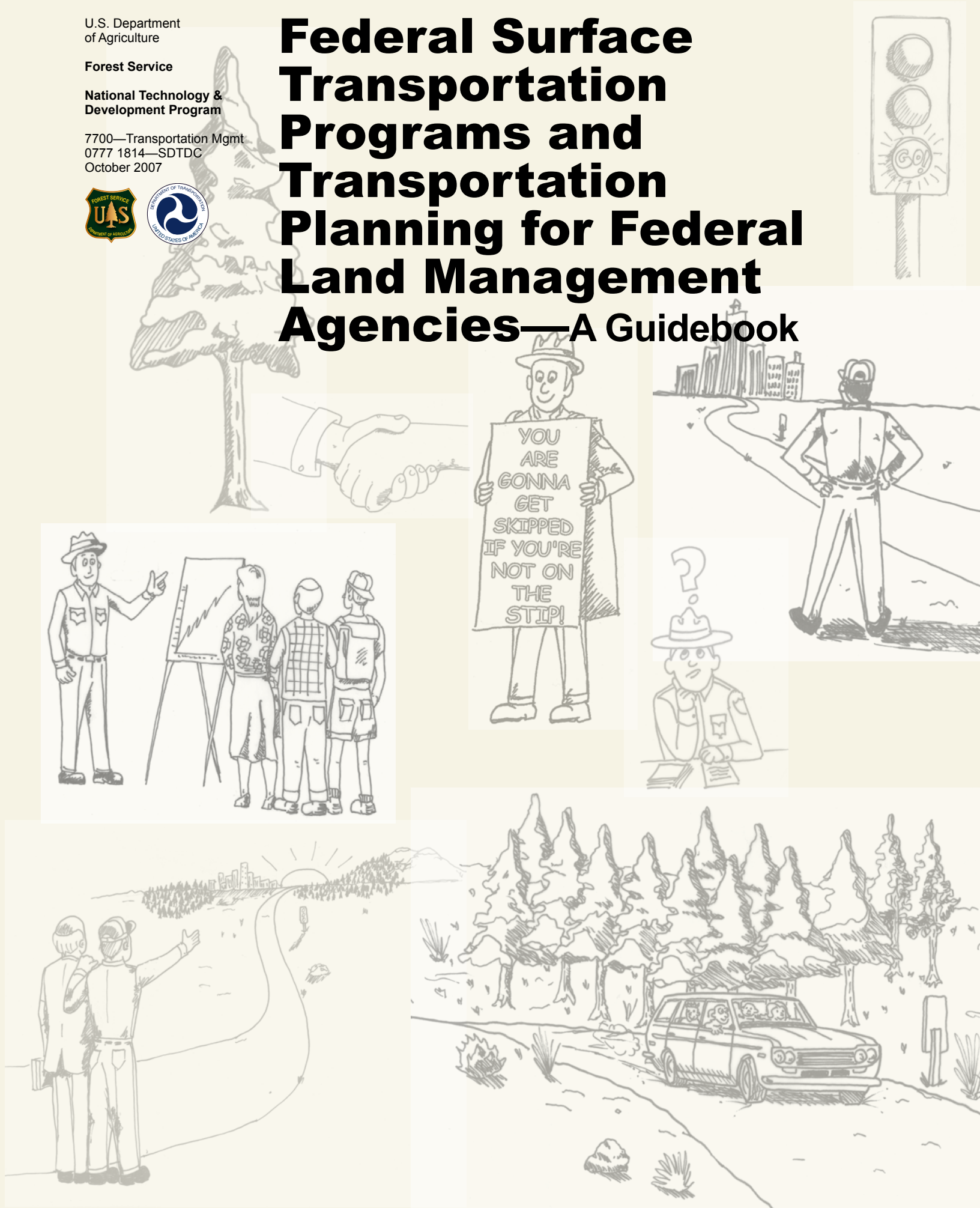
U.S. Department
of Agriculture

**Forest Service**

**National Technology &
Development Program**

7700—Transportation Mgmt
0777 1814—SDTDC
October 2007

# Federal Surface Transportation Programs and Transportation Planning for Federal Land Management Agencies—A Guidebook



## GUIDEBOOK COMMITTEE

**Julie Ann Atkins**
Environmental Protection Specialist
Federal Transit Administration
Washington, DC

**Robert Bini**
Transportation Planning Team Leader
Federal Highway Administration
Washington, DC

**Nathan Caldwell**
Trails, Byways, Transportation Enhancements, and Alternative Transportation Coordinator
U.S. Fish & Wildlife Service
Arlington, VA

