(A) demonstrates, to the satisfaction of the Secretary, that the State has—

(i) established a highway safety data and traffic records coordinating committee with a multidisciplinary membership, including the administrators, collectors, and users of such data (including the public health, injury control, and motor carrier communities);

(ii) completed, within the preceding 5 years, a highway safety data and traffic records assessment or an audit of the highway safety data and traffic records system of the State; and

(iii) initiated the development of a multiyear highway safety data and traffic records strategic plan that—

(I) identifies and prioritizes the highway safety data and traffic records needs and goals of the State;

(II) identifies performance-based measures by which progress toward those goals will be determined; and

(III) will be submitted to the highway safety data and traffic records coordinating committee of the State for approval; or

(B) provides, to the satisfaction of the Secretary—

(i) a certification that the State has met the requirements of clauses (i) and (ii) of subparagraph (A);

(ii) a multiyear highway safety data and traffic records strategic plan that—

(I) meets the requirements of subparagraph (A)(iii); and

(II) specifies how the incentive funds of the State for the fiscal year will be used to address needs and goals identified in the plan; and

(iii) a certification that the highway safety data and traffic records coordinating committee of the State continues to operate and supports the multiyear plan described in clause (ii).

(2) GRANT AMOUNTS.—The amount of a first-year grant made to a State for a fiscal year under this subsection shall equal—

(A) if the State is eligible for the grant under paragraph (1)(A), $125,000; and

(B) if the State is eligible for the grant under paragraph (1)(B), an amount determined by multiplying—

(i) the amount appropriated to carry out this section for such fiscal year; by

(ii) the ratio that the funds apportioned to the State under section 402 for fiscal year 1997 bears to the funds apportioned to all States under section 402 for fiscal year 1997;

except that no State eligible for a grant under paragraph (1)(B) shall receive less than $250,000.

(3) STATES NOT MEETING CRITERIA.—The Secretary may award a grant of up to $25,000 for 1 year to any State that does not meet the criteria established in paragraph (1). The grant may only be used to conduct activities needed to enable the State to qualify for a first-year grant in the next fiscal year.

(c)[1] SUCCEEDING YEAR GRANTS.—

(1) ELIGIBILITY.—A State shall be eligible for a grant under this subsection in a fiscal year succeeding the first fiscal year in which the State receives a grant under subsection (b) if the State, to the satisfaction of the Secretary—

(A) submits or updates a multiyear highway safety data and traffic records strategic plan that meets the requirements of subsection (b)(1);

(B) certifies that the highway safety data and traffic records coordinating committee of the State continues to operate and supports the multiyear plan; and

(C) reports annually on the progress of the State in implementing the multiyear plan.

(2) GRANT AMOUNTS.—The amount of a succeeding year grant made to the State for a fiscal year under this paragraph shall equal the amount determined by multiplying—

(A) the amount appropriated to carry out this section for such fiscal year; by

(B) the ratio that the funds apportioned to the State under section 402 for fiscal year 1997 bears to the funds apportioned to all States under section 402 for fiscal year 1997;

except that no State eligible for a grant under this paragraph shall receive less than $225,000.

(c)[1] ADMINISTRATIVE EXPENSES.—Funds authorized to be appropriated to carry out this section in a fiscal year shall be subject to a deduction not to exceed 5 percent for the necessary costs of administering the provisions of this section.

(d) APPLICABILITY OF CHAPTER 1.—The provisions contained in section 402(d) shall apply to this section.

(Added Pub. L. 105–178, title II, § 2005(a), June 9, 1998, 112 Stat. 332.)

REFERENCES IN TEXT

The date of enactment of the Transportation Equity Act for the 21st Century, referred to in subsec. (a)(3), is the date of enactment of Pub. L. 105–178, which was approved June 9, 1998.

CHAPTER 5—RESEARCH AND TECHNOLOGY

PRIOR PROVISIONS

A prior chapter 5, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 830, consisting of sections 501 to 512, related to highway relocation assistance, prior to repeal by Pub. L. 91–646, title II, § 220(a)(10), Jan. 2, 1971, 84 Stat. 1903. See section 4601 et seq. of Title 42, The Public Health and Welfare. For Effective Date of Repeal and

[1] So in original. Two subsecs. (c) have been enacted.

[1] So in original. Does not conform to section catchline.

Savings Provisions, see sections 221 and 220(b) of Pub. L. 91–646, set out as notes under sections 4601 and 4621, respectively, of Title 42.

CHAPTER REFERRED TO IN OTHER SECTIONS

This chapter is referred to in section 103 of this title.

§ 501. Definitions

In this chapter, the following definitions apply:

(1) FEDERAL LABORATORY.—The term ''Federal laboratory'' includes a Government-owned, Government-operated laboratory and a Government-owned, contractor-operated laboratory.

(2) SAFETY.—The term ''safety'' includes highway and traffic safety systems, research, and development relating to vehicle, highway, driver, passenger, bicyclist, and pedestrian characteristics, accident investigations, communications, emergency medical care, and transportation of the injured.

(Added Pub. L. 105–178, title V, § 5101(2), June 9, 1998, 112 Stat. 422.)

PRIOR PROVISIONS

A prior section 501, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 830, related to declaration of policy as to highway relocation assistance, prior to repeal by Pub. L. 91–646, title II, § 220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

§ 502. Surface transportation research

(a) GENERAL AUTHORITY.—

(1) RESEARCH, DEVELOPMENT, AND TECHNOLOGY TRANSFER ACTIVITIES.—The Secretary may carry out research, development, and technology transfer activities with respect to—

(A) motor carrier transportation;

(B) all phases of transportation planning and development (including construction, operation, modernization, development, design, maintenance, safety, financing, and traffic conditions); and

(C) the effect of State laws on the activities described in subparagraphs (A) and (B).

(2) TESTS AND DEVELOPMENT.—The Secretary may test, develop, or assist in testing and developing any material, invention, patented article, or process.

(3) COOPERATION, GRANTS, AND CONTRACTS.—The Secretary may carry out this section—

(A) independently;

(B) in cooperation with other Federal departments, agencies, and instrumentalities and Federal laboratories; or

(C) by making grants to, or entering into contracts, cooperative agreements, and other transactions with, the National Academy of Sciences, the American Association of State Highway and Transportation Officials, or any Federal laboratory, State agency, authority, association, institution, for-profit or nonprofit corporation, organization, foreign country, or person.

(4) TECHNOLOGICAL INNOVATION.—The programs and activities carried out under this section shall be consistent with the surface transportation research and technology development strategic plan developed under section 508.

(5) FUNDS.—

(A) SPECIAL ACCOUNT.—In addition to other funds made available to carry out this section, the Secretary shall use such funds as may be deposited by any cooperating organization or person in a special account of the Treasury established for this purpose.

(B) USE OF FUNDS.—The Secretary shall use funds made available to carry out this section to develop, administer, communicate, and promote the use of products of research, development, and technology transfer programs under this section.

(b) COLLABORATIVE RESEARCH AND DEVELOPMENT.—

(1) IN GENERAL.—To encourage innovative solutions to surface transportation problems and stimulate the deployment of new technology, the Secretary may carry out, on a cost-shared basis, collaborative research and development with—

(A) non-Federal entities, including State and local governments, foreign governments, colleges and universities, corporations, institutions, partnerships, sole proprietorships, and trade associations that are incorporated or established under the laws of any State; and

(B) Federal laboratories.

(2) AGREEMENTS.—In carrying out this subsection, the Secretary may enter into cooperative research and development agreements (as defined in section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a)).

(3) FEDERAL SHARE.—

(A) IN GENERAL.—The Federal share of the cost of activities carried out under a cooperative research and development agreement entered into under this subsection shall not exceed 50 percent, except that if there is substantial public interest or benefit, the Secretary may approve a greater Federal share.

(B) NON-FEDERAL SHARE.—All costs directly incurred by the non-Federal partners, including personnel, travel, and hardware development costs, shall be credited toward the non-Federal share of the cost of the activities described in subparagraph (A).

(4) USE OF TECHNOLOGY.—The research, development, or use of a technology under a cooperative research and development agreement entered into under this subsection, including the terms under which the technology may be licensed and the resulting royalties may be distributed, shall be subject to the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.).

(5) WAIVER OF ADVERTISING REQUIREMENTS.—Section 3709 of the Revised Statutes (41 U.S.C. 5) shall not apply to a contract or agreement entered into under this chapter.

(c) CONTENTS OF RESEARCH PROGRAM.—The Secretary shall include in surface transportation research, technology development, and technology transfer programs carried out under this title coordinated activities in the following areas:

(1) Development, use, and dissemination of indicators, including appropriate computer

programs for collecting and analyzing data on the status of infrastructure facilities, to measure the performance of the surface transportation systems of the United States, including productivity, efficiency, energy use, air quality, congestion, safety, maintenance, and other factors that reflect system performance.

(2) Methods, materials, and testing to improve the durability of surface transportation infrastructure facilities and extend the life of bridge structures, including—

(A) new and innovative technologies to reduce corrosion;

(B) tests simulating seismic activity, vibration, and weather; and

(C) the use of innovative recycled materials.

(3) Technologies and practices that reduce costs and minimize disruptions associated with the construction, rehabilitation, and maintenance of surface transportation systems, including responses to natural disasters.

(4) Development of nondestructive evaluation equipment for use with existing infrastructure facilities and with next-generation infrastructure facilities that use advanced materials.

(5) Dynamic simulation models of surface transportation systems for—

(A) predicting capacity, safety, and infrastructure durability problems;

(B) evaluating planned research projects; and

(C) testing the strengths and weaknesses of proposed revisions to surface transportation operations programs.

(6) Economic highway geometrics, structures, and desirable weight and size standards for vehicles using the public highways and the feasibility of uniformity in State regulations with respect to such standards.

(7) Telecommuting and the linkages between transportation, information technology, and community development and the impact of technological change and economic restructuring on travel demand.

(8) Expansion of knowledge of implementing life cycle cost analysis, including—

(A) establishing the appropriate analysis period and discount rates;

(B) learning how to value and properly consider use costs;

(C) determining tradeoffs between reconstruction and rehabilitation; and

(D) establishing methodologies for balancing higher initial costs of new technologies and improved or advanced materials against lower maintenance costs.

(9) Standardized estimates, to be developed in conjunction with the National Institute of Standards and Technology and other appropriate organizations, of useful life under various conditions for advanced materials of use in surface transportation.

(10) Evaluation of traffic calming measures that promote community preservation, transportation mode choice, and safety.

(11) Development and implementation of safety-enhancing equipment, including unobtrusive eyetracking technology.

(d) ADVANCED RESEARCH.—

(1) IN GENERAL.—The Secretary shall establish an advanced research program, consistent with the surface transportation research and technology development strategic plan developed under section 508, that addresses longer-term, higher-risk research that shows potential benefits for improving the durability, efficiency, environmental impact, productivity, and safety (including bicycle and pedestrian safety) of highway and intermodal transportation systems. In carrying out the program, the Secretary shall strive to develop partnerships with the public and private sectors.

(2) RESEARCH AREAS.—In carrying out the program, the Secretary may make grants and enter into cooperative agreements and contracts in such areas as the Secretary determines appropriate, including the following:

(A) Characterization of materials used in highway infrastructure, including analytical techniques, microstructure modeling, and the deterioration processes.

(B) Diagnostics for evaluation of the condition of bridge and pavement structures to enable the assessment of risks of failure, including from seismic activity, vibration, and weather.

(C) Design and construction details for composite structures.

(D) Safety technology-based problems in the areas of pedestrian and bicycle safety, roadside hazards, and composite materials for roadside safety hardware.

(E) Environmental research, including particulate matter source apportionment and model development.

(F) Data acquisition techniques for system condition and performance monitoring.

