I

109TH CONGRESS
1ST SESSION

H. R. 242

To authorize appropriations to the Department of Transportation for surface transportation research and development, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 6, 2005

Mr. EHLERS introduced the following bill; which was referred to the Committee on Science, and in addition to the Committee on Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

To authorize appropriations to the Department of Transportation for surface transportation research and development, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''Surface Transportation Research and Development Act of 2005''.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

SEC. 2. FINDINGS.

The Congress finds the following:

(1) Research and development are critical to developing and maintaining a transportation system that meets the goals of safety, mobility, economic vitality, efficiency, equity, and environmental protection.

(2) Federally sponsored surface transportation research and development has produced many successes. The development of rumble strips has in-

creased safety; research on materials has increased the lifespan of pavements, saving money and reducing the disruption caused by construction; and Geographic Information Systems have improved the management and efficiency of transit fleets.

(3) Despite these important successes, the Federal surface transportation research and development investment represents less than one percent of overall government spending on surface transportation.

(4) While Congress increased funding for overall transportation programs by about 40 percent in the Transportation Equity Act for the 21st Century, funding for transportation research and development remained relatively flat.

(5) The Federal investment in research and development should be balanced between short-term applied and long-term fundamental research and development. The investment should also cover a wide range of research areas, including research on materials and construction, research on operations, research on transportation trends and human factors, and research addressing the institutional barriers to deployment of new technologies.

(6) Therefore, Congress finds that it is in the United States interest to increase the Federal investment in transportation research and development, and to conduct research in critical research gaps, in order to ensure that the transportation system meets the goals of safety, mobility, economic vitality, efficiency, equity, and environmental protection.

TITLE I—SURFACE TRANSPORTATION RESEARCH AND DEVELOPMENT

SEC. 101. AUTHORIZATION OF APPROPRIATIONS.

(a) IN GENERAL.—There are authorized to be appropriated for each of fiscal years 2005 through 2010, to carry out this title and the amendments made by this title (other than sections 108 and 109) and other programs described in subsection (b), the greater of—

(1) 1.08 percent of the amounts made available in each fiscal year from the Highway Trust Fund; or

(2) $500,000,000.

(b) PROGRAMS.—Of the amount authorized to be appropriated under subsection (a)—

(1) 50 percent shall be for carrying out sections 502, 503, 506, 507, 508, and 510 of title 23, United

States Code, section 5113(b) of the Transportation Equity Act for the 21st Century, and section 104(d) of this Act, for each of fiscal years 2005 through 2010, of which—

(A) not less than $20,000,000 shall be for the Surface Transportation Environment and Planning Cooperative Research Program under section 507 of title 23, United States Code, for each of those fiscal years;

(B) not less than $10,000,000 shall be for advanced exploratory research under section 502(d) of title 23, United States Code, for each of those fiscal years; and

(C) not less than $5,000,000 shall be for the National Multimodal Trends Policy Research Program under section 104(d) of this Act for each of those fiscal years;

(2) 6.5 percent shall be for carrying out section 504 of title 23, United States Code, for each of fiscal years 2005 through 2010;

(3) 7.5 percent shall be for carrying out section 111 of title 49, United States Code, for each of fiscal years 2005 through 2010, of which not less than $5,000,000 shall be for research and development

grants under subsection (i)(2) of such section for each of fiscal years 2005 through 2010;

(4) 11.5 percent shall be for carrying out section 5505 of title 49, United States Code, for each of fiscal years 2005 through 2010; and

(5) 24.5 percent shall be for carrying out the Intelligent Transportation Systems Act of 2005 for each of fiscal years 2005 through 2010.

SEC. 102. GOALS, PRINCIPLES, AND PROCESSES.

(a) GOALS.—The Federal Government shall support surface transportation research and development to help achieve the goals established for the surface transportation system as set forth in the Transportation Equity Act for the 21st Century, including supporting economic vitality, improving safety and security, increasing mobility, protecting and enhancing the environment, improving integration between modes of transportation, promoting efficiency, and emphasizing the preservation of the existing transportation system.

(b) BASIC PRINCIPLES GOVERNING RESEARCH AND DEVELOPMENT.—

(1) COVERAGE.—Surface transportation research and development shall include all activities leading to technology development and transfer, as well as the introduction of new and innovative ideas,

practices, and approaches, through such mechanisms as field applications, education and training, and technical support.

(2) FEDERAL RESPONSIBILITY.—The Federal Government shall fund and conduct surface transportation research and development and technology transfer activities that—

(A) are of national significance;

(B) support research and development in which there is a clear public benefit, and private sector investment is less than optimal due to market failure;

(C) support research and development that the Secretary determines is critical that is not otherwise being conducted by the public or private sector; or

(D) support a Federal stewardship role in ensuring that State and local governments use national resources efficiently.

(3) ROLE.—Consistent with these Federal responsibilities, the Secretary of Transportation shall—

(A) conduct research and development;

(B) support and facilitate research and development and technology transfer activities by

State highway agencies, metropolitan planning organizations, and local governments;

(C) share results of completed research and development; and

(D) support and facilitate technology and innovation deployment.

(4) PROGRAM CONTENT.—The surface transportation research and development program shall include—

(A) fundamental, long-term research;

(B) research and development aimed at significant research gaps, and emerging issues with national implications; and

(C) research related to policy and planning.

(c) PROCESSES.—

(1) STAKEHOLDER INPUT.—Federal surface transportation research and development activities shall address the needs of stakeholders. Stakeholders include States, metropolitan planning organizations, local governments, the private sector, researchers, research sponsors, and other affected parties, including public interest groups.

(2) COMPETITION AND PEER REVIEW.—Except as otherwise provided in this Act, the Secretary shall

award all grants, contracts, and cooperative agreements for research and development under this Act based on open competition and peer review of proposals.

(3) PERFORMANCE REVIEW AND EVALUATION.—To the maximum extent practicable, all surface transportation research and development projects shall include a component of performance measurement and evaluation. Performance measures shall be established during the proposal stage of a research and development project and shall, to the maximum extent possible, be outcome-based. All evaluations shall be made readily available to the public.

SEC. 103. TRANSPORTATION RESEARCH AND DEVELOPMENT STRATEGIC PLANNING.

(a) AMENDMENT.—Section 508 of title 23, United States Code, is amended to read as follows:

"§ 508. Transportation research and development strategic planning

''(a) IN GENERAL.—

''(1) DEVELOPMENT.—Not later than 1 year after the date of enactment of the Surface Transportation Research and Development Act of 2005, the Secretary shall develop a 5-year transportation re-

search and development strategic plan to guide Federal transportation research and development activities. This plan shall be consistent with section 306 of title 5, sections 1115 and 1116 of title 31, and any other research and development plan within the Department of Transportation.

''(2) CONTENTS.—The strategic plan developed under paragraph (1) shall—

''(A) describe the primary purposes of the transportation research and development program, which shall include, at a minimum—

''(i) reducing congestion and improving mobility;

''(ii) promoting safety;

''(iii) promoting security;

''(iv) protecting and enhancing the environment;

''(v) preserving the existing transportation system; and

''(vi) improving the durability and extending the life of transportation infrastructure;

''(B) for each purpose, list the primary research and development topics that the Department intends to pursue to accomplish that pur-

pose, which may include the fundamental research in the physical and natural sciences, applied research, technology development, and social science research intended for each topic; and

''(C) for each research and development topic, describe—

''(i) the anticipated annual funding levels for the period covered by the strategic plan; and

''(ii) the additional information the Department expects to gain at the end of the period covered by the strategic plan as a result of the research and development in that topic area.

''(3) CONSIDERATIONS.—In developing the strategic plan, the Secretary shall ensure that the plan—

''(A) reflects input from a wide range of stakeholders;

''(B) includes and integrates the research and development programs of all the Department's operating administrations, including aviation, transit, rail, and maritime; and

"(C) takes into account how research and development by other Federal, State, private sector, and not-for-profit institutions contributes to the achievement of the purposes identified under paragraph (2)(A), and avoids unnecessary duplication with these efforts.

"(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 Federal transportation research and development activities for the previous fiscal year in each topic area;

"(B) the amount of funding spent in each topic area;

"(C) a description of the extent to which the research and development is meeting the expectations set forth in paragraph (2)(C)(ii); and

"(D) any amendments to the strategic plan.

"(b) ANNUAL REPORT.—The Secretary shall submit to Congress an annual report, along with the President's annual budget request, describing the amount spent in the last completed fiscal year on transportation research and development and the amount proposed in the current budget for transportation research and development.

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

''(1) strategic plan under section 508;

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

''(3) program performance report required under section 1116 of title 31,

with respect to transportation research and development.''.

(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by striking the item related to section 508 and inserting the following:

''508. Transportation research and development strategic planning.''.

SEC. 104. SURFACE TRANSPORTATION RESEARCH AND DEVELOPMENT.

(a) SURFACE TRANSPORTATION RESEARCH AND DEVELOPMENT.—Section 502 of title 23, United States Code, is amended—

(1) in subsection (a)—

(A) in paragraph (1), by striking ''may'' and inserting ''shall''; and

(B) by striking subparagraphs (B) and (C) of paragraph (1) and inserting the following:

''(B) all phases of transportation planning and development (including construction, transportation system management and operation, modernization, development, design, maintenance, safety, data collection, performance analysis, multimodal assessment, financing, demand forecasting, and traffic conditions);

''(C) institutional arrangements and support; and

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

(2) by amending subsection (c) to read as follows:

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

''(1) Research and development on materials and structures to improve the durability of surface transportation infrastructure and extend the life of pavements and bridges, including, as appropriate—

''(A) development of nondestructive evaluation equipment for use with existing infrastruc-

ture facilities and with next-generation infrastructure facilities that use advanced materials;

"(B) standardized estimates, 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;

"(C) research on the effects of climate conditions (such as freezing, thawing, and precipitation) on highway construction materials, and development of materials that can withstand climatic conditions; and

"(D) 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.

"(2) Research and development on the operation and management of the surface transportation system to improve efficiency, productivity, and safety, including, as appropriate—

"(A) technologies and practices that reduce costs and minimize disruptions associated with the construction, rehabilitation, and mainte-

nance of surface transportation systems, including responses to natural disasters;

''(B) research and system analysis to facilitate and integrate bicycle and pedestrian travel in the transportation system, including within National Parks and in areas adjacent to National Park land;

''(C) development of dynamic simulation models of surface transportation systems for—

''(i) predicting capacity, safety, and infrastructure durability problems;

''(ii) evaluating the extent to which projects are likely to achieve their stated objectives; and

''(iii) testing the strengths and weaknesses of proposed revisions to surface transportation operations and management programs;

''(D) improvement of life cycle cost analysis, including—

''(i) establishing the appropriate analysis period and discount rates;

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

''(iii) determining tradeoffs between reconstruction and rehabilitation; and

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

''(E) research on the effects of climatic conditions (such as freezing, thawing, and precipitation) on the costs of highway construction materials and maintenance;

''(F) research, development, and technology transfer related to asset management; and

''(G) evaluation of traffic calming measures that promote community preservation, transportation mode choice, and safety.

''(3) Research, development, and technology transfer to improve safety.

''(4) Research and development to support the evaluation of how the surface transportation system and individual surface transportation projects meet the goals of the surface transportation system stated in section 102(a) of the Surface Transportation Research and Development Act of 2005, including, as appropriate—

''(A) 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; and

''(B) research on, and dissemination of recommendations and best practices aimed at addressing, nontechnical barriers to technology deployment (such as fragmented local authority, rigid procurement rules, and privacy and liability considerations).

