Public Law 112-141 – July 6, 2012
Moving Ahead for Progress in the 21st Century Act (MAP-21)

Sections of MAP-21 for which RITA has Primary Responsibility

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec. 3</td>
<td>Effective Date</td>
<td>3</td>
</tr>
</tbody>
</table>

**Division A – Federal-aid Highways and Highway Safety Construction Programs.**

- Sec. 1121(b) – National Ferry Database* | 3 |

**Division E – Research and Education**

- Sec. 50001 – Short Title | 3 |

**Title I – Funding**

- Sec. 51001 – Authorization of Appropriations | 3 |

**Title II – Research, Technology and Education**

- Sec. 52001 – Research, Technology and Education* | 4 |
- Sec. 52008 – National Cooperative Freight Research | 5 |
- Sec. 52009 – University Transportation Centers Program | 6 |
  - University Transportation Centers Program | 6 |
  - Competitive Selection Process | 6 |
  - Grants | 8 |
  - Program Coordination | 10 |
  - Limitation on Availability of Amounts | 10 |
  - Information Collection | 10 |
- Sec. 52010 – University Transportation Research | 10 |
- Sec. 52011 – Bureau of Transportation Statistics | 11 |
  - §6301. Definitions | 11 |
  - §6302. Bureau of Transportation Statistics | 11 |
  - §6303. Intermodal transportation database | 14 |
  - §6304. National Transportation Library | 14 |
  - §6305. Advisory council on transportation statistics | 15 |
  - §6306. Transportation statistical collection, analysis, and dissemination | 16 |
  - §6307. Furnishing of information, data, or reports by Federal agencies | 17 |
  - §6308. Proceeds of data product sales | 18 |
§6309. National transportation atlas database 18
§6310. Limitations on statutory construction 18
§6311. Research and development grants 19
§6312. Transportation statistics annual report 19
§6313. Mandatory response authority for freight data collection 20

- Sec. 52012 – Administrative Authority*
  - Program Evaluation and Oversight 21
  - Collaborative Research and Development 21

- Sec. 52013 – Transportation Research and Development Strategic Planning*

Title III – Intelligent Transportation Systems Research

- Sec. 53001 – Use of Funds for ITS Activities 23
- Sec. 53002 – Goals and Purposes 23
- Sec. 53003 – General Authorities and Requirements 25
- Sec. 53004 – Research and Development 28
- Sec. 53005 – National Architecture and Standards 29
- Sec. 53006 – Vehicle-to-Vehicle and Vehicle-to-Infrastructure Communications Systems Deployment 30

*Full Text of United States Code Amended by Asterisked Sections¹

- 23 USC 129 Note – National Ferry Database 31
- 23 USC 501 – Research, Technology and Education – Definitions 31
- 49 USC 112 – Research and Innovative Technology Administration 33
- 23 USC 508 – Transportation Research and Development Strategic Planning 35

SEC. 3. EFFECTIVE DATE.

(a) IN GENERAL.—Except as otherwise provided, divisions A, B, C (other than sections 32603(d), 32603(g), 32912, and 34002 of that division) and E, including the amendments made by those divisions, take effect on October 1, 2012.

(b) REFERENCES.—Except as otherwise provided, any reference to the date of enactment of the MAP–21 or to the date of enactment of the Federal Public Transportation Act of 2012 in the divisions described in subsection (a) or in an amendment made by those divisions shall be deemed to be a reference to the effective date of those divisions.

Division A – Federal-aid Highways and Highway Safety Construction Programs

SEC. 1121. CONSTRUCTION OF FERRY BOATS AND FERRY TERMINAL FACILITIES.

(b) NATIONAL FERRY DATABASE.—Section 1801(e) of the SAFETEA–LU (23 U.S.C. 129 note; Public Law 109–59) is amended—

(1) in paragraph (2), by inserting “, including any Federal, State, and local government funding sources,” after “sources”; and

(2) in paragraph (4)—

(A) in subparagraph (B), by striking “and” at the end;

(B) by redesignating subparagraph (C) as subparagraph (D);

(C) by inserting after subparagraph (B), the following:

“(C) ensure that the database is consistent with the national transit database maintained by the Federal Transit Administration; and”;

and

(D) in subparagraph (D) (as redesignated by subparagraph (B)), by striking “2009” and inserting “2014”.

Division E – Research and Education

SEC. 50001. SHORT TITLE.

This division may be cited as the “Transportation Research and Innovative Technology Act of 2012”.

TITLE I—FUNDING

SEC. 51001. AUTHORIZATION OF APPROPRIATIONS.

(a) IN GENERAL.—The following amounts are authorized to be appropriated out of the Highway Trust Fund (other than the Mass Transit Account):
(4) INTELLIGENT TRANSPORTATION SYSTEMS PROGRAM.—To carry out sections 512 through 518 of title 23, United States Code, $100,000,000 for each of fiscal years 2013 and 2014.

(5) UNIVERSITY TRANSPORTATION CENTERS PROGRAM.—To carry out section 5505 of title 49, United States Code, $72,500,000 for each of fiscal years 2013 and 2014.

(6) BUREAU OF TRANSPORTATION STATISTICS.—To carry out chapter 63 of title 49, United States Code, $26,000,000 for each of fiscal years 2013 and 2014.

(b) APPLICABILITY OF TITLE 23, UNITED STATES CODE.—Funds authorized to be appropriated by subsection (a) shall—

(1) be available for obligation in the same manner as if those funds were apportioned under chapter 1 of title 23, United States Code, except that the Federal share of the cost of a project or activity carried out using those funds shall be 80 percent, unless otherwise expressly provided by this Act (including the amendments by this Act) or otherwise determined by the Secretary; and

(2) remain available until expended and not be transferable.

TITLE II – RESEARCH, TECHNOLOGY AND EDUCATION

SEC. 52001. RESEARCH, TECHNOLOGY, AND EDUCATION.

Section 501 of title 23, United States Code, is amended—

(1) by redesignating paragraph (2) as paragraph (8);

(2) by inserting after paragraph (1) the following:

“(2) INCIDENT.—The term ‘incident’ means a crash, natural disaster, workzone activity, special event, or other emergency road user occurrence that adversely affects or impedes the normal flow of traffic.

“(3) INNOVATION LIFECYCLE.—The term ‘innovation lifecycle’ means the process of innovating through—

“(A) the identification of a need;
“(B) the establishment of the scope of research to address that need;
“(C) setting an agenda;
“(D) carrying out research, development, deployment, and testing of the resulting technology or innovation; and
“(E) carrying out an evaluation of the costs and benefits of the resulting technology or innovation.
“(4) INTELLIGENT TRANSPORTATION INFRASTRUCTURE.—The term ‘intelligent transportation infrastructure’ means fully integrated public sector intelligent transportation system components, as defined by the Secretary.

