November 4, 2024

Office of General Counsel
United States Access Board
1331 F Street NW, Suite 1000
Washington, DC 20004

RE: Docket No. ATBCB-2024-0001
Americans With Disabilities Act and Architectural Barriers Act Accessibility Guidelines; EV Charging Stations
Submitted via Rulemaking Portal at https://www.regulations.gov.

On behalf of the undersigned organizations, we thank the Architectural Transportation Barriers Compliance Board ("Access Board" or "Board") for the opportunity to comment on its proposed accessibility guidelines for EV charging stations.[1] Our organizations and our members are committed to enacting policies that drive EV adoption, create hundreds of thousands of jobs, dramatically improve public health, and significantly reduce transportation emissions. We also believe accessible EV charging is critical to ensuring the EV ownership experience is inclusive to all drivers.

Likewise, we are also fully committed to realizing President Biden's goal of deploying 500,000 public EV chargers by 2030, as laid out in the U.S. National Blueprint for Transportation Decarbonization.[2] Our members span the EV supply chain and include prominent EV charging manufacturers and network operators whose investments will help ensure the future of transportation is electric and accessible to all. As such, we firmly support the intent of the Access Board's proposed rule to ensure public charging is accessible to all EV drivers. However, we believe there are ways in which the rule's intent can be realized without delaying the ongoing manufacture and installation of EV chargers needed to achieve the President's goal. We believe both goals can be accomplished while ensuring public chargers are highly utilized such that the private sector can secure a reasonable return on its investments. We expand upon these and many more points in our comments below.

The Access Board Should Finalize the 'Use Last' Approach

We strongly urge the Access Board to implement the 'Use Last' approach in its final rule. While the 'Reserved' approach may be appropriate for some public infrastructure such as parking spaces, it is poorly suited to EV charging stations. A more appropriate analogy to public EV charging is public restrooms, which are generally understood to allow the use of accessible stalls by non-disabled users in the event of all other stalls being in use, and we believe that principle should apply to EV charging stations as well. Finalizing the 'Use Last' approach can ensure access to accessible EV charging stations while avoiding increased driver wait times or reducing charger utilization rates and the associated secondary impacts that would arise under the 'Reserved' approach.

[1] 89 FR 71215 (September 3, 2024)
[2] https://www.energy.gov/sites/default/files/2023-01/the-us-national-blueprint-for-transportation-decarbonization.pdf

Real-world observations from EV charging network operators that have already implemented the 'Use Last' approach show that accessible chargers are primarily utilized by non-disabled drivers during peak times when all other stalls are occupied. This reflects the intended purpose of the approach: ensuring that accessible chargers are available to disabled drivers while avoiding misuse, and that implementing the 'Use Last' approach does not result in widespread inappropriate usage. We believe the 'Use Last' approach is best for drivers both with and without disabilities and will facilitate the rapid expansion of EV charging stations needed to increase availability for all. The Preliminary Regulatory Impact Assessment (PRIA) further supports these findings, estimating that even if 50 percent of non-disabled drivers inappropriately use accessible spaces, the 'Use Last' approach results in "lower probabilities of waiting [for drivers with disabilities] compared to the proposed rule."[3]

According to our analysis of PRIA data, 44 percent of L2 station stalls and 25 percent of Direct Current Fast Charger (DCFC) station stalls would be exclusive to drivers with disabilities under the 'Reserved' approach.[4] Even with public incentives, charging sites are not economically viable if they do not have enough utilization. The 'Reserved' approach risks the financial viability of charger deployment, even more so with DCFCs, and could result in overbuilding to achieve sufficient EV charging access. Low utilization may also make developers less likely to deploy chargers, slowing deployment significantly, leading to subsequent impacts on local businesses that have been proven to benefit from nearby EV charging station traffic.[5]

The 'Reserved' approach is also likely to increase charging wait times for both disabled and non-disabled drivers. As proposed, the number of reserved charging stalls is identical to the required number of reserved spaces in public parking lots.[6] However, EV charging stations contain far fewer stalls than parking lots, meaning wait times will be longer for non-disabled drivers. It has been well documented that range anxiety and a perceived lack of public charging infrastructure is a primary concern for potential EV buyers.[7,8,9,10] According to a 2023 study from the University of Chicago's Energy Policy Institute and the Associated Press-NORC Center for Public Affairs Research, the most commonly cited reasons survey respondents gave for not

