

Sayers, Margery

From: Terrasa, Jen
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.

- Ongoing Public Service Commission/Desire to otherwise address holistically at the State legislative or regulatory level:** 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.
- Use of the term “new occupancies”:** 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 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 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.

4. **Concern that there is not enough consumer demand for EV infrastructure yet:** The problem with 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.

5. **Concern over cost:** As discussed above, this bill does not require additional spaces, so there should 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

Jennifer Terrasa
Councilwoman, District 3
Howard County Council
Phone: (410) 313-2001
Email: JTerrasa@HowardCountyMD.gov

"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 <cball@howardcountymd.gov>; Smith, Gary <gsmith@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. [Register here](#).

Remodeling & Custom Building Awards - November 1
Honoring Design and Craftsmanship. [Register here](#).

Multifamily Trends Conference - November 8
Featuring Anirban Basu. [Register here](#).

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

From: James D. Walsh, Esq. <jimwalsh@walshlaw.com>
Sent: Monday, October 15, 2018 5:15 PM
To: CouncilMail
Subject: CB76-2018

I strongly oppose CB 76-2018 (mandating electric charging stations in new developments), and I urge the Council to vote against it.

This legislation is unnecessary and burdensome. There is no mandate that people must buy hybrid motor vehicles, but because there is a market for them, some people buy them (and some people don't). This legislation forces Howard County residents to buy a particular product that they don't want or need. (If they did want or need it, they would buy it without a mandate.)

The legislation is counter-productive. Installing a device that ends up unused is a waste of energy and resources, which is harmful to the environment.

Furthermore, given the rapid change in technology, the devices mandated by the legislation might be obsolete within 10 years. Think back 10-15 years, it might have seemed to have been a good idea to mandate CFL light bulbs, yet they are now obsolete with improvements in LED bulbs.

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James D. Walsh, Esq. Walsh & Company, P.A. 9841 Broken Land Pkwy. Suite
206 Columbia, MD 21046-3075 410-312-5690 410-312-5694 fax

Sayers, Margery

From: Josh Cohen <josh.cohen@semaconnect.com>
Sent: Monday, October 15, 2018 3:14 PM
To: CouncilMail
Subject: Testimony in support of Council Bill 76-2018
Attachments: SemaConnect letter HoCo CB 76-2018.pdf; SemaConnect_Small.jpg

SemaConnect respectfully submits the attached testimony in support of CB 76-2018.

I am unable to attend tonight's hearing but please do not hesitate to contact me if I can provide additional information or answer questions either today or in the future.

Please also confirm receipt of this testimony.

Sincerely,
Josh Cohen

--
Josh Cohen | *Director of Policy and Utility Programs*
SemaConnect Inc | 4961 Tesla Drive | Bowie, Maryland 20715
p 301.352.3730 |
c 410.991.5674 |
f. 301.352.4232 | e josh.cohen@semaconnect.com



October 15, 2018

Howard County Council

Via email: councilmail@howardcountymd.gov

RE: **Support for Council Bill 76-2018**
Electric Vehicle Charging Infrastructure

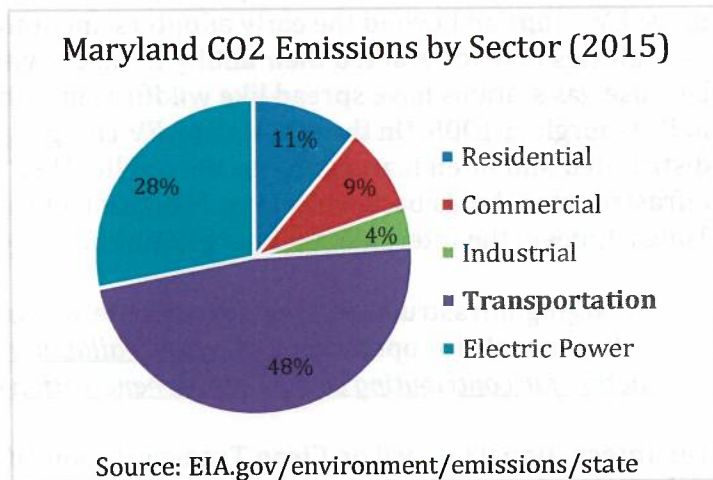
Dear Chair Sigaty, Vice-Chair Ball and Members of the Council:

SemaConnect, a Maryland-based manufacturer of smart, networked Level 2 EV charging solutions, respectfully submits the following testimony in support of CB 76-2018 sponsored by Councilmember Terrasa to require outlets in certain new residential construction capable of supporting Level 2 electric vehicle charging.

