

Overview of SAFETEA-LU

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users

6-year bill, \$286.4 billion total

- FY 2004 as it was spent
- FY 2005 as it was spent with some modifications
- Most new programs apply to FY 2006, FY 2007, FY 2008, and FY 2009
- Ends September 30, 2009

Highway funding increased by 30%

- Range of benefits - some states receive as low as a 19% increase, some states receive as high as 46% increase

Transit funding increased by 46%

5,700 special projects "earmarked" by the authorizers

Overview of ITS in SAFETEA-LU

This marks a successful "graduation" from TEA-21 where ITS was found primarily in Title V (research). ITS is no longer a special niche program, rather is part of the "mainstream" of transportation funding

ITS can be found in several titles of the law

- Title I - Federal Aid Highways
- Title II - Highway Safety
- Title III - Public Transportation
- Title IV - Motor Carrier Safety
- Title V - Research
- Title VI - Transportation Planning

In addition to the expanded eligibility for ITS deployment, the bill contains a new real-time system management information program that directs the Secretary of Transportation to establish a program to provide, in all states, the capability to monitor in real time the traffic and travel conditions of the major highways in the United States. Throughout the list of 5,700 high priority projects many include ITS either as their main focus or as a secondary component. Beyond that, there are numerous programs that include expanded eligibility for ITS projects, and there remains a healthy ITS research and development program. CVISN and Road Weather Management also received special recognition.

ITS America

ITS in SAFETEA-LU: A Title by Title Review of ITS programs and projects

Title I - Federal Aid Highways

**** Section 1201 ** Real-Time System Management Information Program**

The Secretary shall establish a real-time system management information program to provide, in all states, the capability to monitor, in real-time, the traffic and travel conditions of the major highways in the United States and to share that information to improve the security of surface transportation, to address congestion problems, to support improved response to weather events and surface transportation incidents, and to facilitate national and regional highway traveler information.

- Includes establishment of data format standards/guidelines within 2 years
- Includes adding real-time system management information to Regional Architectures currently mandated in Title 23
- Includes mandating States to use the standardized data exchange format
- Can use funds from NHS, CMAQ, and STP
- Still open to some interpretation by the Administration

**** Section 1401 ** Highway Safety Improvement Program**

A comprehensive \$5.1 billion roadway safety program is created under this section. Up to 10% may be transferred to carry out safety projects under another section only if the State has met all needs related to highway safety improvement projects and rail-hwy crossings.

- Includes installation of priority control system for emergency vehicles at signalized intersections
- Includes planning, integration interoperable emergency communications equipment, operational activities, or traffic enforcement activities (including police assistance) relating to workzone safety.

**** Section 1604 ** Tolling**

Section 1604(b) creates a new "Express Lanes Demonstration Program," limited to 15 projects during FY 2005 through FY 2009.

- Subsection (b)(5) requires tolls to be collected only through the use of non-cash electronic technology. Variable pricing is required for tolled HOV lanes and optional for other lanes. The Secretary is also directed to adopt a rule specifying standards for automated toll collection systems implemented under this section.

Section 1604(c) of the Act creates a new pilot program that will permit a State (or an interstate compact of States) to collect tolls on a highway, bridge or tunnel on the Interstate System for the purpose of constructing Interstate highways. This program is limited to three "facilities" on the Interstate System.

- The Selection Criteria includes the State's willingness to develop, manage, and maintain a system that will automatically collect the tolls.

**** Section 1808 ** Addition to CMAQ Eligible Projects**

Expands eligibility of congestion mitigation and air quality funds for advanced truck stop

electrification systems, transportation systems management and operations that reduce congestion and improve air quality, and the purchase of diesel retrofits in most cases.

- Add to definition of eligible projects "transportation systems management and operations that mitigate congestion and improve air quality"

Note: eligibility previously included projects that would establish or operate a traffic monitoring, management, and control facility or program; as well as projects to improve signalization, construct high occupancy vehicle lanes, improve intersections, and implement intelligent transportation system strategies.

**** Section 1919 ** Road User Fees**

This is a \$12,500,000 project with University of Iowa. A long term field test assessing highway use fees based on actual miles traveled.

- Requires use of on-board computers and satellite GPS tracking to calculate actual miles traveled.

