

November 3, 2022

Holly Porter  
Office of Associate Chief Counsel  
(Passthroughs and Special Industries)  
Internal Revenue Service  
1111 Constitution Ave., NW  
Washington, DC 20224

Re: Request for Comments on Credits for Clean Vehicles [CC:PA:LPD:PR (Notice 2022-46)]

Submitted via [www.regulations.gov](http://www.regulations.gov)

Dear Ms. Porter,

I appreciate this opportunity to provide comments that I hope will help inform the rulemaking for the implementation of § 30D.<sup>1</sup> Specifically, my comments relate to the applicable limitations in price of vehicles qualifying for the expanded Clean Vehicle Credit, as provided in the Inflation Reduction Act (IRA) of 2022.

The IRA provides a maximum credit of up to \$7,500 for the purchase of a qualifying “clean” vehicle that satisfies eight requirements provided in § 30D(d)(1)(A) - (H). The IRA disallows the Clean Vehicle Credit for the purchase of vehicles that have a manufacturer’s suggested retail price (MSRP) in excess of the applicable limitation.<sup>2</sup> For vans, sport utility vehicles (SUVs), and pickup trucks, the applicable limitation is \$80,000, for other vehicles it is \$55,000. The IRA gives the Secretary of the Treasury discretion to prescribe regulations and guidance to determine vehicle classifications “using criteria similar to that employed by the Environmental Protection Agency (EPA) and the Department of Energy to determine size and class of vehicles.”<sup>3</sup>

Since vans, SUVs, and pickup trucks qualify for the credit at \$25,000 higher MSRP than other vehicles, it is important that taxpayers have clarity about when the higher MSRP applies and when it does not. The Department of Treasury should seek to provide clear, objective standards for differentiating between SUVs, vans, and pickup trucks vs. other vehicles that align with the direction provided in the IRA.

*IRS Request for Comments on Vehicle Classification*

Question 10 in the IRS’s request for comments asks the following:

(10) Vehicle Classifications.

(a) What, if any, guidance is needed to define how vehicles are classified as vans, sport utility vehicles, pickup trucks, or other designations of vehicles for purposes of the manufacturer’s suggested retail price limitation in § 30D(f)(11)?

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<sup>1</sup> Public Law 1179-169, 136 Stat. 1818 (August 16, 2022), commonly known as the “Inflation Reduction Act.”

<sup>2</sup> § 30D(f)(11).

<sup>3</sup> The EPA calculates average fuel economy levels for vehicle manufacturers and sets greenhouse gas standards, while the Department of Transportation’s National Highway Traffic and Safety Administration (NHTSA) sets and enforces fleet average fuel economy standards and is largely responsible for determining vehicle classifications. NHTSA and EPA have issued joint rules related to corporate average fuel economy (CAFE) standards. It is unclear what Department of Energy criteria Congress was referring to

(b) What criteria employed by the Environmental Protection Agency and Department of Energy or other factors (for example Department of Transportation motor vehicle type classification) should be considered in determining the designation of such vehicles?

*Response to IRS Request for Comments on Vehicle Classification*

Table 1 (and the paragraph following Table 1) provides my recommended vehicle classification criteria to use in determining whether a vehicle should be classified as a SUV, van, or pickup truck and therefore qualify for the higher applicable MSRP limitation. I will explain the rationale for these recommended criteria in the remainder of this document.

*Table 1: Recommended vehicle classification criteria for determining applicable MSRP limitation for the clean vehicle credit*

