

HB 889 Building Code - Construction and Significan

Uploaded by: Cait Kerr

Position: FAV

Friday, February 23, 2024

TO: Marc Korman, Chair of the House Environment and Transportation Committee, and Committee Members

FROM: Cait Kerr, The Nature Conservancy, State Policy Manager; Mariana Rosales, The Nature Conservancy, Director of Climate

POSITION: Support HB 889 Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

The Nature Conservancy (TNC) supports HB 889, offered by Delegates Terrasa and Lehman. HB 889 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 899 will make EV ownership less challenging for those with limited access to charging infrastructure.

TNC commends Delegates Terrasa and Lehman 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 889.

Testimony HB0889 EV Parking Spaces.pdf

Uploaded by: Debbie Cohn

Position: FAV

Committee: Environment and Transportation
Testimony on: HB889 – Building Code-Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spaces
Individual: Deborah Cohn
Submitting: Deborah Cohn
Position: Favorable
Hearing Date: February 23, 2024

Dear Chair and Committee Members:

Thank you for allowing my testimony today in support of HB889. I am concerned that Maryland reduces its greenhouse gas emissions in a manner that is equitable and permits more people to participate in necessary changes. I urge you to vote favorably on HB88.

Problem: Maryland's Climate Pollution Reduction Plan indicates that “to achieve deeper [greenhouse gas] reductions from the transportation sector, it will be necessary to transition much of the light-duty fleet to [zero-emission vehicles] by 2031. Yet, sales of electric vehicles has slowed down. Many factors contribute, but among these are having to adapt driving habits to find EV chargers that often do not work and range anxiety.

Solution: Both of these factors can be addressed by installing more EV chargers where people live. HB899 adds Public Safety Article §12-205(c) which applies to construction or significant renovation of housing units that include, or will include, on-site, off-street, common use parking, requiring that these housing units include for every 25 residents at least one common use parking space with electric vehicle supply equipment (EVSE) that is fully installed from the electric panel to the parking space and at least one EVSE-installed parking space that can provide at least Level 2 charging in a common use parking area, and increasing percentages of EV-ready parking spaces dedicated to specific residential units or for common use, depending on the date of the development or building permit application.

Because HB889 would increase the supply of EV charging stations in multifamily housing, I urge a **FAVORABLE** report in Committee.

Thank you.

Deborah A. Cohn

Terresa_Sponsor_Testimony_HB_889

Uploaded by: Delegate Jen Terrasa

Position: FAV

JEN TERRASA
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Howard County



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Environment and Transportation
Committee

House Chair

Joint Committee on Children,
Youth, and Families

THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

February 23, 2024

To: The Honorable Marc Korman
Chair, Environment and Transportation Committee

From: Delegate Jen Terrasa
District 13, Howard County

Re: Sponsor Testimony in Support of HB889,
Building Code - Construction and Significant Renovation of Housing Units
- Electric Vehicle Parking Spaces

Dear Chairman Korman, Vice Chair Boyce, and Members of the Environment and Transportation Committee,

Thank you for the opportunity to present HB889, which relates to the installation of EV charging equipment in housing that was left out of last year's bill. This bill is cross-filed by Senator Brian Feldman.

HB889 builds off of successful Howard County legislation, which I sponsored in 2018 when I served on the County Council. That bill has been recognized as a model for other jurisdictions across the country.

Similarly, last year we successfully passed, and the governor signed into law, HB830/CH582 Residential Construction - Electric Vehicle Charging, which required installation of EV equipment in new single-family homes, duplexes, and townhouses with garages, carports, or driveways. Multifamily residential buildings were included as HB830 was originally drafted, however the bill was amended to require the Maryland Energy Administration to study issues related to the installation of EV parking spaces for other housing units. That study was completed in January and makes clear that Maryland is behind in adopting EV infrastructure to support future needs.

Now that the study is complete, we are back with HB889 which is intended to do the following:

1. Apply to housing units not covered in last year's bill (which covered units with garages, driveways, or carports). This year's bill applies to those that have communal parking.
2. During the construction or significant renovation of two or more housing units (so generally townhouses and multifamily buildings like apartments) install:
 - a. At least one EVSE-installed space
 - b. Plus, an additional EVSE-installed space for each 25 residential units.
3. During **new** construction, HB889 calls for an additional 10% of parking spaces to be **EV-ready**. Those percentages increase to 20% by 2030 and 30% by 2035.