**** Section 1943 ** Great Lakes ITS Implementation**

The Secretary shall make grants to the State of Wisconsin to continue intelligent transportation system activities in the corridor serving the Greater Milwaukee, Wisconsin, Chicago, Illinois, and Gary, Indiana, areas, initiated under ITSEA and other areas of the State of Wisconsin.

- There is authorized to be appropriated from the Highway Trust Fund (other than the Mass Transit Account) \$2,000,000 for each of the fiscal years 2006 through 2008, and \$3,000,000 for the fiscal year 2009 to carry out this section.

Special Projects in Title I

Earmarks at least 5,700 projects (not including transit title) totaling nearly \$20 billion.

**** Section 1301 ** Projects of National and Regional Significance**

25 Projects - all large reconstruction or new construction projects - detailed plans not yet reviewed, only project titles so far - based on titles no specific ITS listed but it is very likely that several projects include ITS.

**** Section 1302 ** National Corridors Infrastructure Improvement**

33 Projects - all large reconstruction or new construction projects - many of them multi-state - detailed plans not yet reviewed, only project titles so far - based on titles no specific ITS listed but it is very likely that several projects include ITS.

**** Section 1702 ** High Priority Projects**

5,173 total projects - a wide variety of large and small projects - detailed plans not yet reviewed, only project titles so far. Based on titles there is more than \$140M in specific ITS projects

included, with an additional \$200M in projects that likely include some elements of ITS.

- **EXCLUSIVE!** ITS America's table of Project Titles that specifically mention ITS [\[PDF\]](#)
- Link to full Project List in Sect 1702 [\[PDF\]](#) - large file 12MB]

**** Section 1934 **** Transportation Improvements

465 projects - a wide variety of large and small projects - detailed plans not yet reviewed, only project titles so far. Based on titles there are a few specific ITS projects included. It is likely that many others also include ITS.

- Link to Project List in Sect 1934 [\[PDF\]](#) - large file 1MB]
- \$4,000,000 ITS project in MA
- \$500,000 expand TRANSCOM in NJ

Title II - Highway Safety

**** Section 2001 **** NHTSA Safety Program Authorizations

Authorizes funds for highway safety program grants including the 402 program, research and development, occupant protection incentives, safety belt performance grants, state traffic safety information system improvements, and alcohol-impaired driving countermeasures programs. Also includes the national driver register, high visibility enforcement, motorcyclist safety programs, child safety and booster seat grants, and administrative expenses.

**** Section 2002 **** Highway Safety Programs

Expands language defining a State's highway safety program to include measures that "reduce accidents resulting from unsafe driving behavior (including aggressive or fatigued driving and distracted driving arising from the use of electronic devices in vehicles)."

**** Section 2018 **** Safe Intersections

Includes provision concerning non-qualified traffic signal preemption transmitters - unauthorized sales can result in a fine and up to 1 year in jail; unauthorized use can result in a fine and up to 6 months in jail.

Title III - Public Transportation

**** Section 3011 **** Capital Investment Grants

Includes "small start projects" that are seeking less than \$75 million in section 5309 monies and with a total estimated project cost of less than \$250 million.

- Small Start Project eligibility includes bus arrival and departure signage, intelligent transportation system technology, traffic signal priority, off-board fare collection, and advanced bus technology.

**** Section 3014 **** Research & Development

Includes eligibility for "evaluation of technology of national significance to public transportation..."

**** Section 3026**** Allocations for National Research and Technology Programs

- \$2,000,000 - Northern KY University - research on the application of information technology
- \$2,215,000 - Southeastern Connecticut Advanced Technology Bus Rapid Transit Project
- \$1,860,000 - ITS pilot project with the national consortium on remote sensing in transportation flows at the Ohio State University

**** Section 3043**** Project Authorizations for Fixed Guideway Projects

• A wide variety of large and small projects - detailed plans not yet reviewed, only project titles so far. Based on titles there are several that include light rail system grade crossings and signal pre-emption technology, and it is likely that others might also include travel information systems and other ITS solutions.

**** Section 3044**** Projects for Bus and Bus-Related Facilities

665 total projects - a wide variety of large and small projects - detailed plans not yet reviewed, only project titles so far. Based on titles there is more than \$83M in specific ITS projects included, with an additional \$100M in projects that likely include some elements of ITS.