“(5) INTELLIGENT TRANSPORTATION SYSTEM.—The terms ‘intelligent transportation system’ and ‘ITS’ mean electronics, photonics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

“(6) NATIONAL ARCHITECTURE.—For purposes of this chapter, the term ‘national architecture’ means the common framework for interoperability that defines—
   “(A) the functions associated with intelligent transportation system user services;
   “(B) the physical entities or subsystems within which the functions reside;
   “(C) the data interfaces and information flows between physical subsystems; and
   “(D) the communications requirements associated with the information flows.

“(7) PROJECT.—The term ‘project’ means an undertaking to research, develop, or operationally test intelligent transportation systems or any other undertaking eligible for assistance under this chapter.”; and

(3) by inserting after paragraph (8) (as so redesignated) the following:

“(9) 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 the intended purposes of the materials, products, processes, and services; 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.”.

SEC. 52008. NATIONAL COOPERATIVE FREIGHT RESEARCH.

(a) IN GENERAL.—Section 509 of title 23, United States Code, is repealed.

(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by striking the item relating to section 509.
SEC. 52009. UNIVERSITY TRANSPORTATION CENTERS PROGRAM.

(a) IN GENERAL.—Section 5505 of title 49, United States Code, is amended to read as follows: “§ 5505. University transportation centers program.

“(a) UNIVERSITY TRANSPORTATION CENTERS PROGRAM.—

“(1) ESTABLISHMENT AND OPERATION.—The Secretary shall make grants under this section to eligible nonprofit institutions of higher education to establish and operate university transportation centers.

“(2) ROLE OF CENTERS.—The role of each university transportation center referred to in paragraph (1) shall be—

“(A) to advance transportation expertise and technology in the varied disciplines that comprise the field of transportation through education, research, and technology transfer activities;

“(B) to provide for a critical transportation knowledge base outside of the Department of Transportation; and

“(C) to address critical workforce needs and educate the next generation of transportation leaders.

“(b) COMPETITIVE SELECTION PROCESS.—

“(1) APPLICATIONS.—To receive a grant under this section, a nonprofit institution of higher education shall submit to the Secretary an application that is in such form and contains such information as the Secretary may require.

“(2) RESTRICTION.—A nonprofit institution of higher education or the lead institution of a consortium of nonprofit institutions of higher education, as applicable, that receives a grant for a national transportation center or a regional transportation center in a fiscal year shall not be eligible to receive as a lead institution or member of a consortium an additional grant in that fiscal year for a national transportation center or a regional transportation center.

“(3) COORDINATION.—The Secretary shall solicit grant applications for national transportation centers, regional transportation centers, and Tier 1 university transportation centers with identical advertisement schedules and deadlines.

“(4) GENERAL SELECTION CRITERIA.—

“(A) IN GENERAL.—Except as otherwise provided by this section, the Secretary shall award grants under this section in nonexclusive candidate topic areas established by the Secretary that address the research priorities identified in section 503 of title 23.

“(B) CRITERIA.—The Secretary, in consultation as appropriate with the Administrators of the Federal Highway Administration and the Federal Transit Administration, shall select each recipient of a grant under this section through a competitive process based on the assessment of the Secretary relating to—
“(i) the demonstrated ability of the recipient to address each specific topic area described in the research and strategic plans of the recipient;
“(ii) the demonstrated research, technology transfer, and education resources available to the recipient to carry out this section;
“(iii) the ability of the recipient to provide leadership in solving immediate and long-range national and regional transportation problems;
“(iv) the ability of the recipient to carry out research, education, and technology transfer activities that are multimodal and multidisciplinary in scope;
“(v) the demonstrated commitment of the recipient to carry out transportation workforce development programs through—
“(I) degree-granting programs; and
“(II) outreach activities to attract new entrants into the transportation field;
“(vi) the demonstrated ability of the recipient to disseminate results and spur the implementation of transportation research and education programs through national or statewide continuing education programs;
“(vii) the demonstrated commitment of the recipient to the use of peer review principles and other research best practices in the selection, management, and dissemination of research projects;
“(viii) the strategic plan submitted by the recipient describing the proposed research to be carried out by the recipient and the performance metrics to be used in assessing the performance of the recipient in meeting the stated research, technology transfer, education, and outreach goals; and
“(ix) the ability of the recipient to implement the proposed program in a cost-efficient manner, such as through cost sharing and overall reduced overhead, facilities, and administrative costs.

“(5) TRANSPARENCY.——
“(A) IN GENERAL.—The Secretary shall provide to each applicant, upon request, any materials, including copies of reviews (with any information that would identify a reviewer redacted), used in the evaluation process of the proposal of the applicant.

“(B) REPORTS.—The Secretary shall submit to the Committees on Transportation and Infrastructure and Science, Space, and Technology of the House of Representatives and the Committee on Environment and Public Works of the Senate a report describing the overall review process under paragraph (3) that includes—
“(i) specific criteria of evaluation used in the review;
“(ii) descriptions of the review process; and
“(iii) explanations of the selected awards.

“(6) OUTSIDE STAKEHOLDERS.—The Secretary shall, to the maximum extent practicable, consult external stakeholders such as the Transportation Research Board of the National Academy of Sciences to evaluate and competitively review all proposals.
“(c) GRANTS.—

“(1) IN GENERAL.—Not later than 1 year after the date of enactment of the Transportation Research and Innovative Technology Act of 2012, the Secretary, in consultation as appropriate with the Administrators of the Federal Highway Administration and the Federal Transit Administration, shall select grant recipients under subsection (b) and make grant amounts available to the selected recipients.

“(2) NATIONAL TRANSPORTATION CENTERS.—

“(A) IN GENERAL.—Subject to subparagraph (B), the Secretary shall provide grants to 5 recipients that the Secretary determines best meet the criteria described in subsection (b)(3).

“(B) RESTRICTIONS.—

“(i) IN GENERAL.—For each fiscal year, a grant made available under this paragraph shall be $3,000,000 per recipient.

“(ii) FOCUSED RESEARCH.—The grant recipients under this paragraph shall focus research on national transportation issues, as determined by the Secretary.

“(C) MATCHING REQUIREMENT.—

“(i) IN GENERAL.—As a condition of receiving a grant under this paragraph, a grant recipient shall match 100 percent of the amounts made available under the grant.

“(ii) SOURCES.—The matching amounts referred to in clause (i) may include amounts made available to the recipient under section 504(b) or 505 of title 23.

“(3) REGIONAL UNIVERSITY TRANSPORTATION CENTERS.—

“(A) LOCATION OF REGIONAL CENTERS.—One regional university transportation center shall be located in each of the 10 Federal regions that comprise the Standard Federal Regions established by the Office of Management and Budget in the document entitled ‘Standard Federal Regions’ and dated April, 1974 (circular A–105).

“(B) SELECTION CRITERIA.—In conducting a competition under subsection (b), the Secretary shall provide grants to 10 recipients on the basis of—

“(i) the criteria described in subsection (b)(3);

“(ii) the location of the center within the Federal region to be served; and

“(iii) whether the institution (or, in the case of consortium of institutions, the lead institution) demonstrates that the institution has a well-established, nationally recognized program in transportation research and education, as evidenced by—

“(I) recent expenditures by the institution in highway or public transportation research;
“(II) a historical track record of awarding graduate degrees in professional fields closely related to highways and public transportation; and
“(III) an experienced faculty who specialize in professional fields closely related to highways and public transportation.