Emissions

In 2016, transportation [dethroned](#) electricity generation to claim the dubious distinction as the highest polluting sector in our economy. In fact, transportation was the only consumption sector where carbon emissions increased. It now accounts for more than one-fourth of all U.S. greenhouse gas (GHG) emissions.

In Maryland, transportation is far and away the largest emissions-producing sector, accounting for [almost half](#) of statewide carbon emissions. Mobile sources are the top three emitters of [NOx pollution](#) in Maryland as well, with “on-road non-diesel light-duty vehicles” leading the pack. In other words, cleaning up Maryland’s transportation emissions will have a significant impact on the state’s overall emissions and air quality.



To achieve cleaner and healthier air, we need to decarbonize our transportation sector. And to do that, we need to electrify transportation for the simple reason that EVs emit far less pollution than gas-powered vehicles. A recent Union of Concerned Scientists (UCS) report [confirmed](#) that even after taking into account EVs’ more

electricity-intensive manufacturing process, battery electric vehicles (BEVs) produce less than half the GHG emissions as comparable gas-fueled cars over their full life cycle.

What's more, EVs actually get cleaner over time: as a utility incorporates more wind, solar and other renewables into its generation mix, each EV it charges will become cleaner as well. This is especially true in a state like Maryland which is blessed with bountiful solar, offshore wind and other renewable resources.

The benefits to Marylanders will be far reaching. Taking gasoline motors off the road reduces pollution, removes oil and other fuel additives from our roadways and ultimately the Bay, and cleans the air which we all breathe. EVs are not just desirable, they are necessary for Maryland to meet its environmental commitments such as reducing its greenhouse gas emissions 40% by 2030 as required by the [Greenhouse Gas Emissions Reduction Act of 2016](#).

Maryland is also party to the [Zero Emissions Vehicle \(ZEV\) taskforce](#), a group of nine states working together to support EV adoption. Through this task force, Maryland has committed to putting 60,000 vehicles on the road by 2020 and 300,000 by 2025. Without a robust EV charging network, it will be nearly impossible to meet this target.

Infrastructure

Charging infrastructure is the *sine qua non*—the essential ingredient—necessary to move EV adoption beyond the early adopters and into the mainstream. Drivers of gas vehicles take for granted their ability to fill up with fuel wherever they go, because gas stations have spread like wildfire since the first “filling station” opened in Pittsburgh in 1905. On the other hand, EV charging stations are sparsely distributed and often inaccessible to the public. This “relative lack of charging infrastructure” holds back widespread adoption of EVs, [according to](#) the Financial Times. Indeed, the International Energy Administration (IEA) [reports](#):

“Charging infrastructure, whether at home, at work or at public locations, is indispensable for operating EVs... the availability of chargers [is] one of the key factors for contributing to the market penetration of EVs.” (emphasis added)

The International Council on Clean Transportation (ICCT) conducts extensive technical and scientific analysis of the often-inter-related factors impacting electric transportation. Recently ICCT examined EV adoption in the 50 most populous U.S. metropolitan areas and released those [findings](#) last summer:

“Electric vehicle adoption and various types of charging infrastructure grow in unison... These relationships remain complex and multidirectional:

Infrastructure increases electric vehicle awareness and driver confidence, and more electric vehicle users increase demand for infrastructure.”

State charging infrastructure

In Maryland, the need for more public charging stations is clear. [According to the U.S. Department of Energy’s Alternative Fuels Data Center](#), Maryland currently has 516 publicly accessible Level 2 charging locations totaling 1,200 L2 charging ports statewide. While this total is greater than some other states, it nonetheless [equates](#) to only one public L2 charging port for every 1,815 households.