**Betsy Carroll**
FS Grant Strategists Enterprise Lead
U.S. Forest Service
Placerville, CA

**Christy Darden**
Legislation & Outreach Coordinator
Federal Highway Administration
Washington, DC

**Lou DeLorme**
Alternative Transportation in Parks & Public Lands Program Coordinator,
Department of Interior
Washington, DC

**Christopher Douwes**
Trails and Enhancements Program Manager
Federal Highway Administration
Washington, DC

**Jim Evans**
Transportation Planner
National Park Service
Washington, DC

**Ed Gililland**
Project Leader
U.S. Forest Service
San Dimas, CA

**Ellen LaFayette**
Transportation Engineer
U.S. Forest Service
Washington, DC

**Jack Placchi**
Travel Management and Trails Coordinator
Bureau of Land Management
Lakewood, CO

**Aron Reif**
Forest Highway Program Engineer
Federal Highway Administration
Washington, DC

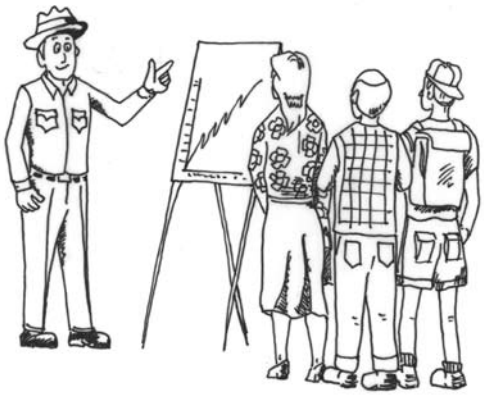
**Robin Smith**
Sr. Transportation Planner
Federal Highway Administration
Lakewood, CO

**Floyd A. Thompson III**
National Tourism & Byways Program Leader
U.S. Forest Service
Washington, DC

***Program Oversight Provided By:***

**Alan Yamada**
Program Leader
San Dimas Technology & Development Center
San Dimas, CA

# Federal Surface Transportation Programs and Transportation Planning for Federal Land Management Agencies—A Guidebook



**Authored by the Guidebook Committee**

October 2007

Information contained in this document has been developed for the guidance of employees of the U.S. Department of Agriculture (USDA) Forest Service, its contractors, and cooperating Federal and State agencies. The USDA Forest Service assumes no responsibility for the interpretation or use of this information by other than its own employees. The use of trade, firm, or corporation names is for the information and convenience of the reader. Such use does not constitute an official evaluation, conclusion, recommendation, endorsement, or approval of any product or service to the exclusion of others that may be suitable.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Table of Contents

**Introduction—Transportation Planning – Building a Seamless Network** ..... vii

**Chapter 1— Transportation Planning Process**

Transportation Opportunities for Federal Lands ..... 1

Transportation Planning ..... 1

Project Identification and Development ..... 6

**Chapter 2—FHWA and FTA Funding Programs and the Statewide and Metropolitan Transportation Planning Processes** ..... 9

The ABCs of Statewide and Metropolitan Transportation Planning ..... 10

Statewide Transportation Planning ..... 11

Metropolitan Transportation Planning ..... 20

**Chapter 3—Implementation Funding** ..... 27

Transportation Program Funding Tables ..... 31

Assistance is Available from the FHWA and the FTA ..... 41

Select Funding Opportunities in Title 23 U.S.C. ..... 44

**Chapter 4—Success Stories**

Recreational Trails Program Funds Provide for Improvements to Allegheny Trail ..... 47

Scenic Byways Funds Promote Beauty of BLM Land on the Alpine Loop Backcountry Byway ..... 48

Federal Surface Transportation Program Funding Supports Valuable Fish Passage Projects in the Forest Service ..... 49

FSTP Funding Improves the Doe Lake Road and Indian River Wild and Scenic River in the Hiawatha National Forest ..... 50

Transportation Assistance Group Shapes Proposal for Addressing Traffic Woes in Utah's Wasatch Cache National Forest ..... 50

**Appendix A—Program Details**

Federal Lands Highway Program ..... 53

FLHP: Park Roads and Parkways Program ..... 55

FLHP: Indian Reservation Roads Program ..... 57

FLHP: Refuge Roads Program ..... 58

## Federal Surface Transportation Programs

FLHP: Forest Highways ..... 59
FLHP: Aquatic Organism Passage ..... 60
FLHP: Public Lands Highways – Discretionary Program (PLHD) ..... 62
FLHP: Coordinated Federal Lands Highway Technology Implementation Program ..... 64
Emergency Relief for Federally Owned Roads ..... 65
High Priority Projects Program ..... 66
Highway Bridge Program ..... 68
Highway Safety Improvement Program ..... 70
High Risk Rural Roads ..... 72
National Scenic Byways Program ..... 74
Recreational Trails Program ..... 76
Safe Roads to School ..... 78
Surface Transportation Program ..... 79
Transportation Enhancement Activities ..... 81
FHWA Discretionary Programs ..... 84
Congestion Mitigation and Air Quality Improvement Program ..... 86
FTA – Alternative Transportation in the Parks and Public Lands Program ..... 88

