HB 1496 Building Code - Construction and Significa

Uploaded by: Cait Kerr

Position: FAV

The Nature Conservancy
Protecting nature. Preserving life.

The Nature Conservancy
Maryland/DC Chapter
425 Barlow Pl., Ste 100
Bethesda, MD 20814

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Wednesday, March 12, 2025

TO: Marc Korman, Chair of the House Environment and Transportation Committee, and Committee Members
FROM: Cait Kerr, The Nature Conservancy, State Policy Manager; Michelle Dietz, The Nature Conservancy, Director of Government Relations
POSITION: Support HB 1496 Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

The Nature Conservancy (TNC) supports HB 1496, offered by Delegates Terrasa, Lehman, Ruth, and Taveras. HB 1496 will set requirements for EV charging parking availability for new or significantly renovated multifamily residential buildings. This bill is consistent with the Maryland Commission on Climate Change's (MCCC) recommendation in the 2023 Annual Report to require new and existing multifamily buildings to meet EV-ready standards and to install EV chargers accessible to building tenants.

As a member of the Mitigation Working Group and the Zero Emissions Vehicles Sub Group, TNC provided funding for a study to examine and design program recommendations for accelerating light-duty zero emission vehicle adoption in Maryland. We recognize that increasing access to EV charging equipment across the state is essential for transitioning the transportation sector to electric.

Population density in multifamily housing developments is high. Multifamily housing also tends to be more affordable than single-family housing. Establishing precise requirements for EV charging parking for housing units can vastly increase access to charging infrastructure and remove barriers for prospective EV buyers living in multifamily housing.

The EV market is expanding – an increasing number of customers are interested in purchasing cleaner and healthier transportation options. Accessible charging infrastructure is necessary to keep up with increasing demand and attract new potential buyers from various geographic regions that may not have previously had reliable access to charging equipment. HB 1496 will make EV ownership less challenging for those who currently have limited access to charging infrastructure.

TNC commends Delegates Terrasa, Lehman, Ruth, and Taveras on introducing this bill, which addresses a current obstacle to EV ownership and seeks to expand access to EV charging equipment for multifamily housing residents.

Therefore, we urge a favorable report on HB 1496.

DAC testimony HB1496 EV charging in residential bu

Uploaded by: Debbie Cohn

Position: FAV

Committee:	**Environment and Transportation**
Testimony on:	**HB1496- Building Code - Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spaces**
Submitted by:	**Deborah A. Cohn**
Position:	**Favorable**
Hearing Date:	**March 12, 2025**

Dear Chair Korman and Committee Members:

Thank you for allowing my testimony today in support of HB1496.

The transportation sector is the largest source of climate-damaging greenhouse gas (GHG) emissions in Maryland and a leading source of toxic air pollution, According to Maryland's 2020 Greenhouse Gas Inventory, gasoline-fueled vehicles account for 76 percent of GHG emissions from the on-road transportation sector. To attain the state's GHG reduction requirements, Maryland needs to encourage greater market penetration of zero emission vehicles.

One factor constraining that market penetration is the lack of accessible, convenient overnight charging at one's residence. HB1496 addresses that concern. It would increase EV charging spaces in new and significant renovations of various types of residential housing units.

For this reasons, I urge this committee to issue a FAVORABLE report on HB1496.

Ext. Comm. - Testimony - 2025 - Maryland HB 1496 -
Uploaded by: Joshua Fisher
Position: FAV

March 12, 2025

The Honorable Marc Korman
Chair, House Environment and Transportation Committee
Annapolis, Maryland 21401

HB 1496: Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces
Position: Favorable

Chair Korman:

The Alliance for Automotive Innovation[1] (Auto Innovators) requests a favorable report for HB 1496. HB 1496 builds on critical legislation from the 2023 session and will extend necessary electric vehicle (EV) charging to residents at multi-unit dwellings.

Current State-of-Play

Maryland EV sales comprised 11.98% percent of new vehicles sales through the first three quarters of 2024[2]. The challenge of reaching the California Air Resource Board (CARB) ACC II mandate of 100 percent electric vehicle market share by 2035, requires Maryland to address several hurdles to consumer acceptance.

The ACC II regulations require very aggressive increases in EV sales starting with MY2027 when 43% of all new vehicles delivered to Maryland car dealers will be EVs. These are staggering, required sales increases for a new technology that relies heavily on customer acceptance and market readiness.

Maryland has slightly under 5,000 publicly available EV charging ports and around 118,000 EVs on the road. To support the number of EVs required to be sold in 2026, Maryland will need around 16,000 public EV charging ports. This means that within two years, Maryland will need over three times as many publicly available charging ports as today **- the equivalent of 13 new charging ports coming online every day between now and the end of 2026. And it only increases from there as the EV sales requirements increase each year.**

Based on the average transaction price of EVs, EV buyers are far more likely to be affluent single-family homeowners with modern electric panels just a few feet from their garage where they will charge their EVs. These buyers do not represent a full cross-section of Maryland's new car buyers,

[1] From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers and semiconductor makers – Alliance for Automotive Innovation represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. Active in Washington, D.C. and all 50 states, the association is committed to a cleaner, safer and smarter personal transportation future. www.autosinnovate.org.

[2] https://www.autosinnovate.org/posts/papers-reports/get-connected-q3-2024

and achieving even 30, 70, or 100 percent of the new car market will require reaching buyers of more moderate means. It will also require action well beyond automakers' ability to produce more EVs.

The Time to Act is Now

According to the U.S. Department of Energy, roughly 80% of EV charging occurs at home, making access to home charging a top priority for customers considering an EV. Lack of access to home charging is a major barrier to EV adoption. As a first and most cost-effective step, states should immediately begin adopting residential building codes to require EV-ready charging capabilities in parking spots in new multi-unit dwellings (MUDs).

According to BestPlaces.net[3], the median residential unit age in Maryland is 40 years. Housing being built today will likely be around through at least 2050 or 2060. Consequently, if EV charging infrastructure is not installed as a new construction, it will need to be a retrofit installation afterwards which is a costly endeavor.

MUD Residents Should be Able to Charge at Home

While most charging occurs at home, MUD residents often face the most costly and burdensome obstacles to installing residential EV charging. For MUD residents, the additional costs to upgrade the electrical panel, install conduit between the electrical panel and their parking space, and the logistical challenges of securing building owner approval, coordinating the billing with the building owner, and persuading an owner to make a long-term investment on a rental property, make it nearly impossible to be an EV driver in a MUD.

Nonetheless, some suggest that while those in single family homes can charge at home, MUD residents can simply charge elsewhere, such as DC fast charge stations or public chargers. Not only is this patently unfair it also raises equity and access concerns for some communities where MUDs are the dominant housing option due to cost or geography. Ensuring access for all communities should be a priority, particularly those that have been traditionally underserved.

Charging at home is far cheaper, far more convenient, and far more reliable. It would be unreasonable to expect MUD residents to pay 2 or 3 times as much for charging and spend hours away from home each week just to charge their vehicles. This will lead them away from EVs and is not consistent with Maryland's stated goals.

Updating Codes Will Save Money

Numerous studies show the costs to retrofit EV charging is several times more expensive than installing it during new construction.[4] In fact, compared to the cost of a new residential unit, the cost of installing even 208/240v 7.2 kW EV Ready charging is relatively small and typically well under

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[3] https://www.bestplaces.net/housing/state/maryland

[4] For example, see Pike, Ed, Jeffery Steuben, Shayna Hirshfield. 2020. City of Oakland Plug-in Electric Vehicle Readiness Grant. California Energy Commission. Publication Number: CEC-600-2020- 116.

$2,000 per charging station.[5] Compare this to the California Public Utilities Commission's approval of ratepayers funding up to $15,000 per charger make-ready to retrofit charging stations at MUDs.[6]

Failing to update building codes that do not adequately plan for 100 percent EVs, does not help long-term housing affordability. Instead, it trades small savings today for vastly higher costs down the road. Moreover, these higher costs will be borne by MUD residents (or ratepayers). To the extent MUD residents have lower incomes, this further exacerbates inequities and widens economic divides.

