§ 109. Standards

(a) In General.—The Secretary shall ensure that the plans and specifications for each proposed highway project under this chapter provide for a facility that will—

(1) adequately serve the existing and planned future traffic of the highway in a manner that is conducive to safety, durability, and economy of maintenance; and

(2) be designed and constructed in accordance with criteria best suited to accomplish the objectives described in paragraph (1) and to conform to the particular needs of each locality.

(b) The geometric and construction standards to be adopted for the Interstate System shall be those approved by the Secretary in cooperation with the State transportation departments. Such standards, as applied to each actual construction project, shall be adequate to enable such project to accommodate the types and volumes of traffic anticipated for such project for the twenty-year period commencing on the date of approval by the Secretary, under section 106 of this title, of the plans, specifications, and estimates for actual construction of such project. Such standards shall in all cases provide for at least four lanes of traffic. The right-of-way width of the Interstate System shall be adequate to permit construction of projects on the Interstate System to such standards. The Secretary shall apply such standards uniformly throughout all the States.

(c) Design Criteria for National Highway System.—

(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) any other material that the Secretary determines to be appropriate.

(d) On any highway project in which Federal funds hereafter participate, or on any such project constructed since December 20, 1944, the location, form and character of informational, regulatory and warning signs, curb and pavement or other markings, and traffic signals installed or placed by any public authority or other agency, shall be subject to the approval of the State transportation department with the concurrence of the Secretary, who is directed to concur only in such installations as will promote the safe and efficient utilization of the highways.

(e) Installation of Safety Devices.—

(1) Highway and Railroad Grade Crossings and Drawbridges.—No funds shall be approved for expenditure on any Federal-aid highway, or highway affected under chapter 2 of this title, unless proper safety protective devices complying with safety standards determined by the Secretary at that time as being adequate shall be installed or be in operation at any highway and railroad grade crossing or drawbridge on that portion of the highway with respect to which such expenditures are to be made.

(2) Temporary Traffic Control Devices.—No funds shall be approved for expenditure on any Federal-aid highway, or highway affected under chapter 2, unless proper temporary traffic control devices to improve safety in work zones will be installed and maintained during construction, utility, and maintenance operations on that portion of the highway with respect to which such expenditures are to be made. Installation and maintenance of the devices shall be in accordance with the Manual on Uniform Traffic Control Devices.

(f) The Secretary shall not, as a condition precedent to his approval under section 106 of this title, require any State to acquire title to, or control of, any marginal land along the pro-
posed highway in addition to that reasonably necessary for road surfaces, median strips, bike-
ways, pedestrian walkways, gutters, ditches, and side slopes, and of sufficient width to provide
service roads for adjacent property to permit safe access at controlled locations in order to
 expedite traffic, promote safety, and minimize roadside parking.

(g) Not later than January 30, 1971, the Secre-
try shall issue guidelines for minimizing pos-
sible soil erosion from highway construction.
Such guidelines shall apply to all proposed
projects with respect to which plans, specifi-
cations, and estimates are approved by the Secre-
tary after the issuance of such guidelines.

(h) Not later than July 1, 1972, the Secretary,
after consultation with appropriate Federal and
State officials, shall submit to Congress, and
not later than 90 days after such submission,
promulgate guidelines designed to assure that
possible adverse economic, social, and environ-
mental effects relating to any proposed project
on any Federal-aid system have been fully con-
sidered in developing such project, and that the
final decisions on the project are made in the
best overall public interest, taking into consid-
eration the need for fast, safe and efficient
transportation, public services, and the costs of
eliminating or minimizing such adverse effects
and the following:

(1) air, noise, and water pollution;

(2) destruction or disruption of man-made
and natural resources, aesthetic values, com-
munity cohesion and the availability of public
facilities and services;

(3) adverse employment effects, and tax and
property value losses;

(4) injurious displacement of people, busi-
nesses and farms; and

(5) disruption of desirable community and
regional growth.

Such guidelines shall apply to all proposed proj-
ects with respect to which plans, specifications,
and estimates are approved by the Secretary
after the issuance of such guidelines.

(i) The Secretary, after consultation with ap-
propriate Federal, State, and local officials,
shall develop and promulgate standards for
highway noise levels compatible with different
land uses and after July 1, 1972, shall not ap-
prove plans and specifications for any proposed
project on any Federal-aid system for which lo-
cation approval has not yet been secured unless
he determines that such plans and specifications
include adequate measures to implement the ap-
propriate noise level standards. The Secretary,
after consultation with the Administrator of the
Environmental Protection Agency and appro-
priate Federal, State, and local officials, may
promulgate standards for the control of highway
noise levels for highways on any Federal-aid
system for which project approval has been se-
cured prior to July 1, 1972. The Secretary may
approve any project on a Federal-aid system to
which noise-level standards are made applicable
under the preceding sentence for the purpose of
carrying out such standards. Such project may
include, but is not limited to, the acquisition of
additional rights-of-way, the construction of
physical barriers, and landscaping. Sums ap-
portioned for the Federal-aid system on which such
project will be located shall be available to fi-
nance the Federal share of such project. Such
project shall be deemed a highway project for all
purposes of this title.