(G) Human factors, including prediction of the response of travelers to new technologies.

(e) LONG-TERM PAVEMENT PERFORMANCE PROGRAM.—

(1) AUTHORITY.—The Secretary shall complete the long-term pavement performance program tests initiated under the strategic highway research program established under section 307(d) (as in effect on the day before the date of enactment of this section) and continued by the Intermodal Surface Transportation Efficiency Act of 1991 (105 Stat. 1914 et seq.) through the midpoint of a planned 20-year life of the long-term pavement performance program.

(2) GRANTS, COOPERATIVE AGREEMENTS, AND CONTRACTS.—Under the program, the Secretary shall make grants and enter into cooperative agreements and contracts to—

(A) monitor, material-test, and evaluate highway test sections in existence as of the date of the grant, agreement, or contract;

(B) analyze the data obtained in carrying out subparagraph (A); and

(C) prepare products to fulfill program objectives and meet future pavement technology needs.

(f) SEISMIC RESEARCH PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall establish a program to study the vulnerability

of the Federal-aid highway system and other surface transportation systems to seismic activity and to develop and implement cost-effective methods to reduce such vulnerability.

(2) COOPERATION WITH NATIONAL CENTER FOR EARTHQUAKE ENGINEERING RESEARCH.—The Secretary shall conduct the program in cooperation with the National Center for Earthquake Engineering Research at the University of Buffalo.

(3) COOPERATION WITH AGENCIES PARTICIPATING IN NATIONAL EARTHQUAKE HAZARDS REDUCTION PROGRAM.—The Secretary shall conduct the program in consultation and cooperation with Federal departments and agencies participating in the National Earthquake Hazards Reduction Program established by section 5 of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704) and shall take such actions as may be necessary to ensure that the program is consistent with—

(A) planning and coordination activities of the Director of the Federal Emergency Management Agency under section 5(b)(1) of such Act (42 U.S.C. 7704(b)(1)); and

(B) the plan developed by the Director of the Federal Emergency Management Agency under section 8(b) of such Act (42 U.S.C. 7705b(b)).

(g) INFRASTRUCTURE INVESTMENT NEEDS REPORT.—

(1) IN GENERAL.—Not later than January 31, 1999, and January 31 of every second year thereafter, the Secretary shall report to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives on—

(A) estimates of the future highway and bridge needs of the United States; and

(B) the backlog of current highway and bridge needs.

(2) COMPARISON WITH PRIOR REPORTS.—Each report under paragraph (1) shall provide the means, including all necessary information, to relate and compare the conditions and service measures used in the 3 biannual reports published prior to the date of enactment of the Transportation Equity Act for the 21st Century.

(Added Pub. L. 105–178, title V, § 5102, June 9, 1998, 112 Stat. 422.)

REFERENCES IN TEXT

The Stevenson-Wydler Technology Innovation Act of 1980, referred to in subsec. (b)(4), is Pub. L. 96–480, Oct. 21, 1980, 94 Stat. 2311, as amended, which is classified generally to chapter 63 (§ 3701 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short title note set out under section 3701 of Title 15 and Tables.

The date of enactment of this section, referred to in subsec. (e)(1), is the date of enactment of Pub. L. 105–178, which was approved June 9, 1998.

The Intermodal Surface Transportation Efficiency Act of 1991, referred to in subsec. (e)(1), is Pub. L. 102–240, Dec. 18, 1991, 105 Stat. 1914, as amended. For complete classification of this Act to the Code, see Short Title of 1991 Amendment note set out under section 101 of Title 49, Transportation, and Tables.

The date of enactment of the Transportation Equity Act for the 21st Century, referred to in subsec. (g)(2), is the date of enactment of Pub. L. 105–178, which was approved June 9, 1998.

PRIOR PROVISIONS

A prior section 502, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 831, related to State assurances of adequate highway relocation assistance program, prior to repeal by Pub. L. 91–646, title II, § 220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

TRANSFER OF FUNCTIONS

For transfer of functions, personnel, assets, and liabilities of the Federal Emergency Management Agency, including the functions of the Director of the Federal Emergency Management Agency relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see sections 313(1), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

STUDY OF FUTURE STRATEGIC HIGHWAY RESEARCH PROGRAM

Pub. L. 105–178, title V, § 5112, June 9, 1998, 112 Stat. 445, provided that:

''(a) STUDY.—Not later than 120 days after the date of enactment of this Act [June 9, 1998], the Secretary shall make a grant to, or enter into a cooperative agreement or contract with, the Transportation Research Board of the National Academy of Sciences (in this section referred to as the 'Board') to conduct a study to determine the goals, purposes, research agenda and projects, administrative structure, and fiscal needs for a new strategic highway research program to replace the program established under section 307(d) (as in effect on the day before the date of enactment of this Act), or a similar effort.

''(b) CONSULTATION.—In conducting the study, the Board shall consult with the American Association of State Highway and Transportation Officials and such other entities as the Board determines appropriate to the conduct of the study.

''(c) REPORT.—Not later than 5 years after making a grant or entering into a cooperative agreement or contract under subsection (a), the Board shall submit a final report on the results of the study to the Secretary, the Committee on Environment and Public Works of the Senate, and the Committee on Transportation and Infrastructure of the House of Representatives.''

COMMERCIAL REMOTE SENSING PRODUCTS AND SPATIAL INFORMATION TECHNOLOGIES

Pub. L. 105–178, title V, § 5113, June 9, 1998, 112 Stat. 445, provided that:

''(a) IN GENERAL.—The Secretary shall establish and carry out a program to validate commercial remote sensing products and spatial information technologies for application to national transportation infrastructure development and construction.

''(b) PROGRAM STAGES.—

''(1) FIRST STAGE.—Not later than 18 months after the date of enactment of this Act [June 9, 1998], the Secretary shall establish a national policy for the use of commercial remote sensing products and spatial information technologies in national transportation infrastructure development and construction.

''(2) SECOND STAGE.—After establishment of the national policy under paragraph (1), the Secretary shall develop new applications of commercial remote sensing products and spatial information technologies for the implementation of the national policy.

''(c) COOPERATION.—The Secretary shall carry out this section in cooperation with the Commercial Remote Sensing Program of the National Aeronautics and Space Administration and a consortium of university research centers.

''(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $10,000,000 for each of fiscal years 1999 through 2004.''

TRANSPORTATION TECHNOLOGY INNOVATION AND DEMONSTRATION PROGRAM

Pub. L. 105–178, title V, §5117, June 9, 1998, 112 Stat. 448, as amended by Pub. L. 105–206, title IX, §9011(g), (h), July 22, 1998, 112 Stat. 864; Pub. L. 105–277, div. A, §101(g) [title III, §3769 [369]], Oct. 21, 1998, 112 Stat. 2681–439, 2681–478; Pub. L. 107–117, div. B, §1101, Jan. 10, 2002, 115 Stat. 2330, provided that:

''(a) IN GENERAL.—The Secretary shall carry out a transportation technology innovation and demonstration program in accordance with the requirements of this section.

''(b) CONTENTS OF PROGRAM.—

''(1) MOTOR VEHICLE SAFETY WARNING SYSTEM.—

''(A) IN GENERAL.—The Secretary shall expand and continue the study authorized by section 358(c) of the National Highway System Designation Act of 1995 [Pub. L. 104–59] (23 U.S.C. 401 note; 109 Stat. 625) relating to the development of a motor vehicle safety warning system and shall conduct tests of such system.

''(B) GRANTS.—In carrying out this paragraph, the Secretary may make grants to State and local governments.

''(C) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2000 by section 5001(a)(2) of this Act [112 Stat. 419], $700,000 per fiscal year shall be available to carry out this paragraph.

''(2) MOTOR CARRIER ADVANCED SENSOR CONTROL SYSTEM.—

''(A) IN GENERAL.—The Secretary shall conduct research on the deployment of a system of advanced sensors and signal processors in trucks and tractor trailers to determine axle and wheel alignment, monitor collision alarm, check tire pressure and tire balance conditions, measure and detect load distribution in the vehicle, and monitor and adjust automatic braking systems.

''(B) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(2) of this Act, $700,000 per fiscal year shall be available to carry out this paragraph.

''(3) INTELLIGENT TRANSPORTATION INFRASTRUCTURE.—

''(A) IN GENERAL.—The Secretary shall carry out a program to advance the deployment of an operational intelligent transportation infrastructure system for the measurement of various transportation system activities to aid in the transportation planning and analysis while making a significant contribution to the ITS program under this title [see Tables for classification]. This program shall be initiated in the 2 largest metropolitan areas in the Commonwealth of Pennsylvania. The program may locate its database at the facility authorized under paragraph (6).

''(B) DESCRIPTION.—The program under this section shall meet the following objectives:

''(i) Build an infrastructure of the measurement of various transportation system metrics to aid in planning, analysis, and maintenance of the Department of Transportation, including the build-out, maintenance, and operation of greater than 40 metropolitan area systems with a cost not to exceed $2,000,000 per metropolitan area. For the purposes of this demonstration initiative, a metropolitan area is defined as any area that has a population exceeding 300,000 and that meets several of the criteria established by the Secretary in conjunction with the intelligent vehicle highway systems corridors program.

''(ii) Provide private technology commercialization initiatives to generate revenues which will be shared with the Department of Transportation.

''(iii) Collect data primarily through wireless transmission along with some shared wide area networks.

''(iv) Aggregate data into reports for multipoint data distribution techniques.

''(v) Utilize an advanced information system designed and monitored by an entity with experience with the Department of Transportation in the design and monitoring of high reliability, mission critical voice and data systems.

''(C) FOLLOW-ON DEPLOYMENT.—(i) After an intelligent transportation infrastructure system deployed in an initial deployment area pursuant to a contract entered into under the program under this paragraph has received system acceptance, the Department of Transportation has the authority to extend the original contract that was competitively awarded for the deployment of the system in the follow-on deployment areas under the contract, using the same asset ownership, maintenance, fixed price contract, and revenue sharing model, and the same competitively selected consortium leader, as were used for the deployment in that initial deployment area under the program.

''(ii) If any one of the follow-on deployment areas does not commit, by July 1, 2002, to participate in the deployment of the system under the contract, then, upon application by any of the other follow-on deployment areas that have committed by that date to participate in the deployment of the system, the Secretary shall supplement the funds made available for any of the follow-on deployment areas submitting the applications by using for that purpose the funds not used for deployment of the system in the nonparticipating area. Costs paid out of funds provided in such a supplementation shall not be counted for the purpose of the limitation on maximum cost set forth in subparagraph (B).

''(D) ELIGIBILITY.—In addition to the amounts made available under subparagraph (F), the program authorized under this paragraph shall be eligible for funding under sections 5207 and 5208 of this Act [set out in a note below].

''(E) DEFINITIONS.—In this paragraph:

''(i) The term 'initial deployment area' means a metropolitan area referred to in the second sentence of subparagraph (A).

''(ii) The term 'follow-on deployment areas' means the metropolitan areas of Baltimore, Birmingham, Boston, Chicago, Cleveland, Dallas/Ft. Worth, Denver, Detroit, Houston, Indianapolis, Las Vegas, Los Angeles, Miami, New York/Northern New Jersey, Northern Kentucky/Cincinnati, Oklahoma City, Orlando, Philadelphia, Phoenix, Pittsburgh, Portland, Providence, Salt Lake, San Diego, San Francisco, St. Louis, Seattle, Tampa, and Washington, District of Columbia.

''(F) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(2) of this Act, $1,700,000 per fiscal year shall be available to carry out this paragraph.

''(G) FEDERAL SHARE.—The Federal share of the cost of a program carried out under this paragraph shall be 80 percent of the cost of such program.

