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## RE-ENERGIZING HIGHWAY REST STOPS

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### INTRODUCTION

Limitations on commercial activity at federal highway rest stops have rendered them dreary and unappealing, and embroiled states and the federal government in pointless bureaucratic battles. Meanwhile, the growth of electric vehicles is hampered by a lack of infrastructure, such as widespread charging stations. One simple policy compromise could help solve both of these ongoing transportation problems simultaneously.

By removing limitations on commercial activity at rest stops that include charging stations for electric vehicles, Congress could not only help modernize the nation's transportation infrastructure, but provide needed emissions-reduction benefits. In addition, states should get credit for any emissions reductions attributable to the electric-vehicle infrastructure when dealing with the Environmental Protection Agency (EPA).

### HIGHWAY REST STOPS

Few pieces of federal legislation have had the reach or long-term impact of the Federal Aid Highway Act of 1956, which established the Interstate Highway System.<sup>1</sup> One of the largest public works projects of all time, the resulting network of highways eased travel across the country and fostered a much more integrated national economy.

In addition to the roads themselves, Congress appropriated funds to build rest stops in sparsely populated points along the new federal highways. Anyone who has ever taken a road trip or traveled the interstate system during a family vacation is probably familiar with these rest areas. They provide a safe, convenient spot for travelers to go to the bathroom, eat a picnic lunch or take a break from the weariness of the road.

Yet while the rest areas provide a needed safety function, they don't offer much more appeal than that. Many stops have an empty, desolate feel to them. The lack of activity at these rest areas is not simply a function of their isolation from major population centers. A number of private rest stops, some of which date to the 1950s or earlier, feature a wide variety of attractions and amenities. The Iowa 80 truck stop—located along Interstate 80 off exit 284—bills itself as the world's largest truck stop, featuring restaurants, a convenience store, a service station, an automotive showroom, 24-hour showers, a business center, barbershop, movie theater and even a dentist's office.<sup>2</sup> While most privately run stops do not come close to offering the amenities available at Iowa 80, it does show the possibilities even in a remote location.

The paucity of activities and services at interstate rest areas is by design. Federal law prohibits commercial activity at the sites,<sup>3</sup> with only limited exceptions for vending machines and promotional tourist brochures.<sup>4</sup> Indeed, the limitations on commercial activity continue to be rigorously enforced. New York State currently is involved in a legal battle with the federal government over the placement of "I Love New York" billboards at rest-area sites. The federal government also currently is undergoing a rulemaking process to update vending-machines rules to deal with technological advances in the machines.

The lack of activity at rest stops can even be a safety concern. In some areas, there have reports that the isolated nature of rest stops has led them to be used as a source of crime, particularly at night.<sup>5</sup>

The restriction on commercial activity originally was included in law as a way to limit competition with commercial centers in small towns along interstate highway routes. After 60 years, the wisdom of continuing the law's inherent protectionism is more questionable than ever.

## ELECTRIC VEHICLES

Recent years have seen a significant increase in the use of electric vehicles. Sales of electric vehicles rose 37 percent in 2016, with 159,132 now on the road.<sup>6</sup> Falling costs, oil-price variability and increased consumer concern about climate change all have served to increase demand for electric-powered transportation options. While they remain only a small fraction of the total U.S. vehicle fleet, sales of electric vehicles are projected to continue to rise for the foreseeable future.<sup>7</sup>

Despite this rising demand, there are factors that continue to hold back wider deployment. One major concern is the paucity of refueling infrastructure. As with a gasoline-powered vehicle, electric vehicles can only drive so long before their battery drains down and needs to be recharged. This can be done either by hooking the battery to an energy source to recharge it, or swapping the depleted battery for one that is fully charged.

Charging stations, however, face a chicken-and-egg problem.<sup>8</sup> To be financially successful, a charging station needs there to be a certain base level of demand from electric-vehicle owners. However, lack of charging stations makes owning an electric vehicle less desirable, as it limits the range of potential travel.

This problem is not insurmountable. After all, gasoline-powered cars initially faced a similar dynamic, with deployment of gas stations and car-ownership growing in tandem over the course of years. Still, if there were a way to ease resolution of the infrastructure issue, it could speed deployment of electric vehicles.