As part of its efforts in confronting climate change, Maryland has set an ambitious goal of 300,000 zero emission vehicles on the road by 2025 and 600,000 by 2030. According to the recent MEA study, as of 2023, the state was home to 92,722 registered EVs, accounting for 4% of the 2,270,862 registered passenger vehicles. That was up from 24,000 as of December 2019. So, while the data highlights the increasing prevalence of EVs within the state's transportation landscape, we are still falling short of our 300,000 goal for next year.

Additionally, Maryland has adopted the Advanced Clean Cars II Program requiring all new cars sold in the state be 100% zero-emission by the year 2035. According to the MEA report, this program will significantly increase EV adoption to nearly 1,867,000 cars, representing 82% of vehicles on the road in the future. So, the requirements of the number of parking spaces in HB889 is quite modest when we consider the current and future rate of EV adoption.

This bill also ensures that electric vehicles are accessible not just to single family home residents, but to townhouse and multifamily building residents as well. All people regardless of housing style or socio-economic status should be afforded the chance to utilize electric vehicles to help the EV market reach the maximum number of drivers, especially considering that almost 75% of multi-family households have at least one vehicle.

According to the U.S. Department of Energy, around 80% of electric vehicle charging occurs at home. The accessibility of home charging is currently a major barrier for residents who may want to buy an electric vehicle but choose not to because their housing lacks the needed charging equipment or station infrastructure. This is especially true for multifamily residents because less than 5% of home charging takes place in multifamily homes.

Retrofitting EV charging infrastructure presents significant challenges and can be two to four times more expensive than installation during new construction and can be nearly impossible in a townhome community with no driveways and no way to plug a car into a home. In many cases, the only option would be running a cord across a communal sidewalk or convincing an HOA to place an EV charging station on communal open space. By making these installations common practice during new construction or major renovations, this bill reduces the costs of installation and allows more Marylanders to

feasibly consider buying an electric vehicle. Recently, Governor Wes Moore announced \$23 million for grants to install electric vehicle charging infrastructure in low- and moderate-income communities, which are more likely to include multifamily developments.

Requiring the installation of electric vehicle charging infrastructure in new construction and renovations will lead to more EVs on Maryland roads, helping us reach our climate and zero emission goals and weaken the reliance on fossil fuels and pollutant emitting vehicles. If we want folks to switch to electric vehicles, we need to make it possible for them to plug in safely and conveniently. Passing HB889 will promote electric vehicle adoption and ensure that Marylanders have adequate access to charging stations at their place of residence.

I urge a favorable report of HB889.

Ext. Comm. - Testimony - 2024 - Maryland HB 889 -

Uploaded by: Joshua Fisher

Position: FAV



February 20, 2024

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

**HB 889: Building Code - Construction and Significant Renovation of Housing Units -
Electric Vehicle Parking Spaces
Position: Favorable**

Chair Korman:

The Alliance for Automotive Innovation¹ (Auto Innovators) requests a favorable report for HB 889. HB 889 builds on critical legislation from the 2023 session and will extend necessary electric vehicle (EV) charging to residents at multi-unit dwellings.

Commitment to Net-Zero Carbon Transportation

Auto Innovators and its members are committed to achieving a net-zero carbon transportation future for America's cars and light trucks. The auto industry is investing \$1.2 trillion globally by 2030 to advance vehicle electrification and will increase the number of EV models available from 111 today to around 150 by model year (MY)2026². In August of 2021, Auto Innovators and our members announced support for a goal of achieving 40-50 percent U.S. new light-duty vehicle market share of EVs nationally by 2030, with the right complementary policies in place. HB 889 is one of those essential complementary policies needed to advance EVs deployment beyond the affluent single-family homeowners currently buying EVs.

Current State-of-Play

Maryland EVs sales comprised 11% percent of new vehicles sales through the first three quarters of 2023³. 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. That means, in Maryland, EV sales must increase more than four-fold in about two model years. These are

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 [EVs, PHEVs hitting U.S. dealerships through 2026 | Automotive News \(autonews.com\)](https://www.autosinnovate.org/posts/papers-reports/get-connected-q3-2023)

³ <https://www.autosinnovate.org/posts/papers-reports/get-connected-q3-2023>

staggering required sales increases for a new technology that relies heavily on home charging, public charging, hydrogen fueling stations, customer acceptance and general market readiness.

