Electric car charging parking space

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The U.S. Access Board, an independent federal agency that issues accessibility guidelines under the Americans with Disabilities Act (ADA), Architectural Barriers Act (ABA), Rehabilitation Act of 1973, and other laws, is providing a technical assistance document to assist in the design and construction of electric vehicle (EV) charging stations that are accessible to and usable by people with disabilities.

The ADA and ABA Accessibility Standards include many requirements applicable to electric vehicle charging stations, among which are provisions regarding access to sites, facilities, buildings, and elements, as well as specific requirements for operable parts and accessible routes. Even absent a specific reference to EV charging stations in the ADA and ABA Standards, regulated entities must still ensure that they are accessible to and usable by individuals with disabilities.

Some EV chargers also have user interfaces and payment systems that would be considered information and communication technology (ICT). Section 508 of the Rehabilitation Act requires individuals with disabilities have access to and use of ICT provided by the Federal government. The law applies to all Federal agencies when they develop, procure, maintain, or use ICT. Federal agencies must ensure that any ICT that is part of an EV charger is accessible to employees and members of the public with disabilities to the extent it does not pose an "undue burden."

In this technical assistance document, the Access Board uses the terms "must" or "required" with reference to the applicable ADA, ABA, and Section 508 Standards with which entities must comply. The words "should" or "recommends" refer to additional recommendations for accessible EV charging stations. Recommendations are not legally binding on any regulated entity but are provided as technical assistance to help regulated entities design and install EV charging stations that are accessible to and usable by people with disabilities.

By contrast, a driver with a disability can use an accessible parking space as long as the vehicle is oriented with the access aisle; a person with a disability could either pull-in or back-in to the parking spot to get the access aisle on the appropriate side. The additional space provided by an access aisle is needed only by the person with a disability (who may be either a driver or passenger) and additional space on the opposite side of the vehicle is usually not needed.

Because of this fundamental difference in use, this document differentiates between parking and EV charging, and primarily focuses on the needs of an EV driver with a disability. The needs of passengers with disabilities are not addressed in this document because it is presumed passengers with disabilities could enter or exit the vehicle at a nearby accessible parking space or passenger loading zone.

Under the ADA and ABA Accessibility Standards, EV charging stations must comply with the technical requirements for floor and ground surfaces (?302), clear floor or ground space (?305), reach ranges (?308),

operable parts (?309), accessible routes (?402), and other provisions when needed, such as some of the provisions in parking (?502), signs (?703), and fare machines (?707). See 36 C.F.R. ?1191.1.

EV chargers developed, procured, maintained, or used by federal agencies must also comply with the revised Section 508 Standards. See 36 C.F.R. ?1194.1, App. A and C. This includes that the user interface (UI) be accessible. EV chargers which do not incorporate a display screen would not be required to be speech-output enabled, but are still ICT and would have accessibility requirements if they are any more complicated than just plugging it in.

Unlike gas stations where an attendant may be available to assist with refueling vehicles, EV charging stations are often unattended. Thus, it is important that EV charging stations be sufficiently accessible to allow independent use by drivers with disabilities, including people who have limited or no hand dexterity, limb differences, or upper extremity amputations and use adaptive driving controls.

A reasonable number of EV chargers must have physical access for people who use mobility devices, such as wheelchairs, scooters, walkers, and canes. Accessible mobility features primarily concern the size of the vehicle charging space, providing access aisles, how and where the chargers are installed, and the physical operability of the charger. Also see: Number of accessible chargers

All EV chargers should have accessible communication features and operable parts. This enables EV chargers to be used by people who are deaf or hard of hearing, little people, and other people with disabilities who do not need accessible mobility features (like access aisles) to use an EV charger.

All EV chargers containing ICT that are developed, procured, maintained, or used by the federal government must comply with the Section 508 Standards and have accessible ICT, including accessible hardware, software, and operable parts.