(j) The Secretary, after consultation with the
Administrator of the Environmental Protection
Agency, shall develop and promulgate guidelines
to assure that highways constructed pursuant to
this title are consistent with any approved plan
for—

(1) the implementation of a national ambient
air quality standard for each pollutant for
which an area is designated as a nonattain-
ment area under section 107(d) of the Clean Air
Act (42 U.S.C. 7407(d)); or

(2) the maintenance of a national ambient
air quality standard in an area that was des-
ignated as a nonattainment area but that was
later redesignated by the Administrator as an
attainment area for the standard and that is
required to develop a maintenance plan under
section 175A of the Clean Air Act (42 U.S.C.
7556a).

(k) The Secretary shall not approve any proj-
ect involving approaches to a bridge under this
title, if such project and bridge will signifi-
cantly affect the traffic volume and the highway
system of a contiguous State without first tak-
ing into full consideration the views of that
State.

(l) In determining whether any right-of-way
on any Federal-aid highway should be used for
accommodating any utility facility, the Secre-
tary shall—

(A) first ascertain the effect such use will
have on highway and traffic safety, since in no
case shall any use be authorized or otherwise
permitted, under this or any other provision of
law, which would adversely affect safety;

(B) evaluate the direct and indirect environ-
mental and economic effects of any loss of pro-
ductive agricultural land or any impairment
of the productivity of any agricultural land
which would result from the disapproval of the
use of such right-of-way for the accommo-
dation of such utility facility; and

(C) consider such environmental and eco-
nomic effects together with any interference
with or impairment of the use of the highway
in such right-of-way which would result from
the use of such right-of-way for the accom-
dation of such utility facility.

(2) For the purpose of this subsection—

(A) the term “utility facility” means any
privately, publicly, or cooperatively owned
line, facility, or system for producing, trans-
mitting, or distributing communications,
power, electricity, light, heat, gas, oil, crude
products, water, steam, waste, storm water
not connected with highway drainage, or any
other similar commodity, including any fire
or police signal system or street lighting system,
which directly or indirectly serves the public;

(B) the term “right-of-way” means any real
property, or interest therein, acquired, dedi-
cated, or reserved for the construction, oper-
ation, and maintenance of a highway.

(m) PROTECTION OF NONMOTORIZED TRANSPOR-
TATION TRAFFIC.—The Secretary shall not ap-
prove any project or take any regulatory action under this title that will result in the severance of an existing major route or have significant adverse impact on the safety for nonmotorized transportation traffic and light motorcycles, unless such project or regulatory action provides for a reasonable alternate route or such a route exists.

(n) It is the intent of Congress that any project for resurfacing, restoring, or rehabilitating any highway, other than a highway access to which is fully controlled, in which Federal funds participate shall be constructed in accordance with standards to preserve and extend the service life of highways and enhance highway safety.

(o) Compliance With State Laws for NON-NHS Projects.—Projects (other than highway projects on the National Highway System) shall be designed, constructed, operated, and maintained in accordance with State laws, regulations, directives, safety standards, design standards, and construction standards.

(p) Scenic and Historic Values.—Notwithstanding subsections (b) and (c), the Secretary may not approve a project for the National Highway System if the project is designed to—

(1) allow for the preservation of environmental, scenic, or historic values;

(2) ensure safe use of the facility; and

(3) comply with subsection (a).

(q) Phase Construction.—Safety considerations for a project under this title may be met by phase construction consistent with the operative safety management system established in accordance with a statewide transportation improvement program approved by the Secretary.

(r) Pavement Markings.—The Secretary shall not approve any pavement markings project that includes the use of glass beads containing more than 200 parts per million of arsenic or lead, as determined in accordance with Environmental Protection Agency testing methods 3052, 6010B, or 6010C.

(Amendments)

Subsec. (j). Pub. L. 104–59, §305(a), substituted “plan for—” and pars. (1) and (2) for “plan for the implementation of any ambient air quality standard for any air quality control region designated pursuant to the Clean Air Act, as amended.”

Subsec. (q). Pub. L. 104–59, §304(3), added subsec. (q) and struck out former subsec. (q) which read as follows:

“(q) HISTORIC AND SCENIC VALUES.—If a proposed project under sections 103(e)(4), 133, or 144 involves a historic or scenic value, the Secretary may approve such project notwithstanding the requirements of subsections (a) and (b) of this section and section 133(c) if such project is designed to standards that allow for the preservation of such historic or scenic value and such project is designed with mitigation measures to allow preservation of such value and ensure safe use of the facility.”


Subsec. (c). Pub. L. 102–240, §1016(c), amended subsec. (c) generally. Prior to amendment, subsec. (c) read as follows: “Projects on the Federal-aid secondary system in which Federal funds participate shall be constructed according to specifications that will provide all-weather service and permit maintenance at a reasonable cost.”


Subsecs. (p), (q), Pub. L. 102–240, §1016(d), (e), added subsecs. (p) and (q).