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, 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.net⁴, the median residential unit age in Maryland is 43 years. Housing being built today will likely be around through at least 2050 or 2060 – 15 to 25 years after Maryland regulations require every new vehicle sold to be electric. Consequently, if EV charging infrastructure is not installed as a new construction, it will need to be a retrofit installation afterwards, which costs far more than installing during new construction.

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.

⁴ <https://www.bestplaces.net/housing/state/maryland>

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.⁵ 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 \$2,000 per charging station.⁶ 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.⁷

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 are lower income, this further exacerbates inequities and widens economic divides.

The California Energy Commission (CEC) summarizes this well in their most recent study (January 2021)⁸:

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

⁵ 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.

⁶ Id. See Table

⁷ See CPUC Decision 20-08-045 "Decision Authorizing Southern California Edison Company's Charge Ready 2 Infrastructure And Market Education Programs," August 27, 2020.

⁸ 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.

breakers, wiring, and chargers. This is unlikely to happen, and residents need access to charging to realize Maryland's EV goals.

Conclusion

Passing HB 889 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,

A handwritten signature in black ink that reads "Josh Fisher". The signature is written in a cursive style with a prominent loop at the end of the last name.

Josh Fisher
Director, State Affairs
Alliance for Automotive Innovation

2024-HB889-PHI- FAV.pdf

Uploaded by: Katie Lanzarotto

Position: FAV



February 23, 2024

112 West Street
Annapolis, MD 21401

Support – House Bill 889: Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) support **House Bill 889 - Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces**. This legislation requires the construction of new multifamily residential buildings and the significant renovation of housing units with separate garages, carports, or driveways for each residential unit to include parking spaces for electric vehicle charging.

Maryland has set an ambitious goal of 300,000 zero emission vehicles on the road by 2025 and 600,000 by 2030. Requiring the installation of electric vehicle charging infrastructure in new construction and renovations of multi-family residential dwellings will lead to more electric vehicles on Maryland roads, effectively expanding the use of zero emission vehicles in the state. This is essential to achieving Maryland's climate and air quality goals. Finally, encouraging the growth of electric vehicles is critically important as transportation is the single largest GHG emissions generator in Maryland.

Pepco and Delmarva Power remain committed to helping Maryland achieve its climate goals and will continue to support our customers and the larger community by providing the tools, programs and resources needed to meet those goals. For reasons stated above, Pepco and Delmarva Power respectfully request a favorable report on House Bill 889.

Contact:

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HB0889 (SB0695) - FAV .pdf

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

DATE: February 23, 2024

MEA Position: FAVORABLE

This bill proposes that any new construction or a building undergoing significant renovation with 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).

HB889_2024_Hartmann.pdf

Uploaded by: Lanny Hartmann

Position: FAV

HB 889 — Building Code - Construction and Significant Renovation of Housing Units -
Electric Vehicle Parking Spaces
Position: **Favorable**

February 23, 2024

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

Dear Chairman Korman and Members of the Committee:

I am writing to express my enthusiastic support for House Bill 889, which aims to establish requirements for the installation of electric vehicle (EV) charging equipment during the construction or significant renovation of housing units.

As Maryland ranks among the top ten states nationally for EV adoption, it is crucial that we proactively address the growing demand for EV charging infrastructure. House Bill 889 presents an invaluable opportunity to future-proof our residential buildings and ensure that Maryland residents have access to convenient, affordable, and reliable charging options.

By encouraging the inclusion of EV charging infrastructure in new multifamily residential buildings and significant renovations, this bill will facilitate easier adoption of EVs for homeowners and also support the growth of clean transportation.

It is essential to prioritize the installation of conduit and panel space for electric vehicle charging during construction to minimize future retrofitting costs. This will help ensure access to low-cost residential utility rates by directly wiring EV spaces to home meters.

In conclusion, I urge you to support House Bill 889 and help advance this critical initiative. By doing so, we can take a significant step towards building a more sustainable future for Maryland. I respectfully ask the committee to provide a favorable report on House Bill 889.

Thank you for considering my perspective.