“(C) RESTRICTIONS.—For each fiscal year, a grant made available under this paragraph shall be $2,750,000 for each recipient.

“(D) MATCHING REQUIREMENTS.—
“(i) IN GENERAL.—As a condition of receiving a grant under this paragraph, a grant recipient shall match 100 percent of the amounts made available under the grant.
“(ii) SOURCES.—The matching amounts referred to in the clause (i) may include amounts made available to the recipient under section 504(b) or 505 of title 23.

“(E) FOCUSED RESEARCH.—The Secretary shall make a grant to 1 of the 10 regional university transportation centers established under this paragraph for the purpose of furthering the objectives described in subsection (a)(2) in the field of comprehensive transportation safety.

“(4) TIER 1 UNIVERSITY TRANSPORTATION CENTERS.—
“(A) IN GENERAL.—The Secretary shall provide grants of $1,500,000 each to not more than 20 recipients to carry out this paragraph.

“(B) RESTRICTION.—A lead institution of a consortium that receives a grant under paragraph (2) or (3) shall not be eligible to receive a grant under this paragraph.

“(C) MATCHING REQUIREMENT.—
“(i) IN GENERAL.—Subject to clause (iii), as a condition of receiving a grant under this paragraph, a grant recipient shall match 50 percent of the amounts made available under the grant.
“(ii) SOURCES.—The matching amounts referred to in clause (i) may include amounts made available to the recipient under section 504(b) or 505 of title 23.
“(iii) EXEMPTION.—This subparagraph shall not apply on a demonstration of financial hardship by the applicant institution.

“(D) FOCUSED RESEARCH.—In awarding grants under this paragraph, consideration shall be given to minority institutions, as defined by section 365 of the Higher Education Act of 1965 (20 U.S.C. 1067k), or consortia that include such institutions that have demonstrated an ability in transportation-related research.
“(d) PROGRAM COORDINATION.—
“(1) IN GENERAL.—The Secretary shall—
“(A) coordinate the research, education, and technology transfer activities carried out by grant recipients under this section; and
“(B) disseminate the results of that research through the establishment and operation of an information clearinghouse.

“(2) ANNUAL REVIEW AND EVALUATION.—Not less frequently than annually, and consistent with the plan developed under section 508 of title 23, the Secretary shall—
“(A) review and evaluate the programs carried out under this section by grant recipients; and
“(B) submit to the Committees on Transportation and Infrastructure and Science, Space, and Technology of the House of Representatives and the Committee on Environment and Public Works of the Senate a report describing that review and evaluation.

“(3) PROGRAM EVALUATION AND OVERSIGHT.—For each of fiscal years 2013 and 2014, the Secretary shall expend not more than 1 1/2 percent of the amounts made available to the Secretary to carry out this section for any coordination, evaluation, and oversight activities of the Secretary under this section.

“(e) LIMITATION ON AVAILABILITY OF AMOUNTS.—Amounts made available to the Secretary to carry out this section shall remain available for obligation by the Secretary for a period of 3 years after the last day of the fiscal year for which the amounts are appropriated.

“(f) INFORMATION COLLECTION.—Any survey, questionnaire, or interview that the Secretary determines to be necessary to carry out reporting requirements relating to any program assessment or evaluation activity under this section, including customer satisfaction assessments, shall not be subject to chapter 35 of title 44.”.

(b) CONFORMING AMENDMENT.—The analysis for chapter 55 of title 49, United States Code, is amended by striking the item relating to section 5505 and inserting the following:
“5505. University transportation centers program.”.

SEC. 52010. UNIVERSITY TRANSPORTATION RESEARCH.

(a) IN GENERAL.—Section 5506 of title 49, United States Code, is repealed.

(b) CONFORMING AMENDMENT.—The analysis for chapter 55 of title 49, United States Code, is amended by striking the item relating to section 5506.
SEC. 52011. BUREAU OF TRANSPORTATION STATISTICS.
(a) IN GENERAL.—Subtitle III of title 49, United States Code, is amended by adding at the end the following:

“CHAPTER 63—BUREAU OF TRANSPORTATION STATISTICS

“Sec.
“6301. Definitions.
“6302. Bureau of Transportation Statistics.
“6303. Intermodal transportation database.
“6304. National Transportation Library.
“6305. Advisory council on transportation statistics.
“6306. Transportation statistical collection, analysis, and dissemination.
“6307. Furnishing of information, data, or reports by Federal agencies.
“6308. Proceeds of data product sales.
“6310. Limitations on statutory construction.
“6311. Research and development grants.
“6312. Transportation statistics annual report.
“6313. Mandatory response authority for freight data collection.

“§ 6301. Definitions

“In this chapter, the following definitions apply:
“(1) BUREAU.—The term ‘Bureau’ means the Bureau of Transportation Statistics established by section 6302(a).

“(2) DEPARTMENT.—The term ‘Department’ means the Department of Transportation.

“(3) DIRECTOR.—The term ‘Director’ means the Director of the Bureau.

“(4) LIBRARY.—The term ‘Library’ means the National Transportation Library established by section 6304(a).

“(5) SECRETARY.—The term ‘Secretary’ means the Secretary of Transportation.

“§ 6302. Bureau of Transportation Statistics

“(a) ESTABLISHMENT.—There is established in the Research and Innovative Technology Administration the Bureau of Transportation Statistics.

“(b) DIRECTOR.—
““(1) APPOINTMENT.—The Bureau shall be headed by a Director, who shall be appointed in the competitive service by the Secretary.

“(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) DUTIES.—

“(A) IN GENERAL.—The Director shall—

“(i) serve as the senior advisor to the Secretary on data and statistics; and

“(ii) be responsible for carrying out the duties described in subparagraph (B).

“(B) DUTIES.—The Director shall—

“(i) ensure that the statistics compiled under clause (vi) are designed to support transportation decisionmaking by—

“(I) the Federal Government;
“(II) State and local governments;
“(III) metropolitan planning organizations;
“(IV) transportation-related associations;
“(V) the private sector, including the freight community; and
“(VI) the public;

“(ii) establish on behalf of the Secretary a program—

“(I) to effectively integrate safety data across modes; and
“(II) to address gaps in existing safety data programs of the Department;

“(iii) work with the operating administrations of the Department—

“(I) to establish and implement the data programs of the Bureau; and
“(II) to improve the coordination of information collection efforts with other Federal agencies;

“(iv) continually improve surveys and data collection methods of the Department to improve the accuracy and utility of transportation statistics;

“(v) encourage the standardization of data, data collection methods, and data management and storage technologies for data collected by—

“(I) the Bureau;
“(II) the operating administrations of the Department;
“(III) State and local governments;
“(IV) metropolitan planning organizations; and
“(V) private sector entities;

