

§ 32904. Calculation of average fuel economy

(a) METHOD OF CALCULATION.—(1) The Administrator of the Environmental Protection Agency shall calculate the average fuel economy of a manufacturer subject to—

(A) section 32902(a) of this title in a way prescribed by the Administrator; and

(B) section 32902(b)–(d) of this title by dividing—

(i) the number of passenger automobiles manufactured by the manufacturer in a model year; by

(ii) the sum of the fractions obtained by dividing the number of passenger automobiles of each model manufactured by the manufacturer in that model year by the fuel economy measured for that model.

(2)(A) In this paragraph, “electric vehicle” means a vehicle powered primarily by an electric motor drawing electrical current from a portable source.

(B) If a manufacturer manufactures an electric vehicle, the Administrator shall include in the calculation of average fuel economy under paragraph (1) of this subsection equivalent petroleum based fuel economy values determined by the Secretary of Energy for various classes of electric vehicles. The Secretary shall review those values each year and determine and propose necessary revisions based on the following factors:

(i) the approximate electrical energy efficiency of the vehicle, considering the kind of vehicle and the mission and weight of the vehicle.

(ii) the national average electrical generation and transmission efficiencies.

(iii) the need of the United States to conserve all forms of energy and the relative scarcity and value to the United States of all fuel used to generate electricity.

(iv) the specific patterns of use of electric vehicles compared to petroleum-fueled vehicles.

(b) SEPARATE CALCULATIONS FOR PASSENGER AUTOMOBILES MANUFACTURED DOMESTICALLY AND NOT DOMESTICALLY.—(1)(A) Except as provided in paragraphs (6) and (7) of this subsection, the Administrator shall make separate calculations under subsection (a)(1)(B) of this section for—

(i) passenger automobiles manufactured domestically by a manufacturer (or included in this category under paragraph (5) of this subsection); and

(ii) passenger automobiles not manufactured domestically by that manufacturer (or excluded from this category under paragraph (5) of this subsection).

(B) Passenger automobiles described in subparagraph (A)(i) and (ii) of this paragraph are deemed to be manufactured by separate manufacturers under this chapter, except for the purposes of section 32903.

(2) In this subsection (except as provided in paragraph (3)), a passenger automobile is deemed to be manufactured domestically in a model year if at least 75 percent of the cost to the manufacturer is attributable to value added in the United States or Canada, unless the as-

sembly of the automobile is completed in Canada and the automobile is imported into the United States more than 30 days after the end of the model year.

(3)(A) In this subsection, a passenger automobile is deemed to be manufactured domestically in a model year, as provided in subparagraph (B) of this paragraph, if at least 75 percent of the cost to the manufacturer is attributable to value added in the United States, Canada, or Mexico, unless the assembly of the automobile is completed in Canada or Mexico and the automobile is imported into the United States more than 30 days after the end of the model year.

(B) Subparagraph (A) of this paragraph applies to automobiles manufactured by a manufacturer and sold in the United States, regardless of the place of assembly, as follows:

(i) A manufacturer that began assembling automobiles in Mexico before model year 1992 may elect, during the period from January 1, 1997, through January 1, 2004, to have subparagraph (A) of this paragraph apply to all automobiles manufactured by that manufacturer beginning with the model year that begins after the date of the election.

(ii) For a manufacturer that began assembling automobiles in Mexico after model year 1991, subparagraph (A) of this paragraph applies to all automobiles manufactured by that manufacturer beginning with the model year that begins after January 1, 1994, or the model year beginning after the date the manufacturer begins assembling automobiles in Mexico, whichever is later.

(iii) A manufacturer not described in clause (i) or (ii) of this subparagraph that assembles automobiles in the United States or Canada, but not in Mexico, may elect, during the period from January 1, 1997, through January 1, 2004, to have subparagraph (A) of this paragraph apply to all automobiles manufactured by that manufacturer beginning with the model year that begins after the date of the election. However, if the manufacturer begins assembling automobiles in Mexico before making an election under this subparagraph, this clause does not apply, and the manufacturer is subject to clause (ii) of this subparagraph.