The California Energy Commission (CEC) summarizes this well in their most recent study (January 2021)[7]:

> *Building codes are often a cost-effective tool to support state policy, ensure equitable outcomes, and reduce barriers to adoption. Increased charging options at MUDs are needed to ensure that all Californians have access to convenient charging. This is all too often an issue at apartments, condos, and for renters where the motivations of tenants and landlords do not always align. Building codes that address new construction as well as major renovations to existing buildings such as when new parking is added or during repaving of an existing parking lot can materially address the EV charging infrastructure gap.*

EV Ready

In using the term, "EV Ready" we mean panel capacity, breaker installed, with wiring to the parking spot terminating in either a receptacle or EV charger. MUD residents (in many cases, renters) cannot be expected to bear the significant costs and coordination responsibility associated with obtaining landlord permission, local permitting, and hiring contractors to install breakers, wiring, and chargers. This is unlikely to happen, and residents need access to charging to realize Maryland's EV goals.

Conclusion

Passing HB 1496 aligns with, and will support, Maryland's climate and transportation goals. The bill will also save Maryland residents money while ensuring they have access to EV charging in the future. Thank you in advance for your consideration of our views. For more information, please contact our local representative, Bill Kress, at (410) 375-8548.

Sincerely,

Josh Fisher
Director, State Affairs, Alliance for Automotive Innovation

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[5] Id. See Table

[6] See CPUC Decision 20-08-045 "Decision Authorizing Southern California Edison Company's Charge Ready 2 Infrastructure And Market Education Programs," August 27, 2020.

[7] Crisostomo, Noel, Wendell Krell, Jeffrey Lu, and Raja Ramesh. January 2021. Assembly Bill 2127 Electric Vehicle Charging Infrastructure Assessment: Analyzing Charging Needs to Support Zero-Emission Vehicles in 2030. California Energy Commission. Publication Number: CEC-600-2021-001.

HB1496 - FAV - Building Code - Construction and Si

Uploaded by: Landon Fahrig

Position: FAV

Maryland Energy Administration

TO: Chair Korman, Vice Chair Boyce, and Members of the Environment and Transportation Committee
FROM: MEA
SUBJECT: HB 1496 - Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces
DATE: March 12, 2025

MEA Position: FAVORABLE

This bill proposes that any new construction or a building undergoing significant renovation without a separate garage, carport, or driveway for each residential unit should have at least one EVSE–installed parking space with at least a level 2 charger or one EV-ready parking space. The bill proposes one common-use EVSE-installed parking space for every 25 units for construction or significant renovation with common-use parking. The bill also makes provisions for the minimum percentages of EV-ready spaces for developments depending on the date that the development application or building permit application is made

MEA is supportive of the bill. MEA recently released a study that highlighted the significant challenges associated with installing EVSE in multifamily buildings.[1] It is estimated that installing EVSE in 10% of parking spaces in multifamily buildings could cost as much as $1.5 billion, rising higher if EVSE is installed in 30% of multifamily building parking spaces. Accordingly, it is key that EVSE be integrated into multifamily developments when it is least expensive to do so (i.e. during construction or significant renovation).

According to Maryland's Climate Pollution Reduction Plan, the "transportation sector accounted for 35% of Maryland's GHG emissions in 2020 with most emissions (82%) in this sector coming from on-road vehicles powered by gasoline or diesel"... but "[t]o achieve deeper reductions from the transportation sector, it will be necessary to transition much of the light-duty fleet to [zero-emission vehicles] by 2031 and increase the use of other modes of transportation, including public transportation and micro-mobility options." Additionally, "[t]o accomplish Maryland's goal for rapid growth in the number of ZEVs on Maryland's roads, building out a robust [zero-emission vehicle] infrastructure network is critical.

Historically, it has been difficult to build out that robust EV infrastructure for low- to moderate-income Marylanders, as they are more likely to live within a multifamily development. This bill would

[1] energy.maryland.gov/Reports/Multifamily%20Residential%20EV%20Study.pdf

assist in the deployment of EVSE by requiring a certain level of adoption in developments either during construction or when undergoing significant renovation.

For these reasons, MEA urges the committee to issue a **favorable report**.

Our sincere thanks for your consideration of this testimony. For questions or additional information, please contact Landon Fahrig, Legislative Liaison, directly (landon.fahrig@maryland.gov, 410.931.1537).

HB1496_FAV_Hartmann.pdf
Uploaded by: Lanny Hartmann
Position: FAV

HB 1496 — Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces
Position: **Favorable**

March 12, 2024

The Honorable Marc Korman
Chair, Environment and Transportation Committee
House Office Building
Annapolis, MD 21401

Dear Chair Korman and Members of the Committee,

I am writing to express my strong support for House Bill 1496, which establishes requirements for installing electric vehicle (EV) charging equipment during the construction or significant renovation of housing units.

With Maryland ranking among the top states for EV adoption, we must proactively meet the rising demand for charging infrastructure. House Bill 1496 offers an opportunity to future-proof our residential buildings, ensuring Marylanders have access to convenient, affordable, and reliable EV charging options.

By promoting the inclusion of EV charging infrastructure in new multifamily housing and major renovations, this bill will ease EV adoption for homeowners and support the expansion of electric transportation. Prioritizing the installation of conduit and panel space during construction will minimize costly retrofits and enable access to low-cost residential utility rates by connecting EV charging spaces directly to home meters.

I urge you to support House Bill 1496 and advance this critical step toward a sustainable future for Maryland. I respectfully request that the committee provide a favorable report on this bill.

Thank you for considering my perspective.

Sincerely,

/s/ Lanny Hartmann

Lanny Hartmann
Columbia, Maryland

hb1496 requiring installation of chargers E&T 3-1

Uploaded by: Lee Hudson

Position: FAV

Delaware-Maryland Synod
Evangelical Lutheran Church in America
God's work. Our hands.

Testimony Prepared for the
Environment and Transportation Committee
on
House Bill 1496
March 12, 2025
Position: **Favorable**

Mr. Chairman and members of the Committee, thank you for this opportunity to testify for expanding a clean and green energy regime in Maryland's building inventory. I am Lee Hudson, assistant to the bishop for public policy in the Delaware-Maryland Synod, Evangelical Lutheran Church in America. We are a faith community with three synods in every part of our State.

Energy sourcing is critical in the built context because it stands to be instrumental for a decarbonized future. That was the goal of the Climate Solutions Act Now of 2022, which we supported. Our community has supported policies for such a transition since 1993. The transportation sector is where a lot of carbon is emitted, and, thus, where there is opportunity for decarbonizing.

EVs and PHEVs have grown more popular with consumers and will become more widely accepted with a reliable network of available charging stations. The most efficient—from the perspectives of scaling and friction—to achieve a rapid expansion of charging stations is to access the permitting process for construction and include charging stations in new, and renovation building. This is already done for public utility infrastructure and the most frictionless method for scaling would be to regard charging stations as a standard element of Maryland's public utility milieu. It should not present any fundamental, philosophic policy conflicts.

Maryland's robust construction market should not be built to carbon dependent standards. Transitioning to any inventory that produces less carbon emissions is necessary for accelerating GGRs. Building additional carbon-intense structures only increases the time, expense, and effort for a transition. Moving the transportation sector nearer to all-electric is the right way to build ourselves out of the climate-catastrophe we've built ourselves into.

We hold that lowering carbon emissions is a social, economic, and moral necessity for the obvious reasons: fire, draught, flooding, sea rise, human displacement, infrastructure vulnerability, indemnification. We support **House Bill 1496** because it is an actual plan for carbon emissions reductions. Our concern for the environmental health and safety of our Maryland neighbors, and a livable and sustainable future for all the earth compels our support and we implore your favorable report.