“(vi) collect, compile, analyze, and publish a comprehensive set of transportation statistics on the performance and impacts of the national transportation system, including statistics on—

“(I) transportation safety across all modes and intermodally;
“(II) the state of good repair of United States transportation infrastructure;
“(III) the extent, connectivity, and condition of the transportation system, building on the national transportation atlas database developed under section 6310;
“(IV) economic efficiency across the entire transportation sector;
“(V) the effects of the transportation system on global and domestic economic competitiveness;
“(VI) demographic, economic, and other variables influencing travel behavior, including choice of transportation mode and goods movement;
“(VII) transportation-related variables that influence the domestic economy and global competitiveness;
“(VIII) economic costs and impacts for passenger travel and freight movement;
“(IX) intermodal and multimodal passenger movement;
“(X) intermodal and multimodal freight movement; and
“(XI) consequences of transportation for the human and natural environment;
“(vii) build and disseminate the transportation layer of the National Spatial Data Infrastructure developed under Executive Order No. 12906 (59 Fed. Reg. 17671) (or a successor Executive order), including by coordinating the development of transportation geospatial data standards, compiling intermodal geospatial data, and collecting geospatial data that is not being collected by other entities;
“(viii) issue guidelines for the collection of information by the Department that the Director determines necessary to develop transportation statistics and carry out modeling, economic assessment, and program assessment activities to ensure that such information is accurate, reliable, relevant, uniform, and in a form that permits systematic analysis by the Department;
“(ix) review and report to the Secretary on the sources and reliability of—
“(I) 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 (Public Law 103–62; 107 Stat. 285); and
“(II) at the request of the Secretary, any other data collected or statistical information published by the heads of the operating administrations of the Department; and
“(x) ensure that the statistics published under this section are readily accessible to the public, consistent with applicable security constraints and confidentiality interests.
“(c) ACCESS TO FEDERAL DATA.—In carrying out subsection (b)(3)(B)(ii), the Director shall be given access to all safety data that the Director determines necessary to carry out that subsection that is held by the Department or any other Federal agency upon written request and subject to any statutory or regulatory restrictions.

“§ 6303. Intermodal transportation database

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

“(b) USE.—The database established under this section shall be suitable for analyses carried out by the Federal Government, the States, and metropolitan planning organizations.

“(c) CONTENTS.—The database established under this section shall include—

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

“(2) 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), intermodal combinations, and relevant classification;

“(3) information on the location and connectivity of transportation facilities and services; and

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

“§ 6304. National Transportation Library

“(a) PURPOSE AND ESTABLISHMENT.—To support the information management and decisionmaking needs of transportation officials at the Federal, State, and local levels, there is established in the Bureau a National Transportation Library which shall—

“(1) be headed by an individual who is highly qualified in library and information science;

“(2) acquire, preserve, and manage transportation information and information products and services for use by the Department, other Federal agencies, and the general public;

“(3) provide reference and research assistance;

“(4) serve as a central depository for research results and technical publications of the Department;

“(5) provide a central clearinghouse for transportation data and information of the Federal Government;

“(6) serve as coordinator and policy lead for transportation information access;
“(7) provide transportation information and information products and services to—
   “(A) the Department;
   “(B) other Federal agencies;
   “(C) public and private organizations; and
   “(D) individuals, within the United States and internationally;
“(8) coordinate efforts among, and cooperate with, transportation libraries, information providers, and technical assistance centers, in conjunction with private industry and other transportation library and information centers, with the goal of developing a comprehensive transportation information and knowledge network that supports the activities described in section 6302(b)(3)(B)(vi); and
“(9) engage in such other activities as the Director determines to be necessary and as the resources of the Library permit.

“(b) ACCESS.—The Director shall publicize, facilitate, and promote access to the information products and services described in subsection (a), to improve the ability of the transportation community to share information and the ability of the Director to make statistics and other information readily accessible as required under section 6302(b)(3)(B)(x).

“(c) AGREEMENTS.—
   “(1) IN GENERAL.—To carry out this section, the Director may enter into agreements with, award grants to, and receive amounts from, any—
      “(A) State or local government;
      “(B) organization;
      “(C) business; or
      “(D) individual.

   “(2) CONTRACTS, GRANTS, AND AGREEMENTS.—The Library may initiate and support specific information and data management, access, and exchange activities in connection with matters relating to the Department’s strategic goals, knowledge networking, and national and international cooperation, by entering into contracts or other agreements or awarding grants for the conduct of such activities.

   “(3) AMOUNTS.—Any amounts received by the Library as payment for library products and services or other activities shall be made available to the Director to carry out this section, deposited in the Research and Innovative Technology Administration’s general fund account, and remain available until expended.

§ 6305. Advisory council on transportation statistics

‘(a) IN GENERAL.—The Director shall establish and consult with an advisory council on transportation statistics.
“(b) FUNCTION.—The advisory council established under this section shall advise the Director on—

“(1) the quality, reliability, consistency, objectivity, and relevance of transportation statistics and analyses collected, supported, or disseminated by the Bureau and the Department; and

“(2) methods to encourage cooperation and interoperability of transportation data collected by the Bureau, the operating administrations of the Department, States, local governments, metropolitan planning organizations, and private sector entities.

“(c) MEMBERSHIP.—

“(1) IN GENERAL.—The advisory council shall be composed of not fewer than 9 and not more than 11 members appointed by the Director.

“(2) SELECTION.—In selecting members for the advisory council, the Director shall appoint individuals who—

“(A) are not officers or employees of the United States;
“(B) possess expertise in—
“(i) transportation data collection, analysis, or application;
“(ii) economics; or
“(iii) transportation safety; and
“(C) represent a cross section of transportation stakeholders, to the greatest extent possible.

“(d) TERMS OF APPOINTMENT.—

“(1) IN GENERAL.—Except as provided in paragraph (2), members of the advisory council shall be appointed to staggered terms not to exceed 3 years.

“(2) ADDITIONAL TERMS.—A member may be renominated for 1 additional 3-year term.

“(3) CURRENT MEMBERS.—A member serving on an advisory council on transportation statistics on the day before the date of enactment of the Transportation Research and Innovative Technology Act of 2012 shall serve until the end of the appointed term of the member.

“(e) APPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—
The Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the advisory council established under this section, except that section 14 of that Act shall not apply.

“§ 6306. Transportation statistical collection, analysis, and dissemination

“To ensure that all transportation statistical collection, analysis, and dissemination is carried out in a coordinated manner, the Director may—
“(1) use the services, equipment, records, personnel, information, and facilities of other Federal agencies, or State, local, and private agencies and instrumentalities, subject to the conditions that the applicable agency or instrumentality consents to that use and with or without reimbursement for such use;

“(2) enter into agreements with the agencies and instrumentalities described in paragraph (1) for purposes of data collection and analysis;

“(3) confer and cooperate with foreign governments, international organizations, and State, municipal, and other local agencies;

“(4) request such information, data, and reports from any Federal agency as the Director determines necessary to carry out this chapter;

“(5) encourage replication, coordination, and sharing of information among transportation agencies regarding information systems, information policy, and data; and

“(6) confer and cooperate with Federal statistical agencies as the Director determines necessary to carry out this chapter, including by entering into cooperative data sharing agreements in conformity with all laws and regulations applicable to the disclosure and use of data.

