- (1) evaluates the process of converting natural gas infrastructure to accommodate fuel cell-powered school buses; and
- (2) assesses the results of the development and demonstration program under this section.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section \$25,000,000 for the period of fiscal years 2006 through 2009.

(Pub. L. 109–58, title VII, $\S743$, Aug. 8, 2005, 119 Stat. 826.)

PART D-MISCELLANEOUS

§ 16101. Railroad efficiency

(a) Establishment

The Secretary shall (in cooperation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency) establish a cost-shared, public-private research partnership involving the Federal Government, railroad carriers, locomotive manufacturers and equipment suppliers, and the Association of American Railroads, to develop and demonstrate railroad locomotive technologies that increase fuel economy, reduce emissions, and lower costs of operation.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section—

- (1) \$15,000,000 for fiscal year 2006;
- (2) \$20,000,000 for fiscal year 2007; and
- (3) \$30,000,000 for fiscal year 2008.

(Pub. L. 109–58, title VII, §751, Aug. 8, 2005, 119 Stat. 826.)

Statutory Notes and Related Subsidiaries

ADVANCED TECHNOLOGY LOCOMOTIVE GRANT PILOT PROGRAM

Pub. L. 110-140, title XI, §1111, Dec. 19, 2007, 121 Stat. 1757, provided that:

"(a) IN GENERAL.—The Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall establish and carry out a pilot program for making grants to railroad carriers (as defined in section 20102 of title 49, United States Code) and State and local governments—

"(1) for assistance in purchasing hybrid or other energy-efficient locomotives, including hybrid switch and generator-set locomotives; and

"(2) to demonstrate the extent to which such locomotives increase fuel economy, reduce emissions, and lower costs of operation.

"(b) LIMITATION.—Notwithstanding subsection (a), no grant under this section may be used to fund the costs of emissions reductions that are mandated under Federal law

"(c) Grant Criteria.—In selecting applicants for grants under this section, the Secretary of Transportation shall consider—

"(1) the level of energy efficiency that would be achieved by the proposed project;

"(2) the extent to which the proposed project would assist in commercial deployment of hybrid or other energy-efficient locomotive technologies:

"(3) the extent to which the proposed project complements other private or governmental partnership efforts to improve air quality or fuel efficiency in a particular area; and

"(4) the extent to which the applicant demonstrates innovative strategies and a financial commitment to

increasing energy efficiency and reducing greenhouse gas emissions of its railroad operations.

"(d) COMPETITIVE GRANT SELECTION PROCESS.—

- "(1) APPLICATIONS.—A railroad carrier or State or local government seeking a grant under this section shall submit for approval by the Secretary of Transportation an application for the grant containing such information as the Secretary of Transportation may require.
- "(2) COMPETITIVE SELECTION.—The Secretary of Transportation shall conduct a national solicitation for applications for grants under this section and shall select grantees on a competitive basis.

"(e) FEDERAL SHARE.—The Federal share of the cost of a project under this section shall not exceed 80 percent of the project cost.

"(f) REPORT.—Not later than 3 years after the date of enactment of this Act [Dec. 19, 2007], the Secretary of Transportation shall submit to Congress a report on the results of the pilot program carried out under this section.

"(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary of Transportation \$10,000,000 for each of the fiscal years 2008 through 2011 to carry out this section. Such funds shall remain available until expended."

§ 16102. Diesel fueled vehicles

(a) Definition of tier 2 emission standards

In this section, the term "tier 2 emission standards" means the motor vehicle emission standards that apply to passenger cars, light trucks, and larger passenger vehicles manufactured after the 2003 model year, as issued on February 10, 2000, by the Administrator of the Environmental Protection Agency under sections 7521 and 7545 of this title.

(b) Diesel combustion and after-treatment technologies

The Secretary shall accelerate efforts to improve diesel combustion and after-treatment technologies for use in diesel fueled motor vehicles.

(c) Goals

The Secretary shall carry out subsection (b) with a view toward achieving the following goals:

- (1) Developing and demonstrating diesel technologies that, not later than 2010, meet the following standards:
 - (A) Tier 2 emission standards.
 - (B) The heavy-duty emissions standards of 2007 that are applicable to heavy-duty vehicles under regulations issued by the Administrator of the Environmental Protection Agency as of August 8, 2005.
- (2) Developing the next generation of lowemission, high efficiency diesel engine technologies, including homogeneous charge compression ignition technology.