- **EXCLUSIVE!** ITS America's table of Project Titles that specifically mention ITS [\[PDF\]](#)

Title IV - Motor Carrier Safety

**** Section 4106 **** Motor Carrier Safety Grants

Includes eligibility for "deployment of technology to enhance the efficiency and effectiveness of commercial vehicle safety programs"

**** Section 4111 **** Motor Carrier Research & Technology Program

Includes eligibility for research including means of reducing accidents, injuries and fatalities involving CMVs; improving safety/efficiency of CMVs; improving technology used by enforcement for inspections/CRs; and increasing safety/security of hazmat. Technology development, testing and CMV safety personnel training are eligible expenses.

**** Section 4126 **** Commercial Vehicle Information Systems and Networks (CVISN) Deployment

The program shall advance the technological capability and promote the deployment of intelligent transportation system applications for commercial vehicle operations, including commercial vehicle, commercial driver, and carrier-specific information systems and networks.

Core Deployment Grants

- Maximum aggregate amount per state \$2,500,000
- States that have either completed core deployment or completed deployment before grant funds are expended can use funds for expanded CVISN deployment

Expanded Deployment Grants

- Not to exceed \$1,000,000 per State
State Grant Eligibility
- Have an approved CVISN Program Plan.
- Certify that its CVISN activities are consistent with the National ITS and CVISN architectures and standards and promote interoperability and efficiency to the extent practicable
- Agree to execute interoperability tests developed by FMCSA
Federal Share
- Not to exceed 50 percent of funds from this section, and not to exceed 80 percent from all federal sources (this means 30% of federal funds from other sources can be used for the match up to 80%)

Title V - Research - Subtitle C - Intelligent Transportation Systems Research

**** Section 5101 **** Authorization of Appropriations

Lays out ITS research funding at \$110M for Fiscal Years 2005 through 2009. This represents (on average) a 9% increase from TEA-21. Funds the previous ITS Deployment program are included just for FY 2005 at \$122M, meaning earmarks from last year can be fully executed.

**** Section 5301 **** National ITS Program Plan

Due one year after enactment, updated biennially - viewed by DOT as an "internal" plan to be married with other program plans specified throughout Title V.

**** Section 5302 **** Use of Funds

Includes a ceiling of \$250K per year for outreach, PR, tours, displays - there are several exclusions to this that make it appear open to "alternative interpretation."

**** Section 5303 **** Goals and Purposes

Includes a set of Goals that are nearly identical to TEA-21, and a set of Purposes that have been expanded slightly from TEA-21. This language is intended to give guidance to the Administration in their use of discretionary funding.

Link to Goals and Purposes ([HTML](#)) ([PDF](#))

**** Section 5304 **** Infrastructure Development

Funds for Operational tests - primarily for "the development of intelligent transportation system infrastructure."

**** Section 5305 **** General Authorities and Requirements

Includes scope, policy, cooperation with governmental/private/education entities, consultation with federal officials, technical assistance, transportation planning, information clearinghouse, and advisory committee.

Subsection (h) Advisory Committee - established "internally" by the Secretary, to include no more than 20 members. Includes "representative from a non-profit group representing the intelligent transportation systems industry" - obviously referring to ITS America. Also includes the following

guidance:

- a representative from a State highway department;
- a representative from a local highway department who is not from a metropolitan planning organization;
- a representative from a State, local, or regional transit agency;
- a representative from a metropolitan planning organization;
- a private sector user of intelligent transportation system technologies;
- 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;
- an academic researcher who is a civil engineer;
- an academic researcher who is a social scientist with expertise in transportation issues;
- a representative from a public interest group concerned with safety;
- a representative from a public interest group concerned with the impact of the transportation system on
 - land use and residential patterns; and
 - members with expertise in planning, safety, and operations

**** Section 5306 **** Research & Development

Provides general guidance on areas of priority making sure funding is considered for those project areas.

Link to R&D Priority Areas ([HTML](#)) ([PDF](#))

**** Section 5307 **** National Architecture and Standards

Continues the national architecture and standards programs, with continued emphasis on interoperability, and nationwide conformity with national architecture.

