

January 27, 2022

The Honorable Thomas D. Everett
Executive Director
Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

**Re: Response of American Car Rental Association to Request for Information on Development of Guidance for Electric Vehicle Charging Infrastructure Deployment
Docket No. FHWA-2021-0022**

Dear Director Everett:

The American Car Rental Association (ACRA) respectfully submits these responses to the Federal Highway Administration's (FHWA) Request for Information (RFI) on "Development of Guidance for Electric Vehicle Charging Infrastructure Deployment." ACRA members have a strong interest in the effective and efficient implementation of Section 11401 of the "Infrastructure Investment and Jobs Act of 2021" (IIJA) and look forward to working with you and your staff on this important program.

The American Car Rental Association

The American Car Rental Association is the national representative for over 98% of our nation's car rental industry. ACRA's membership is comprised of over 300 car rental companies, including all of the brands you would recognize such as Alamo, Avis, Budget, Dollar, Enterprise, Fox, Hertz, National, Sixt and Thrifty. ACRA members also include many system licensees and franchisees, mid-size, regional and independent car rental companies as well as smaller, "mom & pop" operators. ACRA members have over 1.7 million registered vehicles in service in the United States, with fleets ranging in size from one million cars to ten cars.

The Role of the Car Rental Industry in Achieving Sustainable Mobility

ACRA members over the past 10 years on average purchased one in every ten new light duty vehicles sold in the United States each year (10 percent), although that number dropped to approximately 5 percent in 2021 due to supply chain constraints reducing the number of new vehicles available to all buyers and reduced consumer demand during the first part of the year). Approximately 25% of all light duty vehicle miles travelled in the United States each year are in a rented vehicle.

Thus, the car rental industry can be a key participant in the drive for sustainable mobility. In many instances, a driver's first experience in a zero emissions vehicle will be in the rental car context. Combining all these factors, the car rental industry likely is the most important shared mobility stakeholder for converting "motor vehicle trips" by an individual to "zero emission vehicle trips" – even more important than individually-owned vehicles.

ACRA's Views on Key Constructs for Achieving Light Duty Vehicle Decarbonization and A Successful EV Fueling Infrastructure Program

ACRA's response to FHWA's RFI on EV Charging Infrastructure can be summarized in the following principles:

- Public charging infrastructure must support "open fleet" usage models – especially for shared mobility service models to flourish;
- Charging hardware and software must be standardized so that all electric vehicles can charge at every charging station and "Level 3" (fast charging) must be widely available to duplicate the internal combustion engine refueling expectations to which all consumers have become accustomed over decades of experience;
- Charging infrastructure must provide an opportunity for customers to charge at home, at work and at play;

- Electricity grid infrastructure must be resilient to ensure the electric vehicle power supply is available where and when it is needed to respond to electric vehicle load demands (which likely will be very different than residential or commercial demands on the grid);
- Co-investment in private infrastructure that supports adoption of electric vehicles must be encouraged and incentivized through federal and state tax and EV acquisition policies;
- Incentives for personal vehicle and fleet transition should be encouraged at the federal, state and local levels of government;
- Co-investment by public agencies, private companies and fleets, and electric utilities to upgrade electricity infrastructure to facilitate fleet charging (not only the chargers but upgrading the grid and substations, etc.); and,
- Public charging infrastructure should attempt to replicate, to the maximum extent possible, the current consumer fueling experience to reduce consumer resistance to changes in long-standing vehicle fueling habits.

Responses to Specific FHWA RFI Topics:

ACRA does not have unique or expert perspectives on some of the topics covered in FHWA's RFI. ACRA does offer its comments on the following RFI topics:

1. Distance Between Publicly Available EV Charging Infrastructure

"Range anxiety" is the term coined to explain the concerns that EV drivers experience with respect to reaching an EV charging location (be it at home, at the office, or at a public charging location) prior to discharging the last of a vehicle's battery storage. For more than 50 percent of car rental customers (those renting an EV at an airport or train station or at a local car rental facility to drive a distance longer

than a typical EV charge), “range anxiety” is real and must be addressed. A significant majority of EV renters will not recharge their rental vehicle at home or at work because they are travelling away from home or work. Instead, they will need to access the public network of EV charging stations to drive their rented vehicles distances longer than the vehicle’s typical range when fully charged.

From ACRA’s perspective, for EV renters, the following issues are as important as the distance between EV chargers when addressing “range anxiety”:

- a. Type of EV Chargers – Level 1 and 2 AC EV chargers generally will be unacceptable to an EV renter unless the charging takes place at a home where a Level 2 charger is available (likely less than 3 percent of all American homes); consequently, only Level 3, DC chargers will attract EV renters due to the 80 percent charge such chargers provide in approximately 30 minutes; and,
- b. Access to EV Charger – If FHWA, states, counties and cities, as well as private entities, locate EV charging stations to reflect consumer demand, those locations will prove to be close to useless to an EV renter if the renter arrives at the location only to find all of the chargers engaged by other vehicles; this is particularly true at airports, train stations, hotels or perhaps public attractions such as a national or amusement park when an EV may be left connected to a charger for hours or even days – well after a full charge has been achieved.