''(5) To assess how the surface transportation system affects and is affected by social systems, including, as appropriate—

''(A) research aimed at understanding how emerging trends (including demographic, economic, and social trends) will affect surface transportation usage and needs;

''(B) research on how land use affects and is affected by surface transportation investments; and

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

''(6) Environmental research and development, including research described in the Transportation Research Board Special Report 268, entitled 'Surface Transportation Environmental Research: A Long-Term Strategy' published in 2002.

''(7) Exploratory advanced research in any of the preceding areas.

''(8) Any other surface transportation research and development topics that the Secretary determines, in accordance with the strategic planning process under section 508, to be critical.'';

(3) in subsection (d)—

(A) in paragraph (1), by inserting ''exploratory'' after ''shall establish an''; and

(B) by striking paragraph (2) and inserting the following new paragraphs:

''(2) PURPOSE.—The purpose of the research program under this subsection shall be to achieve breakthroughs in transportation research. Exploratory advanced research should have a broader ob-

jective, longer time frame, multidisciplinary nature, and have both a higher risk and a higher potential payoff than for problem-solving research.

''(3) WORKSHOP.—The Secretary shall convene a workshop with appropriate researchers and policymakers from Federal and State agencies, as well as academic researchers. The purpose of the workshop shall be to determine priority areas of exploratory advanced research and to identify the best way to accomplish this research (such as through federally funded research and development centers or academic researchers). The workshop shall include a diverse group of stakeholders. The Secretary shall make the results of the workshop widely available to the public. The workshop shall be held within 6 months after the date of the enactment of this paragraph.

''(4) GRANT PROGRAM.—The Secretary may administer a competitive, peer-reviewed grant program to support exploratory advanced research.

''(5) REPORT.—The President's annual budget request to the Congress shall indicate the amount of funding used in the previous fiscal year, and proposed for the next fiscal year, to support exploratory advanced research under this subsection, including

the amount used to support extramural research grants in exploratory advanced research under this subsection.'';

(4) in subsection (e)(1), by striking ''(105 Stat.'' and all that follows through ''performance program'' and inserting ''and the Transportation Equity Act for the 21st Century'';

(5) by redesignating subsections (f) and (g) as subsections (g) and (h), respectively, and by inserting after subsection (e) the following new subsection:

''(f) LONG-TERM BRIDGE PERFORMANCE PROGRAM.—

''(1) AUTHORITY.—The Secretary shall establish a 20-year, long-term bridge 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 test bridges;

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

''(C) prepare products to fulfill program objectives and meet future bridge technology needs.'';

(6) in subsection (h)(2), as so redesignated by paragraph (5) of this subsection, by striking ''biannual reports'' and all that follows through ''21st Century'' and inserting ''previous reports under this subsection''; and

(7) by adding at the end the following new subsection:

''(i) TURNER-FAIRBANK HIGHWAY RESEARCH CENTER.—

''(1) IN GENERAL.—The Secretary shall operate in the Federal Highway Administration a Turner-Fairbank Highway Research Center.

''(2) USES OF THE CENTER.—The Turner-Fairbank Highway Research Center shall support the—

''(A) conduct of highway research and development related to new highway technology;

''(B) development of understandings, tools, and techniques that provide solutions to complex technical problems through the development of economical and environmentally sensitive designs, efficient and quality controlled

construction practices, and durable materials; and

''(C) development of innovative highway products and practices.''.

(b) GEOSPATIAL INFORMATION SYSTEMS.—Section 5113 of the Transportation Equity Act for the 21st Century (23 U.S.C. 502 note) is amended by amending subsection (b) to read as follows:

''(b) PROGRAM.—

''(1) NATIONAL POLICY.—The Secretary shall establish and maintain a national policy for the use of commercial remote sensing products and geospatial information technologies in national transportation infrastructure development and construction.

''(2) POLICY IMPLEMENTATION.—The Secretary shall develop new applications of commercial remote sensing products and geospatial information technologies for the implementation of the national policy established and maintained under paragraph (1).''.

(c) ENVIRONMENT AND PLANNING.—

(1) AMENDMENT.—Section 507 of title 23, United States Code, is amended to read as follows:

"§ 507. Surface Transportation Environment and Planning Cooperative Research Program

''(a) IN GENERAL.—

''(1) ESTABLISHMENT.—The Secretary shall establish and support a collaborative, public-private, multimodal surface transportation environment and planning cooperative research and development program.

''(2) PROGRAM.—The program established under paragraph (1) shall solely carry out research and development called for in the Transportation Research Board Special Report 268, entitled 'Surface Transportation Environmental Research: A Long-Term Strategy', published in 2002, which included the following research and development areas:

''(A) Human Health.

''(B) Ecology and Natural Systems.

''(C) Environmental and Social Justice.

''(D) Emerging Technologies.

''(E) Land Use.

''(F) Planning and Performance Measures.

''(b) ADMINISTRATION.—

''(1) AGREEMENT.—The Secretary shall enter into an arrangement with the National Research Council, or another nonprofit research organization,

such as the Health Effects Institute, to administer the program established under subsection (a)(1).

''(2) DISSEMINATION OF RESEARCH AND DEVELOPMENT FINDINGS.—The organization described in paragraph (1) and the Department of Transportation shall proactively disseminate research and development findings under this section to researchers, practitioners, and decisionmakers.

''(c) ADVISORY BOARD.—

''(1) ESTABLISHMENT.—The organization described in subsection (b)(1) shall establish an advisory board.

''(2) MEMBERSHIP.—The advisory board shall be balanced, and shall include—

''(A) representatives from pubic interest groups representing the environment;

''(B) representatives of State, regional, and local transportation agencies, including metropolitan planning organizations and transit agencies;

''(C) representatives of State environmental agencies;

''(D) transportation and environmental scientists and engineers; and

''(E) representatives of Federal agencies, including the Department of Transportation, the Environmental Protection Agency, and the National Science Foundation.

''(3) RESPONSIBILITIES.—The advisory board shall—

''(A) develop an annual research and development agenda to carry out research and development activities described in subsection (a)(2);

''(B) solicit research proposals to carry out the research and development agenda, and oversee peer review of proposals;

''(C) develop project selection criteria through an open and public consultation process with stakeholders; and

''(D) select projects for funding.

''(4) CRITERIA.—In developing criteria, the advisory board shall give priority to proposals that—

''(A) are designed to develop fundamental knowledge;

''(B) are interdisciplinary and involve partnerships; and

''(C) include significant matching funds.

''(d) PROJECT FUNDING.—In addition to using funds authorized for this section, the organization described in

subsection (b)(1) is encouraged to seek and accept additional funding sources from public and private entities.

''(e) ANNUAL REPORT.—The organization described in subsection (b)(1) shall prepare and transmit to the Secretary and the Congress an annual report that includes a project summary for every project funded under this section. Each summary shall describe the project, summarize its status and funding levels, and identify sources of funding.''.

(2) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by striking the item related to section 507 and inserting the following:

''507. Surface transportation environment and planning cooperative research program.''.

(d) NATIONAL MULTIMODAL TRENDS POLICY RESEARCH AND DEVELOPMENT PROGRAM.—

(1) IN GENERAL.—The Secretary shall carry out a National Multimodal Trends Policy Research and Development Program that systematically addresses critical short-term, medium-term, and long-term social science issues affecting and affected by the transportation system.

(2) CONTENTS.—The program to be carried out under this subsection shall include research and development on—

(A) how, and the extent to which, the overall transportation system is meeting the goals set forth in the Transportation Equity Act for the 21st Century, and how to improve evaluation methodologies and performance measures;

(B) the development of policy analysis tools and methods for use by decisionmakers;

(C) the critical factors and major trends affecting the success and performance of the Nation's transportation system, as well as how such information can be incorporated into national, State, and local decisionmaking;

(D) economic, demographic, and social trends that are affecting and are affected by the transportation system, including such topics as—

(i) economic trends, including international trade and its effects on the transportation of people and goods, rapidly changing information technology, the changing nature of metropolitan economies, diversification of employment sites, and innovations in goods movement;

(ii) demographic trends, changing residential patterns, and the aging of the population; and

(iii) social trends, including income disparity, access of underserved populations to jobs, services and health care, including the needs of low-income, minority, and transit-dependent populations in urban and rural areas, the needs of rural populations, and the effects of new technologies on driver behavior;

(E) how institutional factors affect the development and successful deployment of new technologies; and

(F) other critical issues identified by the Advisory Board established under paragraph (4).

(3) ESTABLISHMENT.—The Secretary shall enter into an arrangement with the National Research Council to establish the advisory board under paragraph (4) and to administer the program.

(4) ADVISORY BOARD.—

(A) MEMBERSHIP.—A majority of members of the advisory board shall be experts in a broad array of social science fields. Additional

members of the advisory board shall be balanced among representatives of Federal, State, and local transportation agencies, other agencies with appropriate expertise, metropolitan planning organizations, transit operating agencies, and environmental and other nonprofit organizations, including representatives of community-based orgainzations.

(B) RESPONSIBILITIES.—The advisory board shall—

(i) develop a detailed research and development agenda, which shall serve as the basis of the annual project solicitation;

(ii) annually solicit project proposals, through open competition and peer review of research and development proposals; and

(iii) develop project selection criteria, through an open and public consultation process with stakeholders.

(5) DISSEMINATION OF RESEARCH AND DEVELOPMENT FINDINGS.—The National Research Council and the Department of Transportation shall disseminate research and development findings under this

subsection to researchers, practitioners, and decisionmakers.

(e) ROAD WEATHER RESEARCH AND DEVELOPMENT PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall establish a road weather research and development program to—

(A) maximize use of available road weather information and technologies;

(B) expand road weather research and development efforts to enhance roadway safety, capacity, and efficiency while minimizing environmental impacts; and

(C) promote technology transfer of effective road weather scientific and technological advances.

(2) STAKEHOLDER INPUT.—In carrying out this subsection, the Secretary shall consult with the National Oceanic and Atmospheric Administration, the National Science Foundation, the American Association of State Highway and Transportation Officials, nonprofit organizations, and the private sector.

(3) CONTENTS.—The program established under this subsection shall solely carry out research and development called for in the National Research

Council's report entitled ''A Research Agenda for Improving Road Weather Services''. Such research and development includes—

(A) integrating existing observational networks and data management systems for road weather applications;

(B) improving weather modeling capabilities and forecast tools, such as the road surface and atmospheric interface;

(C) enhancing mechanisms for communicating road weather information to users, such as transportation officials and the public; and

(D) integrating road weather technologies into an information infrastructure.

(4) ACTIVITIES.—In carrying out this subsection, the Secretary shall—

(A) enable efficient technology transfer;

(B) improve education and training of road weather information users, such as State and local transportation officials and private sector transportation contractors; and

(C) coordinate with transportation weather research programs in other modes, such as aviation.

(5) FUNDING.—In awarding funds under this subsection, the Secretary shall give preference to applications with significant matching funds from non-Federal sources. From the amounts authorized to be appropriated under section 101(b)(1), there shall be available $5,000,000 for carrying out this subsection for each of fiscal years 2005 through 2010.

SEC. 105. TECHNOLOGY DEPLOYMENT.

(a) TECHNOLOGY DEPLOYMENT PROGRAM.—Section 503(a) of title 23, United States Code, is amended—

(1) in the subsection heading, by striking ''Initiatives and Partnerships'';

(2) by striking paragraph (1) and inserting the following:

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

(3) by striking paragraph (7) and inserting the following:

''(7) 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, 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.