Subsec. (m). Pub. L. 95–599, §116(d), added subsec. (m).

Subsec. (n). Pub. L. 95–599, §114(g), added subsec. (n).


Subsec. (i). Pub. L. 93–87, §114, authorized promulgation of noise-level standards for highways on any Federal-aid system for which project approval has been secured prior to July 1, 1972, and approval of any project on a Federal-aid system to which noise-level standards are made applicable, described the range of the projects, made money available for financing Federal share of the project, and deemed such project a highway project for all purposes of this title.


1970—Subsec. (g). Pub. L. 91–605, §136(a), substituted provisions ordering the Secretary to issue within 30 days after Dec. 31, 1970, guidelines, which will apply to all proposed projects approved by the Secretary after their issuance, for minimizing soil erosion from highway construction for provisions authorizing the Secretary to consult with the Secretary of Agriculture respecting guidelines for minimizing soil erosion from highway construction and report such guidelines to Congress not later than July 1, 1967.

Subsecs. (h) to (j). Pub. L. 91–605, §136(b), added subsec. (h) to (j).

1966—Subsec. (b). Pub. L. 89–574, §5(a), required that in all cases the standards provide for at least four lanes of traffic.

Subsec. (g). Pub. L. 89–574, §14, added subsec. (g).

1963—Subsec. (b). Pub. L. 88–157 substituted “Such standards, as applied to each actual construction project, shall be adequate to enable such project to accommodate the types and volumes of traffic anticipated for such project for the twenty-year period commencing on the date of approval by the Secretary, under section 106 of this title, of the plans, specifications, and estimates for actual construction of such project” for “Such standards shall be adequate to accommodate the types and volumes of traffic forecast for the year 1975”, struck out “up” before “to such standards” and inserted “all” in phrase “throughout all the States”.

Effective Date of 2015 Amendment


Effective Date of 2012 Amendment


Effective Date of 1991 Amendment


Retractive Application of Adjustment to Criteria for Categorical Exclusion for Projects of Limited Federal Assistance


“(1) be carried out not later than 60 days after the date of enactment of this Act [Dec. 4, 2015]; and

“(2) reflect the increase in the Consumer Price Index since July 1, 2012.”

Categorical Exclusion Determinations

Pub. L. 114–94, div. A, title I, §1315(b), Dec. 4, 2015, 129 Stat. 1403, provided that: “Not later than 30 days after the date of enactment of this Act [Dec. 4, 2015], the Secretary [of Transportation] shall revise section 771.117(g) of title 23, Code of Federal Regulations, to allow a programmatic agreement under this section [see section 1318(e) of Pub. L. 112–141, set out under this section] to include responsibility for making categorical exclusion determinations—

“(1) for actions described in subsections (c) and (d) of section 771.117 of title 23, Code of Federal Regulations; and

“(2) that meet the criteria for a categorical exclusion under section 1508.4 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act), and are identified in the programmatic agreement.”

Roadway Design Standard Flexibility

Pub. L. 114–94, div. A, title I, §1404(b), Dec. 4, 2015, 129 Stat. 1409, provided that: “Notwithstanding section 109(c) of title 23, United States Code, a State may allow a local jurisdiction to use a roadway design publication that is different from the roadway design publication used by the State in which the local jurisdiction is located for the design of a project on a roadway under the ownership of the local jurisdiction (other than a highway on the Interstate System) if—

“(1) the local jurisdiction is a direct recipient of Federal funds for the project;

“(2) the roadway design publication—

“(A) is recognized by the Federal Highway Administration; and

“(B) is adopted by the local jurisdiction; and

“(3) the design complies with all other applicable Federal laws.”
EMERGENCY EXEMPTIONS

“(a) IN GENERAL.—Any road, highway, railway, bridge, or transit facility that is damaged by an emergency that is declared by the Governor of the State, with the concurrence of the Secretary of Homeland Security, or declared as an emergency by the President pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), and that is in operation or under construction on the date on which the emergency occurs may be reconstructed in the same location with the same capacity, dimensions, and design as before the emergency subject to the exemptions and expedited procedures under subsection (b).

“(b) EXEMPTIONS AND EXPEDITED PROCEDURES.—

“(1) ALTERNATIVE ARRANGEMENTS.—Alternative arrangements for an emergency under section 1506.11 of title 49, Code of Federal Regulations (as in effect on the date of enactment of this Act [Dec. 4, 2015]) shall apply to reconstruction under subsection (a), and the reconstruction shall be considered necessary to control the immediate impacts of the emergency.

“(2) STORMWATER DISCHARGE PERMITS.—A general permit for stormwater discharges from construction activities, if available, issued by the Administrator of the Environmental Protection Agency or the director of a State program under section 402(p) of the Federal Water Pollution Control Act (33 U.S.C. 1342(p)), as applicable, shall apply to reconstruction under subsection (a), on submission of a notice of intent to be subject to the permit.