Recommended Criteria for Van or SUV	Recommended Criteria for Pickup Truck
<p>Must satisfy one of:</p> <p>Has interior volume of not less than 130 cubic feet -OR- Seats at least 6 passengers</p>	<p>Must satisfy:</p> <p>Designed to transport property on an open bed of at least 54-60 inches in length and 48-54 inches in width.</p>
<p>-AND- must meet criteria A or B</p> <p>A: Has 4-wheel drive/All-wheel drive and satisfies 4 out of 5 of the following at curb weight on a level surface with front wheels parallel to centerline, and tires inflated to manufacturer’s recommended pressure:<sup>4</sup></p> <ul style="list-style-type: none"> <li>• Approach angle of not less than 28°</li> <li>• Breakover angle of not less than 14°</li> <li>• Departure angle of not less than 20°</li> <li>• Running clearance of not less than 20 cm</li> <li>• Front &amp; rear axle clearance of not less than 18 cm each</li> </ul> <p>-OR –</p> <p>B: Satisfies both:<sup>5</sup></p> <ul style="list-style-type: none"> <li>• Is equipped with at least 3 rows of designated seating as standard equipment and</li> <li>• Allows expanded cargo-carrying or non-passenger capacity through the removal or stowing of foldable or pivoting seats to</li> </ul>	<p>-OR- must meet criteria A AND B</p> <p>A: Has 4-wheel drive or All-wheel drive<sup>6</sup> or satisfies 4 out of 5 of the following at curb weight on a level surface with front wheels parallel to centerline, and tires inflated to manufacturer’s recommended pressure:<sup>7</sup></p> <ul style="list-style-type: none"> <li>• Approach angle of not less than 28°</li> <li>• Breakover angle of not less than 14°</li> <li>• Departure angle of not less than 20°</li> <li>• Running clearance of not less than 20 cm</li> <li>• Front &amp; rear axle clearance of not less than 18 cm each</li> </ul> <p>-AND –</p> <p>B: Designed to transport property on an open bed (of any length/width)</p>

<sup>4</sup> To qualify for the higher applicable MSRP limitation a vehicle should be considered a light truck under Department of Transportation rules in 49 CFR 523.5 under the standards in effect at the time that the IRA was enacted. (The EPA defines sport utility vehicles as “light trucks with an extended roof line to increase cargo or passenger capacity, cargo compartment open to the passenger compartment, and one or more rear seats readily removed or folded to facilitate cargo carrying. Refer to 40 CFR 600.002.)

<sup>5</sup> Refer to 49 CFR 523.5(a)(5)(ii).

<sup>6</sup> Refer to 49 CFR 523.5(b)(1).

<sup>7</sup> Refer to 49 CFR 523.5(b)(2).

Recommended Criteria for Van or SUV	Recommended Criteria for Pickup Truck
create a level surface extending from the front of the seats to the back of the vehicle’s interior.	

In addition to the criteria provided in Table 1, any vehicle that satisfies any of the following criteria should also be considered to have met the criteria to qualify as a van or SUV, regardless of whether it has or lacks other features described in Table 1:<sup>8</sup>

- Seats at least 7 passengers and has interior volume greater than 140 cubic feet;
- Provides greater cargo-carrying volume than passenger-carrying volume (as in a cargo van) and has a total interior volume of greater than 140 cubic feet.

*Vehicle Size Classes Currently Employed by the EPA*

The IRA instructs the Secretary of Treasury to use criteria similar to that employed by the EPA and the Department of Energy to determine vehicles’ size and class. The EPA currently relies on an array of criteria to classify vehicles’ size and class in different circumstances rather than a single criterion.<sup>9</sup>

To differentiate between car sizes and station wagon sizes, the EPA relies on interior volume.<sup>10</sup> In ascending order of size, cars are classified as minicompact, subcompact, compact, mid-size, or large. Cars with two or fewer seats are classified as two seaters regardless of interior volume.

On the other hand, to determine the vehicle classifications of “non-passenger automobiles” (also known as light trucks), the EPA relies on gross vehicle weight ratings (GVWRs) and loaded vehicle weights, as well as the presence of various design features and off-road capabilities.<sup>11</sup> The EPA defines heavy-duty vehicles as motor vehicles with a gross vehicle weight rating (GVWR) above 8,500 pounds. Medium duty passenger vehicles are heavy-duty vehicles with a GVWR of less than 10,000 pounds that are designed primarily to transport persons. “Heavy light-duty” trucks have a GVWR greater than 6,000 pounds.<sup>12</sup> The EPA uses loaded vehicle weight to distinguish between classifications of light-duty trucks.