To address this access issue, ACRA suggests that owners of EV charging stations consider extra charges or fees for the person charging the vehicle if an EV is left at an EV charging station for a specific time after a full charge has been achieved (1 hour? 5 hours?). There may be other options for incentivizing EV renters and

owners to “move away from the pump” after a full charge is achieved and ACRA suggests that FHWA and public and private stakeholders explore those options.

2. Connections to the electric grid, including electric distribution upgrades; vehicle-to-grid integration, including smart charge management and other protocols that can minimize impacts to the grid; alignment with electric distribution processes, and plans to use renewable energy sources to power charging and energy storage

ACRA's primary comment on this topic is to focus the attention of FHWA and other public entities on the concentration of electricity that will be needed to charge hundreds or thousands of rental vehicles at our nation's airports – where approximately 50 percent of daily car rentals take place. Without enhancing the “last mile” electricity infrastructure to the airport facilities operated by car rental companies, or the consolidated car rental facilities (commonly referred to as “CONRACs”) already in existence at, and owned by, many airports, charging hundreds or thousands of rental vehicles at once will prove impossible.

In conjunction with these “last mile” electricity infrastructure challenges, the car rental industry may well have to rethink its vehicle fueling and charging procedures as well. Currently, many companies offer options to renters – return a vehicle fully fueled/charged; or, pre-purchase the fuel/charge and return a vehicle less than fully fueled or charged. Unless there are a plethora of Level 3 chargers installed near airports to allow renters to quickly achieve a full charge, then these rental vehicles will either need to be charged at the airport car rental location or rented to the next customer with less than a full charge – re-introducing the notion of “range anxiety” into the car rental transaction.

ACRA encourages FHWA to work with states, counties, cities and airports to “electrify” CONRACs so that hundreds or thousands of rental vehicles can be charge simultaneously. Such projects will serve

the basic goal of avoiding a change of consumer behavior when renting an EV – and increasing consumer acceptance of EV rental cars.

4. Proximity of existing off-highway travel centers, fuel retailers and small businesses to EV charge points

If a primary goal of FHWA's policies is to encourage use of EV infrastructure by not causing consumers to change their vehicle fueling experience substantially (as ACRA urges), then locating EV chargers at existing fueling points such as grocery and convenience stores with fueling islands and truck stops makes abundant good sense. All consumers, including renters, are comfortable refueling their vehicles at these locations and that comfort likely would be extended to EV charging at these locations – providing the charging stations are not occupied by other vehicles and a projected 30-minute stop to recharge expands into a 60- or 90-minute stop while a renter waits for an open charging station.

6. Existing private, national, State, local, Tribal and territorial government EV charging infrastructure programs and incentives

ACRA generally supports EV vehicle purchase and infrastructure incentives at the federal, state and local levels of government. ACRA does not support, and considers counterproductive, vehicle purchase mandates that ignore consumer demand and acceptance of EVs as an attractive and viable alternative to vehicles with internal combustion engines.

Another important topic in this space are applications – whether in-vehicle or on smart phones – identifying the location – and Level – of EV charging stations as well as the charging costs and the current availability of each individual charging station. Currently, such “apps” tend to be proprietary – an OEM's EV charging network app doesn't show EV charging stations not built by the OEM or a private network of EV stations shows an EV owner or renter only stations in its network. An EV renter wants a charge – period. It is unlikely that he

or she has a strong preference of using one network over another. A primary differentiator could well be cost, which should be disclosed on EV charging station “apps” much like gas stations currently post their prices on the street. ACRA also posits that such EV charging locator “apps” be free so as not to disadvantage drivers or renters who cannot afford to subscribe to such fundamentally important apps.

7. Fostering enhanced, coordinated, public-private or private investment in charging infrastructure

Please see ACRA's views on “electrifying” CONRACs under #2 above.

8. Meeting current and anticipated demands for EV charging infrastructure, including with regard to power levels and charging speed, and minimizing time to charge current and anticipated vehicles

ACRA's views on this point are as follows:

- a. Charging Speed – the faster a Level 3 (or Level 4) charger can deliver a full charge to an EV, the more the charging experience will be consistent with the refueling of an existing internal combustion vehicle, fostering consumer acceptance and adoption; and,
- b. Common Hardware – ACRA members have many different automobile brands in their fleets and most manufacturers are committed to expanding their EV offerings; no matter the manufacturer, the refueling infrastructure – hardware, charging connections, etc. -- must be uniform and standardized across the nation to foster consumer acceptance.

* * *



P.O. Box 584
Long Lake, NY 12847

sfaulkner@acraorg.com

www.acraorg.com

ACRA appreciates the opportunity to submit its views to FHWA on these important policy matters. If additional information would be helpful to FHWA as it develops its policies or if ACRA's comments raise questions or require clarification, please contact Gregory M. Scott, ACRA's Government Relations Representative, at gscott@merevir.com or 202-297-5123.

Sincerely yours,

Sharky Laguana
President
American Car Rental Association

Chief Executive Officer
Bandago
San Francisco, CA