

To: The Architectural and Transportation Barriers Compliance Board

SUBMITTED VIA Federal Portal

October 29<sup>th</sup>, 2024

Re: Ensuring the Accessibility and Usability of Electric Vehicle Charging Stations

Docket Number: ATBCB-2024-0001

RIN 3014-AA48

To the Architectural and Transportation Barriers Compliance Board,

On behalf of The Ability Center of Greater Toledo, we are pleased to provide feedback on the proposed rulemaking to enhance accessibility at electric vehicle charging stations. We commend the Architectural and Transportation Barriers Compliance Board for addressing the critical need for accessible EV infrastructure and are optimistic about the positive impacts these changes will bring for Americans with disabilities. As the nation shifts from fossil fuels to electric systems, it is essential that these new infrastructures are designed to be fully accessible and usable for people with disabilities. Without accessible EV charging, transportation barriers will persist, limiting the ability of individuals with disabilities to participate fully in society.

*The Ability Center of Greater Toledo is a Center for Independent Living which serves 13 counties in NW Ohio. Our mission is to make Toledo the most disability friendly in the nation by increasing independence for people with disabilities, discovering true passions, and changing the community's perception of disability.*

In 2021, President Biden's administration allocated \$7.5 billion dollars to jump start the electric vehicle charging landscape.<sup>1</sup> Currently there are 182,000 EV charging stations across the country, and most of them are not accessible to people with disabilities despite their design and construction occurring decades after the passing of the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA).<sup>2</sup> Public charging stations provided by private entities are supposed to be accessible, according to the U.S Access Board. Yet, many if not all private entities such as Tesla, who design and construct these charging stations, are not following accessibility guidelines outlined in the ADA or the ABA.<sup>3</sup> Therefore, it is imperative

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<sup>1</sup> Motavalli, Jim. "\$7.5 Billion in Federal Funds Yield Only 8 EV Charging Stations." *Autoweek*, 7 May 2024, [www.autoweek.com/news/a60702457/federal-funds-yield-only-8-ev-charging-stations/](https://www.autoweek.com/news/a60702457/federal-funds-yield-only-8-ev-charging-stations/). Accessed 29 Oct. 2024.

<sup>2</sup> "Disabled Drivers Face Barriers at EV Chargers." *Mother Jones*, 15 Apr. 2024, [www.motherjones.com/environment/2024/04/disabled-drivers-ev-chargers-accessible-electric-cars/](https://www.motherjones.com/environment/2024/04/disabled-drivers-ev-chargers-accessible-electric-cars/). Accessed 29 Oct. 2024.

<sup>3</sup> "Disabled Drivers Face Barriers at EV Chargers." *Mother Jones*, 15 Apr. 2024, [www.motherjones.com/environment/2024/04/disabled-drivers-ev-chargers-accessible-electric-cars/](https://www.motherjones.com/environment/2024/04/disabled-drivers-ev-chargers-accessible-electric-cars/). Accessed 29 Oct. 2024.

that any and all accessibility barriers are assessed by the Architectural and Transportation Compliance Board as more public and private companies begin to create EV charging infrastructure across the United States.

## Section 1: General Comments and Scoping Requirements

- 1. The Architectural and Transportation Barriers Compliance Board should require, at a minimum, each charging station area to include at least two accessible charging spaces: one standard accessible space and one van-accessible space.**

The accessibility of parking lots is an important and fundamental aspect of ensuring that people with disabilities are able to navigate public spaces safely and independently. Accessible parking spaces, clear pathways, and curb ramps are essential for providing ease of access to facilities and supporting full participation in community life. The current scoping standards for accessible parking spaces work well for traditional parking; however, EV charging stations usually do not have more than 25 spots to each area.<sup>4</sup> This requirement is insufficient for EV charging stations because the ADA requires only one accessible parking space for up to 25 total spaces.<sup>5</sup> For people with disabilities, it is often imperative that each parking lot not only have a designated accessible spot, but also a designated van accessible spot. Van accessible parking spots are designed specifically for vans equipped with wheelchair ramps or lifts and therefore, require a wider space requirement than standard accessible spots to accommodate the side entry of these vehicles.<sup>6</sup>

For EV charging stations with fewer than 25 spots, there should be at least one accessible space and one van-accessible space. For stations with more than 25 spots, the requirement should increase by one accessible space and one van-accessible space for every additional 25 spots. This approach aims to reduce the current barriers faced by individuals with disabilities when accessing EV charging infrastructure. In addition, these accessible spots must follow the ADA requirements pertaining to their location. Accessible spaces must connect to the shortest accessible route to the accessible building entrance or facility they serve.<sup>7</sup> Van accessible spots should also be located near a curb to allow ease of access for people with disabilities who utilize mobility devices.