This relative lack of publicly-accessible charging infrastructure is symptomatic of a broader market failure: private investment alone has been inadequate to meet the need for publicly-available charging, and this in turn has hindered EV adoption.

Multi-Unit Dwellings

Home is not just where the heart is, it’s where [more than 80 percent](#) of EV charging occurs. Unfortunately, not everyone has that ability. Folks who live in multi-unit dwellings (MUDs) such as condominium and apartment buildings are at the mercy of rules established by the COA or property manager as to how many charging stations are allowed, if any. Even for those properties that do allow charging stations, it may not be economically feasible for an EV-driving resident to install one; the costs of site preparation and electrical work to retrofit an existing facility are often multiple times more expensive than during construction while electrical contractors and supplies are already on site.

I commend Council Bill 76-2018 for recognizing and addressing this very real challenge. It is a forward-looking piece of legislation and there is precedent for it. Cities across the country such as [Atlanta](#), [San Francisco](#) and [Fremont](#) have passed “EV-ready” ordinances to require varying percentages of parking spaces in new multi-family and commercial developments—and in Atlanta’s case, all new single-family homes—to “be equipped with the infrastructure needed to install EV charging stations, such as conduit, wiring and electrical capacity.”

These bills each offer not just precedent but also guidance for jurisdictions such as Howard County that are seeking to advance EV adoption in ways that are affordable, fair and appropriate to their communities.

About SemaConnect

A local success story, SemaConnect is a Maryland-based provider of smart, networked Level 2 electric vehicle (EV) charging stations. Our company exemplifies the economic promise of vehicle electrification: our founder Mahi Reddy started

SemaConnect in 2008 when mass market EVs were still just a dream. In its early years, the company's initial focus was designing a charging solution to meet the coming demand. In 2011 we deployed our first charging station as the first EVs were hitting dealer showrooms. Now, just seven years later, SemaConnect has deployed over 5,000 charging stations across North America. We employ more than two dozen professionals who design, assemble, distribute and service our products at our national headquarters in Bowie, Maryland.

Thank you for your consideration of these comments which I hope are useful. If I can provide additional information or otherwise be helpful, please do not hesitate to contact me directly at josh.cohen@semaconnect.com. Our headquarters are just a short drive from Ellicott City, and I hope Howard County will consider us to be a resource as we all navigate this new, more electrified future together.

Respectfully submitted,



Josh Cohen

Director of Policy and Utility Programs

Sayers, Margery

From: Locke Joanne <joannelocke@gmail.com>
Sent: Monday, October 15, 2018 1:33 PM
To: CouncilMail
Subject: CB 76-2018

I fully support CB 76-2018.

IT's our future. Please support it and vote for it

Joanne Locke
Ellicott City, MD 21043

Sayers, Margery

From: Michael Nord <michael.nord@gmail.com>
Sent: Monday, October 15, 2018 1:16 PM
To: CouncilMail; Terrasa, Jen
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.

Than you,

Michael Nord
8821 Stonebrook Lane
Columbia, MD, 20146

Sayers, Margery

From: Scott Wilson <rumpole@me.com>
Sent: Monday, October 15, 2018 11:42 AM
To: CouncilMail
Subject: Support letter for CB76
Attachments: EVADC FOR CB76.docx

Hi,

Please find the attached letter of support for CB76. I've also signed up to testify, and I will bring 7 copies, in case the emailed letter doesn't make it into the record.

Thanks,
Scott Wilson
Electric Vehicle Association of Greater Washington DC
EVADC.org

Oct 15, 2018

Re: Support for CB76 – EV Ready New Construction

Dear Chairwoman Sigaty and Members of the Howard County Council,

I'm Scott Wilson, vice president of the non-profit Electric Vehicle Association of Greater Washington DC, which is the local chapter of the Electric Auto Association, and I also serve on the Maryland Electric Vehicle Infrastructure Council. EVADC has about 100 members in Northern Virginia, DC and Maryland who drive just about every electric and plug-in hybrid car model sold in the last seven years, and several older conversions of previously gasoline-fueled cars. We wish to express our support for CB76.

