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for
**LARGE LANDSCAPE
CONSERVATION**

S. 2302
**AMERICA'S TRANSPORTATION
INFRASTRUCTURE ACT
(ATIA)**

Wildlife-related provisions from
draft legislation, as unanimously approved by the
Senate Environment & Public Works Committee

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About This Publication

On July 30, 2019, the Senate Environment & Public Works Committee unanimously voted (21-0) to advance a bipartisan transportation reauthorization bill, [S. 2302, America's Transportation Infrastructure Act](#). This summary compiles excerpts of the wildlife-related provisions of that bill, including Section 1125, which for the first time ever creates a \$250 million wildlife crossing pilot program aimed at reducing wildlife-vehicle collisions and improving habitat connectivity.

Author's Note: How to Read This Document

- The existing transportation law (FAST Act), as currently codified in 23 U.S. Code et seq. (and related volumes), appears in black text.
- EPW bill S. 2302 amendments to the FAST Act appear in **red text**.
- **Red text highlighted in gray** denotes EPW bill S. 2302 amendments that specifically address wildlife/connectivity/WVCs.

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SEC. 1101. 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):

(d) PILOT PROGRAMS.—The following amounts are authorized to be appropriated out of the Highway Trust Fund (other than the Mass Transit Account):

(1) WILDLIFE CROSSINGS PILOT PROGRAM.—For the wildlife crossings pilot program under section 174 of title 23, United States Code—

- (A) \$55,000,000 for fiscal year 2021;
- (B) \$60,000,000 for fiscal year 2022;
- (C) \$45,000,000 for fiscal year 2023;
- (D) \$45,000,000 for fiscal year 2024; and
- (E) \$45,000,000 for fiscal year 2025.

SEC. 1103. DEFINITIONS.

Section 101(a) of title 23, United States Code, is amended [in part as follows]:

23 U.S. Code § 101. Definitions and declaration of policy

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

(4) CONSTRUCTION.—The term “construction” means the supervising, inspecting, actual building, and incurrence of all costs incidental to the construction or reconstruction of a highway or any project eligible for assistance under this title, including bond costs and other costs relating to the issuance in accordance with section 122 of bonds or other debt financing instruments and costs incurred by the State in performing Federal-aid project related audits that directly benefit the Federal-aid highway program. Such term includes—

- (A) preliminary engineering, engineering, and design-related services directly relating to the construction of a highway project, including engineering, design, project development and management, construction project management and inspection, surveying, **assessing resilience**, mapping (including the establishment of temporary and permanent geodetic control in accordance with specifications of the National Oceanic and Atmospheric Administration), and architectural-related services;
- (B) reconstruction, resurfacing, restoration, rehabilitation, and preservation;
- (C) acquisition of rights-of-way;
- (D) relocation assistance, acquisition of replacement housing sites, and acquisition and rehabilitation, relocation, and construction of replacement housing;
- (E) elimination of hazards of railway-highway grade crossings;
- (F) elimination of roadside hazards;
- (G) improvements that directly facilitate and control traffic flow, such as grade separation of intersections, widening of lanes, channelization of traffic, traffic control systems, and passenger loading and unloading areas; ~~and~~
- (H) improvements that reduce the number of wildlife-vehicle collisions, such as wildlife crossing structures; and**
- (HI) capital improvements that directly facilitate an effective vehicle weight enforcement program, such as scales (fixed and portable), scale pits, scale installation, and scale houses.**

(b) DECLARATION OF POLICY.—

- (3) TRANSPORTATION NEEDS OF 21ST CENTURY.—Congress declares that—
- (A) it is in the national interest to preserve and enhance the surface transportation system to meet the needs of the United States for the 21st Century;
 - (B) the current urban and long distance personal travel and freight movement demands have surpassed the original forecasts and travel demand patterns are expected to continue to change;
 - (C) continued planning for and investment in surface transportation is critical to ensure the surface transportation system adequately meets the changing travel demands of the future;
 - (D) among the foremost needs that the surface transportation system must meet to provide for a strong and vigorous national economy are safe, efficient, **resilient** and reliable—
 - (i) national and interregional personal mobility (including personal mobility in rural and urban areas) and reduced congestion;
 - (ii) flow of interstate and international commerce and freight transportation; and
 - (iii) travel movements essential for national security;
 - (E) special emphasis should be devoted to providing safe and efficient access for the type and size of commercial and military vehicles that access designated National Highway System intermodal freight terminals;
 - (F) the connection between land use and infrastructure is significant;
 - (G) transportation should play a significant role in promoting economic growth, improving the environment, and sustaining the quality of life; and
 - (H) the Secretary should take appropriate actions to preserve and enhance the Interstate System to meet the needs of the 21st Century.

SEC. 1109. SURFACE TRANSPORTATION BLOCK GRANT PROGRAM.

(a) IN GENERAL.—Section 133 of title 23, United States Code, is amended [in part as follows]:

23 U.S. Code § 133. Surface transportation block grant program

(b) ELIGIBLE PROJECTS.—Funds apportioned to a State under section 104(b)(2) for the surface transportation block grant program may be obligated for the following:

- (1) Construction of—
 - (A) highways, bridges, tunnels, including designated routes of the Appalachian development highway system and local access roads under section 14501 of title 40;
 - (B) ferry boats and terminal ~~facilities~~ **eligible facilities—**
 - (i) that are eligible** for funding under section 129(c); **or**
 - (ii) that are privately or majority-privately owned, but that the Secretary determines provide a substantial public transportation benefit or otherwise meet the foremost needs of the surface transportation system described in section 101(b)(3)(D);**
 - (C) transit capital projects eligible for assistance under chapter 53 of title 49;
 - (D) infrastructure-based intelligent transportation systems capital improvements, including the installation of vehicle-to-infrastructure communication equipment;
 - (E) truck parking facilities eligible for funding under section 1401 of MAP–21 (23 U.S.C. 137 note); **and**
 - (F) border infrastructure projects eligible for funding under section 1303 of

SAFETEA-LU (23 U.S.C. 101 note); and
(G) wildlife crossing structures.

(2) Operational improvements and capital and operating costs for traffic monitoring, management, and control facilities and programs.

(3) Environmental measures eligible under sections 119(g), 148(a)(4)(B)(xvii) [The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife], 328, and 329 and transportation control measures listed in section 108(f)(1)(A) (other than clause (xvi) of that section) of the Clean Air Act (42 U.S.C. 7408(f)(1)(A)).

(4) Projects that use natural infrastructure alone or in combination with other eligible projects to enhance resilience of a transportation facility otherwise eligible for assistance under this section.

(5) Highway and transit safety infrastructure improvements and programs, including railway-highway grade crossings.

(6) Fringe and corridor parking facilities and programs in accordance with section 137 and carpool projects in accordance with section 146.

(7) Recreational trails projects eligible for funding under section 206, pedestrian and bicycle projects in accordance with section 217 (including modifications to comply with accessibility requirements under the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.)), and the safe routes to school program under section 1404 of SAFETEA-LU (23 U.S.C. 402 note).

(8) Planning, design, or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

(9) Development and implementation of a State asset management plan for the National Highway System and a performance-based management program for other public roads.

(10) Protection (including painting, scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events) for bridges (including approaches to bridges and other elevated structures) and tunnels on public roads, and inspection and evaluation of bridges and tunnels and other highway assets.

(11) Surface transportation planning programs, highway and transit research and development and technology transfer programs, and workforce development, training, and education under chapter 5 of this title.

(12) Surface transportation infrastructure modifications to facilitate direct intermodal interchange, transfer, and access into and out of a port terminal.