Sincerely,



Lanny Hartmann
Columbia, Maryland

HB889_MDSierraClub_Fav23Feb2024 .docx (1).pdf

Uploaded by: Lindsey Mendelson

Position: FAV



P.O. Box 278
Riverdale, MD 20738

Committee: Environment and Transportation

Testimony on: HB 889- Building Code – Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spaces

Position: Support

Hearing Date: February 23, 2024

The Maryland Chapter of the Sierra Club supports HB 689. 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 2024 and 2035 for newly constructed homes.

Equitable building codes will help to provide residents of multi-family units (who are more likely to be low-income residents or People of Color) with access to electric vehicle charging. 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 889 makes an important contribution in encouraging and supporting Maryland residents with all levels of resources 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 Representative
Lindsey.mendelson@mdsierra.org

Josh Tulkin
Chapter Director
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Karen Douglas
Transportation Committee Member
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¹ <https://www.consumerreports.org/hybrids-evs/evs-offer-big-savings-over-traditional-gas-powered-cars/>

HB889 joint testimony.pdf

Uploaded by: Neda Deylami

Position: FAV



Testimony on **HB 889**

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

Environment and Transportation Committee

Position: Favorable

The undersigned organizations urge a favorable report on HB 889.

We encourage you 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 vehicles¹ 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,

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_SVCE-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.

reserved capacity, wiring, dedicated circuit, and receptacle to support charging at the 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.

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

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 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,

Environmental Defense Fund
EV Charging for All Coalition
Ceres

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

2024 HB 889 EV Parking Spaces Phase In.pdf

Uploaded by: Paul Verchinski

Position: FAV

**FAVORABLE – House Bill 889
HB889- Building Code – Construction and Significant Renovation of
Housing Units – Electric Vehicle Parking Space
Environment and Transportation Committee
Friday, February 23, 2024**

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

MarylandLCV_FAV_HB889_RichardDeutschmann.pdf

Uploaded by: Richard Deutschmann

Position: FAV



February 23, 2024

Kim Coble
Executive Director

2024 Board of
Directors

Lynn Heller, Chair
The Hon. Nancy Kopp,
Treasurer
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Bonnie L. Norman
Katherine (Kitty)
Thomas

SUPPORT: HB889 - Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

Mr. Chairman and Members of the Committee:

Maryland LCV supports HB889 - Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces.

In March 2023, Governor Moore announced that the State of Maryland would fully implement and enforce the multi-state Advanced Clean Cars II Rule. This puts Maryland on a path of achieving 100% statewide sales of electric cars and light duty vehicles by model year 2035. In order to reach these goals, we need to rapidly increase our electric vehicle charging infrastructure throughout the state.

Additionally, in December 2023, the Maryland Department of the Environment issued “Maryland’s Climate Pollution Reduction Plan”, which lays out a roadmap for 60% net reduction in statewide Greenhouse Gas Emissions by 2031, and net-zero by 2045. The plan specifically recommends for the Maryland General Assembly to introduce legislation requiring that the state’s EV-ready standards for new residential construction be extended to include multi-family buildings. This would augment legislation passed by the Assembly in 2023 which codified similar requirements for new, single-family homes and duplexes in the state. The bill also has a phased approach, where the number of EV charging equipped parking spaces starts out modestly, and increases over the next 10 years.

HB889 directly supports the Clean Cars II Rule, as well as the state’s climate goals, by increasing electric vehicle charging infrastructure in an area of great need - multi-family housing. This will, in turn, help address the charging concerns of residents across the state, and encourage Marylanders to purchase electric vehicles in the near term. Having reliable EV charging at home has been identified in many studies as a key factor in consumers choosing to purchase electric vehicles for their personal use.

Maryland LCV urges a favorable report on HB 889.

Wilson Prewiring HB 889 FAV.pdf

Uploaded by: Scott Wilson

Position: FAV

Testimony to the House Environment and Transportation Committee
HB 889 Building Code - Construction and Significant Renovation of Housing Units -
Electric Vehicle Parking Spaces
Position: Favorable

21 February 2024

The Honorable Marc Korman, Chair
Room 251, House Office Building, Annapolis, MD 21401

Honorable Chair Korman and Members of the House Environment and Transportation Committee:

My name is Scott Wilson, and I currently serve on the Maryland Electric Vehicle Infrastructure Council (ZEEVIC). I am also vice president of the Electric Vehicle Association of Greater Washington DC (EVADC). I support the passage of HB 889 for the following reasons.