**Appendix B. Potential Sources of Matching Funds for Transportation Projects** ..... 91

**Appendix C. Sample Financing Tools For Maximizing the Benefits of Additional Revenue Sources In Appendix A** ..... 93

**Appendix D. Environmental Issues and Opportunities** ..... 95

**Appendix E. Social Issues and Opportunities** ..... 99

**Appendix F. LINKS to Additional Project Examples Funded by Federal Transportation Programs** ..... 103

## TRANSPORTATION PLANNING—BUILDING A SEAMLESS NETWORK

Multiple governmental jurisdictions have responsibilities for the transportation systems that provide access to or within Federal lands. Transportation networks are seamless only when these networks are managed holistically. It is critical that Federal agency transportation planning efforts be integrated with those of the States, other Federal agencies, Tribal governments, Metropolitan Planning Organizations (MPOs), counties, and communities to improve the effectiveness of the entire system.

Local communities—and the Federal lands that border them—are intricately linked. Federal lands adjacent to communities contribute significantly to the economy, cultural identity, and quality of life in these communities. They provide scenic beauty and recreational opportunities and help nourish ecological values, benefiting local communities and nearby metropolitan areas. As members of the greater community, Federal land management agency transportation planners and other managers need to work with area leaders to create transportation, land use, and economic development strategies that preserve natural resources while supporting local economic and other community objectives.

### Why Seamless Approaches to Transportation?

Better transportation links are emerging between State and local transportation systems including transit systems and Federal land transportation systems to help people access Federal land. As the connection between these systems becomes more seamless, this coordinated transportation network stimulates new Federal land uses and activities for recreation, allows for more effective land management, and enhances rural transportation infrastructure for surrounding private land. However, this increased use creates challenges for maintaining natural resources such as wildlife, fish, plants, cultural resources, water quality, stream function, and environmental quality overall.

The guidebook is designed to assist Federal land managers, staff, and partners in developing relationships and in maximizing participation in Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) surface transportation programs. With the technical assistance available through the FHWA and the FTA, the agencies can help further regional and local community goals and better fulfill their mission including resource protection and environmental quality.

Seamless transportation systems and Federal land management agencies' commitment to building better relationships with States and other

partners helps agencies achieve their mission and provide effective land stewardship and public service. By working together throughout the transportation planning process, agencies can ensure that transportation systems are developed to better serve communities and visitors to Federal lands. In partnership with State Departments of Transportation (DOT) and local transportation officials, a greater portion of the $244 billion available through FHWA and FTA surface transportation programs can be used to implement transportation projects that are mutually beneficial. The FHWA and FTA funding is very flexible and can be used for many activities beyond just constructing roads including enhancing roadside areas, providing traveler services (e.g., constructing visitor centers), constructing trails, and improving environmental conditions alongside roads and trails.

Most of the funding available through Federal surface transportation programs cannot be accessed directly by the Federal land management agencies (FLMAs). To benefit from most of these FHWA and FTA funding programs, the Federal agencies must partner with the State or local governments. Agencies must participate in the State's and/or region's transportation planning process to ensure that projects that are important to the agencies are included in the State's project priority list known as the statewide transportation improvement program or STIP. In a metropolitan area, projects must be included in a similar list called the transportation improvement program or TIP, which is ultimately incorporated into the STIP, either directly or by reference. Both the STIP and TIP will be described more fully in chapter 2.

This guidebook outlines the transportation planning process and serves as a primer on:

- Which activities are eligible for funding.
- Where to find funding.
- Actions required for Federal land managers to access and benefit from these funds and programs.
- Which agencies to partner with.
- How to integrate Federal land management objectives with State and local objectives.

The guidebook is designed to assist Federal land managers, staff, and partners in developing relationships and in maximizing participation in FHWA and FTA surface transportation programs. With technical assistance available through FHWA and FTA, FLMAs can help further regional and local community goals as well as help fulfill their own mission.

## TRANSPORTATION OPPORTUNITIES FOR FEDERAL LANDS

Federal Land Management Agencies (FLMAs) can significantly improve access to Federal lands while reducing or minimizing impacts to adjacent areas. Because Federal lands are part of a larger community of local, regional, and State interests, integrated transportation planning can offer new and innovative funding opportunities that benefit many groups and meet the following mutual objectives:

- Improving safety and user comfort.
- Restoring watersheds.
- Protecting wetlands.
- Improving wildlife habitat connectivity.
- Protecting threatened, endangered, and sensitive species and their habitats.
- Improving accessibility.
- Enhancing tourism.
- Preserving and interpreting cultural and natural heritage sites.
- Improving recreational trails.
- Identifying, marketing, and enhancing scenic byways.
- Addressing the causes of air pollution.

