

[CHAIRMEN'S PROPOSED CONFERENCE REPORT]

NOVEMBER 17, 2003

1 **TITLE VII—VEHICLES AND**
2 **FUELS**
3 **Subtitle A—Existing Programs**

4 **SEC. 701. USE OF ALTERNATIVE FUELS BY DUAL-FUELED**
5 **VEHICLES.**

6 Section 400AA(a)(3)(E) of the Energy Policy and
7 Conservation Act (42 U.S.C. 6374(a)(3)(E)) is amended
8 to read as follows:

9 “(E)(i) Dual fueled vehicles acquired pursuant to this
10 section shall be operated on alternative fuels unless the
11 Secretary determines that an agency qualifies for a waiver
12 of such requirement for vehicles operated by the agency
13 in a particular geographic area in which—

14 “(I) the alternative fuel otherwise required to
15 be used in the vehicle is not reasonably available to
16 retail purchasers of the fuel, as certified to the Sec-
17 retary by the head of the agency; or

18 “(II) the cost of the alternative fuel otherwise
19 required to be used in the vehicle is unreasonably
20 more expensive compared to gasoline, as certified to
21 the Secretary by the head of the agency.

22 “(ii) The Secretary shall monitor compliance with
23 this subparagraph by all such fleets and shall report annu-

1 ally to Congress on the extent to which the requirements
2 of this subparagraph are being achieved. The report shall
3 include information on annual reductions achieved from
4 the use of petroleum-based fuels and the problems, if any,
5 encountered in acquiring alternative fuels.”.

6 **SEC. 702. NEIGHBORHOOD ELECTRIC VEHICLES.**

7 (a) AMENDMENTS.—Section 301 of the Energy Pol-
8 icy Act of 1992 (42 U.S.C. 13211) is amended—

9 (1) in paragraph (3), by striking “or a dual
10 fueled vehicle” and inserting “, a dual fueled vehicle,
11 or a neighborhood electric vehicle”;

12 (2) in paragraph (13), by striking “and” at the
13 end;

14 (3) in paragraph (14), by striking the period at
15 the end and inserting “; and”; and

16 (4) by adding at the end the following:

17 “(15) the term ‘neighborhood electric vehicle’
18 means a motor vehicle that—

19 “(A) meets the definition of a low-speed
20 vehicle (as defined in part 571 of title 49, Code
21 of Federal Regulations);

22 “(B) meets the definition of a zero-emis-
23 sion vehicle (as defined in section 86.1702–99
24 of title 40, Code of Federal Regulations);

1 “(C) meets the requirements of Federal
2 Motor Vehicle Safety Standard No. 500; and

3 “(D) has a maximum speed of not greater
4 than 25 miles per hour.”.

5 (b) CREDITS.—Notwithstanding section 508 of the
6 Energy Policy Act of 1992 (42 U.S.C. 13258) or any other
7 provision of law, a neighborhood electric vehicle shall not
8 be allocated credit as more than 1 vehicle for purposes
9 of determining compliance with any requirement under
10 title III or title V of such Act.

11 **SEC. 703. CREDITS FOR MEDIUM AND HEAVY DUTY DEDI-**
12 **CATED VEHICLES.**

13 Section 508 of the Energy Policy Act of 1992 (42
14 U.S.C. 13258) is amended by adding at the end the fol-
15 lowing:

16 “(e) CREDIT FOR PURCHASE OF MEDIUM AND
17 HEAVY DUTY DEDICATED VEHICLES.—

18 “(1) DEFINITIONS.—In this subsection:

19 “(A) HEAVY DUTY DEDICATED VEHI-
20 CLE.—The term ‘heavy duty dedicated vehicle’
21 means a dedicated vehicle that has a gross vehi-
22 cle weight rating of more than 14,000 pounds.

23 “(B) MEDIUM DUTY DEDICATED VEHI-
24 CLE.—The term ‘medium duty dedicated vehi-
25 cle’ means a dedicated vehicle that has a gross

1 vehicle weight rating of more than 8,500
2 pounds but not more than 14,000 pounds.

3 “(2) CREDITS FOR MEDIUM DUTY VEHICLES.—

4 The Secretary shall issue 2 full credits to a fleet or
5 covered person under this title, if the fleet or covered
6 person acquires a medium duty dedicated vehicle.

7 “(3) CREDITS FOR HEAVY DUTY VEHICLES.—

8 The Secretary shall issue 3 full credits to a fleet or
9 covered person under this title, if the fleet or covered
10 person acquires a heavy duty dedicated vehicle.

11 “(4) USE OF CREDITS.—At the request of a

12 fleet or covered person allocated a credit under this
13 subsection, the Secretary shall, for the year in which
14 the acquisition of the dedicated vehicle is made,
15 treat that credit as the acquisition of 1 alternative
16 fueled vehicle that the fleet or covered person is re-
17 quired to acquire under this title.”.

18 **SEC. 704. INCREMENTAL COST ALLOCATION.**

19 Section 303(c) of the Energy Policy Act of 1992 (42
20 U.S.C. 13212(c)) is amended by striking “may” and in-
21 serting “shall”.

22 **SEC. 705. ALTERNATIVE COMPLIANCE AND FLEXIBILITY.**

23 (a) ALTERNATIVE COMPLIANCE.—

24 (1) IN GENERAL.—Title V of the Energy Policy
25 Act of 1992 (42 U.S.C. 13251 et seq.) is amended—

1 (A) by redesignating section 514 as section
2 515; and

3 (B) by inserting after section 513 the fol-
4 lowing:

5 **“SEC. 514. ALTERNATIVE COMPLIANCE.**

6 “(a) APPLICATION FOR WAIVER.—Any covered per-
7 son subject to section 501 and any State subject to section
8 507(o) may petition the Secretary for a waiver of the ap-
9 plicable requirements of section 501 or 507(o).

10 “(b) GRANT OF WAIVER.—The Secretary may grant
11 a waiver of the requirements of section 501 or 507(o)
12 upon a showing that the fleet owned, operated, leased, or
13 otherwise controlled by the State or covered person—

14 “(1) will achieve a reduction in its annual con-
15 sumption of petroleum fuels equal to the reduction
16 in consumption of petroleum that would result from
17 100 percent compliance with fuel use requirements
18 in section 501, or, for entities covered under section
19 507(o), a reduction equal to the covered State enti-
20 ty’s consumption of alternative fuels if all its alter-
21 native fuel vehicles given credit under section 508
22 were to use alternative fuel 100 percent of the time;
23 and

1 “(2) is in compliance with all applicable vehicle
2 emission standards established by the Administrator
3 under the Clean Air Act (42 U.S.C. 7401 et seq.).

4 “(c) REVOCATION OF WAIVER.—The Secretary shall
5 revoke any waiver granted under this section if the State
6 or covered person fails to comply with subsection (b).”.

7 (2) TABLE OF CONTENTS AMENDMENT.—The
8 table of contents of the Energy Policy Act of 1992
9 (42 U.S.C. prec. 13201) is amended by striking the
10 item relating to section 514 and inserting the fol-
11 lowing:

 “Sec. 514. Alternative compliance.

 “Sec. 515. Authorization of appropriations.”.

12 (b) CREDITS.—Section 508 of the Energy Policy Act
13 of 1992 (42 U.S.C. 13258) (as amended by section 703)
14 is amended—

15 (1) by redesignating subsections (b) through (e)
16 as subsections (c) through (f), respectively;

17 (2) by striking subsection (a) and inserting the
18 following:

19 “(a) IN GENERAL.—The Secretary shall allocate a
20 credit to a fleet or covered person that is required to ac-
21 quire an alternative fueled vehicle under this title, if that
22 fleet or person acquires an alternative fueled vehicle—

23 “(1) in excess of the number that fleet or per-
24 son is required to acquire under this title;

1 “(2) before the date on which that fleet or per-
2 son is required to acquire an alternative fueled vehi-
3 cle under this title; or

4 “(3) that is eligible to receive credit under sub-
5 section (b).

6 “(b) MAXIMUM AVAILABLE POWER.—The Secretary
7 shall allocate credit to a fleet under subsection (a)(3) for
8 the acquisition by the fleet of a hybrid vehicle as follows:

9 “(1) For a hybrid vehicle with at least 4 per-
10 cent but less than 10 percent maximum available
11 power, the Secretary shall allocate 25 percent of 1
12 credit.

13 “(2) For a hybrid vehicle with at least 10 per-
14 cent but less than 20 percent maximum available
15 power, the Secretary shall allocate 50 percent of 1
16 credit.

17 “(3) For a hybrid vehicle with at least 20 per-
18 cent but less than 30 percent maximum available
19 power, the Secretary shall allocate 75 percent of 1
20 credit.

