From:	Lisa Heflin <lisaseanscott@hotmail.com></lisaseanscott@hotmail.com>
Sent:	Sunday, October 21, 2018 7:20 PM
То:	CouncilMail
Subject:	Council Bill CB76

I'm writing in support of the above bill introduced by Jen Terrasa.

The transportation sector is the largest creator of greenhouse gas emissions in Maryland, and deployment of electric vehicles can significantly reduce these greenhouse gas emissions.

• Traditional internal combustion engine vehicles produce harmful air pollutants that affect human health.

• Preparing for the electrification of the transportation sector now with building codes that plan for the growth of the EV market can save retrofit costs.

Thank you in advance for preparing for a safe future.

Lisa Heflin

From:	Alan Langerman <alanlangerman@me.com></alanlangerman@me.com>
Sent:	Wednesday, October 17, 2018 5:21 PM
То:	CouncilMail
Subject:	CB76-2018 written testimony
Attachments:	2018-10-17 Howard County Council - CB76-2018 support letter.pdf

Dear Howard County Council,

Please find enclosed a letter of support for CB76-2018.

Thank you.

Alan Langerman alanlangerman@me.com

Enc.



# Langerman Family

HOME 6925 Woodside Place Chevy Chase, MD 20815

CELL PHONE 617 306 3226

FAX 425 671 1923

EMAIL alan@langerman.com

wes www.linkedin.com Howard County Council Via email: <u>councilmail@howardcountymd.gov</u>

Dear Chair Sigaty, Vice-Chair Ball and Members of the Council:

I write to you in support of bill CB76-2018, introduced by Jennifer Terassa. I own three electric vehicles and no longer require a gas car; I belong to a nonprofit, Climate XChange, which advocates carbon pricing legislation to address climate change; and I am the proud father of three children whose futures will be greatly affected by our decisions to electrify transportation.

Other testimony has established the health, environmental and operational cost benefits offered by electrifying our transportation infrastructure.

CB76-2018 addresses a critical issue slowing the growth of electric vehicle deployment: deployment of charging infrastructure in new residential units.

The best way to think about this additional charging infrastructure is by analogy with deployment of existing utility services to new homes: **new dwellings are expected to provide basic service infrastructure.** When adding electric vehicle charging, we are fortunate that for new detached housing stock the additional installation cost for charging infrastructure is very low. **It's like adding an additional outlet for a clothes dryer**. For multi-unit dwellings, cost is kept very low by requiring only one energized outlet per 25 residences.

Through CB76-2018, residents of new multi-unit dwellings as well as new detached homes will all benefit from the electric vehicle revolution.

I urge you not to be distracted by references to the Public Service Commission's EV Workgroup (PC44) process in other testimony — it does not conflict with CB76-2018.

Thank you for your attention.

Yours sincerely, Langerman

October 17, 2018

From:	Joshua Greenfeld <jgreenfeld@marylandbuilders.org></jgreenfeld@marylandbuilders.org>
Sent:	Wednesday, October 17, 2018 4:48 PM
To:	Terrasa, Jen; Feldmark, Jessica; Smith, Gary; Weinstein, Jon; Sigaty, Mary Kay; Fox, Greg;
	Knight, Karen; Pruim, Kimberly; Clay, Mary; CouncilMail
Cc:	Wilson, B Diane; Lazdins, Valdis; Edmondson, Chad; Sheubrooks, Kent; James Fraser;
	Kittleman, Allan; aaron@agreenfieldlaw.com; aaron@agreenfieldlaw.com;
	Jjohnson@henwebb.com; khoward@regionalmgmt.com; askolnik@mmhaonline.org
Subject:	RE: MBIA Letter of Opposition to CB76 - Electric Vehicle Charging Mandate
1999 - 199 <b>-</b> 199	

Councilwoman Terrasa – Thank you for your detailed response to our letter and the opportunity to send further comments pursuant to Mr. Fraser's testimony on Monday night. We have been quickly getting ourselves up to speed on this issue, the technology and the best ways to prepare for likely widespread EV uptake in the future. Below please find detailed comments on this legislation

In general, the intent of this bill, to avoid expensive retrofit by planning ahead for broad EV adoption, is not objectionable. However, the closer we read this bill and the more we learn about this technology, this bill itself seems like an enforcement debacle in the making. At the least, the section related to mandated installation of public EV charging stations is entirely unworkable but provisions related to futureproofing new homes with EV charging capability may be salvageable if dramatically simplified.