As Marylanders are discovering, one of the many advantages of owning an electric vehicle is being able to charge it at home. Next to free public charging, it is almost always the lowest-cost electricity available. Given what I pay for electricity at home, I drive at about 3.5 cents/mile. At current prices, a gas car would cost me about 12+ cents/mile, and my daily driving cost in my EV is about one-third of what it would otherwise be.

It is thus vitally important that during significant renovation of single-family and multi-family housing, as defined by the bill, we do not lose the opportunity to install at least the electric capacity to enable the type of home charging enjoyed by single-family homeowners, when that installation will be the least expensive. To minimize cost, EV charging capacity and/or chargers should be installed when electric capacity is being upgraded or when parking upgrades involve repaving or trenching in or around parking spaces since it is far cheaper to install hardware *before* a parking lot is paved rather than *after*, or when trenching occurs anyway.

Pre-wiring with a minimum 208V line and installing an EVSE during renovation are the best way to ensure that, as EV adoption increases, current and future single-family and multi-family residents can fully benefit from the EV opportunity in the least expensive way possible.

Thank you for your time,

Scott Wilson

HB336Testimony.pdf

Uploaded by: Susan Greene

Position: FAV

Susan and Dan Greene, stgreene59@gmail.com

House Bill 886 – SUPPORT

**House Bill 886 – Environment - CAD Task Force
House Committee on Environment and Transportation
February 23, 2024**

My name is Susan Greene. My husband, Dan and I live in the waterfront community of Nabbs and Stoney Creek in Northern Anne Arundel County. We moved to Maryland from New Hampshire two years ago and have grown to love the natural beauty, the abundant seafood, and the joy of living in the Stoney Creek area. I am the mother of three adult children and by the time you read this, I will be a grandmother. I believe that one of the most important things that we can do for our children and grandchildren is to leave them a beautiful, healthy environment.

This written testimony is given in support of HB886 which would lead to the creation of an independent task force to investigate, study and make recommendations about the use of Confined Aquatic Disposal (CAD) of dredge material by the Maryland Port Authority (MPA) in a pilot project creating a CAD site in the Patapsco River near Stoney Creek. This CAD pilot project will begin dumping dredge material (contaminated with heavy metals, petroleum, PFAs, and other toxic forever chemicals) over a 20-acre area off of Stoney Creek within approximately one year. MPA plans include expanding this 20-acre sites to an area up to 220 acres moving towards Fort Smallwood at the mouth of Stoney Creek.

The proposed independent task force is a critical tool to get detailed answers about the impact of the CAD project on

- water quality in the Patapsco River, Stoney Creek and Rock Creek of scraping the clean sand off the site, dumping the dredge material, and leaving the CAD site uncovered
- aquatic plant life that will be devastated by the dredge sediment deposited on the CAD site and the sediment that then drifts throughout the mouth of the Patapsco River, Stoney Creek, Nabbs Creek, Rock Creek and nearby areas of the Chesapeake Bay
- marine wildlife (fish, crabs, oysters and other species) living in and around the CAD dump site as well as the recreational and commercial fishing in the area.
- the birds, other creatures, and people that feed on the aquatic plant life and marine wildlife that are impacted by the dredge dumping
- recreational use and potential health problems due to contact (swimming, boating, water sports, etc.) with contaminated water
- noise and disruption to the Patapsco River and Stoney Creek areas related to the dredge disposal operation

The Maryland Port Administration (MPA) Dredged Material Management Program Annual Report 2023, page 14, states

"Reviewing the Science, Responding to Stakeholders

MPA completed monitoring a CAD pilot project in 2019 and worked to evaluate lessons learned and determine next steps for the program. Planning and investigative efforts, including geotechnical investigations and hydrodynamic modeling within Baltimore Harbor, informed a proposed siting of a second CAD pilot call in a location southeast of the Cox Creek DMCF. The area was presented to the Joint Evaluation Committee, a body of state and federal regulatory agencies, in February 2023 for feedback on the project and permitting strategies.