Maryland currently has about 14,000 registrations of privately owned plug-in vehicles, increasing at about 400 per month. People who own and operate EV's usually do it for one or more of three reasons. They either want to increase American energy security by reducing dependence on oil, they want to drive with less pollution, or they want to save money, since for what they pay for electricity, it's as if gasoline cost one dollar per gallon. An EV represents one of the most significant actions and opportunities an individual or family can take to have substantial impact in all three of those areas.

Cars spend about two-thirds of their lives parked at home, and one-third parked at work. One huge advantage of an EV is therefore being able to charge it at home, overnight. Every day you wake up to a fully charged car capable of its full range. The vast majority of EV drivers plug-in at home, the exceptions being where people must park on the street, or in non-dedicated parking. There is no single universal solution for optimum charging at home, but CB76 addresses two of the biggest opportunities that would allow large numbers of drivers to benefit.

First, in new single-garage construction, it would require the simple installation of a 240V outlet precisely when it's easiest to install. This would eliminate the expense and aggravation of having to retrofit such an outlet, which is what many drivers must do. When I installed my charger in my garage in 2012, my electrician pulled existing wiring from one end of my house and redirected it to the other end, drilling a hole in my rim joist and routing the wire above the ceiling of my garage. We want to make incorporation of an EV into family life as easy as possible, and it's a huge wasted opportunity not to install a simple 240V outlet in a new garage under construction. The bill requires no one to install an EVSE, but the wiring would be there, should a family later decide to discover the opportunity an EV provides.

Second, it requires the installation in new multi-family construction of one 240V energized outlet (not necessarily an EVSE) for every 25 residential units. Since it would be new construction, it would allow for the most cost-effective and aesthetically pleasing installation possible. Almost every existing EV-ready code or law requires a raceway (conduit), wiring and pull rope. Once the future EVSE is installed, it will let multi-family EV drivers benefit in the same manner as single garage users. This is also an economic justice issue, since having access to a home charger in multi-family housing would greatly broaden the income reach of EV's.

Suggestions have been made that the Public Service Commission's EV Workgroup (PC44) process will address this issue. In fact, PC44 contains a suite of proposals, the most significant of which is utility installation and operation of workplace and multi-family charging, however, this will be almost entirely for retrofit installations at existing sites. Utilities and the PSC aren't in the new construction business. The easiest and cheapest method of 240V installation for EV charging is *at the time of construction, not after the fact*. It is comparatively trivial to install wiring and an outlet box between the joists in new single-family or duplex construction, and far cheaper to install conduit and wiring in a parking lot *before paving, not after*. CB76 uses a common-sense approach to minimize costs to future homeowners and maximize cost effectiveness.

It has also been suggested that CB76 creates mandates, not for new construction, but for new occupancies, which is interpreted to include existing structures, and thus would mandate vast amounts of retrofitting. While the word "occupancies" is in the bills language, that interpretation misreads the spirit of the bill. The spirit of the bill is merely to install either a simple 240V outlet in new single-garage construction, or to install a 240V energized outlet for every 25 spaces in new multi-family construction. *The purpose of the bill is expressly to avoid future retrofitting, not to cause it.*

Similar statutes have been enacted in other jurisdictions (sometimes in the face of builder opposition), such as Atlanta (17-O-1654, amended as 18-O-1143), NYC (Local Law 130), San Francisco (Ordinance 92-17), Vancouver (By-law 9691 and 9936), and Salt Lake City (Ordinance 20 of 2017). The closest direct comparison to CB76 may be the EV readiness statute in Denver¹ (Building Code Section R327).

It would be a shame to waste this chance to use common sense to reduce barriers to EV adoption, by using the cheapest and easiest means to prewire new single and multifamily housing for future EVSE installation. Failure would ensure unnecessary expense and aggravation. EVADC looks forward to further assisting the Council in enacting a statute that will enable the hardworking families of Howard County to more easily harness the EV opportunity.