Size classifications for passenger cars excluding station wagons are shown in Table 2. Size classes for station wagons are shown in Table 3. Various criteria used by the EPA to determine vehicle

<sup>8</sup> Refer to 49 CFR 523.5(a)(1) and 49 CFR 523.5(a)(4). The Department of Transportation’s definition of a non-passenger automobile also includes vehicles that provide temporary living quarters (such as recreational vehicles) in 49 CFR 523.5(a)(2). If it is unlikely that manufacturers will make such vehicles that are capable of qualifying for the Clean Vehicles Credit in the near term, though there would be little harm in including that as a criteria that could qualify a vehicle as a van or SUV (alongside an interior volume requirement).

<sup>9</sup> Note the classification terms used in EPA reports often do not align with the terms and definitions provided in the agency’s regulations. See, for example, U.S. Environmental Protection Agency, “The 2021 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology Since 1975,” November 2021, <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P1013L10.pdf> (accessed October 21, 2022).

<sup>10</sup> The Administrator will classify passenger automobiles by car line into one of the following classes based on interior volume index or seating capacity except for those passenger automobiles which the Administrator determines are most appropriately placed in a different classification or classed as special purpose vehicles as provided in paragraph (a)(3) of this section.

<sup>11</sup> “Non-passenger automobile” is a vehicle classification defined by the Department of Transportation and consist mostly of pickup trucks, vans, and large SUVs. The EPA defines light truck as “an automobile that is not a passenger automobile, as defined by the Secretary of Transportation at 49 CFR 523.5. This term is interchangeable with ‘non-passenger automobile.’” Refer to 40 CFR 600.002.

<sup>12</sup> 49 CFR 523.5.

classifications for vehicles other than cars are summarized in Table 4. The vehicle classifications in Table 4 are not all mutually exclusive.

Table 2: EPA car size classifications<sup>13</sup>

Car Size Classifications	Interior Volume (in Cubic Feet)
Two-seater	N/A <sup>14</sup>
Minicompact	< 85
Subcompact	85 to 99
Compact	100 to 109
Mid-size	110 to 119
Large	120 or more

Table 3: EPA station wagon size classes<sup>15</sup>

Station Wagon Size Class	Interior Volume (in Cubic Feet)
Small	< 130
Mid-size	130 to 159
Large	160 or more

Table 4: EPA vehicle classifications<sup>16</sup>

Vehicle Classification	Vehicle type	Gross Vehicle Weight Rating	Loaded Vehicle Weight	Other Criteria
Light-duty truck 1	Light light-duty trucks -or- Small pickup trucks	< 6,000 pounds	< 3,750 pounds	i) Designed primarily for transportation of property; ii) Transports more than 12 passengers; or iii) Has features allowing off-road capabilities
Light-duty truck 2			3,751 + pounds	
Light-duty truck 3	Heavy light-duty trucks -or- Standard pickup trucks	6,001 – 8,500 pounds	< 5,750 pounds	i) Designed primarily for transportation of property; ii) Transports more than 12 passengers; or iii) Has features allowing off-road capabilities
Light-duty truck 4			5,751 + pounds	
Minivans	Light-duty truck	< 8,500 pounds		i) Vans/minivans have an integral enclosure fully enclosing the driver and load-carrying device; and

<sup>13</sup> 40 CFR 600.315-08.

<sup>14</sup> Cars with two or fewer seats are classified as two-seaters regardless of interior volume.

<sup>15</sup> *Ibid.*

<sup>16</sup> See 40 CFR 1803 and 40 CFR 600.315-08.

Vehicle Classification	Vehicle type	Gross Vehicle Weight Rating	Loaded Vehicle Weight	Other Criteria
Vans	Light-duty truck	< 8,500 pounds		ii) Vans/minivans have no body sections protruding more than 30 inches ahead of the windshield.  Minivans typically carry no more than eight passengers and include one or more sliding doors and a rear liftgate. <sup>17</sup>
Small SUV		< 6,000 pounds		Has an extended roof line, cargo compartment open to the passenger compartment and one or more rear seats that can be removed or folded. Must be considered a non-passenger automobile based on Department of Transportation definition.
Standard SUV		6,001 – 10,000 pounds		
Special-purpose vehicles		< 8,500 or 10,000 pounds		Based on determination of EPA administrator. “For example, the Administrator may determine that advanced technology vehicles [such as EVs]... should be appropriately classified as a type of “special purpose vehicle.”
Medium-duty passenger vehicles	Heavy-duty vehicles	8,501 – 10,000 pounds		Is designed primarily for transportation of persons AND does NOT satisfy any of the following: i) Is an “incomplete truck”, does not have seating capacity for more than 12 persons, ii) Is designed to allow nine persons in seating behind the driver’s seat, iii) Has an open cargo area (truck bed) of 6 feet or more.
Heavy-duty vehicles		8,501+ pounds		