Concerns have been raised about the proposed location for the next CAD pilot project, so the project has been paused to ensure there is a thorough education and outreach process. This will include reviewing design alternatives and re-engaging the Bay Enhancement Workgroup. Simultaneously, MPA is developing and implementing a comprehensive outreach and engagement strategy focused on CAD in Baltimore Harbor and the importance of investigating emerging dredged material management approaches. MPA remains committed to transparency, ensuring the public and regulatory and resource agencies receive accurate and timely information and building confidence that future CAD endeavors will have no adverse effects on the environment or nearby residents."

The annual report makes it clear that the work that the MPA plans to do before the CAD pilot project is initiated is mostly education and public relations. The MPA mentions the Innovative Materials Re-Use Project and they discuss it extensively at public meetings. This is a very valid approach and should be aggressively pursued as a more environmentally friendly way to deal with the dredge material. However, the MPA does not address the broad concerns about water quality, aquatic plant life, marine wildlife, and recreational use. The members of the community do not need to just be educated about the value of the CAD project - we need answers to the questions about the impacts of dredge disposal. The independent task force would make it a priority to address the concerns of the community.

It is vitally important that House Bill 886 is moved into legislation and that the task force be created. The task force should include Maryland legislators, relevant Maryland cabinet officers, MPA officials, independent science experts (water quality experts, marine biologists, engineers with experience in dredge material handling), the Chesapeake Bay Foundation, commercial and recreational fishermen, and impacted citizens.

Sincerely,
Susan and Dan Greene
Nabbs/Stoney Creek
7623 Turnbrook Drive
Glen Burnie, MD
stgreene59@gmail.com

HB 889 EV Parking Spaces 2024.pdf

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 • PAULO C. HENRIQUES: Treasurer



TESTIMONY IN SUPPORT OF HB 889 BUILDING CODE- CONSTRUCTION, RENOVATION OF HOUSING- EV PARKING SPACES February 23, 2024

TO: Chair Korman, Vice Chair Boyce and members of the Environment & Transportation Committee

From: Tom Clark, Political Director, International Brotherhood of Electrical Workers Local 26

Mr. Chair, Madam Vice Chair, and members of the Committee. **HB 889** is a forward-thinking Bill that helps Maryland changeover to clean energy automobiles. Most importantly, it does so for those that live in apartments and townhomes (most of our citizens). So please join me in **support of HB 889**.

This piece of legislation addresses the need for electric vehicle chargers, to the everyday Marylander. Not the Tesla owners with a 3-car garage, but the electric car owners that live in apartment buildings and multi-family dwellings. Working people, low- and middle-income families that care about the environment and saving on fuel costs. The need is there, **HB 889** addresses the need. Without bills like **HB 889**, our communities will be littered with miles of extension cords connecting electric cars to household outlets, a danger to all, especially young children. It is this danger that will happen and eventually force the General Assembly to act, after a fatal event. Now is the time to legislate for safety as well as for the environment. This Bill only asks for a minimum of parking spaces and associated wiring and equipment. I respectfully ask that you consider the safety aspect, when voting for or against **HB 889**. Not to mention the cost savings when installing this equipment during new construction or renovation, as opposed to waiting to install this equipment when the yards are finished, the concrete is poured or the parking lot paved.

I commend the sponsors of **HB 889**, legislators that focus on clean air as well as the people I represent, working families. It brings clean energy equipment to Mr. and Mrs. Everyday Marylander. They will thank you for helping them and helping the environment. Please vote **favorably on HB 889**.



HB 889_BOMA_UNF.pdf

Uploaded by: Bryson Popham

Position: UNF



2331 Rock Spring Road
Forest Hill, MD 21050
443.966.3855
info@bomabaltimore.org

February 21, 2024

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

RE: House Bill 889 - 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 both the Legislative Chairman of the Building Owners and Managers Association of Greater Baltimore (BOMA), and as a member of its Board of Directors, to respectfully request an unfavorable report on House Bill 889.

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 is 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 enactment 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.

First, 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.

Second, 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 889.

Sincerely,

A handwritten signature in blue ink that reads "KBauer". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Kevin J. Bauer
BOMA Legislative Chair

cc: Bryson Popham

HB 889 - EV Charging - UNF - REALTORS.pdf

Uploaded by: Christa McGee

Position: UNF



House Bill 889 – 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 889 for the mandates placed upon homeowners in the state.

HB 889 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.

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 adds 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 889 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 889.pdf

Uploaded by: Lori Graf

Position: UNF

February 23, 2024

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

RE: 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 Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces. MBIA **Opposes** the Act in its current version.