''(4) CORROSION CONTROL AND PREVENTION.—

''(A) IN GENERAL.—The Secretary shall make a grant to conduct a study on the costs and benefits of corrosion control and prevention. The study shall be conducted in conjunction with an interdisciplinary team of experts from the fields of metallurgy, chemistry, economics, and others, as appropriate. Not later than September 30, 2001, the Secretary shall submit to Congress a report on the study results, together with any recommendations.

''(B) FUNDING.—Of the amounts made available for each of fiscal years 1999 and 2000 by section 5001(a)(1) of this Act [112 Stat. 419], $500,000 per fiscal year shall be available to carry out this paragraph.

''(5) FUNDAMENTAL PROPERTIES OF ASPHALTS AND MODIFIED ASPHALTS.—

''(A) IN GENERAL.—The Secretary shall continue to carry out section 6016 of the Intermodal Surface Transportation Efficiency Act of 1991 [Pub. L. 102–240, set out as a note below]. Additional areas of

the program under such section shall be asphalt-water interaction studies and asphalt-aggregate thin film behavior studies.

''(B) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(1) of this Act, $1,000,000 for fiscal year 1998 and $3,000,000 for each of fiscal years 1999 through 2003 shall be available to carry out this paragraph.

''(6) ADVANCED TRAFFIC MONITORING AND RESPONSE CENTER.—

''(A) IN GENERAL.—The Secretary shall make grants to the Commonwealth of Pennsylvania, in conjunction with the Pennsylvania Turnpike Commission, to establish an advanced traffic monitoring and emergency response center at Letterkenny Army Depot in Chambersburg, Pennsylvania. The center shall help develop and coordinate traffic monitoring and ITS systems on portions of the Pennsylvania Turnpike system and I–81, coordinate emergency response with State and local governments in the Central Pennsylvania Region and conduct research on emergency response and prototype trauma response.

''(B) FUNDING.—

''(i) ELIGIBILITY UNDER SECTION 5208.—The center established under this paragraph shall be eligible for funding under section 5208 of this Act [set out in a note below].

''(ii) ALLOCATION.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(2) of this Act, $1,667,000 per fiscal year shall be available to carry out this paragraph.

''(7) TRANSPORTATION ECONOMIC AND LAND USE SYSTEM.—

''(A) IN GENERAL.—The Secretary shall continue development and deployment through the New Jersey Institute of Technology to metropolitan planning organizations of the Transportation Economic and Land Use System.

''(B) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(2) of this Act, $1,000,000 per fiscal year shall be available to carry out this paragraph.

''(8) RECYCLED MATERIALS RESOURCE CENTER.—

''(A) ESTABLISHMENT.—The Secretary shall establish at the University of New Hampshire a research program to be known as the 'Recycled Materials Resource Center' (referred to in this paragraph as the 'Center').

''(B) ACTIVITIES.—

''(i) IN GENERAL.—The Center shall—

''(I) systematically test, evaluate, develop appropriate guidelines for, and demonstrate environmentally acceptable and occupationally safe technologies and techniques for the increased use of traditional and nontraditional recycled and secondary materials in transportation infrastructure construction and maintenance;

''(II) make information available to State transportation departments, the Federal Highway Administration, the construction industry, and other interested parties to assist in evaluating proposals to use traditional and nontraditional recycled and secondary materials in transportation infrastructure construction;

''(III) encourage the increased use of traditional and nontraditional recycled and secondary materials by using sound science to analyze thoroughly all potential long-term considerations that affect the physical and environmental performance of the materials; and

''(IV) work cooperatively with Federal and State officials to reduce the institutional barriers that limit widespread use of traditional and nontraditional recycled and secondary materials and to ensure that such increased use is consistent with the sustained environmental and physical integrity of the infrastructure in which the materials are used.

''(ii) SITES AND PROJECTS UNDER ACTUAL FIELD CONDITIONS.—In carrying out clause (i)(III), the Secretary may authorize the Center to—

''(I) use test sites and demonstration projects under actual field conditions to develop appropriate performance data; and

''(II) develop appropriate tests and guidelines to ensure correct use of recycled and secondary materials in transportation infrastructure construction.

''(C) REVIEW AND EVALUATION.—

''(i) IN GENERAL.—Not less often than every 2 years, the Secretary shall review and evaluate the program carried out by the Center.

''(ii) NOTIFICATION OF DEFICIENCIES.—In carrying out clause (i), if the Secretary determines that the Center is deficient in carrying out subparagraph (B), the Secretary shall notify the Center of each deficiency and recommend specific measures to address the deficiency.

''(iii) DISQUALIFICATION.—If, after the end of the 180-day period that begins on the date of notification to the Center under clause (ii), the Secretary determines that the Center has not corrected each deficiency identified under clause (ii), the Secretary may, after notifying the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives of the determination, disqualify the Center from further participation under this section.

''(D) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(1) of this Act, $1,500,000 per fiscal year shall be available to carry out this paragraph.''

INTELLIGENT TRANSPORTATION SYSTEMS

Pub. L. 105–178, title V, subtitle C, June 9, 1998, 112 Stat. 452, as amended by Pub. L. 105–206, title IX, § 9011(c), July 22, 1998, 112 Stat. 863; Pub. L. 105–277, div. A, § 101(g) [title III, § 370], Oct. 21, 1998, 112 Stat. 2681–439, 2681–478, provided that:

''SEC. 5201. SHORT TITLE.

''This subtitle may be cited as the 'Intelligent Transportation Systems Act of 1998'.

''SEC. 5202. FINDINGS.

''Congress finds that—

''(1) investments authorized by the Intermodal Surface Transportation Efficiency Act of 1991 (105 Stat. 1914 et seq.) [Pub. L. 104–240, see Tables for classification] have demonstrated that intelligent transportation systems can mitigate surface transportation problems in a cost-effective manner; and

''(2) continued investment in architecture and standards development, research, and systems integration is needed to accelerate the rate at which intelligent transportation systems are incorporated into the national surface transportation network, thereby improving transportation safety and efficiency and reducing costs and negative impacts on communities and the environment.

''SEC. 5203. GOALS AND PURPOSES.

''(a) GOALS.—The goals of the intelligent transportation system program include—

''(1) enhancement of surface transportation efficiency and facilitation of intermodalism and international trade to enable existing facilities to meet a significant portion of future transportation needs, including public access to employment, goods, and services, and to reduce regulatory, financial, and other transaction costs to public agencies and system users;

''(2) achievement of national transportation safety goals, including the enhancement of safe operation of motor vehicles and nonmotorized vehicles, with particular emphasis on decreasing the number and severity of collisions;

''(3) protection and enhancement of the natural environment and communities affected by surface

transportation, with particular emphasis on assisting State and local governments to achieve national environmental goals;

''(4) accommodation of the needs of all users of surface transportation systems, including operators of commercial vehicles, passenger vehicles, and motorcycles, and including individuals with disabilities; and

''(5) improvement of the Nation's ability to respond to emergencies and natural disasters and enhancement of national defense mobility.

''(b) PURPOSES.—The Secretary shall implement activities under the intelligent system transportation program to, at a minimum—

''(1) expedite, in both metropolitan and rural areas, deployment and integration of intelligent transportation systems for consumers of passenger and freight transportation;

''(2) ensure that Federal, State, and local transportation officials have adequate knowledge of intelligent transportation systems for full consideration in the transportation planning process;

''(3) improve regional cooperation and operations planning for effective intelligent transportation system deployment;

''(4) promote the innovative use of private resources;

''(5) develop a workforce capable of developing, operating, and maintaining intelligent transportation systems; and

''(6) complete deployment of Commercial Vehicle Information Systems and Networks in a majority of States by September 30, 2003.

''SEC. 5204. GENERAL AUTHORITIES AND REQUIREMENTS.

''(a) SCOPE.—Subject to the provisions of this subtitle, the Secretary shall conduct an ongoing intelligent transportation system program to research, develop, and operationally test intelligent transportation systems and advance nationwide deployment of such systems as a component of the surface transportation systems of the United States.

''(b) POLICY.—Intelligent transportation system operational tests and deployment projects funded pursuant to this subtitle shall encourage and not displace public-private partnerships or private sector investment in such tests and projects.

''(c) COOPERATION WITH GOVERNMENTAL, PRIVATE, AND EDUCATIONAL ENTITIES.—The Secretary shall carry out the intelligent transportation system program in cooperation with State and local governments and other public entities, the United States private sector, the Federal laboratories, and colleges and universities, including historically black colleges and universities and other minority institutions of higher education.

''(d) CONSULTATION WITH FEDERAL OFFICIALS.—In carrying out the intelligent transportation system program, the Secretary, as appropriate, shall consult with the Secretary of Commerce, the Secretary of the Treasury, the Administrator of the Environmental Protection Agency, the Director of the National Science Foundation, and the heads of other Federal departments and agencies.

''(e) TECHNICAL ASSISTANCE, TRAINING, AND INFORMATION.—The Secretary may provide technical assistance, training, and information to State and local governments seeking to implement, operate, maintain, or evaluate intelligent transportation system technologies and services.

''(f) TRANSPORTATION PLANNING.—The Secretary may provide funding to support adequate consideration of transportation system management and operations, including intelligent transportation systems, within metropolitan and statewide transportation planning processes.

''(g) INFORMATION CLEARINGHOUSE.—

''(1) IN GENERAL.—The Secretary shall—

''(A) maintain a repository for technical and safety data collected as a result of federally sponsored projects carried out under this subtitle; and

''(B) on request, make that information (except for proprietary information and data) readily available to all users of the repository at an appropriate cost.

''(2) DELEGATION OF AUTHORITY.—

''(A) IN GENERAL.—The Secretary may delegate the responsibility of the Secretary under this subsection, with continuing oversight by the Secretary, to an appropriate entity not within the Department of Transportation.

''(B) FEDERAL ASSISTANCE.—If the Secretary delegates the responsibility, the entity to which the responsibility is delegated shall be eligible for Federal assistance under this section.

''(h) ADVISORY COMMITTEES.—

''(1) IN GENERAL.—In carrying out this subtitle, the Secretary may use 1 or more advisory committees.

''(2) APPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—Any advisory committee so used shall be subject to the Federal Advisory Committee Act (5 U.S.C. App.).

''(i) PROCUREMENT METHODS.—

''(1) TECHNICAL ASSISTANCE.—The Secretary shall develop appropriate technical assistance and guidance to assist State and local agencies in evaluating and selecting appropriate methods of procurement for intelligent transportation system projects carried out using funds made available from the Highway Trust Fund, including innovative and nontraditional methods such as the Information Technology Omnibus Procurement.

''(2) INTELLIGENT TRANSPORTATION SYSTEM SOFTWARE.—To the maximum extent practicable, contracting officials shall use as a critical evaluation criterion the Software Engineering Institute's Capability Maturity Model, or another similar recognized standard risk assessment methodology, to reduce the cost, schedule, and performance risks associated with the development, management, and integration of intelligent transportation system software.

''(j) EVALUATIONS.—

''(1) GUIDELINES AND REQUIREMENTS.—

''(A) IN GENERAL.—The Secretary shall issue guidelines and requirements for the evaluation of operational tests and deployment projects carried out under this subtitle.

''(B) OBJECTIVITY AND INDEPENDENCE.—The guidelines and requirements issued under subparagraph (A) shall include provisions to ensure the objectivity and independence of the evaluator so as to avoid any real or apparent conflict of interest or potential influence on the outcome by parties to any such test or deployment project or by any other formal evaluation carried out under this subtitle.

''(C) FUNDING.—The guidelines and requirements issued under subparagraph (A) shall establish evaluation funding levels based on the size and scope of each test or project that ensure adequate evaluation of the results of the test or project.