Lee Hudson

5699 Meridale Rd. Baltimore, MD 21228 410-230-2860 800-869-5492 fax 410-230-2871

HB1496_MDSierra_FAV_3.12.2025.pdf
Uploaded by: Lindsey Mendelson
Position: FAV

SIERRA CLUB
MARYLAND CHAPTER

P.O. Box 278
Riverdale, MD 20738

Committee: Environment and Transportation
Testimony on: HB 1496 "Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces"
Position: Support
Hearing Date: March 12, 2025

The Maryland Chapter of the Sierra Club supports HB 1496. The bill would extend EV ready building codes to the new construction and significant renovation of multi-family units. This bill would require that for every 25 residential units in a multi-family complex, there be at least one Electric Vehicle Supply Equipment (EVSE)-installed parking space and an increasing percentage of EV-Ready parking spaces between 2025 and 2036 for newly constructed homes.

Equitable building codes will provide residents of multi-family units with access to electric vehicle charging which can help reduce economic and racial disparities in EV adoption. Studies have found that at-home and employee charging is typically much cheaper (and more convenient) than public charging.[1]

The transportation sector accounted for 35% of Maryland's greenhouse gas emissions in 2020, with most emissions (82%) in this sector coming from on-road vehicles powered by gasoline or diesel. Therefore, it is imperative that we support residents' transition toward utilizing clean modes of transportation. The Maryland Department of Transportation's 2024 Annual Attainment Report on Transportation System Performance included a goal of 1.1 million electric vehicles being registered in Maryland by 2030. This bill would support the requirements of the Advanced Clean Cars II program that are needed to meet our climate targets.

HB 1496 makes an important contribution in encouraging and supporting Maryland residents who want to move away from using gasoline-powered cars for their transportation needs. We urge the Committee to provide a favorable report. Finally, we also encourage the Committee to consider increasing, over time, the requirements for providing on-site charging sites to residents of existing multi-family housing.

Lindsey Mendelson
Transportation Campaign Representative
lindsey.mendelson@mdsierra.org

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org

Karen Douglas Transportation
Committee Member
douglasdouglas@verizon.net

[1] https://www.consumerreports.org/hybrids-evs/evs-offer-big-savings-over-traditional-gas-powered-cars/

HB1496 EDF Favorable.pdf
Uploaded by: Neda Deylami
Position: FAV

March 10, 2025

Testimony on **HB 1496**
Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces
Environment and Transportation Committee
Position: Favorable

Environmental Defense Fund submits the following testimony in support of HB1496, encourages this committee to support the bill, and consider the principles and best practices below in order to maximize access to equitable home charging for multi-family building residents, while minimizing cost and complexity of construction, management, and enforcement of these buildings and codes.

Maryland's adoption of Advanced Clean Cars II (ACCII) is expected to bring 1.8 million electric vehicles[1] to consumers by 2035 and $6.6 billion worth of emissions reductions, cleaner air, and societal benefits by 2050.[2] Currently, most electric vehicle (EV) owners charge at home for its affordability and convenience, but home charging is not as accessible an option for those in multi-family homes, especially low-income households who tend to be overburdened by pollution and transportation costs and could benefit the most from switching to EVs.

This bill's EV-ready requirements seek to future-proof housing to reduce barriers to home charging. The cost of retrofitting an existing building with charging supply equipment is up to twelve times more expensive than the cost at new construction.[3] The largest expenses when retrofitting are related to demolition, breaking and repairing walls, and asphalt and concrete trenching.[4] On the other hand, adding the necessary conduit, reserved capacity, wiring, dedicated circuit, and receptacle to support charging at the

[1] Maryland Energy Administration, *Multifamily Residential EV Study* (Jan. 2024), https://energy.maryland.gov/Reports/Multifamily%20Residential%20EV%20Study.pdf at 6.
[2] Sierra Club, *New Reports Warn of Deadly Effects of Vehicle Pollution in Maryland* (June 23, 2023), https://www.sierraclub.org/press-releases/2023/06/new-reports-warn-deadly-effects-vehicle-pollution-maryland.
[3] Energy Solutions, *Electric Vehicle Infrastructure Cost Analysis Report for Peninsula Clean Energy (PCE) & Silicon Valley Clean Energy (SVCE)* (Nov. 20, 2019), https://bayareareachcodes.org/wp-content/uploads/2020/03/PCE_SCVE-EV-Infrastructure-Report-2019.11.05.pdf
[4] The Solar Foundation, *EV Ready Cost Comparison*, https://www.usdn.org/uploads/cms/documents/ev_ready_cost_comparison.pdf.

time of construction adds only an estimated 0.1-0.2% to overall building development cost.[5]

An EV-ready building code should seek to limit marginal cost of compliance, balanced with the savings of potential avoided retrofits. Including renovated buildings in this bill is important to address inequality of housing opportunities. However, the definition of renovation that triggers EV-ready requirements should be based on the costliest endeavors of retrofitting to limit the incremental cost borne solely by EV-ready compliance in an otherwise unrelated alteration of a building. In other words, where renovation projects are already planned, EV-ready compliance should not add an additional significant cost. The current definition of "significant renovation" – "electrical panel upgrades that increase the capacity of the panel" – is not directly related to the most burdensome costs of retrofitting. Although trenching of parking spaces is appropriate, it can accompany, for example, renovations "where the work area exceeds 50 percent of the original building area" to acknowledge triggers that may more closely relate to demolition and trenching.[6]

Requirements for new construction should be as high as possible to meet the future charging needs of all residents and capitalize on the savings of futureproofing. Maryland is already in the top ten states nationally for EV adoption with registrations doubling every year since 2020; ACCII will only expand and accelerate the transition.[7] The best time to invest in strong EV-ready building codes is now rather than attempting to predict market growth in five or ten years. Instead of a low percentage EV-ready requirement, other jurisdictions utilize a mixture of EV-capable and EV-ready totaling 100%. In EV-capable, only conduit and reserved capacity on the panel is required but no wiring, which reduces up-front costs while still avoiding the cost of demolitions and trenching of future retrofits.

To limit costs while expanding equitable access to charging, full power to every EV-ready space can be restricted. The minimum 40-ampere circuit required per EV-ready parking

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[5] California Air Resources Board, *EV Charging Infrastructure Nonresidential Building Standards: 2019/2020 Intervening Code Cycle: CARB Staff Technical and Cost Analysis* (Nov. 15, 2019), https://ww2.arb.ca.gov/sites/default/files/2020-08/CARB_Technical_Analysis_EV_Charging_Nonresidential_CALGreen_2019_2020_Intervening_Code.pdf.

[6] 2022 Denver Energy Code, available at https://denvergov.org/files/assets/public/v/6/community-planning-and-development/documents/ds/building-codes/2022-denver-building-and-fire-code.pdf at 305.

[7] Maryland Department of Transportation/Motor Vehicle Administration Electric and Plug-in Hybrid Vehicle Registrations by County as of each month end from July 2020 to December 2023, available at https://opendata.maryland.gov/Transportation/MDOT-MVA-Electric-and-Plug-in-Hybrid-Vehicle-Regis/qtcv-n3tc/about_data

space is an excessive amount of power for one vehicle's daily, most often overnight use. Instead, EV-ready could be alternatively defined as providing Low Power Level 2 charging,[8] a minimum 20-ampere, 208/240-volt circuit that would still provide 3.8 kilo-watts of power, or approximately 10-20 miles of range per hour, more than enough overnight for daily driving needs. A further option is energy management systems with load sharing to allow for safe and efficient simultaneous charging on the same circuit. Energy management optimizes energy consumption, leveraging utility rates to minimize charging costs and reduce demand on building capacity and the grid.

Those living in EV-ready multi-family homes should have access to the same cost savings and conveniences of home charging as those in single-family homes. EV spaces should be directly wired to individual meters where possible to ensure access to low-cost residential utility rates and incentives (such as off-peak pricing, where available), and the resilience benefits of future vehicle-to-home battery bidirectionality. Cost savings can be achieved by prioritizing installation of receptacles rather than commercial EV supply equipment (EVSE-installed), which tend to charge higher electricity rates, surcharges, and subscription and idling fees. EV-capable spaces should also have prominent signage for those looking to upgrade to EV-ready.

