

408, was executed by renumbering section 412 as this section as if “and” had read “as”, to reflect the probable intent of Congress.

### [§ 409. Renumbered § 407]

### [§§ 410, 411. Repealed. Pub. L. 112–141, div. C, title I, § 31109(e), (f), July 6, 2012, 126 Stat. 757]

Section 410, added Pub. L. 100–690, title IX, §9002(a), Nov. 18, 1988, 102 Stat. 4521; amended Pub. L. 101–516, title III, §336, Nov. 5, 1990, 104 Stat. 2186; Pub. L. 102–240, title II, §2004(a), Dec. 18, 1991, 105 Stat. 2073; Pub. L. 102–388, title VI, §§601–606, Oct. 6, 1992, 106 Stat. 1569, 1570; Pub. L. 104–59, title III, §324, Nov. 28, 1995, 109 Stat. 591; Pub. L. 105–18, title II, §8003, June 12, 1997, 111 Stat. 195; Pub. L. 105–130, §6(b), Dec. 1, 1997, 111 Stat. 2558; Pub. L. 105–178, title II, §2004(a), June 9, 1998, 112 Stat. 328; Pub. L. 108–88, §6(e)(1), Sept. 30, 2003, 117 Stat. 1120; Pub. L. 108–310, §6(e)(1), Sept. 30, 2004, 118 Stat. 1152; Pub. L. 109–59, title II, §2007(a), (b), Aug. 10, 2005, 119 Stat. 1529; Pub. L. 110–244, title III, §303(c)(2), (3), June 6, 2008, 122 Stat. 1619; Pub. L. 111–147, title IV, §421(f)(1), Mar. 18, 2010, 124 Stat. 85; Pub. L. 112–30, title I, §121(f)(1), Sept. 16, 2011, 125 Stat. 347, related to alcohol-impaired driving countermeasures.

Section 411, added Pub. L. 105–178, title II, §2005(a), June 9, 1998, 112 Stat. 332; amended Pub. L. 110–244, title III, §303(c)(4), June 6, 2008, 122 Stat. 1619, related to State highway safety data improvements.

### Statutory Notes and Related Subsidiaries

#### 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.

#### REPEAL OF PROGRAMS

Pub. L. 112–141, div. C, title I, §31109(a), July 6, 2012, 126 Stat. 756, provided that: “A repeal made by this section [repealing sections 406 to 408, 410, and 411 of this title and repealing provisions set out as notes under sections 402, 403, and 405 of this title] shall not affect amounts apportioned or allocated before the effective date of such repeal [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], provided that such apportioned or allocated funds continue to be subject to the requirements to which such funds were subject under the repealed section as in effect on the day before the date of the repeal.”

### [§ 412. Renumbered § 408]

### CHAPTER 5—RESEARCH, TECHNOLOGY, AND EDUCATION

Sec.	
501.	Definitions.
502.	Surface transportation research, development, and technology.
503.	Research and technology development and deployment.
504.	Training and education.
505.	State planning and research.
[506 to 509.	Repealed.]
510.	Future strategic highway research program.
511.	Multistate corridor operations and management.
512.	National ITS program plan.
513.	Use of funds for ITS activities.
514.	Goals and purposes.
515.	General authorities and requirements.
516.	Research and development.
517.	National architecture and standards.

Sec.	
518.	Vehicle-to-vehicle and vehicle-to-infrastructure communications systems deployment.
519.	Infrastructure development.
520.	Transportation Resilience and Adaptation Centers of Excellence.

### Editorial Notes

#### PRIOR PROVISIONS

A prior chapter 5, added Pub. L. 90–495, §30, Aug. 23, 1968, 82 Stat. 830, consisting of sections 501 to 512, related to highway relocation assistance, prior to repeal by Pub. L. 91–646, title II, §220(a)(10), Jan. 2, 1971, 84 Stat. 1903. See section 4601 et seq. of Title 42, The Public Health and Welfare. For Effective Date of Repeal and Savings Provisions, see sections 221 and 220(b) of Pub. L. 91–646, set out as notes under sections 4601 and 4621, respectively, of Title 42.

#### AMENDMENTS

2021—Pub. L. 117–58, div. A, title III, §13009(b), Nov. 15, 2021, 135 Stat. 644, added item 520.

2015—Pub. L. 114–94, div. A, title VI, §§6010(b), 6019(d)(1)(B), Dec. 4, 2015, 129 Stat. 1568, 1581, struck out item 508 “Transportation research and development strategic planning”, substituted “National ITS program plan” for “National ITS Program Plan” in item 512, and added item 519.

2012—Pub. L. 112–141, div. E, title II, §§52002(b), 52003(b), 52006(b), 52007(b), 52008(b), title III, §§53002(b), 53003(b), 53004(b), 53005(b), 53006(b), July 6, 2012, 126 Stat. 872, 880, 882, 899, 901–903, 905, substituted “Surface transportation research, development, and technology” for “Surface transportation research” in item 502 and “Research and technology development and deployment” for “Technology deployment program” in item 503, struck out items 506 “International highway transportation outreach program”, 507 “Surface transportation environment and planning cooperative research program”, and 509 “National cooperative freight transportation research program”, and added items 514 to 518.

2008—Pub. L. 110–244, title I, §111(b)(2)(B), June 6, 2008, 122 Stat. 1605, amended Pub. L. 109–59, §5210. See 2005 Amendment note below.

2005—Pub. L. 109–59, title V, §5210(c), formerly §5210(d), Aug. 10, 2005, 119 Stat. 1804, as renumbered by Pub. L. 110–244, title I, §111(b)(2)(B), June 6, 2008, 122 Stat. 1605, added item 510.

Pub. L. 109–59, title V, §§5201(a)(2), 5207(c), 5208(b), 5209(c), 5211(c), 5301(b), 5302(b), Aug. 10, 2005, 119 Stat. 1781, 1798, 1799, 1801, 1804, 1805, substituted “RESEARCH, TECHNOLOGY, AND EDUCATION” for “RESEARCH AND TECHNOLOGY” in chapter heading, “Surface transportation environment and planning cooperative research program” for “Surface transportation-environment cooperative research program” in item 507, “Transportation research and development strategic planning” for “Surface transportation research strategic planning” in item 508, and added items 509 and 511 to 513.

### § 501. Definitions

In this chapter, the following definitions apply:

(1) **FEDERAL LABORATORY.**—The term “Federal laboratory” includes a Government-owned, Government-operated laboratory and a Government-owned, contractor-operated laboratory.

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

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