1. First, it is highly problematic to put site design criteria (related to parking for projects with 25 or more 'residential units') in Title 3 'Buildings' and specifically in Subtitle 1 'Buildings' of Title 3. As Mr. Fraser, a civil engineer explained in his testimony, site design is the first step in a project's design (significantly before building types or building designs are finalized). Designers never review or use Title 3, Subtitle 1 of the code to evaluate parking or electrical infrastructure for a project. Subtitle 1 'Buildings' which is being modified by this bill currently contains the adoption of the International building codes (3.100) and four other sections 3.101 – 3.104) which amend each of the adopted codes for use in Howard County (see Table of Contents for Subtitle 1 pasted below):

Sec. 3.100. - Howard County Building Code; adoption of International Codes.

- Sec. 3.101. Amendments to the International Building Code, 2015 Edition.
- Sec. 3.102. Amendments to the International Residential Code, 2015 Edition.

Sec. 3.103. - Amendments to the International Mechanical Code, 2015 Edition.

Sec. 3.104. - Amendments to the International Energy Conservation Code, 2015 Edition.

If criteria affecting parking for multiple residential units (a site design issue) is going to be placed in Title 3 'Buildings' it would seem to make a lot more sense to put it in SUBTITLE 10. 'ENERGY EFFICIENCY AND ENVIRONMENTAL DESIGN' of Title 3. Placing the new mandate into Title 3, Subtitle 1 will cause it to be overlooked by designers as it is not in the appropriate section. This will cause major problems later in the development process and while this may seem mundane, it is important to draft legislation in a way that is consistent with development process to maximize results.

2. Second, the 1 EV charging station per 25 residential units remains confusing despite your emailed response to MBIA's letter which said,

"this legislation amends the building code and <u>does not change the zoning code</u>, therefore, it cannot and does not change the number of spaces required in a development. However, to be clear, for the spaces required in communities with homes that do not have driveways or garages (in other words the communities where shared EV charging stations would be required at a ratio of 1 to 25) <u>these stations would have to be available to everyone in</u> <u>the community just like all community amenities</u>." a. If EV charging stations are going to be considered shared community amenities, they should probably be in the zoning code rather than the building code. The only time the building code deals with amenities is in one case and that is in the definition for stormwater management BMPs (Subtitle 4 – Grading). There is not any time the term "amenity" in the building code refers to a "shared community asset." On the other hand, the term "amenity (or amenities)" is used with the "shared community" implication throughout the zoning code in nearly every section. This creates a challenging scenario where either:

i. New development obligations to provide "community amenities" (EV charging stations) are now going to appear in the Building Code for the first time (VERY CONFUSING AND PROBLEMATIC FROM AN ENFORCEMENT PERSPECTIVE), or

ii. The 1 per 25 part of this bill should actually be considered a zoning change (different section of the code) because it proposes to change the community amenity requirements for new developments. We believe this is more likely a change to community benefits and therefore a zoning code change.

3. Third, the language, "AT LEAST 1 PARKING SPACE FOR EACH 25 RESIDENTIAL UNITS SHALL FEATURE ENERGIZED OUTLETS; AND" is a very confusing from an enforcement/design perspective and inconsistent with the rest of the code as summarized below:

a. The ratio of parking spaces to "residential units" is an inconsistent metric because parking requirements (as defined in the zoning code) vary for different types of projects – in other words, not all "residential units" are the same when it comes to parking. Challenges include:

b. How is the 1 per 25 supposed to measured/enforced?

i. Based on time? (i.e. "you must install one EV station before the 25<sup>th</sup> occupancy permit for the project is issued")

ii. Based on proximity? (i.e. How many EV parking spaces would be required by CB76 for a project where there are 30 homes in one area separated by a long road and large open space from 15 homes in another area?) How are we to design communities with such nebulous requirements?

c. Large Single Family lot homes application challenges

What if a project has 29 one acre lots in RR-DEO zoning - there are no shared or community parking spaces in my project because with large lots shared parking simply is not needed (practically or by code).

Would this project now be obligated under CB76 to provide a "community" parking space and EV charging station somewhere on the property?

Please note that the word "AND" at the end of this line (highlighted in red above) suggests both requirements (I) **and** (II) in this bill are simultaneously required for all projects. If the answer to this example is that the bill would require a community parking space that wasn't previously required, this is in conflict with your explanation in Item #3 above and based on her email, this would be a zoning change.