House Bill 889 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 a 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

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 - 2024 - HB889 - UNF.pdf

Uploaded by: Matthew Pipkin

Position: UNF



House Bill 889

Committee: Environment and Transportation Committee

Bill: House Bill 889 Building Code – Construction and Significant Renovation of Housing Units – Electric Vehicle Parking Spots

Date: February 21, 2024

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 889 (“HB 889”) 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 Session¹, 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 report², published last month, is a key component of this legislation.

MMHA would like to respectfully request an unfavorable report on House Bill 889. While MMHA appreciates the intent of this legislation, there are significant areas of concern that need to be addressed. To begin, MMHA has strong 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 new compliance standards required under the enacted Climate Solution Now Act of 2022 (CSN)³. This provision will result in beleaguered property owners, who are renovating to comply with CSN, to now be bombarded with additional costs that come as a result from this bill. As the

¹MD General Assembly. Chapter 582 Residential Construction – Electric Vehicle Charging. Reg. Session. 2023. [2023 Regular Session - House Bill 830 Chapter \(maryland.gov\)](#)

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

³MD General Assembly. Chapter 38 Climate Solutions Now Act of 2022. Reg. Session. 2022. [2022 Regular Session - Senate Bill 528 Chapter \(maryland.gov\)](#)



report cited on page 26¹, 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

2

This legislation offers no financial remedy to offset these cited costs associated with retrofitting existing multi-housing units. 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*

¹Maryland Energy Administration Multifamily Residential EV Study – Jan. 2024. [Multifamily Residential EV Study.pdf \(maryland.gov\)](#)

²Readers 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 HB889.**

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

HB 889-AOBA--UNF.pdf

Uploaded by: Ryan Washington

Position: UNF



Bill No: HB 889—Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

Committee: Environment and Transportation

Date: 2/23/2024

Position: Unfavorable

The Apartment and Office Building Association of Metropolitan Washington (AOBA) represents members that own or manage more than 23 million square feet of commercial office space and 133,000 apartment rental units in Montgomery and Prince George’s Counties.

House Bill 889 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. 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.

AOBA members will be burdened with this cost to meet targets set by the State and forced to pass these costs on to residents to ensure compliance with the bill requirements, thus decreasing the State's viable naturally occurring housing stock. The total cost of making such renovations to the parking lot outweighs the payback period on this bill, as it could take about 10 years with assistance or more without. This will result in housing providers not pursuing projects because it is an unappealing investment.

For these reasons, AOBA requests an unfavorable report on HB 889. For further information, contact Ryan Washington, AOBA's Government Affairs Manager, at 202-770-7713 or email rwashington@aoba-metro.org.

HB0988 - Building Code - Construction and Renovati

Uploaded by: Tom Ballentine

Position: UNF



February 21, 2024

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

Oppose: HB 889 – Building Code – 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 988 which requires installation of electric vehicle charging equipment in existing multifamily buildings and new construction. NAIOP's opposition is based on the following considerations:

- The MEA study of multifamily electric vehicle charging estimated the cost of equipment at 50% of multifamily parking spaces would be \$7.4 billion. Installing electric vehicle charging equipment at Individual parking spaces was estimated to cost between \$43,000 and \$47,000 for larger multifamily buildings. The estimated costs did not include the offsite utility costs to bring electricity supply to the location.
- The bill would impose significant costs on multifamily building owners and occupants before providing incentives, and grants at a scale. 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. The FY24 funding for the program was \$2.5 million.
- The electric vehicle charging requirements will coincide with building energy performance requirements in the Climate Solutions Now Act. For condominium buildings the cost of installation would necessarily need to be included in reserve studies and funded.
- 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 a renovation affects 50% of the floor 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. This would activate the requirements when multifamily buildings replace fossil fuel heat and hot water equipment to meet the requirements of the Climate Solutions Now Act, at repaving a parking area or repairing a water line.