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[3] "U.S. Access Board Accessible Electric Vehicle Chargers Preliminary Regulatory Impact Assessment," p. 48, US DOT Volpe Center, August 16, 2024. https://www.regulations.gov/document/ATBCB-2024-0001-0004

[4] Calculated by multiplying the anticipated percent of public ports for each station size by the ratio of accessible ports required under the 'Reserved' approach.

[5] Zheng, Y., Keith, D.R., Wang, S. et al. Effects of electric vehicle charging stations on the economic vitality of local businesses. Nat Commun 15, 7437 (2024). https://doi.org/10.1038/s41467-024-51554-9

[6] "Guide to the ADA Accessibility Standards: Minimum Number of Accessible Parking Spaces," U.S. Access Board, accessed October 15, 2024. https://www.access-board.gov/ada/guides/chapter-5-parking/

[7] S&P Global: Mobility, "Affordability tops charging and range concerns in slowing EV demand," November 2023, available at https://www.spglobal.com/mobility/en/research-analysis/affordability-tops-charging-and-range[1] concerns-in-slowing-ev-d.html.

[8] Bloomberg, "Despite Hurdles, Vehicle Electrification in the US is Likely Here to Stay, finds Bloomberg Intelligence," April 2024, available at https://www.bloomberg.com/company/press/despite-hurdles-vehicle[1] electrification-in-the-us-is-likely-here-to-stay-finds-bloomberg-intelligence/

[9] Avery, R., TomTom, "Forget worrying about range, charging anxiety is now the prime concern for EV drivers," September 2023, available at https://www.tomtom.com/newsroom/behind-the-map/charging-anxiety-for-ev-drivers/.

[10] Daly, M. and Sanders, L., PBS News, "AP-NORC/EPIC poll shows Americans are still hesitant about electric vehicles, despite Biden's push," June 2024, available at https://www.pbs.org/newshour/politics/ap-norc-epic-poll[1]shows-americans-are-still-hesitant-about-electric-vehicles-despite-bidens-push.

purchasing an EV were the high upfront cost of the vehicle and charging station availability.[11] Given these concerns, it is no surprise that the existence of public EV charging stations directly enables customers to purchase EVs.[12,13,14,15] The 'Use Last' approach avoids exacerbating this problem by ensuring lower wait times for all drivers.

Lastly, we recommend that if the Access Board adopts the 'Use Last' approach, it should consider requiring only one accessible stall for small charging stations, or those with eight stalls or fewer. Based on our analysis of the PRIA, adopting this adjustment would ensure that at least 48 percent of stalls at small L2 and DCFC sites remain accessible to drivers with disabilities, while ensuring at least 43 percent of stalls across public charging stations of all sizes and types remain accessible.[16] As the industry moves towards larger stations with more than eight stalls, these smaller stations often represent the only viable charging option in constrained locations. By adjusting the minimum stall requirements for these sites, the Board can preserve accessibility while avoiding the unintended consequence of disincentivizing developers from installing smaller, yet essential, charging infrastructure.

The Access Board Should Create Parity Between Gasoline Pumps and EV Chargers by Exempting Chargers from the Five-Pounds-of-Force Requirement

We encourage the Access Board to exempt EV chargers from the requirement that they be operable with no more than five pounds of force under Section 309.4, consistent with the existing exemption for gasoline pumps. Charging cables can extend up to 20 feet to accommodate multiple vehicle types with varying charging port locations and site layouts. Additionally, higher power chargers inherently have heavier cables because more material is needed to safely transfer that power. At present, there are no commercially available, cost-effective products publicly known to be capable of safely reducing the operating force of EV charger cables and connectors to below five pounds while managing current, voltage, and power levels.