Lastly, people with disabilities may need more room within the parking spot to maneuver and access the charging station. The ADA requires accessible parking spots to be a minimum of 8 feet wide for van-accessible spaces and 5 feet wide for standard accessible spaces.<sup>8</sup> Additionally, there should be a minimum 5-foot access aisle next to each accessible space.<sup>9</sup>

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<sup>4</sup> <https://www.ada.gov/>

<sup>5</sup> <https://www.ada.gov/>

<sup>6</sup> O'Connor, Michael. "The Americans with Disabilities Act (ADA) and Parking." *Parking & Mobility*, 12 Feb. 2016, [www.parking-mobility.org/2016/02/12/tpp-2015-11-the-americans-with-disabilities-act-ada-and-parking/](http://www.parking-mobility.org/2016/02/12/tpp-2015-11-the-americans-with-disabilities-act-ada-and-parking/). Accessed 29 Oct. 2024.

<sup>7</sup> "Parking." *ADA National Network*, 2021, [adata.org/factsheet/parking](http://adata.org/factsheet/parking). Accessed 29 Oct. 2024.

<sup>8</sup> <https://www.ada.gov/topics/parking/>

<sup>9</sup> <https://www.ada.gov/topics/parking/>

These requirements are once again (mostly) sufficient for standard parking lots; however, they do not take in to account how the EV charging station may encroach on the access aisle, nor the extra maneuvering room that may be needed by a person with a disability to safely, independently, and accurately use the EV charging station. To address this issue, the width requirements for van-accessible parking spaces should be increased to **10 feet**, while standard accessible spaces should be increased to **8 feet**. Additionally, the access aisle should not be obstructed by EV chargers. Therefore, the compliance board must mandate that the access aisle be positioned on the opposite side of the EV charger, ensuring ample space for safe and convenient access to the charging station.

Enhancing the accessibility of EV charging stations is vital for promoting independence and safety for individuals with disabilities. Current ADA requirements for accessible parking may not adequately address the unique needs associated with EV infrastructure. By increasing the width of van-accessible and standard accessible parking spaces, along with ensuring unobstructed access aisles, we can significantly improve usability. These adjustments will help create a more inclusive environment, allowing all individuals to participate fully in the transition to electric vehicles.

**2. The Architectural and Transportation Barriers Compliance Board should ensure that all routes from EV charging stations are fully accessible for people with disabilities by following ADA guidelines and implementing the U.S. Access Board’s PROWAG standards.**

As highlighted by the Board in their rule-making process, many EV charging stations are often located away from the buildings they serve, hidden in obscure corners of parking lots, or scattered throughout these areas. Furthermore, since charging can take up to an hour, individuals with disabilities may find themselves stranded next to their vehicles with no accessible route to nearby facilities, such as shopping centers or rest areas. Therefore, it is imperative that all future EV charging stations are constructed in strict accordance with accessibility guidelines mandated by law, including the adoption of the U.S. Access Board’s PROWAG standards, to ensure safe and convenient access for all users.

The U.S Access Board PROWAG was developed in part by combining guidelines under the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA).<sup>10</sup> The PROWAG addresses access to sidewalks and streets, crosswalks, curb ramps, on-street parking, and other components of the public right-of-way.<sup>11</sup> Not all departments/agencies at the federal level, such as the DOJ, have adopted the PROWAG Guidelines. However, the U.S Department of Transportation recently issued a rule seeking to adopt them into their ADA guidelines for transit stations. In a similar way, the adoption of PROWAG into the construction guidelines for EV charging stations would promote greater accessibility and usability of the stations.

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<sup>10</sup> “Public Right-of-Way Accessibility Guidelines (PROWAG).” *U.S. Access Board*, [www.access-board.gov/prowag/](http://www.access-board.gov/prowag/). Accessed 29 Oct. 2024.

<sup>11</sup> “Public Right-of-Way Accessibility Guidelines (PROWAG).” *U.S. Access Board*, [www.access-board.gov/prowag/](http://www.access-board.gov/prowag/). Accessed 29 Oct. 2024.

**Pathway Width and Clearance:** PROWAG specifies minimum width requirements and clearances for walkways, which ensure that routes from EV charging stations are wide enough for wheelchairs, scooters, and other mobility devices.<sup>12</sup> This helps create unobstructed paths that are easy to navigate for people who use mobility devices or have mobility related disabilities. This is especially important for EV charging station accessible parking spaces, as a charger could encroach on the accessible space and limit the mobility of the user.