- The definition of multifamily does not follow the building code use group categories that differentiate between building use types. As a result, the provisions of the bill likely apply to mixed-use buildings, hotels, dormitories, rooming houses, and transitional housing in addition to residential apartments and condominium units.
- The bill's definitions of EV parking spaces are inconsistent with the building code definitions. The bill omits *EV Ready Space* from the building code definitions. This means there is no defined level of service that can be preinstalled without securing and reserving electric capacity. Bringing additional power to the site can be costly to building owners and residents.
- The bill applies state-wide, but EV registrations are concentrated in a few central Maryland counties.
- Our members are interested in syncing the installation of equipment with the rise in demand so that equipment and capacity do not go unused. The MDE's estimates assume that many manufacturers would use offsets allowed by Advanced Clean Cars II to reduce EV sales during the early years of the program.
- The codes adopted by Maryland will contain requirements for EV installation. While we respect the authority of the General Assembly to override building and energy codes, we believe that power should be reserved and used in a limited fashion.

For these reasons, NAIOP respectfully requests your unfavorable report on HB 889.

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.

HB 889 Building Code - Construction and Significan

Uploaded by: Crystal Hypolite


Position: INFO

Robin Carter
Chairperson, Board of Commissioners

Janet Abrahams
President | Chief Executive Officer



February 23, 2024

TO: Members of the Environment and Transportation
FROM: Janet Abrahams, HABC President & CEO 
RE: House Bill 889 - Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces

POSITION: Letter of Information

Members of the Environment and Transportation Committee, please be advised that the Housing Authority of Baltimore City (HABC) wishes to submit a Letter of Information to request an exemption on properties owned and operated by public housing authorities.

HB 889 - Building Code - Construction and Significant Renovation of Housing Units - Electric Vehicle Parking Spaces requires the construction of new multifamily residential buildings with separate garages, carports, or driveways for each residential unit to include parking spaces for electric vehicle charging. The bill also states that if the construction or renovation of housing units includes significant renovation that includes electrical panel upgrades that increase the panel's capacity or parking upgrades that involve repaving or trenching in or around parking spaces, the following apply:

- For every 25 residential units, at least one common use EVSE installed parking space.
- For a development application or building permit application made on or after October 1, 2024, at least 10% of the parking spaces;
- For a development application or building permit application made on or after January 1, 2030, at least 20% of the parking spaces; and
- For a development application or building permit application made on or after January 1, 2035, at least 30% of the parking spaces.

HABC is the country's 5th largest public housing authority and Baltimore City's largest provider of affordable housing opportunities. HABC is federally funded and regulated by the U.S. Department of Housing and Urban Development (HUD). HABC serves nearly 44,000 of Baltimore City's low to extremely low-income individuals through its Public Housing and Housing Choice Voucher programs. The public housing inventory currently consists of almost 6,000 units located at various developments and scattered sites throughout the city.

Housing Authority of Baltimore City | 417 East Fayette Street, Baltimore, MD 21202

 410.396.3232  www.HABC.org    @BmoreHabc 

HABC is working to transform its public housing developments into thriving mixed-income communities where residents have opportunities for economic mobility. Three of our current major redevelopment initiatives include the Perkins Somerset Old town (PSO) Transformation Plan, Transform Poe and the O'Donnell Heights revitalization plan.

The PSO Transformation Plan includes the demolition and replacement of 629 public housing units as well as the construction of 424 low-income units serving households with an average of 60% AMI, and 307 unrestricted market-rate units spread across the Somerset and Perkins sites.

The O'Donnell Heights revitalization plan includes the construction of approximately 925 mixed income units, including mostly row homes, two-story walk-up flats, and a low-rise apartment building. Under the Transform Poe plan, 288 distressed public housing units at Poe Homes will be demolished and replaced as part of a new mixed-income community that will support existing and future residents.

All three of HABC's current major redevelopment initiatives are in progress and have already been designed by architects. If passed, this legislation would add to both re-design and construction costs, which would result in a delay of upcoming financial closings and the creation of new affordable units for the families we serve. As written, HB 889 will be troublesome for our projects with funding gaps, causing additional costs to projects struggling to find funds.

As HABC performs renovations and continues to redevelop our remaining public housing sites, installation of EV stations would require multiple spaces due to the size of the units, which would impact existing parking spaces on our lots, and further reduce the already limited parking. In addition, as property owners, public housing authorities would be responsible for the cost of providing the electricity for the new spaces, as electric charging stations are considered an amenity that housing authorities are prohibited from charging residents for under federal regulation.

HABC respectfully requests the consideration of the information stated above for purposes of this legislation.

Respectfully submitted:

Janet Abrahams, HABC President & CEO