(iv) For a manufacturer that does not assemble automobiles in the United States, Canada, or Mexico, subparagraph (A) of this paragraph applies to all automobiles manufactured by that manufacturer beginning with the model year that begins after January 1, 1994.

(v) For a manufacturer described in clause (i) or (iii) of this subparagraph that does not make an election within the specified period, subparagraph (A) of this paragraph applies to all automobiles manufactured by that manufacturer beginning with the model year that begins after January 1, 2004.

(C) The Secretary of Transportation shall prescribe reasonable procedures for elections under subparagraph (B) of this paragraph.

(4) In this subsection, the fuel economy of a passenger automobile that is not manufactured domestically is deemed to be equal to the average fuel economy of all passenger automobiles manufactured by the same manufacturer that are not manufactured domestically.

(5)(A) A manufacturer may submit to the Secretary of Transportation for approval a plan, including supporting material, stating the actions and the deadlines for taking the actions, that will ensure that the model or models referred to in subparagraph (B) of this paragraph will be manufactured domestically before the end of the 4th model year covered by the plan. The Secretary promptly shall consider and act on the plan. The Secretary shall approve the plan unless—

(i) the Secretary finds that the plan is inadequate to meet the requirements of this paragraph; or

(ii) the manufacturer previously has submitted a plan approved by the Secretary under this paragraph.

(B) If the plan is approved, the Administrator shall include under paragraph (1)(A)(i) and exclude under paragraph (1)(A)(ii) of this subsection, for each of the 4 model years covered by the plan, not more than 150,000 passenger automobiles manufactured by that manufacturer but not qualifying as domestically manufactured if—

(i) the model or models involved previously have not been manufactured domestically;

(ii) at least 50 percent of the cost to the manufacturer of each of the automobiles is attributable to value added in the United States or Canada;

(iii) the automobiles, if their assembly was completed in Canada, are imported into the United States not later than 30 days after the end of the model year; and

(iv) the model or models are manufactured domestically before the end of the 4th model year covered by the plan.

(c) TESTING AND CALCULATION PROCEDURES.—The Administrator shall measure fuel economy for each model and calculate average fuel economy for a manufacturer under testing and calculation procedures prescribed by the Administrator. However, except under section 32908 of this title, the Administrator shall use the same procedures for passenger automobiles the Administrator used for model year 1975 (weighted 55 percent urban cycle and 45 percent highway cycle), or procedures that give comparable results. A measurement of fuel economy or a calculation of average fuel economy (except under section 32908) shall be rounded off to the nearest .1 of a mile a gallon. The Administrator shall decide on the quantity of other fuel that is equivalent to one gallon of gasoline. To the extent practicable, fuel economy tests shall be carried out with emissions tests under section 206 of the Clean Air Act (42 U.S.C. 7525).

(d) EFFECTIVE DATE OF PROCEDURE OR AMENDMENT.—The Administrator shall prescribe a procedure under this section, or an amendment (except a technical or clerical amendment) in a procedure, at least 12 months before the beginning of the model year to which the procedure or amendment applies.

(e) REPORTS AND CONSULTATION.—The Administrator shall report measurements and calculations under this section to the Secretary of Transportation and shall consult and coordinate with the Secretary in carrying out this section.

(Pub. L. 103–272, § 1(e), July 5, 1994, 108 Stat. 1062; Pub. L. 103–429, § 6(36), Oct. 31, 1994, 108 Stat. 4380; Pub. L. 104–287, § 5(63), Oct. 11, 1996, 110 Stat. 3395; Pub. L. 110–140, title I, §§ 104(b)(2), 113(a), Dec. 19, 2007, 121 Stat. 1503, 1508.)

