

RETHINKING INTERSTATE REST AREAS

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INTRODUCTION

Motorists and truckers who drive long distances on America's most important highways—the 49,000 miles of Interstates—experience a startling difference between the 5% of them that were built originally with toll-revenue finance and the other 95% that were built with 90% funding from federal highway user taxes. On the tolled corridors (such as the New York Thruway, the Ohio Turnpike, and the Indiana Toll Road), large commercial service plazas are spaced at intervals along the roadway, offering various combinations of vehicle refueling, food and beverage service (both eat in and take out), miscellaneous minor shopping, and parking for both cars and trucks.

But on the fuel-tax-funded Interstates, motorists and truckers can find only "rest areas" which offer restrooms, vending machines, and a modest amount of parking. If they want any commercial services, Interstate users must exit the highway and look for gas stations, restaurants, and other services, which range from being located close to the off-ramp to being several miles away. Longer distances are often involved to reach full-service truck stops, which offer overnight truck parking, restrooms with showers, and restaurant services.

A major 2018 study of the future of the Interstate Highway System, authorized by Congress and carried out by an expert committee of the Transportation Research Board, concluded that most of the Interstate system is nearing the end of its useful life and needs to be

reconstructed and modernized for the 21st century.¹ While that report focused mostly on pavement and bridge condition, congestion, and potential widening of some corridors, it did not call attention to the inadequate "rest areas," especially on long stretches of rural Interstates.

This policy brief suggests that a 21st-century Interstate system should have state-of-the-art service plazas in addition to new pavement, improved bridges, and redesigned and rebuilt interchanges in many urban areas.

Three factors may lead to support for reconsideration of the no-commercial-services rule for Interstate rest areas. One is the large and growing shortage of safe overnight parking for long-distance trucking. A second factor is the trend of state transportation departments to close some of their rest areas, due to budget cuts. And the third is the coming need to charge electric passenger vehicles and trucks and to refuel those powered by non-traditional fuels such as liquified natural gas (LNG) and hydrogen.

Norman Augustine (Chair), *Renewing the National Commitment to the Interstate Highway System: A Foundation for the Future*, Future Interstate Study Committee, Transportation Research Board, National Academies of Science, Engineering, and Medicine, December 2018.

THE COMMERCIAL SERVICES BAN

The ban on commercial services at Interstate rest areas dates back to the late 1950s and early 1960s when the first long-distance Interstates were being built. In most rural areas, the new Interstate would bypass many smaller towns and cities, whose gas stations and eating establishments depended on long-distance travelers for a significant part of their business (e.g., on historic U.S. Route 66). Lobbying from those interests persuaded Congress to help out by banning toll-road style commercial service plazas, giving local merchants the opportunity to set up shop at or near off-ramps on the new Interstates to recoup lost business. This new law in 1960 amended the 1956 law authorizing federal funding for Interstate construction. It remains in effect today, strongly supported by existing truck stop operators and franchise operators of food and fuel businesses at or near off-ramps.

The ban is in Section 111 of Title 23 of the U.S. Code. It provides that any construction project on an Interstate highway receiving federal aid "shall contain a clause providing that the State will not add any points of access to, or exit from the project in addition to those [originally] approved by the Secretary [of Transportation] in the plans for such project, without the prior approval of the Secretary." The clause must also say that "the State will not permit automotive service stations or other commercial establishments for serving motor vehicle users to be constructed or located on the rights-of-way of the Interstate System and will not change the boundary of any right-of-way on the Interstate System to

accommodate the construction of, or afford access to, an automotive service station or other commercial establishment." But Section 111 excludes any commercial establishment that was in existence before January 1, 1960. Note that this language prohibits not only gas stations and eating establishments at rest areas on the Interstate but also any new development such as a service plaza that would have direct access (entry and exit) to the Interstate right-of-way.

To be clear on terminology, in this policy brief the term "rest area" means a place on an Interstate highway with no commercial services, such as eating establishments or fuel services. A "service plaza" means a place on an Interstate that offers an array of commercial services, which is currently legal only on toll roads that were not developed with federal funding and had service plazas in existence prior to 1960.



The ban on commercial services at Interstate rest areas dates back to the late 1950s and early 1960s when the first long-distance Interstates were being built. In most rural areas, the new Interstate would bypass many smaller towns and cities, whose gas stations and eating establishments depended on long-distance travelers for a significant part of their business....



THE TRUCK PARKING SHORTAGE

The current shortage of safe overnight truck parking is widely recognized in the trucking industry as an unintended consequence of a provision in the 2012 MAP-21 legislation (which reauthorized highway user taxes and the entire federal highway and transit program). Included in MAP-21 was a mandate that all over-the-road trucking companies must install electronic logging devices (ELDs) to record their hours of service (HOS) and rest hours by Dec. 18, 2017. To allow a grace period, that requirement began being fully enforced as of April 1, 2018.² Prior to the ELD mandate, it was widely believed that many truck drivers fudged the entries in their paper log books so they could drive longer hours than federal law allowed. Once ELDs were in place and being enforced, reported violations declined significantly.