The vehicle classifications in the EPA regulations as summarized in Tables 2 - 4 are not clear-cut or fully defined. The phrase “Has features allowing off-highway capabilities” is not clarified by the EPA, and ultimately the determination for whether it is satisfied is based on criteria provided by the NHTSA.<sup>18</sup> To qualify as a non-passenger automobile (and potentially a SUV based on the definition of sport utility vehicle in 40 CFR 600.002) based on being capable of off-highway operation, the NHTSA currently states that a vehicle must satisfy (1) or (2):

- (1) Have 4-wheel drive; -OR-
- (2) Be rated at more than 6,000 pounds GVWR

AND satisfy four out of five of (I) – (V) at curb weight on a level surface with front wheels parallel to centerline, and tires inflated to manufacturer’s recommended pressure:

- (I) Approach angle of not less than 28°;
- (II) Breakover angle of not less than 14°;
- (III) Departure angle of not less than 20°;
- (IV) Running clearance of not less than 20 cm;
- (V) Front & rear axle clearance of not less than 18 cm each.

<sup>17</sup> 40 CFR 600.002.

<sup>18</sup> *Federal Register*, Vol. 87, No. 84 (May 2, 2022), pp. 26053-26054.

The Department of Transportation relies on auto manufacturers to test these off-road capable criteria. The current Department of Transportation criteria may be short-lived. The Department of Transportation appears determined to impose stricter requirements to determine whether vehicles are off-road capable as it stated in the Federal Register in May 2022:

*“The purpose for our previous flexibility was to afford maximum leniency for vehicles necessary for off-road work purposes. However, given the vast proliferation of SUVs and crossovers—the majority of which will never be used for off-road purposes—we believe that we will need to reevaluate what features are indicative of off-road purposes in the near future.”<sup>19</sup>*

Such ambiguity explains why the EPA regulations state, “All automobiles which possess features that could apply to two classes will be classified by the Administrator based on the Administrator’s judgment on which class of vehicles consumers are more likely to make comparisons.”<sup>20</sup>

The current Department of Transportation regulations on which the EPA relies state that vehicles may also qualify as non-passenger automobiles (and potentially SUVs or vans) if they are designed to do at least one of the following:<sup>21</sup>

- (1) Transport more than 10 persons;
- (2) Provide temporary living quarters;
- (3) Transport property on an open bed,
- (4) Provide greater cargo-carrying volume than passenger-carrying volume; -OR-
- (5) Permit expanded use of the automobile for cargo-carrying purposes (e.g., by allowing stowing of foldable or pivoting seats).

#### *The Problem with Relying on GVWR to classify clean SUVs, vans, and pickup trucks*

A vehicle’s GVWR is the maximum loaded weight that a vehicle is designed to carry consistent with sound engineering judgment (as specified by the manufacturer). Trucks, vans, and SUVs typically must bear more cargo and passenger weight than cars must bear. In most cases, GVWR serves as a reasonable measure of a gas-powered vehicle’s ability to withstand greater external weights and burdens.

However, all else being equal, an electric vehicle is capable of carrying less cargo and passenger weight than a gas-powered vehicle with the same GVWR.<sup>22</sup> That is because GVWR includes the weight of the vehicle and its components, and electric vehicles must carry battery packs that typically weigh considerably more than gas-powered engines. Electric SUVs’ battery packs may weigh 2,000 pounds or more, whereas a gas-powered SUV’s engine will typically weigh about 500 pounds. If the Department of Treasury decides to use GVWR as a criterion to classify clean vehicles as SUVs, vans, or pickup trucks, that measure should be adjusted to account for the excess weight of the vehicle’s battery pack, fuel cells, motor/engine, and transmission (as applicable) above the weight of a comparable gas-powered engine and transmission.<sup>23</sup>

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<sup>19</sup> *Ibid.*

<sup>20</sup> 40 CFR 600.315-08(a)(3)(ii).