In addition to residential buildings, this Assembly can also consider the second most popular location for EV charging, workplace charging, and other non-residential locations in general – particularly those with "long dwell times" – to take advantage of lower-cost, low-powered charging options. Commercial EV readiness can provide the infrastructure for more robust public charging, for those without off-street parking; it can also assist businesses in electrifying their fleets – including warehouses that rely on diesel vehicles that disproportionately pollute the air, especially in communities of color and low-income communities – that can use the same charging infrastructure as passenger vehicles. Abundant, accessible, and affordable charging infrastructure is consumers' top priority in considering an EV and it is incumbent on policymakers to explore every opportunity to expand access.

Signed,

Neda Deylami
Manager & Attorney, Vehicle Electrification

[8] Cal. Code Regs. Tit. 24 Part 11 §202

2025 HB1496EV Parking Spaces Phase InFavorable.pdf
Uploaded by: Paul Verchinski
Position: FAV

FAVORABLE – House Bill 1496
HB1496- Building Code – Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Space
Environment and Transportation Committee
Wednesday, March 12, 2025

Greetings Chairman Marc Korman, Vice Chairman Regina Boyce and members of the Environment and Transportation Committee

My name is Paul Verchinski. I am a member of the Maryland Zero Emissions Electric Vehicle Infrastructure Council (ZEEVIC) and I represent the Public.

Favorable

I request a Favorable Report for the following reasons:

The Maryland Energy Administration (MEA) released its report "Multifamily Residential EV Study " (Study) in January, 2024. In it, the MEA stated that Maryland is on track to meet its target for DC Fast Chargers by 2025 and beyond. "However significant development of Level 2 charging network is needed." (page 25). This legislation would help to increase build out of Level 2 charging in multifamily housing renovations when electric service panels are upgraded or when parking lots are repaved. It is well known that doing Level 2 upgrades as part of renovation can be up to 6 times cheaper than doing it as the only upgrade.

The Climate Solutions Now Act passed in 2022 puts Maryland on a path to 60% reduction in Green House Gas by 2031. An integral part is the turn to transportation electrification from Internal Combustion Engine cars which currently represents 35% of Green House Gases in Maryland. "Advance Clean Cars II adopted by Maryland in 2023 "will significantly increase EV adoption to nearly 1,807,000 representing 82% of vehicles on the road, in 2035" (Study, page 6). This legislation proposes a nuanced phase in of Level 2 chargers from 10% in 2024 to 30% of parking spaces in new Multifamily Buildings to provide needed charging points.

I ask that the committee report out the bill Favorably

Paul Verchinski
5475 Sleeping Dog Lane
Columbia, MD 21045

Testimony in Support HB 1496 Construction & Rennov

Uploaded by: Tom Clark

Position: FAV

International Brotherhood of Electrical Workers
JOSEPH F. DABBS: Business Manager • THOMAS C. MYERS: President • RICHARD D. WILKINSON: Vice President
CHRISTOPHER M. CASH: Financial Secretary • RICHARD G. MURPHY: Recording Secretary • WILLIAM T. NG: Treasurer

TESTIMONY IN SUPPORT HB 1496
BUILDING CODE-CONSTRUCTION & RENOVATION HOUSING UNITS
ELECTRIC VEHICLE PARKING SPACES
March 12, 2025

TO: Chair Marc Korman, Vice Chair Boyce, and Environment & Transportation Committee
FROM: Tom Clark, Political Director, Intl. Brotherhood of Electrical Workers Local 26

Mr. Chair, Madam Vice Chair, distinguished members of the Committee, I ask that you join me and 21st century Marylanders in **support of HB 1496.** I sarcastically mention the 21st century, because it is important to realize that we have a high demand for EV infrastructure on the residential level, and this demand will only get larger. HB 1496 is a step in the right direction.

In 2025 we are building multifamily dwellings that will stand for at least 200 years. Yet, as soon as these brand-new homes are sold, they are antiquated. These new homes are built for the Marylander of the 1960's, not for the Marylander of the near future. Whether legislators or residents like it, I would imagine everyone of us will be driving and looking to charge Electric Vehicles within 40 years. Without legislation like HB 1496, their will be neighborhoods torn apart by the upgraded infrastructure needed for Electric Vehicle charging stations. As a journeyman electrician, this will bring me lucrative business opportunities. As a Marylander, it frustrates me why this great state will not have the foresight to look into the energy of the future. The same is true for major renovations to homes. I am reminded of the question: If not now, when? When will the peoples representatives look out for its own citizens. I am not talking about the person that lives in Potomac, with a Tesla or two, and a three-car garage. I am referring to the middle-class family that lives in the town home and wants to charge their affordable vehicle in the EV world of **today.**

I simply ask you to build the homes of tomorrow, with the electrical infrastructure of today. Please make a vote for 2025 and beyond and give a **favorable report to HB 1496.** Thank you.

4371 Parliament Place, Lanham, MD 20706 • Office 301-459-2900 • Fax 301-459-2100
www.ibewlocal26.org

HB 1496 - MoCo DEP - Fitzgerald_FWA (GA 25).pdf
Uploaded by: Garrett Fitzgerald
Position: FWA

Montgomery County
Office of Intergovernmental Relations

ROCKVILLE: 240-777-6550 **ANNAPOLIS: 240-777-8270**

HB 1496 **DATE: March 12, 2025**

SPONSOR: Delegate Terrasa

ASSIGNED TO: Environment and Transportation Committee

CONTACT PERSON: Garrett Fitzgerald (garrett.fitzgerald@montgomerycountymd.gov)

POSITION: Favorable with Amendment (Department of Environmental Protection)

Building Code – Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spaces

Electric vehicles (EVs) powered by a clean energy grid will play a critical role in achieving our climate goals. EVs can also reduce local air pollution and improve public health. Owning an EV necessitates having parking spaces available where the vehicle can be charged.

This bill would establish requirements for the installation of EV charging equipment or EV-ready parking spaces in new construction and significant renovation of residential properties.

We support the requirements of the bill particularly as they relate to new construction. These requirements will ensure that new properties are built ready to support the EV transition, with necessary infrastructure included in a manner that is most cost-effective and least disruptive to building owners and occupants.

However, we suggest an amendment to the way the bill would address existing buildings. As written, the bill states that any renovations that include electric panel upgrades that increase capacity of the panel would be considered a significant renovation triggering the bill requirements. Electric panel upgrades are occasionally necessary to enable the installation of new equipment such as electric heat pumps. Requiring the addition of out-of-scope parking area changes may dissuade property owners from making electrification investments in their properties. We suggest that in the event of a renovation involving an upgrade to the electric panel, the property owner should be required to ensure that conduit is in place and there is space available in the electric panel to accommodate a new circuit for EV charging. However, requirements to make associated parking spaces EV-ready with the addition of a circuit and wiring should only be triggered if the renovation project also involves the parking area.

We also suggest striking “40-ampere” and replacing with “50-ampere” in the definition of “EV-ready parking space” (page 2, line 4). This will enable faster charging for newer vehicles.

We respectfully request that the Environment and Transportation Committee give this bill a favorable report with the inclusion of the suggested amendments.

2025.03.10 SWTCH Testimony on HB 1496.pdf
Uploaded by: Josh Cohen
Position: FWA

SWTCH Energy Inc.
Greentown Labs
444 Somerville Ave
Somerville, MA 02143
swtchenergy.com

March 10, 2025

The Honorable Marc Korman
Chair, House Environment and Transportation Committee

Submitted electronically

Re: SWTCH testimony in SUPPORT with AMENDMENT:
HB 1496: **Building Code – Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spaces**

Dear Chair Korman and Committee Members:

SWTCH is pleased to offer this testimony in SUPPORT with AMENDMENT of HB 1496.

About SWTCH

SWTCH is a leading provider of electric vehicle (EV) charging and energy management solutions for multifamily, commercial, and workplace properties in Maryland and across North America. SWTCH's end-to-end solution optimizes EV charging usage and manages load to benefit drivers, property owners, and the grid. SWTCH has deployed more than 10,000 charging stations, with a particular focus on ensuring equitable access to EV charging. SWTCH's charging management platform is built upon a foundation of open communication standards and interoperability to ensure future flexibility, scalability, and innovation even after purchase and installation.