But with drivers no longer fudging their time on the road, a predictable result was a growing problem of finding safe and legal places to park for what amounted to more actual hours of rest, generally in a sleeper-cab berth. At a session discussing the truck parking problem at the 2020 Annual Meeting of the Transportation Research Board, Darrin Roth of the American Trucking Associations (ATA) cited research from the industry's American Transportation Research Institute (ATRI) finding that 36.5% of drivers used unauthorized or

William B. Cassidy, "Emerging Effects: ELDs Increase Adherence to HOS Rules; Safety Impacts Less Clear," *The Journal of Commerce*, 20 January 2020.

undesignated parking between three and four times per week, and nearly 50% parked in such spots at least three times a week.³ Numerous media reports include photos of big rigs parked illegally alongside Interstate off-ramps and other unauthorized and unsafe locations.

The National Association of Truck Stop Operators (NATSO) estimates that truck stops and travel plazas provide 90% of legal overnight truck parking in the United States. Nearly all such parking is not charged for, noted Lisa Mullings, NATSO's president, since truck stops seek to attract drivers who will spend money on fuel, food, and miscellaneous services. She told attendees at the 2020 TRB session that trucking companies should be paying for driver parking at safe locations: "We wouldn't expect the government to pay for a hotel room for a pilot. Why would we expect the government to pay for a truck parking space? [Trucking is] a business. That is a cost of doing business."

In response to the growing need for large amounts of additional overnight truck parking spaces, the Federal Highway Administration (FHWA) and state departments of transportation (DOTs) have focused on compiling data on the amount and location of existing legal truck parking spaces. Here are several nationwide efforts.

- Under a provision of the 2012 surface transportation law MAP-21, Jason's Law requires FHWA to do periodic surveys on the extent and availability of legal overnight truck parking spaces in each state.
- The Park My Truck app, a joint effort of ATRI and NATSO, allows truck stops and rest areas to report the number of spaces available on their premises. The aim is to ensure that all reported spaces become known to truckers on the road, but that depends on the providers to send timely updates. It is not known how often providers submit updates, and without essentially real-time updates, the information is of questionable value. (https://natso.com/parkmytruck)
- American Truck Parking, partly funded by FHWA, is operated by the University of California at Berkeley. Its website has data on truck stops, toll road service plazas, and highway rest areas nationwide. It can be searched by location, type of facility (e.g., private truck stop, public rest area, etc.), services available, and number of available spaces—either fixed or dynamic. Searching the *public* rest areas (Interstate

Eleanor Lamb, "Trucking Experts Tackle Parking Problems, Solutions," *Transportation Topics*, 13 January 2020.

⁴ Ibid.

- and other highways) identified only five with showers, none with laundry facilities and only two with gated parking areas—out of 1,953 such rest areas.⁵
- TruckPark Inc. is a platform linking drivers with selected parking providers in real time. The app is free, but the participating parking facilities, which take reservations, offer paid parking for 12 to 24 hours (https://truckpark.com). Most of its 80 providers are located in major metro areas, which TruckPark has found are the most difficult locations for drivers to find overnight parking.⁶
- Two of the largest truck stop operators—Travel Centers of America and Pilot Flying J—have developed a means by which drivers can pay to reserve a parking space.
- In the course of researching this policy brief, the author learned that the company that holds the long-term lease to manage, operate, and improve the Indiana Toll Road has signed a contract with a company to develop a real-time parking availability system for the 76 acres of truck parking that it offers to truckers (in addition to the spaces at its service plazas).⁷

The problem with the above services is that they are only seeking to make full use of *existing* parking slots, which are mostly at truck stops and highway rest areas. That is part of the problem, but the larger problem is the need to expand the total amount of safe overnight truck parking. The trucking industry would like Congress to fund additional truck parking. One potential vehicle was the Truck Parking Safety Act, introduced in 2020 by Reps. Michael Bost (R, IL) and Angie Craig (D, MN). The bill would have allocated \$755 million to a competitive grant program to build new parking spaces or to add parking spaces at existing rest areas and weigh stations.⁸



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⁵ https://www.americantruckparking.com, (10 September 2020).

⁶ Mindy Long, "Parking Concerns," *FleetOwner*, December 2019.

⁷ Email to Robert Poole from Nicholas Barr, Indiana Toll Road Concession Company, 12 January 2021.

⁸ David Heller, "Promising Bipartisan Parking Bill," *FleetOwner*, April 2020.

While these efforts are proceeding, state DOTs face serious budget shortfalls, due to the decrease in driving during the COVID-19 pandemic. For example, in August 2020, Iowa DOT announced that it will close eight of its 38 rest areas that are near the end of their useful lives. The plan calls for upgrading 12 older sites, but only *by 2033*. The overall plan seeks to add 247 truck parking spaces by then, but that will depend on the availability of funding.

In December 2020, industry participants expressed growing concern about the lack of action on adding new parking capacity. Discussing the findings from the most recent FHWA Jason's Law survey, participants at a meeting of the National Coalition on Truck Parking noted that "in the five years since the last Jason's Law survey, the truck parking shortage seems to have worsened." Darrin Roth of ATA told *FleetOwner*, "Unfortunately, there doesn't seem to be much of an effort under way by parking providers—both public [rest areas] and private [truck stops] to address the problem with new capacity." He noted that the need is greatest in urban areas, but the problem there is that "land in large urban areas is scarce and expensive."

⁹ "Iowa DOT Unveils Updated Rest Stop Strategy," AASHTO Journal, 14 August 2020.

¹⁰ Cristina Commendatore, "Disconnect Looms Between Truck Parking Capacity and Need," *FleetOwner*, 8 December 2020.