(13) Projects and strategies designed to support congestion pricing, including electronic toll collection and travel demand management strategies and programs.

(14) Projects and strategies designed to reduce the number of wildlife-vehicle collisions, including project-related planning, design, construction, monitoring, and preventative maintenance.

(15) At the request of a State, and upon Secretarial approval of credit assistance under chapter 6, subsidy and administrative costs necessary to provide an eligible entity Federal credit assistance under chapter 6 with respect to a project eligible for assistance under this section.

(16) The creation and operation by a State of an office to assist in the design, implementation, and oversight of public-private partnerships eligible to receive funding under this title and chapter 53 of title 49, and the payment of a stipend to unsuccessful private bidders to offset their proposal development costs, if necessary to encourage robust competition in public-private partnership procurements.

(17) Any type of project eligible under this section as in effect on the day before the

date of enactment of the FAST Act, including projects described under section 101(a)(29) as in effect on such day.
(18) Rural barge landing, dock, and waterfront infrastructure projects in accordance with subsection (j).

SEC. 1110. NATIONALLY SIGNIFICANT FREIGHT AND HIGHWAY PROJECTS.

(a) IN GENERAL.—Section 117 of title 23, United States Code, is amended [in part as follows]

23 U.S. Code § 117. Nationally significant freight and highway projects

(d) ELIGIBLE PROJECTS.-

(1) IN GENERAL.—Except as provided in subsection (e), the Secretary may make a grant under this section only for a project that-

(A) is-

(i) a highway freight project carried out on the National Highway Freight Network established under section 167;

(ii) a highway or bridge project carried out on the National Highway System, including-

(I) a project to add capacity to the Interstate System to improve mobility;

or

(II) a project in a national scenic area;

(iii) a freight project that is-

(I) a freight intermodal or freight rail project; or

(II) within the boundaries of a public or private freight rail, water (including ports), or intermodal facility and that is a surface transportation infrastructure project necessary to facilitate direct intermodal interchange, transfer, or access into or out of the facility; ~~or~~

(iv) a railway-highway grade crossing or grade separation project; ~~and~~

~~(v) a wildlife crossing project; . . .~~

(B) has eligible project costs that are reasonably anticipated to equal or exceed the lesser of-

(i) \$100,000,000; or

(ii) in the case of a project-

(I) located in 1 State, 30 percent of the amount apportioned under this chapter to the State in the most recently completed fiscal year; or

(II) located in more than 1 State, 50 percent of the amount apportioned under this chapter to the participating State with the largest apportionment under this chapter in the most recently completed fiscal year. . . .

(e) SMALL PROJECTS.-

(1) IN GENERAL.—The Secretary shall reserve ~~10 percent~~ **not less than 15 percent** of the amounts made available for grants under this section each fiscal year to make grants for projects described in subsection (d)(1)(A) that do not satisfy the minimum threshold under subsection (d)(1)(B).

(2) GRANT AMOUNT.—Each grant made under this subsection shall be in an amount that is at least \$5,000,000.

(3) PROJECT SELECTION CONSIDERATIONS.—In addition to other applicable requirements, in making grants under this subsection the Secretary shall consider-

(A) the cost effectiveness of the proposed project; ~~and~~

(B) the effect of the proposed project on mobility in the State and region in which the project is carried out; ~~and~~

(C) the effect of the proposed project on safety on freight corridors with significant hazards, such as high winds, heavy snowfall, flooding, rockslides, mudslides, wildfire, wildlife crossing onto the roadway, or steep grades.

(4) REQUIREMENT.—Of the amounts reserved under paragraph (1), not less than 30 percent shall be used for projects in rural areas (as defined in subsection (i)(3)). . . .

(h) ADDITIONAL CONSIDERATIONS.—In making a grant under this section, the Secretary shall consider—

(1) utilization of nontraditional financing, innovative design and construction techniques, or innovative technologies;

(2) utilization of non-Federal contributions; ~~and~~

(3) contributions to geographic diversity among grant recipients, including the need for a balance between the needs of rural and urban communities; ~~and~~

(4) enhancement of freight resilience to natural hazards or disasters, including high winds, heavy snowfall, flooding, rockslides, mudslides, wildfire, wildlife crossing onto the roadway, or steep grades. . . .

SEC. 1112. FEDERAL LANDS TRANSPORTATION PROGRAM.

Section 203(a) of title 23, United States Code, is amended [as follows]

23 U.S. Code § 203. Federal lands transportation program

(a) USE OF FUNDS.—

(1) IN GENERAL.—Funds made available under the Federal lands transportation program shall be used by the Secretary of Transportation and the Secretary of the appropriate Federal land management agency to pay the costs of—

(A) program administration, transportation planning, research, preventive maintenance, engineering, rehabilitation, restoration, construction, and reconstruction of Federal lands transportation facilities, and—

(i) adjacent vehicular parking areas;

(ii) acquisition of necessary scenic easements and scenic or historic sites;

(iii) provision for pedestrians and bicycles;

(iv) environmental mitigation in or adjacent to Federal land open to the public—

(I) to improve public safety and reduce vehicle-caused wildlife mortality while maintaining habitat connectivity; and

(II) to mitigate the damage to wildlife, aquatic organism passage, habitat, and ecosystem connectivity, including the costs of constructing, maintaining, replacing, or removing culverts and bridges, as appropriate;

(v) construction and reconstruction of roadside rest areas, including sanitary and water facilities;

(vi) congestion mitigation; and

(vii) other appropriate public road facilities, as determined by the Secretary;

(B) capital, operations, and maintenance of transit facilities; ~~and~~

(C) any transportation project eligible for assistance under this title that is on a public road within or adjacent to, or that provides access to, Federal lands open to the public; ~~and~~.

- (D) not more ~~\$10,000,000~~ \$20,000,000 of the amounts made available per fiscal year to carry out this section for activities eligible under subparagraph (A)(iv)(I).
- (2) CONTRACT.—In connection with an activity described in paragraph (1), the Secretary and the Secretary of the appropriate Federal land management agency may enter into a contract or other appropriate agreement with respect to the activity with—
- (A) a State (including a political subdivision of a State); or
 - (B) an Indian tribe.
- (3) ADMINISTRATION.— All appropriations for the construction and improvement of Federal lands transportation facilities shall be administered in conformity with regulations and agreements jointly approved by the Secretary and the Secretary of the appropriate Federal land managing agency.
- (4) COOPERATION.—
- (A) In general.— The cooperation of States, counties, or other local subdivisions may be accepted in construction and improvement.
 - (B) Funds received.— Any funds received from a State, county, or local subdivision shall be credited to appropriations available for the class of Federal lands transportation facilities to which the funds were contributed.
- (5) COMPETITIVE BIDDING.—
- (A) In general.— Subject to subparagraph (B), construction of each project shall be performed by contract awarded by competitive bidding.
 - (B) Exception.— Subparagraph (A) shall not apply if the Secretary or the Secretary of the appropriate Federal land management agency affirmatively finds that, under the circumstances relating to the project, a different method is in the public interest.
- (6) NATIVE PLANT MATERIALS.—In carrying out an activity described in paragraph (1), the entity carrying out the activity shall consider—
- (A) the use of locally adapted native plant materials; and
 - (B) designs that minimize runoff and heat generation.

SEC. 1119. BRIDGE INVESTMENT PROGRAM.

(a) IN GENERAL.—Chapter 1 of title 23, United States Code, is amended by inserting after section 123 the following:

23 U.S. Code § 124. Bridge investment program

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE PROJECT.—

(A) IN GENERAL.—The term ‘eligible project’ means a project to replace, rehabilitate, preserve, or protect 1 or more bridges on the National Bridge Inventory under section 144(b).