Best regards,

Scott Wilson, Vice President, EVADC

¹ <https://www.denverpost.com/2016/03/09/denvers-new-building-code-requires-garages-to-support-electric-vehicles/>

Sayers, Margery

From: no-reply@howardcountymd.gov
Sent: Monday, October 15, 2018 11:26 AM
To: ned@sustainable.us
Subject: EV at new construction sites

First Name: Ned
Last Name: Tillman
Email: ned@sustainable.us
Street Address: 94687 Hickory Limb
City: Columbia
Subject: EV at new construction sites
Message: This is an important step that we should take. Thanks for helping us move forward.

Sayers, Margery

From: Andrew Farkas <andrew.farkas@morgan.edu>
Sent: Monday, October 15, 2018 10:55 AM
To: CouncilMail
Cc: verchinski@yahoo.com
Subject: CB76-2018 testimony

Honorable Council Members,

I wish to testify in favor of the subject council bill. I am a resident of Howard County and I served on the Public Transportation Board as chair in the 1990s. I have been on the faculty in transportation for 35 years and lead the transportation research center at Morgan State University. I have also served on the Maryland Electric Vehicle Infrastructure Council (EVIC) as the academic member since 2011. I recently presented to EVIC our research on purchasing and commuting behavior of EV owners in Maryland. The research was done with the assistance of the Maryland Motor Vehicle Administration.

We found that 80% of EV owners are affluent, environmentally conscious, educated, older white males with an urban/suburban orientation. Eighty-five percent of EV owners charge at home. Yet, 20% of owners have less than \$100K in household income, own EVs because they are operating-cost conscious, and tend to reside and commute in suburban, exurban and rural areas. Many such households reside in multi-family housing and must charge their vehicles at the few public and employer charging stations.

EVIC wants to expand the 20% and understands that more charging stations are needed in suburban and rural areas. So, I hope you will give these findings every consideration in your deliberations to facilitate charging stations at multi-family housing developments. I am happy to answer any questions about our research, and you may access the final report at https://www.morgan.edu/school_of_engineering/research_centers/national_transportation_center/research/completed_projects.html

Regards,

Z. Andrew Farkas, Ph.D.
Director and Professor
National Transportation Center, CBEIS 327
Director, Urban Mobility & Equity Center
Morgan State University
1700 E. Cold Spring Lane
Baltimore, MD 21251
443-885-3761
<http://www.morgan.edu/soe/ntc>
<http://www.morgan.edu/umec>
<https://www.facebook.com/morganntc>

Sayers, Margery

From: Pokie Schuck <bayviewmktg@gmail.com>
Sent: Monday, October 15, 2018 10:36 AM
To: CouncilMail
Subject: Electric Car Charging Stations

Good Morning. I am not a constituent in your district, but I do have some related thoughts that might be helpful as you prepare for tonight's meeting. I live in Colonial Beach, VA a neighbor to MD. I drive a 100% electric car Fiat 500e. And I am daily impressed with the forward, timely, up-to-date innovations that I am seeing in MD. I often drive to visit my daughter who lives in Bowie & I charge with Sema Connect. VA sad to say is woefully behind you guys. It is embarrassing.
Pocahontas Schuck

Sent from my iPhone

Sayers, Margery

From: Kevin Grishkot <tinkjumps@mac.com>
Sent: Monday, October 15, 2018 10:22 AM
To: Terrasa, Jen; CouncilMail
Subject: Support for CB76-2018 (Requiring EV Charging at New Residential Construction).

Hi;

I am write to you today to request you to support CB76-2018 (Requiring EV Charging at New Residential Construction). Electric vehicles are the way forward in the future. Both GM and Volvo have committed to a fully electric line by 2023. I suspect others will do the same. To require new housing to have a EV charging capability is a simple and straightforward matter. It's as simple as placing a 240v outlet (that same kind of outlet that a stove or dryer uses) somewhere that a car can be parked close to. This would add a trivial amount to the cost of building a new home.

Please support this bill. It is a simple, very low cost, item that will position new construction to be better suited to the coming change in automobile transportation.

Thanks
Kevin Grishkot.