ELECTRIC VEHICLE CHARGING AND ALTERNATIVE FUELING

State and federal policies increasingly favor a transition from petroleum-fueled vehicles to electric vehicles. Various state policies are further-advanced for cars than for trucks, but virtually every U.S., European, and Japanese car and truck manufacturer (as well as a number of start-ups) is developing electric vehicles in response to growing governmental support for shifting motor vehicles from petroleum to electric power.

Both battery-electric vehicles and hydrogen fuel cell vehicles need to be replenished after a certain number of miles, whether by charging their battery packs or refueling with hydrogen. The United States is in a situation resembling the early days of automobiles in 1920 when gas stations (initially called filling stations) were few and far between. "Range anxiety" is a problem already well-known to electric vehicle (EV) owners—the fear of running out of battery capacity before reaching a charging station. With the Interstate highways accounting for 25% of all vehicle-miles of travel, it would be highly desirable for charging stations to be available at Interstate rest areas—but that would be illegal under current law, due to the ban on commercial services at such locations (unless the electricity were given away).

In 2016 FHWA announced a new program called Alternative Fuel Corridors. The aim is to establish "a national network of alternative fueling and charging infrastructure for electric, natural gas (LNG and CNG), hydrogen, and propane fuel vehicles across the country." The news release said the initial network of corridors "includes 55 Interstates (entire length or portions) in 35 states plus D.C., designated as signage-ready for one or more fuels." Needless to say, for the Interstate highways listed, none of these services is available at rest areas. For a charging station to be listed in the federal network, it must be located no more than *five miles* from an off-ramp—not a happy thought for a driver suffering from serious range anxiety.



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State governments are doing their part to support a transition to electric vehicles. Here are several recent examples.

- Florida Gov. Ron DeSantis signed a bill in June 2020 to require Florida DOT to develop a master plan for EV charging stations along the state highway system, with the plan's legislative recommendations due July 1, 2021. In July 2020, the governor announced initial plans for charging stations "along" I-4, I-75, and I-95—but not actually on those Interstates.¹²
- In September 2020, a group of Midwest electric utilities announced plans for a network of fast-charging stations from Michigan to Kansas. Companies include DTE Energy and Consumers Energy in Michigan, Ameren Missouri, Ameren Illinois, Oklahoma Gas and Energy, and Evergy (Missouri and Kansas). Most of the Interstates

[&]quot;News from the US DOT Office of Public Engagement," 4 November 2016, http://www.fhwa.dot.gov/environment/alternative_fuel_corridors (10 September 2020)

Marlow Starling, "Florida Moves Ahead with More Electric-Vehicle Plans." *Daytona Beach News-Journal*, 21 July 2020.

in these states are not toll roads, so they cannot install on-Interstate charging stations.

• On the other hand, tolled Interstates such as the Ohio Turnpike (I-80) and the Indiana Toll Road (also I-80) have announced plans to add EV charging facilities to their service plazas. In 2020 New Jersey and New York made similar announcements. In March 2020, the New Jersey Turnpike (I-95) announced a contract to increase the number of chargers from 20 to 76.¹³ And in July 2020, New York Gov. Andrew Cuomo announced plans to spend \$750 million to help build 50,000 EV charging points, to be largely funded by the state's electric utilities.¹⁴ Included will be the tolled New York Thruway (I-87 and I-90).



California officials are the most active with policies to expand electrification of the vehicle fleet, including trucks.



California officials are the most active with policies to expand electrification of the vehicle fleet, including trucks. In June 2020, the California Air Resources Board (CARB) announced a new Advanced Clean Trucks Rule, requiring increased fractions of new trucks sold in California to be zero-emission starting in 2024, with 2035 targets of 55% for light trucks, 75% for medium/heavy-duty trucks, and 40% for tractor-trailer rigs.¹⁵

The kind of growth intended by CARB, if realized, will require a very large expansion of truck charging and fueling infrastructure (in addition to what will be required for the state's growing population of electric cars). The National Center for Sustainable Transportation (at University of California, Davis) released a study in April 2020 suggesting highway rest areas

¹³ Cynthia Shahan, "New Jersey Turnpike Authority Teams Up with Tesla—56 New Superchargers for NJ," *CleanTechnica*, 17 March 2020.

Tina Bellon, "New York to Invest \$750 Million to Expand Electric-Vehicle Infrastructure," Reuters, 16 July 2020.

Debra Kehn, "California Approves First-in-Nation Sales Mandate for Electric Trucks." *Politico Pro Transportation*, 25 June 2020.

as locations for vehicle charging.¹⁶ Its calculations included projected levels of electric cars and trucks, but since part of its focus was on the impact of EV charging on the electric utility grid, it did not get into detail on the hydrogen fuel cell alternative.¹⁷ The study's modeling focused primarily on personal (light duty) vehicles in estimating the future demand for electricity.

In June 2020, the West Coast Clean Transit Corridor Initiative released a study focusing on heavy trucks. The study was carried out on behalf of electric utilities in California, Oregon, and Washington. It proposed charging stations at 50-mile intervals on primary highways, the large majority of them Interstates, but without acknowledging the current ban on commercial services at Interstate rest areas. The UC Davis study acknowledged that ban, but it referred to the ban as "federal regulations" rather than *federal law* that would have to be repealed by Congress. 19



One other environment-friendly service that could be provided at commercialized rest areas, along with expanded truck parking, is electrical hookups to operate sleeper-cab heating and air conditioning.