''(2) SPECIAL RULE.—Any survey, questionnaire, or interview that the Secretary considers necessary to carry out the evaluation of any test, deployment project, or program assessment activity under this subtitle shall not be subject to chapter 35 of title 44.

''(k) USE OF RIGHTS-OF-WAY.—Intelligent transportation system projects specified in section 5117(b)(3) and 5117(b)(6) [set out above] and involving privately owned intelligent transportation system components that is carried out using funds made available from the Highway Trust Fund shall not be subject to any law or regulation of a State or political subdivision of a State prohibiting or regulating commercial activities in the rights-of-way of a highway for which Federal-aid highway funds have been utilized for planning, design, construction, or maintenance, if the Secretary of Transportation determines that such use is in the public interest. Nothing in this subsection shall affect the authority of a State or political subdivision of a State to regulate highway safety.

''SEC. 5205. NATIONAL ITS PROGRAM PLAN.

''(a) IN GENERAL.—

''(1) UPDATES.—The Secretary shall maintain and update, as necessary, the National ITS Program Plan developed by the Department of Transportation and the Intelligent Transportation Society of America.

''(2) SCOPE.—The National ITS Program Plan shall—

''(A) specify the goals, objectives, and milestones for the research and deployment of intelligent transportation systems in the context of major metropolitan areas, smaller metropolitan and rural areas, and commercial vehicle operations;

''(B) specify how specific programs and projects will achieve the goals, objectives, and milestones referred to in subparagraph (A), including consideration of the 5- and 10-year timeframes for the goals and objectives;

''(C) identify activities that provide for the dynamic development of standards and protocols to promote and ensure interoperability in the implementation of intelligent transportation system technologies, including actions taken to establish critical standards; and

''(D) establish a cooperative process with State and local governments for determining desired surface transportation system performance levels and developing plans for incorporation of specific intelligent transportation system capabilities into surface transportation systems.

''(b) REPORTING.—The plan described in subsection (a) shall be transmitted and updated as part of the Surface Transportation Research and Development Strategic Plan developed under section 508 of title 23, United States Code.

''SEC. 5206. NATIONAL ARCHITECTURE AND STANDARDS.

''(a) IN GENERAL.—

''(1) DEVELOPMENT, IMPLEMENTATION, AND MAINTENANCE.—Consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 [Pub. L. 104–113] (15 U.S.C. 272 note; 110 Stat. 783), the Secretary shall develop, implement, and maintain a national architecture and supporting standards and protocols to promote the widespread use and evaluation of intelligent transportation system technology as a component of the surface transportation systems of the United States.

''(2) INTEROPERABILITY AND EFFICIENCY.—To the maximum extent practicable, the national architecture shall promote interoperability among, and efficiency of, intelligent transportation system technologies implemented throughout the United States.

''(3) USE OF STANDARDS DEVELOPMENT ORGANIZATIONS.—In carrying out this section, the Secretary may use the services of such standards development organizations as the Secretary determines to be appropriate.

''(b) REPORT ON CRITICAL STANDARDS.—Not later than June 1, 1999, the Secretary shall submit a report to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure and the Committee on Science of the House of Representatives identifying which standards are critical to ensuring national interoperability or critical to the development of other standards and specifying the status of the development of each standard identified.

''(c) PROVISIONAL STANDARDS.—

''(1) IN GENERAL.—If the Secretary finds that the development or balloting of an intelligent transportation system standard jeopardizes the timely achievement of the objectives identified in subsection (a), the Secretary may establish a provisional standard after consultation with affected parties, and using, to the extent practicable, the work product of appropriate standards development organizations.

''(2) CRITICAL STANDARDS.—If a standard identified as critical in the report under subsection (b) is not adopted and published by the appropriate standards development organization by January 1, 2001, the Secretary shall establish a provisional standard after consultation with affected parties, and using, to the extent practicable, the work product of appropriate standards development organizations.

''(3) PERIOD OF EFFECTIVENESS.—A provisional standard established under paragraph (1) or (2) shall be published in the Federal Register and remain in effect until the appropriate standards development organization adopts and publishes a standard.

''(d) WAIVER OF REQUIREMENT TO ESTABLISH PROVISIONAL STANDARD.—

''(1) IN GENERAL.—The Secretary may waive the requirement under subsection (c)(2) to establish a provisional standard if the Secretary determines that additional time would be productive or that establishment of a provisional standard would be counterproductive to achieving the timely achievement of the objectives identified in subsection (a).

''(2) NOTICE.—The Secretary shall publish in the Federal Register a notice describing each standard for which a waiver of the provisional standard requirement has been granted, the reasons for and effects of granting the waiver, and an estimate as to when the standard is expected to be adopted through a process consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 [Pub. L. 104–113] (15 U.S.C. 272 note; 110 Stat. 783).

''(3) WITHDRAWAL OF WAIVER.—At any time the Secretary may withdraw a waiver granted under paragraph (1). Upon such withdrawal, the Secretary shall publish in the Federal Register a notice describing each standard for which a waiver has been withdrawn and the reasons for withdrawing the waiver.

''(e) CONFORMITY WITH NATIONAL ARCHITECTURE.—

''(1) IN GENERAL.—Except as provided in paragraphs (2) and (3), the Secretary shall ensure that intelligent transportation system projects carried out using funds made available from the Highway Trust Fund, including funds made available under this subtitle to deploy intelligent transportation system technologies, conform to the national architecture, applicable standards or provisional standards, and protocols developed under subsection (a).

''(2) SECRETARY'S DISCRETION.—The Secretary may authorize exceptions to paragraph (1) for—

''(A) projects designed to achieve specific research objectives outlined in the National ITS Program Plan under section 5205 or the Surface Transportation Research and Development Strategic Plan developed under section 508 of title 23, United States Code; or

''(B) the upgrade or expansion of an intelligent transportation system in existence on the date of enactment of this subtitle [June 9, 1998], if the Secretary determines that the upgrade or expansion—

''(i) would not adversely affect the goals or purposes of this subtitle;

''(ii) is carried out before the end of the useful life of such system; and

''(iii) is cost-effective as compared to alternatives that would meet the conformity requirement of paragraph (1).

''(3) EXCEPTIONS.—Paragraph (1) shall not apply to funds used for operation or maintenance of an intelligent transportation system in existence on the date of enactment of this subtitle.

''(f) SPECTRUM.—The Federal Communications Commission shall consider, in consultation with the Secretary, spectrum needs for the operation of intelligent transportation systems, including spectrum for the dedicated short-range vehicle-to-wayside wireless standard. Not later than January 1, 2000, the Federal Communications Commission shall have completed a rulemaking considering the allocation of spectrum for intelligent transportation systems.

''SEC. 5207. RESEARCH AND DEVELOPMENT.

''(a) IN GENERAL.—The Secretary shall carry out a comprehensive program of intelligent transportation system research, development and operational tests of

intelligent vehicles and intelligent infrastructure systems, and other similar activities that are necessary to carry out this subtitle.

''(b) PRIORITY AREAS.—Under the program, the Secretary shall give higher priority to funding projects that—

''(1) address traffic management, incident management, transit management, toll collection, traveler information, or highway operations systems;

''(2) focus on crash-avoidance and integration of in-vehicle crash protection technologies with other on-board safety systems, including the interaction of air bags and safety belts;

''(3) incorporate human factors research, including the science of the driving process;

''(4) facilitate the integration of intelligent infrastructure, vehicle, and control technologies, including magnetic guidance control systems or other materials or magnetics research; or

''(5) incorporate research on the impact of environmental, weather, and natural conditions on intelligent transportation systems, including the effects of cold climates.

''(c) OPERATIONAL TESTS.—Operational tests conducted under this section shall be designed for the collection of data to permit objective evaluation of the results of the tests, derivation of cost-benefit information that is useful to others contemplating deployment of similar systems, and development and implementation of standards.

''(d) FEDERAL SHARE.—The Federal share of the cost of operational tests and demonstrations under subsection (a) shall not exceed 80 percent.

''SEC. 5208. INTELLIGENT TRANSPORTATION SYSTEM INTEGRATION PROGRAM.

''(a) IN GENERAL.—The Secretary shall conduct a comprehensive program to accelerate the integration and interoperability of intelligent transportation systems in metropolitan and rural areas. Under the program, the Secretary shall select for funding, through competitive solicitation, projects that will serve as models to improve transportation efficiency, promote safety (including safe freight movement), increase traffic flow (including the flow of intermodal travel at ports of entry), reduce emissions of air pollutants, improve traveler information, enhance alternative transportation modes, build on existing intelligent transportation system projects, or promote tourism.

''(b) SELECTION OF PROJECTS.—Under the program, the Secretary shall give priority to funding projects that—

''(1) contribute to national deployment goals and objectives outlined in the National ITS Program Plan under section 5205;

''(2) demonstrate a strong commitment to cooperation among agencies, jurisdictions, and the private sector, as evidenced by signed memoranda of understanding that clearly define the responsibilities and relations of all parties to a partnership arrangement, including institutional relationships and financial agreements needed to support deployment;

''(3) encourage private sector involvement and financial commitment, to the maximum extent practicable, through innovative financial arrangements, especially public-private partnerships, including arrangements that generate revenue to offset public investment costs;

''(4) demonstrate commitment to a comprehensive plan of fully integrated intelligent transportation system deployment in accordance with the national architecture and standards and protocols established under section 5206;

''(5) are part of approved plans and programs developed under applicable statewide and metropolitan transportation planning processes and applicable State air quality implementation plans, as appropriate, at the time at which Federal funds are sought;

''(6) minimize the relative percentage and amount of Federal contributions under this section to total project costs;

''(7) ensure continued, long-term operations and maintenance without continued reliance on Federal funding under this subtitle, as evidenced by documented evidence of fiscal capacity and commitment from anticipated public and private sources;

''(8) demonstrate technical capacity for effective operations and maintenance or commitment to acquiring necessary skills;

''(9) mitigate any adverse impacts on bicycle and pedestrian transportation and safety; or

''(10) in the case of a rural area, meet other safety, mobility, geographic and regional diversity, or economic development criteria as determined by the Secretary.

''(c) FISCAL YEAR LIMITATIONS.—Of the amounts made available to carry out this section for a fiscal year—

''(1) not more that $15,000,000 may be used for projects in a single metropolitan area;

''(2) not more than $2,000,000 may be used for projects in a single rural area; and

''(3) not more than $35,000,000 may be used for projects in a State.

''(d) FUNDING LIMITATIONS.—

''(1) PROJECTS IN METROPOLITAN AREAS.—Funding under this section for intelligent transportation infrastructure projects in metropolitan areas shall be used primarily for activities necessary to integrate intelligent transportation infrastructure elements that are either deployed or to be deployed with other sources of funds.

''(2) OTHER PROJECTS.—For projects outside metropolitan areas, funding provided under this subtitle may also be used for installation of intelligent transportation infrastructure elements.

''(e) FUNDING FOR RURAL AREAS.—The Secretary shall allocate not less than 10 percent of funds authorized by section 5001(c)(4)(A) [112 Stat. 421] in rural areas for intelligent transportation infrastructure deployment activities funded under this section to carry out intelligent transportation infrastructure deployment activities in rural areas.

''(f) FEDERAL SHARE.—

''(1) FUNDS MADE AVAILABLE UNDER THIS SECTION.—The Federal share of the cost of a project payable from funds made available under this section shall not exceed 50 percent.

''(2) FUNDS MADE AVAILABLE FROM ALL FEDERAL SOURCES.—The total Federal share of the cost of a project payable from all eligible sources (including this section) shall not exceed 80 percent.

''(g) CORRIDOR DEVELOPMENT AND COORDINATION.—

''(1) IN GENERAL.—The Secretary shall encourage multistate cooperative agreements, coalitions, or other arrangements intended to promote regional cooperation, planning, and shared project implementation for intelligent transportation system projects.