Comments

This bill establishes EV-ready construction requirements for residential buildings – including multifamily properties – for new construction and significant renovations. These long-overdue standards will save Marylanders money by substantially reducing the cost of installing EV chargers.

If one accepts as a premise that the future of transportation in Maryland is electric, and Maryland's households will benefit from the accessibility and affordability of having at-home charging, then there is no question this bill will save Marylanders money. Only if one disputes that premise and believes Marylanders will not need charging can one argue that this bill would add unnecessary cost. However, Maryland has already determined as a matter of policy – and indeed law – that Maryland will transition to a zero-emission future. The question for the legislature is not whether, but how, to achieve that transition in a cost-effective way for Marylanders. This bill is a key policy lever to do that.

Maryland's clean transportation policy leadership

For many years now, Maryland has been a leader in clean transportation policy. In 2023, the State continued to set the bar high when it adopted the Advanced Clean Cars II (ACCII) Rule. This Rule requires automakers to deliver an increasing percentage of light-duty zero-emission or hybrid vehicles with each model year beginning with Model Year (MY) 2027,

culminating in 100% ZEV or hybrid deliveries by MY2035. These and other policy actions matter because policy shapes the market for EVs and charging.

Zero-emission vehicle ("ZEV") mandates and other policy goals such as the ACCII Rule – while eminently worthy – are insufficient in and of themselves to bring about the changes they envision. Indeed, without a host of complementary actions, the achievement of high-level policy mandates and goals are likely to fall short. EV-ready construction requirements are among such complementary actions. For residents of apartments and condominium buildings in particular, EV-ready requirements are imperative – not only for the state to keep pace with its overall EV adoption targets, but to keep pace in an equitable way that helps shrink the disparity between those who live in single-family homes and those who don't.

The value of EV-ready construction requirements

Establishing minimum EV-ready construction requirements matter because they enable more widespread and equitable EV adoption by driving down the cost of charging infrastructure. It is far less expensive – generally 4 to 8 times less expensive – to plan, engineer, design, and install EV charging infrastructure during new construction than to retrofit an already-built building.

More than 30% of all U.S. households live in multifamily apartment and condominium buildings. Multifamily properties are an underserved segment when it comes to EV charging for a host of reasons, cost being a major one. By driving down the cost of charging infrastructure, EV-ready construction codes will help expand equitable access to charging among multifamily households, as well as enable the corresponding savings that accrue to those who are able to charge at home. This is especially important because multifamily households are disproportionately low- and moderate-income, and face an above average transportation energy burden.

Charging infrastructure costs

In SWTCH's experience, the typical cost to install a commercial-grade Level 2 EV charger at an existing multifamily property ranges from $5,000 to $10,000. This range is consistent with industry experience. The National Renewable Energy Laboratory (NREL)'s "2030 National Charging Network" included a meta-review of literature and reported a range from $4,400 to $10,600 (Note "commercial" in the table below is the category that includes multifamily properties"):

Table 5. EVSE Capital Cost Assumptions

Charger Hardware		Unit Cost per Port	Install Cost per Port [a]	References
L1 residential	Low: High:	$0 $0 [b]	$100 $1,000	(Fixr.com 2022; Courtney 2021; HomeAdvisor 2022)
L2 residential	Low: High:	$400 $1,200	$500 $1,700	(Borlaug et al. 2020; Fixr.com 2022; Courtney 2021; HomeAdvisor 2022)
L2 commercial	Low: High:	$2,200 $4,600	$2,200 $6,000	(Nicholas 2019; Nelder and Rogers 2019; Borlaug et al. 2020; Bloomberg New Energy Finance 2020; Pournazeri 2022)

Source: National Renewable Energy Laboratory.[1]

NREL's meta-review is consistent with Maryland's own experience as reflected in BGE's Q3-Q4 2024 Semi-Annual Report to the Public Service Commission. Whereas NREL's report aggregates data from reports published between 2019-2022, BGE's latest report indicates an average cost of $11,847 per charger, installed:

4. **Actual costs of implementation at each site. Discuss the overall costs, broken down by cost categories and charger type (including capital costs and annual operations and maintenance costs). Also include incentive costs and any "make ready" costs such as distribution system upgrades.**

Average Multifamily Program Costs per EV Charger Port Jul 1, 2024 – Dec 31, 2024	
Equipment Cost	$ 3,934
Install Cost	$ 6,429
Other Cost*	$ 2,438
Total Average	**$ 11,847**

* Other Cost average based only on properties who reported applicable project costs that were not qualified under equipment or installation costs. 53% of properties reported other costs associated with residential EV charger installation.

Source: BGE. [2]

Note that in all three of these examples – SWTCH, NREL, and BGE – the installation and supporting infrastructure comprise the bulk of the cost; the chargers themselves are

[1] National Renewable Energy Laboratory. (2023). The 2030 National Charging Network. Page 33. Available at: https://www.nrel.gov/docs/fy23osti/85654.pdf.
[2] BGE. (Jan. 31, 2025). Semi-Annual Report to the PSC, Case No. 9478. Page 25. *See Item No. 690* available at: https://webpscxb.psc.state.md.us/DMS/case/9478.

generally between $1,000 to $4,000. These cost estimates are all for installing chargers in existing buildings. Importantly, if Maryland adopts EV-ready construction requirements, the costs to install chargers will be far less.

Recommended Amendment

1. The proposed EV-ready requirements in this bill, while forward-looking, are relatively modest. SWTCH encourages stronger provisions that align with the new Appendix CG of the 2024 edition of the International Energy Conservation Code (IECC), which requires a minimum of 20% EVSE Installed, 5% EV Ready, and 75% EV Capable spaces for R-2 occupancies.[3]

In Closing

SWTCH supports the goals of this bill and respectfully encourages favorable consideration with amendment.

Thank you for your consideration of these comments. If you have questions or if I can provide more information, please contact me at josh.cohen@swtchenergy.com or 202.998.7758.

Respectfully,

Josh Cohen
Head of Policy

[3] International Code Council. (2024). 2024 International Energy Conservation Code, Appendix CG. Available at: https://codes.iccsafe.org/content/IECC2024P1/appendix-cg-electric-vehicle-charging-infrastructure.

2025 HB1496 Testimony Against 2025-03-12.pdf
Uploaded by: Alan Lang
Position: UNF

Testimony Against HB1496

Honorable Delegates

Please enter an unfavorable report against HB1496.

I am against

- requiring the construction of new multifamily residential buildings with separate garages, carports, or driveways for each residential unit to include certain parking spaces for electric vehicle charging;
- requiring certain significant renovations of housing units with separate garages, carports, or driveways for each residential unit to include certain parking spaces for electric vehicle recharging.

I do not believe that the State should impose on builders a requirement to include parking places designated for electric vehicle charging. It is bad enough that existing law already requires builders to place an expensive car charger in new single family housing developments.

The fiscal note states the following is existing law. If the construction of a new housing unit includes a separate garage, carport, or driveway for each residential unit, the construction of a new housing unit must include in or on the garage, carport, or driveway (1) one EVSE-installed parking space capable of providing at least Level 2 charging or (2) or one EV-ready parking space.

The fiscal note has the following additional information. Small Business Effect: Small home builders, particularly those involved with multifamily residential buildings, likely incur greater costs to install the infrastructure needed to comply with the bill's requirements, although any such costs are likely passed on to home buyers. **As a result, the cost of new and significantly renovated housing units likely increases.**

In these tough times, I hear the constant need for affordable houses. I would imagine that many multifamily housing projects are geared for lower income buyers who probably cannot afford electric vehicles. Mandating EV parking spots with expensive EV chargers for a group that may not even own electric vehicles does not make sense.