(B) INCLUSIONS.—The term ‘eligible project’ includes—

- (i) a bundle of projects described in subparagraph (A), regardless of whether the bundle of projects meets the requirements of section 144(j)(5); and
- (ii) a project to replace or rehabilitate culverts for the purpose of improving flood control and improved habitat connectivity for aquatic species.

(2) LARGE PROJECT.—The term ‘large project’ means an eligible project with total eligible project costs of greater than \$100,000,000.

(3) PROGRAM.—The term ‘program’ means the bridge investment program established by subsection (b)(1).

(b) ESTABLISHMENT OF BRIDGE INVESTMENT PROGRAM.—

(1) IN GENERAL.—There is established a bridge investment program to provide financial assistance for eligible projects under this section.

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

(A) to improve the safety, efficiency, and reliability of the movement of people and freight over bridges;

(B) to improve the condition of bridges in the United States by reducing—

(i) the number of bridges—

(I) in poor condition; or

(II) in fair condition and at risk of falling into poor condition within the next 3 years;

(ii) the total person miles traveled over bridges—

(I) in poor condition; or

(II) in fair condition and at risk of falling into poor condition within the next 3 years;

(iii) the number of bridges that—

(I) do not meet current geometric design standards; or

(II) cannot meet the load and traffic requirements typical of the regional transportation network; and

(iv) the total person miles traveled over bridges that—

(I) do not meet current geometric design standards; or

(II) cannot meet the load and traffic requirements typical of the regional transportation network; and

(C) to provide financial assistance that leverages and encourages non-Federal contributions from sponsors and stakeholders involved in the planning, design, and construction of eligible projects.

(c) GRANT AUTHORITY.—

(1) IN GENERAL.—In carrying out the program, the Secretary may award grants, on a competitive basis, in accordance with this section.

(2) GRANT AMOUNTS.—Except as otherwise provided, a grant under the program shall be—

(A) in the case of a large project, in an amount that is—

(i) adequate to fully fund the project in combination with other financial resources identified in the application); and

(ii) not less than \$50,000,000; and

(B) in the case of any other eligible project, in an amount that is—

(i) adequate to fully fund the project (in combination with other financial resources identified in the application); and

(ii) not less than \$2,500,000.

(3) MAXIMUM AMOUNT.—Except as otherwise provided, for an eligible project receiving assistance under the program, the amount of assistance provided by the Secretary under this section, as a share of eligible project costs, shall be—

(A) in the case of a large project, not more than 50 percent; and

(B) in the case of any other eligible project, not more than 80 percent.

(4) FEDERAL SHARE.—

(A) MAXIMUM FEDERAL INVOLVEMENT.—Federal assistance other than a grant under the program may be used to satisfy the non-Federal share of the cost of a

project for which a grant is made, except that the total Federal assistance provided for a project receiving a grant under the program may not exceed the Federal share for the project under section 120.

(B) OFF-SYSTEM BRIDGES.—In the case of an eligible project for an off-system bridge (as defined in section 133(f)(1))—

- (i) Federal assistance other than a grant under the program may be used to satisfy the non-Federal share of the cost of a project; and
- (ii) notwithstanding subparagraph (A), the total Federal assistance provided for the project shall not exceed 90 percent of the total eligible project costs.

(C) FEDERAL LAND MANAGEMENT AGENCIES AND TRIBAL GOVERNMENTS.—

Notwithstanding any other provision of law, Federal funds other than Federal funds made available under this section may be used to pay the remaining share of the cost of a project under the program by a Federal land management agency or a Tribal government or consortium of Tribal governments.

(5) CONSIDERATIONS.—

(A) IN GENERAL.—In awarding grants under the program, the Secretary shall consider—

- (i) in the case of a large project, the 5 ratings assigned under subsection 6 (g)(5)(A);
- (ii) in the case of an eligible project other than a large project, the quality rating assigned under subsection (f)(3)(A)(ii);
- (iii) the average daily person and freight throughput supported by the eligible project;
- (iv) the number and percentage of bridges within the same State as the eligible project that are in poor condition;
- (v) the extent to which the eligible project demonstrates cost savings by bundling multiple bridge projects;
- (vi) in the case of an eligible project of a Federal land management agency, the extent to which the grant would reduce a Federal liability or Federal infrastructure maintenance backlog;
- (vii) geographic diversity among grant recipients, including the need for a balance between the needs of rural and urban communities; and
- (viii) the extent to which a bridge that would be assisted with a grant—
 - (I) is, without that assistance—
 - (aa) at risk of falling into or remaining in poor condition; or
 - (bb) in fair condition and at risk of falling into poor condition within the next 3 years;
 - (II) does not meet current geometric design standards based on—
 - (aa) the current use of the bridge; or
 - (bb) load and traffic requirements typical of the regional corridor or local network in which the bridge is located; or
 - (III) does not meet current seismic design standards.

(B) REQUIREMENT.—The Secretary shall—

- (i) give priority to an application for an eligible project that is located within a State for which—
 - (I) 2 or more applications for eligible projects within the State were submitted for the current fiscal year and an average of 2 or more applications for eligible projects within the State were submitted in prior fiscal years of the program; and
 - (II) fewer than 2 grants have been awarded for eligible projects within the State under the program;

(ii) during the period of fiscal years 2021 through 2025, for each State described in clause (i), select—

(I) not fewer than 1 large project that the Secretary determines is justified under the evaluation under subsection (g)(4); or

(II) 2 eligible projects that are not large projects that the Secretary determines are justified under the evaluation under subsection (f)(3); and

(iii) not be required to award a grant for an eligible project that the Secretary does not determine is justified under an evaluation under subsection (f)(3) or (g)(4).

(6) CULVERT LIMITATION.—Not more than 57 percent of the amounts made available for each fiscal year for grants under the program may be used for eligible projects that consist solely of culvert replacement or rehabilitation.

(d) ELIGIBLE ENTITY.—The SECRETARY may make a grant under the program to any of the following:

(1) A State or a group of States.

(2) A metropolitan planning organization that serves an urbanized area (as designated by the Bureau of the Census) with a population of over 200,000.

(3) A unit of local government or a group of local governments.

(4) A political subdivision of a State or local government.

(5) A special purpose district or public authority with a transportation function.

(6) A Federal land management agency.

(7) A Tribal government or a consortium of Tribal governments.

(8) A multistate or multijurisdictional group of entities described in paragraphs (1) through (7).

(e) ELIGIBLE PROJECT REQUIREMENTS.—The Secretary may make a grant under the program only to an eligible entity for an eligible project that—

(1) in the case of a large project, the Secretary recommends for funding in the annual report on funding recommendations under subsection (g)(6);

(2) is reasonably expected to begin construction not later than 18 months after the date on which funds are obligated for the project; and

(3) is based on the results of preliminary engineering.

(f) COMPETITIVE PROCESS AND EVALUATION OF ELIGIBLE PROJECTS OTHER THAN LARGE PROJECTS.—

(1) COMPETITIVE PROCESS.—

(A) IN GENERAL.—The Secretary shall—

(i) for the first fiscal year for which funds are made available for obligation under the program, not later than 60 days after the date on which the template under subparagraph (B)(i) is developed, and in subsequent fiscal years, not later than 60 days after the date on which amounts are made available for obligation under the program, solicit grant applications for eligible projects other than large projects; and

(ii) not later than 120 days after the date on which the solicitation under clause (i) expires, conduct evaluations under paragraph (3).