“(3) EMERGENCY PROCEDURES.—The emergency procedures for issuing permits in accordance with section 325.2(e)(4) of title 33, Code of Federal Regulations (as in effect on the date of enactment of this Act) shall apply to reconstruction under subsection (a), and the reconstruction shall be considered an emergency under that regulation.

“(4) NATIONAL HISTORIC PRESERVATION ACT EXEMPTION.—Reconstruction under subsection (a) is eligible for an exemption from the requirements of the National Historic Preservation Act of 1966 [Pub. L. 89–665, see Tables for classification] pursuant to part 78 of title 36, Code of Federal Regulations (as in effect on the date of enactment of this Act).

“(5) ENDANGERED SPECIES ACT EXEMPTION.—An exemption from the requirements of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) pursuant to section 7(p) of that Act (16 U.S.C. 1538(p)) shall apply to reconstruction under subsection (a) and, if the President makes the determination required under section 7(p) of that Act, the determinations required under subsections (g) and (h) of that section shall be deemed to be made.

“(6) EXPEDITED CONSULTATION UNDER ENDANGERED SPECIES ACT.—Expedited consultation pursuant to section 402.05 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act) shall apply to reconstruction under subsection (a).

“(7) OTHER EXEMPTIONS.—Any reconstruction that is exempt under paragraph (5) shall also be exempt from requirements under—

“(A) the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.);

“(B) the Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.); and

“(C) the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.)."

SAFETY FOR USERS

“(a) IN GENERAL.—The Secretary of Transportation shall—

“(1) not later than 180 days after the date of enactment of this Act [see section 3(a), (b) of Pub. L. 114–94, set out as Effective and Termination Dates of 2012 Amendment notes under section 101 of this title], develop and implement a program to address the safety of operations and reconstruction activities.

“(b) REPORT.—Not later than 2 years after the date of enactment of this Act [Dec. 4, 2015], the Secretary shall report to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on the development and implementation of the program described in subsection (a).

“CATEGORICAL EXCLUSIONS IN EMERGENCIES

“(a) IN GENERAL.—Not later than 30 days after the date of enactment of this Act (see section 3(a), (b) of Pub. L. 112–141, set out as Effective and Termination Dates of 2012 Amendment notes under section 101 of this title), the Secretary of Transportation shall—

“(1) in the same location with the same capacity, dimensions, and design as the original road, highway, or bridge as before the declaration described in this section; and

“(2) commenced within a 2-year period beginning on the date of a declaration described in this section.

“(b) RULEMAKING.—

“(1) IN GENERAL.—The Secretary of Transportation shall ensure that the rulemaking helps to—

“(A) help protect public safety and health by providing for periodic evaluations to determine if reasonable alternatives exist to roads, highways, or bridges that repeatedly require repair and reconstruction activities;

“(B) conserve Federal resources and protect public safety and health by providing for periodic evaluations to determine if reasonable alternatives exist to roads, highways, or bridges that repeatedly require repair and reconstruction activities.

“(2) REASONABLE ALTERNATIVES.—The reasonable alternatives described in paragraph (1) include actions that could reduce the need for Federal funds to be expended on such repair and reconstruction activities, better protect public safety and health and the environment, and meet transportation needs as described in relevant and applicable Federal, State, local, and tribal plans.”

CATEGORICAL EXCLUSIONS FOR PROJECTS WITHIN THE RIGHT-OF-WAY

“(a) IN GENERAL.—The Secretary of Transportation shall—

“(1) not later than 30 days after the date of enactment of this Act (see section 3(a), (b) of Pub. L. 112–141, set out as Effective and Termination Dates of 2012 Amendment notes under section 101 of this title), identify any project described in section 23 of title 23, United States Code) within an existing operational right-of-way as an action categorically ex-
cluded from the requirements relating to environmental assessments or environmental impact statements under section 1508.4 of title 40, Code of Federal Regulations, and section 771.117(c) of title 23, Code of Federal Regulations; and

(2) not later than 150 days after the date of enactment of this Act, promulgate regulations to carry out paragraph (1).

(b) Definition of an Operational Right-of-Way.—In this section, the term ‘operational right-of-way’ means all real property interests acquired for the construction, operation, or mitigation of a project (as defined in section 101(a) of title 23, United States Code), including the locations of the roadway, bridges, interchanges, culverts, drainage, clear zone, traffic control signage, landscaping, and any rest areas with direct access to a controlled access highway.

Categorical Exclusion for Projects of Limited Federal Assistance


(1) designate as an action categorically excluded from the requirements relating to environmental assessments or environmental impact statements under section 1508.4 of title 40, Code of Federal Regulations, and section 771.117(c) of title 23, Code of Federal Regulations, any project—

(A) that receives less than $5,000,000 (as adjusted annually by the Secretary to reflect any increases in the Consumer Price Index prepared by the Department of Labor) of Federal funds; or

(B) with a total estimated cost of not more than $30,000,000 (as adjusted annually by the Secretary to reflect any increases in the Consumer Price Index prepared by the Department of Labor) and Federal funds comprising less than 15 percent of the total estimated project cost; and

(2) not later than 150 days after the date of enactment of this Act, promulgate regulations to carry out paragraph (1).