''(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 open competition and peer review, and on whether the project that is the subject of the grant serves the purpose of the program described in paragraph (2).'';

(4) by striking paragraph (8);

(5) by redesignating paragraph (9) as paragraph (10); and

(6) by inserting after paragraph (7) the following:

''(8) TECHNOLOGY AND INFORMATION TRANSFER.—The Secretary shall ensure that the information and technology resulting from research and development conducted under paragraph (3) is made available to State and local transportation depart-

ments and other interested parties as specified by the Secretary.

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

(b) INNOVATIVE BRIDGE RESEARCH AND DEPLOYMENT PROGRAM.—

(1) IN GENERAL.—Section 503(b) of title 23, United States Code, is amended by striking paragraph (1) and inserting:

''(1) IN GENERAL.—The Secretary shall establish and carry out a program to promote, demonstrate, evaluate, and document the application of innovative designs, materials and construction methods in the construction, repair, and rehabilitation of bridges and other highway structures.''.

(2) GOALS.—Section 503(b) of such title is amended by striking paragraph (2) and inserting:

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

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

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

''(C) the development of engineering design criteria for innovative products, materials, and structural systems for use in highway bridges and structures;

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

''(E) the development of highway bridges and structures that will withstand natural disasters and terrorist attacks;

''(F) the documentation and wide dissemination of objective evaluations of the performance and benefits of these innovative designs, materials, and construction methods; and

''(G) the effective transfer of resulting information and technology.''.

(c) INNOVATIVE PAVEMENT RESEARCH AND DEPLOYMENT PROGRAM.—Section 503 of title 23, United States Code, is amended by adding after subsection (b) the following:

''(c) INNOVATIVE PAVEMENT RESEARCH AND DEPLOYMENT PROGRAM.—

''(1) IN GENERAL.—The Secretary shall establish and implement a program to promote, dem-

onstrate, support, and document the application of innovative pavement technologies, practices, performance, and benefits.

''(2) GOALS.—The goals of the innovative pavement research and deployment program shall include—

''(A) the deployment of new, cost-effective innovative designs, materials, and practices to extend pavement life and performance and to improve customer satisfaction;

''(B) the reduction of initial costs and life-cycle costs of pavements, including the costs of new construction, replacement, maintenance, and rehabilitation;

''(C) the deployment of accelerated construction techniques, including innovative pavement materials, to increase safety and reduce construction time and traffic disruption and congestion;

''(D) the deployment of engineering design criteria and specifications for innovative practices, products, and materials for use in highway pavements;

''(E) the deployment of new nondestructive and real time pavement evaluation technologies and techniques;

''(F) evaluation, refinement, and documentation of the performance and benefits of innovative technologies deployed to improve life, performance, cost effectiveness, safety, and customer satisfaction;

''(G) effective technology transfer and information dissemination to accelerate implementation of innovative technologies and to improve life, performance, cost effectiveness, safety, and customer satisfaction; and

''(H) the development of designs and materials to reduce storm water runoff.

''(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 States, other Federal agencies, universities and colleges, private sector entities, and nonprofit organizations for research, development, and technology transfer for innovative safety technologies.

''(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 open competition and peer review, and 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.''.

(d) SAFETY INNOVATION DEPLOYMENT PROGRAM.—Section 503 of title 23, United States Code, as amended by this Act, is further amended by adding the following:

''(d) SAFETY INNOVATION DEPLOYMENT PROGRAM.—

''(1) IN GENERAL.—The Secretary shall establish and implement a program to demonstrate the

application of innovative technologies in highway safety.

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

''(A) the deployment and evaluation of safety technologies and innovations at state and local levels; and

''(B) the deployment of best practices in training, management, design, and planning.

''(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 States, other Federal agencies, universities and colleges, private sector entities, and nonprofit organizations for research, development, and technology transfer for innovative safety technologies.

''(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 open competition and peer review, and 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.''.

SEC. 106. TRAINING AND EDUCATION.

(a) NATIONAL HIGHWAY INSTITUTE.—Section 504(a) of title 23, United States Code, is amended by striking paragraph (3) and inserting the following:

''(3) COURSES.—

''(A) IN GENERAL.—The Institute shall develop or update courses in the subject areas of asset management, application of emerging technologies, including intelligent transportation systems, techniques, methods, regulations, information technology, general management, environmental stewardship, acquisition of rights-of-way, relocation assistance, engineering, safe-

ty, transportation system management and operations, construction, maintenance, contract administration, inspection, and finance.

"(B) ADDITIONAL COURSES.—In addition to the courses in the subject matter areas described in subparagraph (A), the Institute, in consultation with State transportation departments and the American Association of State Highway and Transportation Officials, may develop other courses as it considers necessary.

"(C) REVISION OF COURSES OFFERED.—The Institute shall periodically—

"(i) review the course inventory of the Institute; and

"(ii) revise or cease to offer courses based on course content, applicability, and need.".

(b) LOCAL TECHNICAL ASSISTANCE PROGRAM.—Section 504(b) of title 23, United States Code, is amended by adding at the end the following:

"(3) FEDERAL SHARE.—

"(A) GRANTS.—The grant funds authorized to carry out this subsection may be used to cover up to 50 percent of the program costs relating to local technical assistance. Funds

available for technology transfer and training purposes under this title and title 49 may be used to cover the remaining 50 percent of the program costs.

''(B) TRIBAL TECHNICAL ASSISTANCE CENTERS.—The Federal share of the cost of activities carried out by the tribal technical assistance centers under paragraph (2)(D)(ii) of this subsection shall be 100 percent.''.

(c) SURFACE TRANSPORTATION WORKFORCE DEVELOPMENT, TRAINING, AND EDUCATION.—Section 504 of title 23, United States Code, is amended by adding at the end the following:

''(d) SURFACE TRANSPORTATION WORKFORCE DEVELOPMENT, TRAINING, AND EDUCATION.—

''(1) FUNDING.—Subject to project approval by the Secretary, a State may obligate funds apportioned to it under sections 104(b)(1), (3), and (4) and 144(e) of this title for surface transportation workforce development, training and education, including—

''(A) tuition and direct educational expenses, excluding salaries, in connection with the education and training of employees of State and local transportation agencies;

''(B) employee professional development;

''(C) student internships; or

''(D) education outreach activities to develop interest and promote participation in surface transportation careers.

''(2) FEDERAL SHARE.—The Federal share of the cost of activities carried out in accordance with this subsection shall be 100 percent.''.

(d) DEFINITIONS AND DECLARATION OF POLICY.—Section 101(a) of title 23, United States Code, is amended—

(1) in paragraph (3), by—

(A) striking ''and'' after subparagraph (G);

(B) striking the period after subparagraph (H) and inserting ''; and''; and

(C) adding after subparagraph (H) the following:

''(I) surface transportation workforce development, training, and education.'';

(2) by redesignating paragraphs (34) through (37) as paragraphs (35) through (38) respectively; and

(3) by adding after paragraph (33), as redesignated by this Act, the following:

''(34) SURFACE TRANSPORTATION WORKFORCE DEVELOPMENT, TRAINING, AND EDUCATION.—The term 'surface transportation workforce development, training, and education' means activities associated with surface transportation career awareness, student transportation career preparation, and training and professional development for surface transportation workers, including activities for women and minorities.''.

(e) GARRETT A. MORGAN TECHNOLOGY AND TRANSPORTATION EDUCATION PROGRAM.—Section 504 of title 23, United States Code, as amended by this section, is further amended by adding at the end the following new subsection:

''(e) GARRETT A. MORGAN TECHNOLOGY AND TRANSPORTATION EDUCATION PROGRAM.—

''(1) IN GENERAL.—The Secretary shall establish the Garrett A. Morgan Technology and Transportation Education Program to improve the preparation of students, particularly women and minorities, in science, technology, engineering, and mathematics through curriculum development and other activities related to transportation.

''(2) AUTHORIZED ACTIVITIES.—The Secretary shall award grants under this subsection on the

basis of competitive, peer review. Grants awarded under this subsection may be used for enhancing science, technology, engineering, and mathematics at the elementary and secondary school level through such means as—

"(A) internships that offer students experience in the transportation field;

"(B) programs that allow students to spend time observing scientists and engineers in the transportation field; and

"(C) developing relevant curriculum that uses examples and problems related to transportation.

"(3) APPLICATION AND REVIEW PROCEDURES.—

"(A) IN GENERAL.—An entity described in subparagraph (C) seeking funding under this subsection shall submit an application to the Secretary at such time, in such manner, and containing such information as the Secretary may require. Such application, at a minimum, shall include a description of how the funds will be used and a description of how the funds will be used to serve the purposes described in paragraph (2).

''(B) PRIORITY.—In making awards under this subsection, the Secretary shall give priority to applicants that will encourage the participation of women and minorities.

''(C) ELIGIBILITY.—Local education agencies and State education agencies, which may partner with institutions of higher education, businesses, or other entities, shall be eligible to apply for grants under this subsection.

''(4) DEFINITIONS.—For purposes of this subsection—

''(A) the term 'institution of higher education' has the meaning given that term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001);

''(B) the term 'local educational agency' has the meaning given that term in section 9101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801); and

''(C) the term 'State educational agency' has the meaning given that term in section 9101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

''(5) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Sec-

retary of Transportation to carry out this subsection $500,000 for fiscal year 2006 and such sums as may be necessary thereafter.''.

SEC. 107. BUREAU OF TRANSPORTATION STATISTICS.

Section 111 of title 49, United States Code, is amended to read as follows:

''§ 111. Bureau of Transportation Statistics

''(a) ESTABLISHMENT.—There is established in the Department of Transportation a Bureau of Transportation Statistics.

''(b) DIRECTOR.—

''(1) APPOINTMENT.—The Bureau shall be headed by a Director who shall be appointed by the President, by and with the advice and consent of the Senate.

''(2) QUALIFICATIONS.—The Director shall be appointed from among individuals who are qualified to serve as the Director by virtue of their training and experience in the collection, analysis, and use of transportation statistics.

''(3) REPORTING.—The Director shall report directly to the Secretary.

''(4) TERM.—The term of the Director shall be 5 years. The Director may continue to serve after

the expiration of the term until a successor is appointed and confirmed.

''(c) RESPONSIBILITIES.—The Director of the Bureau shall serve as the Secretary's senior advisor on data and statistics, and shall be responsible for carrying out the following duties:

''(1) PROVIDING DATA, STATISTICS, AND ANALYSIS TO TRANSPORTATION DECISIONMAKERS.—Ensuring that the statistics compiled under paragraph (5) are designed to support transportation decisionmaking by the Federal Government, State and local governments, metropolitan planning organizations, transportation-related associations, the private sector (including the freight community), and the public.

''(2) COORDINATING COLLECTION OF INFORMATION.—Working with the operating administrations of the Department to establish and implement the Bureau's data programs and to improve the coordination of information collection efforts with other Federal agencies.

''(3) DATA MODERNIZATION.—Continually improving surveys and data collection methods to improve the accuracy and utility of transportation statistics.

''(4) ENCOURAGING DATA STANDARDIZATION.—Encouraging the standardization of data, data collection methods, and data management and storage technologies for data collected by the Bureau, the operating administrations of the Department of Transportation, States, local governments, metropolitan planning organizations, and private sector entities.

