

## 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; 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.)

## 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.

**§ 517. National architecture and standards**

(a) **IN GENERAL.**—

(1) **DEVELOPMENT, IMPLEMENTATION, AND MAINTENANCE.**—In accordance with section

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

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

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

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

(c) **PROVISIONAL STANDARDS.**—

(1) **IN GENERAL.**—If the Secretary finds that the development or balloting of an intelligent transportation system standard jeopardizes the timely achievement of the objectives described in subsection (a), the Secretary may establish a provisional standard, after consultation with affected parties, using, to the maximum extent practicable, the work product of appropriate standards development organizations.

(2) **PERIOD OF EFFECTIVENESS.**—A provisional standard established under paragraph (1) shall be published in the Federal Register and remain in effect until the appropriate standards development organization adopts and publishes a standard.

(d) **CONFORMITY WITH NATIONAL ARCHITECTURE.**—

(1) **In general.**—Except as provided in paragraph (2), the Secretary shall ensure that intelligent transportation system projects carried out using amounts made available from the Highway Trust Fund, including amounts made available to deploy intelligent transportation systems, conform to the appropriate regional ITS architecture, applicable standards, and protocols developed under subsection (a) or (c).

(2) **DISCRETION OF THE SECRETARY.**—The Secretary, at the discretion of the Secretary, may offer an exemption from paragraph (1) for projects designed to achieve specific research objectives outlined in the national intelligent transportation system program plan or the surface transportation research and develop-