21 “(4) For a hybrid vehicle with 30 percent or
22 more maximum available power, the Secretary shall
23 allocate 1 credit.”; and

24 (3) by adding at the end the following:

1 “(g) CREDIT FOR INVESTMENT IN ALTERNATIVE
2 FUEL INFRASTRUCTURE.—

3 “(1) DEFINITION OF QUALIFYING INFRASTRUC-
4 TURE.—In this subsection, the term ‘qualifying in-
5 frastructure’ means—

6 “(A) equipment required to refuel or re-
7 charge alternative fueled vehicles;

8 “(B) facilities or equipment required to
9 maintain, repair, or operate alternative fueled
10 vehicles; and

11 “(C) such other activities as the Secretary
12 considers to constitute an appropriate expendi-
13 ture in support of the operation, maintenance,
14 or further widespread adoption of or utilization
15 of alternative fueled vehicles.

16 “(2) ISSUANCE OF CREDITS.—The Secretary
17 shall issue a credit to a fleet or covered person under
18 this title for investment in qualifying infrastructure
19 if the qualifying infrastructure is open to the general
20 public during regular business hours.

21 “(3) AMOUNT.—For the purpose of credits
22 under this subsection—

23 “(A) 1 credit shall be equal to a minimum
24 investment of \$25,000 in cash or equivalent ex-
25 penditure, as determined by the Secretary; and

1 “(B) except in the case of a Federal or
2 State fleet, no part of the investment may be
3 provided by Federal or State funds.

4 “(4) USE OF CREDITS.—At the request of a
5 fleet or covered person allocated a credit under this
6 subsection, the Secretary shall, for the year in which
7 the investment is made, treat that credit as the ac-
8 quisition of 1 alternative fueled vehicle that the fleet
9 or covered person is required to acquire under this
10 title.

11 “(h) DEFINITION OF MAXIMUM AVAILABLE
12 POWER.—In this section, the term ‘maximum available
13 power’ means the quotient obtained by dividing—

14 “(1) the maximum power available from the en-
15 ergy storage device of a hybrid vehicle, during a
16 standard 10-second pulse power or equivalent test;
17 by

18 “(2) the sum of—

19 “(A) the maximum power described in sub-
20 paragraph (A); and

21 “(B) the net power of the internal combus-
22 tion or heat engine, as determined in accord-
23 ance with standards established by the Society
24 of Automobile Engineers.”.

1 (c) LEASE CONDENSATE FUELS.—Section 301 of the
2 Energy Policy Act of 1992 (42 U.S.C. 13211) (as amend-
3 ed by section 702) is amended—

4 (1) in paragraph (2), by inserting “mixtures
5 containing 50 percent or more by volume of lease
6 condensate or fuels extracted from lease conden-
7 sate;” after “liquefied petroleum gas;”;

8 (2) in paragraph (14)—

9 (A) by inserting “mixtures containing 50
10 percent or more by volume of lease condensate
11 or fuels extracted from lease condensate,” after
12 “liquefied petroleum gas;” and

13 (B) by striking “and” at the end;

14 (3) in paragraph (15), by striking the period at
15 the end and inserting “; and”; and

16 (4) by adding at the end the following:

17 “(16) the term ‘lease condensate’ means a mix-
18 ture, primarily of pentanes and heavier hydro-
19 carbons, that is recovered as a liquid from natural
20 gas in lease separation facilities.”.

21 (d) LEASE CONDENSATE USE CREDITS.—

22 (1) IN GENERAL.—Title III of the Energy Pol-
23 icy Act of 1992 (42 U.S.C. 13211 et seq.) is amend-
24 ed by adding at the end the following:

1 **“SEC. 313. LEASE CONDENSATE USE CREDITS.**

2 “(a) IN GENERAL.—Subject to subsection (d), the
3 Secretary shall allocate 1 credit under this section to a
4 fleet or covered person for each qualifying volume of the
5 lease condensate component of fuel containing at least 50
6 percent lease condensate, or fuels extracted from lease
7 condensate, after the date of enactment of this section for
8 use by the fleet or covered person in vehicles owned or
9 operated by the fleet or covered person that weigh more
10 than 8,500 pounds gross vehicle weight rating.

11 “(b) REQUIREMENTS.—A credit allocated under this
12 section—

13 “(1) shall be subject to the same exceptions,
14 authority, documentation, and use of credits that are
15 specified for qualifying volumes of biodiesel in sec-
16 tion 312; and

17 “(2) shall not be considered a credit under sec-
18 tion 508.

19 “(c) REGULATION.—

20 “(1) IN GENERAL.—Subject to subsection (d),
21 not later than January 1, 2004, after the collection
22 of appropriate information and data that consider
23 usage options, uses in other industries, products, or
24 processes, potential volume capacities, costs, air
25 emissions, and fuel efficiencies, the Secretary shall

1 issue a regulation establishing requirements and pro-
2 cedures for the implementation of this section.

3 “(2) QUALIFYING VOLUME.—The regulation
4 shall include a determination of an appropriate
5 qualifying volume for lease condensate, except that
6 in no case shall the Secretary determine that the
7 qualifying volume for lease condensate is less than
8 1,125 gallons.

9 “(d) APPLICABILITY.—This section applies unless the
10 Secretary finds that the use of lease condensate as an al-
11 ternative fuel would adversely affect public health or safe-
12 ty or ambient air quality or the environment.”.

13 (2) TABLE OF CONTENTS AMENDMENT.—The
14 table of contents of the Energy Policy Act of 1992
15 (42 U.S.C. prec. 13201) is amended by adding at
16 the end of the items relating to title III the fol-
17 lowing:

“Sec. 313. Lease condensate use credits.”.

18 (e) EMERGENCY EXEMPTION.—Section 301 of the
19 Energy Policy Act of 1992 (42 U.S.C. 13211) (as amend-
20 ed by section 702 and this section) is amended in para-
21 graph (9)(E) by inserting before the semicolon at the end
22 “, including vehicles directly used in the emergency repair
23 of transmission lines and in the restoration of electricity
24 service following power outages, as determined by the Sec-
25 retary”.

1 **SEC. 706. REVIEW OF ENERGY POLICY ACT OF 1992 PRO-**
2 **GRAMS.**

3 (a) IN GENERAL.—Not later than 180 days after the
4 date of enactment of this section, the Secretary of Energy
5 shall complete a study to determine the effect that titles
6 III, IV, and V of the Energy Policy Act of 1992 (42
7 U.S.C. 13211 et seq.) have had on—

8 (1) the development of alternative fueled vehicle
9 technology;

10 (2) the availability of that technology in the
11 market; and

12 (3) the cost of alternative fueled vehicles.

13 (b) TOPICS.—As part of the study under subsection
14 (a), the Secretary shall specifically identify—

15 (1) the number of alternative fueled vehicles ac-
16 quired by fleets or covered persons required to ac-
17 quire alternative fueled vehicles;

18 (2) the quantity, by type, of alternative fuel ac-
19 tually used in alternative fueled vehicles acquired by
20 fleets or covered persons;

21 (3) the quantity of petroleum displaced by the
22 use of alternative fuels in alternative fueled vehicles
23 acquired by fleets or covered persons;

24 (4) the direct and indirect costs of compliance
25 with requirements under titles III, IV, and V of the

1 Energy Policy Act of 1992 (42 U.S.C. 13211 et
2 seq.), including—

3 (A) vehicle acquisition requirements im-
4 posed on fleets or covered persons;

5 (B) administrative and recordkeeping ex-
6 penses;

7 (C) fuel and fuel infrastructure costs;

8 (D) associated training and employee ex-
9 penses; and

10 (E) any other factors or expenses the Sec-
11 retary determines to be necessary to compile re-
12 liable estimates of the overall costs and benefits
13 of complying with programs under those titles
14 for fleets, covered persons, and the national
15 economy;

16 (5) the existence of obstacles preventing compli-
17 ance with vehicle acquisition requirements and in-
18 creased use of alternative fuel in alternative fueled
19 vehicles acquired by fleets or covered persons; and

20 (6) the projected impact of amendments to the
21 Energy Policy Act of 1992 made by this title.

22 (c) REPORT.—Upon completion of the study under
23 this section, the Secretary shall submit to Congress a re-
24 port that describes the results of the study and includes
25 any recommendations of the Secretary for legislative or

1 administrative changes concerning the alternative fueled
2 vehicle requirements under titles III, IV and V of the En-
3 ergy Policy Act of 1992 (42 U.S.C. 13211 et seq.).

4 **SEC. 707. REPORT CONCERNING COMPLIANCE WITH AL-**
5 **TERNATIVE FUELED VEHICLE PURCHASING**
6 **REQUIREMENTS.**

7 Section 310(b)(1) of the Energy Policy Act of 1992
8 (42 U.S.C. 13218(b)(1)) is amended by striking “1 year
9 after the date of enactment of this subsection” and insert-
10 ing “February 15, 2004”.