HISTORICAL AND REVISION NOTES
PUB. L. 103–272

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32904(a)(1) ..	15:2003(a)(1), (2).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(a)(1), (2), (d)–(f); added Dec. 22, 1975, Pub. L. 94–163, § 301, 89 Stat. 906, 907.
32904(a)(2) ..	15:2003(a)(3).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(a)(3); added Jan. 7, 1980, Pub. L. 96–185, § 18 (related to § 503(a)(3) of Motor Vehicle Information and Cost Savings Act), 93 Stat. 1336.
32904(b)(1) ..	15:2003(b)(2).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(b)(1), (2); added Dec. 22, 1975, Pub. L. 94–163, § 301, 89 Stat. 906; Oct. 10, 1980, Pub. L. 96–425, § 4(c)(2), (3), 8(e), 94 Stat. 1824, 1829.
32904(b)(2) ..	15:2003(b)(1).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(b)(4); added Oct. 10, 1980, Pub. L. 96–425, § 4(b), 94 Stat. 1824.
32904(b)(3) ..	15:2003(b)(4).	
32904(b)(4)–(6).	15:2003(b)(3).	Oct. 20, 1972, Pub. L. 92–513, 86 Stat. 947, § 503(b)(3); added Oct. 10, 1980, Pub. L. 96–425, § 4(a)(1), 94 Stat. 1822; Nov. 8, 1984, Pub. L. 98–620, § 402(18), 98 Stat. 3358.
32904(c)	15:2003(d)(1) (1st–3d sentences), (2), (e).	
32904(d)	15:2003(d)(3).	
32904(e)	15:2003(d)(1) (last sentence), (f).	

In subsection (a)(1), before clause (A), the words “of a manufacturer subject to” are substituted for “for the purposes of” for clarity. In clause (B)(ii), the words “the sum of the fractions obtained by” are substituted for “a sum of terms, each term of which is a fraction created by” to eliminate unnecessary words.

Subsection (a)(2)(A) is substituted for “as defined in section 2012(b)(2) of this title” for clarity.

In subsection (a)(2)(B), before clause (i), the words “the Administrator shall include in the calculation of average fuel economy” are substituted for “the average fuel economy will be calculated . . . to include” for clarity. The text of 15:2003(a)(3)(B) is omitted as executed. The words “determine and propose” are substituted for “propose” for clarity and consistency with the authority of the Secretary under the source provisions. The words “based on the following factors” are substituted for “Determination of these fuel economy values will take into account the following parameters” for clarity and to eliminate unnecessary words. The factors in clauses (i)–(iv) are applied to revisions in fuel economy values for clarity and consistency with the authority of the Secretary under the source provisions. In clause (iv), the words “patterns of use” are substituted for “driving patterns” for clarity.

In subsection (b)(1), before clause (A), the text of 15:2003(b)(2)(A)–(D) is omitted as executed. In clause (A), the words “is imported . . . more than 30 days after” are substituted for “is not imported . . . prior to the expiration of 30 days following” for clarity and for consistency in the revised chapter. The words “The EPA Administrator may prescribe rules for purposes of carrying out this subparagraph” are omitted as surplus because of the authority of the Administrator to prescribe regulations under section 32910(d) of the revised title. The term “regulations” is used in section 32910(d) instead of “rules” for consistency in the revised title and because the terms are synonymous. In clause (B), the words “which is imported by a manufacturer in

model year 1978 or any subsequent year, as the case may be, and” are omitted as surplus.

In subsection (b)(2)(A), before clause (i), the words “Except as provided in paragraphs (4) and (5) of this subsection” are added for clarity. The words “the Administrator shall make separate calculations” are substituted for “In calculating average fuel economy . . . the EPA Administrator shall separate the total number of passenger automobiles manufactured by a manufacturer into the following two categories” and “The EPA Administrator shall calculate the average fuel economy of each such separate category” to eliminate unnecessary words. In clauses (i) and (ii), the reference in the parenthetical to paragraph (3) is substituted for the reference in the source to paragraph (3), which apparently should have been a reference to paragraph (4). The text of 15:2003(b)(1)(A) (words in parentheses) and (B) (words in parentheses) is omitted as executed.

Subsection (b)(2)(B) is substituted for 15:2003(b)(1) (words after last comma) because of the restatement.