(Pub. L. 109–58, title VII, $\S754,~{\rm Aug.}~8,~2005,~119~{\rm Stat.}~828.)$

§ 16103. Conserve by Bicycling Program

(a) Definitions

In this section:

(1) Program

The term "program" means the Conserve by Bicycling Program established by subsection (b).

(2) Secretary

The term "Secretary" means the Secretary of Transportation.

(b) Establishment

There is established within the Department of Transportation a program to be known as the "Conserve by Bicycling Program".

(c) Projects

(1) In general

In carrying out the program, the Secretary shall establish not more than 10 pilot projects that are—

- (A) dispersed geographically throughout the United States; and
- (B) designed to conserve energy resources by encouraging the use of bicycles in place of motor vehicles.

(2) Requirements

- A pilot project described in paragraph (1) shall—
 - (A) use education and marketing to convert motor vehicle trips to bicycle trips;
- (B) document project results and energy savings (in estimated units of energy conserved):
- (C) facilitate partnerships among interested parties in at least 2 of the fields of—
 - (i) transportation;
 - (ii) law enforcement;
 - (iii) education;
 - (iv) public health;
 - (v) environment: and
 - (vi) energy:
- (D) maximize bicycle facility investments;
- (E) demonstrate methods that may be used in other regions of the United States; and
- (F) facilitate the continuation of ongoing programs that are sustained by local resources.

(3) Cost sharing

At least 20 percent of the cost of each pilot project described in paragraph (1) shall be provided from non-Federal sources.

(d) Energy and bicycling research study

(1) In general

Not later than 2 years after August 8, 2005, the Secretary shall enter into a contract with the National Academy of Sciences for, and the National Academy of Sciences shall conduct and submit to Congress a report on, a study on the feasibility of converting motor vehicle trips to bicycle trips.

(2) Components

The study shall—

- (A) document the results or progress of the pilot projects under subsection (c);
- (B) determine the type and duration of motor vehicle trips that people in the United States may feasibly make by bicycle, taking into consideration factors such as—
 - (i) weather;
 - (ii) land use and traffic patterns;
 - (iii) the carrying capacity of bicycles;
 - (iv) bicycle infrastructure;
- (C) determine any energy savings that would result from the conversion of motor vehicle trips to bicycle trips;

- (D) include a cost-benefit analysis of bicycle infrastructure investments; and
- (E) include a description of any factors that would encourage more motor vehicle trips to be replaced with bicycle trips.

(e) Authorization of appropriations

There is authorized to be appropriated to the Secretary to carry out this section \$6,200,000, to remain available until expended, of which—

- (1) \$5,150,000 shall be used to carry out pilot projects described in subsection (c);
- (2) \$300,000 shall be used by the Secretary to coordinate, publicize, and disseminate the results of the program; and
- (3) \$750,000 shall be used to carry out subsection (d).

(Pub. L. 109–58, title VII, §755, Aug. 8, 2005, 119 Stat. 828.)

§ 16104. Reduction of engine idling

(a) Definitions

In this section:

(1) Administrator

The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) Advanced truck stop electrification system

The term "advanced truck stop electrification system" means a stationary system that delivers heat, air conditioning, electricity, or communications, and is capable of providing verifiable and auditable evidence of use of those services, to a heavy-duty vehicle and any occupants of the heavy-duty vehicle with or without relying on components mounted onboard the heavy-duty vehicle for delivery of those services.

(3) Auxiliary power unit

The term "auxiliary power unit" means an integrated system that—

- (A) provides heat, air conditioning, engine warming, or electricity to components on a heavy-duty vehicle; and
- (B) is certified by the Administrator under part 89 of title 40, Code of Federal Regulations (or any successor regulation), as meeting applicable emission standards.

(4) Heavy-duty vehicle

The term "heavy-duty vehicle" means a vehicle that—

- (A) has a gross vehicle weight rating greater than 8,500 pounds; and
 - (B) is powered by a diesel engine.

(5) Idle reduction technology

The term "idle reduction technology" means an advanced truck stop electrification system, auxiliary power unit, or other technology that—

- (A) is used to reduce long-duration idling; and
- (B) allows for the main drive engine or auxiliary refrigeration engine to be shut