So please enter an unfavorable report against HB1496

Alan Lang
45 Marys Mount Road
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March 12, 2025

HB 1496_BOMA_UNF.pdf
Uploaded by: Bryson Popham
Position: UNF

BOMA BALTIMORE

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March 10, 2025

The Honorable Marc Korman
Chair, House Environment and Transportation Committee
Room 251, House Office Building
Annapolis, Maryland 21401

RE: House Bill 1496 - Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces
UNFAVORABLE

Dear Chair Korman and Members of the Committee,

I am writing in my capacity as the Legislative Chairman of the Building Owners and Managers Association of Greater Baltimore (BOMA), to respectfully request an unfavorable report on House Bill 1496.

BOMA, through its nearly 300 members, represents owners and managers of all types of commercial property, comprising 143 million square feet of office space in Baltimore and Central Maryland. Our members' facilities support over 19,000 jobs and contribute $2.5 billion to the Maryland economy each year.

First, it important to place the significant and expensive requirements of this legislation in a broader context. Maryland has, for a number of years, promoted the "electrification" of motor vehicles as part of a larger philosophy to move away from fossil fuels as an energy source and toward renewable resources. The salient example of that philosophy was the enacted of Senate Bill 528 in 2022 – the Climate Solutions Now Act. BOMA members and all commercial property owners are struggling to comply with the evolving requirements of that Act.

Second, this legislation directly addresses the subject of urban development for residential property. And it can be fairly considered as running counter to our renewable energy policy in its requirements to convert existing parking spaces to incorporate electric charging stations. The future of urban development is, and should be, transit oriented. Mandating a certain number of spaces to accommodate electric vehicles will require developers to build more regular parking spaces (in order to drive transient revenue), and because in our jurisdiction parking garages are not subject for FAR (floor area ratio) calculations, the result will be public encouragement of building more structured parking rather than less.

Floor area ratio (FAR) is the measurement of a building's floor area in relation to the size of the lot/parcel that the building is located on. FAR is expressed as a decimal number, and is derived by dividing the total area of the building by the total area of the parcel (building area ÷ lot area). In zoning in addition to height restrictions, jurisdictions have limits on the FAR allowed.

We should also point out that the definition of "multifamily residential building" would appear to include mixed use buildings which represent a primary and publicly acceptable practice in commercial construction today. Therefore, the bill would automatically increase the cost of mixed use development, as described above.

Finally, the bill's provisions are triggered by a "significant renovation," as defined in the bill. That definition includes "parking upgrades that involve repaving or trenching in or around parking spaces." This definition is so vague that it could include any repair near a parking space no matter how small. Similarly, trenching is not adequately defined – there is no minimum area for this activity, for example.

One of our BOMA members has reported cost estimates for such work at an actual Baltimore City building. It is as follows:

- Bringing additional power to the building for 30 electric vehicle units - $160,000
- Bringing power to individual parking spaces - $10,000 per space

The total cost is thus estimated at approximately $300,000, a very significant expense by any measure against a need that is highly speculative. BOMA respectfully believes that the best way to accomplish the goals of the bill is to allow the market to do so.

For the foregoing reasons, BOMA respectfully requests an unfavorable report on House Bill 1496.

Sincerely,

Tim O'Donald
BOMA Legislative Chair

cc: Bryson Popham

HB1496_UNF.pdf
Uploaded by: Hugo Cantu
Position: UNF

Bill:	**House Bill 1496– Building Code – Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spaces**
Committee:	**Environment and Transportation**
Date:	**March 12, 2025**
Position:	**Unfavorable**

The Apartment and Office Building Association (AOBA) of Metropolitan Washington is a non-profit trade association representing the owners and managers of more than 23 million square feet of commercial office space and 133,000 apartment rental units in Montgomery and Prince George's counties. AOBA submits the following testimony in opposition to House Bill 1496.

House Bill 1496 requires the construction of new multifamily residential buildings with separate garages, carports, or driveways for each residential unit to include certain parking spaces for electric vehicle charging. The bill applies to significant renovations with separate garages, carports, or driveways, defined as housing units that include electric panel upgrades that increase the panel's capacity or parking upgrades that involve repaving or trenching in or around the parking space. Communities making these renovations to the community must include one EVSE-installed parking space capable of providing at least level 2 charging and one EV-ready parking space. If the significant renovation of housing units includes or will include on-site, off-street, and common-use parking, then it must also include, for every 25 residential units, at least one common EVSE-installed parking space.

AOBA supports efforts to expand electric vehicle charging capacity throughout the State. However, AOBA members are concerned about the cost of adding EV charging stations to existing housing units that undergo significant renovations. The bill defines significant renovations as any renovation that includes electric panel upgrades that increase the capacity of the panel or parking upgrades that involve trenching in or around parking spaces.

While electric panel upgrades may increase capacity to meet new appliance or building system requirements, the new capacity may not be sufficient for a level 2 EV charging station. Thus, this bill could require significantly higher capital investments than housing providers had intended when

deciding to make such upgrades. These costs come at a time when the rental housing industry is already under significant strain due to increased operating expenses, such as utilities, labor, and insurance; increased delinquencies due to the pandemic; and new legal mandates, such as the Building Energy Performance Standards and restrictive rent regulations in Montgomery and Prince George's Counties.

The Maryland Energy Administration (MEA) report analyzes the potential cost estimates for a Level 2 (LV2) charging station for different multifamily building types.[1] The report concludes that it cost $1.4 billion to install LV2 chargers for 10% of parking spaces. That figure increases substantially as more parking spaces are being retrofitted with chargers. Adding L2 Chargers to 50% of parking spaces will cost housing providers $7.4 billion for multifamily developments. These figures are significant even with financial assistance from the public sector, and other cost saving measures still is exorbitant for AOBA members. Moreover, MEA would have to allocate $660 million to meet the demand for multifamily communities to make installations.

At the federal level, the current administration is eliminating the electric vehicle tax credit which allows purchasers to receive up to $7,500 for eligible vehicles.[2] The administration has also imposed or threatened to impose costly tariffs that will raise the cost of vehicles.[3] Lastly, the federal layoffs and associated decline in spending will have a ripple effect throughout the state's economy that is already impacting the state's budget. This combination of factors will reduce demand for electric vehicles.

For these reasons, AOBA urges an unfavorable report on House Bill 1496. For more information, please contact Hugo Cantu at hcantu@aoba-metro.org

[1] https://energy.maryland.gov/Reports/Multifamily%20Residential%20EV%20Study.pdf
[2] https://apnews.com/article/climate-trump-electric-vehicles-pollution-standards-ae3a35faa376630e494765175aee2c28
[3] https://www.reuters.com/business/autos-transportation/automakers-warn-that-trump-tariffs-will-hike-some-vehicle-prices-by-much-25-2025-03-04/

HB 1496 - EV Charging - UNF - REALTORS.pdf
Uploaded by: Lisa May
Position: UNF

House Bill 1496 – Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

Position: Oppose

While we appreciate efforts to expand access to electric vehicle infrastructure, Maryland REALTORS® opposes HB 1496 for the mandates placed upon homeowners in the state.

HB 1496 requires that existing housing units include an EV-installed or EV-ready parking space when undergoing "significant renovations."

However, under this bill a "significant renovation" is triggered just through expanding the capacity of a home's electrical panel. Electrical panel upgrades alone are too narrow a standard under which to impose these requirements. Something as simple as replacing old appliances with modern ones or adding an air conditioning unit could impose EV-charging installation requirements under this bill.

The same is true for a homeowner seeking to merely repave their driveway. Particularly in older homes, the electrical panel may not be directly adjacent to the home's parking areas. Installing an EV-ready or EV-capable parking space in those situations would cause homeowners to disturb parts of the property not under renovation.

This bill would greatly increase the scope of these relatively routine projects. It would add significant costs for property owners who may not now, nor may they ever, own an electric vehicle and where they may not see a return on their investment at resale.

REALTORS® believe that the requirements of HB 1496 are too high a barrier for existing homeowners to meet, and we recommend an unfavorable report.