<sup>21</sup> In practice most vehicles that qualify as SUVs do so based on (5).)

<sup>22</sup> Stated differently, all else being equal, an electric vehicle will suffer more strain and have more risk of damage than a gas-powered vehicle with the GVWR carrying the same passenger and cargo load.

<sup>23</sup> For example, a GVWR of 7,000 pounds for an electric vehicle with a 1,500 lb. battery and motor would be considered equivalent to a GVWR of 6,000 for a gas-powered vehicle with an engine and transmission that weigh 500 lb.

The EPA subjects vehicles of different classes and sizes to different emissions regulations and standards.<sup>24</sup> Since clean vehicles have zero emissions, the difference between the weight of electric vehicles and gas-powered vehicles has not arisen as a major issue for EPA rules (an electric vehicle would satisfy emissions standards regardless of class and size.) The Secretary of the Treasury, however, should not ignore that there are differences in weights of electric vehicles versus gas-powered vehicles when determining which clean vehicles should qualify for the higher MSRP limitation of SUVs, vans, and pickup trucks.<sup>25</sup> For gas-powered vehicles, having a GVWR of more than 6,000 pounds is a reasonable measure indicating that a gas-powered vehicle is a family or work-capable automobile. For clean vehicles, a GVWR of 6,000 pounds is far less meaningful. Failing to account for the added weight inherent in electric vehicles when classifying vehicles could extend the tax credit to the purchase of luxury cars.

In addition, using GVWR to classify electric vehicles could be counterproductive toward achieving emissions reductions, which was ostensibly why lawmakers created the clean vehicles credit.<sup>26</sup> If clean SUVs, vans, and pickup trucks are to become commercially competitive with gas-powered vehicles, electric vehicle manufacturers will need to innovate and find ways to develop smaller, more efficient and more energy-dense batteries and fuel cells. Credits should not be more readily available for vehicles simply because they are designed to carry heavier batteries.

### *Interior Volume*

Given the shortcomings of using GVWR to classify clean vehicles and given the potentially evolving standards of the Department of Transportation, the Secretary of Treasury should instead rely on interior volume as a factor to identify vehicles reasonably classified as SUVs and vans, as the EPA currently does in determining the size classes of cars and station wagons. Among the 25 bestselling cars, trucks, and SUVs of 2021 according to Car and Driver magazine and the 15 best-selling U.S. cars in 2021 according to Newsweek,<sup>27</sup> all non-pickups with an interior volume of less than 130 cubic feet are in the car regulatory class (and therefore should not qualify as SUVs, vans, or pickup trucks).

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<sup>24</sup> See, for example, 40 CFR 86.1811-04.

<sup>25</sup> The apparent reason that the IRA allows SUVs, vans, and pickup trucks to sell at a higher MSRP and still qualify for the clean vehicles credits is to disallow the credit for luxury vehicles but to allow the credit for family vehicles or work-capable vehicles that offer more space for passengers, more cargo or towing capacity, and/or the ability to be used off-road or under more arduous conditions. For example, in House of Representatives floor debate, Rep. Dan Kildee (D-Mich.) said, “I mentioned earlier in the conversation there was a suggestion a person making \$750,000 could buy an \$80,000 vehicle and get the credit. Simply not true. A sedan is capped at \$55,000.”