One other environment-friendly service that could be provided at commercialized rest areas, along with expanded truck parking, is electrical hookups to operate sleeper-cab heating and air conditioning. The North American Council for Freight Efficiency (NACFE) reports that in 2017 U.S. truck fleets used over a billion gallons of diesel fuel to keep their engines idling overnight to operate heating or air conditioning—about 8% of total fuel

Behdad Kiani, et al, "Utilizing Highway Rest Areas for Electric Vehicle Charging: Economics and Impacts on Renewable Energy Penetration in California," National Center for Sustainable Transportation, UC Davis, April 2020, https://escholarship.org/uc/item/2c91x13m

¹⁷ Ihid

[&]quot;I-5 Electric Truck Charging Sites Mapped Out by Electric Utilities," West Coast Clean Transit Corridor Initiative Study, 17 June 2020, https://www.westcoastcleantransit.com), (15 August 2020).

Kiani, et al., "Utilizing Highway Rest Areas for Electric Vehicle Charging: Economics and Impacts on Renewable Energy Penetration in California." 45.

burned.²⁰ Electric hookups could reduce or eliminate that use of fuel (and the accompanying pollution and noise), but the electricity would obviously have to be paid for—hence it would be a commercial service.

²⁰ "Report Details Paths to Reduce Truck Idling," *FleetOwner*, September 2019.

COMMERCIAL INTERSTATE REST AREAS?

Defenders of the 1960 ban on commercial services at Interstate rest areas cite the decades of growth in gas stations and food-service operations at or within a few miles of off-ramps on the Interstates. But this view does not take into account the need to *expand* services in coming decades, especially for a trucking industry whose vehicle-miles of travel (VMT) is expected by FHWA to grow significantly faster than personal-vehicle VMT.²¹ A statement in a recent FHWA report on truck parking identifies the problem:

Rising real estate costs make it more difficult for highway-oriented uses that cater to truckers to compete with other, more-profitable land uses in the vicinity of highway interchanges [off-ramps]. These interchanges have typically been the ideal locations for traditional truck stops and multipurpose travel centers. But the cost of land, as well as potentially lengthy land-use review processes at the municipal level for new sites, has

Don Pickrell, et al., "Developing a Multi-Level Vehicle Miles of Travel Forecasting Model," Volpe National Transportation Systems Center, submitted to the Transportation Research Board, Nov. 15, 2011.

made it impractical to build a large-scale, privately owned travel center in many regions with heavy truck parking demand.²²

Thus, FHWA's freight office appears to recognize the need for new truck service facilities to be located elsewhere than near existing Interstate off-ramps.

What would be involved in designing 21st-century truck facilities? National infrastructure design and professional services firm WGI has produced a document outlining its assessment of the principal design considerations involved.²³ It points out the current limitation on commercial services at Interstate rest areas but also notes that those planning such facilities should anticipate long-term utilization over many years, including the need to adapt to new technologies. WGI's top-10 design considerations are as follows:

- 1. **Location**: Plan within the context of other rest/service locations; evaluate the feasibility of a single facility serving both directions of travel.
- 2. **Parking engineering**: Estimate likely numbers of car and truck parking spaces and the geometrics involved. Decide if there is a need to serve drivers swapping trailers.
- 3. **Separate the car and truck facilities**: This is for safety reasons and to distinguish services for each user group.
- 4. **Restrooms**: They must be sized for each user group; for truckers, shower facilities are generally welcome, and also washing machines.
- 5. **Fuel and vehicle services**: Alternative fueling (e.g., hydrogen) and electric charging, in addition to conventional fuels. Also, minor vehicle repair services for locations in remote areas.
- 6. **Environmental conditions**: Water treatment facilities may be needed to deal with stormwater, fluid leaks, de-icing chemicals, etc. (Also, electrical hookups for sleeper cabs.)
- 7. **Food services**: Fast-food, sit-down dining, and possibly outdoor grills for customers to use.
- 8. **Utilities**: Electricity and water supply are essential, but in remote areas the rest area may need to generate power on-site. Also, "rest areas can provide ideal cell tower locations."

[&]quot;Jason's Law Truck Parking Results and Comparative Analysis, Chapter 1: Introduction," Federal Highway Administration, no date, https://ops.fhwa,gov/freight/infrastructure/truck_parking/jasons_law/truckparkingsurvey/ch1.htm, (11 September 2020).

WGI, "Top 10 Design Considerations for Highway Truck Parking," June 2020, https://wginc.com/top-10-design-considerations-for-highway-truck-parking-meeting-the-need-of-truck-drivers-and-other-travelers-today-and-into-the-future, (29 September 2020).

- 9. **How to pay for everything**: Leasing cell towers can provide revenue to supplement the revenues from commercial services for auto and truck drivers. An array of revenue sources makes public-private partnerships a possible means to finance commercial rest area development.
- 10. **Safety and security**: The principles of crime prevention through environmental design call for surveillance, access control, territorial controls (i.e., separating trucks and personal vehicles), and maintenance. LED lighting and security cameras should be part of the infrastructure.



Over the past decade, many toll roads have rebuilt and modernized their service plazas, often using long-term public-private partnership (P3) procurements in which a competitively selected company or consortium finances the modernization based largely or entirely on the projected stream of commercial revenues.