4. Lastly, the section of the bill that reads, "(II) A RESIDENTIAL UNIT WITH A GARAGE, CARPORT, OR DRIVEWAY SHALL FEATURE APPROPRIATE ELECTRIC VEHICLE SUPPLY EQUIPMENT CONSISTING OF CONDUCTORS, CONNECTORS, DEVICES, APPARATUS, AND FITTINGS SO THAT AN ENERGIZED OUTLET MAY BE ADDED IN THE FUTURE." is likely to cause confusion for regulators and builders if implemented the way it is written.

a. Who is responsible for enforcing this part of the bill if it becomes law and how would anyone know what the undefined term "<u>APPROPRIATE</u>" ELECTRIC VEHICLE SUPPLY EQUIPMENT, means or if it has been provided?
b. In speaking with providers of EV charging station retrofits, it is not clear from this legislation what exactly is required? Is it merely the ability to install a charging station in the future? Does this mean the

electrical outlet has to be provided in the home? Or merely the electrical service capability? Or something else?

c. If this section is to be included, it should be dramatically simplified to state only that the new home must include sufficient electrical supply to add an EV charging station in the future. Language relating to the "appropriateness" of "conductors, connectors, devices, apparatus and fittings" is confusing and unenforceable as undefined.

These comments reflect how challenging this issue is and why this legislation should not be rushed at the last minute. This is an important issue, one that builders should eventually, either by mandate or through demand in the market, supply in new homes, but this legislation has too many practical challenges and is thus not ready for primetime. If this legislation is to move forward, the unclear and unpractical zoning and building code issues related to the 1 in 25 parking spaces mandate must be eliminated. Possibly the requirement of futureproofing new homes with the ability to add EV charging stations can stay, but it must be dramatically simplified so as to be easily understood and implemented by the builder community as recommended above.

Thank you again for this opportunity to comment. We look forward to more discussion.

Josh Greenfeld, Esq. VP, Government Affairs Maryland Building Industry Association 443.515.0025

From: Terrasa, Jen [mailto:jterrasa@howardcountymd.gov]
Sent: Monday, October 15, 2018 5:49 PM
To: Joshua Greenfeld; Feldmark, Jessica; Ball, Calvin B; Smith, Gary; Weinstein, Jon; Sigaty, Mary Kay; Fox, Greg; Knight, Karen; Pruim, Kimberly; Clay, Mary; CouncilMail
Cc: Wilson, B Diane; Lazdins, Valdis; Edmondson, Chad; Sheubrooks, Kent; James Fraser; Kittleman, Allan; aaron@agreenfieldlaw.com; aaron@agreenfieldlaw.com; Jjohnson@henwebb.com; khoward@regionalmgmt.com; askolnik@mmhaonline.org; Terrasa, Jen
Subject: RE: MBIA Letter of Opposition to CB76 - Electric Vehicle Charging Mandate

Dear Mr. Greenfeld:

Thank you for your email on behalf of MBIA regarding CB76-2018. I am sorry you were unable to join us for our conference call last week, and want to make sure you know that I am more than happy to arrange a call or meeting with you to discuss any questions you have about this legislation. In the meantime, I will do my best to clarify some misconceptions about the bill and answer some of the questions you have to the best of my ability.

1. <u>Ongoing Public Service Commission/Desire to otherwise address holistically at the State</u> <u>legislative or regulatory level</u>: I understand your desire for this to be addressed as part of the PSC Workgroup on Implementation of a Statewide Vehicle Portfolio. However, from what I understand, that work group is primarily focused on who pays for it and how to insure that this infrastructure is available broadly. I do not believe anything we are doing here could interfere with that. In fact, if anything, CB76 would help create parts of that infrastructure and ensure that new neighborhoods built between now and the completion of the statewide plan will not require retrofitting.

2. <u>Use of the term "new occupancies"</u>: Please note that this was not intended to mean anything other than new construction. In fact, one of the primary purposes of requiring EV infrastructure and charging stations in new construction is to avoid additional expense that would come with retrofitting down the road. I discussed this concern with our drafting staff, and my understanding is that the term "new occupancies" was used by our drafters because it is a term that appears in the building code. He has since discussed this with Bob Francis, Director of the Department of Inspections, Licenses and Permits who noted that "new occupancies" would be

interpreted as meaning "new construction." He does not, however, object to changing the term to "new construction," so we already have an amendment drafted to make that change.