Programmatic Agreements and Additional Categorical Exclusions


(1) survey the use by the Department [of Transportation] of categorical exclusions in transportation projects since 2005;

(2) publish a review of the survey that includes a description of—

(A) the types of actions categorically excluded; and

(B) any requests previously received by the Secretary for new categorical exclusions; and

(3) solicit requests from State departments of transportation, transit authorities, metropolitan planning organizations, or other government agencies for new categorical exclusions.

(b) New Categorical Exclusions.—Not later than 120 days after the date of enactment of this Act, the Secretary shall publish a notice of proposed rulemaking to propose new categorical exclusions received by the Secretary under subsection (a), to the extent that the categorical exclusions meet the criteria for a categorical exclusion under section 1508.4 of title 40, Code of Federal Regulations, and section 771.117(a) of title 23, Code of Federal Regulations (as those regulations are in effect on the date of the notice).

(c) Additional Actions.—The Secretary shall issue a proposed rulemaking to move the following types of actions from subsection (d) of section 771.117 of title 23, Code of Federal Regulations (as in effect on the date of enactment of this Act), to subsection (c) of that section, to the extent that such movement complies with the criteria for a categorical exclusion under section 1508.4 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act):

(1) Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing).

(2) Highway safety or traffic operations improvement projects, including the installation of ramp metering control devices and lighting.

(3) Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.

(d) Programmatic Agreements.—

(1) In General.—The Secretary shall seek opportunities to enter into programmatic agreements with the States that establish efficient administrative procedures for carrying out environmental and other required project reviews.

(2) Inclusions.—Programmatic agreements authorized under paragraph (1) may include agreements that allow a State to determine on behalf of the Federal Highway Administration whether a project is categorically excluded from the preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(3) Determinations.—An agreement described in paragraph (2) may include determinations by the Secretary [of Transportation] of the types of projects categorically excluded (consistent with section 1508.4 of title 40, Code of Federal Regulations) in the State in addition to the types listed in subsections (c) and (d) of section 771.117 of title 23, Code of Federal Regulations (as in effect on the date of enactment of this Act).

(e) Programmatic Agreement Template.—

(1) In General.—The Secretary [of Transportation] shall develop a template programmatic agreement described in subsection (d) that provides for efficient and adequate procedures for evaluating Federal actions described in section 771.117(c) of title 23, Code of Federal Regulations (as in effect on the date of enactment of this subsection [Dec. 4, 2015]).

(2) Use of Template.—The Secretary [of Transportation] shall—

(A) on receipt of a request from a State, shall use the template programmatic agreement developed under paragraph (1) in carrying out this section; and

(B) on consent of the applicable State, may modify the template as necessary to address the unique needs and characteristics of the State.

(3) Outcome Measurements.—The Secretary shall establish a method to verify that actions described in section 771.117(c) of title 23, Code of Federal Regulations (as in effect on the date of enactment of this subsection), are evaluated and documented in a consistent manner by the State that uses the template programmatic agreement under this subsection.’’
not be considered a substitute for engineering judgment.”

HIGHWAY SIGNS RELATING TO VETERANS CEMETERIES

“(a) IN GENERAL.—Notwithstanding the terms of any agreement entered into by the Secretary of Transportation and a State under section 109(d) or 402(a) of title 23, United States Code, a veterans cemetery shall be treated as a site for which a supplemental guide sign may be placed on any Federal-aid highway.

“(b) APPLICABILITY.—Subsection (a) shall apply to an agreement entered into before, on, or after the date of the enactment of this Act [May 29, 2003].”

INTERNATIONAL ROUGHNESS INDEX

“(1) STUDY.—The Comptroller General of the United States shall conduct a study on the international roughness index that is used as an indicator of pavement quality on the Federal-aid highway system.

“(2) REQUIRED ELEMENTS.—The study shall specify the extent of usage of the index and the extent to which the international roughness index measurement is reliable across different manufacturers and types of pavement.

“(3) REPORT TO CONGRESS.—Not later than 2 years after the date of enactment of this Act [June 9, 1998], the Comptroller General shall submit to Congress a report on the results of the study.”

ENVIRONMENTAL STREAMLINING

ROADSIDE SAFETY TECHNOLOGIES

“(1) CRASH CUSHIONS.—

“(1) GUIDANCE.—Not later than 18 months after the date of enactment of this Act [June 9, 1998], the Secretary shall issue guidance regarding the benefits and safety performance of redirecive and nonredirecive crash cushions in different road applications, taking into consideration roadway conditions, operating speed limits, the location of the crash cushion in the right-of-way, and any other relevant factors. The guidance shall include recommendations on the most appropriate circumstances for utilization of redirecive and nonredirecive crash cushions.

“(2) USE OF GUIDANCE.—States shall use the guidance issued under this subsection in evaluating the safety and cost-effectiveness of utilizing different crash cushion designs and determining whether re- direcive or nonredirecive crash cushions or other safety appurtenances should be installed at specific highway locations.