Service plazas on toll roads illustrate many of these principles. Over the past decade, many toll roads have rebuilt and modernized their service plazas, often using long-term public-private partnership (P3) procurements in which a competitively selected company or consortium finances the modernization based largely or entirely on the projected stream of commercial revenues. States whose toll roads have used or are using long-term P3 agreements to finance, rebuild, and operate their service plazas include Connecticut, Delaware, Florida, Indiana, Maryland, and New York, as shown in Table 1. The duration of these agreements ranges from 30 to 35 years. In most cases, the winning bidder finances the entire cost of reconstruction/modernization and expects to recover its costs from the revenues derived from the service businesses operating at the plazas.

TABLE 1: U.S. TOLL ROAD SERVICE PLAZA PUBLIC-PRIVATE PARTNERSHIPS (P3S)										
State	Year	Plazas	Term (years)	Company	Investment \$M	Notes				
СТ	2010	23	35	Carlyle/Subway	\$178	SEIU is part of consortium				
DE	2010	1	35	HMS Host	n.a.					
FL	2009	8	30	Areas USA	\$91					
IN	2016	8	30	HMS Host/7-11	\$70					
MD	2012	2	35	Areas USA	\$56					
NY	2020	27	33	John Laing	\$450	\$350M PABs				

Sources: individual companies or agencies

Among the services offered at these service plazas are some or all of the following:

- Fuel supply
- EV charging
- Free wi-fi
- Convenience stores
- Fast food stores
- Sit-down restaurants
- Truck parking

Reviewing the WGI criteria as applied to current Interstate rest areas reveals an important problem. Nearly all the rest areas are far too small to accommodate a full-scale service plaza, especially if it is going to include food services and safe overnight parking for overthe-road trucks. Data on rest area size proved difficult to obtain from state DOTs, but the American Truck Parking program at UC Berkeley was able to provide an indication of restarea size. It provided the author with truck parking data on the 2,008 Interstate rest areas in its database. The average rest area has space for only 20.9 18-wheel semi-trucks. Applying an estimate of 950 square feet per truck for parking and maneuvering and multiplying that by 1.5 to account for access lanes, the estimated average real estate for truck parking at rest areas is only 0.68 acres. The average truck parking capacity of 176 "turnpike" service plazas is 44 spaces. Using the same assumptions as for non-tolled rest areas, the average service plaza devotes 1.44 acres to truck parking (though some offer considerably more).

²⁴ Elliot Martin, UC Berkeley American Truck Parking program, email to Robert Poole, 8 December 2020.

The average service plaza acreage on several long-distance toll roads is as follows:

• Florida Turnpike 26.9 acres per plaza

Indiana Toll Road
 16.2 acres (plus 76 acres of separate truck parking)

Kansas Turnpike 12.1 acresOhio Turnpike 56.9 acres

Hence, if state DOTs were to redevelop their Interstate rest areas into full-scale service plazas, they would need to purchase considerable adjacent land (if available) and also come up with the costs of designing and building the new service plazas. This is likely well beyond the current strained budgets of most state DOTs. But the successful use of private financing via long-term P3 development and operation of toll road service plazas offers a promising way to address this problem.

In November 2020, the Pennsylvania Legislature passed, and its governor signed, a bill (HB 2065) that would expand the state's existing P3 law to include truck-related facilities, including truck parking and weigh station bypasses.²⁵ Thus, Pennsylvania now has enabling legislation that could be further expanded to include P3 development of new service plazas.



... Pennsylvania now has enabling legislation that could be further expanded to include P3 development of new service plazas



Keith Goble, "Pennsylvania Senate Panel Backs Bill to Tap Public-Private Partnerships for Truck Projects," Landline, 6 November 2020.

OBSTACLES TO INTERSTATE COMMERCIAL SERVICE PLAZAS

Previous sections have discussed the need for expanded truck parking along Interstates that are key truck routes, as well as the longer-term need for development of EV charging stations for both personal and commercial vehicles, and possibly hydrogen refueling for hydrogen fuel-cell vehicles. Given today's high cost of land near Interstate off-ramps, and concerns about range anxiety if vehicle operators would otherwise have to travel as much as five miles from an exit to an EV charging location, there is a strong case for locating parking and power services directly along Interstates, especially on long-distance rural Interstates where exits are far apart and truck stops are less common.

ATTEMPTS TO REPEAL THE BAN

The major obstacle to adding such services is the federal ban on any "commercial services" at the rest areas of non-tolled Interstates. This ban is strongly supported by NATSO—the National Association of Truck Stop Operators. It is also supported by the American Trucking

Associations (ATA), which has viewed repeal of this ban as a potential threat to the truck stops its members rely on.



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"

At various points in time, some state DOTs have proposed repealing the ban. In 2009, at the urging of Virginia DOT, Rep. Frank Wolf (R,VA) introduced an amendment that would have allowed the privatization of rest stops, but the measure was defeated in a subcommittee vote. That same year, Georgia DOT asked the American Association of State Highway & Transportation Officials (AASHTO) to survey all state DOTs to obtain basic rest area data, including those closed due to budget constraints, and their interest in commercialization. The following year, Arizona DOT produced a video supporting rest area commercialization, citing data from the AASHTO survey that found that at least six states had closed multiple rest areas due to budget cuts (Arizona had closed 13). Arizona's Gov. Jan Brewer sent a letter to Transportation Secretary Ray LaHood and the state's congressional delegation asking for the ban on commercial services to be repealed. This effort led to Amendment 217 of the American Energy & Infrastructure Jobs Act of 2012, authored by the late Rep. Steve LaTourette (R, OH), Rep. Steve Stivers (R, OH), and Rep. Dennis Kucinich (D, OH). A companion measure was authored by Sen. Rob Portman (R, OH). The Senate version was defeated by 86 to 12, after heavy NATSO lobbying.