In addition, transit systems have the potential to expand access to Federal lands for underserved populations and to improve environmental conditions of the Federal lands. Careful transportation planning can enhance this potential.

## TRANSPORTATION PLANNING

Planning transportation systems and managing road, public transit, and trail systems are critical issues that require attention. Each FLMA has established policy that directs their transportation planning. Federal land managers should become familiar with their agencies' requirements and procedures for integrated transportation planning.

### How Does Transportation Planning Fit?

Generally, FLMAs have a process for developing a comprehensive resource protection or land use management plan (overall plan). These plans provide the managers with overall goals for management of the Federal land, and may include objectives related to such needs as:

- Protecting and/or using resources.
- Accommodating and/or managing visitors.

Ideally, each FLMA would also develop a comprehensive, long range transportation plan or travel management plan within the framework of the overall plan. A comprehensive, long range transportation plan should include, as appropriate, a discussion of all transportation needs of the Federal land in question, including needs in such areas as vehicular access, parking, trails and trailheads, bike and pedestrian facilities, and waterborne access.

FLMAs implement policies to develop transportation systems that will best serve current and anticipated management objectives and will accommodate public use of Federal lands in line with the overall plan. This is accomplished through transportation planning. Appropriated funds available to the FLMA to accomplish the goals outlined in transportation planning initiatives are limited. By supplementing direct agency appropriations with Federal transportation program funds, more of the FLMA planned goals to improve access to and within the Federal lands, and improve environmental conditions of resources impacted by the presence of transportation facilities can be met.

- FLMA national and regional strategic plans outline goals and objectives at the programmatic level, defining the vision and direction for transportation networks.
- The FLMA comprehensive resource protection or land use management plan and supporting transportation plan should define the future vision for the FLMA's transportation system.

- The transportation plan for individual Federal lands identify critical transportation issues as they relate to management of Federal land. The plans should clearly define the desired future resource conditions and visitor experiences envisioned for the Federal land balanced against the unit's transportation needs.

The transportation plan for a specific Federal land includes goals for the transportation system, and the implementation of projects is a means for achieving the goals set forth in the plan. Not all of the projects that are required to achieve the goals will be included in any one STIP. It is likely that only a few projects will get into any one STIP, due in part to limited resources and intended timing of project implementation, as well as other considerations. Therefore, the process of developing a prioritized list of projects, and identifying project sponsors and funding is an ongoing process. Over a period of time, many of the FLMA-recommended projects are likely to be included in future STIP updates and the goals of the transportation plan will be accomplished.