In subsection (b)(3)(A), before clause (i), the word “deadlines” is substituted for “dates” for clarity. The text of 15:2003(b)(4)(C) is omitted as executed.

In subsection (b)(4)(A), before clause (i), the words “A manufacturer may file with the Secretary of Transportation a petition for an exemption from the requirement of separate calculations under paragraph (2)(A) of this subsection” are substituted for “petition . . . for an exemption from the provisions of paragraph (1) filed by a manufacturer, the Secretary” for clarity.

In subsection (b)(5)(B), the words “judgment of the court under this subparagraph may be reviewed” are substituted for “judgment of the court affirming, remanding, or setting aside, in whole or in part, any such decision shall be final, subject to review” to eliminate unnecessary words.

In subsection (b)(5)(C), the words “Notwithstanding any other provision of law” are omitted as surplus. The words “a petition for” are added for consistency.

In subsection (c), the words “of a model type” and “of a manufacturer” are omitted as surplus. The words “by rule” are omitted as surplus because of the authority of the Administrator to prescribe regulations under section 32910(d) of the revised title. The term “regulations” is used in section 32910(d) instead of “rules” for consistency in the revised title and because the terms are synonymous. The words “However . . . the Administrator shall use the same procedures for passenger automobiles the Administrator used” are substituted for “Procedures so established with respect to passenger automobiles . . . shall be the procedures utilized by the EPA Administrator” for clarity. The words “(in accordance with rules of the EPA Administrator)” are omitted as surplus. The words “fuel economy tests shall be carried out with” are substituted for “Procedures under this subsection . . . shall require that fuel economy tests be conducted in conjunction with” to eliminate unnecessary words.

In subsection (d), the words “The Administrator shall prescribe a procedure under this section, or an amendment . . . at least” are substituted for “Testing and calculation procedures applicable to a model year and any amendment to such procedures . . . shall be promulgated not less than” to eliminate unnecessary words.

In subsection (e), the words “his duties under” are omitted as surplus.

PUB. L. 103-429, §6(36)(A)

This makes conforming amendments necessary because of the restatement of 15:2003(b)(2)(G) as 49:32904(b)(3) by section 6(36)(B) of the bill.

PUB. L. 103-429, §6(36)(B)

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
32904(b)	15:2003(b)(2)(E), (G).	Oct. 20, 1972, Public Law 92-513, §503(b)(2)(E), (G), as amended Dec. 8, 1993, Pub. L. 103-182, §371, 107 Stat. 2127.

The text of 49:32904(b)(1) is the text of 49:32904(b)(2), as enacted by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 1063), with conforming changes made in the cited cross-references.

The text of subsection (b)(2) is the text of 49:32904(b)(1)(A), as enacted by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 1063), with the amendments of the underlying source provisions of 49:32904(b)(1)(A) made by section 371(b)(1) of the North American Free Trade Implementation Act (Public Law 103-182, 107 Stat. 2128). The words “(except as provided in paragraph (3))” are substituted for “Except as provided in subparagraph (G)” because of the restatement of 15:2003(b)(2)(G) as 49:32904(b)(3).

In subsection (b)(3)(A), the words “is imported . . . more than 30 days after” are substituted for “is not imported . . . prior to the expiration of 30 days following” for clarity and consistency with title 49, United States Code.

In subsection (b)(3)(C), the words “and the EPA Administrator may prescribe rules for purposes of carrying out this subparagraph” are omitted as surplus because of the authority of the Administrator to prescribe regulations under 49:32910(d). The amendment made by section 371(b)(2) of the North American Free Trade Implementation Act (Public Law 103-182, 107 Stat. 2128) is not given effect because the last sentence of section 503(b)(2)(E) of the Motor Vehicle and Cost Savings Act (Public Law 92-513, 86 Stat. 947) was omitted in the restatement of title 49 because of the authority of the Administrator to prescribe regulations under 49:32910(d).

The text of subsection (b)(4) is the text of 49:32904(b)(1)(B), as enacted by section 1 of the Act of July 5, 1994 (Public Law 103-272, 108 Stat. 1063).