11 **Subtitle B—Hybrid Vehicles, Ad-**
12 **vanced Vehicles, and Fuel Cell**
13 **Buses**

14 **PART 1—HYBRID VEHICLES**

15 **SEC. 711. HYBRID VEHICLES.**

16 The Secretary of Energy shall accelerate efforts di-
17 rected toward the improvement of batteries and other re-
18 chargeable energy storage systems, power electronics, hy-
19 brid systems integration, and other technologies for use
20 in hybrid vehicles.

21 **PART 2—ADVANCED VEHICLES**

22 **SEC. 721. DEFINITIONS.**

23 In this part:

24 (1) ALTERNATIVE FUELED VEHICLE.—

1 (A) IN GENERAL.—The term “alternative
2 fueled vehicle” means a vehicle propelled solely
3 on an alternative fuel (as defined in section 301
4 of the Energy Policy Act of 1992 (42 U.S.C.
5 13211)).

6 (B) EXCLUSION.—The term “alternative
7 fueled vehicle” does not include a vehicle that
8 the Secretary determines, by regulation, does
9 not yield substantial environmental benefits
10 over a vehicle operating solely on gasoline or
11 diesel derived from fossil fuels.

12 (2) FUEL CELL VEHICLE.—The term “fuel cell
13 vehicle” means a vehicle propelled by an electric
14 motor powered by a fuel cell system that converts
15 chemical energy into electricity by combining oxygen
16 (from air) with hydrogen fuel that is stored on the
17 vehicle or is produced onboard by reformation of a
18 hydrocarbon fuel. Such fuel cell system may or may
19 not include the use of auxiliary energy storage sys-
20 tems to enhance vehicle performance.

21 (3) HYBRID VEHICLE.—The term “hybrid vehi-
22 cle” means a medium or heavy duty vehicle propelled
23 by an internal combustion engine or heat engine
24 using any combustible fuel and an onboard recharge-
25 able energy storage device.

1 (4) NEIGHBORHOOD ELECTRIC VEHICLE.—The
2 term “neighborhood electric vehicle” means a motor
3 vehicle that—

4 (A) meets the definition of a low-speed ve-
5 hicle (as defined in part 571 of title 49, Code
6 of Federal Regulations);

7 (B) meets the definition of a zero-emission
8 vehicle (as defined in section 86.1702–99 of
9 title 40, Code of Federal Regulations);

10 (C) meets the requirements of Federal
11 Motor Vehicle Safety Standard No. 500; and

12 (D) has a maximum speed of not greater
13 than 25 miles per hour.

14 (5) PILOT PROGRAM.—The term “pilot pro-
15 gram” means the competitive grant program estab-
16 lished under section 722.

17 (6) SECRETARY.—The term “Secretary” means
18 the Secretary of Energy.

19 (7) ULTRA-LOW SULFUR DIESEL VEHICLE.—
20 The term “ultra-low sulfur diesel vehicle” means a
21 vehicle manufactured in any of model years 2003
22 through 2006 powered by a heavy-duty diesel engine
23 that—

1 (A) is fueled by diesel fuel that contains
2 sulfur at not more than 15 parts per million;
3 and

4 (B) emits not more than the lesser of—

5 (i) for vehicles manufactured in—

6 (I) model year 2003, 3.0 grams
7 per brake horsepower-hour of oxides
8 of nitrogen and .01 grams per brake
9 horsepower-hour of particulate matter;
10 and

11 (II) model years 2004 through
12 2006, 2.5 grams per brake horse-
13 power-hour of nonmethane hydro-
14 carbons and oxides of nitrogen and
15 .01 grams per brake horsepower-hour
16 of particulate matter; or

17 (ii) the quantity of emissions of non-
18 methane hydrocarbons, oxides of nitrogen,
19 and particulate matter of the best-per-
20 forming technology of ultra-low sulfur die-
21 sel vehicles of the same class and applica-
22 tion that are commercially available.

23 **SEC. 722. PILOT PROGRAM.**

24 (a) ESTABLISHMENT.—The Secretary, in consulta-
25 tion with the Secretary of Transportation, shall establish

1 a competitive grant pilot program, to be administered
2 through the Clean Cities Program of the Department of
3 Energy, to provide not more than 15 geographically dis-
4 persed project grants to State governments, local govern-
5 ments, or metropolitan transportation authorities to carry
6 out a project or projects for the purposes described in sub-
7 section (b).

8 (b) GRANT PURPOSES.—A grant under this section
9 may be used for the following purposes:

10 (1) The acquisition of alternative fueled vehicles
11 or fuel cell vehicles, including—

12 (A) passenger vehicles (including neighbor-
13 hood electric vehicles); and

14 (B) motorized 2-wheel bicycles, scooters, or
15 other vehicles for use by law enforcement per-
16 sonnel or other State or local government or
17 metropolitan transportation authority employ-
18 ees.

19 (2) The acquisition of alternative fueled vehi-
20 cles, hybrid vehicles, or fuel cell vehicles, including—

21 (A) buses used for public transportation or
22 transportation to and from schools;

23 (B) delivery vehicles for goods or services;
24 and

1 (C) ground support vehicles at public air-
2 ports (including vehicles to carry baggage or
3 push or pull airplanes toward or away from ter-
4 minal gates).

5 (3) The acquisition of ultra-low sulfur diesel ve-
6 hicles.

7 (4) Installation or acquisition of infrastructure
8 necessary to directly support an alternative fueled
9 vehicle, fuel cell vehicle, or hybrid vehicle project
10 funded by the grant, including fueling and other
11 support equipment.

12 (5) Operation and maintenance of vehicles, in-
13 frastructure, and equipment acquired as part of a
14 project funded by the grant.

15 (c) APPLICATIONS.—

16 (1) REQUIREMENTS.—

17 (A) IN GENERAL.—The Secretary shall
18 issue requirements for applying for grants
19 under the pilot program.

20 (B) MINIMUM REQUIREMENTS.—At a min-
21 imum, the Secretary shall require that an appli-
22 cation for a grant—

23 (i) be submitted by the head of a
24 State or local government or a metropoli-
25 tan transportation authority, or any com-

1 bination thereof, and a registered partici-
2 pant in the Clean Cities Program of the
3 Department of Energy; and

4 (ii) include—

5 (I) a description of the project
6 proposed in the application, including
7 how the project meets the require-
8 ments of this part;

9 (II) an estimate of the ridership
10 or degree of use of the project;

11 (III) an estimate of the air pollu-
12 tion emissions reduced and fossil fuel
13 displaced as a result of the project,
14 and a plan to collect and disseminate
15 environmental data, related to the
16 project to be funded under the grant,
17 over the life of the project;

18 (IV) a description of how the
19 project will be sustainable without
20 Federal assistance after the comple-
21 tion of the term of the grant;

22 (V) a complete description of the
23 costs of the project, including acquisi-
24 tion, construction, operation, and

1 maintenance costs over the expected
2 life of the project;

3 (VI) a description of which costs
4 of the project will be supported by
5 Federal assistance under this part;
6 and

7 (VII) documentation to the satis-
8 faction of the Secretary that diesel
9 fuel containing sulfur at not more
10 than 15 parts per million is available
11 for carrying out the project, and a
12 commitment by the applicant to use
13 such fuel in carrying out the project.

14 (2) PARTNERS.—An applicant under paragraph
15 (1) may carry out a project under the pilot program
16 in partnership with public and private entities.

17 (d) SELECTION CRITERIA.—In evaluating applica-
18 tions under the pilot program, the Secretary shall—

19 (1) consider each applicant's previous experi-
20 ence with similar projects; and

21 (2) give priority consideration to applications
22 that—

23 (A) are most likely to maximize protection
24 of the environment;

1 (B) demonstrate the greatest commitment
2 on the part of the applicant to ensure funding
3 for the proposed project and the greatest likeli-
4 hood that the project will be maintained or ex-
5 panded after Federal assistance under this part
6 is completed; and

7 (C) exceed the minimum requirements of
8 subsection (c)(1)(B)(ii).

9 (e) PILOT PROJECT REQUIREMENTS.—

10 (1) MAXIMUM AMOUNT.—The Secretary shall
11 not provide more than \$20,000,000 in Federal as-
12 sistance under the pilot program to any applicant.

13 (2) COST SHARING.—The Secretary shall not
14 provide more than 50 percent of the cost, incurred
15 during the period of the grant, of any project under
16 the pilot program.

17 (3) MAXIMUM PERIOD OF GRANTS.—The Sec-
18 retary shall not fund any applicant under the pilot
19 program for more than 5 years.

20 (4) DEPLOYMENT AND DISTRIBUTION.—The
21 Secretary shall seek to the maximum extent prac-
22 ticable to ensure a broad geographic distribution of
23 project sites.