''(5) COMPILING TRANSPORTATION STATISTICS.—Compiling, analyzing, and publishing a comprehensive set of transportation statistics on the performance and impacts of the national transportation system, including statistics on—

''(A) productivity in various parts of the transportation sector;

''(B) traffic flows for all modes of transportation;

''(C) other elements of the Intermodal Transportation Database established under subsection (g);

''(D) travel times and measures of congestion;

''(E) vehicle weights and other vehicle characteristics;

"(F) demographic, economic, and other variables influencing traveling behavior, including choice of transportation mode, and goods movement;

"(G) transportation costs for passenger travel and goods movement;

"(H) availability and use of mass transit (including the number of passengers served by each mass transit authority) and other forms of for-hire passenger travel;

"(I) frequency of vehicle and transportation facility repairs and other interruptions of transportation service;

"(J) safety and security for travelers, vehicles, and transportation systems;

"(K) consequences of transportation for the human and natural environment;

"(L) the extent, connectivity, and condition of the transportation system, building on the National Transportation Atlas Database developed under subsection (g); and

"(M) transportation-related variables that influence the domestic economy and global competitiveness.

''(6) NATIONAL SPATIAL DATA INFRASTRUCTURE.—Building and disseminating the transportation layer of the National Spatial Data Infrastructure, including coordinating the development of transportation geospatial data standards, compiling intermodal geospatial data, and collecting geospatial data that is not being collected by others.

''(7) ISSUING GUIDELINES.—Issuing guidelines for the collection of information by the Department of Transportation required for statistics to be compiled under paragraph (5) in order to ensure that such information is accurate, reliable, relevant, and in a form that permits systematic analysis. The Bureau shall review and report to the Secretary of Transportation on the sources and reliability of the statistics proposed by the heads of the operating administrations of the Department to measure outputs and outcomes as required by the Government Performance and Results Act of 1993, and the amendments made by such Act, and shall carry out such other reviews of the sources and reliability of other data collected or statistical information published by the heads of the operating administrations of the Department as shall be requested by the Secretary.

''(8) MAKING STATISTICS ACCESSIBLE.—Making the statistics published under this subsection readily accessible.

''(d) INFORMATION NEEDS ASSESSMENT.—

''(1) IN GENERAL.—Within 60 days after the date of the enactment of the Surface Transportation Research and Development Act of 2005, the Secretary shall enter into an arrangement with the National Research Council to develop and publish a National Transportation Information Needs Assessment. The Assessment shall be transmitted to the Secretary and the Congress not later than 24 months after such arrangement is entered into.

''(2) CONTENT.—The Assessment shall—

''(A) identify, in priority order, transportation data that is not being collected by the Bureau, Department of Transportation operating administrations, or other Federal, State, or local entities, but is needed to improve transportation decisionmaking at the Federal, State, and local level and to fulfill the requirements of subsection (c)(5);

''(B) recommend whether the data identified in subparagraph (A) should be collected by the Bureau, other parts of the Department, or

by other Federal, State, or local entities, and whether any data is a higher priority than data currently being collected;

"(C) identify any data the Bureau or other Federal, State, and local entities is collecting that is not needed;

"(D) describe new data collection methods (including changes in surveys) and other changes the Bureau or other Federal, State, and local entities should implement to improve the standardization, accuracy, and utility of transportation data and statistics; and

"(E) estimate the cost of implementing any recommendations.

"(3) CONSULTATION.—In developing the Assessment, the National Research Council shall consult with the Department's Advisory Council on Transportation Statistics and a representative cross-section of transportation community stakeholders as well as other Federal agencies, including the Environmental Protection Agency, the Department of Energy, and the Department of Housing and Urban Development.

"(4) REPORT TO CONGRESS.—Not later than 6 months after the National Research Council trans-

mits the Needs Assessment under paragraph (1), the Secretary shall transmit a report to the Committee on Science and the Committee on Transportation and Infrastructure of the House of Representatives, and to the Committee on Environment and Public Works of the Senate, that describes—

"(A) how the Department plans to fill the data gaps identified under paragraph (2)(A);

"(B) how the Department plans to stop collecting data identified under paragraph (2)(C);

"(C) how the Department plans to implement improved data collection methods and other changes identified under paragraph (2)(D);

"(D) the expected costs of implementing subparagraphs (A), (B), and (C) of this paragraph;

"(E) any findings of the Needs Assessment under paragraph (1) with which the Secretary disagrees, and why; and

"(F) any proposed statutory changes needed to implement the findings if the Needs Assessment under paragraph (1).

"(e) INTERMODAL TRANSPORTATION DATA BASE.—

''(1) IN GENERAL.—In consultation with the Under Secretary for Policy, the Assistant Secretaries, and the heads of the operating administrations of the Department of Transportation, the Director shall establish and maintain a transportation data base for all modes of transportation.

''(2) USE.—The data base shall be suitable for analyses carried out by the Federal Government, the States, and metropolitan planning organizations.

''(3) CONTENTS.—The data base shall include—

''(A) information on the volumes and patterns of movement of goods, including local, interregional, and international movement, by all modes of transportation and intermodal combinations, and by relevant classification;

''(B) information on the volumes and patterns of movement of people, including local, interregional, and international movements, by all modes of transportation (including bicycle and pedestrian modes) and intermodal combinations, and by relevant classification;

''(C) information on the location and connectivity of transportation facilities and services; and

''(D) a national accounting of expenditures and capital stocks on each mode of transportation and intermodal combination.

''(f) NATIONAL TRANSPORTATION LIBRARY.—

''(1) IN GENERAL.—The Director shall establish and maintain a National Transportation Library, which shall contain a collection of statistical and other information needed for transportation decision-making at the Federal, State, and local levels.

''(2) ACCESS.—The Director shall facilitate and promote access to the Library, with the goal of improving the ability of the transportation community to share information and the ability of the Director to make statistics readily accessible under subsection (c)(8).

''(3) COORDINATION.—The Director shall work with other transportation libraries and other transportation information providers, both public and private, to achieve the goal specified in paragraph (2).

''(g) NATIONAL TRANSPORTATION ATLAS DATA BASE.—

''(1) IN GENERAL.—The Director shall develop and maintain geospatial data bases that depict—

''(A) transportation networks;

"(B) flows of people, goods, vehicles, and craft over the networks; and

"(C) social, economic, and environmental conditions that affect or are affected by the networks.

"(2) INTERMODAL NETWORK ANALYSIS.—The data bases shall be able to support intermodal network analysis.

"(h) MANDATORY RESPONSE AUTHORITY FOR FREIGHT DATA COLLECTION.—Whoever, being the owner, official, agent, person in charge, or assistant to the person in charge, of any corporation, company, business, institution, establishment, or organization of any nature whatsoever, neglects or refuses, when requested by the Director or other authorized officer, employee or contractor of the Bureau, to answer completely and correctly to the best of his/her knowledge all questions relating to the corporation, company, business, institution, establishment, or other organization, or to records or statistics in his/her official custody, contained in a data collection request prepared and submitted as part of the collection of freight data, shall be fined not more than $500; and if the individual willfully gives a false answer to a question, shall be fined not more than $10,000.

''(i) RESEARCH AND DEVELOPMENT GRANTS.—The Secretary may make grants to, or enter into cooperative agreements or contracts with, public and nonprofit private entities (including State transportation departments, metropolitan planning organizations, and institutions of higher education) for—

''(1) investigation of the subjects specified in subsection (c)(5) and research and development of new methods of data collection, standardization, management, integration, dissemination, interpretation, and analysis;

''(2) demonstration programs by States, local governments, and metropolitan planning organizations to harmonize data collection, reporting, management, storage, and archiving to simplify data comparisons across jurisdictions;

''(3) development of electronic clearinghouses of transportation data and related information, as part of the National Transportation Library under subsection (f); and

''(4) development and improvement of methods for sharing geographic data, in support of the national transportation atlas data base under subsection (g) and the National Spatial Data Infra-

structure developed under Executive Order No. 12906.

''(j) LIMITATIONS ON STATUTORY CONSTRUCTION.—Nothing in this section shall be construed—

''(1) to authorize the Bureau to require any other department or agency to collect data; or

''(2) to reduce the authority of any other officer of the Department of Transportation to collect and disseminate data independently.

''(k) PROHIBITION ON CERTAIN DISCLOSURES.—

''(1) IN GENERAL.—An officer or employee of the Bureau may not—

''(A) make any disclosure in which the data provided by an individual or organization under subsection (c) can be identified;

''(B) use the information provided under subsection (c) for a nonstatistical purpose; or

''(C) permit anyone other than an individual authorized by the Director to examine any individual report provided under subsection (c).

''(2) PROHIBITION ON REQUESTS FOR CERTAIN DATA.—

''(A) GOVERNMENT AGENCIES.—No department, bureau, agency, officer, or employee

of the United States (except the Director in carrying out this section) may require, for any reason, a copy of any report that has been filed under subsection (c) with the Bureau or retained by an individual respondent.

''(B) COURTS.—Any copy of a report described in subparagraph (A) that has been retained by an individual respondent or filed with the Bureau or any of its employees, contractors, or agents—

''(i) shall be immune from legal process; and

''(ii) shall not, without the consent of the individual concerned, be admitted as evidence or used for any purpose in any action, suit, or other judicial or administrative proceeding.

''(C) APPLICABILITY.—This paragraph shall apply only to reports that permit information concerning an individual or organization to be reasonably inferred by direct or indirect means.

''(3) DATA COLLECTED FOR NONSTATISTICAL PURPOSES.—In a case in which the Bureau is authorized by statute to collect data or information for

a nonstatistical purpose, the Director shall clearly distinguish the collection of the data or information, by rule and on the collection instrument, so as to inform a respondent that is requested or required to supply the data or information of the nonstatistical purpose.

''(l) TRANSPORTATION STATISTICS ANNUAL REPORT.—The Director shall transmit to the President and Congress a Transportation Statistics Annual Report which shall include information on items referred to in subsection (c)(5), documentation of methods used to obtain and ensure the quality of the statistics presented in the report, and recommendations for improving transportation statistical information.

''(m) PROCEEDS OF DATA PRODUCT SALES.—Notwithstanding section 3302 of title 31, funds received by the Bureau from the sale of data products, for necessary expenses incurred, may be credited to the Highway Trust Fund (other than the Mass Transit Account) for the purpose of reimbursing the Bureau for the expenses.

''(n) ADVISORY COUNCIL ON TRANSPORTATION STATISTICS.—

''(1) ESTABLISHMENT.—The Director of the Bureau of Transportation Statistics shall establish an Advisory Council on Transportation Statistics.

''(2) FUNCTION.—It shall be the function of the Advisory Council established under this subsection to—

''(A) advise the Director of the Bureau of Transportation Statistics on the quality, reliability, consistency, objectivity, and relevance of transportation statistics and analyses collected, supported, or disseminated by the Bureau of Transportation Statistics and the Department of Transportation;

''(B) provide input to and review the report to Congress under subsection (d)(4); and

''(C) advise the Director on methods to encourage harmonization and interoperability of transportation data collected by the Bureau, the operating administrations of the Department of Transportation, States, local governments, metropolitan planning organizations, and private sector entities.

''(3) MEMBERSHIP.—The Advisory Council established under this subsection shall be composed of not fewer than 15 members appointed by the Director, who are not officers or employees of the United States, including—

''(A) 2 members with specific expertise in economics;

''(B) 3 members with expertise in statistics; and

''(C) additional members with expertise in transportation statistics, analysis, or policy.

Members shall include representatives of a cross-section of transportation community stakeholders.

''(4) TERMS OF APPOINTMENT.—(A) Except as provided in subparagraph (B), members shall be appointed to staggered terms not to exceed 3 years. A member may be renominated for one additional 3-year term.

''(B) Members serving on the Advisory Council on Transportation Statistics as of the date of enactment of the Surface Transportation Research and Development Act of 2005 shall serve until the end of their appointed terms.

''(5) APPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—The Federal Advisory Committee Act shall apply to the Advisory Council established under this subsection, except that section 14 of the Federal Advisory Committee Act shall not apply to such Advisory Council.''.

SEC. 108. STATE PLANNING AND RESEARCH.