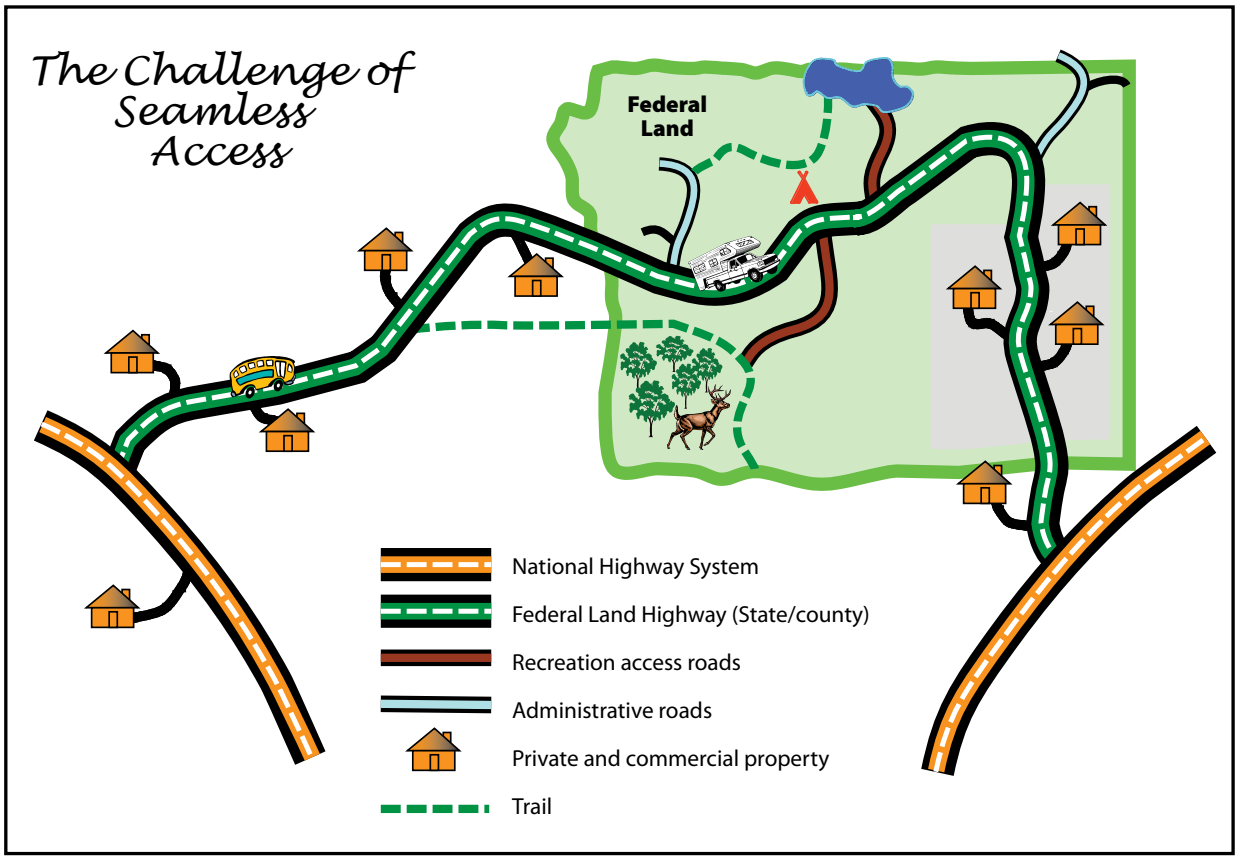
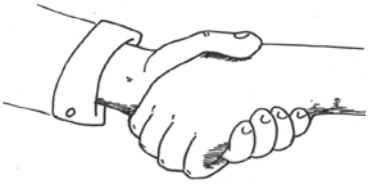



Figure 1. Seamless access to Federal land involves Federal, State, county, and Federal Land Highways and Roads.

### *Partnering*



A comprehensive transportation planning process includes partnering with State DOT and local transportation officials, Tribal governments, local communities, and other public and private groups. As appropriate, these groups should be involved in all levels of transportation planning from the beginning. To ensure a truly seamless access to Federal land (see figure 1), it is important that the goals and objectives of these planning partners be incorporated into proposed improvements. By working with partners early in the process, better projects will be developed and supported by the partners and others affected by the transportation system.

### *Involving the Public*

Public involvement should occur at all phases of transportation and project development, including transportation plan updates, development of the prioritized program of projects, and completion of the National Environmental Policy Act (NEPA) process. By involving the public, the agency can broaden the understanding of all interested groups and citizens for a specific program or project, and solicit ideas for solutions to transportation problems. This can lead to long-term relationships that help ensure consensus among the FLMA, the public, and local communities. FLMA, State, and MPO public involvement efforts in transportation planning should support each other. Coordinated public involvement that provides communities with an appropriate opportunity to comment is preferred to multiple agency processes for similar or related projects. One agency should take the lead for all the public involvement on a particular project for all the entities involved.

Public involvement is important because public input, with consensus from interested parties, will result in a better project and fewer delays in the project development process. Federal lands belong to the public and they have the right to participate in decisions. In addition, public involvement is a requirement to receive and use FHWA or FTA funds.

Public involvement can be expensive, but poorly designed public involvement is even more expensive in terms of project delays and community dissent. Involving the public early and often will avoid these types of impacts on projects.

## PROJECT IDENTIFICATION AND DEVELOPMENT

### System Inventory

The first step is to identify the extent and qualities of the agency or unit transportation network, its condition and assets, and its users (see figure 2). Include partners to assist with the inventory and analysis of the transportation system. Often State and local roads are the foundation of the transportation system within the Federal land. Connections beyond the boundary are also key components of the system. State and