24 (5) TRANSFER OF INFORMATION AND KNOWL-
25 EDGE.—The Secretary shall establish mechanisms to

1 ensure that the information and knowledge gained
2 by participants in the pilot program are transferred
3 among the pilot program participants and to other
4 interested parties, including other applicants that
5 submitted applications.

6 (f) SCHEDULE.—

7 (1) PUBLICATION.—Not later than 90 days
8 after the date of enactment of this Act, the Sec-
9 retary shall publish in the Federal Register, Com-
10 merce Business Daily, and elsewhere as appropriate,
11 a request for applications to undertake projects
12 under the pilot program. Applications shall be due
13 not later than 180 days after the date of publication
14 of the notice.

15 (2) SELECTION.—Not later than 180 days after
16 the date by which applications for grants are due,
17 the Secretary shall select by competitive, peer re-
18 viewed proposal, all applications for projects to be
19 awarded a grant under the pilot program.

20 (g) LIMIT ON FUNDING.—The Secretary shall pro-
21 vide not less than 20 nor more than 25 percent of the
22 grant funding made available under this section for the
23 acquisition of ultra-low sulfur diesel vehicles.

1 **SEC. 723. REPORTS TO CONGRESS.**

2 (a) INITIAL REPORT.—Not later than 60 days after
3 the date on which grants are awarded under this part,
4 the Secretary shall submit to Congress a report
5 containing—

6 (1) an identification of the grant recipients and
7 a description of the projects to be funded;

8 (2) an identification of other applicants that
9 submitted applications for the pilot program; and

10 (3) a description of the mechanisms used by the
11 Secretary to ensure that the information and knowl-
12 edge gained by participants in the pilot program are
13 transferred among the pilot program participants
14 and to other interested parties, including other ap-
15 plicants that submitted applications.

16 (b) EVALUATION.—Not later than 3 years after the
17 date of enactment of this Act, and annually thereafter
18 until the pilot program ends, the Secretary shall submit
19 to Congress a report containing an evaluation of the effec-
20 tiveness of the pilot program, including—

21 (1) an assessment of the benefits to the envi-
22 ronment derived from the projects included in the
23 pilot program; and

24 (2) an estimate of the potential benefits to the
25 environment to be derived from widespread applica-

1 tion of alternative fueled vehicles and ultra-low sul-
2 fur diesel vehicles.

3 **SEC. 724. AUTHORIZATION OF APPROPRIATIONS.**

4 There are authorized to be appropriated to the Sec-
5 retary to carry out this part \$200,000,000, to remain
6 available until expended.

7 **PART 3—FUEL CELL BUSES**

8 **SEC. 731. FUEL CELL TRANSIT BUS DEMONSTRATION.**

9 (a) IN GENERAL.—The Secretary of Energy, in con-
10 sultation with the Secretary of Transportation, shall es-
11 tablish a transit bus demonstration program to make com-
12 petitive, merit-based awards for 5-year projects to dem-
13 onstrate not more than 25 fuel cell transit buses (and nec-
14 essary infrastructure) in 5 geographically dispersed local-
15 ities.

16 (b) PREFERENCE.—In selecting projects under this
17 section, the Secretary of Energy shall give preference to
18 projects that are most likely to mitigate congestion and
19 improve air quality.

20 (c) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated to the Secretary of En-
22 ergy to carry out this section \$10,000,000 for each of fis-
23 cal years 2004 through 2008.

1 **Subtitle C—Clean School Buses**

2 **SEC. 741. DEFINITIONS.**

3 In this subtitle:

4 (1) ADMINISTRATOR.—The term “Adminis-
5 trator” means the Administrator of the Environ-
6 mental Protection Agency.

7 (2) ALTERNATIVE FUEL.—The term “alter-
8 native fuel” means liquefied natural gas, compressed
9 natural gas, liquefied petroleum gas, hydrogen, pro-
10 pane, or methanol or ethanol at no less than 85 per-
11 cent by volume.

12 (3) ALTERNATIVE FUEL SCHOOL BUS.—The
13 term “alternative fuel school bus” means a school
14 bus that meets all of the requirements of this sub-
15 title and is operated solely on an alternative fuel.

16 (4) EMISSIONS CONTROL RETROFIT TECH-
17 NOLOGY.—The term “emissions control retrofit tech-
18 nology” means a particulate filter or other emissions
19 control equipment that is verified or certified by the
20 Administrator or the California Air Resources Board
21 as an effective emission reduction technology when
22 installed on an existing school bus.

23 (5) IDLING.—The term “idling” means oper-
24 ating an engine while remaining stationary for more
25 than approximately 15 minutes, except that the term

1 does not apply to routine stoppages associated with
2 traffic movement or congestion.

3 (6) SECRETARY.—The term “Secretary” means
4 the Secretary of Energy.

5 (7) ULTRA-LOW SULFUR DIESEL FUEL.—The
6 term “ultra-low sulfur diesel fuel” means diesel fuel
7 that contains sulfur at not more than 15 parts per
8 million.

9 (8) ULTRA-LOW SULFUR DIESEL FUEL SCHOOL
10 BUS.—The term “ultra-low sulfur diesel fuel school
11 bus” means a school bus that meets all of the re-
12 quirements of this subtitle and is operated solely on
13 ultra-low sulfur diesel fuel.

14 **SEC. 742. PROGRAM FOR REPLACEMENT OF CERTAIN**
15 **SCHOOL BUSES WITH CLEAN SCHOOL BUSES.**

16 (a) ESTABLISHMENT.—The Administrator, in con-
17 sultation with the Secretary and other appropriate Federal
18 departments and agencies, shall establish a program for
19 awarding grants on a competitive basis to eligible entities
20 for the replacement of existing school buses manufactured
21 before model year 1991 with alternative fuel school buses
22 and ultra-low sulfur diesel fuel school buses.

23 (b) REQUIREMENTS.—

24 (1) IN GENERAL.—Not later than 90 days after
25 the date of enactment of this Act, the Administrator

1 shall establish and publish in the Federal Register
2 grant requirements on eligibility for assistance, and
3 on implementation of the program established under
4 subsection (a), including instructions for the submis-
5 sion of grant applications and certification require-
6 ments to ensure compliance with this subtitle.

7 (2) APPLICATION DEADLINES.—The require-
8 ments established under paragraph (1) shall require
9 submission of grant applications not later than—

10 (A) in the case of the first year of program
11 implementation, the date that is 180 days after
12 the publication of the requirements in the Fed-
13 eral Register; and

14 (B) in the case of each subsequent year,
15 June 1 of the year.

16 (c) ELIGIBLE RECIPIENTS.—A grant shall be award-
17 ed under this section only—

18 (1) to 1 or more local or State governmental
19 entities responsible for providing school bus service
20 to 1 or more public school systems or responsible for
21 the purchase of school buses;

22 (2) to 1 or more contracting entities that pro-
23 vide school bus service to 1 or more public school
24 systems, if the grant application is submitted jointly
25 with the 1 or more school systems to be served by

1 the buses, except that the application may provide
2 that buses purchased using funds awarded shall be
3 owned, operated, and maintained exclusively by the
4 1 or more contracting entities; or

5 (3) to a nonprofit school transportation associa-
6 tion representing private contracting entities, if the
7 association has notified and received approval from
8 the 1 or more school systems to be served by the
9 buses.

10 (d) AWARD DEADLINES.—

11 (1) IN GENERAL.—Subject to paragraph (2),
12 the Administrator shall award a grant made to a
13 qualified applicant for a fiscal year—

14 (A) in the case of the first fiscal year of
15 program implementation, not later than the
16 date that is 90 days after the application dead-
17 line established under subsection (b)(2); and

18 (B) in the case of each subsequent fiscal
19 year, not later than August 1 of the fiscal year.

20 (2) INSUFFICIENT NUMBER OF QUALIFIED
21 GRANT APPLICATIONS.—If the Administrator does
22 not receive a sufficient number of qualified grant ap-
23 plications to meet the requirements of subsection
24 (i)(1) for a fiscal year, the Administrator shall
25 award a grant made to a qualified applicant under

1 subsection (i)(2) not later than September 30 of the
2 fiscal year.

3 (e) TYPES OF GRANTS.—

4 (1) IN GENERAL.—A grant under this section
5 shall be used for the replacement of school buses
6 manufactured before model year 1991 with alter-
7 native fuel school buses and ultra-low sulfur diesel
8 fuel school buses.

9 (2) NO ECONOMIC BENEFIT.—Other than the
10 receipt of the grant, a recipient of a grant under this
11 section may not receive any economic benefit in con-
12 nection with the receipt of the grant.