PUB. L. 103-429, §6(36)(C), (D)

This makes conforming amendments necessary because of the restatement of 15:2003(b)(2)(G) as 49:32904(b)(3) by section 6(36)(B) of the bill.

AMENDMENTS

2007—Subsec. (b)(1)(B). Pub. L. 110-140, §104(b)(2), inserted “, except for the purposes of section 32903” before period at end.

Subsec. (b)(6) to (8). Pub. L. 110-140, §113(a), struck out pars. (6) to (8) which related to exemption from separate calculations requirement, judicial review of denial of petition, and unavailability of section 32903(a) and (b)(2) credits during model year when exemption is effective, respectively.

1996—Subsec. (b)(6)(C). Pub. L. 104-287 substituted “Committee on Commerce” for “Committee on Energy and Commerce”.

1994—Subsec. (b)(1). Pub. L. 103-429, §6(36)(B), added par. (1) and struck out former par. (1) which read as follows: “In this subsection—

“(A) a passenger automobile is deemed to be manufactured domestically in a model year if at least 75 percent of the cost to the manufacturer is attributable to value added in the United States or Canada, unless the assembly of the automobile is completed in Canada and the automobile is imported into the United States more than 30 days after the end of the model year; and

“(B) the fuel economy of a passenger automobile that is not manufactured domestically is deemed to be equal to the average fuel economy of all passenger automobiles manufactured by the same manufacturer that are not manufactured domestically.”

Subsec. (b)(2). Pub. L. 103-429, §6(36)(B), added par. (2) and struck out former par. (2) which read as follows:

“(2)(A) Except as provided in paragraphs (4) and (5) of this subsection, the Administrator shall make separate calculations under subsection (a)(1)(B) of this section for—

“(i) passenger automobiles manufactured domestically by a manufacturer (or included in this category under paragraph (3) of this subsection); and

“(ii) passenger automobiles not manufactured domestically by that manufacturer (or excluded from this category under paragraph (3) of this subsection).”

“(B) Passenger automobiles described in subparagraph (A)(i) and (ii) of this paragraph are deemed to be manufactured by separate manufacturers under this chapter.”

Subsec. (b)(3), (4). Pub. L. 103-429, §6(36)(B), added pars. (3) and (4). Former pars. (3) and (4) redesignated (5) and (6), respectively.

Subsec. (b)(5). Pub. L. 103-429, §6(36)(A), redesignated par. (3) as (5). Former par. (5) redesignated (7).

Subsec. (b)(5)(B). Pub. L. 103-429, §6(36)(C), substituted “paragraph (1)(A)(i) and exclude under paragraph (1)(A)(ii)” for “paragraph (2)(A)(i) and exclude under paragraph (2)(A)(ii)” in introductory provisions.

Subsec. (b)(6). Pub. L. 103-429, §6(36)(A), redesignated par. (4) as (6). Former par. (6) redesignated (8).

Subsec. (b)(6)(A). Pub. L. 103-429, §6(36)(D), substituted “paragraph (1)(A)” for “paragraph (2)(A)” in introductory provisions.

Subsec. (b)(7), (8). Pub. L. 103-429, §6(36)(A), redesignated pars. (5) and (6) as (7) and (8), respectively.

EFFECTIVE DATE OF 2007 AMENDMENT

Amendment by Pub. L. 110-140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

EFFECT OF REPEAL ON EXISTING EXEMPTIONS

Pub. L. 110-140, title I, §113(b), (c), Dec. 19, 2007, 121 Stat. 1508, provided that:

“(b) EFFECT OF REPEAL ON EXISTING EXEMPTIONS.—Any exemption granted under section 32904(b)(6) of title 49, United States Code, prior to the date of the enactment of this Act [Dec. 19, 2007] shall remain in effect subject to its terms through model year 2013.

“(c) ACCRUAL AND USE OF CREDITS.—Any manufacturer holding an exemption under section 32904(b)(6) of title 49, United States Code, prior to the date of the enactment of this Act may accrue and use credits under sections 32903 and 32905 of such title beginning with model year 2011.”