For more information contact lisa.may@mdrealtor.org or christa.mcgee@mdrealtor.org

MBIA Letter of Opposition HB 1496.pdf
Uploaded by: Lori Graf
Position: UNF

MARYLAND BUILDING INDUSTRY ASSOCIATION
11825 West Market Place | Fulton, MD 20759 | 301-776-6242

March 10, 2025

The Honorable Marc Korman
Chair, Environment & Transportation Committee
House Office Building, Room 251
6 Bladen St., Annapolis, MD, 21401

RE: HB 1496 Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

Dear Chairman Korman:

The Maryland Building Industry Association, representing 100,000 employees statewide, appreciates the opportunity to participate in the discussion surrounding **HB 1496 Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces**. MBIA **Opposes** the Act in its current version.

House Bill 1496 would require the construction of new multifamily residential buildings with separate garages, carports, or driveways for each residential unit to include certain parking spaces for electric vehicle charging. While MBIA Supports the concept of creating the infrastructure for Elective Vehicles, we have some concerns about the current language in the bill. This bill imposes significant costs on buildings undergoing major renovations and may discourage renovations all together. The renovations section of the legislation would require any building that is doing any renovation, as simple as paving their driveway to install Electric Vehicle Charging station

This bill would also require EVSE-installed and EVSE-ready installed parking in certain new construction multi-family projects. The Maryland Energy Administration has recently completed a report that was required under 2023 HB830. The report outlines the costs and other challenges to installing these charging stations in multi-family buildings (see below for a summary of these costs).

MBIA supports the need for charging stations, however we have concerns about the timing of this measure. Maryland currently faces a housing shortage of approximately 96,000 housing units. If nothing changes, that number will increase by 5600 units per year. The National Association of Homebuilders reports that the estimated rent of a Maryland Housing Units is more than 30% of household incomes state wide with 25% of people spending more than 50% of their income on housing. In order to address this problem, we need a concerted effort to make housing available, and affordable to the residents of this state. This bill is an important first step in addressing this problem as it relieves some of the process burden for construction these desperately needed housing units. More than 50% of residents of the state of Maryland report that lack of housing availability is a major problem. According to the Maryland Department of Housing and Community Development, Maryland is the 8th least affordable state in the United States. In addition, regulations imposed by all levels of government account for 23.8% of the price of a house. This is not the time to provide disincentives to build housing in Maryland.

For these reasons, MBIA respectfully requests the Committee give this measure an unfavorable report. Thank you for your consideration. For more information about this position, please contact Lori Graf at 410-800-7327 or lgraf@marylandbuilders.org.

cc: Members of the House Environment & Transportation Committee

MARYLAND BUILDING INDUSTRY ASSOCIATION
11825 West Market Place | Fulton, MD 20759 | 301-776-6242

Summary of MEA Multifamily Residential EV Study

1. **The report estimated that the cost of installing charging equipment on 50% of multifamily parking spots would be $7.4 billion.** That cost does not include offsite utility costs to bring the extra supply to the multifamily location and therefore underestimates the true cost. (Note that the cost estimates include a +/- variation of as much as 50% - suggesting that the cost could be as much as $11.1 billion.)

2. **The report did not make a specific recommendation for legislation mandating EV infrastructure at multifamily housing.** Instead, it just noted that infrastructure would be needed, especially "within proximity of low-income communities." However, low-income communities are likely to lag behind other communities in EV adoption because of fewer new and even fewer new, luxury, vehicles. In addition, the Governor has allocated additional funds for EV charging in low-income communities. The report concluded that: "To date, Maryland has succeeded in supporting EVSE infrastructure deployment in low-income and EJ communities in terms of the number of EVSE ports, particularly in urban centers such as the Washington D.C outskirts and Baltimore City."

3. **The report was very optimistic in estimating that by 2035, 82% of vehicles on the road would be EVs.** However, it is not clear that the report accounted for the offsets allowed by Advanced Clean Cars II. MDE's estimates assumed that many manufacturers would use those offsets to reduce EV sales during early years of the program. The report also states that the estimated number of vehicles could be reached only with $660 million in incentives – compared to the current annual rate of $3.5 million.

4. **The report appears to confirm that, for multifamily other than townhouses, the cost of later retrofitting parking lots for EV charging is roughly comparable to the cost at initial construction.** This would permit multifamily owners to delay installation until market demand develops.

5. **About 4% of cars currently on the road are EVs however electric vehicles are heavily concentrated in certain jurisdictions, especially Montgomery, Howard and Anne Arundel Counties.** (Note that the Howard County Building Code requires multifamily buildings to have EV Ready parking spaces. Montgomery County is considering a similar provision.)

Here are the key findings and recommendations from the report:

Key Findings:

● EV adoption and EVSE infrastructure are primarily concentrated in affluent counties within the State. Nevertheless, there is a proportionate distribution of EVSE infrastructure to the population levels in EJ and low-income communities.

● There is a lack of EVSE infrastructure within proximity to low-income housing complexes.

● Advanced Clean Cars II will significantly increase EV adoption to nearly 1,867,000, representing 82% of vehicles on the road, in 2035. Maryland is estimated to need a total of 1,970 DCFC ports and 1,978,865 Level 2 ports to meet this EV demand.

● Chapter 582 (2023) is expected to support the deployment of up to 263,930 Level 2 ports if all existing multifamily dwellings installed EVSE infrastructure for 50% of their parking spaces. The infrastructure comes at a steep cost, estimated at $7.4 billion dollars. For reference, MEA's FY24 budget for the Electric Vehicle Supply Equipment Rebate Program is $2.5 million dollars.

● There are numerous payment options and ownership models available to ensure this cost is not borne solely by the property owner.

Recommendations:

The Maryland Energy Administration makes the following recommendations for further activities to advance adoption of EVSE infrastructure and EVs in MD.

● Agencies should continue to work together to gather granular data on EV adoption and EVSE locations and upload this information to the Maryland Open Data Portal.

● Relevant agencies should conduct a thorough feasibility study to explore the development of an EV program supporting EVSE installations in low-income residential buildings.

● Agencies should collaborate with key stakeholders to continue existing EV and EVSE financial programs and develop innovative offerings, especially for low-income residents. Potential programs would include incentives, EV charging rates, technical assistance offerings, innovative ownership models, and revenue generation models.

● Agencies should collaborate with key stakeholders to continue educational programs for multifamily residents and developers but also as workforce development initiatives to ensure there is an adequate workforce to properly install and maintain the EVSE infrastructure.

MMHA - 2025 - HB1496 - UNF.pdf
Uploaded by: Matthew Pipkin
Position: UNF

MARYLAND MULTI-HOUSING ASSOCIATION, INC.

House Bill 1496

Committee: Environment and Transportation
Bill: House Bill 1496 Building Code – Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spots
Date: March 12, 2025
Position: Unfavorable

The Maryland Multi-Housing Association (MMHA) is a professional trade association established in 1996, whose members house more than 538,000 residents of the State of Maryland. MMHA's membership consists of owners and managers of more than 210,000 rental housing homes in over 958 apartment communities and more than 250 associate member companies who supply goods and services to the multi-housing industry.

House Bill 1496 ("HB 1496") requires the construction of new multifamily residential buildings with separate garages, carports, or driveways for each residential unit to include certain parking for electric vehicle charging. In addition, this bill requires housing units that are undergoing significant renovations with separate garages, carports, or driveways for each residential unit to include certain parking spaces for electric vehicle recharging. It should be noted that as part of the passage of Chapter 582 Residential Construction – Electric Vehicle Charging legislation from the 2023 Legislative Session[1], a study was mandated to be conducted by MEA with the goal of *"studying the costs, barriers, and impacts related to requiring both new and existing multifamily residential buildings to include EVSE-installed or EV-ready parking spaces."*. This MEA report was published in January 2024[2].