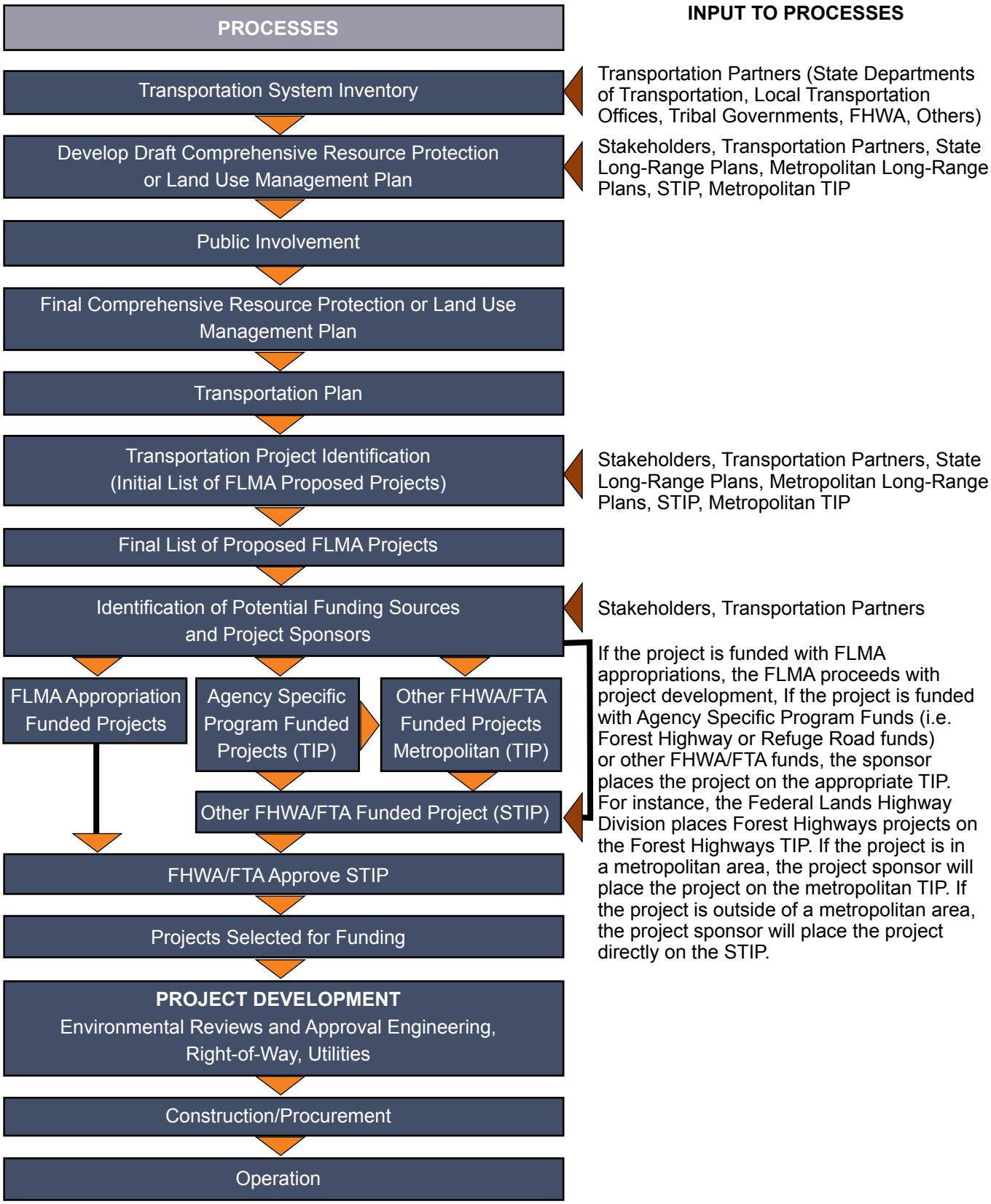



Figure 2. Project identification and development.

local transportation officials can describe their future plans for their transportation system, relevant issues related to the system, and provide data that may be useful to the FLMA when planning for the transportation network.

***The Comprehensive Transportation Plan for the Agency or Unit***

The agency or unit comprehensive transportation plan or travel management plan will define goals for the transportation system and may include a list of major proposed projects or opportunities. Include State and local transportation officials from the beginning of all Federal land management planning and transportation planning processes. They can provide information that will help in developing goals and projects to be pursued. The FLMA should also obtain transportation planning documents that have been developed by the State and local transportation officials when beginning the agency or unit management plan or transportation plan revisions. The States all have long-range transportation plans that provide information on the long-range goals of the State's transportation system. These plans may have proposed improvements or new transportation facilities, including those that provide access to and within Federal land. The States also have STIPs that include specific improvements to the transportation system that are to start implementation within the next 4 years. The STIPs and agency or unit transportation plan should be integrated and compliment each other. Obtain other transportation planning and land use documents from local officials. Look for avenues to incorporate partner's needs and objectives when developing the transportation plan. This partnering should begin prior to the public involvement process. Provide FLMA plans such as comprehensive resource protection plans, land use management plans, transportation plans, recreation strategic plans, facility master plans, and recreation niche statements to transportation agencies and others who may be impacted by the plan's goals or projects.

***Project Analysis***

Based on their approved transportation plan the FLMA analyzes projects that are needed. The FLMA should establish an initial prioritized list of proposed projects that support transportation plan goals. The FLMA should encourage partners and stakeholders to participate in this process.