“§ 6307. Furnishing of information, data, or reports by Federal agencies

“(a) IN GENERAL.—Except as provided in subsection (b), a Federal agency requested to furnish information, data, or reports by the Director under section 6302(b)(3)(B) shall provide the information to the Director.

“(b) PROHIBITION ON CERTAIN DISCLOSURES.—

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

“(A) make any disclosure in which the data provided by an individual or organization under section 6302(b)(3)(B) can be identified;

“(B) use the information provided under section 6302(b)(3)(B) for a nonstatistical purpose; or

“(C) permit anyone other than an individual authorized by the Director to examine any individual report provided under section 6302(b)(3)(B).

“(2) COPIES OF REPORTS.—

“(A) IN GENERAL.—No department, bureau, agency, officer, or employee of the United States (except the Director in carrying out this chapter) may require, for any reason, a copy of any report that has been filed under section 6302(b)(3)(B) with the Bureau or retained by an individual respondent.

“(B) LIMITATION ON JUDICIAL PROCEEDINGS.—A copy of a report described in subparagraph (A) that has been retained by an individual respondent or filed with the Bureau or any of the employees, contractors, or agents of the Bureau—
“(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 proceedings.
“(C) APPLICABILITY.—This paragraph shall apply only to reports that permit
information concerning an individual or organization to be reasonably determined
by direct or indirect means.

“(3) INFORMING RESPONDENT OF USE OF DATA.—If 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, in a manner that informs the respondent who is requested or required to
supply the data or information of the nonstatistical purpose.

“(c) TRANSPORTATION AND TRANSPORTATION-RELATED DATA ACCESS.—The
Director shall be provided access to any transportation and transportation-related information in
the possession of any Federal agency, except—
“(1) information that is expressly prohibited by law from being disclosed to another
Federal agency; or
“(2) information that the agency possessing the information determines could not be
disclosed without significantly impairing the discharge of authorities and responsibilities
which have been delegated to, or vested by law, in such agency.

“§ 6308. Proceeds of data product sales

“Notwithstanding section 3302 of title 31, amounts 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 those expenses.

“§ 6309. National transportation atlas database

“(a) IN GENERAL.—The Director shall develop and maintain a national transportation atlas
database that is comprised of geospatial databases that depict—
“(1) transportation networks;
“(2) flows of people, goods, vehicles, and craft over the transportation networks; and
“(3) social, economic, and environmental conditions that affect or are affected by the
transportation networks.

“(b) INTERMODAL NETWORK ANALYSIS.—The databases referred to in subsection (a)
shall be capable of supporting intermodal network analysis.
“§ 6310. Limitations on statutory construction

“Nothing in this chapter—

“(1) authorizes the Bureau to require any other Federal agency to collect data; or

“(2) alters or diminishes the authority of any other officer of the Department to collect and disseminate data independently.

“§ 6311. 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 described in section 6302(b)(3)(B)(vi);

“(2) research and development of new methods of data collection, standardization, management, integration, dissemination, interpretation, and analysis;

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

“(4) development of electronic clearinghouses of transportation data and related information, as part of the Library; and

“(5) development and improvement of methods for sharing geographic data, in support of the database under section 6310 and the National Spatial Data Infrastructure developed under Executive Order No. 12906 (59 Fed. Reg. 17671) (or a successor Executive order).

“§ 6312. Transportation statistics annual report

“The Director shall submit to the President and Congress a transportation statistics annual report, which shall include—

“(1) information on the progress of the Director in carrying out the duties described in section 6302(b)(3)(B);

“(2) documentation of the methods used to obtain and ensure the quality of the statistics presented in the report; and

“(3) any recommendations of the Director for improving transportation statistical information.
§ 6313. Mandatory response authority for freight data collection

(a) FREIGHT DATA COLLECTION.—

“(1) IN GENERAL.—An owner, official, agent, person in charge, or assistant to the person in charge of a freight corporation, company, business, institution, establishment, or organization described in paragraph (2) shall be fined in accordance with subsection (b) if that individual neglects or refuses, when requested by the Director or other authorized officer, employee, or contractor of the Bureau to submit data under section 6302(b)(3)(B) —

“(A) to answer completely and correctly to the best knowledge of that individual all questions relating to the corporation, company, business, institution, establishment, or other organization; or

“(B) to make available records or statistics in the official custody of the individual.

“(2) DESCRIPTION OF ENTITIES.—A freight corporation, company, business, institution, establishment, or organization referred to in paragraph (1) is a corporation, company, business, institution, establishment, or organization that—

“(A) receives Federal funds relating to the freight program; and

“(B) has consented to be subject to a fine under this subsection on—

“(i) refusal to supply any data requested; or

“(ii) failure to respond to a written request.

(b) FINES.—

“(1) IN GENERAL.—Subject to paragraph (2), an individual described in subsection (a) shall be fined not more than $500.

“(2) WILLFUL ACTIONS.—If an individual willfully gives a false answer to a question described in subsection (a)(1), the individual shall be fined not more than $10,000.”.

(b) RULES OF CONSTRUCTION.—If the provisions of section 111 of title 49, United States Code, are transferred to chapter 63 of that title, the following rules of construction apply:

(1) For purposes of determining whether 1 provision of law supersedes another based on enactment later in time, a chapter 63 provision is deemed to have been enacted on the date of enactment of the corresponding section 111 provision.

(2) A reference to a section 111 provision, including a reference in a regulation, order, or other law, is deemed to refer to the corresponding chapter 63 provision.

(3) A regulation, order, or other administrative action in effect under a section 111 provision continues in effect under the corresponding chapter 63 provision.

(4) An action taken or an offense committed under a section 111 provision is deemed to have been taken or committed under the corresponding chapter 63 provision.
(c) CONFORMING AMENDMENTS.—

(1) REPEAL.—Section 111 of title 49, United States Code, is repealed, and the item relating to section 111 in the analysis for chapter 1 of that title is deleted.

(2) ANALYSIS FOR SUBTITLE III.—The analysis for subtitle III of title 49, United States Code, is amended by inserting after the items for chapter 61 the following:

“CHAPTER 63—BUREAU OF TRANSPORTATION STATISTICS.”.

SEC. 52012. ADMINISTRATIVE AUTHORITY.

Section 112 of title 49, United States Code, is amended by adding at the end the following:

“(f) PROGRAM EVALUATION AND OVERSIGHT.—For each of fiscal years 2013 and 2014, the Administrator is authorized to expend not more than 1 1/2 percent of the amounts authorized to be appropriated for necessary expenses for administration and operations of the Research and Innovative Technology Administration for the coordination, evaluation, and oversight of the programs administered by the Administration.

“(g) COLLABORATIVE RESEARCH AND DEVELOPMENT.—

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

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

“(B) Federal laboratories; and

“(C) other Federal agencies.