**** Section 5308 **** Road Weather Research & Development Program

Establishes a program funded by a takedown from the research program of \$5,000,000 per year (2006 through 2009) that includes:

- integrating existing observational networks and data management systems for road weather applications;
- improving weather modeling capabilities and forecast tools, such as the road surface and atmospheric interface;
- enhancing mechanisms for communicating road weather information to users, such as transportation officials and the public; and
- integrating road weather technologies into an information infrastructure.

**** Section 5309 **** Centers for Surface Transportation Excellence

A further takedown from the ITS Research program of \$3, 750,000 per year (2006 through 2009), establishing four centers for excellence.

Title V - Research - Other Programs Involving ITS

**** Section 5204 **** Training & Education

Eligibility for NHI and LTAP includes intelligent transportation systems

**** Section 5205 ** State Planning and Research**

Expanded eligibility now includes "the conduct of activities relating to the planning of real-time monitoring elements"

**** Section 5209 ** National Cooperative Freight Transportation Research Program**

Establishes a new program under Title 23 Chapter 5 - to be managed by TRB - for cooperative research programs (just like NCHRP) with funding at \$3,750,000 for each year 2006 through 2009 (plus the eligibility to add other funding sources to the program).

- Includes guidance that research include "the use of technology applications to increase capacity of highway lanes dedicated to truck-only traffic" and "other research areas to identify and address emerging and future research needs related to freight transportation by all modes"

**** Section 5210 ** Future Strategic Highway Research Program**

Establishes a new program under Title 23 Chapter 5 - to be managed by AASHTO and TRB - with funding at \$51,250,000 for each year 2006 through 2009 (plus the eligibility to add other funding sources to the program).

- Renewal of aging highway infrastructure with minimal impact to users of the facilities
- Driving behavior and likely crash causal factors to support improved countermeasures
- Reducing highway congestion due to nonrecurring congestion
- Planning and designing new road capacity to meet mobility, economic, environmental, and community needs

**** Section 5211 ** Multi-State Corridor Operations and Management**

Interstate Route 95 Corridor Coalition Transportation Systems Management And Operations - the Secretary shall make grants under this subsection to States to continue intelligent transportation system management and operations in the Interstate Route 95 Corridor Coalition region initiated under ISTEA.

- \$7,000,000 for each of fiscal years 2005 through 2009 shall be available (take-down from the ITS Research program Subtitle C)

**** Section 5502 ** Surface Transportation Congestion Relief Solutions Research Initiative**

A new program that consists of two separate projects, total funding for program is \$9,000,000 per year (2006-2009). Heavy focus on performance measurement and congestion analysis is included. Additional funding is provided for technology transfer and training.

**** Section 5503 ** Motor Carrier Efficiency Study**

A new research program that includes fuel monitoring and management systems, radio frequency identification technology, electronic manifest systems, and cargo theft prevention. Total funding is \$1,250,000 per year (2006 through 2009).

**** Section 5507 **** Rural Interstate Corridor Communications Study

Project to determine the feasibility of installing fiber optic cable and wireless communication infrastructure along rural interstate corridors. Funding of \$1,000,000 in 2006 and \$2,000,000 in 2007 is available.

- Corridors recommended in the language include: I-90 through rural Wisconsin, southern Minnesota, northern Iowa, and South Dakota; I-20 through Alabama, Mississippi, and northern Louisiana; I-91 through Vermont, New Hampshire, and Massachusetts; and any other rural corridor the Secretary considers appropriate.

**** Section 5508 **** Transportation Technology Innovation and Demonstration Program

The Intelligent Transportation Infrastructure Program, provides up to \$2,000,000 per metropolitan area, encouraging the partnership with a private information provider. Allows Traffic.com to complete projects underway and explore use of uncommitted funds from TEA-21, and opens up competitive bidding for new projects under SAFETEA-LU funding.

Title VI - Transportation Planning

**** Section 6010 **** Environment Review of Activities that Support Deployment of Intelligent Transportation Systems

Not later than one year after enactment the Secretary shall initiate a rulemaking process to establish, to the extent appropriate, categorical exclusions for activities that support the deployment of intelligent transportation infrastructure and systems from the requirement that an environment assessment or an environment impact statement be prepared.