Exempting EV chargers from the five-pounds-of-force requirement would align with existing California Building Code standards, which recognize the technical and safety similarities

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[11] Energy Policy Center, University of Chicago and Associated Press-NORC Center for Public Affairs Research,. "New Poll: 2 in 5 Would Consider Purchasing An Electric Vehicle As Their Next Car, But They Remain Prohibitively Expensive for Americans," April 10, 2023, available at https://epic.uchicago.edu/news/new-poll-2-in-5-would[1]consider-purchasing-an-electric-vehicle-as-their-next-car-but-they-remain-prohibitively-expensive-for-americans/.

[12] Osaka, S., The Washington Post, "For each public charger, here's how many EVs are looking to plug in," May 2024, available at https://www.washingtonpost.com/climate-solutions/2024/05/20/charging-stations-lag-ev-sales/.

[13] Center for Sustainable Energy, "The State of Electric Vehicle Adoption in the U.S. and the Role of Incentives in Market Transformation," September 2023, available at https://energycenter.org/thought-leadership/blog/state[1]electric-vehicle-adoption-us-and-role-incentives[1]market

[14] U.S. Department of Energy, Alternative Fuels Data Center, "Charging Electric Vehicles in Public," accessed October 2024, available at https://afdc.energy.gov/fuels/electricity-charging-public.

[15] International Energy Agency, "Global EV Outlook 2024: Moving towards increased affordability," 2024, available at https://iea.blob.core.windows.net/assets/a9e3544b-0b12-4e15-b407-65f5c8ce1b5f/GlobalEVOutlook2024.pdf.

[16] Calculated by multiplying the anticipated percent of public ports for each station size by the ratio of accessible ports required under the suggested ZETA alternative.

between gasoline pumps and EV charging cables.[17] Extending the same exemption to EV chargers under Section 309.4 would balance accessibility with safety without imposing unfeasible design constraints.

Further, the National Electric Vehicle Infrastructure (NEVI) program, administered by the Federal Highway Administration (FHWA), allocates $5 billion over five years towards the buildout of a national electric vehicle charging network.[18] The minimum NEVI standards promulgated by FHWA require that DCFCs located along designated highway corridors must simultaneously deliver up to 150kW across a minimum of four charging ports.[19] As manufacturers design products to meet these specifications, the lack of available cables and connectors that can safely deliver 150kW of power while remaining under five pounds of weight would significantly hamper the NEVI program's ability to deliver a nationwide network of EV chargers if this proposed requirement is finalized.

The Board has already excluded gasoline pump nozzles in its regulations due to safety concerns.[20] Both EV chargers and gasoline pump nozzles are similar in character and purpose in that they dispense vehicle fuel and so we believe both should receive identical treatment under the Section 309.4 requirements. Electric vehicle charging is dependent on safe and secure connection points for the transfer of energy. Heating can increase if the metal-to-metal connection falls below an optimal resistance level, leading to potential safety concerns. Ensuring these metal-to-metal connection points are appropriately connected requires the use of force, which observed in the market is greater than five pounds.

For the reasons stated above, we encourage the Board to finalize an exemption from the requirement that EV chargers be operable with no more than five pounds of force under Section 309.4.

The Access Board Should Clarify that Adapters, Whether Integrated or External, Do Not Count Against Compliance with Section 309.4

Given the proliferation of announcements from automakers in recent months[21] and with the support of the U.S. Joint Office of Energy and Transportation,[22] vehicles with NACS/J3400 connectors are likely to eventually make up a significant portion of the domestic light-duty EV fleet. However, there remains considerable short-term uncertainty about the speed and scale of the transition, as well as the implications for current CCS and J1772-compatible vehicle owners. In response to this ongoing transition, some automakers are supplying drivers with external adapters while other third-party adapters are available to drivers on the open market. Charging manufacturers and operators are also exploring ways to integrate adapters directly into connectors, enabling drivers to select between multiple connector types at one charging unit.