§ 32905. Manufacturing incentives for alternative fuel automobiles

(a) DEDICATED AUTOMOBILES.—Except as provided in subsection (c) of this section or section 32904(a)(2) of this title, for any model of dedicated automobile manufactured by a manufacturer after model year 1992, the fuel economy measured for that model shall be based on the fuel content of the alternative fuel used to operate the automobile. A gallon of a liquid alternative fuel used to operate a dedicated automobile is deemed to contain .15 gallon of fuel.

(b) DUAL FUELED AUTOMOBILES.—Except as provided in subsection (d) of this section or section 32904(a)(2) of this title, for any model of dual fueled automobile manufactured by a manufacturer in model years 1993 through 2019, the Administrator of the Environmental Protection Agency shall measure the fuel economy for that model by dividing 1.0 by the sum of—

(1) .5 divided by the fuel economy measured under section 32904(c) of this title when operating the model on gasoline or diesel fuel; and

(2) .5 divided by the fuel economy—

(A) measured under subsection (a) when operating the model on alternative fuel; or

(B) measured based on the fuel content of B20 when operating the model on B20, which is deemed to contain 0.15 gallon of fuel.

(c) GASEOUS FUEL DEDICATED AUTOMOBILES.—For any model of gaseous fuel dedicated auto-

mobile manufactured by a manufacturer after model year 1992, the Administrator shall measure the fuel economy for that model based on the fuel content of the gaseous fuel used to operate the automobile. One hundred cubic feet of natural gas is deemed to contain .823 gallon equivalent of natural gas. The Secretary of Transportation shall determine the appropriate gallon equivalent of other gaseous fuels. A gallon equivalent of gaseous fuel is deemed to have a fuel content of .15 gallon of fuel.

(d) GASEOUS FUEL DUAL FUELED AUTOMOBILES.—For any model of gaseous fuel dual fueled automobile manufactured by a manufacturer in model years 1993 through 2019, the Administrator shall measure the fuel economy for that model by dividing 1.0 by the sum of—

(1) .5 divided by the fuel economy measured under section 32904(c) of this title when operating the model on gasoline or diesel fuel; and

(2) .5 divided by the fuel economy measured under subsection (c) of this section when operating the model on gaseous fuel.

(e) ELECTRIC DUAL FUELED AUTOMOBILES.—

(1) IN GENERAL.—At the request of the manufacturer, the Administrator may measure the fuel economy for any model of dual fueled automobile manufactured after model year 2015 that is capable of operating on electricity in addition to gasoline or diesel fuel, obtains its electricity from a source external to the vehicle, and meets the minimum driving range requirements established by the Secretary for dual fueled electric automobiles, by dividing 1.0 by the sum of—

(A) the percentage utilization of the model on gasoline or diesel fuel, as determined by a formula based on the model's alternative fuel range, divided by the fuel economy measured under section 32904(c); and

(B) the percentage utilization of the model on electricity, as determined by a formula based on the model's alternative fuel range, divided by the fuel economy measured under section 32904(a)(2).

(2) ALTERNATIVE CALCULATION.—If the manufacturer does not request that the Administrator calculate the manufacturing incentive for its electric dual fueled automobiles in accordance with paragraph (1), the Administrator shall calculate such incentive for such automobiles manufactured by such manufacturer after model year 2015 in accordance with subsection (b).

(f) FUEL ECONOMY CALCULATIONS.—The Administrator shall calculate the manufacturer's average fuel economy under section 32904(a)(1) of this title for each model described under subsections (a)–(d) of this section by using as the denominator the fuel economy measured for each model under subsections (a)–(d).

(g) FUEL ECONOMY INCENTIVE REQUIREMENTS.—In order for any model of dual fueled automobile to be eligible to receive the fuel economy incentives included in section 32906(a) and (b), a label shall be attached to the fuel compartment of each dual fueled automobile of that model, notifying that the vehicle can be operated on an alternative fuel and on gasoline or diesel, with the form of alternative fuel stated on the notice.