## EMISSIONS REDUCTION PROGRAMS

A final element of the puzzle involves state programs to reduce emissions from the transportation sector. Under the Clean Air Act, the Environmental Protection Agency is required to set National Ambient Air Quality Standards (NAAQS) for certain airborne pollutants.<sup>9</sup> States then develop their own implementation plans to meet these standards. When areas of a state fail to attain the NAAQS, the state's implementation plan must include strategies to meet attainment goals and/or offset the excess emissions in other ways.<sup>10</sup>

Texas, for example, includes in its state implementation plan the Texas Emissions Reduction Plan, or TERP.<sup>11</sup> Under TERP, the state makes grants to fund emissions reductions and increased efficiency in the state's transportation sector. Among the programs within TERP are the Clean Transportation Triangle (CTT) Program and the Alternative Fueling Facilities Program (AFFP), which provide grants to create fueling stations for natural-gas-powered vehicles in selected counties.<sup>12</sup> Under these programs, Texas receives credit for emissions reductions, based on the supposition that replac-

ing gasoline-powered vehicles with natural-gas vehicles will reduce overall emissions.

TERP, however, does not currently include any similar programs related to electric-vehicle charging stations. While including electric vehicles in TERP or similar state programs would require EPA approval, there is no obvious reason a state should be given credit for encouraging development of natural-gas-powered vehicle-fueling stations, but not for electric-vehicle charging stations. Both types of vehicles, after all, have the potential to reduce emissions by taking higher-emitting gasoline-powered vehicles off the road.<sup>13</sup>

## POLICY OPTIONS

A few minor policy changes could resolve several of these issues. For example, one way to expand availability of electric-vehicle charging infrastructure would be to amend federal law to allow charging stations at interstate highway rest stops. These stations would be small structures, easy to maintain and, depending on the type of station, would not necessarily even require a storefront or attendants.

In addition to the charging stations themselves, the government should ease restrictions on commercial activity at rest stops. Whatever the merits originally were of the law's provisions protecting pre-existing facilities from competition, after nearly 70 years of changing population patterns, any legitimacy the policy might once have had has long passed.

If it proved politically expedient, the two policies could be paired together: restrictions on commercial activity at a rest stop could be lifted if the stop includes an electric-vehicle charging station. Opening rest stops to ordinary commercial activity would attract customers for electric-vehicle charging and vice versa.

Finally, should states agree to this proposal, it should be included in the state's NAAQS implementation plan. In other words, states should get credit for emissions reductions that stem from the increased deployment of electric vehicles. While the program would differ from TERP, in that it would not require any state funding, the resulting decreases in emissions would be just as real and should be counted toward a state's air quality goals.

## CONCLUSION

Politics involves compromise. Sometimes, several policy changes make more sense in combination than they would in isolation. Current restrictions on commercial activities at federal highway rest stops serve little purpose other than to make those stops dreary and uninviting places. The lack of charging infrastructure for electric vehicles discourages ownership of those vehicles. The inclusion of natural-gas-

fueling stations, but not electric-vehicle charging stations, in state emissions-reduction programs makes little logical sense. By tying these policies together, states have the opportunity to remove barriers to emerging technologies, reduce emissions and encourage economic development.

#### ABOUT THE AUTHOR

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He leads the institute's energy program, which works to advance a well-defined and limited role for government in shaping decisions about infrastructure, wholesale and retail electricity, research and development, fuel choice and diversity, and climate adaptation and mitigation. He also leads the institute's work on legislation and issues affecting Arkansas, Louisiana, New Mexico, Oklahoma and Texas.

#### ENDNOTES

1. Public Law 84-627 (1956).
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3. 23 U.S. Code 111(a).
4. 23 U.S. Code 111(b).
5. See, e.g., Sofia Santana, "Highway rest area no place to let your guard down," *Sun Sentinel*, May 30, 2008. <http://www.sun-sentinel.com/news/crime/sfl-530publicsafe-ty-story.html>
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9. 40 CFR part 50.
10. U.S. Environmental Protection Agency, "Basic Information about Air Quality SIPs," Sept. 30, 2016. <https://www.epa.gov/sips/basic-information-air-quality-sips>
11. See Air Quality Division, "Texas Emissions Reduction Plan Biennial Report (2015-2016): A Report to the Texas Legislature," Texas Commission on Environmental Quality, December 2016. [https://www.tceq.texas.gov/assets/public/comm\\_exec/pubs/sfr/079-16.pdf](https://www.tceq.texas.gov/assets/public/comm_exec/pubs/sfr/079-16.pdf)
12. *Id.* at pp. 8-9.
13. Like natural-gas-powered vehicles, electric vehicles do not represent a zero emissions source of transportation, as the generation of electricity used to power the vehicles can involve the emission of various pollutants. Depending on the generation mix, however, they can still represent a significant emissions reduction compared to gasoline vehicles.