Section 505 of title 23, United States Code, is amended to read as follows:

"§ 505. State planning and research

''(a) IN GENERAL.—Two and a half percent of the sums apportioned to a State for fiscal year 2005 and each fiscal year thereafter under section 104 (other than subsections (f) and (h)) and under sections 105 and 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, the planning of the financing of such programs and systems, including metropolitan and Statewide planning under sections 134 and 135, freight planning, safety planning, transportation systems management and operations planning, transportation-related land use planning, and transportation-related growth management activities within these planning processes, and planning capacity building activities.

''(3) Development and implementation of infrastructure management and traffic monitoring systems, and for asset management.

''(4) Studies of the economy, safety, and convenience of highway, local public transportation, bicycle, and pedestrian systems and the desirable regulation and equitable taxation of their use.

''(5) Research, development, and technology transfer activities necessary in connection with the planning, design, construction, management, maintenance, regulation, and taxation of the use of highway, local public transportation, and intermodal transportation systems, including innovative techniques for ensuring representative public input (e.g. deliberative polling).

''(6) Research on the effects of design standards on intermodal coordination, such as the highway-rail interface, and on safe pedestrian access to transit on arterial roads and urban highways.

''(7) Study, research and development, and training on the engineering standards and construction materials, including accreditation of inspection and testing, for highway, local public transportation, bicycle, pedestrian, and intermodal transportation systems.

''(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 appropriated pursuant to subsection (a) 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, bicycle, pedestrian, 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 the funds described in paragraph (1) are not needed for research, development, and technology transfer 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) MINIMUM EXPENDITURES FOR IMPROVING THE QUALITY OF COLLECTION AND REPORTING OF STRATEGIC SURFACE TRANSPORTATION DATA.—

''(1) IN GENERAL.—Subject to paragraph (2), not less than 10 percent of the funds appropriated

pursuant to subsection (a) for a fiscal year to a State shall be expended by the State to improve the collection and reporting of strategic surface transportation data to provide critical information about the extent, condition, use, performance, and financing of the Nation's surface transportation system (including intermodal connectors) for passenger and freight movement.

''(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 the State is collecting and reporting strategic data consistent with quality assurance guidelines developed cooperatively with the States and the Secretary approves such certification.

''(d) FEDERAL SHARE.—The Federal share of the cost of a project carried out using funds subject to subsection (a) shall be matched in accordance with section 120(b) unless the Secretary determines that the interests of the surface transportation program would be best served without such matching.''.

SEC. 109. FUTURE STRATEGIC HIGHWAY RESEARCH PROGRAM.

(a) AMENDMENT.—Chapter 5 of title 23, United States Code, is amended by adding at the end the following new section:

"§ 509. Future Strategic Highway Research Program

''(a) ESTABLISHMENT.—The Secretary, in consultation with the American Association of State Highway and Transportation Officials, shall establish and support a grant program to be known as the Future Strategic Highway Research Program.

''(b) PROGRAM.—The program established under this section shall implement the Transportation Research Board Special Report 260, entitled 'Strategic Highway Research: Saving Lives, Reducing Congestion, Improving Quality of Life', which included the following research areas:

''(1) Accelerating the renewal of America's highways.

''(2) Making a significant improvement in highway safety.

''(3) Providing a highway system with reliable travel times.

''(4) Providing highway capacity in support of the Nation's economic, environmental, multi-modal transportation, and social goals.

''(c) ADMINISTRATION.—The Secretary shall enter into an arrangement with the National Research Council to administer the program established under subsection (a).

''(d) PERIOD OF AVAILABILITY.—Funds set aside to carry out this section shall remain available for the fiscal year for which such funds are made available and the three succeeding fiscal years.

''(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Transportation from the Highway Trust Fund, for each of fiscal years 2005 through 2010, $75,000,000 to carry out this section.

''(f) PROGRAM ADMINISTRATION.—In carrying out the program under this section, the Secretary, through the agreement with the National Research Council, shall ensure that the selection of awards shall be based on open competition and peer review, and that a balanced group of stakeholders is represented on all committees and panels established to implement the program. Proposals that involve partnerships and include significant matching funds shall be encouraged, although no matching funds are required.

''(g) PROGRAMMATIC EVALUATIONS.—Within 3 years after the first research and development project grants,

cooperative agreements, or contracts are awarded under this section, the Comptroller General shall review the program under this section, and recommend improvements. The review shall assess the degree to which projects funded under this section have addressed the research and development topics identified in the Transportation Research Board Special Report 260, including identifying those topics which have not yet been addressed.

''(h) ANNUAL PROGRESS AND PERFORMANCE REPORT.—The National Research Council shall produce an annual progress and performance report for the program under this section. The report shall summarize the status, funding, and sponsors of all funded projects by the research and development areas specified in subsection (b). The report shall be submitted to the Secretary, to the Committee on Transportation and Infrastructure and the Committee on Science of the House of Representatives, and to the Committee on Environment and Public Works of the Senate.''.

(b) CONFORMING AMENDMENT.—The analysis of chapter 5 of title 23, United States Code, is amended by adding at the end the following new item:

''509. Future strategic highway research program.''.

SEC. 110. UNIVERSITY TRANSPORTATION RESEARCH.

Section 5505 of title 49, United States Code, is amended to read as follows:

"§ 5505. University transportation research

''(a) REGIONAL CENTERS.—The Secretary of Transportation shall make grants to nonprofit institutions of higher learning to establish and operate 1 university transportation center in each of the 10 United States Government regions that comprise the Standard Federal Regional Boundary System.

''(b) OTHER CENTERS.—The Secretary shall make 16 grants to nonprofit institutions of higher learning, in addition to grants made under subsection (a), to establish and operate university transportation centers.

''(c) ROLE OF CENTERS.—The role of each center shall be to address transportation management and research and development matters, with special attention to increasing the number of highly skilled individuals entering the field of transportation.

''(d) SELECTION OF GRANT RECIPIENTS.—

''(1) APPLICATIONS.—In order to be eligible to receive a grant under this section, a nonprofit institution of higher learning shall submit to the Secretary an application that is in such form and contains such information as the Secretary may require.

''(2) SELECTION CRITERIA.—Except as otherwise provided by this section, the Secretary shall select each recipient of a grant under this section

through an open competition, peer-reviewed process on the basis of the following:

"(A) The capability of the recipient to provide leadership in making national and regional contributions to the solution of immediate and long-range transportation problems.

"(B) The recipient's establishment of a surface transportation program by the date of the award, which encompasses several modes of transportation.

"(C) The recipient's demonstrated ability to disseminate results of transportation research and education programs through a statewide or regionwide continuing education program.

"(D) The strategic plan the recipient proposes to carry out under the grant.

"(e) OBJECTIVES.—The Secretary shall ensure that each university transportation center receiving a grant under this section shall conduct the following programs and activities:

"(1) Basic and applied research and development that supports the Department's research and development agenda consistent with section 508 of title 23.

''(2) An education program that includes multidisciplinary course work, faculty and student participation in research and development, and an opportunity for practical experience.

''(3) An ongoing program of technology transfer that makes research and development results available to potential users in a form that can be implemented, utilized, or otherwise applied.

''(f) MAINTENANCE OF EFFORT.—To be eligible to receive a grant under this section, an applicant shall—

''(1) enter into an agreement with the Secretary to ensure that the applicant will maintain total expenditures from all other sources to establish and operate a university transportation center and related educational and research and development activities at a level that is at least equal to the average level of those expenditures during the 2 fiscal years before the date on which the grant is provided;

''(2) submit to the Secretary an annual report on the projects and activities of the university transportation center for which funds are made available for the fiscal year covered by the report, a description of—

''(A) the educational activities carried out by the center (including a detailed summary of the budget for those educational activities);

''(B) each research and development project carried out by the center, including—

''(i) the identity of the principal investigator working on a research and development project; and

''(ii) the overall funding amount for each research and development project (including the amounts expended for the project as of the date of the report); and

''(C) overall technology transfer and implementation efforts of the center; and

''(3) make use of National Research Council, Transportation Research Board, and Transportation Research Information Services online databases for—

''(A) program development and strategic planning;

''(B) reporting of activities funded under this section; and

''(C) input and dissemination of results and reports from completed research and development.

''(g) FEDERAL SHARE.—The Federal share of the costs of activities carried out using a grant made under subsection (a) is 80 percent of costs, and under subsection (b) is 50 percent of costs. The non-Federal share may include funds provided to a recipient under section 503, 504(b), or 505 of title 23, United States Code.

''(h) PROGRAM COORDINATION.—

''(1) COORDINATION.—The Secretary shall coordinate the research and development, education, training, and technology transfer activities that grant recipients carry out under this section.

''(2) ANNUAL REVIEW AND EVALUATION.—At least annually and consistent with the plan developed by the recipient under subsection (f)(2), the Secretary shall review and evaluate programs the grant recipients carry out.

''(3) FUNDING LIMITATION.—The Secretary may use not more than 1 percent of amounts made available from Government sources to carry out this subsection.

''(i) LIMITATION ON AVAILABILITY OF FUNDS.—Funds made available to carry out this program shall remain available for obligation for a period of 2 years after the last day of the fiscal year for which such funds are authorized.

''(j) TRANSPORTATION EDUCATION DEVELOPMENT PILOT PROGRAM.—

''(1) ESTABLISHMENT.—The Secretary shall establish a program to make grants to institutions of higher education that in partnership with industry or State Departments of Transportation will develop, test, and revise new curricula and education programs to train individuals at all levels of the transportation workforce.

''(2) SELECTION OF GRANT RECIPIENTS.—In selecting applications for awards under this subsection, the Secretary shall consider—

''(A) the degree to which the new curricula or education program meets the specific needs of a segment of the transportation industry, States, or regions;

''(B) providing for practical experience and on-the-job training;

''(C) proposals oriented toward practitioners in the field rather than the support and growth of the research community;

''(D) the degree to which the new curricula or program will provide training in areas other than engineering, such as business administra-

tion, economics, information technology, environmental science, and law;

''(E) programs or curricula in nontraditional departments which train professionals for work in the transportation field, such as materials, information technology, environmental science, urban planning, and industrial technology; and

''(F) industry or a State's Department of Transportation commitment to the program.

''(3) AUTHORIZATION OF APPROPRIATIONS.—From amounts authorized under section 101(b)(4) of the Surface Transportation Research and Development Act of 2005 for carrying out this section, for each of fiscal years 2005, 2006, 2007, 2008, 2009, and 2010, there shall be available for carrying out this subsection $4,500,000.

''(4) LIMITATIONS.—No individual grant under this subsection shall exceed $750,000 per year. After a recipient has received 3 years of Federal funding under this subsection, Federal funding may equal no more than 75 percent of a grantee's program costs.

''(k) NATIONAL TRANSPORTATION SECURITY CENTERS.—

''(1) ESTABLISHMENT.—The Secretary shall establish not more than 4 National Transportation Security Centers at institutions of higher education to conduct research, education, and professional training on all aspects of surface transportation security, with emphasis on utilization of intelligent transportation systems, technologies, and architectures.

''(2) SELECTION CRITERIA.—The Secretary shall make grants using a competitive peer-reviewed procedure that gives priority to—

''(A) institutions with a commitment to transportation security issues;

''(B) proposals that include partnerships with other institutions of higher education, federally funded research and development centers, or other nonprofit laboratories;

''(C) proposals to conduct both practical and theoretical research and technical systems analysis; and

''(D) proposals to develop professional training programs.''.

SEC. 111. INTELLIGENT TRANSPORTATION SYSTEMS.