13 (3) PRIORITY OF GRANT APPLICATIONS.—The
14 Administrator shall give priority to applicants that
15 propose to replace school buses manufactured before
16 model year 1977.

17 (f) CONDITIONS OF GRANT.—A grant provided under
18 this section shall include the following conditions:

19 (1) SCHOOL BUS FLEET.—All buses acquired
20 with funds provided under the grant shall be oper-
21 ated as part of the school bus fleet for which the
22 grant was made for a minimum of 5 years.

23 (2) USE OF FUNDS.—Funds provided under the
24 grant may only be used—

1 (A) to pay the cost, except as provided in
2 paragraph (3), of new alternative fuel school
3 buses or ultra-low sulfur diesel fuel school
4 buses, including State taxes and contract fees
5 associated with the acquisition of such buses;
6 and

7 (B) to provide—

8 (i) up to 20 percent of the price of the
9 alternative fuel school buses acquired, for
10 necessary alternative fuel infrastructure if
11 the infrastructure will only be available to
12 the grant recipient; and

13 (ii) up to 25 percent of the price of
14 the alternative fuel school buses acquired,
15 for necessary alternative fuel infrastructure
16 if the infrastructure will be available to the
17 grant recipient and to other bus fleets.

18 (3) GRANT RECIPIENT FUNDS.—The grant re-
19 cipient shall be required to provide at least—

20 (A) in the case of a grant recipient de-
21 scribed in paragraph (1) or (3) of subsection
22 (c), the lesser of—

23 (i) an amount equal to 15 percent of
24 the total cost of each bus received; or

25 (ii) \$15,000 per bus; and

1 (B) in the case of a grant recipient de-
2 scribed in subsection (c)(2), the lesser of—

3 (i) an amount equal to 20 percent of
4 the total cost of each bus received; or

5 (ii) \$20,000 per bus.

6 (4) ULTRA-LOW SULFUR DIESEL FUEL.—In the
7 case of a grant recipient receiving a grant for ultra-
8 low sulfur diesel fuel school buses, the grant recipi-
9 ent shall be required to provide documentation to
10 the satisfaction of the Administrator that diesel fuel
11 containing sulfur at not more than 15 parts per mil-
12 lion is available for carrying out the purposes of the
13 grant, and a commitment by the applicant to use
14 such fuel in carrying out the purposes of the grant.

15 (5) TIMING.—All alternative fuel school buses,
16 ultra-low sulfur diesel fuel school buses, or alter-
17 native fuel infrastructure acquired under a grant
18 awarded under this section shall be purchased and
19 placed in service as soon as practicable.

20 (g) BUSES.—

21 (1) IN GENERAL.—Except as provided in para-
22 graph (2), funding under a grant made under this
23 section for the acquisition of new alternative fuel
24 school buses or ultra-low sulfur diesel fuel school
25 buses shall only be used to acquire school buses—

1 (A) with a gross vehicle weight of greater
2 than 14,000 pounds;

3 (B) that are powered by a heavy duty en-
4 gine;

5 (C) in the case of alternative fuel school
6 buses manufactured in model years 2004
7 through 2006, that emit not more than 1.8
8 grams per brake horsepower-hour of non-
9 methane hydrocarbons and oxides of nitrogen
10 and .01 grams per brake horsepower-hour of
11 particulate matter; and

12 (D) in the case of ultra-low sulfur diesel
13 fuel school buses manufactured in model years
14 2004 through 2006, that emit not more than
15 2.5 grams per brake horsepower-hour of non-
16 methane hydrocarbons and oxides of nitrogen
17 and .01 grams per brake horsepower-hour of
18 particulate matter.

19 (2) LIMITATIONS.—A bus shall not be acquired
20 under this section that emits nonmethane hydro-
21 carbons, oxides of nitrogen, or particulate matter at
22 a rate greater than the best performing technology
23 of the same class of ultra-low sulfur diesel fuel
24 school buses commercially available at the time the
25 grant is made.

1 (h) DEPLOYMENT AND DISTRIBUTION.—The Admin-
2 istrator shall—

3 (1) seek, to the maximum extent practicable, to
4 achieve nationwide deployment of alternative fuel
5 school buses and ultra-low sulfur diesel fuel school
6 buses through the program under this section; and

7 (2) ensure a broad geographic distribution of
8 grant awards, with a goal of no State receiving more
9 than 10 percent of the grant funding made available
10 under this section for a fiscal year.

11 (i) ALLOCATION OF FUNDS.—

12 (1) IN GENERAL.—Subject to paragraph (2), of
13 the amount of grant funding made available to carry
14 out this section for any fiscal year, the Adminis-
15 trator shall use—

16 (A) 70 percent for the acquisition of alter-
17 native fuel school buses or supporting infra-
18 structure; and

19 (B) 30 percent for the acquisition of ultra-
20 low sulfur diesel fuel school buses.

21 (2) INSUFFICIENT NUMBER OF QUALIFIED
22 GRANT APPLICATIONS.—After the first fiscal year in
23 which this program is in effect, if the Administrator
24 does not receive a sufficient number of qualified
25 grant applications to meet the requirements of sub-

1 paragraph (A) or (B) of paragraph (1) for a fiscal
2 year, effective beginning on August 1 of the fiscal
3 year, the Administrator shall make the remaining
4 funds available to other qualified grant applicants
5 under this section.

6 (j) REDUCTION OF SCHOOL BUS IDLING.—Each
7 local educational agency (as defined in section 9101 of the
8 Elementary and Secondary Education Act of 1965 (20
9 U.S.C. 7801)) that receives Federal funds under the Ele-
10 mentary and Secondary Education Act of 1965 (20 U.S.C.
11 6301 et seq.) is encouraged to develop a policy, consistent
12 with the health, safety, and welfare of students and the
13 proper operation and maintenance of school buses, to re-
14 duce the incidence of unnecessary school bus idling at
15 schools when picking up and unloading students.

16 (k) ANNUAL REPORT.—

17 (1) IN GENERAL.—Not later than January 31
18 of each year, the Administrator shall transmit to
19 Congress a report evaluating implementation of the
20 programs under this section and section 743.

21 (2) COMPONENTS.—The reports shall include a
22 description of—

23 (A) the total number of grant applications
24 received;

1 (B) the number and types of alternative
2 fuel school buses, ultra-low sulfur diesel fuel
3 school buses, and retrofitted buses requested in
4 grant applications;

5 (C) grants awarded and the criteria used
6 to select the grant recipients;

7 (D) certified engine emission levels of all
8 buses purchased or retrofitted under the pro-
9 grams under this section and section 743;

10 (E) an evaluation of the in-use emission
11 level of buses purchased or retrofitted under the
12 programs under this section and section 743;
13 and

14 (F) any other information the Adminis-
15 trator considers appropriate.

16 (I) AUTHORIZATION OF APPROPRIATIONS.—There
17 are authorized to be appropriated to the Administrator to
18 carry out this section, to remain available until
19 expended—

20 (1) \$45,000,000 for fiscal year 2005;

21 (2) \$65,000,000 for fiscal year 2006;

22 (3) \$90,000,000 for fiscal year 2007; and

23 (4) such sums as are necessary for each of fis-
24 cal years 2008 and 2009.

1 **SEC. 743. DIESEL RETROFIT PROGRAM.**

2 (a) ESTABLISHMENT.—The Administrator, in con-
3 sultation with the Secretary, shall establish a program for
4 awarding grants on a competitive basis to entities for the
5 installation of retrofit technologies for diesel school buses.

6 (b) ELIGIBLE RECIPIENTS.—A grant shall be award-
7 ed under this section only—

8 (1) to a local or State governmental entity re-
9 sponsible for providing school bus service to 1 or
10 more public school systems;

11 (2) to 1 or more contracting entities that pro-
12 vide school bus service to 1 or more public school
13 systems, if the grant application is submitted jointly
14 with the 1 or more school systems that the buses
15 will serve, except that the application may provide
16 that buses purchased using funds awarded shall be
17 owned, operated, and maintained exclusively by the
18 1 or more contracting entities; or

19 (3) to a nonprofit school transportation associa-
20 tion representing private contracting entities, if the
21 association has notified and received approval from
22 the 1 or more school systems to be served by the
23 buses.

24 (c) AWARDS.—

25 (1) IN GENERAL.—The Administrator shall
26 seek, to the maximum extent practicable, to ensure

1 a broad geographic distribution of grants under this
2 section.

3 (2) PREFERENCES.—In making awards of
4 grants under this section, the Administrator shall
5 give preference to proposals that—

6 (A) will achieve the greatest reductions in
7 emissions of nonmethane hydrocarbons, oxides
8 of nitrogen, or particulate matter per proposal
9 or per bus; or

10 (B) involve the use of emissions control
11 retrofit technology on diesel school buses that
12 operate solely on ultra-low sulfur diesel fuel.

