



Appendix O: Funding Sources Overview

OVERVIEW OF FUNDING SOURCES POTENTIALLY AVAILABLE FOR ITS IN CURRENT TEA-21

The largest source of federal funding for ITS is the Transportation Equity Act for the 21st Century (TEA-21), which originally ran through September 30, 2003, and was extended to June 30, 2004 by Executive Order. TEA-21 expands the number of ITS programs eligible for federal funds and extends local control of how that money is used. TEA-21 provides highways and transit with \$217.5 billion over six years (fiscal years 1998 to 2003). ITS projects can qualify for most, if not all, of these funds including operations and maintenance costs. By comparison, TEA-21's predecessor, the Intermodal Surface Transportation Efficiency Act (ISTEA), authorized \$155 billion from 1992-1997, with limited ITS program funding through the FHWA.

TEA-21 is organized to "mainstream" technology in transportation programs and make ITS an everyday tool for state and local governments. This program allows local and state transportation authorities a way to tap a variety of federal transportation funding opportunities. But along with TEA-21's larger funding pool and greater local control of funds, ITS projects and the government entities and companies behind them must compete for funds with more traditional transportation programs, projects and players.

Besides mainstreaming funds for ITS projects, TEA-21 specifically re-authorizes the federal ITS program, and once again directs funds to the FHWA to administer. TEA-21 provides \$1.28 billion for federal ITS programs. Spending goes to two broad categories: ITS standards, research, and operational testing, funded at \$95-110 million annually; and ITS deployment incentives funded at \$101-122 million per year. The two primary deployment funds are the Commercial Vehicle Intelligent Transportation System Infrastructure Deployment Program and the Intelligent Transportation Systems Deployment Incentives Program. Although these are the only two programs that are specifically for ITS deployment, TEA-21 allows ITS projects to compete with other transportation projects under related programs. These are described under the Titles below.

The TEA-21 document is organized into nine titles, six of which describe various types of transportation funding programs. These titles are as follows:

- ◆ Title I: Federal-Aid Highways
- ◆ Title II: Highway Safety
- ◆ Title III: Federal Transit Administration Programs
- ◆ Title IV: Motor Carrier Safety
- ◆ Title V: Transportation Research
- ◆ Title VII: Miscellaneous

Of these titles, three contain programs under which ITS projects would be eligible for funding. Below is a brief description of these funding programs. Details regarding purpose, criteria, distribution of funds, annual value and source of funding information are found in the table at the end of this section.

Title I - Federal-Aid Highways

Section 1106 Federal Aid Systems:

This program provides funding for improvements to rural and urban roads that are part of the National Highway System (NHS), including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used to fund transit improvements in NHS corridors. TEA-21 expands the projects eligible for funding under NHS improvements to such areas as publicly owned bus terminals, infrastructure-based intelligent transportation system capital improvements, and natural habitat mitigation.

Section 1108 Surface Transportation Program:

The Surface Transportation Program (STP) provides flexible funding that may be used by state and local agencies for projects on any federal-aid highway, including the NHS, bridge projects on any public road, transit capital projects, and public bus terminals and facilities. This program has been expanded to include infrastructure-based intelligent transportation system capital improvements.

When TEA-21 was initially enacted, each state was allocated a set amount of money to be used for STP-type projects. The state then allocated the money under each of the sub-programs listed above to the MPO's and Regional Transportation Planning Organizations (RTPO's) in the state. These agencies were responsible for distributing the money to projects based on the six-year transportation plans submitted by the local cities and counties each year.

ITS projects are eligible for funding under all these programs except for the Transportation Enhancement, Bridge Replacement and Rehabilitation and Emergency Relief programs.

Section 1110 Congestion Mitigation and Air Quality Improvement Program:

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program, was continued in TEA-21, providing a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Eligible activities include transit improvements, travel demand management strategies, traffic flow improvements, and public fleet conversions to cleaner fuels. The traffic flow improvements item includes, but is not limited to, signalization upgrades, ITS deployment, traffic signal coordination improvements, and construction of high occupancy vehicle lanes.

Section 1221 Transportation and Community and System Preservations Pilot program:

Through the Transportation and Community and System Preservation Pilot program, state and local governments, and metropolitan planning organizations are eligible for discretionary grants to plan and implement strategies that improve the efficiency of the transportation system; reduce environmental impacts of transportation; reduce the need for

costly future public infrastructure investments; ensure efficient access to jobs, services, and centers of trade; and examine private sector development patterns and investments that support these goals.