(B) REQUIREMENTS.—In carrying out subparagraph (A), the Secretary shall—

(i) develop a template for applicants to use to summarize project needs and benefits, including benefits described in paragraph (3)(B)(i); and

(ii) enable applicants to use data from the National Bridge Inventory under section 144(b) to populate templates described in clause (i), as applicable.

(2) APPLICATIONS.—An eligible entity shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(3) EVALUATION.—

(A) IN GENERAL.—Prior to providing a grant under this subsection, the Secretary shall—

- (i) conduct an evaluation of each eligible project for which an application is received under this subsection; and
- (ii) assign a quality rating to the eligible project on the basis of the evaluation under clause (i).

(B) REQUIREMENTS.—In carrying out an evaluation under subparagraph (A), the Secretary shall—

- (i) consider information on project benefits submitted by the applicant using the template developed under paragraph (1)(B)(i), including whether the project will generate, as determined by the Secretary—
 - (I) costs avoided by the prevention of closure or reduced use of the bridge to be improved by the project;
 - (II) in the case of a bundle of projects, benefits from executing the projects as a bundle compared to as individual projects;
 - (III) safety benefits, including the reduction of accidents and related costs;
 - (IV) person and freight mobility benefits, including congestion reduction and reliability improvements;
 - (V) national or regional economic benefits;
 - (VI) benefits from long-term resiliency to extreme weather events, flooding, or other natural disasters;
 - (VII) benefits from protection (as described in section 133(b)(10)), including improving seismic or scour protection;
 - (VIII) environmental benefits, including wildlife connectivity;
 - (IX) benefits to non-vehicular and public transportation users;
 - (X) benefits of using—
 - (aa) innovative design and construction techniques; or
 - (bb) innovative technologies; or
 - (XI) reductions in maintenance costs, including, in the case of a federally-owned bridge, cost savings to the Federal budget; and
- (ii) consider whether and the extent to which the benefits, including the benefits described in clause (i), are more likely than not to outweigh the total project costs.

(g) COMPETITIVE PROCESS, EVALUATION, AND ANNUAL REPORT FOR LARGE PROJECTS.—

(1) IN GENERAL.—The Secretary shall establish an annual date by which an eligible entity submitting an application for a large project shall submit to the Secretary such information as the Secretary may require, including information described in paragraph (2), in order for a large project to be considered for a recommendation by the Secretary for funding in the next annual report under paragraph (6).

(2) INFORMATION REQUIRED.—The information referred to in paragraph (1) includes—

- (A) all necessary information required for the Secretary to evaluate the large project; and
- (B) information sufficient for the Secretary to determine that—

- (i) the large project meets the applicable requirements under this section; and
 - (ii) there is a reasonable likelihood that the large project will continue to meet the requirements under this section.
- (3) DETERMINATION; NOTICE.—On making a determination that information submitted to the Secretary under paragraph (1) is sufficient, the Secretary shall provide a written notice of that determination to—
- (A) the eligible entity that submitted the application;
 - (B) the Committee on Environment and Public Works of the Senate; and
 - (C) the Committee on Transportation and Infrastructure of the House of Representatives.
- (4) EVALUATION.—The Secretary may recommend a large project for funding in the annual report under paragraph (6) only if the Secretary evaluates the proposed project and determines that the project is justified because the project—
- (A) addresses a need to improve the condition of the bridge, as determined by the Secretary, consistent with the goals of the program under subsection (b)(2);
 - (B) will generate, as determined by the Secretary—
 - (i) costs avoided by the prevention of closure or reduced use of the bridge to be improved by the project;
 - (ii) in the case of a bundle of projects, benefits from executing the projects as a bundle compared to as individual projects;
 - (iii) safety benefits, including the reduction of accidents and related costs;
 - (iv) person and freight mobility benefits, including congestion reduction and reliability improvements;
 - (v) national or regional economic benefits;
 - (vi) benefits from long-term resiliency to extreme weather events, flooding, or other natural disasters;
 - (vii) benefits from protection (as described in section 133(b)(10)), including improving seismic or scour protection;
 - (viii) environmental benefits, including wildlife connectivity;
 - (ix) benefits to nonvehicular and public transportation users;
 - (x) benefits of using—
 - (I) innovative design and construction techniques; or
 - (II) innovative technologies; or
 - (xi) reductions in maintenance costs, including, in the case of a federally-owned bridge, cost savings to the Federal budget;
 - (C) is cost effective based on an analysis of whether the benefits and avoided costs described in subparagraph (B) are expected to outweigh the project costs;
 - (D) is supported by other Federal or non-Federal financial commitments or revenues adequate to fund ongoing maintenance and preservation; and
 - (E) is consistent with the objectives of an applicable asset management plan of the project sponsor, including a State asset management plan under section 119(e) in the case of a project on the National Highway System that is sponsored by a State.

SEC. 1125. WILDLIFE CROSSING SAFETY.

(1) IN GENERAL.—Chapter 1 of title 23, United States Code (as amended by section 1124(a)(1)), is amended by adding at the end the following:

23 U.S. Code § 174. Wildlife crossings pilot program

(a) FINDING.—Congress finds that greater adoption of wildlife-vehicle collision safety countermeasures is in the public interest because—

(1) according to the report of the Federal Highway Administration entitled ‘Wildlife-Vehicle Collision Reduction Study’, there are more than 1,000,000 wildlife-vehicle collisions every year;

(2) wildlife-vehicle collisions—

(A) present a danger to

(i) human safety; and

(ii) wildlife survival; and

(B) represent a persistent concern that results in tens of thousands of serious injuries and hundreds of fatalities on the roadways of the United States; and

(3) the total annual cost associated with wildlife-vehicle collisions has been estimated to be \$8,388,000,000; and

(4) wildlife-vehicle collisions are a major threat to the survival of species, including birds, reptiles, mammals, and amphibians.

(b) ESTABLISHMENT.—The Secretary shall establish a competitive wildlife crossings pilot program (referred to in this section as the ‘pilot program’) to provide grants for projects that seek to achieve—

(1) a reduction in the number of wildlife-vehicle collisions; and

(2) in carrying out the purpose described in paragraph (1), improved habitat connectivity for terrestrial and aquatic species.

(c) ELIGIBLE ENTITIES.—An entity eligible to apply for a grant under the pilot program is—

(1) a State highway agency, or an equivalent of that agency;

(2) a metropolitan planning organization (as defined in section 134(b));

(3) a unit of local government;

(4) a regional transportation authority;

(5) a special purpose district or public authority with a transportation function, including a port authority;

(6) an Indian tribe (as defined in section 207(m)(1)), including a Native village and a Native Corporation (as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602));

(7) a Federal land management agency; or

(8) a group of any of the entities described in paragraphs (1) through (7).

(d) APPLICATIONS.—

(1) **IN GENERAL.**—To be eligible to receive a grant under the pilot program, an eligible entity shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(2) **REQUIREMENT.**—If an application under paragraph (1) is submitted by an eligible entity other than an eligible entity described in paragraph (1) or (7) of subsection (c), the application shall include documentation that the State highway agency, or an equivalent of that agency, of the State in which the eligible entity is located was consulted during the development of the application.

(3) **GUIDANCE.**—To enhance consideration of current and reliable data, eligible entities may obtain guidance from an agency in the State with jurisdiction over fish and wildlife.

(e) CONSIDERATIONS.—In selecting grant recipients under the pilot program, the Secretary shall take into consideration the following:

(1) Primarily, the extent to which the proposed project of an eligible entity is likely to protect motorists and wildlife by reducing the number of wildlife-vehicle collisions and improve habitat connectivity for terrestrial and aquatic species.