''(2) GREAT LAKES ITS IMPLEMENTATION.—

''(A) IN GENERAL.—The Secretary shall make grants under this subsection to the State of Wisconsin to continue ITS activities in the corridor serving the Greater Milwaukee, Wisconsin, Chicago, Illinois, and Gary, Indiana, areas initiated under the Intermodal Surface Transportation Efficiency Act of 1991 [Pub. L. 102–240, see Tables for classification] and other areas of the State.

''(B) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 under section 5001(c)(4)(A) of this Act, $2,000,000 per fiscal year shall be available to carry out this paragraph.

''(3) NORTHEAST ITS IMPLEMENTATION.—

''(A) IN GENERAL.—The Secretary shall make grants under this subsection to the States to continue ITS activities in the Interstate Route I–95 corridor in the northeastern United States initiated under the Intermodal Surface Transportation Efficiency Act of 1991.

''(B) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 under section 5001(c)(4)(A) of this Act, $5,000,000 per fiscal year shall be available to carry out this paragraph.

''SEC. 5209. COMMERCIAL VEHICLE INTELLIGENT TRANSPORTATION SYSTEM INFRASTRUCTURE DEPLOYMENT.

''(a) IN GENERAL.—The Secretary shall carry out a comprehensive program to deploy intelligent transportation systems that—

''(1) improve the safety and productivity of commercial vehicles and drivers; and

''(2) reduce costs associated with commercial vehicle operations and Federal and State commercial vehicle regulatory requirements.

''(b) PURPOSE.—The program shall advance the technological capability and promote the deployment of intelligent transportation system applications to commercial vehicle operations, including commercial vehicle, commercial driver, and carrier-specific information systems and networks.

''(c) PRIORITY AREAS.—In carrying out the program, the Secretary shall give priority to projects that—

''(1) encourage multistate cooperation and corridor development;

''(2)(A) improve the safety of commercial vehicle operations; and

''(B) increase the efficiency of regulatory inspection processes to reduce administrative burdens by advancing technology to facilitate inspections and generally increase the effectiveness of enforcement efforts;

''(3)(A) advance electronic processing of registration information, driver licensing information, fuel tax information, inspection and crash data, and other safety information; and

''(B) promote communication of the information among the States; or

''(4) enhance the safe passage of commercial vehicles across the United States and across international borders.

''(d) LEVERAGING OF FEDERAL FUNDS.—Federal funds used to carry out the program shall, to the maximum extent practicable—

''(1) be leveraged with non-Federal funds; and

''(2) be used for activities not carried out through the use of private funds.

''(e) FEDERAL SHARE.—The Federal share of the cost of the project payable from funds made available to carry out this section shall not exceed 50 percent. The total Federal share of the cost of the project payable from all eligible sources shall not exceed 80 percent.

''SEC. 5210. USE OF FUNDS.

''(a) OUTREACH AND PUBLIC RELATIONS LIMITATION.—

''(1) IN GENERAL.—For each fiscal year, not more than $5,000,000 of the funds made available to carry out this subtitle shall be used for intelligent transportation system outreach, public relations, displays, scholarships, tours, and brochures.

''(2) APPLICABILITY.—Paragraph (1) shall not apply to intelligent transportation system training or the publication or distribution of research findings, technical guidance, or similar documents.

''(b) INFRASTRUCTURE DEVELOPMENT.—Funds made available to carry out this subtitle for operational tests and deployment projects—

''(1) shall be used primarily for the development of intelligent transportation system infrastructure; and

''(2) to the maximum extent practicable, shall not be used for the construction of physical highway and transit infrastructure unless the construction is incidental and critically necessary to the implementation of an intelligent transportation system project.

''(c) LIFE CYCLE COST ANALYSIS AND FINANCING AND OPERATIONS PLAN.—The Secretary shall require an applicant for funds made available under sections 5208 and 5209 to submit to the Secretary—

''(1) an analysis of the life-cycle costs of operation and maintenance of intelligent transportation system elements, if the total initial capital costs of the elements exceed $3,000,000; and

''(2) a multiyear financing and operations plan that describes how the project will be cost-effectively operated and maintained.

''(d) USE OF INNOVATIVE FINANCING.—

''(1) IN GENERAL.—The Secretary may use up to 25 percent of the funds made available to carry out this subtitle to make available loans, lines of credit, and loan guarantees for projects that are eligible for assistance under this subtitle and that have significant intelligent transportation system elements.

''(2) CONSISTENCY WITH OTHER LAW.—Credit assistance described in paragraph (1) shall be made available in a manner consistent with the Transportation Infrastructure Finance and Innovation Act of 1998 [see section 1501 of Pub. L. 105–178, set out as a Short Title of 1998 Amendments note under section 101 of this title].

''SEC. 5211. DEFINITIONS.

''In this subtitle, the following definitions apply:

''(1) COMMERCIAL VEHICLE INFORMATION SYSTEMS AND NETWORKS.—The term 'Commercial Vehicle Information Systems and Networks' means the information systems and communications networks that support commercial vehicle operations.

''(2) COMMERCIAL VEHICLE OPERATIONS.—The term 'commercial vehicle operations'—

''(A) means motor carrier operations and motor vehicle regulatory activities associated with the commercial movement of goods, including hazardous materials, and passengers; and

''(B) with respect to the public sector, includes the issuance of operating credentials, the administration of motor vehicle and fuel taxes, and roadside safety and border crossing inspection and regulatory compliance operations.

''(3) CORRIDOR.—The term 'corridor' means any major transportation route that includes parallel limited access highways, major arterials, or transit lines.

''(4) INTELLIGENT TRANSPORTATION INFRASTRUCTURE.—The term 'intelligent transportation infrastructure' means fully integrated public sector intelligent transportation system components, as defined by the Secretary.

''(5) INTELLIGENT TRANSPORTATION SYSTEM.—The term 'intelligent transportation system' means electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

''(6) NATIONAL ARCHITECTURE.—The term 'national architecture' means the common framework for interoperability adopted by the Secretary that defines—

''(A) the functions associated with intelligent transportation system user services;

''(B) the physical entities or subsystems within which the functions reside;

''(C) the data interfaces and information flows between physical subsystems; and

''(D) the communications requirements associated with the information flows.

''(7) STANDARD.—The term 'standard' means a document that—

''(A) contains technical specifications or other precise criteria for intelligent transportation systems that are to be used consistently as rules, guidelines, or definitions of characteristics so as to ensure that materials, products, processes, and services are fit for their purposes; and

''(B) may support the national architecture and promote—

''(i) the widespread use and adoption of intelligent transportation system technology as a component of the surface transportation systems of the United States; and

''(ii) interoperability among intelligent transportation system technologies implemented throughout the States.

''(8) STATE.—The term 'State' has the meaning given the term under section 101 of title 23, United States Code.

''SEC. 5212. PROJECT FUNDING.

''(a) USE OF HAZARDOUS MATERIALS MONITORING SYSTEMS.—

''(1) IN GENERAL.—The Secretary shall conduct research on improved methods of deploying and integrating existing ITS projects to include hazardous materials monitoring systems across various modes of transportation.

''(2) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(6) of this Act [112 Stat. 420], $1,500,000 per fiscal year shall be available to carry out this paragraph.

''(b) OUTREACH AND TECHNOLOGY TRANSFER ACTIVITIES.—

''(1) IN GENERAL.—The Secretary shall continue to support the Urban Consortium's ITS outreach and technology transfer activities.

''(2) FUNDING.—Of the amounts made available for each of fiscal years 1998 through 2003 by section 5001(a)(5) of this Act [112 Stat. 420], $500,000 per fiscal year shall be available to carry out this paragraph.

''(c) TRANSLINK.—

''(1) IN GENERAL.—The Secretary shall make grants to the Texas Transportation Institute to continue the Translink Research program.

''(2) FUNDING.—Of the amounts allocated for each of fiscal years 1999 through 2001 by section 5001(a)(6) of this Act, $1,300,000 per fiscal year shall be available to carry out this paragraph.

''SEC. 5213. REPEAL.

''The Intermodal Surface Transportation Efficiency Act of 1991 [Pub. L. 102–240] is amended by striking part B [§§ 6051–6059] of title VI (23 U.S.C. 307 note; 105 Stat. 2189).''

RESEARCH ADVISORY COMMITTEE

Pub. L. 102–240, title VI, § 6011, Dec. 18, 1991, 105 Stat. 2179, provided that:

''(a) ESTABLISHMENT.—Not later than 180 days after the date of transmittal of the report to Congress under section 6010 [of Pub. L. 102–240, formerly set out as a note under section 307 of this title], the Secretary shall establish an independent surface transportation research advisory committee (hereinafter in this section referred to as the 'advisory committee').

''(b) PURPOSES.—The advisory committee shall provide ongoing advice and recommendations to the Secretary regarding needs, objectives, plans, approaches, content, and accomplishments with respect to short-term and long-term surface transportation research and development. The advisory committee shall also assist in ensuring that such research and development is coordinated with similar research and development being conducted outside of the Department of Transportation.

''(c) MEMBERSHIP.—The advisory committee shall be composed of not less than 20 and not more than 30 members appointed by the Secretary from among individuals who are not employees of the Department of Transportation and who are specially qualified to serve on the advisory committee by virtue of their education, training, or experience. A majority of the members of the advisory committee shall be individuals with experience in conducting surface transportation research and development. The Secretary in appointing the members of the advisory committee shall ensure that representatives of Federal, State, and local governments, other public agencies, colleges and universities, public, private, and nonprofit research organizations, and organizations representing transportation providers, shippers, labor, and the financial community are represented on an equitable basis.

''(d) CHAIRMAN.—The chairman of the advisory committee shall be designated by the Secretary.

''(e) PAY AND EXPENSES.—Members of the advisory committee shall serve without pay, except that the Secretary may allow any member, while engaged in the business of the advisory committee or a subordinate committee, travel expenses, including per diem in lieu of subsistence, in accordance with sections 5702 and 5703 of title 5, United States Code.

''(f) SUBORDINATE COMMITTEES.—The Secretary shall establish a subordinate committee to the advisory committee to provide advice on advanced highway vehicle technology research and development, and may establish other subordinate committees to provide advice on specific areas of surface transportation research and development. Such subordinate committees shall be subject to subsections (e), (g), and (i) of this section.

''(g) ASSISTANCE OF SECRETARY.—Upon request of the advisory committee, the Secretary shall provide such information, administrative services, support staff, and supplies as the Secretary determines to be necessary for the advisory committee to carry out its functions.

''(h) REPORTS.—The advisory committee shall, within 1 year after the date of establishment of the advisory committee, and annually thereafter, submit to the Congress a report summarizing its activities under this section.

''(i) TERMINATION.—Section 14 of the Federal Advisory Committee Act [5 App. U.S.C.] shall not apply to the advisory committee established under this section.''

FUNDAMENTAL PROPERTIES OF ASPHALTS AND MODIFIED ASPHALTS

Pub. L. 102–240, title VI, § 6016, Dec. 18, 1991, 105 Stat. 2182, provided that:

''(a) STUDIES.—The Administrator of the Federal Highway Administration (hereinafter in this section referred to as the 'Administrator') shall conduct studies of the fundamental chemical property and physical property of petroleum asphalts and modified asphalts used in highway construction in the United States. Such studies shall emphasize predicting pavement performance from the fundamental and rapidly measurable properties of asphalts and modified asphalts.

''(b) CONTRACTS.—To carry out the studies under subsection (a), the Administrator shall enter into contracts with the Western Research Institute of the University of Wyoming in order to conduct the necessary technical and analytical research in coordination with existing programs which evaluate actual performance of asphalts and modified asphalts in roadways, including the Strategic Highway Research Program.