Sayers, Margery

From: Aaron Greenfield <agreenfield@mmhaonline.org>
Sent: Monday, October 15, 2018 10:04 AM
To: Feldmark, Jessica; Ball, Calvin B; Smith, Gary; Weinstein, Jon; Terrasa, Jen; Sigaty, Mary Kay; Fox, Greg; Knight, Karen; Pruiim, Kimberly; Clay, Mary; CouncilMail; Gelwicks, Colette
Cc: Jjohnson@henwebb.com; Kathy K. Howard; Adam Skolnik
Subject: Letter MMHA Opposition to CB76 - Electric Vehicle Charging Mandate
Attachments: MMHA - Howard County - EV bill CB 76.pdf

Dear Chairwoman Sigaty and Members of the Howard County Council:

On behalf of the Maryland Multi-Housing Association (MMHA), attached please find a letter 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.

Council Bill 76 is laudable but presents some practical complications including how it will align with the ongoing statewide effort at the Public Service Commission (PSC). By way of background, Maryland joined seven other states in forming a task force to ensure the successful implementation of the Zero Emission Vehicles (ZEV) program. Maryland has a goal of having 60,000 ZEVs on the road by 2020 and 300,000 ZEVs on the road by 2025 and Maryland’s work with the other ZEVs states will help build the market needed to sustain this goal. As a way to reach and support these goals, Maryland, through the PSC, has held hearings on a joint proposal to address statewide EV infrastructure challenges called the “Maryland Electric Vehicle Portfolio.” These challenges should be addressed through the ongoing PSC process.

Thank you for your attention. If you have any questions about these comments and would like to discuss MMHA’s position further, please do not hesitate to contact me at 410.446.1992.

Aaron

Aaron J. Greenfield
Maryland Multi-Housing Association
410.446.1992



October 15, 2018

Opposition to Council Bill 76 - Electric Vehicle Charging Station Mandate

Dear Chairwoman Sigaty and Members of the Howard County Council:

This testimony is offered on behalf of Maryland Multi-Housing Association (MMHA). We are a professional trade association established in 1996, whose members consists of owners and managers of more than 190,000 rental housing homes in over 800 apartment communities. In addition, MMHA represents companies that manage over 35,000 condominium and home owner associations in over 250 communities. Our members house over 556,000 residents of the State of Maryland. MMHA's membership owns and/or manages 16,500 apartment homes located in Howard County.

MMHA writes in opposition to Council Bill 76 mandating all new residential construction and "new occupancies" install Level 2 electric vehicle (EV) charging stations or the infrastructure capable of future installation for driveways and garages. This bill presents a number of complications including:

- Undefined Term: The term "new occupancies" is undefined which suggests every time a new occupancy occurs in a residential unit (single family, multi-family, rental or sale), the owner is required to meet these new mandates.
- New Requirement: The bill requires one charging unit per 25 parking spaces. How was this ratio devised? Is there data that supports one to 25 parking spaces? How will this be counted and enforced? Does this create a new parking requirement?
- Cost: The Department of Energy (DoE) indicates an equipment cost of \$400-\$6,500 for Level 2 charging units. DoE cites installation costs that average \$3,000 with a cost range of \$600 - \$12,700 per unit. Installation costs vary. DoE notes that units (like the townhouse chargers in the bill) more than 100 feet from a power source require an additional transformer and, in the PSC petition, the utilities cite requirements for separate electric meter or submeters as a cost barrier and request changes to PSC regulations to provide relief.
- HOAs/COAs: Whether a homeowner can install EV charging equipment may not be within the control of the developer or homebuilder. Adding EV charging equipment to a home or community could be controlled by the Homeowner's Association (HOA) or Condominium Association (COA) where the owner lives. These HOAs and COAs can deny installation of EV charging equipment if it is contrary to their governing documents.
- Liability: Parking lots or garages of communities where these recharging stations will be located are considered the common area of the property and owners, including HOAs and COAs will likely be responsible for maintenance, repair and liability.

Ongoing Statewide Efforts

Without question, the electric vehicle market is growing. It is important to support this industry and the reduction of greenhouse gas emissions. By way of background, Maryland joined seven other states in forming a task force to ensure the successful implementation of the Zero Emission Vehicles program. The ZEV program is part of the California Clean Cars Program that Maryland adopted in 2007. It requires vehicle manufacturers to begin selling an increasing number of ZEVs in the state. Maryland has a goal of having 60,000 ZEVs on the road by 2020 and 300,000 ZEVs on the road by 2025 and Maryland's work with the other ZEVs states will help build the market needed to sustain this goal.