“(2) COOPERATION, GRANTS, CONTRACTS, AND AGREEMENTS.—Notwithstanding any other provision of law, the Administrator may directly initiate contracts, grants, cooperative research and development agreements (as defined in section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a)), and other agreements to fund, and accept funds from, the Transportation Research Board of the National Research Council of the National Academy of Sciences, State departments of transportation, cities, counties, institutions of higher education, associations, and the agents of those entities to carry out joint transportation research and technology efforts.

“(3) FEDERAL SHARE.—
“(A) IN GENERAL.—Subject to subparagraph (B), the Federal share of the cost of an activity carried out under paragraph (2) shall not exceed 50 percent.

“(B) EXCEPTION.—If the Secretary determines that the activity is of substantial public interest or benefit, the Secretary may approve a greater Federal share.

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

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

“(5) WAIVER OF ADVERTISING REQUIREMENTS.—Section 6101 of title 41 shall not apply to a contract, grant, or other agreement entered into under this section.”.

SEC. 52013. TRANSPORTATION RESEARCH AND DEVELOPMENT STRATEGIC PLANNING.

Section 508(a) of title 23, United States Code, is amended—

(1) in paragraph (1), by striking “SAFETEA–LU” and inserting “Transportation Research and Innovative Technology Act of 2012”; and

(2) in paragraph (2), by striking subparagraph (A) and inserting the following:

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

“(i) promoting safety;
“(ii) reducing congestion and improving mobility;
“(iii) preserving the environment;
“(iv) preserving the existing transportation system;
“(v) improving the durability and extending the life of transportation infrastructure; and
“(vi) improving goods movement.”.
TITLE III—INTELLIGENT TRANSPORTATION SYSTEMS RESEARCH

SEC. 53001. USE OF FUNDS FOR ITS ACTIVITIES.
Section 513 of title 23, United States Code, is amended to read as follows:

”§ 513. Use of funds for ITS activities

“(a) DEFINITIONS.—In this section, the following definitions apply:

“(1) ELIGIBLE ENTITY.—The term ‘eligible entity’ means a State or local government, tribal government, transit agency, public toll authority, metropolitan planning organization, other political subdivision of a State or local government, or a multistate or multijurisdictional group applying through a single lead applicant.

“(2) MULTIJURISDICTIONAL GROUP.—The term ‘multijurisdictional group’ means a combination of State governments, local governments, metropolitan planning agencies, transit agencies, or other political subdivisions of a State that—

“(A) have signed a written agreement to implement an activity that meets the grant criteria under this section; and

“(B) is comprised of at least 2 members, each of whom is an eligible entity.

“(b) PURPOSE.—The purpose of this section is to develop, administer, communicate, and promote the use of products of research, technology, and technology transfer programs.

“(c) ITS ADOPTION.—

“(1) INNOVATIVE TECHNOLOGIES AND STRATEGIES.—The Secretary shall encourage the deployment of ITS technologies that will improve the performance of the National Highway System in such areas as traffic operations, emergency response, incident management, surface transportation network management, freight management, traffic flow information, and congestion management by accelerating the adoption of innovative technologies through the use of—

“(A) demonstration programs;

“(B) grant funding;

“(C) incentives to eligible entities; and

“(D) other tools, strategies, or methods that will result in the deployment of innovative ITS technologies.

“(2) COMPREHENSIVE PLAN.—To carry out this section, the Secretary shall develop a detailed and comprehensive plan that addresses the manner in which incentives may be adopted, as appropriate, through the existing deployment activities carried out by surface transportation modal administrations.”.

SEC. 53002. GOALS AND PURPOSES.
(a) IN GENERAL.—Chapter 5 of title 23, United States Code, is amended by adding after section 513 the following:

”§ 514. Goals and purposes
“(a) GOALS.—The goals of the intelligent transportation system program include—

“(1) enhancement of surface transportation efficiency an 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 enhancement of safe operation of motor vehicles and nonmotorized vehicles and improved emergency response to collisions, 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 motor vehicles, passenger motor vehicles, motorcycles, bicycles, and pedestrians (including individuals with disabilities); and

“(5) enhancement of national defense mobility and improvement of the ability of the United States to respond to security related or other manmade emergencies and natural disasters.

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

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

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

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

“(4) to promote the innovative use of private resources in support of intelligent transportation system development;

“(5) to facilitate, in cooperation with the motor vehicle industry, the introduction of vehicle-based safety enhancing systems;

“(6) to support the application of intelligent transportation systems that increase the safety and efficiency of commercial motor vehicle operations;
“(7) to develop a workforce capable of developing, operating, and maintaining intelligent transportation systems;

“(8) to provide continuing support for operations and maintenance of intelligent transportation systems; and

“(9) to ensure a systems approach that includes cooperation among vehicles, infrastructure, and users.”.

(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by adding after the item relating to section 513 the following:
“514. Goals and purposes.”.

SEC. 53003. GENERAL AUTHORITIES AND REQUIREMENTS.
(a) IN GENERAL.—Chapter 5 of title 23, United States Code, is amended by adding after section 514 (as added by section 53002) the following:

“§ 515. General authorities and requirements

“(a) SCOPE.—Subject to the provisions of this chapter, the Secretary shall conduct an ongoing intelligent transportation system program—

“(1) to research, develop, and operationally test intelligent transportation systems; and

“(2) to provide technical assistance in the nationwide application of those systems as a component of the surface transportation systems of the United States.

“(b) POLICY.—Intelligent transportation system research projects and operational tests funded pursuant to this chapter shall encourage and not displace public-private partnerships or private sector investment in those 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 private sector firms of the United States, the Federal laboratories, and institutions of higher education, 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 shall consult with the heads of other Federal agencies, as appropriate.

“(e) TECHNICAL ASSISTANCE, TRAINING, AND INFORMATION.—The Secretary may provide technical assistance, training, and information to State and local governments seeking to implement, operate, maintain, or evaluate intelligent transportation system technologies and services.
“(f) TRANSPORTATION PLANNING.—The Secretary may provide funding to support adequate consideration of transportation systems management and operations, including intelligent transportation systems, within metropolitan and statewide transportation planning processes.

“(g) INFORMATION CLEARINGHOUSE.—
“(1) IN GENERAL.—The Secretary shall—
“(A) maintain a repository for technical and safety data collected as a result of federally sponsored projects carried out under this chapter; and
“(B) make, on request, that information (except for proprietary information and data) readily available to all users of the repository at an appropriate cost.

“(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 enters into an agreement with an entity for the maintenance of the repository, the entity shall be eligible for Federal financial assistance under this section.

“(3) AVAILABILITY OF INFORMATION.—Information in the repository shall not be subject to sections 552 and 555 of title 5, United States Code.

“(h) ADVISORY COMMITTEE.—
“(1) IN GENERAL.—The Secretary shall establish an Advisory Committee to advise the Secretary on carrying out this chapter.