[17] CBC 11B-309.4
[18] https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nevi_formula_program.cfm
[19] 23 CFR § 680.106
[20] https://www.access-board.gov/ada/#ada-309_4
[21] https://www.caranddriver.com/news/a44388939/tesla-nacs-charging-network-compatibility/
[22] https://driveelectric.gov/news/j3400-standard-practice

We believe third-party adapters are not public infrastructure and, therefore, should not fall under the scope of the rulemaking, as charging operators cannot guarantee that these adapters will meet requirements under Section 309.4 when used in conjunction with their products. We also ask that the Access Board distinguish between integrated and external adapters in the final rule and make clear that neither are subject to the accessibility guidelines. If the Board opts not to adopt the recommendations discussed in this section of our comments, then we urge it to only finalize requirements related to adapters that are specific to accessible EV charging stalls.

The Access Board Should Limit Communication Standards to Chargers at Accessible Stalls and Reconsider the Proposed Volume Control Requirements

We recommend that the Access Board limit communication feature requirements in Section 709 to chargers located at accessible stalls, rather than applying them to all chargers at a site. There is little precedent for accessibility requirements to apply to multiple identical elements of the same public facility. Extending these requirements to all EV chargers at a site would impose significant costs on manufacturers—including product redesigns and retooling manufacturing plants—that were not thoroughly analyzed in the PRIA. These costs risk broadly delaying the rollout of EV chargers, undermining the President's goal of deploying 500,000 public chargers by 2030. The industry does not yet know if the full EV charger supply chain can deliver the necessary communications components at scale, especially as it navigates various domestic sourcing requirements such as the expiration of the Federal Highway Administration's Buy America waiver on July 1, 2024.[23]

Once the final accessibility requirements take effect, manufacturers will still have significant inventories of nearly completed hardware that do not meet these new standards. Requiring implementation of these communication features would render this equipment obsolete, resulting in either expensive retrofits or stranded assets. If the Board finalizes these requirements, we recommend implementing a grandfathering period that exempts existing inventory from the new standards, allowing manufacturers to use their current stock.

We also urge the Access Board to reconsider its proposed requirement for volume controls on accessible chargers that provide sound. This requirement could inadvertently discourage manufacturers from including any sound features on chargers, ultimately reducing accessibility options. By limiting this requirement to only chargers at accessible stalls, the Board can strike the right balance between ensuring accessibility and avoiding unintended negative consequences for manufacturers and EV infrastructure deployment.

The Access Board Should Reduce the Required Length for Accessible EV Charging Stalls to 18 Feet

We recommend that the Access Board reduce the required length for accessible EV charging stalls to 18 feet, consistent with the California Building Code.[24,25] The proposed 20-foot stall length requirement would create significant barriers to EV charging deployment, particularly in

[23] 88 FR 10619 (March 23, 2023)
[24] https://www.regulations.gov/comment/ATBCB-2024-0001-0067
[25] CBC 1109A.8.5

dense urban communities that already face limited access to charging infrastructure and where nearby residents often rely heavily on public EV charging infrastructure. This requirement also increases the risk of vehicle and/or pedestrian collisions, especially tight urban parking facilities, by limiting available space for movement and may render certain urban areas unable to accommodate EV charging stations due to unavoidable space constraints.

While newly constructed lots may accommodate 20-foot stalls more easily, 20-foot length requirements for charging station stalls installed in existing parking lots or parking garages would require the expansion of an entire row of parking spaces, resulting in significant redesign cost and impeding existing driving lanes designed around existing 18-foot spaces. The 20-foot stall requirement will be infeasible in most existing enclosed parking garages and result in a reduction of EV charging access in apartment complexes, office buildings, and dense urban areas. At such an early stage of the market, a site host's interest in installing a charger can be fragile. While installing a charging station may appeal to them, they do not want to be overly inconvenienced by major site retrofits, especially if they expect it will disrupt consumer traffic. As such, finalizing this requirement as proposed would risk site hosts losing interest in installing chargers altogether.

Aligning with California's 18-foot standard would alleviate these challenges, ensuring chargers can be installed in a wider variety of settings without extensive redesigns or prohibitive costs.