As a way to reach and support these goals, Maryland, through the Public Service Commission (PSC) has held hearings on a joint proposal to address statewide EV infrastructure challenges called the “Maryland Electric Vehicle Portfolio.” According to the proposal, the EV Portfolio is “comprised of the initiatives and pilots...that, if approved, would deploy targeted investments in support of: EV supply equipment, innovative EV-related rate design options, EV-related technology demonstration projects and EV-related consumer education and outreach campaigns.”

Per the PSC petition, the existing energy grid and current challenges to providing in home electric vehicles charging stations such as the potential need for separate electric meters, the addition of additional transformers, and the potential need for expansion of in-home electric service make it inappropriate to mandate a one size fits all solution to this multi-layered problem better solved with a holistic approach as recommended to the PSC by both the energy provider and environmental communities. This PSC proposal is a joint effort between providers of electricity and technology and also the environmental community. Included are providers like BGE, PEPCO, and Delmarva Power alongside the Natural Resources Defense Council, the Sierra Club, Chesapeake Climate Action Network, and Marylanders for Energy Democracy and Affordability. This proposal is the result of a newly formed state-level EV Workgroup (PC44 EV Workgroup) and is likely to continue through implementation of this and related projects to solve the problems raised by Council Bill 76.

For the foregoing reasons, MMHA respectfully requests an unfavorable vote on Council Bill 76 and allows time for a statewide approach to resolve these challenges.

Thank you for your attention to this. If you have any questions, please do not hesitate to contact me at agreenfield@mmhaonline.org or 410.446.1992.

Sincerely,

/s/

Aaron J. Greenfield
Director, Government Affairs

Sayers, Margery

From: beverly hovmand <beverlyhovmand@gmail.com>
Sent: Monday, October 15, 2018 9:44 AM
To: CouncilMail
Subject: CB76-2018

Please support this bill to provide a charging structure in residential homes. It is an important step to further the use of electric vehicles. Howard County has already site-specific charging stations, but the passage of this bill will provide additional access and motivation to purchase alternative vehicles to gas driven vehicles.

Beverly Hovmand
3711 Spring Meadow Drive
Ellicott City, Maryland 21042

Sayers, Margery

From: Matthew Gibbens <ashveratu@gmail.com>
Sent: Monday, October 15, 2018 9:08 AM
To: Terrasa, Jen; CouncilMail
Subject: Support CB76-2018 (Requiring EV Charging at New Residential Construction)

I have been living in a Condominium for over 5 years and driving an electric car and motorcycle for nearly 3 years. We need to prepare for the electrification of the transportation sector now with building codes that plan for the growth of the EV market and save in retrofitting costs.

The traditional internal combustion engine in vehicles produce harmful air pollutants that greatly affect human health. This in turn puts a huge strain on our health and financial systems.

The transportation sector is the largest creator of greenhouse gas emissions and supporting the deployment of electric vehicles can significantly reduce these emissions, saving lives and money.

Sincerely,

Matthew Gibbens

Sayers, Margery

From: Randy Murbach <randymurbach@gmail.com>
Sent: Monday, October 15, 2018 8:45 AM
To: CouncilMail
Cc: randymurbach@gmail.com; Terrasa, Jen; Kittleman, Allan
Subject: **Murbach** CB76-2018 (Requiring EV Charging at New Residential Construction) in Howard County

Dear County Council of Howard County,

I have owned and driven two electric vehicles (EV) since 2012 (2012 Nissan Leaf and currently have a 2015 BMW i3). I have a reservation for a Tesla Model 3, own an electric riding mower, use electric outdoor power tools (weed trimmer, snow blower, self-propelled walking mower, power wash machine, etc.), have solar panels on my roof, and use geothermal for HVAC in my home.

I'm seriously committed to making our future a better place for my family, children, friends, and residents of Howard County. I would like to see the Council a partner in my efforts as well.