***Finalized List of Proposed Projects***

The next step is to work cooperatively with State and Federal agencies, Tribal governments, counties, communities, and other stakeholders to refine the initial list of prioritized projects that were identified through the project analysis process. A great deal of support can be generated through this early involvement. It is critical that the State and local DOT be primary partners in this process. If they understand the needs and support the priorities, it improves the likelihood that the STIP will include these projects.

### *Potential Funding Sources and Project Sponsors*

After setting project priorities in partnership with other stakeholders, categorize eligible projects by potential funding sources, and identify project sponsors. Several FHWA and FTA surface transportation programs can fund many projects because the eligibility criteria often overlap. State DOTs, metropolitan planning organizations (MPOs), regional planning organizations (RPOs), other local transportation officials, the FHWA, the FTA, and other stakeholders can assist in determining potential funding sources. After reviewing the available sources of funding for each project, the most likely funding sources should be identified along with a project sponsor. For projects outside of metropolitan areas, the State, a local government, or FLMA could be the project sponsor. For projects within metropolitan areas, the State, a local government working through the MPO, or a public transportation provider will likely be the project sponsor.

### *Project Funded by FLMA Appropriations or FHWA/FTA Programs*

If the project is funded with FLMA appropriations, the FLMA proceeds with project development. If the project is funded with Forest Highway funds, Refuge Roads funds, or other FHWA/FTA funds, the sponsor seeks to have the project placed on the appropriate transportation improvement program (TIP). If the project is a Forest Highway project, the Federal Lands Highway Division will place the project on the Forest Highway TIP. If the project is in a metropolitan area, the project sponsor will need to work with the appropriate MPO to have the project placed on the metropolitan TIP. If the project is outside of a metropolitan area, the project sponsor will need to work with the State to have the project placed on the STIP. Limited resources and project timing affect the ability of a project sponsor to get any single project on the appropriate STIP or TIP. Therefore, it may be necessary to repeat this process in subsequent STIP/TIP update cycles.

### *Project Selection for Funding*

Because of the competitive nature of transportation project funding, coalitions of support are crucial to obtaining support and funds for projects that serve Federal lands and adjacent communities. FLMAs can be very attractive partners because of their various sources of funding and in-kind support (i.e., engineering, or environmental services). This FLMA funding and in-kind support can often be used as matching funds that may be required for project selection. It is important to check with the appropriate agency to ensure that an in-lieu of money match will be acceptable. Many small communities and organizations lack the workforce or the financial ability to meet the matching requirements of the FHWA and FTA programs. Projects with multiagency support and strong local backing generally rank higher, increasing the chance of such projects being

selected for funding by the State DOT. Leveraging funding from a variety of sources will greatly improve the likelihood of the project being selected for funding by being placed on the STIP. After the STIP has been approved (see chapter 3), the project can be selected, and the project development process begins.

***Project Development***

The final phase of transportation planning begins after the project has been included on the approved STIP/TIP. This phase includes:

- Project planning.
- Preparing project-level NEPA and biological-opinion documents.
- Developing a preliminary design.
- Preparing the plans, specifications, and cost estimate package for project construction bids.

The project development process involves decisions on the location, design, and operation and maintenance of transportation services and systems. Project level environmental impacts and mitigation measures including vegetation management, fire risk management, cultural resources, wildlife and fish crossings, and watershed restoration activities are addressed at this time.

A common mistake has been to apply for and to accept highway program funding, but to be unprepared to complete the project, and/or operate and maintain the project after its completion. Sufficient staffing resources are required for the design, on-the-ground work, administrative assistance, maintenance, and the determination of sources for matching funds. The FLMA should understand the level of commitment required and be fully prepared to commit the resources necessary to implement, operate, and maintain a project prior to beginning the first phase of the transportation planning process. Partners can, and often do, assume responsibility for operating or maintaining a project or service after they are implemented.

## FHWA AND FTA FUNDING PROGRAMS AND THE STATEWIDE AND METROPOLITAN TRANSPORTATION PLANNING PROCESSES

FHWA and FTA surface transportation programs can provide significant funding for implementing transportation improvement projects that assist FLMAs in achieving their mission. Understanding and actively participating in the statewide and metropolitan transportation planning process is required for the agencies to benefit from these programs. Most of the funding coming from these programs is provided to the State DOTs, local transportation officials, and public transportation providers. They determine which projects will be funded by Federal funds through the statewide and metropolitan transportation planning processes.