13 (d) CONDITIONS OF GRANT.—A grant shall be pro-
14 vided under this section on the conditions that—

15 (1) buses on which retrofit emissions-control
16 technology are to be demonstrated—

17 (A) will operate on ultra-low sulfur diesel
18 fuel where such fuel is reasonably available or
19 required for sale by State or local law or regula-
20 tion;

21 (B) were manufactured in model year 1991
22 or later; and

23 (C) will be used for the transportation of
24 school children to and from school for a min-
25 imum of 5 years;

1 (2) grant funds will be used for the purchase of
2 emission control retrofit technology, including State
3 taxes and contract fees; and

4 (3) grant recipients will provide at least 15 per-
5 cent of the total cost of the retrofit, including the
6 purchase of emission control retrofit technology and
7 all necessary labor for installation of the retrofit.

8 (e) VERIFICATION.—Not later than 90 days after the
9 date of enactment of this Act, the Administrator shall
10 publish in the Federal Register procedures to verify—

11 (1) the retrofit emissions-control technology to
12 be demonstrated;

13 (2) that buses powered by ultra-low sulfur die-
14 sel fuel on which retrofit emissions-control tech-
15 nology are to be demonstrated will operate on diesel
16 fuel containing not more than 15 parts per million
17 of sulfur; and

18 (3) that grants are administered in accordance
19 with this section.

20 (f) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated to the Administrator to
22 carry out this section, to remain available until
23 expended—

24 (1) \$20,000,000 for fiscal year 2005;

25 (2) \$35,000,000 for fiscal year 2006;

1 (3) \$45,000,000 for fiscal year 2007; and

2 (4) such sums as are necessary for each of fis-
3 cal years 2008 and 2009.

4 **SEC. 744. FUEL CELL SCHOOL BUSES.**

5 (a) ESTABLISHMENT.—The Secretary shall establish
6 a program for entering into cooperative agreements—

7 (1) with private sector fuel cell bus developers
8 for the development of fuel cell-powered school
9 buses; and

10 (2) subsequently, with not less than 2 units of
11 local government using natural gas-powered school
12 buses and such private sector fuel cell bus developers
13 to demonstrate the use of fuel cell-powered school
14 buses.

15 (b) COST SHARING.—The non-Federal contribution
16 for activities funded under this section shall be not less
17 than—

18 (1) 20 percent for fuel infrastructure develop-
19 ment activities; and

20 (2) 50 percent for demonstration activities and
21 for development activities not described in paragraph
22 (1).

23 (c) REPORTS TO CONGRESS.—Not later than 3 years
24 after the date of enactment of this Act, the Secretary shall
25 transmit to Congress a report that—

1 (1) evaluates the process of converting natural
2 gas infrastructure to accommodate fuel cell-powered
3 school buses; and

4 (2) assesses the results of the development and
5 demonstration program under this section.

6 (d) AUTHORIZATION OF APPROPRIATIONS.—There
7 are authorized to be appropriated to the Secretary to carry
8 out this section \$25,000,000 for the period of fiscal years
9 2004 through 2006.

10 **Subtitle D—Miscellaneous**

11 **SEC. 751. RAILROAD EFFICIENCY.**

12 (a) ESTABLISHMENT.—The Secretary of Energy
13 shall, in cooperation with the Secretary of Transportation
14 and the Administrator of the Environmental Protection
15 Agency, establish a cost-shared, public-private research
16 partnership involving the Federal Government, railroad
17 carriers, locomotive manufacturers and equipment sup-
18 pliers, and the Association of American Railroads, to de-
19 velop and demonstrate railroad locomotive technologies
20 that increase fuel economy, reduce emissions, and lower
21 costs of operation.

22 (b) AUTHORIZATION OF APPROPRIATIONS.—There
23 are authorized to be appropriated to the Secretary of En-
24 ergy to carry out this section—

25 (1) \$25,000,000 for fiscal year 2005;

- 1 (2) \$35,000,000 for fiscal year 2006; and
- 2 (3) \$50,000,000 for fiscal year 2007.

3 **SEC. 752. MOBILE EMISSION REDUCTIONS TRADING AND**
4 **CREDITING.**

5 (a) IN GENERAL.—Not later than 180 days after the
6 date of enactment of this Act, the Administrator of the
7 Environmental Protection Agency shall submit to Con-
8 gress a report on the experience of the Administrator with
9 the trading of mobile source emission reduction credits for
10 use by owners and operators of stationary source emission
11 sources to meet emission offset requirements within a non-
12 attainment area.

13 (b) CONTENTS.—The report shall describe—

14 (1) projects approved by the Administrator that
15 include the trading of mobile source emission reduc-
16 tion credits for use by stationary sources in com-
17 plying with offset requirements, including a descrip-
18 tion of—

19 (A) project and stationary sources location;

20 (B) volumes of emissions offset and trad-
21 ed;

22 (C) the sources of mobile emission reduc-
23 tion credits; and

24 (D) if available, the cost of the credits;

1 (2) the significant issues identified by the Ad-
2 ministrator in consideration and approval of trading
3 in the projects;

4 (3) the requirements for monitoring and assess-
5 ing the air quality benefits of any approved project;

6 (4) the statutory authority on which the Admin-
7 istrator has based approval of the projects;

8 (5) an evaluation of how the resolution of issues
9 in approved projects could be used in other projects;
10 and

11 (6) any other issues that the Administrator con-
12 siders relevant to the trading and generation of mo-
13 bile source emission reduction credits for use by sta-
14 tionary sources or for other purposes.

15 **SEC. 753. AVIATION FUEL CONSERVATION AND EMISSIONS.**

16 (a) IN GENERAL.—Not later than 60 days after the
17 date of enactment of this Act, the Administrator of the
18 Federal Aviation Administration and the Administrator of
19 the Environmental Protection Agency shall jointly initiate
20 a study to identify—

21 (1) the impact of aircraft emissions on air qual-
22 ity in nonattainment areas; and

23 (2) ways to promote fuel conservation measures
24 for aviation to—

25 (A) enhance fuel efficiency; and

1 (B) reduce emissions.

2 (b) FOCUS.—The study under subsection (a) shall
3 focus on how air traffic management inefficiencies, such
4 as aircraft idling at airports, result in unnecessary fuel
5 burn and air emissions.

6 (c) REPORT.—Not later than 1 year after the date
7 of the initiation of the study under subsection (a), the Ad-
8 ministrator of the Federal Aviation Administration and
9 the Administrator of the Environmental Protection Agen-
10 cy shall jointly submit to the Committee on Energy and
11 Commerce and the Committee on Transportation and In-
12 frastructure of the House of Representatives and the Com-
13 mittee on Environment and Public Works and the Com-
14 mittee on Commerce, Science, and Transportation of the
15 Senate a report that—

16 (1) describes the results of the study; and

17 (2) includes any recommendations on ways in
18 which unnecessary fuel use and emissions affecting
19 air quality may be reduced—

20 (A) without adversely affecting safety and
21 security and increasing individual aircraft noise;
22 and

23 (B) while taking into account all aircraft
24 emissions and the impact of the emissions on
25 human health.

1 **SEC. 754. DIESEL FUELED VEHICLES.**

2 (a) DEFINITION OF TIER 2 EMISSION STANDARDS.—

3 In this section, the term “tier 2 emission standards”
4 means the motor vehicle emission standards that apply to
5 passenger cars, light trucks, and larger passenger vehicles
6 manufactured after the 2003 model year, as issued on
7 February 10, 2000, by the Administrator of the Environ-
8 mental Protection Agency under sections 202 and 211 of
9 the Clean Air Act (42 U.S.C. 7521, 7545).

10 (b) DIESEL COMBUSTION AND AFTER-TREATMENT

11 TECHNOLOGIES.—The Secretary of Energy shall accel-
12 erate efforts to improve diesel combustion and after-treat-
13 ment technologies for use in diesel fueled motor vehicles.

14 (c) GOALS.—The Secretary shall carry out subsection
15 (b) with a view toward achieving the following goals:

16 (1) Developing and demonstrating diesel tech-
17 nologies that, not later than 2010, meet the fol-
18 lowing standards:

19 (A) Tier 2 emission standards.

20 (B) The heavy-duty emissions standards of
21 2007 that are applicable to heavy-duty vehicles
22 under regulations issued by the Administrator
23 of the Environmental Protection Agency as of
24 the date of enactment of this Act.

25 (2) Developing the next generation of low-emis-
26 sion, high efficiency diesel engine technologies, in-

1 including homogeneous charge compression ignition
2 technology.

3 **SEC. 755. CONSERVE BY BICYCLING PROGRAM.**

4 (a) DEFINITIONS.—In this section:

5 (1) PROGRAM.—The term “program” means
6 the Conserve by Bicycling Program established by
7 subsection (b).