- 1) The transportation sector is one of the largest creator of greenhouse gas emissions in state, and deployment of electric vehicles can significantly reduce these greenhouse gas emissions.
- 2) Traditional internal combustion engine (ICE) vehicles produce harmful air pollutants that affect human health.
- 3) 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

I'm in full support of CB76-2018 bill introduced by Jen Terrasa.

Providing a charging structure in one's residence, is crucial in supporting the transition from ICE to an EV-based transportation network/structure. Howard County has done well to-date in deployed charging stations at HC facilities and it's time to branch out to residential facilities throughout the county.

Thank you for listening.

Sincerely,

Randy Murbach
Ellicott City, MD

Sayers, Margery

From: Mark Czajka <mark@mdvolt.org>
Sent: Monday, October 15, 2018 7:56 AM
To: CouncilMail
Cc: Terrasa, Jen
Subject: Letter of Support for CB76-2018
Attachments: mdvolt_CB76-2018.pdf

Thank you for your efforts in regards to CB76-2018 (Requiring EV Charging at New Residential Construction). Attached is a Letter of Support.

Sincerely,

Mark Czajka
Director
MD Volt Inc.
www.mdvolt.org



Subject: SUPPORT FOR CB76-2018

October 15, 2018

Howard County Council
George Howard Building
3430 Court House Drive
Ellicott City, MD 21043

Dear Members of the Council:

I represent MD Volt Inc., a Maryland based non-profit representing more than 370 EV owners and enthusiasts in the Mid-Atlantic region. MD Volt hosts meetups and events all over the area for the purposes of education and awareness of Electric Vehicles (EVs) and EV charging stations. We held a meetup at Clarksville Commons in June and also supported the National Drive Electric Week event in Clarksville in September. Our members LOVE events in Howard County!

We support CB76-2018 (Requiring EV Charging at New Residential Construction). I have talked with many of our members about the challenges of charging their cars in apartment complexes, condos and town homes. While there are limited DC Fast Charging stations in Howard County (supported by some EVs), being able to charge at home is more convenient, cheaper (when charging during off-peak hours at night) and saves time for electric vehicle owners who live in multi-unit residential communities. According to the Office of Energy Efficiency & Renewable Energy, most electric vehicle owners charge their cars at home (80%)¹.

We appreciate the efforts of the Council and Councilwoman Terrasa which will continue to make Howard County one of Maryland's most EV friendly places to live and a destination for our members.

Sincerely,

Mark Czajka, *Director*, MD Volt Inc.

www.mdvolt.org
mark@mdvolt.org

¹ <https://www.energy.gov/eere/electricvehicles/charging-home>

From: Chris <untilcomplete@gmail.com>
Sent: Sunday, October 14, 2018 8:49 PM
To: CouncilMail
Subject: CB76

Council Members,

As the United States transistons to renewable energy and Electric Vehicles(EVs), it is important to recognize the impotance of the electric infrastructure. It is considerably cheaper to install the necessary wiring for EVs for new construction than it is for existing structures. Structures with the exisiting EV charging not only give future tenants the option to charge their EVs, it also raises property values to offset the cost of installing the charger.

Vr
Chris

From: Angie Boyter <angie.boyter@gmail.com>
Sent: Sunday, October 14, 2018 9:20 AM
To: CouncilMail
Subject: Testimony on CB 76-2018

Dear Council Members,

I am writing to support Council Bill 76-2018, which would require some new construction to provide for charging stations for electric vehicles.

It is helpful to have this bill cover single-family residences, but I think this legislation is especially important for multi-family communities with common parking areas and for hotels and motels.

Condominium owners without a garage cannot add an outlet for their vehicles, so it is especially important for the builder to provide these amenities. And for many, a big question when considering an electric vehicle is, "What do I do when I am traveling?" It would be very reassuring to know that the hotel is ready not just for me but for my car.

The requirements in this bill do not sound onerous or unreasonably expensive. I will have to depend on the framers to assure that the technical standards are appropriate---it makes no sense to require the chargers if they are not going to be useful.

Most of us do not own electric vehicles, but I certainly do not rule out having one in the future. If and when I do, I like to think my county is ready for me.

Angie Boyter

3914 MacAlpine Rd

Ellicott City MD 21042