**Curb Ramps and Slope Guidelines:** PROWAG includes detailed specifications for curb ramps and slopes, making it easier for wheelchair users and individuals with mobility disabilities to travel seamlessly between different levels or across curbs.<sup>13</sup> This is crucial in areas where EV chargers are installed near sidewalks or parking lots with raised curbs.

**Safe Crossing Points and Tactile Warnings:** In areas where charging stations are near roadways or parking lots, PROWAG's guidelines for crosswalks, pedestrian signals, and tactile warning strips enhance safety for people with disabilities.<sup>14</sup> For example, tactile paving and audible signals alert blind individuals to transitions or potential hazards along the route.

**On Street Parking:** For EV charging stations integrated into on-street parking, it is essential to adhere to PROWAG requirements. On-street parking presents unique challenges not typically faced by parking lots, including continuous traffic flow, inconsistent curb heights, and unclear access routes to parking spaces. PROWAG specifically addresses these issues, ensuring that accessible routes are maintained, and safety is prioritized.<sup>15</sup> Therefore, EV charging stations in on-street parking must follow PROWAG guidelines to enhance accessibility and usability for all individuals.

Implementing the PROWAG guidelines for EV charging stations is vital for ensuring accessibility and safety for individuals with disabilities. By adhering to these standards, we can create unobstructed pathways, properly designed curb ramps, and safe crossing points that enhance usability.

**3. The Architectural and Transportation Barriers Compliance Board should mandate that all EV charging stations, regardless of the number of spaces available, include at least one designated accessible parking space accompanied by appropriate signage.**

The Board's proposal to exempt charging stations with four or fewer chargers from requiring an accessible parking space to be designated only for people with disabilities is concerning. Without an accessible space specifically designated for people with disabilities, individuals with disabilities would be unable to utilize that station altogether. It is essential that all charging

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<sup>12</sup> "Scoping Requirements for Public Right-of-Way Accessibility Guidelines (PROWAG)." *U.S. Access Board*, [www.access-board.gov/prowag/scoping.html](http://www.access-board.gov/prowag/scoping.html). Accessed 29 Oct. 2024.

<sup>13</sup> "Scoping Requirements for Public Right-of-Way Accessibility Guidelines (PROWAG)." *U.S. Access Board*, [www.access-board.gov/prowag/scoping.html](http://www.access-board.gov/prowag/scoping.html). Accessed 29 Oct. 2024.

<sup>14</sup> "Scoping Requirements for Public Right-of-Way Accessibility Guidelines (PROWAG)." *U.S. Access Board*, [www.access-board.gov/prowag/scoping.html](http://www.access-board.gov/prowag/scoping.html). Accessed 29 Oct. 2024.

<sup>15</sup> "Scoping Requirements for Public Right-of-Way Accessibility Guidelines (PROWAG)." *U.S. Access Board*, [www.access-board.gov/prowag/scoping.html](http://www.access-board.gov/prowag/scoping.html). Accessed 29 Oct. 2024.

stations include at least one accessible space, regardless of their size. We recommend having one van-accessible parking spot and one standard accessible parking spot for every station, with an increase for stations with 25 or more spots. For stations with fewer than 10 chargers, at least one van-accessible space specifically designated ONLY for people with disabilities should be mandatory to ensure access for all users.

**4. The Architectural and Transportation Barriers Compliance Board should consider that the placement of charging ports in electric vehicles lacks the standardization seen in gasoline-powered cars. This variability can significantly impact the accessibility and usability of EV charging stations for individuals with disabilities.**

The lack of standardization in electric vehicle charging port locations is primarily due to the rapid evolution of EV technology and the diverse designs among manufacturers. Unlike gasoline vehicles, which have standardized fuel filler locations, electric vehicle designs can vary significantly.<sup>16</sup> This variability arises from different battery layouts, vehicle types, and manufacturers' preferences. As the industry matures and regulations evolve, there is a push towards more standardized solutions, but achieving uniformity across all brands and models remains a challenge.

Kia's latest electric vehicles feature charging ports located at the front and relatively low to the ground.<sup>17</sup> This design can present significant challenges for individuals in wheelchairs using a rear lift. They may encounter a curb that completely blocks access to the charging port or find that the narrow gap between the curb and the port is too tight for safe maneuvering. Additionally, if they need to back the car out further, they risk encroaching on the parking space boundaries, which could obstruct traffic or lead to accidents.

The Board should consider the most common charging port locations when designing mobility and accessibility features for accessible spaces, while also recognizing that different brands may require distinct standards to ensure equal accessibility.