<sup>26</sup> Legislators who voted for the IRA and the media frequently refer to the IRA as a “climate bill” because of its emphasis on “decarbonizing the economy.” Francesca Paris, Alicia Parlapiano, Margot Sanger-Katz, and Eve Washington, “A Detailed Picture of What’s in the Democrats’ Climate and Health Bill,” *The New York Times*, August 16, 2022, <https://www.nytimes.com/interactive/2022/08/13/upshot/whats-in-the-democrats-climate-health-bill.html> (accessed October 18, 2022). Amy B. Wang, “Biden Signs Sweeping Bill to Tackle Climate Change, Lower Health-Care Costs,” *The Washington Post*, August 16, 2022, <https://www.washingtonpost.com/politics/2022/08/16/biden-inflation-reduction-act-signing/> (accessed October 18, 2022). Senate Democrats, “Summary of the Energy Security and Climate Change Investments in the Inflation Reduction Act of 2022,” [https://www.democrats.senate.gov/imo/media/doc/summary\\_of\\_the\\_energy\\_security\\_and\\_climate\\_change\\_investments\\_in\\_the\\_inflation\\_reduction\\_act\\_of\\_2022.pdf](https://www.democrats.senate.gov/imo/media/doc/summary_of_the_energy_security_and_climate_change_investments_in_the_inflation_reduction_act_of_2022.pdf) (accessed October 18, 2022).

<sup>27</sup> “Top 25 Bestselling Cars, Trucks, and SUVs of 2021,” Car and Driver, <https://www.caranddriver.com/news/g36005989/best-selling-cars-2021/> (accessed October 21, 2022). “15 Best-Selling Cars in the US in 2021,” Newsweek, July 26, 2021, <https://www.newsweek.com/15-best-selling-cars-us-2021-1606971> (accessed October 21, 2022).

Table 5: Features of top-selling cars, pickups, and SUVs in 2021<sup>28</sup>

Make and Model	Interior Volume (Cubic Ft.)	Truck Bed	Marketed as	Regulatory Class
Ford F-Series	-	X	Pickup Truck	Truck
RAM	-	X	Pickup Truck	Truck
Chevrolet Silverado	-	X	Pickup Truck	Truck
Toyota RAV4	-	X	Pickup Truck	Truck
Ford Explorer	170.9		SUV	Truck
Honda Pilot	168.2		SUV	Car
Toyota Highlander	157.3		SUV	Truck
Hyundai Tucson	146.9		Compact SUV	Truck
Honda CR-V	145.1		Compact SUV	Truck
Toyota 4Runner	144.5		SUV	Truck
Subaru Outback	141.5		Station wagon	Both
Jeep Grand Cherokee	140.5		SUV	Truck
Subaru Forester	140.5		Compact SUV	Both
Ford Escape	137.5		Compact SUV	Truck
Nissan Rogue	137		Compact SUV	Truck*
Toyota RAV4	136.4		Compact SUV	Truck
Tesla Model Y	136.2		Crossover	Car
Jeep Wrangler	135.7		SUV	Truck
Mazda CX-5	134.5		Compact SUV	Truck
Chevrolet Equinox	133.4		Compact SUV	Truck
Honda Civic	123.5		Sedan	Car
Honda Accord	122.3		Sedan	Car
Kia K5	121.3		Sedan	Car
Kia Soul	120.9		Subcompact SUV	Car
Dodge Charger	120.8		Sedan	Car
Toyota Prius	120.5		Hatchback	Car
Hyundai Sonata	120.4		Sedan	Car
Chevrolet Malibu	118.7		Sedan	Car
Nissan Altima	116		Sedan	Car
Toyota Camry	115.5		Sedan	Car
Hyundai Elantra	113.6		Sedan	Car
Kia Forte	111.3		Sedan	Car
Nissan Sentra	110.3		Sedan	Car
Nissan Versa	103.6		Sedan	Car
Toyota Corolla	101.7		Sedan	Car

<sup>28</sup> Based on vehicle specifications as provided by edmunds.com, <https://www.beachford.net/2022-ford-explorer-interior/>, <https://www.lexusofhenderson.com/lexus-rx-v-tesla/>, <https://www.billbrownford.net/2022-ford-escape-dimensions/#:~:text=Ford%20Escape%20Interior%20Dimensions,-The%20new%20Ford&text=Passenger%20Volume%3A%20104%20cubic%20feet,Front%20Leg%20Room%3A%2042.4%20inches>, [https://www.tesla.com/ownersmanual/modely/en\\_us/GUID-E47C4A6D-528E-419C-8C57-FD3864644C34.html](https://www.tesla.com/ownersmanual/modely/en_us/GUID-E47C4A6D-528E-419C-8C57-FD3864644C34.html), <https://www.laethemcdjr.com/2022-jeep-wrangler-interior/>, and <https://media.chevrolet.com/media/us/en/chevrolet/vehicles/Equinox/2022.tab1.html>.