''(c) ACTIVITIES OF STUDIES.—The studies under subsection (a) shall include the following activities:

''(1) Fundamental composition studies.

''(2) Fundamental physical and rheological property studies.

''(3) Asphalt-aggregate interaction studies.

''(4) Coordination of composition studies, physical and rheological property studies, and asphalt-aggregate interaction studies for the purposes of predicting pavement performance, including refinements of Strategic Highway Research Program specifications.

''(d) TEST STRIP.—

''(1) IMPLEMENTATION.—The Administrator, in coordination with the Western Research Institute of the University of Wyoming, shall implement a test strip for the purpose of demonstrating and evaluating the unique energy and environmental advantages of using shale oil modified asphalts under extreme climatic conditions.

''(2) FUNDING.—For the purposes of construction activities related to this test strip, the Secretary and the Director of the National Park Service shall make up to $1,000,000 available from amounts made available from the authorization for parkroads and parkways.

''(3) REPORT TO CONGRESS.—Not later than November 30, 1995, the Administrator shall transmit to Congress as part of a report under subsection (e) the Administrator's findings on activities conducted under this subsection, including an evaluation of the test strip implemented under this subsection and recommendations for legislation to establish a national program to support United States transportation and energy security requirements.

''(e) ANNUAL REPORT TO CONGRESS.—Not later than 180 days after the date of the enactment of this Act

[Dec. 18, 1991], and on or before November 30th of each year beginning thereafter, the Administrator shall transmit to Congress a report of the progress made in implementing this section.

''(f) AUTHORIZATION OF APPROPRIATIONS.—The Secretary shall expend from administrative and research funds deducted under section 104(a) of this title [probably means section 104(a) of Title 23, Highways] at least $3,000,000 for each of fiscal years 1992, 1993, 1994, 1995, and 1996 to carry out subsection (b).''

[For termination, effective May 15, 2000, of annual reporting provisions in section 6016(e) of Pub. L. 102–240, set out above, see section 3003 of Pub. L. 104–66, as amended, set out as a note under section 1113 of Title 31, Money and Finance, and page 139 of House Document No. 103–7.]

STUDY OF FACTORS AFFECTING SAFE AND EFFICIENT OPERATION OF BRIDGES, TUNNELS AND ROADS WITHIN UNITED STATES

Pub. L. 95–599, title I, §166, Nov. 6, 1978, 92 Stat. 2722, provided that: ''The Secretary of Transportation shall make a full and complete investigation and study of all those factors affecting the safe and efficient operation of bridges, tunnels, and roads within the United States, including, but not limited to, structural, operational, environmental, and civil disturbance factors.''

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 151 of this title.

§ 503. Technology deployment

(a) TECHNOLOGY DEPLOYMENT INITIATIVES AND PARTNERSHIPS PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall develop and administer a national technology deployment initiatives and partnerships program.

(2) PURPOSE.—The purpose of the program shall be to significantly accelerate the adoption of innovative technologies by the surface transportation community.

(3) DEPLOYMENT GOALS.—

(A) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this section, the Secretary shall establish not more than 5 deployment goals to carry out paragraph (1).

(B) DESIGN.—Each of the goals and the program developed to achieve the goals shall be designed to provide tangible benefits, with respect to transportation systems, in the areas of efficiency, safety, reliability, service life, environmental protection, and sustainability.

(C) STRATEGIES FOR ACHIEVEMENT.—For each goal, the Secretary, in cooperation with representatives of the transportation community such as States, local governments, the private sector, and academia, shall use domestic and international technology to develop strategies and initiatives to achieve the goal, including technical assistance in deploying technology and mechanisms for sharing information among program participants.

(4) INTEGRATION WITH OTHER PROGRAMS.—The Secretary shall integrate activities carried out under this subsection with the efforts of the Secretary to disseminate the results of research sponsored by the Secretary and to facilitate technology transfer.

(5) LEVERAGING OF FEDERAL RESOURCES.—In selecting projects to be carried out under this subsection, the Secretary shall give preference to projects that leverage Federal funds with other significant public or private resources.

(6) CONTINUATION OF SHRP PARTNERSHIPS.—Under the program, the Secretary shall continue the partnerships established through the strategic highway research program established under section 307(d) (as in effect on the day before the date of enactment of this section).

(7) GRANTS, COOPERATIVE AGREEMENTS, AND CONTRACTS.—Under the program, the Secretary may make grants and enter into cooperative agreements and contracts to foster alliances and support efforts to stimulate advances in transportation technology, including—

(A) the testing and evaluation of products of the strategic highway research program;

(B) the further development and implementation of technology in areas such as the Superpave system and the use of lithium salts and other alternatives to prevent and mitigate alkali silica reactivity;

(C) the provision of support for long-term pavement performance product implementation and technology access; and

(D) other activities to achieve the goals established under paragraph (3).

(8) REPORTS.—Not later than 18 months after the date of enactment of this section, and biennially thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report on the progress and results of activities carried out under this section.

(9) ALLOCATION.—To the extent appropriate to achieve the goals established under paragraph (3), the Secretary may further allocate funds made available to carry out this section to States for their use.

(b) INNOVATIVE BRIDGE RESEARCH AND CONSTRUCTION PROGRAM.—

(1) IN GENERAL.—The Secretary shall establish and carry out a program to demonstrate the application of innovative material technology in the construction of bridges and other structures.

(2) GOALS.—The goals of the program shall include—

(A) the development of new, cost-effective innovative material highway bridge applications;

(B) the reduction of maintenance costs and life-cycle costs of bridges, including the costs of new construction, replacement, or rehabilitation of deficient bridges;

(C) the development of construction techniques to increase safety and reduce construction time and traffic congestion;

(D) the development of engineering design criteria for innovative products and materials for use in highway bridges and structures;

(E) the development of cost-effective and innovative techniques to separate vehicle and pedestrian traffic from railroad traffic;

(F) the development of highway bridges and structures that will withstand natural

disasters, including alternative processes for the seismic retrofit of bridges; and

(G) the development of new nondestructive bridge evaluation technologies and techniques.

(3) GRANTS, COOPERATIVE AGREEMENTS, AND CONTRACTS.—

(A) IN GENERAL.—Under the program, the Secretary shall make grants to, and enter into cooperative agreements and contracts with—

(i) States, other Federal agencies, universities and colleges, private sector entities, and nonprofit organizations to pay the Federal share of the cost of research, development, and technology transfer concerning innovative materials; and

(ii) States to pay the Federal share of the cost of repair, rehabilitation, replacement, and new construction of bridges or structures that demonstrate the application of innovative materials.

(B) APPLICATIONS.—To receive a grant under this subsection, an entity described in subparagraph (A) shall submit an application to the Secretary. The application shall be in such form and contain such information as the Secretary may require. The Secretary shall select and approve the applications based on whether the project that is the subject of the grant meets the goals of the program described in paragraph (2).

(4) TECHNOLOGY AND INFORMATION TRANSFER.—The Secretary shall take such action as is necessary to ensure that the information and technology resulting from research conducted under paragraph (3) is made available to State and local transportation departments and other interested parties as specified by the Secretary.

(5) FEDERAL SHARE.—The Federal share of the cost of a project under this section shall be determined by the Secretary.

(Added Pub. L. 105–178, title V, §5103, June 9, 1998, 112 Stat. 427.)

REFERENCES IN TEXT

The date of enactment of this section, referred to in subsec. (a)(3)(A), (6), (8), is the date of enactment of Pub. L. 105–178, which was approved June 9, 1998.

PRIOR PROVISIONS

A prior section 503, added Pub. L. 90–495, §30, Aug. 23, 1968, 82 Stat. 831, related to administration of highway relocation assistance program, prior to repeal by Pub. L. 91–646, title II, §220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in title 49 section 5505.

§ 504. Training and education

(a) NATIONAL HIGHWAY INSTITUTE.—

(1) IN GENERAL.—The Secretary shall operate in the Federal Highway Administration a National Highway Institute (in this subsection referred to as the ''Institute''). The Secretary shall administer, through the Institute, the authority vested in the Secretary by this title or by any other law for the development and conduct of education and training programs relating to highways.

(2) DUTIES OF THE INSTITUTE.—In cooperation with State transportation departments, United States industry, and any national or international entity, the Institute shall develop and administer education and training programs of instruction for—

(A) Federal Highway Administration, State, and local transportation agency employees;

(B) regional, State, and metropolitan planning organizations;

(C) State and local police, public safety, and motor vehicle employees; and

(D) United States citizens and foreign nationals engaged or to be engaged in surface transportation work of interest to the United States.

(3) COURSES.—The Institute may develop and administer courses in modern developments, techniques, methods, regulations, management, and procedures relating to surface transportation, environmental mitigation and compliance, acquisition of rights-of-way, relocation assistance, engineering, safety, construction, maintenance and operations, contract administration, motor carrier safety activities, inspection, and highway finance.

(4) SET-ASIDE; FEDERAL SHARE.—Not to exceed ½ of 1 percent of the funds apportioned to a State under section 104(b)(3) for the surface transportation program shall be available for expenditure by the State transportation department for the payment of not to exceed 80 percent of the cost of tuition and direct educational expenses (excluding salaries) in connection with the education and training of employees of State and local transportation agencies in accordance with this subsection.

(5) FEDERAL RESPONSIBILITY.—

(A) IN GENERAL.—Except as provided in subparagraph (B), education and training of employees of Federal, State, and local transportation (including highway) agencies authorized under this subsection may be provided—

(i) by the Secretary at no cost to the States and local governments if the Secretary determines that provision at no cost is in the public interest; or

(ii) by the State through grants, cooperative agreements, and contracts with public and private agencies, institutions, individuals, and the Institute.

(B) PAYMENT OF FULL COST BY PRIVATE PERSONS.—Private agencies, international or foreign entities, and individuals shall pay the full cost of any education and training received by them unless the Secretary determines that a lower cost is of critical importance to the public interest.

(6) TRAINING FELLOWSHIPS; COOPERATION.—The Institute may—

(A) engage in training activities authorized under this subsection, including the granting of training fellowships; and

(B) carry out its authority independently or in cooperation with any other branch of the Federal Government or any State agency, authority, association, institution, for-profit or nonprofit corporation, other na-

tional or international entity, or other person.

(7) COLLECTION OF FEES.—

(A) GENERAL RULE.—In accordance with this subsection, the Institute may assess and collect fees solely to defray the costs of the Institute in developing or administering education and training programs under this subsection.

(B) LIMITATION.—Fees may be assessed and collected under this subsection only in a manner that may reasonably be expected to result in the collection of fees during any fiscal year in an aggregate amount that does not exceed the aggregate amount of the costs referred to in subparagraph (A) for the fiscal year.

(C) PERSONS SUBJECT TO FEES.—Fees may be assessed and collected under this subsection only with respect to—

(i) persons and entities for whom education or training programs are developed or administered under this subsection; and

(ii) persons and entities to whom education or training is provided under this subsection.

(D) AMOUNT OF FEES.—The fees assessed and collected under this subsection shall be established in a manner that ensures that the liability of any person or entity for a fee is reasonably based on the proportion of the costs referred to in subparagraph (A) that relate to the person or entity.

(E) USE.—All fees collected under this subsection shall be used to defray costs associated with the development or administration of education and training programs authorized under this subsection.

(8) RELATION TO FEES.—The funds made available to carry out this subsection may be combined with or held separate from the fees collected under paragraph (7).

(b) LOCAL TECHNICAL ASSISTANCE PROGRAM.—

(1) AUTHORITY.—The Secretary shall carry out a local technical assistance program that will provide access to surface transportation technology to—

(A) highway and transportation agencies in urbanized areas with populations of between 50,000 and 1,000,000 individuals;

(B) highway and transportation agencies in rural areas; and

(C) contractors that do work for the agencies.