“(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 nonprofit 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, telecommunications, utilities, 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.
“(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 Transportation Research and Innovative Technology Act of 2012, the Secretary shall submit to Congress a report that includes—

“(A) all recommendations made by the Advisory Committee during the preceding calendar year;
“(B) an explanation of the manner in which 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) REPORTING.—

“(1) GUIDELINES AND REQUIREMENTS.—

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

“(B) OBJECTIVITY AND INDEPENDENCE.—The guidelines and requirements issued under subparagraph (A) shall include provisions to ensure the objectivity and independence of the reporting entity 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 chapter.

“(C) FUNDING.—The guidelines and requirements issued under subparagraph (A) shall establish reporting funding levels based on the size and scope of each test or project that ensure adequate reporting of the results of the test or project.
“(2) SPECIAL RULE.—Any survey, questionnaire, or interview that the Secretary considers necessary to carry out the reporting of any test, deployment project, or program assessment activity under this chapter shall not be subject to chapter 35 of title 44, United States Code.”.

(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by adding after the item relating to section 514 (as added by section 53002) the following:

“515. General authorities and requirements.”.

SEC. 53004. RESEARCH AND DEVELOPMENT.
(a) IN GENERAL.—Chapter 5 of title 23, United States Code, is amended by adding after section 515 (as added by section 53003) the following:

“§ 516. Research and development

“(a) IN GENERAL.—The Secretary shall carry out a comprehensive program of intelligent transportation system research and development, and operational tests of intelligent vehicles, intelligent infrastructure systems, and other similar activities that are necessary to carry out this chapter.

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

“(1) enhance mobility and productivity through improved traffic management, incident management, transit management, freight management, road weather management, toll collection, traveler information, or highway operations systems and remote sensing products;

“(2) use interdisciplinary approaches to develop traffic management strategies and tools to address multiple impacts of congestion concurrently;

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

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

“(5) enhance intermodal use of intelligent transportation systems for diverse groups, including for emergency and health related services;

“(6) enhance safety through improved crash avoidance and protection, crash and other notification, commercial motor vehicle operations, and infrastructure-based or cooperative safety systems; or

“(7) facilitate the integration of intelligent infrastructure, vehicle, and control technologies.

“(c) FEDERAL SHARE.—The Federal share payable on account of any project or activity carried out under subsection (a) shall not exceed 80 percent.”.
(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by adding after the item relating to section 515 (as added by section 53003) the following:

“516. Research and development.”.

SEC. 53005. NATIONAL ARCHITECTURE AND STANDARDS.
(a) IN GENERAL.—Chapter 5 of title 23, United States Code, is amended by adding after section 516 (as added by section 53004) the following:

“§ 517. National architecture and standards

“(a) IN GENERAL.—

“(1) DEVELOPMENT, IMPLEMENTATION, AND MAINTENANCE.—In accordance with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note; 110 Stat. 783; 115 Stat. 1241), the Secretary shall develop and maintain a national ITS architecture and supporting ITS standards and protocols to promote the use of systems engineering methods in the widespread deployment and evaluation of intelligent transportation systems as a component of the surface transportation systems of the United States.

“(2) INTEROPERABILITY AND EFFICIENCY.—To the maximum extent practicable, the national ITS architecture and supporting ITS standards and protocols shall promote interoperability among, and efficiency of, intelligent transportation systems and technologies implemented throughout the United States.

“(3) USE OF STANDARDS DEVELOPMENT ORGANIZATIONS.—In carrying out this section, the Secretary shall support the development and maintenance of standards and protocols using the services of such standards development organizations as the Secretary determines to be necessary and whose memberships are comprised of, and represent, the surface transportation and intelligent transportation systems industries.

“(b) STANDARDS FOR NATIONAL POLICY IMPLEMENTATION.—If the Secretary finds that a standard is necessary for implementation of a nationwide policy relating to user fee collection or other capability requiring nationwide uniformity, the Secretary, after consultation with stakeholders, may establish and require the use of that standard.

“(c) PROVISIONAL STANDARDS.—

“(1) IN GENERAL.—If the Secretary finds that the development or balloting of an intelligent transportation system standard jeopardizes the timely achievement of the objectives described in subsection (a), the Secretary may establish a provisional standard, after consultation with affected parties, using, to the maximum 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 remain in effect until the appropriate standards development organization adopts and publishes a standard.
“(d) CONFORMITY WITH NATIONAL ARCHITECTURE.—
“(1) IN GENERAL.—Except as provided in paragraph (2), the Secretary shall ensure that intelligent transportation system projects carried out using amounts made available from the Highway Trust Fund, including amounts made available to deploy intelligent transportation systems, conform to the appropriate regional ITS architecture, applicable standards, and protocols developed under subsection (a) or (c).

“(2) DISCRETION OF THE SECRETARY.—The Secretary, at the discretion of the Secretary, may offer an exemption from paragraph (1) for projects designed to achieve specific research objectives outlined in the national intelligent transportation system program plan or the surface transportation research and development strategic plan developed under section 508.”.

(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by adding after the item relating to section 516 (as added by section 53004) the following:
“517. National architecture and standards.”.

SEC. 53006. VEHICLE-TO-VEHICLE AND VEHICLE-TO-INFRASTRUCTURE COMMUNICATIONS SYSTEMS DEPLOYMENT.
(a) IN GENERAL.—Chapter 5 of title 23, United States Code, is amended by adding after section 517 (as added by section 53005) the following:

“§ 518. Vehicle-to-vehicle and vehicle-to-infrastructure communications systems deployment

“(a) IN GENERAL.—Not later than 3 years after the date of enactment of this section, the Secretary shall submit to the Committees on Commerce, Science, and Transportation and Environment and Public Works of the Senate and the Committees on Transportation and Infrastructure, Energy and Commerce, and Science, Space, and Technology of the House of Representatives that—
“(1) assesses the status of dedicated short-range communications technology and applications developed through research and development;
“(2) analyzes the known and potential gaps in short-range communications technology and applications;
“(3) defines a recommended implementation path for dedicated short-range communications technology and applications that—
“(A) is based on the assessment described in paragraph (1); and
“(B) takes into account the analysis described in paragraph (2);
“(4) includes guidance on the relationship of the proposed deployment of dedicated short-range communications to the National ITS Architecture and ITS Standards; and
“(5) ensures competition by not preferencing the use of any particular frequency for vehicle to infrastructure operations.

“(b) REPORT REVIEW.—The Secretary shall enter into agreements with the National Research Council and an independent third party with subject matter expertise for the review of the
report described in subsection (a).”.

(b) CONFORMING AMENDMENT.—The analysis for chapter 5 of title 23, United States Code, is amended by adding after section 517 (as added by section 53005) the following: “518. Vehicle-to-vehicle and vehicle-to-infrastructure communications systems deployment.”.

**FULL TEXT OF UNITED STATES CODE (USC) AMENDED BY *ASTERISKED SECTIONS**

**23 USC 129 NOTE – NATIONAL FERRY DATABASE**


“(1) Establishment. - The Secretary [of Transportation], acting through the Bureau of Transportation Statistics, shall establish and maintain a national ferry database.