(a) AMENDMENT.—Subtitle C of title V of the Transportation Equity Act for the 21st Century is amended to read as follows:

"Subtitle C—Intelligent Transportation Systems

"SEC. 5201. SHORT TITLE.

''This subtitle may be cited as the 'Intelligent Transportation Systems Act of 2005'.

"SEC. 5202. 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, motorcycles, and bicycles, and including pedestrians and individuals with disabilities; and

''(5) improvement of the Nation's ability to respond to security related or other man-made emergencies and natural disasters, and enhancement of national defense mobility.

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

''(1) develop and test emerging technologies to meet the goals described in subsection (a);

''(2) expedite deployment and ensure integration and interoperability of proven intelligent transportation systems;

''(3) analyze the likelihood of utilization of intelligent transportation system technologies by the intended user community;

''(4) ensure that Federal, State, and local transportation officials have adequate knowledge of

intelligent transportation systems for full consideration in the transportation planning process;

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

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

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

''(8) evaluate costs and benefits of intelligent transportation systems projects.

''SEC. 5203. 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 proven systems through research on barriers to deployment as a component of the surface transportation systems of the United States.

''(b) POLICY.—Intelligent transportation system research, development, operational tests, and deployment projects funded pursuant to this subtitle shall encourage and not displace public-private partnerships or private sec-

tor investment in such research and development 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, federally funded research and development centers, 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, may consult with the Secretary of Commerce, the Secretary of the Treasury, the Secretary of Homeland Security, 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 shall 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 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) make that information (except for proprietary information and data) readily available to all users of the repository.

''(2) AGREEMENT.—

''(A) IN GENERAL.—The Secretary may enter into an agreement with a third party for the maintenance of the repository for technical and safety data under paragraph (1)(A).

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

''(h) ADVISORY COMMITTEE.—

''(1) IN GENERAL.—The Secretary shall establish an Advisory Committee to advise the Secretary on carrying out this subtitle.

''(2) MEMBERSHIP.—The Advisory Committee shall have no more than 20 members, be balanced between metropolitan and rural interests, and include, at a minimum—

''(A) a representative from a State highway department;

''(B) a representative from a local highway department who is not from a metropolitan planning organization;

''(C) a representative from a State, local, or regional transit agency;

''(D) a representative from a metropolitan planning organization;

''(E) a private sector user of intelligent transportation system technologies;

''(F) an academic researcher with expertise in computer science or another information science field related to intelligent transportation systems, and who is not an expert on transportation issues;

''(G) an academic researcher who is a civil engineer;

"(H) an academic researcher who is a social scientist with expertise in transportation issues;

"(I) a representative from a not-for-profit group representing the intelligent transportation system industry;

"(J) a representative from a public interest group concerned with safety;

"(K) a representative from a public interest group concerned with the impact of the transportation system on land use and residential patterns; and

"(L) members with expertise in planning, safety, and operations.

"(3) DUTIES.—The Advisory Committee shall, at a minimum, perform the following duties:

"(A) Provide input into the development of the Intelligent Transportation System aspects of the strategic plan under section 508 of title 23, United States Code.

"(B) Review, at least annually, areas of intelligent transportation systems research being considered for funding by the Department, to determine—

''(i) whether these activities are likely to advance either the state-of-the-practice or state-of-the-art in intelligent transportation systems;

''(ii) whether the intelligent transportation system technologies are likely to be deployed by users, and, if not, to determine the barriers to deployment; and

''(iii) the appropriate roles for government and the private sector in investing in the research and technologies being considered.

''(4) REPORT.—Not later than February 1 of each year after the date of enactment of the Surface Transportation Research and Development Act of 2005, the Secretary shall transmit to the Committee on Science and the Committee on Transportation and Infrastructure of the House of Representatives, and to the Committee on Environment and Public Works of the Senate, a report including—

''(A) all recommendations made by the Advisory Committee during the preceding calendar year;

''(B) an explanation of how the Secretary has implemented those recommendations; and

''(C) for recommendations not implemented, the reasons for rejecting the recommendations.

''(5) APPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—The Advisory Committee shall be subject to the Federal Advisory Committee Act (5 U.S.C. App.).

''(i) EVALUATIONS.—

''(1) GUIDELINES AND REQUIREMENTS.—

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

''(B) CONTENT.—Such evaluations shall include specific, quantitative measures to determine whether a technology is meeting its intended goal. To the maximum extent practicable, these measures shall evaluate the outcome of the technology (such as accidents avoided or decreased travel times or travel time variability).

''(C) 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.

''(D) 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.

''(E) DISSEMINATION.—The Secretary shall make readily available through the Internet all information collected through evaluations carried out under this subsection.

''(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, United States Code.

''SEC. 5204. USING INFORMATION FROM INTELLIGENT TRANSPORTATION SYSTEMS.

''(a) REPORT.—The Secretary shall prepare a report assessing the value of current and anticipated data col-

lected from intelligent transportation system technologies to determine whether and how that data should be used for real-time traffic management, planning, performance monitoring, program assessment, and policy applications.

''(b) ASSESSMENT.—In preparing the report under subsection (a), the Secretary should assess—

''(1) the extent to which data should be centralized nationally in support of national planning and goals, what information should be aggregated regionally, and what information should be kept locally;

''(2) the need for data standards;

''(3) public and private data sources other than intelligent transportation system data sources (such as roadway characteristics inventories and incident information) that, combined with intelligent transportation system data, would enhance the utility of intelligent transportation system data to decisionmakers, and how these data sources can be merged; and

''(4) how to make data accessible to users.

''(c) CONSULTATION.—In developing the strategy under this section, the Secretary shall consult with the Bureau of Transportation Statistics and the advisory committee established under section 5203(h).

''(d) REPORT TO CONGRESS.—Not later than 2 years after the date of the enactment of this subsection, the Secretary shall transmit to the Committee on Science and the Committee on Transportation and Infrastructure of the House of Representatives, and to the Committee on Environment and Public Works of the Senate, the report developed under this section.

"SEC. 5205. 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 (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) GOAL.—The goal of the national architecture and standards shall be to ensure, whenever it is appropriate, 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.

''(4) STANDARD VALIDATION.—The Secretary shall ensure that new standards promulgated for intelligent transportation system technologies that are funded by the Department are tested and validated, whenever it is appropriate, and shall ensure that the results of such testing and validation are made publicly available.

''(b) 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)(1) and (2), 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) PERIOD OF EFFECTIVENESS.—A provisional standard established under paragraph (1) shall be published in the Federal Register and re-

main in effect until the appropriate standards development organization adopts and publishes a standard.

''(c) 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 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 and development objectives outlined in the National ITS Program Plan 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 the Transportation Equity Act for the 21st Century, 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 the Transportation Equity Act for the 21st Century.

''SEC. 5206. RESEARCH AND DEVELOPMENT.

''(a) IN GENERAL.—The Secretary shall carry out a comprehensive program of research, development, and operational tests of intelligent vehicles and intelligent infrastructure systems, as well as research into barriers to their deployment, 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) are aimed at reducing congestion and improving mobility and efficiency;

''(2) are aimed at improving safety;

''(3) are aimed at improving security by focusing on responding to security-related emergencies, and preventing such emergencies;

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

''(5) develop methods to address nontechnical barriers to the deployment of intelligent transportation system technologies, and the best ways to develop partnerships to successfully deploy intelligent transportation system technologies;

''(6) facilitate the integration of intelligent infrastructure, vehicle, and control technologies;

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

''(8) utilize interdisciplinary approaches to develop traffic management strategies and tools to address multiple impacts of congestion concurrently;

''(9) are aimed at improving the efficiency of goods movement, such as through real-time tracking and management; or

''(10) facilitate high-performance transportation systems, through methods such as congestion pricing, real-time facility management, rapid emergency response, and just-in-time transit.

''(c) OPERATIONAL TESTS.—Operational tests shall be used to evaluate promising technologies that have not yet been demonstrated. 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. 5207. USE OF FUNDS.

''(a) CONGESTION REDUCTION.—At least ⅓ of funds made available under section 5206 for intelligent transportation systems research and development shall be used to research, develop, and operationally test technologies whose primary purpose is to reduce congestion.

''(b) 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.

''(c) INFRASTRUCTURE DEVELOPMENT.—Funds made available to carry out this subtitle for operational tests—

''(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.

''SEC. 5208. DEFINITIONS.

''In this subtitle, the following definitions apply:

''(1) INTELLIGENT TRANSPORTATION INFRASTRUCTURE.—The term 'intelligent transportation infrastructure' means fully integrated public sector

intelligent transportation system components, as defined by the Secretary.

''(2) 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.

''(3) 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.

''(4) 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.

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

(b) TABLE OF CONTENTS AMENDMENT.—The items relating to subtitle C of title V in the table of contents of the Transportation Equity Act for the 21st Century are amended to read as follows:

''Subtitle C—Intelligent Transportation Systems

''Sec. 5201. Short title.
''Sec. 5202. Goals and purposes.
''Sec. 5203. General authorities and requirements.
''Sec. 5204. Using information from intelligent transportation systems.
''Sec. 5205. National architecture and standards.
''Sec. 5206. Research and development.
''Sec. 5207. Use of funds.
''Sec. 5208. Definitions.''.

TITLE II—MISCELLANEOUS

SEC. 201. AUTHORIZATION OF APPROPRIATIONS.

(a) TRANSIT RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated from the Highway Trust Fund to the Secretary of Transportation to carry out sections 5312, 5313, 5314, 5315, and 5322 of title 49, United States Code, and section 202 of this Act, relating to research and development, such sums as may be necessary for each of the fiscal years 2005 through 2010.

(b) HIGHWAY SAFETY RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated from the Highway Trust Fund to the Secretary of Transportation to carry out section 403 of title 23, United States Code, relating to research and development, such sums as may be necessary for each of the fiscal years 2005 through 2010.

(c) MOTOR CARRIER RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated from the Highway Trust Fund to the Secretary of Transportation to carry out section 31108 of title 49, United States Code, relating to research and development, such sums as may be necessary for each of the fiscal years 2005 through 2010.

SEC. 202. INNOVATIVE PRACTICES AND TECHNOLOGIES DEMONSTRATION AND DEPLOYMENT PROGRAM.

(a) ESTABLISHMENT.—The Secretary of Transportation shall establish an Innovative Practices and Technologies Demonstration and Deployment Program.

(b) PROGRAM GOALS.—The goals of the program are to—

(1) demonstrate promising new transit practices and technologies, including new business models for managing and operating transit systems, that may increase ridership, increase accessibility, reduce cost, improve customer satisfaction, and improve safety;

(2) evaluate, refine, and document the performance, benefits, and costs of innovative transit practices and technologies; and

(3) effectively disseminate information to accelerate deployment of innovative transit practices and technologies.

(c) GRANTS, COOPERATIVE AGREEMENTS, AND CONTRACTS.—The Secretary may make grants to, or enter into cooperative agreements or contracts with, transit agencies, States, other Federal agencies, universities and colleges, private sector entities, and nonprofit organizations to pay the Federal share of the cost of demonstration

and deployment projects concerning innovative practices and technologies.

(d) APPLICATIONS.—To receive a grant, cooperative agreement, or contract under this section, an entity described in subsection (c) 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 through an open competition based on the following criteria:

(1) Whether the project meets the goals of the program.

(2) Peer review of the proposal.

(3) The likelihood that the project will result in more widespread deployment of the practice or technology being proposed.

(4) Preference shall be given to an application that represents a public-private partnership.