8 (2) SECRETARY.—The term “Secretary” means
9 the Secretary of Transportation.

10 (b) ESTABLISHMENT.—There is established within
11 the Department of Transportation a program to be known
12 as the “Conserve by Bicycling Program”.

13 (c) PROJECTS.—

14 (1) IN GENERAL.—In carrying out the program,
15 the Secretary shall establish not more than 10 pilot
16 projects that are—

17 (A) dispersed geographically throughout
18 the United States; and

19 (B) designed to conserve energy resources
20 by encouraging the use of bicycles in place of
21 motor vehicles.

22 (2) REQUIREMENTS.—A pilot project described
23 in paragraph (1) shall—

24 (A) use education and marketing to con-
25 vert motor vehicle trips to bicycle trips;

1 (B) document project results and energy
2 savings (in estimated units of energy con-
3 served);

4 (C) facilitate partnerships among inter-
5 ested parties in at least 2 of the fields of—

6 (i) transportation;

7 (ii) law enforcement;

8 (iii) education;

9 (iv) public health;

10 (v) environment; and

11 (vi) energy;

12 (D) maximize bicycle facility investments;

13 (E) demonstrate methods that may be
14 used in other regions of the United States; and

15 (F) facilitate the continuation of ongoing
16 programs that are sustained by local resources.

17 (3) COST SHARING.—At least 20 percent of the
18 cost of each pilot project described in paragraph (1)
19 shall be provided from State or local sources.

20 (d) ENERGY AND BICYCLING RESEARCH STUDY.—

21 (1) IN GENERAL.—Not later than 2 years after
22 the date of enactment of this Act, the Secretary
23 shall enter into a contract with the National Acad-
24 emy of Sciences for, and the National Academy of
25 Sciences shall conduct and submit to Congress a re-

1 port on, a study on the feasibility of converting
2 motor vehicle trips to bicycle trips.

3 (2) COMPONENTS.—The study shall—

4 (A) document the results or progress of
5 the pilot projects under subsection (c);

6 (B) determine the type and duration of
7 motor vehicle trips that people in the United
8 States may feasibly make by bicycle, taking into
9 consideration factors such as—

10 (i) weather;

11 (ii) land use and traffic patterns;

12 (iii) the carrying capacity of bicycles;

13 and

14 (iv) bicycle infrastructure;

15 (C) determine any energy savings that
16 would result from the conversion of motor vehi-
17 cle trips to bicycle trips;

18 (D) include a cost-benefit analysis of bicy-
19 cle infrastructure investments; and

20 (E) include a description of any factors
21 that would encourage more motor vehicle trips
22 to be replaced with bicycle trips.

23 (e) AUTHORIZATION OF APPROPRIATIONS.—There
24 are authorized to be appropriated to the Secretary to carry

1 out this section \$6,200,000, to remain available until ex-
2 pended, of which—

3 (1) \$5,150,000 shall be used to carry out pilot
4 projects described in subsection (c);

5 (2) \$300,000 shall be used by the Secretary to
6 coordinate, publicize, and disseminate the results of
7 the program; and

8 (3) \$750,000 shall be used to carry out sub-
9 section (d).

10 **SEC. 756. REDUCTION OF ENGINE IDLING OF HEAVY-DUTY**
11 **VEHICLES.**

12 (a) DEFINITIONS.—In this section:

13 (1) ADMINISTRATOR.—The term “Adminis-
14 trator” means the Administrator of the Environ-
15 mental Protection Agency.

16 (2) ADVANCED TRUCK STOP ELECTRIFICATION
17 SYSTEM.—The term “advanced truck stop elec-
18 trification system” means a stationary system that
19 delivers heat, air conditioning, electricity, and com-
20 munications, and is capable of providing verifiable
21 and auditable evidence of use of those services, to a
22 heavy-duty vehicle and any occupants of the heavy-
23 duty vehicle without relying on components mounted
24 onboard the heavy-duty vehicle for delivery of those
25 services.

1 (3) AUXILIARY POWER UNIT.—The term “auxil-
2 iary power unit” means an integrated system that—

3 (A) provides heat, air conditioning, engine
4 warming, and electricity to the factory-installed
5 components on a heavy-duty vehicle as if the
6 main drive engine of the heavy-duty vehicle
7 were running; and

8 (B) is certified by the Administrator under
9 part 89 of title 40, Code of Federal Regulations
10 (or any successor regulation), as meeting appli-
11 cable emission standards.

12 (4) HEAVY-DUTY VEHICLE.—The term “heavy-
13 duty vehicle” means a vehicle that—

14 (A) has a gross vehicle weight rating great-
15 er than 12,500 pounds; and

16 (B) is powered by a diesel engine.

17 (5) IDLE REDUCTION TECHNOLOGY.—The term
18 “idle reduction technology” means an advanced
19 truck stop electrification system, auxiliary power
20 unit, or other device or system of devices that—

21 (A) is used to reduce long-duration idling
22 of a heavy-duty vehicle; and

23 (B) allows for the main drive engine or
24 auxiliary refrigeration engine of a heavy-duty
25 vehicle to be shut down.

1 (6) LONG-DURATION IDLING.—

2 (A) IN GENERAL.—The term “long-dura-
3 tion idling” means the operation of a main
4 drive engine or auxiliary refrigeration engine of
5 a heavy-duty vehicle, for a period greater than
6 15 consecutive minutes, at a time at which the
7 main drive engine is not engaged in gear.

8 (B) EXCLUSIONS.—The term “long-dura-
9 tion idling” does not include the operation of a
10 main drive engine or auxiliary refrigeration en-
11 gine of a heavy-duty vehicle during a routine
12 stoppage associated with traffic movement or
13 congestion.

14 (b) IDLE REDUCTION TECHNOLOGY BENEFITS, PRO-
15 GRAMS, AND STUDIES.—

16 (1) IN GENERAL.—Not later than 90 days after
17 the date of enactment of this Act, the Administrator
18 shall—

19 (A)(i) commence a review of the mobile
20 source air emission models of the Environ-
21 mental Protection Agency used under the Clean
22 Air Act (42 U.S.C. 7401 et seq.) to determine
23 whether the models accurately reflect the emis-
24 sions resulting from long-duration idling of

1 heavy-duty vehicles and other vehicles and en-
2 gines; and

3 (ii) update those models as the Adminis-
4 trator determines to be appropriate; and

5 (B)(i) commence a review of the emission
6 reductions achieved by the use of idle reduction
7 technology; and

8 (ii) complete such revisions of the regula-
9 tions and guidance of the Environmental Pro-
10 tection Agency as the Administrator determines
11 to be appropriate.

12 (2) DEADLINE FOR COMPLETION.—Not later
13 than 180 days after the date of enactment of this
14 Act, the Administrator shall—

15 (A) complete the reviews under subpara-
16 graphs (A)(i) and (B)(i) of paragraph (1); and

17 (B) prepare and make publicly available 1
18 or more reports on the results of the reviews.

19 (3) DISCRETIONARY INCLUSIONS.—The reviews
20 under subparagraphs (A)(i) and (B)(i) of paragraph
21 (1) and the reports under paragraph (2)(B) may ad-
22 dress the potential fuel savings resulting from use of
23 idle reduction technology.

24 (4) IDLE REDUCTION DEPLOYMENT PRO-
25 GRAM.—

1 (A) ESTABLISHMENT.—

2 (i) IN GENERAL.—Not later than 90
3 days after the date of enactment of this
4 Act, the Administrator, in consultation
5 with the Secretary of Transportation, shall
6 establish a program to support deployment
7 of idle reduction technology.

8 (ii) PRIORITY.—The Administrator
9 shall give priority to the deployment of idle
10 reduction technology based on beneficial ef-
11 fects on air quality and ability to lessen
12 the emission of criteria air pollutants.

13 (B) FUNDING.—

14 (i) AUTHORIZATION OF APPROPRIA-
15 TIONS.—There are authorized to be appro-
16 priated to the Administrator to carry out
17 subparagraph (A) \$19,500,000 for fiscal
18 year 2004, \$30,000,000 for fiscal year
19 2005, and \$45,000,000 for fiscal year
20 2006.

21 (ii) COST SHARING.—Subject to clause
22 (iii), the Administrator shall require at
23 least 50 percent of the costs directly and
24 specifically related to any project under

1 this section to be provided from non-Fed-
2 eral sources.

3 (iii) NECESSARY AND APPROPRIATE
4 REDUCTIONS.—The Administrator may re-
5 duce the non-Federal requirement under
6 clause (ii) if the Administrator determines
7 that the reduction is necessary and appro-
8 priate to meet the objectives of this sec-
9 tion.