Subtitle E – Transportation Infrastructure Finance and Innovation Act:

TEA-21 builds on the innovative financing initiatives begun under ISTEA to leverage federal resources by encouraging private participation in the delivery of surface transportation infrastructure. These initiatives are intended to supplement the traditional federal-aid grant assistance by increasing funding flexibility and program effectiveness. They establish pilot programs to test new finance mechanisms, and they extend or make permanent some of the tools already tested. The Act establishes a new program, under the Transportation Infrastructure Finance and Innovation Act (TIFIA), through which the DOT can provide credit assistance on flexible terms directly to public-private sponsors of major surface transportation projects to assist them in gaining access to the capital markets. ITS projects must cost a minimum of \$30 million and be supported by user charges or other dedicated revenue streams.

Title III - Federal Transit Administration Programs

TEA-21's transit program, authorized at \$41 billion with a guaranteed funding level of \$36 billion, represents at least a 50% increase and – if fully funded – as much as a 70% increase over appropriated funding in the six years of ISTEA. Most ITS projects specifically designated for ITS funding are included in Title V of TEA-21. Transit applications of ITS are covered under various programs within this Title V. However, the definition of capital projects within Title III was expanded under TEA-21 to include transit-related ITS systems, therefore transit ITS projects are also eligible for funding through the urbanized area formula and Major Capital Investment programs described here in Title III.

Section 3007 Urbanized Area Formula Grants:

Under this program, 91.23 percent of the funding is made available to all urbanized areas with a population of 50,000 or more. For urbanized areas with populations less than 200,000, funding may be used for either capital or operating costs at local option and without limitation. For urbanized areas with populations of 200,000 or more, the definition of “capital” has been revised to include preventative maintenance. Operating assistance for these larger areas is no longer an eligible expense. Also, for these larger areas, at least one percent of the funding apportioned to each area must be used for transit enhancement activities such as historic preservation, landscaping, public art, pedestrian access, bicycle access, and enhanced access for persons with disabilities. This program includes transit related ITS elements such as security cameras, preventative maintenance systems, communications and on-board computers.

Title V – Transportation Research

The legislated purposes of the programs under this title are, among others, to expedite integration and deployment, improve regional cooperation and operations planning, develop a capable ITS workforce, and promote innovative use of private resources.

Section 5207 Research and Development:

TEA-21 contains a comprehensive ITS research, development, operational testing, and demonstration program for intelligent vehicles and intelligent infrastructure systems.

This program provides priority for federal funding across five areas:

- ◆ Traffic management, toll collection, traveler information or traffic control systems
- ◆ Crash-avoidance and integration of in-vehicle crash protection technologies
- ◆ Human factors research
- ◆ Integration of intelligent infrastructure, vehicle and control technologies
- ◆ Impact of ITS on environmental, weather and natural conditions

ITS operational tests shall be designed to collect data to permit the objective evaluation of the test results and realize cost-benefit information. The federal share for operational tests and demonstration programs is not to exceed 80 percent.

Section 5208 Intelligent Transportation System Integration Program:

This program was established to accelerate the integration and interoperability of ITS systems in both metropolitan and rural areas, and provides criteria for the selection of projects that will support this goal. These criteria include the demonstration of a strong commitment to cooperation among agencies, jurisdictions, and the private sector, and a commitment to a comprehensive plan of fully integrated intelligent transportation system deployment in accordance with the national ITS architecture and standards. Public-private partnerships are encouraged, including arrangements that generate revenue to offset public investment costs and minimize the relative percentage and amount of federal ITS funding. All ITS Integration Program projects must be part of approved plans and programs developed under applicable statewide and metropolitan transportation planning processes and applicable state air quality implementation plans, as appropriate, at the time federal funds are sought. In addition, funding recipients must demonstrate a commitment to the long-term operations, management and maintenance of the system without continued reliance on federal ITS funding.

Section 5209 Commercial Vehicle ITS Infrastructure Deployment:

The purpose of this program is to improve the safety and productivity of commercial vehicles and drivers, and to reduce the costs associated with commercial vehicle operations and federal and state commercial vehicle regulatory requirements. TEA-21 establishes criteria for identifying priority areas and encourages multi-state cooperation and corridor development to improve the safety of commercial vehicle operations. Activities funded under the Commercial Vehicle Intelligent Transportation Infrastructure Deployment Program should advance the use of technology to increase the efficiency of the regulatory inspection processes, reduce administrative burdens, facilitate commercial vehicle inspections, and generally increase the effectiveness of enforcement efforts. Funds can also be used to enhance the safe passage of commercial vehicles across the United States and across international borders.