“(2) Contents. - The database shall contain current information regarding ferry systems, including information regarding routes, vessels, passengers and vehicles carried, funding sources, including any Federal, State, and local government funding sources, and such other information as the Secretary considers useful.

“(3) Update report. - Using information collected through the database, the Secretary shall periodically modify as appropriate the report submitted under section 1207(c) of the Transportation Equity Act for the 21st Century [Pub. L. 105-178] (23 U.S.C. 129 note; 112 Stat. 185-186).

“(4) Requirements. - The Secretary shall -

“(A) compile the database not later than 1 year after the date of enactment of this Act [Aug. 10, 2005] and update the database every 2 years thereafter;
“(B) ensure that the database is easily accessible to the public;
“(C) ensure that the database is consistent with the national transit database maintained by the Federal Transit Administration; and
“(D) make available, from the amounts made available for the Bureau of Transportation Statistics by section 5101 of this Act [119 Stat. 1779], not more than $500,000 for each of fiscal years 2006 through 2014 to establish and maintain the database.”

**TITLE 23 - HIGHWAYS**

**CHAPTER 5 - RESEARCH, TECHNOLOGY, AND EDUCATION**

**Sec. 501. DEFINITIONS**

In this chapter, the following definitions apply:
(1) Federal laboratory. - The term "Federal laboratory" includes a Government-owned, Government-operated laboratory and a Government-owned, contractor-operated laboratory.

(2) Incident. - The term "incident" means a crash, natural disaster, workzone activity, special event, or other emergency road user occurrence that adversely affects or impedes the normal flow of traffic.

(3) Innovation lifecycle. - The term "innovation lifecycle" means the process of innovating through –

- (A) the identification of a need;
- (B) the establishment of the scope of research to address that need;
- (C) setting an agenda;
- (D) carrying out research, development, deployment, and testing of the resulting technology or innovation; and
- (E) carrying out an evaluation of the costs and benefits of the resulting technology or innovation.

(4) Intelligent transportation infrastructure. - The term "intelligent transportation infrastructure" means fully integrated public sector intelligent transportation system components, as defined by the Secretary.

(5) Intelligent transportation system. - The terms "intelligent transportation system" and "ITS" mean electronics, photonics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

(6) National architecture. - For purposes of this chapter, the term "national architecture" means the common framework for interoperability that defines -

- (A) the functions associated with intelligent transportation system user services;
- (B) the physical entities or subsystems within which the functions reside;
- (C) the data interfaces and information flows between physical subsystems; and
- (D) the communications requirements associated with the information flows.

(7) Project. - The term "project" means an undertaking to research, develop, or operationally test intelligent transportation systems or any other undertaking eligible for assistance under this chapter.

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

(9) 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 the intended purposes of the materials, products, processes, and services; 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.


TITLE 49 – TRANSPORTATION
SUBTITLE I - DEPARTMENT OF TRANSPORTATION
CHAPTER 1 - ORGANIZATION
Sec. 112. RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION

(a) Establishment. - The Research and Innovative Technology Administration shall be an administration in the Department of Transportation.

(b) Administrator. -
   (1) Appointment. - The Administration shall be headed by an Administrator who shall be appointed by the President, by and with the advice and consent of the Senate
   (2) Reporting. - The Administrator shall report directly to the Secretary.

(c) Deputy Administrator. - The Administration shall have a Deputy Administrator who shall be appointed by the Secretary of Transportation. The Deputy Administrator shall carry out duties and powers prescribed by the Administrator.

(d) Powers and Duties of the Administrator. - The Administrator shall carry out -
   (1) powers and duties prescribed by the Secretary for –
      (A) coordination, facilitation, and review of the Department's research and development programs and activities;
      (B) advancement, and research and development, of innovative technologies, including intelligent transportation systems;
      (C) comprehensive transportation statistics research, analysis, and reporting;
      (D) education and training in transportation and transportation-related fields; and
      (E) activities of the Volpe National Transportation Center; and
   (2) other powers and duties prescribed by the Secretary.

(e) Administrative Authorities. - The Administrator may enter into grants and cooperative agreements with Federal agencies, State and local government agencies, other public entities, private organizations, and other persons -
   (1) to conduct research into transportation service and infrastructure assurance; and
   (2) to carry out other research activities of the Administration.
(f) Program Evaluation and Oversight. - For each of fiscal years 2013 and 2014, the Administrator is authorized to expend not more than 1 1/2 percent of the amounts authorized to be appropriated for necessary expenses for administration and operations of the Research and Innovative Technology Administration for the coordination, evaluation, and oversight of the programs administered by the Administration.

(g) Collaborative Research and Development. –

(1) In general. - To encourage innovative solutions to multimodal transportation problems and stimulate the deployment of new technology, the Administrator may carry out, on a cost-shared basis, collaborative research and development with -

(A) non-Federal entities, including State and local governments, foreign governments, institutions of higher education, corporations, institutions, partnerships, sole proprietorships, and trade associations that are incorporated or established under the laws of any State;
(B) Federal laboratories; and
(C) other Federal agencies.

(2) Cooperation, grants, contracts, and agreements. - Notwithstanding any other provision of law, the Administrator may directly initiate contracts, grants, cooperative research and development agreements (as defined in section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a)), and other agreements to fund, and accept funds from, the Transportation Research Board of the National Research Council of the National Academy of Sciences, State departments of transportation, cities, counties, institutions of higher education, associations, and the agents of those entities to carry out joint transportation research and technology efforts.

(3) Federal share. –

(A) In general. - Subject to subparagraph (B), the Federal share of the cost of an activity carried out under paragraph (2) shall not exceed 50 percent.

(B) Exception. - If the Secretary determines that the activity is of substantial public interest or benefit, the Secretary may approve a greater Federal share.

(C) Non-federal share. - All costs directly incurred by the non-Federal partners, including personnel, travel, facility, and hardware development costs, shall be credited toward the non-Federal share of the cost of an activity described in subparagraph (A).

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

(5) Waiver of advertising requirements. - Section 6101 of title 41 shall not apply to a contract, grant, or other agreement entered into under this section.
TITLE 23 – HIGHWAYS
CHAPTER 5 - RESEARCH, TECHNOLOGY, AND EDUCATION
Sec. 508. TRANSPORTATION RESEARCH AND DEVELOPMENT STRATEGIC PLANNING

(a) In General. –

(1) Development. - Not later than 1 year after the date of enactment of the Transportation Research and Innovative Technology Act of 2012, the Secretary shall develop a 5-year transportation research 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) promoting safety;
      (ii) reducing congestion and improving mobility;
      (iii) preserving the environment;
      (iv) preserving the existing transportation system;
      (v) improving the durability and extending the life of transportation infrastructure; and
      (vi) improving goods movement.
   (B) for each purpose, list the primary research and development topics that the Department intends to pursue to accomplish that purpose, 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 nonprofit 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 appropriate committees of Congress an annual report, in conjunction with the President's annual budget request as set forth in section 1105 of title 31, 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 this section;

(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.