(2) Secondly, the extent to which the proposed project of an eligible entity is likely to accomplish the following:

(A) Leveraging Federal investment by encouraging non-Federal contributions to the project, including projects from public-private partnerships.

(B) Supporting local economic development and improvement of visitation opportunities.

(C) Incorporation of innovative technologies, including advanced design techniques and other strategies to enhance efficiency and effectiveness in reducing wildlife-vehicle collisions and improving habitat connectivity for terrestrial and aquatic species.

(D) Provision of educational and outreach opportunities.

(E) Monitoring and research to evaluate, compare effectiveness of, and identify best practices in, selected projects.

(F) Any other criteria relevant to reducing the number of wildlife-vehicle collisions and improving habitat connectivity for terrestrial and aquatic species, as the Secretary determines to be appropriate, subject to the condition that the implementation of the pilot program shall not be delayed in the absence of action by the Secretary to identify additional criteria under this subparagraph.

(f) USE OF FUNDS.—

(1) IN GENERAL.—The Secretary shall ensure that a grant received under the pilot program is used for a project to reduce wildlife-vehicle collisions.

(2) GRANT ADMINISTRATION.—

(A) IN GENERAL.—A grant received under the pilot program shall be administered by—

(i) in the case of a grant to a Federal land management agency or an Indian tribe (as defined in section 207(m)(1)), including a Native village and a Native Corporation (as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602)), the Federal Highway Administration, through an agreement; and

(ii) in the case of a grant to an eligible entity other than an eligible entity described in clause (i), the State highway agency, or an equivalent of that agency, for the State in which the project is to be carried out.

(B) PARTNERSHIPS.—

(i) IN GENERAL.—A grant received under the pilot program may be used to provide funds to eligible partners of the project for which the grant was received described in clause (ii), in accordance with the terms of the project agreement.

(ii) ELIGIBLE PARTNERS DESCRIBED.—The eligible partners referred to in clause (i) include—

(I) a metropolitan planning organization (as defined in section 134(b));

- (II) a unit of local government;
- (III) a regional transportation authority;
- (IV) a special purpose district or public authority with a transportation function, including a port authority;
- (V) an Indian tribe (as defined in section 207(m)(1)), including a Native village and a Native Corporation (as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602));
- (VI) a Federal land management agency;
- (VII) a foundation, nongovernmental organization, or institution of higher education;
- (VIII) a Federal, Tribal, regional, or State government entity; and
- (IX) a group of any of the entities described in subclauses (I) through (VIII).

(3) COMPLIANCE.—An eligible entity that receives a grant under the pilot program and enters into a partnership described in paragraph (2) shall establish measures to verify that an eligible partner that receives funds from the grant complies with the conditions of the pilot program in using those funds.

(g) REQUIREMENT.—The Secretary shall ensure that not less than 60 percent of the amounts made available for grants under the pilot program each fiscal year are for projects located in rural areas.

(h) ANNUAL REPORT TO CONGRESS.—

(1) IN GENERAL.—Not later than December 31 of each calendar year, the Secretary shall submit to Congress, and make publicly available, a report describing the activities under the pilot program for the fiscal year that ends during that calendar year.

(2) CONTENTS.—The report under paragraph (1) shall include—

(A) a detailed description of the activities carried out under the pilot program;

(B) an evaluation of the effectiveness of the pilot program in meeting the purposes described in subsection (b); and

(C) policy recommendations to improve the effectiveness of the pilot program.

(2) CLERICAL AMENDMENT.—The analysis for chapter 1 of title 23, United States Code (as amended by section 1124(a)(2)) is amended by inserting after the item relating to section 173 the following:

174. Wildlife crossings pilot program.

(c) WILDLIFE VEHICLE COLLISION REDUCTION AND HABITAT CONNECTIVITY IMPROVEMENT.—

(1) IN GENERAL.—Chapter 1 of title 23, United States Code (as amended by subsection (b)(1)), is amended by adding at the end the following:

23 U.S. Code § 175. Wildlife-vehicle collision reduction and habitat connectivity improvement

(a) STUDY.—

(1) IN GENERAL.—The Secretary shall conduct a study (referred to in this subsection as the ‘study’) of the state, as of the date of the study, of the practice of methods to reduce collisions between motorists and wildlife (referred to in this section as ‘wildlife-vehicle collisions’).

(2) CONTENTS.—

(A) AREAS OF STUDY.—The study shall—

(i) update and expand on, as appropriate—

- (I) the report entitled ‘Wildlife Vehicle Collision Reduction Study: 2008 Report to Congress’; and
- (II) the document entitled ‘Wildlife Vehicle Collision Reduction Study: Best Practices Manual’ and dated October 2008; and

(ii) include—

- (I) an assessment, as of the date of the study, of—
 - (aa) the causes of wildlife-vehicle collisions;
 - (bb) the impact of wildlife-vehicle collisions on motorists and wildlife; and
 - (cc) the impacts of roads and traffic on habitat connectivity for terrestrial and aquatic species; and
- (II) solutions and best practices for—
 - (aa) reducing wildlife-vehicle collisions; and
 - (bb) improving habitat connectivity for terrestrial and aquatic species.

(B) METHODS.—In carrying out the study, the Secretary shall—

(i) conduct a thorough review of research and data relating to—

- (I) wildlife-vehicle collisions; and
- (II) habitat fragmentation that results from transportation infrastructure;

(ii) survey current practices of the Department of Transportation and State departments of transportation to reduce wildlife-vehicle collisions; and

(iii) consult with—

- (I) appropriate experts in the field of wildlife-vehicle collisions; and
- (II) appropriate experts on the effects of roads and traffic on habitat connectivity for terrestrial and aquatic species.

(3) REPORT.—

(A) IN GENERAL.—Not later than 18 months after the date of enactment of the America’s Transportation Infrastructure Act of 2019, the Secretary shall submit to Congress a report on the results of the study.

(B) CONTENTS.—The report under sub-paragraph (A) shall include—

(i) a description of—

- (I) the causes of wildlife-vehicle collisions;
- (II) the impacts of wildlife-vehicle collisions;
- (III) the impacts of roads and traffic on—
 - (aa) species listed as threatened species or endangered species under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);
 - (bb) species identified by States as species of greatest conservation need;

(cc) species identified in State wildlife plans; and
(dd) medium and small terrestrial and aquatic species;

(ii) an economic evaluation of the costs and benefits of installing highway infrastructure and other measures to mitigate damage to terrestrial and aquatic species, including the effect on jobs, property values, and economic growth to society, adjacent communities, and landowners;

(iii) recommendations for preventing wildlife-vehicle collisions, including recommended best practices, funding resources, or other recommendations for addressing wildlife-vehicle collisions; and

(iv) guidance, developed in consultation with Federal land management agencies and State departments of transportation, State fish and wildlife agencies, and Tribal governments that agree to participate, for developing, for each State that agrees to participate, voluntary joint statewide transportation and wildlife action plan—

(I) to address wildlife-vehicle collisions; and

(II) to improve habitat connectivity for terrestrial and aquatic species.

(b) WORKFORCE DEVELOPMENT AND TECHNICAL TRAINING.—

(1) IN GENERAL.—Not later than 3 years after the date of enactment of the America’s Transportation Infrastructure Act of 2019, the Secretary shall, based on the study conducted under subsection (a), develop a series of in-person and online workforce development and technical training courses—

(A) to reduce wildlife-vehicle collisions; and

(B) to improve habitat connectivity for terrestrial and aquatic species.