(2) GRANTS, COOPERATIVE AGREEMENTS, AND CONTRACTS.—The Secretary may make grants and enter into cooperative agreements and contracts to provide education and training, technical assistance, and related support services to—

(A) assist rural, local transportation agencies and tribal governments, and the consultants and construction personnel working for the agencies and governments, to—

(i) develop and expand their expertise in road and transportation areas (including pavement, bridge, concrete structures, safety management systems, and traffic safety countermeasures);

(ii) improve roads and bridges;

(iii) enhance—

(I) programs for the movement of passengers and freight; and

(II) intergovernmental transportation planning and project selection; and

(iv) deal effectively with special transportation-related problems by preparing and providing training packages, manuals, guidelines, and technical resource materials;

(B) develop technical assistance for tourism and recreational travel;

(C) identify, package, and deliver transportation technology and traffic safety information to local jurisdictions to assist urban transportation agencies in developing and expanding their ability to deal effectively with transportation-related problems;

(D) operate, in cooperation with State transportation departments and universities—

(i) local technical assistance program centers designated to provide transportation technology transfer services to rural areas and to urbanized areas with populations of between 50,000 and 1,000,000 individuals; and

(ii) local technical assistance program centers designated to provide transportation technical assistance to Indian tribal governments; and

(E) allow local transportation agencies and tribal governments, in cooperation with the private sector, to enhance new technology implementation.

(c) RESEARCH FELLOWSHIPS.—

(1) GENERAL AUTHORITY.—The Secretary, acting either independently or in cooperation with other Federal departments, agencies, and instrumentalities, may make grants for research fellowships for any purpose for which research is authorized by this chapter.

(2) DWIGHT DAVID EISENHOWER TRANSPORTATION FELLOWSHIP PROGRAM.—The Secretary shall establish and implement a transportation research fellowship program for the purpose of attracting qualified students to the field of transportation. The program shall be known as the ''Dwight David Eisenhower Transportation Fellowship Program''.

(Added Pub. L. 105–178, title V, § 5104, June 9, 1998, 112 Stat. 429.)

PRIOR PROVISIONS

A prior section 504, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 831, related to Federal reimbursement for highway relocation assistance, prior to repeal by Pub. L. 91–646, title II, § 220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 204 of this title; title 49 section 5505.

§ 505. State planning and research

(a) GENERAL RULE.—Two percent of the sums apportioned to a State for fiscal year 1998 and each fiscal year thereafter under section 104 (other than sections 104(f) and 104(h)) and under

section 144 shall be available for expenditure by the State, in consultation with the Secretary, only for the following purposes:

(1) Engineering and economic surveys and investigations.

(2) The planning of future highway programs and local public transportation systems and the planning of the financing of such programs and systems, including metropolitan and statewide planning under sections 134 and 135.

(3) Development and implementation of management systems under section 303.

(4) Studies of the economy, safety, and convenience of surface transportation systems and the desirable regulation and equitable taxation of such systems.

(5) Research, development, and technology transfer activities necessary in connection with the planning, design, construction, management, and maintenance of highway, public transportation, and intermodal transportation systems.

(6) Study, research, and training on the engineering standards and construction materials for transportation systems described in paragraph (5), including the evaluation and accreditation of inspection and testing and the regulation and taxation of their use.

(b) MINIMUM EXPENDITURES ON RESEARCH, DEVELOPMENT, AND TECHNOLOGY TRANSFER ACTIVITIES.—

(1) IN GENERAL.—Subject to paragraph (2), not less than 25 percent of the funds subject to subsection (a) that are apportioned to a State for a fiscal year shall be expended by the State for research, development, and technology transfer activities described in subsection (a), relating to highway, public transportation, and intermodal transportation systems.

(2) WAIVERS.—The Secretary may waive the application of paragraph (1) with respect to a State for a fiscal year if the State certifies to the Secretary for the fiscal year that total expenditures by the State for transportation planning under sections 134 and 135 will exceed 75 percent of the funds described in paragraph (1) and the Secretary accepts such certification.

(3) NONAPPLICABILITY OF ASSESSMENT.—Funds expended under paragraph (1) shall not be considered to be part of the extramural budget of the agency for the purpose of section 9 of the Small Business Act (15 U.S.C. 638).

(c) FEDERAL SHARE.—The Federal share of the cost of a project carried out using funds subject to subsection (a) shall be 80 percent unless the Secretary determines that the interests of the Federal-aid highway program would be best served by decreasing or eliminating the non-Federal share.

(d) ADMINISTRATION OF SUMS.—Funds subject to subsection (a) shall be combined and administered by the Secretary as a single fund and shall be available for obligation for the same period as funds apportioned under section 104(b)(1).

(Added Pub. L. 105–178, title V, §5105, June 9, 1998, 112 Stat. 432.)

PRIOR PROVISIONS

A prior section 505, added Pub. L. 90–495, §30, Aug. 23, 1968, 82 Stat. 831, related to highway relocation assistance payments, prior to repeal by Pub. L. 91–646, title II, §220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

ALASKA HIGHWAY STUDY

Pub. L. 87–866, §13, Oct. 23, 1962, 76 Stat. 1149, as amended by Pub. L. 97–449, §2(a), Jan. 12, 1983, 96 Stat. 2439, provided that:

''(a) The Secretary of Transportation, in cooperation with the State of Alaska, is hereby authorized to make engineering studies and estimates and planning surveys relative to a highway construction program for the State of Alaska, and, in accordance with treaties or other agreements to be negotiated with Canada by the Secretary of State in consultation with the Secretary of Transportation, engineering studies, estimates, and planning surveys relative to connecting Alaskan roads with Canadian roads at the International boundary.

''(b) On or before May 15, 1964, the Secretary of Transportation shall submit a report to the Congress which shall include—

''(1) an analysis of the adequacy of the Federal-aid highway program to provide for a satisfactory program in both the populated and the undeveloped areas in Alaska;

''(2) specific recommendations as to the construction of roads through undeveloped areas of Alaska and connection of such roads with Canadian roads at the International boundary; and

''(3) a feasible program for implementing such specific recommendations, including cost estimates, recommendations as to the sharing of cost responsibilities, and other pertinent matters.

''(c) From time to time, either before or after submission of the report provided for in subsection (b) of this section, the Secretary of Transportation may submit recommendations to the Congress with respect to the construction of particular highways to carry out the purposes of this section.

''(d) Nothing in this section shall be construed as creating any obligation in the Congress, express or implied, to carry out the recommendations referred to in subsections (b) and (c).

''(e) There is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, to be available until expended, the sum of $800,000 for the purpose of making the studies, surveys, and report authorized by subsections (a) and (b) hereof.''

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 115, 135, 506 of this title; title 49 section 5505.

§506. International highway transportation outreach program

(a) ESTABLISHMENT.—The Secretary may establish an international highway transportation outreach program—

(1) to inform the United States highway community of technological innovations in foreign countries that could significantly improve highway transportation in the United States;

(2) to promote United States highway transportation expertise, goods, and services in foreign countries; and

(3) to increase transfers of United States highway transportation technology to foreign countries.

(b) ACTIVITIES.—Activities carried out under the program may include—

(1) development, monitoring, assessment, and dissemination in the United States of information about highway transportation innovations in foreign countries that could significantly improve highway transportation in the United States;

(2) research, development, demonstration, training, and other forms of technology transfer and exchange;

(3) informing foreign countries about the technical quality of United States highway transportation goods and services through participation in trade shows, seminars, expositions, and other such activities;

(4) offering technical services of the Federal Highway Administration that cannot be readily obtained from United States private sector firms to be incorporated into the proposals of United States private sector firms undertaking highway transportation projects outside the United States if the costs of such services will be recovered under the terms of the project;

(5) conducting studies to assess the need for or feasibility of highway transportation improvements in countries that are not members of the Organization for Economic Cooperation and Development, as of December 18, 1991, and in Greece and Turkey; and

(6) gathering and disseminating information on foreign transportation markets and industries.

(c) COOPERATION.—The Secretary may carry out this section in cooperation with any appropriate Federal agency, State or local agency, authority, association, institution, corporation (profit or nonprofit), foreign government, multinational institution, or other organization or person.

(d) FUNDS.—

(1) CONTRIBUTIONS.—Funds available to carry out this section shall include funds deposited by any cooperating organization or person into a special account of the Treasury established for this purpose.

(2) ELIGIBLE USES OF FUNDS.—The funds deposited into the account and other funds available to carry out this section shall be available to cover the cost of any activity eligible under this section, including the cost of promotional materials, travel, reception and representation expenses, and salaries and benefits.

(3) REIMBURSEMENTS FOR SALARIES AND BENEFITS.—Reimbursements for salaries and benefits of Department of Transportation employees providing services under this section shall be credited to the account.

(e) ELIGIBLE USE OF STATE PLANNING AND RESEARCH FUNDS.—A State, in coordination with the Secretary, may obligate funds made available to carry out section 505 for any activity authorized under subsection (a).

(Added Pub. L. 105–178, title V, § 5106, June 9, 1998, 112 Stat. 433.)

PRIOR PROVISIONS

A prior section 506, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 832; amended Pub. L. 91–605, title I, § 137, Dec. 31, 1970, 84 Stat. 1735, related to replacement housing, prior to repeal by Pub. L. 91–646, title II, § 220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

§ 507. Surface transportation-environment cooperative research program

(a) IN GENERAL.—The Secretary shall establish and carry out a surface transportation-environment cooperative research program.

(b) CONTENTS.—The program to be carried out under this section shall include research designed—

(1) to develop more accurate models for evaluating transportation control measures and transportation system designs that are appropriate for use by State and local governments, including metropolitan planning organizations, in designing implementation plans to meet Federal, State, and local environmental requirements;

(2) to improve understanding of the factors that contribute to the demand for transportation, including transportation system design, demographic change, land use planning, and communications and other information technologies;

(3) to develop indicators of economic, social, and environmental performance of transportation systems to facilitate analysis of potential alternatives;

(4) to study the relationship between highway density and ecosystem integrity, including the impacts of highway density on habitat integrity and overall ecosystem health, and develop a rapid assessment methodology for use by transportation and regulatory agencies in determining the relationship between highway density and ecosystem integrity; and

(5) to meet additional priorities as determined by the advisory board established under subsection (c), including recommendations of the National Research Council in the report entitled ''Environmental Research Needs in Transportation''.

(c) ADVISORY BOARD.—

(1) ESTABLISHMENT.—In consultation with the Secretary of Energy, the Administrator of the Environmental Protection Agency, and the heads of other appropriate Federal departments and agencies, the Secretary shall establish an advisory board to recommend environmental and energy conservation research, technology, and technology transfer activities related to surface transportation.

(2) MEMBERSHIP.—The advisory board shall include—

(A) representatives of State transportation and environmental agencies;

(B) transportation and environmental scientists and engineers; and

(C) representatives of metropolitan planning organizations, transit operating agencies, and environmental organizations.

(d) NATIONAL ACADEMY OF SCIENCES.—The Secretary may make grants to, and enter into cooperative agreements with, the National Academy of Sciences to carry out such activities relating to the research, technology, and technology transfer activities described in subsection (b) as the Secretary determines appropriate.

(Added Pub. L. 105–178, title V, § 5107, June 9, 1998, 112 Stat. 434.)

PRIOR PROVISIONS

A prior section 507, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 832, related to expenses incidental to transfer of property, prior to repeal by Pub. L. 91–646, title II, § 220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

TERMINATION OF ADVISORY BOARDS

Advisory boards established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a board established by the President or an officer of the Federal Government, such board is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a board established by Congress, its duration is otherwise provided for by law. See sections 3(2) and 14 of Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, 776, set out in the Appendix to Title 5, Government Organization and Employees.