10 (5) IDLING LOCATION STUDY.—

11 (A) IN GENERAL.—Not later than 90 days
12 after the date of enactment of this Act, the Ad-
13 ministrator, in consultation with the Secretary
14 of Transportation, shall commence a study to
15 analyze all locations at which heavy-duty vehi-
16 cles stop for long-duration idling, including—

- 17 (i) truck stops;
18 (ii) rest areas;
19 (iii) border crossings;
20 (iv) ports;
21 (v) transfer facilities; and
22 (vi) private terminals.

23 (B) DEADLINE FOR COMPLETION.—Not
24 later than 180 days after the date of enactment
25 of this Act, the Administrator shall—

1 (i) complete the study under subpara-
2 graph (A); and

3 (ii) prepare and make publicly avail-
4 able 1 or more reports of the results of the
5 study.

6 (c) VEHICLE WEIGHT EXEMPTION.—Section 127(a)
7 of title 23, United States Code, is amended—

8 (1) by designating the first through eleventh
9 sentences as paragraphs (1) through (11), respec-
10 tively; and

11 (2) by adding at the end the following:

12 “(12) HEAVY DUTY VEHICLES.—

13 “(A) IN GENERAL.—Subject to subpara-
14 graphs (B) and (C), in order to promote reduc-
15 tion of fuel use and emissions because of engine
16 idling, the maximum gross vehicle weight limit
17 and the axle weight limit for any heavy-duty ve-
18 hicle equipped with an idle reduction technology
19 shall be increased by a quantity necessary to
20 compensate for the additional weight of the idle
21 reduction system.

22 “(B) MAXIMUM WEIGHT INCREASE.—The
23 weight increase under subparagraph (A) shall
24 be not greater than 250 pounds.

1 “(C) PROOF.—On request by a regulatory
2 agency or law enforcement agency, the vehicle
3 operator shall provide proof (through dem-
4 onstration or certification) that—

5 “(i) the idle reduction technology is
6 fully functional at all times; and

7 “(ii) the 250-pound gross weight in-
8 crease is not used for any purpose other
9 than the use of idle reduction technology
10 described in subparagraph (A).”.

11 **SEC. 757. BIODIESEL ENGINE TESTING PROGRAM.**

12 (a) IN GENERAL.—Not later than 180 days after the
13 date of enactment of this Act, the Secretary shall initiate
14 a partnership with diesel engine, diesel fuel injection sys-
15 tem, and diesel vehicle manufacturers and diesel and bio-
16 diesel fuel providers, to include biodiesel testing in ad-
17 vanced diesel engine and fuel system technology.

18 (b) SCOPE.—The program shall provide for testing
19 to determine the impact of biodiesel from different sources
20 on current and future emission control technologies, with
21 emphasis on—

22 (1) the impact of biodiesel on emissions war-
23 ranty, in-use liability, and antitampering provisions;

24 (2) the impact of long-term use of biodiesel on
25 engine operations;

1 (3) the options for optimizing these technologies
2 for both emissions and performance when switching
3 between biodiesel and diesel fuel; and

4 (4) the impact of using biodiesel in these fuel-
5 ing systems and engines when used as a blend with
6 2006 Environmental Protection Agency-mandated
7 diesel fuel containing a maximum of 15-parts-per-
8 million sulfur content.

9 (c) REPORT.—Not later than 2 years after the date
10 of enactment of this Act, the Secretary shall provide an
11 interim report to Congress on the findings of the program,
12 including a comprehensive analysis of impacts from bio-
13 diesel on engine operation for both existing and expected
14 future diesel technologies, and recommendations for en-
15 suring optimal emissions reductions and engine perform-
16 ance with biodiesel.

17 (d) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated \$5,000,000 for each of
19 fiscal years 2004 through 2008 to carry out this section.

20 (e) DEFINITION.—For purposes of this section, the
21 term “biodiesel” means a diesel fuel substitute produced
22 from nonpetroleum renewable resources that meets the
23 registration requirements for fuels and fuel additives es-
24 tablished by the Environmental Protection Agency under
25 section 211 of the Clean Air Act (42 U.S.C. 7545) and

1 that meets the American Society for Testing and Materials
2 D6751-02a Standard Specification for Biodiesel Fuel
3 (B100) Blend Stock for Distillate Fuels.

4 **SEC. 758. HIGH OCCUPANCY VEHICLE EXCEPTION.**

5 Notwithstanding section 102(a) of title 23, United
6 States Code, a State may permit a vehicle with fewer than
7 2 occupants to operate in high occupancy vehicle lanes if
8 the vehicle—

9 (1) is a dedicated vehicle (as defined in section
10 301 of the Energy Policy Act of 1992 (42 U.S.
11 13211)); or

12 (2) is a hybrid vehicle (as defined by the State
13 for the purpose of this section).

14 **Subtitle E—Automobile Efficiency**

15 **SEC. 771. AUTHORIZATION OF APPROPRIATIONS FOR IM-**
16 **PLEMENTATION AND ENFORCEMENT OF**
17 **FUEL ECONOMY STANDARDS.**

18 In addition to any other funds authorized by law,
19 there are authorized to be appropriated to the National
20 Highway Traffic Safety Administration to carry out its ob-
21 ligations with respect to average fuel economy standards
22 \$2,000,000 for each of fiscal years 2004 through 2008.

1 **SEC. 772. REVISED CONSIDERATIONS FOR DECISIONS ON**
2 **MAXIMUM FEASIBLE AVERAGE FUEL ECON-**
3 **OMY.**

4 Section 32902(f) of title 49, United States Code, is
5 amended to read as follows:

6 “(f) CONSIDERATIONS FOR DECISIONS ON MAXIMUM
7 FEASIBLE AVERAGE FUEL ECONOMY.—When deciding
8 maximum feasible average fuel economy under this sec-
9 tion, the Secretary of Transportation shall consider the
10 following matters:

11 “(1) Technological feasibility.

12 “(2) Economic practicability.

13 “(3) The effect of other motor vehicle standards
14 of the Government on fuel economy.

15 “(4) The need of the United States to conserve
16 energy.

17 “(5) The effects of fuel economy standards on
18 passenger automobiles, nonpassenger automobiles,
19 and occupant safety.

20 “(6) The effects of compliance with average fuel
21 economy standards on levels of automobile industry
22 employment in the United States.”.

1 **SEC. 773. EXTENSION OF MAXIMUM FUEL ECONOMY IN-**
2 **CREASE FOR ALTERNATIVE FUELED VEHI-**
3 **CLES.**

4 (a) MANUFACTURING INCENTIVES.—Section 32905
5 of title 49, United States Code, is amended—

6 (1) in each of subsections (b) and (d), by strik-
7 ing “1993–2004” and inserting “1993–2008”;

8 (2) in subsection (f), by striking “2001” and
9 inserting “2005”; and

10 (3) in subsection (f)(1), by striking “2004” and
11 inserting “2008”.

12 (b) MAXIMUM FUEL ECONOMY INCREASE.—Sub-
13 section (a)(1) of section 32906 of title 49, United States
14 Code, is amended—

15 (1) in subparagraph (A), by striking “the model
16 years 1993–2004” and inserting “model years
17 1993–2008”; and

18 (2) in subparagraph (B), by striking “the model
19 years 2005–2008” and inserting “model years
20 2009–2012”.

21 **SEC. 774. STUDY OF FEASIBILITY AND EFFECTS OF REDUC-**
22 **ING USE OF FUEL FOR AUTOMOBILES.**

23 (a) IN GENERAL.—Not later than 30 days after the
24 date of the enactment of this Act, the Administrator of
25 the National Highway Traffic Safety Administration shall
26 initiate a study of the feasibility and effects of reducing

1 by model year 2012, by a significant percentage, the
2 amount of fuel consumed by automobiles.

3 (b) SUBJECTS OF STUDY.—The study under this sec-
4 tion shall include—

5 (1) examination of, and recommendation of al-
6 ternatives to, the policy under current Federal law
7 of establishing average fuel economy standards for
8 automobiles and requiring each automobile manufac-
9 turer to comply with average fuel economy standards
10 that apply to the automobiles it manufactures;

11 (2) examination of how automobile manufactur-
12 ers could contribute toward achieving the reduction
13 referred to in subsection (a);

14 (3) examination of the potential of fuel cell
15 technology in motor vehicles in order to determine
16 the extent to which such technology may contribute
17 to achieving the reduction referred to in subsection
18 (a); and

19 (4) examination of the effects of the reduction
20 referred to in subsection (a) on—

21 (A) gasoline supplies;

22 (B) the automobile industry, including
23 sales of automobiles manufactured in the
24 United States;

25 (C) motor vehicle safety; and

1 (D) air quality.

2 (c) REPORT.—The Administrator shall submit to
3 Congress a report on the findings, conclusion, and rec-
4 ommendations of the study under this section by not later
5 than 1 year after the date of the enactment of this Act.