The issue came up again in 2016, when FHWA asked for public comments on whether it should allow new forms of rest area commercial sales. NATSO specifically opposed the FHWA proposal to include Interstate rest areas in its planned national network of EV

²⁶ Amy Gardner, "Potty Politics, Part II," *The Washington Post*, 20 July 2009.

²⁷ Robert Poole, memo to Reason Foundation transportation staff on "GDOT meeting re rest area commercialization," 17 December 2009.

²⁸ Byron Schlomach, "Open Highway Rest Stops with Private Vendors," *Goldwater Institute Daily*, 17 February 2019.

charging stations.²⁹ The subject came up again in 2017, when two House members—Reps. Joe Courtney (D, CT) and Jim Banks (R, IN) introduced a bill that would give states the option to commercialize rest areas on Interstates.³⁰ That bill also went nowhere in Congress.

Two points are fairly clear from these efforts. First, a number of state DOTs would like the opportunity to revamp and upgrade their rest areas to offer commercial services and generate revenues to support their modernization and operations. Second, legislators who have taken up the issue have been both Democrats and Republicans.

The Trump White House's 2018 infrastructure proposal again raised this issue, as one of a long list of reform measures aimed at increasing investment:

Liberalize Tolling Policy and Allow Private Investment in Rest Areas. Tolling is generally restricted on Interstate highways. This restriction prevents public and private investment in such facilities. We should reduce this restriction and allow the States to assess their transportation needs and weigh the relative merits of tolling assets. The Administration also supports allowing the private sector to construct, operate, and maintain Interstate rest areas, which are often overburdened and inadequately maintained. [emphasis added]

In apparent response to including this provision in the White House infrastructure proposal, Arizona Gov. Doug Ducey renewed Arizona's call for rest-area commercialization, making public his letter on that subject to DOT Secretary Elaine Chao.³² In the letter he referred to the 1956 law as "an archaic and nonsensical federal prohibition that punishes younger states, especially in the West." He also noted that Arizona's 28 bare-bones highway rest areas cost the state \$4 million a year to operate, without any dedicated revenue source. But Congress took no action on this matter.

[&]quot;NATSO Presses Its Case with FHWA Against Rest Area Commercialization," *AASHTO Journal*, 10 November 2016.

³⁰ Chris Dehnel, "Rest Area Privatization Proposed in Courtney Legislation," *Patch.com*, 6 April 2017.

³¹ "Legislative Outline for Rebuilding Infrastructure in America," The White House, February 2017.

Bob Christie, "Gov. Ducey Wants US to Allow Private Business at Rest Stops," Associated Press, 3 November 2017.

6.2

ASSESSING NATSO'S CASE

NATSO makes several points in defending the status quo. It says somewhat misleadingly that the 1956 ban was enacted "because community leaders feared local businesses and tax collections would shrink if states were allowed to run commercial operations along the new Interstate system." Actually, the fear was about competition per se, not necessarily by states. Today NATSO stresses that the gas stations and fast-food outlets clustered near Interstate off-ramps are tax-paying private businesses, while what state DOTs seek to do is to create "state-sanctioned monopolies" alongside Interstate rights-of-way.

The monopoly claim is a half-truth, at best. Toll road service plazas generally do contract with one gas station provider for the entire system, for a limited number of years. But at least some toll roads require fuel prices to be comparable to those away from the toll road. Most service plazas these days offer a selection of food purveyors under contracts that are far shorter than the 30 to 35 years of most P3 agreements like those shown in Table 1. And in many cases, the array of food providers differs from one service plaza to the next. So customers have a number of food choices, though only one gas station brand.

The other "monopoly" concern is that the prices charged by food providers and gas stations must cover the rent these establishments pay to the P3 company. That is a normal cost of business, since the cost of acquiring and upgrading the land on which the service plaza is built is a real cost. It is just as real as the cost of the land on which gas stations and fast-food outlets are built near Interstate off-ramps, which must be covered by the prices they charge. There is no basic difference.

In its opposition to the 2018 White House proposal, NATSO claimed that commercial services at Interstate rest areas "would drain local businesses of customers, communities of much-needed jobs, and city governments of critical tax revenue by putting established businesses in direct competition with state governments." This statement is also misleading, because the competition for gas stations and food purveyors at off-ramps would be with name-brand, tax-paying gas stations and food purveyors at the commercial rest areas. Table 2 identifies 35 name-brand food providers that serve customers at service plazas along major toll roads, all but one of which are Interstates that were already using

³³ Ibid.

[&]quot;Coalition Pushes Back on Trump Proposal to Commercialize Interstate Rest Areas," AASHTO Journal, 23 June 2017.

tolls prior to the 1956 legislation authorizing federal gas-tax funding to build non-tolled Interstates. Travelers will find many of these same outlets near Interstate off-ramps.