Table O-1 provides more detail about these federal programs.

Table O-1. Current TEA-21 ITS Funding Sources

Title	Purpose	Criteria	Distribution of Funds	Value/Application Process	Source Of Information
Federal Aid Systems	Provide funding for improvements to rural and urban roads that are part of the National Highway System (NHS), including the Interstate System and designated connections to major intermodal terminals. Also covers infrastructure-based intelligent transportation systems.	This program can be used to fund the following project types: <ul style="list-style-type: none"> ◆ Natural habitat mitigation ◆ Publicly-owned intra-city and inter-city bus terminals ◆ Infrastructure-based intelligent transportation system capital improvements 	Allocated to each state based on a formula that includes each state's lane-miles of principal arterials (excluding Interstate), vehicle-miles traveled on those arterials, diesel fuel used on the state's highways, and per capita principal arterial lane-miles. Typically this money would be distributed to the MPO's by the state, but instead the state swaps this money with the local agencies and provides them all the STP money granted to the state.	Value: \$14.9 Billion nationally for 2001-2003 Application Process: None	FHWA Website http://www.fhwa.dot.gov/tea21/factsheets/nhs.htm
STP Regional Competitive Program (STPR/STPU)	Improve transportation facilities based on regional priorities.	Projects are considered eligible if on federally functional roads classified above minor rural collectors. All modes of transportation eligible. The final criteria used in the application process are established by the MPO's and RTPOs.	Money for all state STP programs is allocated to each state by the federal government using the same process as discussed for the Federal Aid Systems. The state then distributes the money to the MPO's and RTPO's.		
STP-Statewide Competitive Funds (STPC)	Develop, improve and/or preserve an integrated transportation system that encourages multi-modal choices to the public.	All projects on federally functional roads, above minor rural collector, are eligible.	Selection criteria established by ODOT.	This money has been allocated through 2003.	

Title	Purpose	Criteria	Distribution of Funds	Value/Application Process	Source Of Information
STP Railway-Highway Grade Crossing Program	The objective of these projects is to reduce fatalities, injuries and damages through improved crossings.	The projects must be on local roads and half the available funds shall be designated for installing protective devices. Train activated warning devices that are ITS related would be eligible.			
Congestion Mitigation and Air Quality (CMAQ)	Fund transportation projects and programs that will contribute to attainment of National Ambient Air Quality Standards (NAAQS). Projects must be included in a conforming transportation plan and TIP and conform to the requirements of the Clean Air Act.	Eligible projects include: <ul style="list-style-type: none"> ◆ Transportation control measures ◆ Management systems ◆ Activities that are innovative and based on promising technologies which will improve air quality ◆ Traffic monitoring, management and control ◆ Emission inspection systems ◆ Public transit projects ◆ Project planning if leading directly to construction 	After the state receives their portion of the grant money from the federal government, it is distributed to the MPO's. The MPO's are then responsible for soliciting applications to receive CMAQ funds.	The RVMPO receives applications and the TAC scores and weights them	

Title	Purpose	Criteria	Distribution of Funds	Value/Application Process	Source Of Information
Transportation and Community, and System Preservation Pilot Program (TCSP)	Provide funding for research and grants to investigate the relationships between transportation and community, and system preservation and private sector-based initiatives.	Eligible projects shall implement transportation strategies which provide the following: <ul style="list-style-type: none"> ◆ Improved efficiency of the transportation system ◆ Reduced environmental impacts ◆ Reduced need for costly future public infrastructure investments ◆ Efficient access to jobs and service to trade centers 	An interagency team evaluates applications for competitive TCSP Program grants. The team includes representatives from FHWA, FTA, U.S. DOT Office of the Secretary, Federal Railroad Administration, Research and Special Programs Administration/Volpe Center, and the Environmental Protection Agency. TCSP Program grants can also be designated by Congress.	Value: \$50 million nationally for 2002 and 2003.	FHWA Program Information web site: www.fhwa.dot.gov/discretionary/pi_tcsp.htm http://tcsppfhwa.volpe.dot.gov/docs/brochure.pdf
Transportation Infrastructure Finance Innovation Act	Provide credit assistance on flexible terms directly to public-private sponsors of major surface transportation projects to assist them in gaining access to the capital markets.	Any project that is eligible for STP funding can receive assistance from this program. ITS projects must cost a minimum of \$30 million and be supported by user charges or other dedicated revenue streams. Federal credit cannot exceed 33 percent.	Funds are distributed by the U.S. Department of Transportation.	Available Funds: \$232 million has been authorized by the U.S. DOT for FY 2002 and 2003. The maximum nominal amount of credit was \$5.0 billion over the FY 2003-2004. Application Process: Applications are typically due in the spring for the following funding year.	http://www.fhwa.dot.gov/discretionary/pi_tifia.htm