HOA/COA control over electric vehicles charging stations: To my knowledge the concern over 3. HOA/COA control of charging stations is one of the main items this bill will address by requiring charging stations upfront in developments where there are no garages or driveways. In this circumstance, the charging stations would be installed before the HOA/COA takes over the community so any efforts to prevent their installation would be moot. As a former HOA president and someone who has dealt with HOA/COA issues throughout my time on the council, I am not aware of anything that gives an HOA/COA the ability to ban the installation of an electric outlet within your own home, however, I will look into this. On the other hand, I believe, unless otherwise specified in the law, it would be fully within an HOA/COA's discretion to come up with rules governing the placement of such a station outside of one's home. I do not see any conflict here, but am open to hearing more about your concern. With respect to maintenance and liability, this would presumably be treated like any communal space or amenities owned by an HOA/COA (such as pools, playgrounds, open space, etc.).

Concern about how 1 charging unit per 25 units will be counted or enforced and whether this 4. adds required spaces: Please note that this legislation amends the building code and does not change the zoning code, therefore, it cannot and does not change the number of spaces required in a development. However, to be clear, for the spaces required in communities with homes that do not have driveways or garages (in other words the communities where shared EV charging stations would be required at a ratio of 1 to 25) these stations would have to be available to everyone in the community just like all community amenities.

Concern that there is not enough consumer demand for EV infrastructure yet: The problem with 4. this statement is that especially in communities where there are no driveways and/or garages (and no practical way to get electricity from the home to the car without going over community property), it is not unreasonable to conclude that at least some of the lack of demand stems from the fact that they would not be able to charge an electric vehicle at home. This bill aims to address this.

Concern over cost: As discussed above, this bill does not require additional spaces, so there should 5. not be a concern about cost associated with adding parking spaces to a development. With respect to the cost of a charging station, the information you provided indicates a wide range of possible costs. The Department of Energy's report "Costs Associated with Non-Residential Electric Vehicle Supply Equipment" notes that it is far less expensive to build this infrastructure up front than to retrofit later (pg. 29). So, unless I am missing something, the costs associated with this requirement would fall in the lower range. Additionally, if something in the bill (such as the requirement of Level 2) would cause the cost to fall in the higher range of these estimates, please let us know and we can work with you on this. Otherwise, the decision to install less or more expensive charging stations would be made by the developer perhaps in response to whether a higher level charging station is something the purchasers and/or renters are looking for.

I am cc'ing Mr. Aaron Greenfield, who is representing the Maryland Multi-Housing Association, because he expressed some similar concerns in our phone conversation and subsequent email. I am more than happy to talk and/or meet with you to address any additional concerns you may have. If you would like to schedule something, please reach out to my assistant, Colette Gelwicks, at jterrasa@howardcountymd.gov or (410) 313-2421. I look forward to continuing to work through this issue with you.

All the best, Jen Howard County Council

Phone: (410) 313-2001 Email: <u>JTerrasa@HowardCountyMD.gov</u>

"Like" my page on Facebook and follow me on Twitter!

Sign up for Jen's newsletter!

From: Joshua Greenfeld [mailto:jgreenfeld@marylandbuilders.org] Sent: Friday, October 12, 2018 10:14 AM

To: Feldmark, Jessica <jfeldmark@howardcountymd.gov>; Ball, Calvin B <cbball@howardcountymd.gov>; Smith, Gary <glsmith@howardcountymd.gov>; Weinstein, Jon <jweinstein@howardcountymd.gov>; Terrasa, Jen <jterrasa@howardcountymd.gov>; Sigaty, Mary Kay <mksigaty@howardcountymd.gov>; Fox, Greg <gfox@howardcountymd.gov>; Knight, Karen <kknight@howardcountymd.gov>; Pruim, Kimberly <kpruim@howardcountymd.gov>; Clay, Mary <mclay@howardcountymd.gov>; CouncilMail <CouncilMail@howardcountymd.gov>

**Cc:** Wilson, B Diane <BDWilson@howardcountymd.gov>; Lazdins, Valdis <vlazdins@howardcountymd.gov>; Edmondson, Chad <cedmondson@howardcountymd.gov>; Sheubrooks, Kent <ksheubrooks@howardcountymd.gov>; James Fraser <jamie@i-s-land.com>; Kittleman, Allan <AKittleman@howardcountymd.gov> **Subject:** MBIA Letter of Opposition to CB76 - Electric Vehicle Charging Mandate