Food Service	CT	DL	FL	IL Toll-	IN Toll	MD	NY	OH	PA Tole	Total
Aubu/e	I-95	I-95	Tpk	way	Road	I-95	Thruway X	Tpk	Tpk	1
Arby's Auntie Anne's	Х				Χ	Χ	X	Χ	Х	6
	۸	Χ			^	^	۸	^	^	1
Baja Fresh Breyer's Ice Cream		۸					Χ			1
Burger King		Χ	Χ				X	Χ		4
Checker's		^	^				X	^		1
Chipotle	Х						^			1
Cinnabon	۸	Χ					Χ			2
		^					^	Χ		1
Dairy Queen Dunkin	Х		Χ	Х		Χ		Χ		4
	Χ		X	Χ		X				
Earl of Sandwich			Х			Х				2
Einstein Bagels		V					V	Χ		1
Famous Famiglia		Χ					Χ			2
Gloria Jean's								Χ		1
Gourmet Cup							Χ			1
Hardee's						.,		Χ		1
KFC			Χ			Χ				2
McDonald's	Χ			Χ			X			3
Moe's Southwest							Χ			1
Nathan's Famous			Χ			Χ	Χ			3
Nature's Table			Χ							1
Panda Express	Χ			Χ						2
Panera Bread								Χ		1
Peet's Coffee						Χ				1
Pizza Hut			Χ			Χ		Χ		3
Popeye's	Χ	Χ		Χ	Χ		Χ	Χ		6
Qdoba	Χ									1
Quizno's							Χ			1
Roy Rogers							Χ		Χ	2
Sbarro	Χ			Χ	Χ		Χ	Χ	Χ	6
Starbucks		Χ		Χ	Χ		Χ	Χ	Χ	6
Steak & Shake									Χ	1
Subway	Χ		Χ	Χ			Χ			4
Tim Horton's							Χ			1
Wendy's			Χ			Χ				2

NATSO's Partnership to Save Highway Communities includes 16 entities in addition to NATSO itself. Most of these are associations of *franchisees* of chains such as Burger King, McDonalds, and Pizza Hut, not the national firms. Judging by Table 2, national chains are eager to serve willing customers with the convenience of on-Interstate meal breaks.

Another problem with NATSO's argument is that it assumes the food and fuel businesses are *zero-sum*. In other words, any new gas station, food outlet, or EV charging station at a commercialized Interstate rest area would put out of business a comparable business at the nearest off-ramp. That might conceivably be true of gas stations and food outlets in a zero-growth economy, but there is little likelihood of that being America's future. With personal travel and especially truck traffic projected to increase at least as fast as population growth in coming decades, the need is for *more* services for highway travelers. And as pointed out in Parts 3 and 4, that is especially true of the need for more safe overnight truck parking, EV charging, and hydrogen refueling. Land at or near off-ramps has become very expensive, as FHWA has pointed out. That reduces the likelihood of more service stations and food purveyors locating near those exit ramps.



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What NATSO is calling for is protecting status-quo businesses from would-be competitors. That is not how a free-market economy is supposed to work. When a shopping center developer applies for permits to create a new mall, there is no legal basis for the owners of existing stores to call for making such new competition illegal. But that is essentially what NATSO argues for.

REFORM POSSIBILITIES

NATSO, in alliance with franchisees and trucking groups, has proven to be a powerful opponent of commercializing Interstate rest areas. But political battles are generally fought between coalitions, each with something at stake in the outcome. In previous battles over repealing the commercial services ban, generally the only proponents have been a few state DOTs. What other interests might coalesce in support of this effort?

The most likely near-term supporter is the environmental community. Virtually all members of this community favor an expedited transition from petroleum-fueled vehicles to electric vehicles, and the Biden administration is expected to expand federal support for this transition. The campaign's official transportation policy statement called for restoring the full federal EV tax credit, investing \$5 billion over five years in battery research, and investing in a national electric-vehicle charging network.³⁵

As a preview, in summer 2020 the Democratic-majority House passed a \$1.5 trillion infrastructure bill that would add EV charging stations at Interstate rest stops across the country, despite NATSO opposition.³⁶ In denouncing the measure, NATSO noted that it has formed a coalition with ChargePoint to add EV charging equipment at more than 4,000 truck stops/travel plazas around the country. While the Senate failed to take up this House

Biden-Harris Campaign, "Biden-Harris Transportation Policy," *TransLaw*, Federal Bar Association Transportation and Transportation Security Law Section, Special Edition, Fall 2020.

Josh Fisher, "House Passes Transportation Bill," FleetOwner, August 2020.

bill, it is noteworthy that it received majority House support despite including partial repeal of the commercial services ban.

Environmental policy groups have also noted that the ban prevents adding commercial EV charging stations at some of the most important and convenient locations on the U.S. highway system. In a recent report outlining a reform agenda for US DOT, the Center for American Progress called for amending the commercial services ban "to permit states to install or contract for the installation and operation of commercial charging stations at public rest areas on the Interstate system."⁵⁷

Some environmental researchers are aware of the ban, but (as noted in Part 3) do not realize that it is a federal statute, which can only be changed by an act of Congress, as opposed to a regulation, which can be altered by the agency that promulgated it. Hence, wider awareness of the ban within the broader environmental community could lead to greater support for its repeal, as part of speeding the transition to electric vehicles. An Interstate rest area coalition led by environmental groups might also challenge the two large corporate members of NATSO's coalition—Burger King and McDonald's—to stop opposing EV charging and other needed services at Interstate rest areas. Opposing this needed change could count against their ESG (environmental, social, and governance) score.