Title	Purpose	Criteria	Distribution of Funds	Value/Application Process	Source Of Information
Urbanized Area Formula Grant	Provide funding for capital expenses, operating costs and/or preventative maintenance. Population of region dictates what the money can be used for. The funds can also cover transit related ITS expenses	Population 50-200K: Funding available for capital and operating costs. Population >200K: Funding available for capital and preventive maintenance expenses. 1percent of funding must be used for transit enhancements.	Funding is apportioned by the FHWA on the basis of legislative formulas.	Available Funds: \$10 Billion nationally over three years. Application Process: Requires legislative campaigning.	www.fta.dot.gov/library/policy/prgms/uafg.htm
ITS Research and Development	Provide funding for research and development for operational tests and demonstration projects.	ITS research and development projects must fall into one or more of the categories below: 1. Traffic management, toll collection, traveler information or traffic control systems 2. Crash-avoidance and integration of in-vehicle crash protection technologies 3. Human factors research 4. Integration of intelligent infrastructure, vehicle and control technologies 5. Impact of ITS on environmental, weather and natural conditions	Because this is a discretionary program, there is no solicited application process for obtaining funding for a project. The local agencies are required to lobby Congress to get funds earmarked for a project through this program.	Value: \$95 million total nationally for funding years 2002 and 2003	www.fhwa.dot.gov/tea21/h2400-v.htm#5207

Title	Purpose	Criteria	Distribution of Funds	Value/Application Process	Source Of Information
ITS Integration Program	This program was established to accelerate the integration and interoperability of ITS systems in both metropolitan and rural areas.	These projects shall exhibit one or more of the following characteristics: <ol style="list-style-type: none"> 1. Commitment to interagency and private-sector cooperation 2. Commitment to comprehensive plan compliant with National ITS Architecture 3. Must be part of approved plan 4. Demonstrate commitment to long-term operations, management and maintenance without reliance on federal funding 	Because this is a discretionary program, there is no solicited application process for obtaining funding for a project. The local agencies are required to lobby Congress to get funds earmarked for a project through this program.	<ul style="list-style-type: none"> ◆ Total value for this program and the Commercial Vehicle ITS program is \$242 million for funding years 2002 and 2003. ◆ No more than \$15 million of this program can be spent in the metropolitan area. ◆ The maximum amount of ITS program funding that can be spent on each project is 50 percent. However, up to 80 percent can be from federal grants. 	Available Funds: FHWA Web site: www.fhwa.dot.gov/discretionary/pi_it sip.htm

Title	Purpose	Criteria	Distribution of Funds	Value/Application Process	Source Of Information
Commercial Vehicle ITS Infrastructure Deployment	To improve the safety and productivity of commercial vehicles and drivers, and to reduce the costs associated with commercial vehicle operations and federal and state commercial vehicle regulatory requirements.	These projects shall exhibit one or more of the following characteristics: <ol style="list-style-type: none"> 1. Encourage multi-state cooperation and corridor development 2. Increase efficiency of regulatory inspections 3. Reduce administrative burdens 4. Facilitate commercial vehicle inspections 5. Enhance safety 	Because this is a discretionary program, there is no solicited application process for obtaining funding for a project. The local agencies are required to lobby Congress to get funds earmarked for a project through this program.	Available Funds: ♦ The maximum amount of ITS program funding that can be spent on each project is 50 percent. However, up to 80 percent can be from federal grants.	FHWA Web site: www.fhwa.dot.gov/discretionary/pi_it_scv.htm
Corridor Congestion Relief Program		All ITS related projects are eligible			
IDEA program	Innovative solutions to critical issues in the areas of transit, highway, high speed rail and safety.	Managed by the Transportation Research Board (TRB)	Apply directly to TRB	N/A Online	http://gulliver.trb.org/publications/sp/IDEA_announcement.pdf#Safety also http://www4.trb.org/trb/dive.nsf/web/idea_programs