Dear Chairwoman Sigaty and Members of the Howard County Council:

The Howard County Chapter of the Maryland Building Industry Association (MBIA) writes in **opposition** to Council Bill 76 mandating all new residential construction and "new occupancies" install Level 2 electric vehicle charging stations or the infrastructure capable of future installation for driveways and garages. While the MBIA believes electric vehicles will make up a significant element of Maryland's future vehicle fleet, this challenge should be addressed through the ongoing Public Service Commission process or otherwise addressed holistically at the State legislative or regulatory level. Creating a patchwork of competing and conflicting local EV laws throughout Maryland will lead to slower, less efficient uptake of EV technology while contributing to more costly housing stock.

In advance of Monday's hearing, please find attached a more detailed letter of opposition as well as the a recently filed PSC petition for a statewide EV infrastructure program.

Thank you for your attention to this issue and your continued support of the local home building industry. If you have any questions about these comments and would like to discuss MBIA's position further, please do not hesitate to contact me at jgreenfeld@marylandbuilders.org or (443) 515-0025.

Best regards,

Josh Greenfeld, Esq. jgreenfeld@marylandbuilders.org Vice President of Government Affairs Maryland Building Industry Association 11825 W. Market Place Fulton, MD 20759 Ph: 443-515-0025



Fall Membership Drive - September 1 - October 31 Help Us Recruit NEW Members and win PRIZES. Click here for info.

Chef Night- Let's Go to the Movies - October 25 Reel Food. Real Fun. <u>Register here</u>.

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Remodeling & Custom Building Awards - November 1 Honoring Design and Craftsmanship. <u>Register here</u>.

Multifamily Trends Conference - November 8 Featuring Anirban Basu. <u>Register here</u>.

Check out NAHB's Member Advantage Program at www.nahb.org/ma

나는 사람들은 물건을 가지 않는 것을 했다.

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From:	Michael Nord <michael.nord@gmail.com></michael.nord@gmail.com>
Sent:	Wednesday, October 17, 2018 7:40 AM
То:	CouncilMail
Subject:	Support CB76-2018 (Requiring EV Charging at New Residential Construction)

I am writing to ask you to support CB76-2018 (Requiring EV Charging at New Residential Construction). Preparing for the electrification of the transportation sector now with building codes that plan for the growth of the EV market can save retrofit costs. Early adoption of these technologies will also increase home values and therefore tax revenues.

Thank you,

Michael Nord 8821 Stonebrook Lane Columbia, MD, 20146

From:	Jamie Richardson <jrichardson@ccpace.com></jrichardson@ccpace.com>	
Sent:	Tuesday, October 16, 2018 3:48 PM	
То:	CouncilMail	
Subject:	I Support! Bill 76-2018	
Importance:	Hiah	
÷	Contract West Constraints of a set of the	
Good afternoon Councilmen,		

I strongly support the bill requiring infrastructure for and charging stations for electric vehicles in certain new residential structures!

THANK YOU FOR YOUR TIME 😳

Jamie Richardson Technical Recruiter P: 703.251.6993 W: CCPace

Get to know us, visit our blog!

From:	Earl, Lawson C. <lcearl@nvcc.edu></lcearl@nvcc.edu>
Sent:	Tuesday, October 16, 2018 3:30 PM
То:	CouncilMail
Cc:	perkins.jason@gmail.com; Curtis Craddock
Subject:	Letter in support of EV Ready council bill 76-2018

Good afternoon,

I am not a Howard County resident, but I am a member of the Electric Vehicle Association of Greater Washington, D.C. as well as an EV driver who has recently switched from fossil fuels to all-electric transportation.

I feel compelled to write in support of council bill 76-2018 because of the electric vehicle's importance in the future of sustainable transportation. By mandating EV-ready new residential construction, you're making it easier for home buyers and utility companies to plan for electric vehicle charging. Building in advance also means less cost to the homeowner down the road, as homes don't need to be retrofitted with EV charging infrastructure. The cost savings will benefit all homeowners and rental tenants, particular those in low income neighborhoods where it is considerably more difficult to fund EV infrastructure.

Thank you for your time and consideration.

Lawson Earl Operations Manager Richard J. Ernst Community Cultural Center Northern Virginia Community College 8333 Little River Turnpike Annandale, VA 22003 office: 703.323.2400 fax: 703.323.2185 http://www.nvcc.edu/ernst/