MMHA would like to respectfully request an unfavorable report on House Bill 1496. While MMHA understands the intent of this legislation, HB 1496 fails to account for the economic and practical realities facing multi-housing providers and would only contribute to further housing unaffordability in Maryland. To begin, MMHA has serious concerns under what is defined in the legislation as "SIGNIFICANT RENOVATION" that would trigger compliance measures for existing multi-family housing units. The definition in the legislation is as follows:

> "SIGNIFICANT RENOVATION MEANS: (I) A RENOVATION TO A HOUSING UNIT THAT INCLUDES ELECTRICAL PANEL UPGRADES THAT INCREASE THE CAPACITY OF THE PANEL; OR (II) PARKING UPGRADES THAT INVOLVE REPAVING OR TRENCHING IN OR AROUND PARKING SPACES"

MMHA takes issue with both (I) and (II) portions of the cited definition. Regarding (I), as this committee is aware, many of our property owners will need a new electric panel upgrade as part of the compliance standards required under the enacted Building Energy Performance Standards as a part of the Climate Solution Now Act of 2022 (CSN)[3]. This provision will result in

[1]MD General Assembly. Chapter 582 Residential Construction – Electric Vehicle Charging. Reg. Session. 2023. 2023 Regular Session - House Bill 830 Chapter (maryland.gov)
[2]Maryland Energy Administration Multifamily Residential EV Study – Jan. 2024. Multifamily Residential EV Study.pdf (maryland.gov)
[3]MD General Assembly. Chapter 38 Climate Solutions Now Act of 2022. Reg. Session. 2022. 2022 Regular Session - Senate Bill 528 Chapter (maryland.gov)

beleaguered property owners, who are renovating to comply with BEPS, to now be bombarded with additional costs that come as a result from this bill. As the report cited on page 26[2], MEA detailed a graph with actual estimated installation costs for retrofitting various existing multi-family housing units with electric vehicle supply equipment (EVSE) showing the following:

Table 7: Summary of EVSE Cost Estimates, by Multifamily Unit Type

Type	Quantity	Labor Direct Cost	Material Cost	Soft Cost	Total Installed Cost
Townhomes - L2 Charging Stations	1	$9,669	$7,795	$8,544	$26,008
Low Rise - L2 Charging Stations	1	$10,680	$18,995	$14,302	$43,977
High Rise - L2 Charging Stations	1	$12,282	$19,523	$15,271	$47,076
Structured Parking - L2 Charging Stations	1	$12,282	$19,523	$15,271	$47,076

[4]

This legislation offers no financial remedy to offset these cited costs associated with retrofitting existing multi-housing properties. Without any new financial remedy offered to offset the costs, this is simply too much to ask of our members to bear.

Regarding (II), it is unreasonable to expect that a landlord, who has decided to simply repave a parking lot for the benefit of their tenants residing in a building, should now be expected to comply and install the charging stations as the bill as outlined. While trenching involves more significant groundwork, it would be inappropriate to deem "REPAVING" of a parking lot to be "SIGNIFICANT RENOVATION." As this definition stands, this will only dissuade landlords from maintaining the parking lots for their tenants and trip up other landlords into complying with the installation of the charging stations.

In addition, this bill factors in no consideration for economic/market factors when requiring multi-family residential buildings to fall into compliance. The cost of purchasing and owning an electric vehicle in Maryland remains prohibitively expensive for many of our low income residents who reside in affordable multi-family housing units. For property owners of these multi-family housing units, it seems unreasonable to expect that they should burden this new expense with little reason to expect tenants will utilize these charging stations. By the admission of the key findings cited on page six of MEA's report, ***"there is a proportionate distribution of EVSE infrastructure to the population levels in [environmental justice] and low-income***

[2]Maryland Energy Administration Multifamily Residential EV Study – Jan. 2024. Multifamily Residential EV Study.pdf (maryland.gov)

[4]Readers note: these estimated costs only cited installation costs and do not account for maintenance of the L2 charging stations.

communities." If there is already a proportional distribution of EVSE in low-income communities, why would a mandate be necessary here at the expense of property owners?

Without significant rework of the "SIGNIFICANT RENOVATION" definition, a realistic consideration for economic factors in the legislation, and a new financial remedy to offset the increasing and compounding cost of compliance to our property owners, **MMHA must respectfully request an unfavorable report to HB 1496**.

Please contact Matthew Pipkin, Jr. at (443) 995-4342 or mpipkin@mmhaonline.org with any questions.

HB01496 - Building Code - Construction and Renovat

Uploaded by: Tom Ballentine

Position: UNF

NAIOP
MARYLAND CHAPTERS
THE ASSOCIATION FOR COMMERCIAL REAL ESTATE

March 10, 2025

The Honorable Marc Korman, Chair
House Environment and Transportation Committee
House Office Building, Room 251
6 Bladen St., Annapolis, MD 21401

Unfavorable: HB 1496 – Construction and Renovation of Housing – Electric Vehicle Charging

Dear, Chair Korman and Committee Members:

NAIOP represents 22,000+ commercial real estate professionals in the United States and Canada. Our Maryland membership is comprised of a mix of local firms and publicly traded real estate investment trusts that have long-standing investments in Maryland but also have experience in national and international markets. NAIOP members deliver office, mixed use, multi-family, and warehouse developments that meet the changing ways that people work, live, shop and play.

On behalf of our member companies, I am writing to oppose HB 1496 which requires installation of electric vehicle charging equipment in existing multifamily buildings and new construction.

NAIOP supported HB 380 that the committee passed in 2023; this bill is considerably different. Our opposition is based on the following considerations:

- Our members recognize the transition to electric vehicles is underway and will meet the needs of their tenants and customers as the market develops.
- An investment-grade apartment building will provide 400 spaces of on-stie parking. Bringing additional power to the site and reserving capacity will be costly to building owners and residents. Unused capacity can be withdrawn by utilities.
- Synchronizing the installation of equipment and reservation of electric capacity with the rise in demand in our buildings will reduce the opportunity for equipment and electric capacity to go unused while waiting for the market to mature.
- The MEA study of multifamily electric vehicle charging estimated the cost of installing equipment at 50% of multifamily parking spaces would be $7.4 billion. The estimated costs did not include the offsite utility costs to bring electricity supply to the location.
- MEA's cost estimates confirm that, for multifamily buildings, the cost to retrofit individual parking spaces with EV charging equipment is roughly $47,000 vs. $43,000 to install in new construction. This would suggest it is more cost-effective to install equipment as market demand develops vs preinstalling equipment.
- The bill would impose significant costs on multifamily building owners and occupants at a time when federal and state incentives are highly uncertain. The MEA study estimated the state Electric Vehicle Supply and Equipment Rebate Program would need to offer $660 million under its current structure to retrofit 50% of existing multifamily parking spaces. This data predates recent cuts in federal funds.

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- The definition of "major renovation" is inconsistent with the International Building Code and presents an inappropriately low trigger. The building codes require modifications to meet current code provisions when alterations affect 50% or more of the building area. The bill requires installation of EV charging capabilities any time the electric panel capacity is expanded or when repaving or trenching near parking areas. The definition ensures that electric vehicle charging requirements will coincide with and add compliance costs to buildings making energy modifications to comply with the Building Energy Performance Standards.
- The bill's definitions of EV parking spaces are inconsistent with the energy code. The bill omits ***EV Capable*** *spaces* from the definitions. This means there is no defined level of service that can be preinstalled without securing and reserving electric capacity.
- There is no phase-in period. The bill applies to building permit applications submitted on or after October 1, 2025. This effective date will apply the bill to buildings that completed electric load calculations and received utility commitments before its introduction.
- The bill applies state-wide, but EV registrations are concentrated in a few central Maryland jurisdictions, most of which have local installation requirements.
- The definition of multifamily does not follow the building code use group categories that differentiate between residential building use types. As a result, the bill applies to mixed-use buildings, hotels, dormitories, and nursing homes in addition to residential apartments and condominium units.

For these reasons, NAIOP respectfully requests your unfavorable report on HB 1496.

Sincerely,

Tom Ballentine, Vice President for Policy
NAIOP – Maryland Chapters, *The Association for Commercial Real Estate*

cc: Environment and Transportation Committee Members
Nick Manis – Manis, Canning Assoc.

Disapprove.pdf
Uploaded by: William Mauer
Position: UNF

I do not support this bill,