**5. The Architectural and Transportation Barriers Compliance Board should increase the width of accessible parking spaces at charging stations, while maintaining the requirement for both a van-accessible and standard accessible parking space.**

People with disabilities may need more room within the parking spot to maneuver and access the charging station. The ADA requires accessible parking spots to be a minimum of 8 feet wide for van-accessible spaces and 5 feet wide for standard accessible spaces.<sup>18</sup> Additionally, there

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<sup>16</sup> McCarthy, David. "Why Do Automakers Place Electric Vehicle Charging Ports on the Driver's Side?" *The Globe and Mail*, 29 Apr. 2022, [www.theglobeandmail.com/drive/mobility/article-why-do-automakers-place-electric-vehicle-charging-ports-on-the-drivers/](http://www.theglobeandmail.com/drive/mobility/article-why-do-automakers-place-electric-vehicle-charging-ports-on-the-drivers/). Accessed 29 Oct. 2024.

<sup>17</sup> "Why the Kia EV6 Charging Port Is in an Unusual Place." *The Drive*, 23 Nov. 2021, [www.thedrive.com/news/why-the-kia-ev6-charging-port-is-in-an-unusual-place](http://www.thedrive.com/news/why-the-kia-ev6-charging-port-is-in-an-unusual-place). Accessed 29 Oct. 2024.

<sup>18</sup> <https://www.ada.gov/topics/parking/>

should be a minimum 5-foot access aisle next to each accessible space.<sup>19</sup> These requirements are once again (mostly) sufficient for standard parking lots; however, they do not take in to account how the EV charging station may encroach on the access aisle, nor the extra maneuvering room that may be needed by a person with a disability to safely, independently, and accurately use the EV charging station. To address this issue, the width requirements for van-accessible parking spaces should be increased to **10 feet**, while standard accessible spaces should be increased to **8 feet**. Additionally, the access aisle should not be obstructed by EV chargers. Therefore, the compliance board must mandate that the access aisle be positioned on the opposite side of the EV charger, ensuring ample space for safe and convenient access to the charging station.

The Board should ensure a clear distinction between van-accessible and standard-accessible parking spots. While the Board has suggested that charging spots in general, being larger, may not require separate designation, it is crucial to maintain both types to adhere to accessibility standards. This distinction ensures that individuals with various disabilities can effectively utilize charging stations, promoting inclusivity and accessibility for all users. By clearly marking both types of spots, the Board can support a more equitable charging infrastructure for people with disabilities.

**6. The Architectural and Transportation Barriers Compliance Board should ensure that accessible spaces are dispersed throughout the charging station, and that access aisles are not shared between two accessible spaces.**

The Board's proposal to have accessible parking spaces share an access aisle raises concerns. While this practice is common in standard parking lots, the unique nature of EV charging stations could lead to issues. Specifically, the presence of two chargers may result in the access aisle being obstructed either by the charger itself or by a vehicle sharing the space, making it difficult for individuals to maneuver to the opposite side where the charger is located. To ensure accessibility, it is vital to maintain clear, unobstructed access paths.

## Section 2: Communication Elements and Features

**7. The Ability Center of Greater Toledo is pleased to see the effort the Board has taken to include all features of effective communication, particularly pertaining to real time video communication for individuals who utilize sign language. We recommend that this feature be available on all chargers in designated accessible spaces.**

One of the most significant barriers to effective communication is the lack of sign language interpreters in critical settings, such as medical appointments, legal proceedings, and educational institutions. In transportation settings, the absence of this type of communication is also a significant barrier. Ensuring that every accessible charging station is equipped to support communication through sign language is essential for allowing the deaf community to

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<sup>19</sup> <https://www.ada.gov/topics/parking/>

use these facilities safely and accurately. While we commend the Board for recognizing this need, we urge them to mandate sign language support at every accessible charging station to promote full inclusivity.

### Section 3: Conclusion

It is imperative that the Architectural and Transportation Barriers Compliance Board takes action to ensure that electric vehicle charging stations are fully accessible to all individuals, particularly those with disabilities. By mandating the inclusion of clearly designated accessible spaces, adhering to specific accessibility guidelines, and incorporating effective communication features, we can remove barriers that currently limit participation in the evolving landscape of electric mobility. We commend the Board for addressing these critical issues and urge them to adopt our recommendations to foster an inclusive environment where everyone can benefit from this transition to electric vehicles. Thank you for your commitment to accessibility.

If there are any questions or concerns, please do not hesitate to contact [sfish@abilitycenter.org](mailto:sfish@abilitycenter.org) for further information.

Sincerely,

Sally Fish

*Disability Rights Advocate*

The Ability Center of Greater Toledo