(e) TECHNOLOGY AND INFORMATION TRANSFER.—The Secretary shall ensure that information about innovative practices and technologies supported under this section is made available to transit agencies, State and local transportation departments, and other interested parties. Information disseminated under this subsection shall in-

clude both the costs and benefits of deploying an innovative practice or technology, and shall document—

(1) best practices for adopting successful practices or technologies; and

(2) the transferability of these practices and technologies.

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

SEC. 203. NATIONAL TRANSIT INSTITUTE.

Section 5315 of title 49, United States Code, is amended—

(1) in subsection (a)—

(A) by striking ''public mass transportation'' and inserting ''public transportation'';

(B) by striking ''mass'' after ''Government-aid'' and inserting ''public''; and

(C) in paragraphs (1), (6), (7), and (10) by striking ''mass'' each place it appears before ''transportation'' and inserting ''public''; and

(2) in subsection (d) by striking ''mass'' each place it appears.

SEC. 204. HUMAN RESOURCE PROGRAMS.

(a) IN GENERAL.—Section 5322 of title 49, United States Code, is amended—

(1) by inserting ''(a) In General.—'' before the beginning of the first sentence of the section; and

(2) by adding the following at the end:

''(b) GRANTS TO HIGHER LEARNING INSTITUTIONS.—

''(1) The Secretary (or the Secretary of Housing and Urban Development when required by section 5334(i) of this title) may make grants to nonprofit institutions of higher learning—

''(A) to conduct competent research and development and investigations into the theoretical or practical problems of urban transportation; and

''(B) to train individuals to conduct further research and development or obtain employment in an organization that plans, builds, operates, or manages an urban transportation system.

''(2) Research and investigations under this subsection include—

''(A) the design and use of urban public transportation systems and urban roads and highways;

''(B) the interrelationship between various modes of urban and interurban transportation;

''(C) the role of transportation planning in overall urban planning;

''(D) public preferences in transportation;

''(E) the economic allocation of transportation resources; and

''(F) the legal, financial, engineering, and esthetic aspects of urban transportation.

''(3) When making a grant under this subsection, the Secretary shall give preference to an institution that brings together knowledge and expertise in the various social science and technical disciplines related to urban transportation problems.

''(c) FELLOWSHIPS.—

''(1) The Secretary may make grants to States, local governmental authorities, and operators of public transportation systems to provide fellowships to train personnel employed in managerial, technical, and professional positions in the mass transportation field.

''(2) A fellowship under this subsection may be for not more than one year of training in an institution that offers a program applicable to the public transportation industry. The recipient of the grant shall select an individual on the basis of demonstrated ability and for the contribution the indi-

vidual reasonably can be expected to make to an efficient public transportation operation. A grant for a fellowship may not be more than the lesser of $65,000 or 75 percent of—

''(A) tuition and other charges to the fellowship recipient;

''(B) additional costs incurred by the training institution and billed to the grant recipient; and

''(C) the regular salary of the fellowship recipient for the period of the fellowship to the extent the salary is actually paid or reimbursed by the grant recipient.

''(d) OTHER GRANTS.—The Secretary may make grants to State and local governmental authorities for projects that will use innovative techniques and methods in managing and providing public transportation.''.

SEC. 205. HIGHWAY SAFETY RESEARCH AND DEVELOPMENT.

Section 403(a) (Authority of the Secretary) of title 23, United States Code, is amended by adding the following paragraphs at the end:

''(4) EMERGENCY MEDICAL SERVICES.—In addition to the authority provided under this subsection, the Secretary is authorized to use funds ap-

propriated to carry out this section to enhance coordination among Federal agencies involved with State, local, tribal, and community-based emergency medical services. In exercising this authority, the Secretary may coordinate with State and local governments, the Bureau of Indian Affairs on behalf of Indian tribes, private industry, and other interested parties; collect and exchange emergency medical services data and information; examine emergency medical services needs, best practices, and related technology; and develop emergency medical services standards and guidelines, and plans for the assessment of emergency medical services systems.

''(5) INTERNATIONAL COOPERATION.—In addition to the authority provided under this subsection, the Secretary is authorized to use funds appropriated to carry out this section to participate and cooperate in international activities to enhance highway safety by such means as exchanging safety information; conducting safety research and development; and examining safety needs, best practices, and new technology.

''(6) NATIONAL MOTOR VEHICLE CRASH CAUSATION SURVEY.—In addition to the authority provided under this subsection, the Secretary is author-

ized to use funds appropriated to carry out this section to develop and conduct a nationally representative survey to collect on-scene motor vehicle crash causation data.''.

SEC. 206. MOTOR CARRIER RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—Title 49, United States Code, is amended by repealing section 31108 and inserting the following new section, to read as follows:

''§ 31108. Motor carrier research and development program

''(a) RESEARCH, DEVELOPMENT, AND TECHNOLOGY TRANSFER ACTIVITIES.—

''(1) The Secretary of Transportation shall establish and carry out a motor carrier research and development program. The Secretary may carry out research, development, technology, and technology transfer activities with respect to—

''(A) the causes of accidents, injuries and fatalities involving commercial motor vehicles; and

''(B) means of reducing the number and severity of accidents, injuries and fatalities involving commercial motor vehicles.

''(2) The Secretary may test, develop, or assist in testing and developing any material, invention, patented article, or process related to the research and development program.

''(3) The Secretary may use the funds appropriated to carry out this section for training or education of commercial motor vehicle safety personnel, including, but not limited to, training in accident reconstruction and detection of controlled substances or other contraband, and stolen cargo or vehicles.

''(4) The Secretary may carry out this section—

''(A) independently;

''(B) in cooperation with other Federal departments, agencies, and instrumentalities and federally funded research and development centers; or

''(C) by making grants to, or entering into contracts or cooperative agreements with, any federally funded research and development center, State agency, authority, association, institution, for-profit or non-profit corporation, organization, foreign country, or person.

''(5) The Secretary shall use funds made available to carry out this section to develop, administer,

communicate, and promote the use of products of research, technology, and technology transfer programs under this section.

''(b) COLLABORATIVE RESEARCH AND DEVELOPMENT.—

''(1) To advance innovative solutions to problems involving commercial motor vehicle and motor carrier safety, security, and efficiency, and to stimulate the deployment of emerging 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, and sole proprietorships that are incorporated or established under the laws of any State; and

''(B) federally funded research and development centers.

''(2) 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) (A) 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) All costs directly incurred by the non-Federal partners, including personnel, travel, and hardware or software development costs, shall be credited toward the non-Federal share of the cost of the activities described in subparagraph (A).

''(4) 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) Section 3705 of title 41, United States Code, shall not apply to a contract or agreement entered into under this section.''.

(b) CONFORMING AMENDMENT.—The table of sections at the beginning of chapter 311 of title 49, United

States Code, is amended by revising the item relating to section 31108 to read as follows:

"31108. Motor carrier research and development program.".

SEC. 207. TRANSPORTATION, ENERGY, AND ENVIRONMENT.

(a) IN GENERAL.—As part of the National Climate Change Technology Initiative and the Climate Change Research Initiative, the Secretary shall establish and carry out a multimodal energy and climate change program to study the relationship of transportation, energy, and climate change.

(b) CONTENTS.—The program to be carried out under this section shall include, but not be limited to, research and development designed to—

(1) identify, develop and evaluate strategies to improve energy efficiency and reduce greenhouse gas emissions from transportation sources; and

(2) identify and evaluate the potential effects of climate changes on the Nation's transportation systems, and strategies to address these effects.

(c) PROJECT SELECTION.—Activities to be undertaken in this program will be determined by an internal steering committee established by the Secretary of Transportation. This intermodal committee shall include representatives from the Office of the Secretary and operating administrations within the Department of Transportation as designated by the Secretary.

(d) GRANTS, COOPERATIVE AGREEMENTS AND CONTRACTS.—The Secretary may carry out this program independently or by making grants to, or entering into contracts and cooperative agreements with, a Federal agency, State agency, local agency, authority, association, nonprofit or for-profit corporation, or institution of higher education.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section, from the Highway Trust Fund and the Airport and Airway Trust Fund, such sums as may be necessary for each of fiscal years 2005 through 2010.

SEC. 208. NATIONAL COOPERATIVE FREIGHT TRANSPORTATION RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—Chapter 5 of title 23, United States Code, is amended by adding at the end the following:

"§ 510. National cooperative freight transportation research and development program

''(a) ESTABLISHMENT.—The Secretary shall establish and support a national cooperative freight transportation research and development program. The program shall focus on all forms of freight transportation, including trucking and rail.

''(b) AGREEMENT.—The Secretary shall enter into an arrangement with the National Research Council to support and carry out administrative and management activities relating to the governance of the national cooperative freight transportation research and development program.

''(c) ADVISORY COMMITTEE.—The National Research Council shall select an advisory committee consisting of a representative cross-section of freight stakeholders, including the Department of Transportation, other Federal agencies, State transportation departments, local governments, the American Association of State Highway and Transportation Officials and other nonprofit entities (including environmental groups), academia, and the private sector.

''(d) GOVERNANCE.—The national cooperative freight transportation research and development program established under this section shall include the following administrative and management elements:

''(1) NATIONAL RESEARCH AND DEVELOPMENT AGENDA.—The advisory committee, in consultation with stakeholders, shall recommend a national research and development agenda for the national cooperative freight transportation research and development program. The national research and develop-

ment agenda shall include a multi-year strategic plan.

''(2) STAKEHOLDER INVOLVEMENT.—Stakeholders may—

''(A) submit research and development proposals to the advisory committee;

''(B) participate in merit reviews of research and development proposals and peer reviews of research and development products; and

''(C) receive research and development results.

''(3) OPEN COMPETITION AND PEER REVIEW OF RESEARCH AND DEVELOPMENT PROPOSALS.—The National Research Council shall award research and development contracts and grants through open competition and peer review conducted on a regular basis.

''(4) EVALUATION OF RESEARCH.—

''(A) PEER REVIEW.—Research and development contracts and grants shall allow peer review of the research and development results.

''(B) PROGRAMMATIC EVALUATIONS.—The National Research Council may conduct peri-

odic programmatic evaluations on a regular basis.

''(5) DISSEMINATION OF RESEARCH FINDINGS.—The National Research Council shall disseminate research and development findings to researchers, practitioners, and decisionmakers.

''(e) CONTENTS.—The national research and development agenda for the national cooperative freight transportation research and development program required under subsection (d)(1) may include research and development in the following areas:

''(1) Techniques for estimating and quantifying public benefits derived from freight transportation projects.

''(2) Alternative approaches to calculating the contribution of truck traffic to congestion on specific highway segments.

''(3) The feasibility of freight villages as a means of consolidating origins and destinations for freight movement.

''(4) Methods for incorporating estimates of international trade into landside transportation planning.

''(5) The use of technology applications to increase capacity of highway lanes dedicated to truck-only traffic.

''(6) Development of physical and policy alternatives for separating car and truck traffic.

''(7) Ways to synchronize infrastructure improvements with freight transportation demand.

''(8) Additional priorities to identify and address the emerging and future research and development needs related to freight transportation.

''(f) FUNDING.—

''(1) FEDERAL SHARE.—The Federal share of the cost of an activity carried out using such funds shall be up to 100 percent, and such funds shall remain available until expended.

''(2) USE OF NON-FEDERAL FUNDS.—In addition to using funds authorized for this section, the National Research Council may seek and accept additional funding sources from public and private entities capable of accepting funding from the United States Department of Transportation (Federal Highway Administration, Federal Transit Administration, Federal Railroad Administration, Research and Special Programs Administration, and the National Highway Traffic Safety Administration),

states, local governments, nonprofit foundations, and the private sector.''.

(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by adding at the end the following new item:

''510. National cooperative freight transportation research and development program.''.

