ties," after "telecommunications," and substituted semicolon for period at end.

Subsec. (h)($\overline{2}$)(P) to (R). Pub. L. 117–58, \$25001(2)(F), added subpars. (P) to (R).

Subsec. (h)(2)(V), (W). Pub. L. 117-58, $\S25001(2)(G)$, added subpars. (V) and (W).

Subsec. (h)(3). Pub. L. 117-58, $\S25001(5)$, added par. (3). Former par. (3) redesignated (5).

Subsec. (h)(3)(A). Pub. L. 117-58, \$25001(3)(A), substituted "section 6503 of title 49" for "section 508".

Subsec. (h)(3)(B). Pub. L. 117-58, §25001(3)(B)(i), inserted "programs and" before "research" in introductory provisions.

Subsec. (h)(3)(B)(iii). Pub. L. 117-58, §25001(3)(B)(ii), substituted "programs, research, and" for "research and".

Subsec. (h)(4). Pub. L. 117–58, §25001(5), added par. (4). Former par. (4) redesignated (6).

Subsec. (h)(5) to (7). Pub. L. 117-58, \$25001(4), redesignated pars. (3) to (5) as (5) to (7), respectively.

2015—Pub. L. 114-94, §1446(a)(14), substituted "sections 512 through 518" for "this chapter" wherever appearing.

Subsec. (h)(4). Pub. L. 114-94, §6007, in introductory provisions, substituted "May 1 of each year" for "February 1 of each year after the date of enactment of the Transportation Research and Innovative Technology Act of 2012" and "make available to the public on a Department of Transportation website" for "submit to Congress".

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE OF 2021 AMENDMENT

Amendment by section 13008(a) of Pub. L. 117–58 effective Oct. 1, 2021, see section 10003 of Pub. L. 117–58, set out as a note under section 101 of this title.

EFFECTIVE DATE OF 2015 AMENDMENT

Amendment by Pub. L. 114-94 effective Oct. 1, 2015, see section 1003 of Pub. L. 114-94, set out as a note under section 5313 of Title 5, Government Organization and Employees.

EFFECTIVE DATE

Section 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

§ 516. Research and development

- (a) IN GENERAL.—The Secretary shall carry out a comprehensive program of intelligent transportation system research and development, and operational tests of intelligent vehicles, intelligent infrastructure systems, and other similar activities that are necessary to carry out this chapter.
- (b) PRIORITY AREAS.—Under the program, the Secretary shall give higher priority to funding projects that—
 - (1) enhance mobility and productivity through improved traffic management, incident management, transit management, freight management, road weather management, toll collection, traveler information, or highway operations systems and remote sensing products;
 - (2) use interdisciplinary approaches to develop traffic management strategies and tools to address multiple impacts of congestion concurrently;
 - (3) address traffic management, incident management, transit management, toll collection traveler information, or highway operations systems;

- (4) incorporate research on the potential impact of environmental, weather, and natural conditions on intelligent transportation systems, including the effects of cold climates;
- (5) enhance intermodal use of intelligent transportation systems for diverse groups, including for emergency and health-related services:
- (6) enhance safety through improved crash avoidance and protection, crash and other notification, commercial motor vehicle operations, and infrastructure-based or cooperative safety systems, including animal detection systems to reduce the number of wildlife-vehicle collisions; or
- (7) facilitate the integration of intelligent infrastructure, vehicle, and control technologies.
- (c) FEDERAL SHARE.—The Federal share payable on account of any project or activity carried out under subsection (a) shall not exceed 80 percent.

(Added Pub. L. 112–141, div. E, title III, §53004(a), July 6, 2012, 126 Stat. 902; amended Pub. L. 117–58, div. A, title III, §13008(b), Nov. 15, 2021, 135 Stat. 641.)

Editorial Notes

AMENDMENTS

2021—Subsec. (b)(6). Pub. L. 117-58 inserted ", including animal detection systems to reduce the number of wildlife-vehicle collisions" after "systems".

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE OF 2021 AMENDMENT

Amendment by Pub. L. 117-58 effective Oct. 1, 2021, see section 10003 of Pub. L. 117-58, set out as a note under section 101 of this title.

EFFECTIVE DATE

Section 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

§ 517. National architecture and standards

- (a) IN GENERAL.—
- (1) DEVELOPMENT, IMPLEMENTATION, AND MAINTENANCE.—In accordance with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note; 110 Stat. 783; 115 Stat. 1241), the Secretary shall develop and maintain a national ITS architecture and supporting ITS standards and protocols to promote the use of systems engineering methods in the widespread deployment and evaluation of intelligent transportation systems as a component of the surface transportation systems of the United States.
- (2) INTEROPERABILITY AND EFFICIENCY.—To the maximum extent practicable, the national ITS architecture and supporting ITS standards and protocols shall promote interoperability among, and efficiency of, intelligent transportation systems and technologies implemented throughout the United States.
- (3) USE OF STANDARDS DEVELOPMENT ORGANIZATIONS.—In carrying out this section, the Secretary shall support the development and