“(b) TRAFFIC FLOW AND SAFETY APPLICATIONS OF ROAD BARRIERS.—

“(1) STUDY.—The Secretary shall conduct a study on the technologies and methods to enhance safety, streamline construction, and improve capacity by providing positive separation at all times between traffic, equipment, and workers on highway construction projects. The study shall also address how such technologies can be used to improve capacity and safety at those specific highway, bridge, and other appropriate locations where reversible lane, contraflow, and high occupancy vehicle lane operations are implemented during peak traffic periods.

“(2) USES TO CONSIDER.—In conducting the study, the Secretary shall consider, at a minimum, uses of positive separation technologies related to—

“(A) separating workers from traffic flow when work is in progress;

“(B) providing additional safe work space by utilizing adjacent and available traffic lanes during off-peak hours;

“(C) rapid deployment to allow for daily or periodic restoration of lanes for use by traffic during peak hours as needed;

“(D) mitigating congestion caused by construction by—

“(i) opening all adjacent and available lanes to traffic during peak traffic hours; or

“(ii) using reversible lanes to optimize capacity of the highway by adjusting to directional traffic flow; and

“(E) permanent use of positive separation technologies to create contraflow or reversible lanes to increase the capacity of congested highways, bridges, and tunnels.

“(3) REPORT.—Not later than 18 months after the date of enactment of this Act [June 9, 1998], the Secretary shall submit to Congress a report on the results of the study. The report shall include findings and recommendations for the use of the technologies referred to in paragraph (2) to provide positive separation on appropriate projects.”

METRIC REQUIREMENTS

“(1) PLACEMENT AND MODIFICATION OF SIGNS.—The Secretary shall not require the States to expend any Federal or State funds to construct, erect, or otherwise place or to modify any sign relating to a speed limit, distance, or other measurement on a highway for the purpose of having such sign establish such speed limit, distance, or other measurement using the metric system.

“(2) OTHER ACTIONS.—The Secretary shall not require that any State use or plan to use the metric system with respect to designing or advertising, or preparing plans, specifications, estimates, or other documents, for a Federal-aid highway project eligible for assistance under title 23, United States Code.

“(3) DEFINITIONS.—In this subsection, the following definitions apply:

“(A) HIGHWAY.—The term ‘highway’ has the meaning such term has under section 101 of title 23, United States Code.

“(B) METRIC SYSTEM.—The term ‘metric system’ has the meaning the term ‘metric system of measurement’ has under section 4 of the Metric Conversion Act of 1975 (15 U.S.C. 205c).”

TYPE II NOISE BARRIERS
Pub. L. 104–59, title III, §339(b), Nov. 28, 1995, 109 Stat. 605, provided that:

“(1) GENERAL RULE.—No funds made available out of the Highway Trust Fund may be used to construct Type II noise barriers (as defined by section 772.5(i) of title 23, Code of Federal Regulations) pursuant to subsections (b) and (1) of section 109 of title 23, United States Code, if such barriers were not part of a project approved by the Secretary before the date of the enactment of this Act [Nov. 28, 1995].

“(2) EXCEPTIONS.—Paragraph (1) shall not apply to construction of Type II noise barriers along lands that were developed or were under substantial construction before approval of the acquisition of the rights-of-ways for, or construction of, the existing highway.”

HIGHWAY SIGNS FOR NATIONAL HIGHWAY SYSTEM
Pub. L. 104–59, title III, §359(b), Nov. 28, 1995, 109 Stat. 626, provided that:

“(1) STUDY.—The Secretary shall conduct a study to determine the cost, need, and efficacy of establishing a
highway sign for identifying routes on the National Highway System. In conducting the study, the Secretary shall make a determination concerning whether to identify National Highway System route numbers.

(2) REPORT.—Not later than March 1, 1997, the Secretary shall transmit to Congress a report on the results of the study.

USE OF RECYCLED PAVING MATERIAL


"(a) ASPHALT PAVEMENT CONTAINING RECYCLED RUBBER DEMONSTRATION PROGRAM.—Notwithstanding any other provision of title 23, United States Code, or regulation or policy of the Department of Transportation, the Secretary (or a State acting as the Department’s agent) may not disapprove a highway project under chapter 1 of title 23, United States Code, on the ground that asphalt pavement containing recycled rubber. Under this subsection, a patented application process for recycled rubber shall be eligible for approval under the same conditions that an unpatented process is eligible for approval.

(2) STUDIES.—

(1) IN GENERAL.—The Secretary and the Administrator of the Environmental Protection Agency shall coordinate and conduct, in cooperation with the States, a study to determine—

"(A) the threat to human health and the environment associated with the production and use of asphalt pavement containing recycled rubber;

"(B) the degree to which asphalt pavement containing recycled rubber can be recycled; and

"(C) the performance of the asphalt pavement containing recycled rubber under various climate and use conditions.