SEC. 209. NEXT GENERATION NATIONAL TRANSPORTATION POLICY STUDY COMMISSION.

(a) ESTABLISHMENT OF COMMISSION.—(1) The President shall established a Commission to be known as the Next Generation National Transportation Policy Study Commission, in this section referred to as the ''Commission''.

(2) The Commission shall make a full and complete investigation and study of the transportation needs and of the resources, requirements, and policies of the United States to meet such expected needs. It shall take into consideration all reports on national transportation policy which have been submitted to Congress in the last decade, including all reports referenced in the Intermodal Surface Transportation Efficiency Act of 1991 and the Transportation Equity Act for the 21st Century. It shall also take into consideration the changes in global trade and its impact on the Nation's economy. It shall evaluate the relative merits of all modes of transportation in meeting our Na-

tion's transportation needs. It shall take into account the link between transportation and the natural environment. Based on such study, it shall recommend changes to existing policies and any new policies that are most likely to ensure that adequate multimodal transportation systems are in place which will meet the needs for a safe and efficient movement of people and goods and also support and grow the national economy.

(b) MEMBERSHIP.—The Commission shall be comprised of 16 members appointed by the President from among individuals who are knowledgeable in transportation activities, including individuals representing State and local governments, metropolitan planning organizations, transportation-related industries, academic and technical institutions, and public interest organizations involved with scientific, regulatory, economic, and environmental transportation activities. The membership of the Commission shall be balanced geographically to the extent consistent with maintaining the highest level of expertise on the Commission. Members shall be appointed for the life of the Commission as follows:

(1) 4 shall be appointed from a list of 8 individuals who shall be recommended by the majority leader of the Senate in consultation with the Chairman of the Committee on Environment and Public

Works, and the Chairman of the Committee on Commerce, Science and Transportation, and the Chairman of the Committee on Banking, Housing and Urban Affairs of the Senate.

(2) 4 shall be appointed from a list of 8 individuals who shall be recommended by the minority leader of the Senate in consultation with the ranking member of the Committee on Environment and Public Works, the ranking member of the Committee on Commerce, Science and Transportation, and the ranking member of the Committee on Banking, Housing and Urban Affairs of the Senate.

(3) 4 shall be appointed from a list of 8 individuals who shall be recommended by the Speaker of the House of Representatives in consultation with the Chairman of the Committee on Transportation and Infrastructure, the Chairman of the Committee on Energy and Commerce, and the Chairman of the Committee on Science of the House of Representatives.

(4) 4 shall be appointed from a list of 8 individuals who shall be recommended by the minority leader of the House of Representatives in consultation with the ranking member of the Committee on Transportation and Infrastructure, the ranking

member of the Committee on Energy and Commerce, and the ranking member of the Committee on Science of the House of Representatives.

(5) Any vacancy which may occur on the Commission shall not affect its powers or functions but shall be filled in the same manner in which the original appointment was made.

(c) FINAL REPORT.—The Commission shall not later than December 31, 2007, submit to the President and Congress its final report including its findings and recommendations. The Commission shall cease to exist six months after submission of such report. All records and papers of the Commission shall thereupon be delivered to the Archivist of the United States for deposit in the Archives of the United States.

(d) FINDINGS AND RECOMMENDATIONS.—The final report shall include the Commission's findings and recommendations with respect to the following:

(1) The Nation's transportation needs, both national and regional, through the year 2025.

(2) The ability of our current transportation systems to meet the projected needs.

(3) The proper mix of transportation modes and necessary linkages between modes to meet anticipated needs.

(4) Necessary measures and policies to ensure enhancement and protection of the natural environment in transportation decisionmaking.

(5) Short-term, medium-term, and long-term research, development, and deployment to meet expected needs.

(6) The roles of the public and private sectors relative to each mode and the balance between public and private investment.

(7) The existing policies and programs of the Federal Government which affect the development of our national transportation system.

(8) The new policies required to develop a balanced national transportation system which meets projected needs, accommodates international trade and supports the national economy.

(9) The adequacy of existing methods to finance transportation and alternative new methods of financing.

(e) SPECIFIC FACTORS TO CONSIDER.—In developing its findings and recommendations, the Commission shall address the following specific factors:

(1) The role of transportation as a critical link to the global economy and trade.

(2) A balance between the transportation of people and goods.

(3) Improving operations and management of the transportation system to improve efficiency, including asset and information management.

(4) The need to address aging infrastructure.

(5) The need to address the enhancement and protection of the natural environment.

(6) The need to address congestion in all modes.

(7) The need to improve environmental decisionmaking.

(8) A balance between the demand for transportation reliability with new threats to security.

(9) Ways to eliminate barriers to transportation investment created by the current modal structure of transportation funding.

(10) Existing barriers to private investment in transportation facilities including tax inequities between modes.

(11) The adequacy of the Federal transportation trust funds to finance future transportation needs.

(12) Appropriate measures of transportation need.

(13) The adequacy of integration among Federal programs affecting transportation.

(14) The relationship between land use and transportation infrastructure investment.

(15) The role that transportation plays in promoting economic growth, improving the environment and sustaining the quality of life.

(f) RECOMMENDATIONS ON THE ROLES OF GOVERNMENT.—The Commission shall also make recommendations on the roles of the Federal and State governments in—

(1) environmental review of transportation projects;

(2) the provision of intercity passenger rail services;

(3) financing transportation at international border crossings;

(4) facilitating international goods movement to, from and within the United States;

(5) ensuring consistency in data and communications links for and between all modes;

(6) financing for each mode of transportation; and

(7) effectively using transportation networks to enhance the quality of life, protect natural resources and promote sustainable economic growth.

(g) PARTICIPATION IN COMMISSION ACTIVITIES.—

(1) PARTICIPATION OF FEDERAL AGENCIES.—The Chairman of the Commission shall request the head of each Federal department or agency with an interest in or a responsibility for national transportation policy to appoint a liaison who shall work closely with the Committee and its staff. Such departments and agencies shall include, but not be limited to, the Department of Transportation, and each of its modal administrations, Office of Management and Budget, Department of Energy, Department of Homeland Security, Environmental Protection Agency, Department of Health and Human Services, Department of Commerce, Department of the Treasury, Department of Defense, Department of Agriculture, National Transportation Safety Board, Surface Transportation Board, and Army Corps of Engineers.

(2) ADVICE FROM PUBLIC AND PRIVATE ORGANIZATIONS.—In carrying out its duties, the Commission shall seek the advice of various groups interested in national transportation policy including

State and local governments, public and private organizations in the fields of transportation and safety, business, education, environment and labor, and the public.

(h) HEARINGS.—The Commission or, on the authorization of the Commission, any Committee of two or more members may, for the purpose of carrying out the provisions of this section, hold such hearings at such times and places as the Commission or such authorized committee may deem advisable.

(i) COMPENSATION.—Members of Congress or other governmental employees shall serve without compensation, but shall be reimbursed for travel, per diem in accordance of the rules of the House of Representatives and Senate, accordingly, or subsistence and other necessary expenses incurred in the performance of the duties vested in the Commission.

(j) COMMISSION STAFF.—The Commission is authorized to appoint and fix the compensation of a staff director and such additional personnel as may be necessary to enable it to carry out its functions.

(k) CONTRACTS.—The Commission is authorized to enter into contracts or agreements for studies and surveys with public and private organizations and, if necessary, to transfer funds to Federal agencies from sums appro-

priated pursuant to this section to carry out such of its duties as the Commission determines can best be carried our in the that manner.

(l) AUTHORIZATION OF APPROPRIATIONS.—(1) There are authorized to be appropriated from the Highway Trust Fund to carry out this section such sums as may be necessary for each of fiscal years 2005 and 2006.

(2) Funds authorized by this subsection shall remain available until expended.

SEC. 210. REAL-TIME SYSTEM MANAGEMENT INFORMATION PROGRAM.

(a) GOALS AND PURPOSES.—

(1) GOALS.—The goals of the real-time system management information program are to provide the nationwide capability to monitor, in real-time, the traffic and travel conditions of our Nation's major highways and to widely share that information to improve the security of the surface transportation system, address congestion problems, support improved response to weather events, and facilitate national and regional traveler information.

(2) PURPOSES.—The purposes of the real-time system management information program are to—

(A) establish a nationwide system of basic real-time information for managing and operating our surface transportation system;

(B) identify longer range real-time highway and transit monitoring needs and develop plans and strategies for meeting those needs; and

(C) provide the capability and means to share that data with state and local governments, and the traveling public.

(b) DATA EXCHANGE FORMATS.—Within one year of enactment of this Act, the Secretary shall establish data exchange formats to ensure that the data provided by highway and transit monitoring systems, including statewide incident reporting systems can readily be exchanged across jurisdictional boundaries, facilitating nationwide availability of information.

(c) STATEWIDE INCIDENT REPORTING SYSTEM.—Within 2 years of enactment of this legislation, each State shall establish a statewide incident reporting system.

(d) REGIONAL INTELLIGENT TRANSPORTATION SYSTEM ARCHITECTURE.—

(1) As State and local governments develop or update their regional ITS architectures, as specified in section 940.9 of title 23, Code of Federal Regula-

tions (Regional ITS Architecture), they shall explicitly address their real-time highway and transit information needs and the systems needed to meet those needs. This specific incorporation of information needs should address coverage, monitoring systems, data fusion and archiving, and methods of exchanging or sharing this information.

(2) States are encouraged to incorporate the data exchange formats developed by the Secretary to ensure that the data provided by highway and transit monitoring systems can readily be exchanged across state and local governments, and with the traveling public.

(e) DEFINITION.—In this section, the term ''statewide incident reporting system'' means a statewide system for facilitating the real-time electronic reporting of incidents to a central location for use in monitoring the event, providing accurate traveler information, and responding to the incident as appropriate.

(f) ELIGIBILITY.—Subject to approval by the Secretary, a State may obligate funds apportioned to it under sections 104(b)(1) and (3) and 505 of title 23, United States Code, for activities relating to the planning of real-time monitoring elements.

SEC. 211. PLANNING CAPACITY BUILDING INITIATIVE.

Section 104 of title 23, United States Code, is amended by inserting after subsection (l) the following:

''(m) PLANNING CAPACITY BUILDING INITIATIVE.—

''(1) IN GENERAL.—The Secretary shall establish a planning capacity building initiative to support enhancements in transportation planning, in order to—

''(A) strengthen metropolitan and statewide transportation planning under sections 134 and 135, and under sections 5303 through 5305 of title 49;

''(B) enhance tribal capacity to conduct joint transportation planning under chapter 2 of this title; and

''(C) participate in the metropolitan and statewide transportation planning programs under chapter 52 of title 49.

''(2) PRIORITY.—The Secretary shall give priority to planning practices and processes that support homeland security planning, performance based planning, safety planning, operations planning, freight planning, and integration of environment and planning.

''(3) USE OF FUNDS.—Funds authorized for this program may be used for research, program de-

velopment, information collection and dissemination, and technical assistance. The Secretary may use these funds independently or make grants to, or enter into contracts and cooperative agreements with, a Federal agency, State agency, local agency, federally recognized Indian tribal government or tribal consortium, authority, association, nonprofit or for-profit corporation, or institution of higher education, to carry out the purposes of this subsection.

''(4) FEDERAL SHARE.—The Federal share of the cost of an activity carried out using such funds shall be up to 100 percent, and such funds shall remain available until expended.

''(5) ADMINISTRATION.—This initiative shall be administered by the Federal Highway Administration in cooperation with the Federal Transit Administration.

''(6) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated from the Highway Trust Fund such sums as may be necessary to carry out this section for each of fiscal years 2005 through 2010.''.

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