Since the EPA distinguishes between car size classifications using interior volume, using interior volume to distinguish between vans and SUVs vs. other vehicles is consistent with the IRA's instruction to use criteria similar to that employed by the EPA to determine size and class of vehicles.

As was noted above, the apparent reason the IRA allows vans, SUVs and pickup trucks to sell at a higher price than cars while still qualifying for the Clean Vehicles Credit is because the higher price of vans, SUVs, and pickups is not necessarily an indication of luxury but of function. While larger vehicles cost more, they may be a necessity for larger families or for drivers using vehicles for work. Requiring that vehicles have an interior volume of at least 130 cubic feet to be considered a van or SUV would discourage manufacturers from designing luxury cars that are not large enough to serve as a family or work vehicle yet receive the credit by narrowly meeting the off-road or other criteria ultimately chosen by the Department of Treasury.

While a minimum interior volume threshold of 130 cubic feet would discourage luxury vehicle makers from trying to take advantage of the credit, such a standard would not unduly restrict the credit from vehicles that are reasonably classified as vans or SUVs. Among the most popular cars, SUVs, vans, and pickup trucks selling today, only the Kia Soul is marketed as a (subcompact) SUV despite having an interior volume of less than 130 cubic feet, and the Soul would not qualify as a light truck or SUV based on NHTSA's existing standards. Also, notably, the MSRP of the Kia Soul is approximately \$20,000 to \$25,000, meaning a comparable electric car would easily qualify for the applicable price limitation whether it was classified as an SUV or other vehicle.<sup>29</sup>

### *Bed Length*

The distinguishing feature of pickup trucks is not interior volume, but the presence of a truck bed. It would not be appropriate to include an interior volume requirement for pickup trucks, but in lieu of meeting an interior volume threshold, the Department of Treasury should require pickup trucks to meet a specified minimum truck bed length (perhaps 54 to 60 inches) to qualify for the clean vehicle credit at the higher price limitation.

### *Off-Road Capable*

Under the existing NHTSA rules, to be considered as having features that allow off-highway capabilities, a vehicle currently must have 4-wheel or have a GVWR rating of over 6,000 pounds and meet four out of five criteria related to turn angles and clearance. The Department of Transportation is likely to issue new regulations to tighten the definition of features that allow off-road capabilities. If NHTSA revises its definition of what qualifies as off-road capable, the Department of Treasury should likewise adjust Criteria A in Table 1 if it is feasible to do so. For the time being, NHTSA's existing four-out-of-five criteria, coupled with 4-wheel drive or all-wheel drive should be used to determine whether a vehicle has off-road capable features. Since electric vehicles with heavy battery packs need a higher GVWR just to offer the same level of off-road utility, GVWR should not be considered as a factor in determining the off-road capability of clean vehicles.

### *Stowable Third-row Seating*

Under 49 CFR 523.5(5), a vehicle that does not have off-road capabilities may qualify as a non-passenger vehicle (and potentially a SUV) if it is equipped with at least 3 rows of designated seating as standard equipment and allows expanded cargo-carrying or non-passenger capacity through the removal or stowing of foldable or pivoting seats to create a level surface extending from the front of the seats to the back of

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<sup>29</sup> <https://www.kbb.com/kia/soul/2022/>.

the vehicle's interior. Assuming an interior volume of at least 130 cubic feet and/or the capability of seating at least six, a vehicle with stowable third-row seating should qualify a vehicle as a van/SUV for purposes of the Clean Vehicle Credit. This existing standard used by the EPA to qualify vehicles as light trucks/SUVs is reasonable; vehicles that meet these criteria are functional family vehicles that are broadly perceived as SUVs. The stowable third-row seating criteria works equally well for distinguishing SUVs and vans whether gas-powered, electric-powered, or otherwise.