(2) DIVISION OF RESPONSIBILITIES.—The Administrator shall conduct the part of the study relating to paragraph (1)(A) and the Secretary shall conduct the part of the study relating to paragraph (1)(B). The Administrator and the Secretary shall jointly conduct the study relating to paragraph (1)(B).

(3) ADDITIONAL STUDY.—The Secretary and the Administrator, in cooperation with the States, shall jointly conduct a study to determine the economic savings, technical performance qualities, threats to human health and the environment, and environmental benefits of using recycled materials in highway design and appurtenances and highways projects, including asphalt containing over 80 percent reclaimed asphalt, asphalt containing recycled glass, and asphalt containing recycled plastic.

(4) ADDITIONAL ELEMENTS.—In conducting the study under paragraph (3), the Secretary and the Administrator shall examine utilization of various technologies by States and shall examine the current practice of all States relating to the reuse and disposal of materials used in federally assisted highway projects.

(5) REPORT.—Not later than 18 months after the date of the enactment of this Act [Dec. 18, 1991], the Secretary and the Administrator shall transmit to Congress a report on the results of the studies conducted under this subsection, including a detailed analysis of the economic savings and technical performance qualities of using such recycled materials in federally assisted highway projects and the environmental benefits of using such recycled materials in such highway projects in terms of reducing air emissions, conserving natural resources, and reducing disposal of the materials in landfills.

(6) DOT GUIDANCE.—

(1) INFORMATION GATHERING AND DISTRIBUTION.—The Secretary shall gather information and recommendations concerning the use of asphalt containing recycled rubber in highway projects from those States that have extensive experience in the use of such asphalt and implemented such projects and shall make available such information and recommendations on the use of such asphalt to those States which indicate an interest in the use of such asphalt.

(2) ENCOURAGEMENT OF USE.—The Secretary should encourage the use of recycled materials determined to be appropriate by the studies pursuant to subsection (b) in federally assisted highway projects. Procuring agencies shall comply with all applicable guidelines or regulations issued by the Administrator of the Environmental Protection Agency.

(1) CRUMB RUBBER MODIFIER RESEARCH.—Not later than 180 days after the date of the enactment of the National Highway System Designation Act of 1995 [Nov. 28, 1995], the Secretary shall develop testing procedures and conduct research to develop performance grade classifications, in accordance with the strategic highway research program carried out under section 307(d) of title 23, United States Code, for crumb rubber modifier binders. The testing procedures and performance grade classifications should be developed in consultation with representatives of the crumb rubber modifier industry and other interested parties (including the asphalt paving industry) with experience in the development of the procedures and classifications.

(2) CRUMB RUBBER MODIFIER PROGRAM DEVELOPMENT.—

(A) IN GENERAL.—The Secretary may make grants to States to develop programs to use crumb rubber from scrap tires to modify asphalt pavements.

(B) USE OF GRANT FUNDS.—Grant funds made available to States under this paragraph shall be used—

(i) to develop mix designs for crumb rubber modified asphalt pavements;

(ii) for the placement and evaluation of crumb rubber modified asphalt pavement field tests; and

(iii) for the expansion of State crumb rubber modifier programs in existence on the date the grant is made available.

(c) DEFINITIONS.—For purpose of this section—

"(1) the term ‘crumb rubber’ means any mixture of asphalt and crumb rubber derived from whole scrap tires, such that the physical properties of the asphalt are modified through the mixture, for use in pavement maintenance, rehabilitation, or construction applications; and

"(2) the term ‘recycled rubber’ is any crumb rubber derived from processing whole scrap tires or shredded tire material taken from automobiles, trucks, or other equipment owned and operated in the United States."

SURVEY AND REPORT ON UPGRADE OF DESIGN STANDARDS

Pub. L. 102–240, title I, §1049, Dec. 18, 1991, 105 Stat. 2000, directed Secretary to conduct a survey to identify current State standards relating to geometric design, traffic control devices, roadside safety, safety appurtenance design, uniform traffic control devices, and sign legibility and directional clarity for all Federal-aid highways and, not later than 2 years after Dec. 18, 1991, to transmit to Congress a report on the results of the survey and the crashworthiness of traffic lights, traffic signs, guardrails, impact attenuators, concrete barrier treatments, and breakaway utility poles for bridges and roadways currently used by States.

EROSION CONTROL GUIDELINES


(1) DEVELOPMENT.—The Secretary shall develop erosion control guidelines for States to follow in carrying out construction projects funded in whole or in part under this title [see Tables for classification].
“(b) MORE STRINGENT STATE REQUIREMENTS.—Guidelines developed under subsection (a) shall not preempt any requirement made by or under State law if such requirement is more stringent than the guidelines.

“(c) CONSISTENCY WITH OTHER PROGRAMS.—Guidelines developed under subsection (a) shall be consistent with nonpoint source management programs under section 319 of the Federal Water Pollution Control Act [33 U.S.C. 1329] and coastal nonpoint pollution control guidance under section 6217(g) of the Omnibus Budget Reconciliation Act of 1990 [16 U.S.C. 1455q(g)].

