendments include sustaining California's natural resources by reducing GHG emissions and dependency on fossil fuel. HCD estimates an additional GHG emissions reduction potential between 750,000 to 1,007,000 metric tons of CO2 equivalent (CO_2e) annually over the lifetime of the proposed amendments.

3. What are the total statewide benefits from these regulations over its lifetime?

All New Construction Residential Spaces (Combined Multifamily, Hotels, and Motels)

In addition to the GHG emissions reduction, HCD's proposed amendment for new construction results in an additional 168,402 to 176,014 parking spaces serving multifamily building, hotels and motels that will have EV charging capabilities. HCD estimates an additional statewide benefit of $767.3 million to $1,199.5 million over the 3-year lifetime of the amendments.

Existing Multifamily Dwellings and Hotels/Motel Parking Retrofit

HCD estimates a total of 248,945 to 254,056 parking spaces serving hotels, motels and multifamily dwellings will be retrofit to have EV charging capabilities. In addition to the GHG emissions reduction, HCD estimates a statewide benefit of $1,263.2 million to $1,809.8 million over the 3-year lifetime of the amendments.

D. ALTERNATIVES TO THE REGULATION

1. List alternatives considered and describe them below. If no alternatives were considered, explain why not:

HCD considered the following two alternatives in an effort to further advance the potential for EV preparedness. HCD has determined that no reasonable alternative considered by HCD or that has otherwise been identified and brought to the attention of HCD would be more effective in carrying out the purpose for which the action is proposed or would be as

effective and less burdensome to affected private persons than the proposed action. In addition, no reasonable alternative considered by HCD or that has otherwise been identified and brought to the attention of HCD would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

Alternative 1: HCD proposes newly constructed multifamily dwellings, hotels, and motels would be required to meet the following provisions, 60 percent of all parking spaces would be equipped with low power Level 2 EV charging receptacles and 10 percent of all parking spaces must be equipped with Level 2 EV chargers for all new construction and no change to existing multifamily dwellings, hotels and motels.

Alternative 2: HCD considered a slightly more stringent proposal for newly constructed multifamily dwellings, hotels, and motels. HCD proposed to require 55 percent of all parking spaces to have low power Level 2 EV charging receptacles and 20 percent of all parking spaces to be equipped with Level 2 EV chargers for all new construction and proposed to require 55 percent of all parking spaces to have low power Level 2 EV charging receptacles and 20 percent of all parking spaces to be equipped with Level 2 EV chargers for all existing multifamily dwellings, hotels and motels.

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

The table below represents the costs and benefits from this regulation and the alternatives considered.

Alternative 1: All New Construction Residential Spaces (Combined Multifamily, Hotels, and Motels):

When combining new construction for multifamily dwellings, hotels, and motels, HCD estimates a total of 177,755 to 185,953 parking spaces that meet the proposed EV requirements. HCD estimates a total construction cost of $200.4 million to $405.7 million and a total statewide benefit of $700.1 million to $1,089.2 million.

Alternative 2: All New Construction Residential Spaces (Combined Multifamily, Hotels, and Motels)

In all newly constructed residential buildings, HCD estimates an additional 177,755 to 185,953 parking spaces serving multifamily buildings, hotels, and motels with EV equipment. HCD estimates a net construction cost ranging from $253 million to $485.4 million, with a net estimated statewide benefit ranging from $847.8 million to $1,340.9 million.

Comparison between Proposed Amendments, Alternative 1 and Alternative 2

	Proposed Amendments	Alternative 1	Alternative 2
Cost	$208.6 million - $411.5 million	$200.4 million - $405.7 million	$253 million - $485.4 million
Benefit	$767.3 million - $1,199.5 million	$700.1 million - $1,089.2 million	$847.8 million - $1,340.9 million

E. MAJOR REGULATIONS

5. The benefits of the regulations, including, but not limited to, benefits to the health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life, among any other benefits identified by the agency:

The benefits of these proposed building standards include facilitating large scale deployment of EVs, which will sustain California's natural resources by reducing GHG emissions, and reduced dependency on fossil fuels. The benefit also includes an annual additional cost savings of $767.3 million to $1,199.5 million statewide during the 3-year lifetime of the proposed EV charging measures, at the time of new construction. In addition to the cost benefit, GHG emission reductions are estimated between 750,000 to 1,007,000 metric tons of CO2 over 3 years.

It should be noted that per Government Code, section 11342.548, "Major Regulation means any proposed adoption, amendment, or repeal of a regulation subject to review by the Office of Administrative Law pursuant to Article 6 (commencing with section 11349) that will have an economic impact on California business enterprises and individuals in an amount exceeding fifty million dollars ($50,000,000), as estimated by the agency." Proposed changes to building standards are reviewed and approved by the California Building Standards Commission and they are not subject to review by the Office of Administrative Law (OAL). Health and Safety Code, section 18930(a) states: "…any building standard adopted or proposed by state agencies shall be submitted to, and approved or adopted by, the California Building Standards Commission prior to codification."

A. FISCAL EFFECT ON LOCAL GOVERNMENT

6. Other. Explain.

No cost is expected for any local agencies. Local enforcing agencies conduct plan review, issuance of permits, and conduct on-site inspections to ensure construction is consistent with approved plans and current building standards. Any plan review or inspection resulting from this proposal would be done as part of the evaluation of projects using existing authorities. Health and Safety Code, section 17951, authorizes counties and cities to defray costs of enforcement by prescribing fees for permits and enforcement.

B. FISCAL EFFECT ON STATE GOVERNMENT

4. Other. Explain.

No cost is expected for HCD or any other state agencies, and there is no impact on federal funding of state programs.