(2) AVAILABILITY.—The Secretary shall—

(A) make the series of courses developed under paragraph (1) available for transportation and fish and wildlife professionals; and

(B) update the series of courses not less frequently than once every 2 years.

(c) STANDARDIZATION OF WILDLIFE COLLISION AND CARCASS DATA.—

(1) STANDARDIZED METHODOLOGY.—

(A) IN GENERAL.—The Secretary, acting through the Administrator of the Federal Highway Administration (referred to in this sub-section as the ‘Secretary’), shall develop a quality standardized methodology for collecting and reporting spatially accurate wildlife collision and carcass data for the National Highway System, considering the practicability of the methodology with respect to technology and cost.

(B) METHODOLOGY.—In developing the standardized methodology under subparagraph (A), the Secretary shall—

(i) survey existing methodologies and sources of data collection, including the Fatality Analysis Reporting System, the General Estimates System of the National Automotive Sampling System, and the Highway Safety Information System; and

(ii) to the extent practicable, identify and correct limitations of those existing methodologies and sources of data collection.

(C) CONSULTATION.—In developing the standardized methodology under subparagraph (A), the Secretary shall consult with—

- (i) the Secretary of the Interior;
- (ii) the Secretary of Agriculture, acting through the Chief of the Forest Service;
- (iii) Tribal, State, and local transportation and wildlife authorities;
- (iv) metropolitan planning organizations (as defined in section 134(b));
- (v) members of the American Association of State Highway Transportation Officials;
- (vi) members of the Association of Fish and Wildlife Agencies;
- (vii) experts in the field of wildlife-vehicle collisions;
- (viii) nongovernmental organizations; and
- (ix) other interested stakeholders, as appropriate.

(2) STANDARDIZED NATIONAL DATA SYSTEM WITH VOLUNTARY TEMPLATE IMPLEMENTATION.—The Secretary shall—

(A) develop a template for State implementation of a standardized national wildlife collision and carcass data system for the National Highway System that is based on the standardized methodology developed under paragraph (1); and

(B) encourage the voluntary implementation of the template developed under subparagraph (A).

(3) REPORTS.—

(A) METHODOLOGY.—The Secretary shall submit to Congress a report describing the standardized methodology developed under paragraph (1) not later than the later of—

- (i) the date that is 18 months after the date of enactment of the America’s Transportation Infrastructure Act of 2019; and
- (ii) the date that is 180 days after the date on which the Secretary completes the development of the standardized methodology.

(B) IMPLEMENTATION.—Not later than 4 years after the date of enactment of the America’s Transportation Infrastructure Act of 2019, the Secretary shall submit to Congress a report describing—

- (i) the status of the voluntary implementation of the standardized methodology developed under paragraph (1) and the template developed under paragraph (2)(A);
- (ii) whether the implementation of the standardized methodology developed under paragraph (1) and the template developed under paragraph (2)(A) has impacted efforts by States, units of local government, and other entities—
 - (I) to reduce the number of wildlife-vehicle collisions; and
 - (II) to improve habitat connectivity;
- (iii) the degree of the impact described in clause (ii); and
- (iv) the recommendations of the Secretary, including recommendations for further study aimed at reducing motorist collisions involving wildlife and improving habitat connectivity for terrestrial and aquatic species on the National Highway System, if any.

(d) NATIONAL THRESHOLD GUIDANCE.—The Secretary shall—

(1) establish guidance, to be carried out by States on a voluntary basis, that contains a threshold for determining whether a highway shall be evaluated for potential mitigation measures to reduce wildlife-vehicle collisions and increase habitat connectivity for terrestrial and aquatic species, taking into consideration—

(A) the number of wildlife-vehicle collisions on the highway that pose a human safety risk;

(B) highway-related mortality and the effects of traffic on the highway on—

(i) species listed as endangered species or threatened species

under the Endangered Species Act of 1973 (16 U.S.C 1531 et seq.);

(ii) species identified by a State as species of greatest conservation need;

(iii) species identified in State wildlife plans; and

(iv) medium and small terrestrial and aquatic species; and

(C) habitat connectivity values for terrestrial and aquatic species and the barrier effect of the highway on the movements and migrations of those species.

23 U.S. Code § 109. Standards

(c) DESIGN CRITERIA FOR .—

(1) IN GENERAL.—A design for new construction, reconstruction, resurfacing (except for maintenance resurfacing), restoration, or rehabilitation of a highway on the National Highway System (other than a highway also on the Interstate System) shall consider, in addition to the criteria described in subsection (a)—

(A) the constructed and natural environment of the area;

(B) the environmental, scenic, aesthetic, historic, community, and preservation impacts of the activity;

(C) cost savings by utilizing flexibility that exists in current design guidance and regulations; and

(D) access for other modes of transportation.

(2) DEVELOPMENT OF CRITERIA.—The Secretary, in cooperation with State transportation departments, may develop criteria to implement paragraph (1). In developing criteria under this paragraph, the Secretary shall consider—

(A) the results of the committee process of the American Association of State Highway and Transportation Officials as used in adopting and publishing “A Policy on Geometric Design of Highways and Streets”, including comments submitted by interested parties as part of such process;

(B) the publication entitled “Flexibility in Highway Design” of the Federal Highway Administration;

(C) “Eight Characteristics of Process to Yield Excellence and the Seven Qualities of Excellence in Transportation Design” developed by the conference held during 1998 entitled “Thinking Beyond the Pavement National Workshop on Integrating Highway Development with Communities and the Environment while Maintaining Safety and Performance”;

(D) the publication entitled “Highway Safety Manual” of the American Association of State Highway and Transportation Officials;

(E) the publication entitled “Urban Street Design Guide” of the National Association of City Transportation Officials; and

(F) the publication of the Federal Highway Administration entitled ‘Wildlife Crossing Structure Handbook: Design and Evaluation in North America’ and dated March 2011; and
(FG) any other material that the Secretary determines to be appropriate.

23 U.S. Code § 144. National bridge and tunnel inventory and inspection standards

(a) FINDINGS AND DECLARATIONS.—

(1) FINDINGS.—Congress finds that—

(A) the condition of the bridges of the United States has improved since the date of enactment of the Transportation Equity Act for the 21st Century (Public Law 105–178; 112 Stat. 107), yet continued improvement to bridge conditions is essential to protect the safety of the traveling public and allow for the efficient movement of people and goods on which the economy of the United States relies; and

(B) the systematic preventative maintenance of bridges, and replacement and rehabilitation of deficient bridges, should be undertaken through an overall asset management approach to transportation investment.

(2) DECLARATIONS.—Congress declares that it is in the vital interest of the United States—

(A) to inventory, inspect, and improve the condition of the highway bridges and tunnels of the United States;

(B) to use a data-driven, risk-based approach and cost-effective strategy for systematic preventative maintenance, replacement, and rehabilitation of highway bridges and tunnels to ensure safety, **resilience** and extended service life;

(C) to use performance-based bridge management systems to assist States in making timely investments;

(D) to ensure accountability and link performance outcomes to investment decisions; **and**

(E) to ensure connectivity and access for residents of rural areas of the United States through strategic investments in National Highway System bridges and bridges on all public roads; **and**

(F) to ensure adequate passage of aquatic and terrestrial species, where appropriate.