A new group, the Zero Emission Transportation Association was launched in 2020 to argue for 100% electric vehicle sales by 2030. Its members include many large electric utilities (e.g., Pacific Gas & Electric, Duke Energy, and Southern Company) plus vehicle companies Tesla and Lordstown Motor Co. and EV charging companies such as ChargePoint.³⁸

One major trucking organization, the Owner-Operator Independent Drivers Association (OOIDA), has long supported commercialization of Interstate rest areas. Its Norita Taylor told trucking newsletter Transport Dive that "Now more than ever, our members are relying on rest areas to safely rest when tired or required by law. If commercialization will help states keep these locations open during difficult budgetary times, we're all for it." 39

Kevin DeGood, "A Reform Agenda for the U.S. Department of Transportation," Center for American Progress, 9 September 2020.

Anthony Adragna, "New Lobby Group to Seek All Electric Vehicles Sales Within Decade," *Politico*, 17 November 2020.

Jim Stinson, "The Debate Over EV Charging at Interstate Rest Stops," TransportDive, 26 February 2021. https://www.transportdive.com/news/NATSO-commercialization-interstate-rest-stop-electric-charging, 2 March 2021.

Other trucking associations might follow OOIDA's lead and rethink their alliance with NATSO on this subject. Trucking's immediate need is more safe overnight parking capacity on key truck routes. While repealing the ban would not provide immediate relief of the current parking shortage, it would motivate state DOTs to start planning for expansion and upgrading of their Interstate rest areas. The shortage of safe overnight parking may be of particular concern to the growing population of female truck drivers. According to *Redefining the Road* magazine, "women now make up over 10 percent of over-the-road truck drivers."



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Finally, some state DOTs might consider converting one or two rest areas to truck-only services. Although state DOTs are likely to be under budget constraints in the immediate post-COVID-19 years, removal of the federal ban would enable them to solicit proposals from investors and service plaza companies to finance the needed land acquisition, paving, and initial facility construction, based on the projected stream of commercial revenues from well-sited service plazas directly on the Interstates. They could invite leading truck stop/travel plaza companies such as Pilot/Flying J and Travel Centers of America to respond to a Request for Information on a public-private partnership under which one of them would finance, develop, and operate a truck stop with full services and direct access to the Interstate. Companies like these possess considerable market knowledge, enabling them to identify the best rest area locations for such new truck stop travel plazas. The same investors that are financing long-term P3 projects to modernize toll road service plazas might be interested in teaming with an experienced truck stop company for such projects.

^{40 &}quot;Redefining the Road Magazine," https://womenintrucking.org/redefiningtheroadmagazine (25 November 2020).

CONCLUSIONS

The decades-old ban on commercial services at Interstate rest areas was dubious at the outset, but in the post-petroleum-fueled era that is ahead of us, it is clearly past its expiration date. As part of either the 2021 reauthorization of the FAST Act or an overall infrastructure bill, repeal of this anachronistic law should be a priority. Commercialized rest areas will expand much-needed truck parking capacity and will provide ideal locations for EV charging stations as part of the expanding national network. They will also offer motorists additional refueling and meal options on their highway trips, as is appropriate in a free-market economy.

For most of the 60 years since the commercial services ban was enacted, there was not a critical mass of support for its repeal. As of 2021, that critical mass may finally emerge to support this long-overdue change.

ABOUT THE AUTHOR

Robert W. Poole, Jr. is director of transportation policy and the Searle Freedom Trust Transportation Fellow at Reason Foundation, a national public policy think tank based in Los Angeles.

His 1988 policy paper proposing supplemental privately financed toll lanes as congestion relievers directly inspired California's landmark private tollway law (AB 680), which authorized four pilot projects including the highly successful 91 Express Lanes in Orange County. Over two dozen other states have enacted similar public-private partnership legislation. In 1993 Poole oversaw a study that introduced the term HOT (high-occupancy/toll) Lane, a concept which has become widely accepted since then.

Poole has advised the Federal Highway Administration, the Federal Transit Administration, the White House Office of Policy Development and National Economic Council, the Government Accountability Office (GAO), and the California, Florida, Georgia, Indiana, Texas, Utah, Virginia, and Washington State Departments of Transportation. He served 18 months on the Caltrans Privatization Advisory Steering Committee, helping oversee the implementation of AB 680. He was appointed by Gov. Pete Wilson as a member of California's Commission on Transportation Investment in 1995-96.

Poole is a member of the board of the Public-Private Partnerships (P3) division of ARTBA and an emeritus member of the Transportation Research Board's Managed Lanes Committee. From 2003 to 2005, he was a member of the TRB's special committee on the

long-term viability of the fuel tax for highway funding. In 2008 he was a member of the Study Committee on Private Participation in Toll Roads, appointed by Texas Gov. Rick Perry. In 2010 he was a member of the Washington State DOT's Expert Review Panel on the proposed Eastside Managed Lanes Corridor. Also in 2010, he served as a transportation policy advisor on the transition team of Florida Gov. Rick Scott.

Poole is the author of dozens of policy studies and journal articles on transportation issues. His book, *Rethinking America's Highways*, was published by the University of Chicago Press in 2018. Poole's popular writings have appeared in national newspapers, including *The New York Times* and *The Wall Street Journal*; he has also been a guest on such programs as "Crossfire," "Good Morning America," and "Huffington Post," as well as ABC, CBS and NBC News, NPR and PBS. He produces the monthly e-newsletter *Surface Transportation Innovations*. *The New York Times* has called him "the chief theorist for private solutions to gridlock."

Poole received his B.S. and M.S. in mechanical engineering at MIT and did graduate work in operations research at NYU.