§ 508. Surface transportation research strategic planning

(a) IN GENERAL.—The Secretary shall—

(1) establish a strategic planning process, consistent with section 306 of title 5 for the Department of Transportation to determine national transportation research and technology development priorities related to surface transportation;

(2) coordinate Federal surface transportation research and technology development activities;

(3) measure the results of those activities and how they impact the performance of the surface transportation systems of the United States; and

(4) ensure that planning and reporting activities carried out under this section are coordinated with all other surface transportation planning and reporting requirements.

(b) IMPLEMENTATION.—The Secretary shall—

(1) provide for the integrated planning, coordination, and consultation among the operating administrations of the Department of Transportation, all other Federal agencies with responsibility for surface transportation research and technology development, State and local governments, institutions of higher education, industry, and other private and public sector organizations engaged in surface transportation-related research and development activities;

(2) ensure that the surface transportation research and technology development programs of the Department do not duplicate other Federal, State, or private sector research and development programs; and

(3) provide for independent validation of the scientific and technical assumptions underlying the surface transportation research and technology development programs of the Department.

(c) SURFACE TRANSPORTATION RESEARCH AND TECHNOLOGY DEVELOPMENT STRATEGIC PLAN.—

(1) DEVELOPMENT.—The Secretary shall develop an integrated surface transportation research and technology development strategic plan.

(2) CONTENTS.—The plan shall include—

(A) an identification of the general goals and objectives of the Department of Transportation for surface transportation research and development;

(B) a description of the roles of the Department and other Federal agencies in achieving the goals identified under subparagraph (A), in order to avoid unnecessary duplication of effort;

(C) a description of the overall strategy of the Department, and the role of each of the operating administrations of the Department, in carrying out the plan over the next 5 years, including a description of procedures for coordination of the efforts of the Secretary with the efforts of the operating administrations of the Department and other Federal agencies;

(D) an assessment of how State and local research and technology development activities are contributing to the achievement of the goals identified under subparagraph (A);

(E) details of the surface transportation research and technology development programs of the Department, including performance goals, resources needed to achieve those goals, and performance indicators as described in section 1115(a) of title 31, United States Code, for the next 5 years for each area of research and technology development;

(F) significant comments on the plan obtained from outside sources; and

(G) responses to significant comments obtained from the National Research Council and other advisory bodies, and a description of any corrective actions taken pursuant to such comments.

(3) NATIONAL RESEARCH COUNCIL REVIEW.—The Secretary shall enter into an agreement for the review by the National Research Council of the details of each—

(A) strategic plan or revision required under section 306 of title 5;

(B) performance plan required under section 1115 of title 31; and

(C) program performance report required under section 1116,

with respect to surface transportation research and technology development.

(4) PERFORMANCE PLANS AND REPORTS.—In reports submitted under sections 1115 and 1116 of title 31, the Secretary shall include—

(A) a summary of the results for the previous fiscal year of surface transportation research and technology development programs to which the Department of Transportation contributes, along with—

(i) an analysis of the relationship between those results and the goals identified under paragraph (2)(A); and

(ii) a description of the methodology used for assessing the results; and

(B) a description of significant surface transportation research and technology development initiatives, if any, undertaken during the previous fiscal year that were not in the plan developed under paragraph (1), and any significant changes in the plan from the previous year's plan.

(d) MERIT REVIEW AND PERFORMANCE MEASUREMENT.—Not later than 1 year after the date of enactment of this section, the Secretary shall transmit to Congress a report describing competitive merit review procedures for use in selecting grantees and contractors in the programs covered by the plan developed under subsection (c) and performance measurement procedures for evaluating the programs.

(e) PROCUREMENT PROCEDURES.—The Secretary shall—

(1) develop model procurement procedures that encourage the use of advanced technologies; and

(2) develop model transactions for carrying out and coordinating Federal and State surface transportation research and technology development activities.

(f) CONSISTENCY WITH GOVERNMENT PERFORMANCE AND RESULTS ACT OF 1993.—The plans and reports developed under this section shall be consistent with and incorporated as part of the plans developed under section 306 of title 5 and sections 1115 and 1116 of title 31.

(Added Pub. L. 105–178, title V, § 5108, June 9, 1998, 112 Stat. 435.)

REFERENCES IN TEXT

Section 1116, referred to in subsec. (c)(3)(C), probably is a reference to section 1116 of Title 31, Money and Finance. No section 1116 of this title has been enacted.

The date of enactment of this section, referred to in subsec. (d), is the date of enactment of Pub. L. 105–178, which was approved June 9, 1998.

The Government Performance and Results Act of 1993, referred to in subsec. (f), is Pub. L. 103–62, Aug. 3, 1993, 107 Stat. 285, which enacted sections 1115 to 1119, 9703, and 9704 of Title 31, Money and Finance, section 306 of Title 5, Government Organization and Employees, and sections 2801 to 2805 of Title 39, Postal Service, amended section 1105 of Title 31, and enacted provisions set out as notes under sections 1101 and 1115 of Title 31. For complete classification of this Act to the Code, see Short Title of 1993 Amendment note set out under section 1101 of Title 31 and Tables.

PRIOR PROVISIONS

Sections 508 to 512 of this title were repealed by Pub. L. 91–646, title II, § 220(a)(10), Jan. 2, 1971, 84 Stat. 1903.

Section 508, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 833, related to highway relocation services.

Section 509, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 833, related to relocation assistance programs on Federal highway projects.

Section 510, added Pub. L. 91–605, title I, § 117(b), Dec. 31, 1970, 84 Stat. 1724, related to construction of replacement housing.

Section 511, formerly 510, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 834; renumbered § 511, Pub. L. 91–605, title I, § 117(a), Dec. 31, 1970, 84 Stat. 1724, related to authority of Secretary.

Section 512, formerly 511, added Pub. L. 90–495, § 30, Aug. 23, 1968, 82 Stat. 834; renumbered § 512, Pub. L. 91–605, title I, § 117(a), Dec. 31, 1970, 84 Stat. 1724, related to definitions for chapter.

SURFACE TRANSPORTATION RESEARCH AND DEVELOPMENT PLANNING

Pub. L. 102–240, title VI, § 6009, Dec. 18, 1991, 105 Stat. 2175, as amended by Pub. L. 104–59, title III, § 338(c)(1), Nov. 28, 1995, 109 Stat. 604, provided that:

''(a) FINDINGS.—Congress finds that—

''(1) despite an annual expenditure in excess of $10,000,000,000 on surface transportation and its infrastructure, the Federal Government has not developed a clear vision of—

''(A) how the surface transportation systems of the 21st century will differ from the present;

''(B) how they will interface with each other and with other forms of transportation;

''(C) how such systems will adjust to changing American population patterns and lifestyles; and

''(D) the role of federally funded research and development in ensuring that appropriate transportation systems are developed and implemented;

''(2) the population of the United States is projected to increase by over 30,000,000 people within the next 20 years, mostly in existing major metropolitan areas, which will result in increased traffic congestion within and between urban areas, more accidents, loss of productive time, and increased cost of transportation unless new technologies are developed to improve public transportation within cities and to move people and goods between cities;

''(3) 18,000,000 crashes, 4,000,000 injuries, and 45,000 fatalities each year on the Nation's highways are intolerable and substantial research is required in order to develop safer technologies in their most useful and economic forms;

''(4) current research and development funding for surface transportation is insufficient to provide the United States with the technologies essential to providing its own advanced transportation systems in the future and, as a result, the United States is becoming increasingly dependent on foreign surface transportation technologies and equipment to meet its expanding surface transportation needs;

''(5) a more active, focused surface transportation research and development program involving cooperation among the Federal Government, United States based industry, and United States universities should be organized on a priority basis;

''(6) intelligent transportation systems represent the best near-term technology for improving surface transportation for public benefit by providing equipment which can improve traffic flow and provide for enhanced safety;

''(7) research and development programs related to surface transportation are fragmented and dispersed throughout government and need to be strengthened and incorporated in an integrated framework within which a consensus on the goals of a national surface transportation research and development program must be developed;

''(8) the inability of government agencies to cooperate effectively, the difficulty of obtaining public support for new systems and rights-of-way, and the high cost of capital financing discourage private firms from investing in the development of new transportation equipment and systems; therefore, the Federal Government should sponsor and coordinate research and development of new technologies to provide safer, more convenient, and affordable transportation systems for use in the future; and

''(9) an effective high technology applied research and development program should be implemented quickly by strengthening the Department of Transportation research and development staff and by contracting with private industry for specific development projects.

''(b) SURFACE TRANSPORTATION RESEARCH AND DEVELOPMENT PLAN.—

''(1) DEVELOPMENT.—The Secretary shall develop an integrated national surface transportation research and development plan (hereinafter in this subsection referred to as the 'plan').

''(2) FOCUS.—The plan shall focus on surface transportation systems needed for urban, suburban, and rural areas in the next decade.

''(3) CONTENTS.—The plan shall include the following:

''(A) Details of the Department's surface transportation research and development programs, including appropriate funding levels and a schedule with milestones, preliminary cost estimates, appropriate work scopes, personnel requirements, and estimated costs and goals for the next 3 years for each area of research and development.

''(B) A 10-year projection of long-term programs in surface transportation research and development and recommendations for the appropriate source or mechanism for surface transportation research and development funding, taking into account recommendations of the Research and Development Coordinating Council of the Department of Transpor-

tation and the plan of the National Council on Surface Transportation Research.

''(C) Recommendations on changes needed to assure that Federal, State, and local contracting procedures encourage the adoption of advanced technologies developed as a consequence of the research programs in this Act [Pub. L. 102–240, see Tables for classification].

''(4) OBJECTIVES.—The plan shall provide for the following:

''(A) The development, within the shortest period of time possible, of a range of technologies needed to produce convenient, safe, and affordable modes of surface transportation to be available for public use beginning in the mid-1990's.

''(B) Maintenance of a long-term advanced research and development program to provide for next generation surface transportation systems.

''(5) COOPERATION WITH INDUSTRY.—A primary component of the plan shall be cooperation with industry in carrying out this part [part A (§§ 6001–6024) of title VI of Pub. L. 102–240, enacting sections 325 and 326 of this title, sections 3711b and 3711c of Title 15, Commerce and Trade, section 111 of Title 49, Transportation, and section 1625 of former Title 49, Transportation, amending sections 204, 307, and 321 of this title, section 5316 of Title 5, Government Organization and Employees, sections 3708 and 3712 to 3715 of Title 15, sections 101 and 301 of Title 49, and sections 1607c and 1608 of former Title 49, enacting provisions set out as notes under sections 101, 112, and 307 of this title and sections 111 and 301 of Title 49, and amending provisions set out as notes under section 1608 of former Title 49] and strengthening the manufacturing capabilities of United States firms in order to produce products for surface transportation systems.

''(6) CONFORMANCE WITH PLAN.—All surface transportation research and development within the Department of Transportation shall be included in the plan and shall be evaluated in accordance with the plan.

''(7) COORDINATION.—In developing the plan and carrying out this part, the Secretary shall consult with and, where appropriate, use the expertise of other Federal agencies and their laboratories.

''(8) TRANSMITTAL.—On or before January 15, 1993, and annually thereafter, the Secretary shall transmit the plan to Congress, together with the Secretary's comments and recommendations. The Secretary shall review and update the plan before each transmittal under this paragraph.

''(9) RECOMMENDATIONS FOR ALTERNATIVES.—In the event a different technology or alternative program can be identified that would accomplish the same or better results than those described in this part, the Secretary may make recommendations for an alternative, and shall promptly report such alternative recommendations to Congress.''

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 502 of this title; title 49 section 5505.