(b) NATIONAL BRIDGE AND TUNNEL INVENTORIES.—The Secretary, in consultation with the States and Federal agencies with jurisdiction over highway bridges and tunnels, shall—

(1) inventory all highway bridges on public roads, on and off Federal-aid highways, including tribally owned and Federally owned bridges, that are bridges over waterways, other topographical barriers, other highways, and railroads;

(2) inventory all tunnels on public roads, on and off Federal-aid highways, including tribally owned and Federally owned tunnels;

(3) classify the bridges according to serviceability, safety, and essentiality for public use, including the potential impacts to emergency evacuation routes and to regional and national freight and passenger mobility if the serviceability of the bridge is restricted or diminished;

(4) based on that classification, assign each a risk-based priority for systematic preventative maintenance, replacement, or rehabilitation; **and**

(5) determine the cost of replacing each structurally deficient bridge identified under

this subsection with a comparable facility or the cost of rehabilitating the bridge; and (6) determine if the replacement or rehabilitation of bridges and tunnels should include measures to enable safe and unimpeded movement for terrestrial and aquatic species.

....
(i) TRAINING PROGRAM FOR BRIDGE AND TUNNEL INSPECTORS.—

(1) IN GENERAL.—The Secretary, in cooperation with the State transportation departments, shall maintain a program designed to train appropriate personnel to carry out highway bridge and tunnel inspections.

(2) REVISIONS.—The training program shall be revised from time to time to take into account new and improved techniques.

(3) REQUIREMENT.—The first revision under paragraph (2) after the date of enactment of the America Transportation Infrastructure Act of 2019 shall include techniques to assess passage of aquatic and terrestrial species and habitat restoration potential.

SEC. 3005. RESEARCH AND TECHNOLOGY DEVELOPMENT AND DEPLOYMENT.

(a) IN GENERAL.—Section 503 of title 23, United States Code, is amended [in part as follows]—

23 U.S. Code § 503. Research and technology development and deployment

(b) HIGHWAY RESEARCH AND DEVELOPMENT PROGRAM.—

(C) Contents.—Research and technology activities carried out under this paragraph may include—

- (i) safety assessments and decisionmaking tools;
- (ii) data collection and analysis;
- (iii) crash reduction projections;
- (iv) low-cost safety countermeasures;
- (v) innovative operational improvements and designs of roadway and roadside features;
- (vi) evaluation of countermeasure costs and benefits;
- (vii) development of tools for projecting impacts of safety countermeasures;
- (viii) rural road safety measures;
- (ix) safety measures for vulnerable road users, including bicyclists and pedestrians;
- (x) safety measures to reduce the number of wildlife-vehicle collisions;
- (~~xi~~) safety policy studies;
- (xi) human factors studies and measures;
- (xiii) safety technology deployment;
- (~~xiii~~iv) safety workforce professional capacity building initiatives;
- (~~xiv~~) safety program and process improvements; and
- (xvi) tools and methods to enhance safety performance, including achievement of statewide safety performance targets.

(3) IMPROVING INFRASTRUCTURE INTEGRITY.—

(B) Objectives.—In carrying out this paragraph, the Secretary shall carry out research and development activities—

- (i) to reduce the number of fatalities attributable to infrastructure design characteristics and work zones;
- (ii) to improve the safety and security of highway infrastructure;
- (iii) to increase the reliability of lifecycle performance predictions used in

- infrastructure design, construction, and management;
- (iv) to improve the ability of transportation agencies to deliver projects that meet expectations for timeliness, quality, and cost;
- (v) to reduce user delay attributable to infrastructure system performance, maintenance, rehabilitation, and construction;
- (vi) to improve highway condition and performance through increased use of design, materials, construction, and maintenance innovations;
- (vii) to reduce the environmental impacts of highway infrastructure through innovations in design, construction, operation, preservation, and maintenance; and
- (viii) to study vulnerabilities of the transportation system to seismic activities and extreme **weather** events and methods to reduce those vulnerabilities.

(C) Contents.—Research and technology activities carried out under this paragraph may include—

- (i) long-term infrastructure performance programs addressing pavements, bridges, tunnels, and other structures;
- (ii) short-term and accelerated studies of infrastructure performance;
- (iii) research to develop more durable infrastructure materials and systems;
- (iv) advanced infrastructure design methods;
- (v) accelerated highway and bridge construction;
- (vi) performance-based specifications;
- (vii) construction and materials quality assurance;
- (viii) comprehensive and integrated infrastructure asset management;
- (ix) infrastructure safety assurance;
- (x) sustainable infrastructure design and construction;
- (xi) infrastructure rehabilitation and preservation techniques, including techniques to rehabilitate and preserve historic infrastructure;
- (xii) hydraulic, geotechnical, and aerodynamic aspects of infrastructure;
- (xiii) improved highway construction technologies and practices;
- (xiv) improved tools, technologies, and models for infrastructure management, including assessment and monitoring of infrastructure condition;
- (xv) studies to improve flexibility and resiliency of infrastructure systems to withstand **extreme weather events and** climate variability;
- (xvi) studies on the effectiveness of fiber-based additives to improve the durability of surface transportation materials in various geographic regions;
- (xvii) studies of infrastructure resilience and other adaptation measures;
- (xviii) maintenance of seismic research activities, including research carried out in conjunction with other Federal agencies to study the vulnerability of the transportation system to seismic activity and methods to reduce that vulnerability;~~and~~
- (xix) technology transfer and adoption of permeable, pervious, or porous paving materials, practices, and systems that are designed to minimize environmental impacts, stormwater runoff, and flooding and to treat or remove pollutants by allowing stormwater to infiltrate through the pavement in a manner similar to predevelopment hydrologic conditions.; **and**
- (xx) studies on the deployment and revenue potential of the deployment of energy and broadband infrastructure in highway rights-of-way, including potential adverse impacts of the use or nonuse of those rights-of-way.**

SEC. 3007. WILDLIFE-VEHICLE COLLISION RESEARCH.

(a) GENERAL AUTHORITIES AND REQUIREMENTS REGARDING WILDLIFE AND HABITAT.—Section 515(h)(2) of title 23, United States Code, is amended [in part as follows]—

23 U.S. Code § 515. General authorities and requirements

(h) ADVISORY COMMITTEE.—

(1) IN GENERAL.—The Secretary shall establish an Advisory Committee to advise the Secretary on carrying out sections 512 through 518.

(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 State, local, or regional wildlife, land use, or resource management agency;

~~(DE)~~ a representative from a metropolitan planning organization;

~~(EF)~~ a private sector user of intelligent transportation system technologies;

~~(FG)~~ 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;

~~(GH)~~ an academic researcher who is a civil engineer;

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

(J) an academic researcher who is a biological or ecological scientist with expertise in transportation issues;

~~(K)~~ a representative from a nonprofit group representing the intelligent transportation system industry;

~~(L)~~ a representative from a public interest group concerned with safety;

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

(N) a representative from a public interest group concerned with the impact of the transportation system on terrestrial and aquatic species and the habitat of those species; and

~~(O)~~ members with expertise in planning, safety, telecommunications, utilities, and operations.

23 U.S. Code § 516. Research and development

(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, **including animal detection systems to reduce the number of wildlife-vehicle collisions**; or
- (7) facilitate the integration of intelligent infrastructure, vehicle, and control technologies.

TITLE II—TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION

SEC. 2001. TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION ACT OF 1998 AMENDMENTS.