The Access Board Should Allow Greater Flexibility in Charger Placement

We recommend that the Access Board align its EV charger placement requirements with established precedent in California, which allows for greater flexibility in both the approach and placement of EV chargers. The proposed federal requirements for a parallel approach with unobstructed side reach (Sections 506.2.1 and 309.3.1, respectively) impose overly prescriptive constraints that limit the ability to configure chargers in ways that best serve users with disabilities, while also addressing site-specific challenges. The California Building Code allows for both forward and parallel approaches, offering flexibility to position chargers at the front, side, or within a reasonable distance of the parking space.[26]

Providing greater flexibility in charger placement would not only facilitate more efficient installations in both new and existing facilities, but also allow more widespread deployment of accessible charging infrastructure across a broader range of environments—including dense urban areas and existing parking structures—without compromising accessibility.

The Access Board Should Clarify Key Definitions and Requirements for Consistent Implementation

We request that the Access Board provide several essential clarifications to ensure uniform interpretation and application of the proposed guidelines.

First, the guidelines should explicitly distinguish between requirements for "accessible EV charging spaces" and all "EV charging spaces." The current language does not specify which

[26] CBC 11B-812.10.4

provisions apply universally versus those intended only for designated accessible spaces, creating significant ambiguity. This distinction is critical for charging operators and enforcement agencies to ensure accurate compliance.

Second, the Board should clarify when an EV charging station "serves" a building or facility, especially in the context of third-party charging operators at retail or mixed-use sites. The current language in Sections 206.2.1 and 249.3.2.1 appears to require accessible routes to buildings without accounting for different charging scenarios—such as public fast charging, dedicated fleet charging, or charging ancillary to retail. The guidelines should reflect the operational independence of many third-party charging stations located on a property but not directly linked to the primary facility.

Finally, the Board should clarify whether Exception 2 under Section 206.2.1 applies to charging stations in standard retail parking lots and shopping centers. The current wording leaves uncertainty as to when an accessible route is required between charging stations and building entrances in these common deployment scenarios.

Enforcing Agencies Should Engage Directly with Charging Operators Before Taking Any Enforcement Action

We are concerned with potential difficulties in enforcement of the final regulations and encourage the relevant agencies to consider pathways for engagement with charging operators before any enforcement action is taken. We urge the relevant agencies to consider direct outreach and collaboration with charging network operators before any official enforcement action is taken. Doing so would significantly reduce cost and time burdens for both the enforcing agencies and charging network operators.

The Access Board Should Articulate Clear Compliance Timelines for Sites and Charging Units in the Final Rule

EV chargers undergo intensive manufacturing processes before they are ever transported to a site for installation, and site construction can be delayed for a variety of reasons. EV charging stations are different from other public facilities, such as bathrooms, stairs, or parking lots, in that they are not always assembled on-site and cannot easily achieve compliance with accessibility requirements without extensive re-design and modification. It is our understanding that accessibility requirements will take effect immediately upon the adoption of the rule by relevant federal agencies. This may disrupt ongoing projects and potentially lead to delays as manufacturers re-design equipment and implement new manufacturing processes.

We encourage the Access Board to set compliance timelines to avoid disrupting the installation of EV chargers and provide certainty to manufacturers and enforcing agencies. Further, we request that the Board clarify that charging stations that have already been permitted or begun construction upon adoption of the final rules by relevant agencies will not be required to pause and sit idle as they wait for the delivery of ADA-compliant chargers or redesign the EV charging station to meet new compliance obligations. Providing this certainty to charging manufacturers

and operators will allow for a smooth transition to ADA-compliant EV charging stations and facilitate the continued expansion of charging infrastructure throughout the country.

Conclusion

We appreciate the opportunity to respond to the Access Board's proposed rule. Our membership is united behind a commitment to making EV driving and charging accessible to all, while also significantly expanding the nation's charging network and facilitating greater EV adoption for people of all abilities. We thank the Board for its careful consideration of our comments and look forward to engaging with it in the future to improve EV charging accessibility.

Sincerely,

CALSTART
Clean Fuels Michigan
Electric Vehicle Charging Association (EVCA)
Electrification Coalition (EC)
Michigan Energy Innovation Business Council
National Electrical Manufacturers Association (NEMA)
Zero Emission Transportation Association (ZETA)