ROADSIDE BARRIER TECHNOLOGY


“(a) REQUIREMENT FOR INNOVATIVE BARRIERS.—Not less than 2½ percent of the mileage of new or replacement permanent or temporary crashworthy barriers included in awarded contracts along Federal-aid highways within the boundaries of a State in each calendar year shall be crashworthy safety barriers.

“(b) CERTIFICATION.—Each State shall annually certify to the Secretary its compliance with the requirements of this section.

“(c) DEFINITION OF INNOVATIVE CRASHWORTHY SAFETY BARRIERS.—For purposes of this section, the term ‘innovative crashworthy safety barrier’ means a barrier, other than a guardrail or guldeer, classified by the Federal Highway Administration as ‘experimental’ or that was classified as ‘operational’ before January 1, 1983, and that meets or surpasses the requirements of the National Cooperative Highway Research Program Report 230 for longitudinal barriers.”

ROADSIDE BARRIERS AND SAFETY APPURTENANCES


“(a) INITIATION OF RULEMAKING PROCEEDING.—Not later than 30 days after the date of the enactment of this Act [Dec. 18, 1991], the Secretary shall initiate a rulemaking proceeding to revise the guidelines and establish standards for installation of roadside barriers and other safety appurtences, including longitudinal barriers, end terminals, and crash cushions. Such rulemaking shall reflect state-of-the-art designs, testing, and evaluation criteria contained in the National Cooperative Highway Research Program Report 230, relating to improved standards which provide an enhanced level of crashworthiness performance to accommodate vans, mini-vans, pickup trucks, and 4-wheel drive vehicles.

“(b) FINAL RULE.—Not later than 1 year after the date of the enactment of this Act [Dec. 18, 1991], the Secretary shall complete the rulemaking proceeding initiated under subsection (a), and issue a final rule regarding the implementation of revised guidelines and standards for acceptable roadside barriers and other safety appurtences, including longitudinal barriers, end terminals, and crash cushions. Such revised guidelines and standards shall accommodate vans, mini-vans, pickup trucks, and 4-wheel drive vehicles and shall be applicable to the refurbishment and replacement of existing roadside barriers and safety appurtences as well as to the installation of new roadside barriers and safety appurtences.”

STUDIES RELATING TO ESTABLISHMENT OF STANDARDS FOR RESURFACING, RESTORATION, AND REHABILITATION OF HIGHWAYS AND TO ESTABLISHMENT OF UNIFORM STANDARDS AND CRITERIA FOR TESTING AND INSPECTING HIGHWAYS AND BRIDGES

Pub. L. 97–424, title I, § 110(a), (c), Jan. 6, 1983, 96 Stat. 2105, provided that:

“(b) The Secretary of Transportation shall enter into appropriate arrangements with the National Academy of Sciences (1) to conduct a study of the safety cost-effectiveness of design of geometric data currently in effect for construction and reconstruction of highways, other than highways access to which is fully controlled, to determine the most appropriate minimum standards to apply to resurfacing, restoration, and rehabilitation projects on such highways, which study shall include a study of the cost effectiveness of the hot dip galvanizing process for the installation, repair, or replacement of exposed structural and miscellaneous steel, and (2) to propose standards to preserve and extend the service life of such highways and enhance highway safety. The National Academy of Sciences shall conduct such study in cooperation with the National Transportation Safety Board, the Congressional Budget Office, and the American Association of State Highway and Transportation Officials. Upon completion of such study, the National Academy of Sciences shall submit such study and its proposed standards to the Secretary of Transportation for review. Within ninety days after submission of such standards to the Secretary of Transportation, the Secretary shall submit such study and the proposed standards of the National Academy of Sciences, together with the recommendations of the Secretary, to Congress for approval.

“(c) The Secretary of Transportation is directed to coordinate a study with the National Bureau of Standards, the American Society for Testing and Materials, and other organizations as deemed appropriate, (A) to determine the existing quality of design, construction, products, use, and systems for highways and bridges; (B) to determine the need for uniform standards and criteria for design, processing, products, and applications, including personnel training and implementation of enforcement techniques; and (C) to determine the manpower needs and costs of developing a national system for the evaluation and accreditation of testing and inspection agencies.

“(d) The Secretary shall submit such study to the Congress not later than one year after the date of enactment of this section [Jan. 6, 1983].”

EXPENDITURE OF FEDERAL FUNDS FOR HIGHWAY SIGNS USING METRIC SYSTEM


MODIFICATION OF PROJECT AGREEMENTS TO EFFECTUATE REQUIREMENT OF FOUR-LANES OF TRAFFIC

Authorization to modify projects agreements entered into prior to September 13, 1966, to effectuate the amendment of this section by Pub. L. 89–574 which added the requirement of four-lanes of traffic, see section 5(b) of Pub. L. 89–574, set out as a note under section 106 of this title.


Another section 110 was renumbered section 126 of this title.


EFFECTIVE DATE OF REPEAL

Repeal effective Oct. 1, 2012, see section 3(a) of Pub. L. 112–141, set out as an Effective and Termination Dates of 2012 Amendment note under section 101 of this title.