U.S. Code § 601. Generally applicable provisions

(a) DEFINITIONS.—The following definitions apply to sections 601 through 609:

~~(a)~~ **PROJECT.**—The term “project” means—

- (A) any surface transportation project eligible for Federal assistance under this title or chapter 53 of title 49;
- (B) a project for an international bridge or tunnel for which an international entity authorized under Federal or State law is responsible;
- (C) a project for intercity passenger bus or rail facilities and vehicles, including facilities and vehicles owned by the National Railroad Passenger Corporation and components of magnetic levitation transportation systems;
- (D) a project that—
 - (i) is a project—
 - (I) for a public freight rail facility or a private facility providing public benefit for highway users by way of direct freight interchange between highway and rail carriers;
 - (II) for an intermodal freight transfer facility;
 - (III) for a means of access to a facility described in subclause (I) or (II);
 - (IV) for a service improvement for a facility described in subclause (I) or (II) (including a capital investment for an intelligent transportation system); or
 - (V) that comprises a series of projects described in subclauses (I) through (IV) with the common objective of improving the flow of goods;
 - (ii) may involve the combining of private and public sector funds, including investment of public funds in private sector facility improvements;
 - (iii) if located within the boundaries of a port terminal, includes only such surface transportation infrastructure modifications as are necessary to facilitate direct intermodal interchange, transfer, and access into and out of the port; and
 - (iv) is composed of related highway, surface transportation, transit, rail, or intermodal capital improvement projects eligible for assistance under this section in order to meet the eligible project cost threshold under section 602, by grouping related projects together for that purpose, subject to the condition that the credit assistance for the projects is secured by a common pledge;
- (E) a project to improve or construct public infrastructure that is located within walking distance of, and accessible to, a fixed guideway transit facility, passenger

rail station, intercity bus station, or intermodal facility, including a transportation, public utility, or capital project described in section 5302(3)(G)(v) of title 49, and related infrastructure; and
(F) the capitalization of a rural projects fund.

(G) an eligible airport-related project (as defined in section 40117(a) of title 49) for which, not later than September 30, 2024, the Secretary has—

- (i) received a letter of interest; and
- (ii) determined that the project is eligible for assistance; and

(H) a project for the acquisition of plant and wildlife habitat pursuant to a conservation plan that—

- (i) has been approved by the Secretary of the Interior pursuant to section 10 of the Endangered Species Act of 1973 (16 U.S.C. 1539); and
- (ii) in the judgment of the Secretary, would mitigate the environmental impacts of transportation infrastructure projects otherwise eligible for assistance under this title.

49 U.S. Code § 70102. National freight strategic plan

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this section, the Under Secretary of Transportation for Policy shall—

- (1) develop a national freight strategic plan in accordance with this section; and
- (2) publish the plan on the public Internet Web site of the Department of .

(b) CONTENTS.—The national freight strategic plan shall include—

- (1) an assessment of the condition and performance of the National Multimodal Freight Network established under section 70103;
- (2) forecasts of freight volumes for the succeeding 5-, 10-, and 20-year periods;
- (3) an identification of major trade gateways and national freight corridors that connect major population centers, trade gateways, and other major freight generators;
- (4) an identification of bottlenecks on the National Multimodal Freight Network that create significant freight congestion, based on a quantitative methodology developed by the Under Secretary, which shall include, at a minimum—
 - (A) information from the Freight Analysis Framework of the Federal Highway Administration; and
 - (B) to the maximum extent practicable, an estimate of the cost of addressing each bottleneck and any operational improvements that could be implemented;
- (5) an assessment of statutory, regulatory, technological, institutional, financial, and other barriers to improved freight transportation performance, and a description of opportunities for overcoming the barriers;
- (6) a process for addressing multistate projects and encouraging jurisdictions to collaborate;
- (7) strategies to improve freight intermodal connectivity;
- (8) an identification of corridors providing access to energy exploration, development, installation, or production areas;
- (9) an identification of corridors providing access to major areas for manufacturing, agriculture, or natural resources;
- (10) an identification of best practices for improving the performance of the National Multimodal Freight Network, including critical commerce corridors and rural and urban access to critical freight corridors; ~~and~~
- (11) an identification of best practices to mitigate the impacts of freight movement on

communities;

(12) possible strategies to increase the resilience of the freight system, including the ability to anticipate, prepare for, or adapt to conditions, or withstand, respond to, or recover rapidly from disruptions, including extreme weather and natural disasters;

(13) strategies to promote United States economic growth and international competitiveness; and

(14) strategies to reduce local air pollution, water runoff, and wildlife habitat loss..

49 U.S. Code § 70202. State freight plans

(b) PLAN CONTENTS.-A State freight plan described in subsection (a) shall include, at a minimum-

(1) an identification of significant freight system trends, needs, and issues with respect to the State;

(2) a description of the freight policies, strategies, and performance measures that will guide the freight-related transportation investment decisions of the State;

(3) when applicable, a listing of-

(A) multimodal critical rural freight facilities and corridors designated within the State under section 70103 of this title; and

(B) critical rural and urban freight corridors designated within the State under section 167 of title 23;

(4) a description of how the plan will improve the ability of the State to meet the national multimodal freight policy goals described in section 70101(b) of this title and the national highway freight program goals described in section 167 of title 23;

(5) a description of how innovative technologies and operational strategies, including freight intelligent transportation systems, that improve the safety and efficiency of freight movement, were considered;

(6) in the case of roadways on which travel by heavy vehicles (including mining, agricultural, energy cargo or equipment, and timber vehicles) is projected to substantially deteriorate the condition of the roadways, a description of improvements that may be required to reduce or impede the deterioration;

(7) an inventory of facilities with freight mobility issues, such as bottlenecks, within the State, and for those facilities that are State owned or operated, a description of the strategies the State is employing to address the freight mobility issues;

(8) consideration of any significant congestion or delay caused by freight movements and any strategies to mitigate that congestion or delay;

(9) a freight investment plan that, subject to subsection (c)(2), includes a list of priority projects and describes how funds made available to carry out section 167 of title 23 would be invested and matched; ~~and~~

(10) the most recent commercial motor vehicle parking facilities assessment conducted under subsection (f);

(11) strategies and goals to decrease—

(A) the severity of impacts of extreme weather and natural disasters on freight mobility;

(B) the impacts of freight on local air pollution;

(C) the impacts of freight on flooding, water runoff, and other adverse water impacts; and

- (D) the impacts of freight on wildlife habitat loss;
- (12) strategies and goals to decrease the adverse impact of freight transportation on communities traversed by freight railroads; and
- ~~(13)~~ consultation with the State freight advisory committee, if applicable.

SEC. 1504. FOREST SERVICE LEGACY ROADS AND TRAILS REMEDIATION PROGRAM.

Public Law 88–657 (16 U.S.C. 532 et seq.) (commonly known as the “Forest Roads and Trails Act”) is amended by adding at the end the following:

Sec. 8. Forest Service Legacy Roads and Trails Remediation Program.

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary, acting through the Chief of the Forest Service, shall establish, and develop a national strategy to carry out, a program, to be known as the ‘Forest Service Legacy Roads and Trails Remediation Program’, within the National Forest System, to carry out critical maintenance and urgent repairs and improvements on National Forest System roads, trails, and bridges.

(b) PRIORITY.—In implementing the program under this section, the Secretary may give priority to any project that protects or restores—

- (1) water quality;
- (2) a watershed that feeds a public drinking water system;
- (3) important wildlife habitat, as determined by the Secretary, in consultation with each affected State, including habitat of threatened, endangered, or sensitive fish or wildlife species; or
- (4) historic public access for authorized multiple uses of National Forest System land in accordance with the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528 et seq.), including grazing, recreation, hunting, fishing, forest management, wildfire mitigation, and ecosystem restoration.

(c) NATIONAL FOREST SYSTEM.—Except as authorized under section 323 of the Department of the Interior and Related Agencies Appropriations Act, 1999 (16 U.S.C. 1011a), each project carried out under this section shall be on a National Forest System road or trail.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this section \$50,000,000 for each of fiscal years 2021 through 2025, to remain available until expended.

For a full text of the bill, as amended, click [here](#).