By participating in the statewide and metropolitan planning processes, Federal agencies can benefit from FHWA and FTA funding programs in two ways:

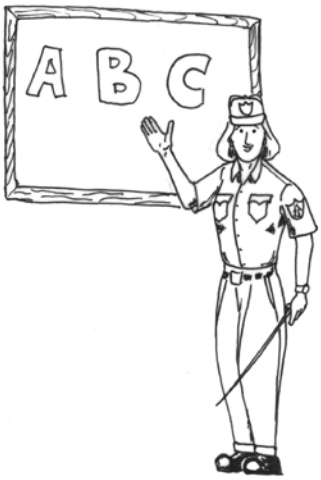
- Direct funding can be provided for Federal agency transportation projects.
- Partners can construct projects that are beneficial to the Federal lands.

There are many FHWA and FTA programs that provide funding for a wide variety of surface transportation projects. In addition to simply funding the construction or reconstruction of roads, many of these programs can provide funds for activities that go beyond road construction (see chapter 3, table 5) This chapter describes how the Federal agencies can participate in the statewide and metropolitan transportation planning processes.

The surface transportation authorization acts are usually multiyear authorizations that fund FHWA and FTA programs. Surface transportation authorization acts include provisions that contain specific funding levels for each individual FHWA and FTA program. The current act, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), was signed into law on August 10, 2005, and expires on September 30, 2009. SAFETEA-LU authorizes about $244 billion for the surface transportation programs in Title 23 U.S.C. (Highways, administered by the FHWA), and Title 49 U.S.C. (Mass Transportation, administered by the FTA). Titles 23 and 49 require that all projects funded under those titles be included in formal, mandated transportation planning processes.

Chapter 3 summarizes the eligible activities and program requirements for the FHWA and FTA funding programs.

## THE ABCs OF STATEWIDE AND METROPOLITAN TRANSPORTATION PLANNING




The primary goal of transportation planning is to encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight, and foster economic growth and development while minimizing transportation-related environmental impacts. Obtaining funding is one way to accomplish the primary goal of transportation planning because it gives you the ability to implement your future vision for the transportation system. The transportation planning process considers all modes of transportation and is continuous, cooperative, and comprehensive.

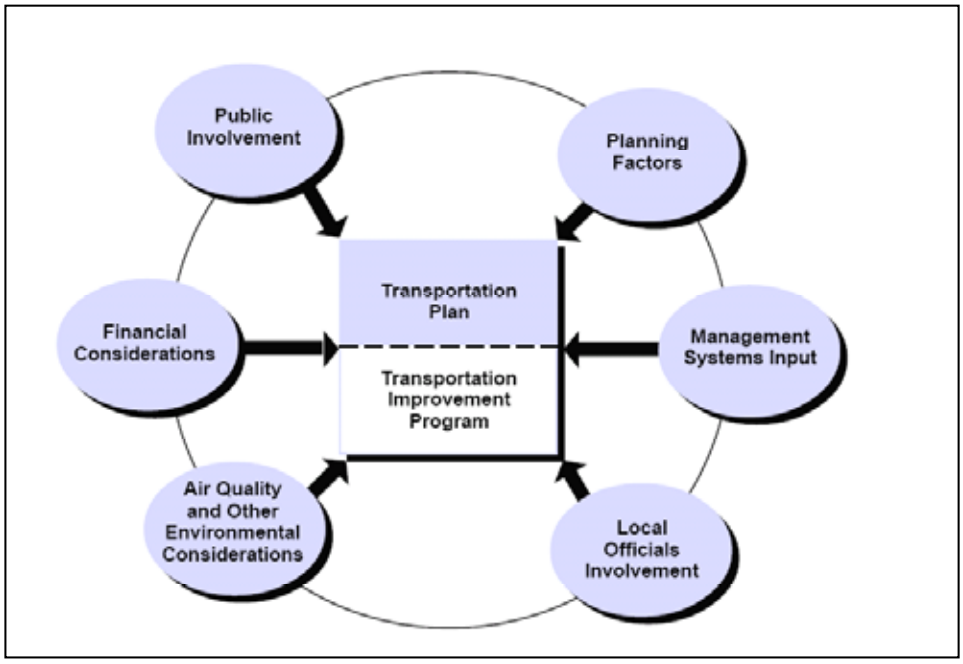



Figure 3. Major components of transportation planning.

The transportation planning process produces two key products:

- Long-range transportation plans.
  - ▲ Contain the long-range vision, policies, and strategies for guiding the development of the transportation system.
  - ▲ In metropolitan areas, long-range plans must include specific descriptions for major projects, including timing of project implementation and estimated costs.

- STIPs and TIPs.
  - Contain a priority list of proposed FHWA-/FTA-funded projects and strategies for the upcoming 4 years (minimum) that are consistent with the long-range plan.

Major components contributing to the development of long-range transportation plans and STIPs/TIPs are shown in figure 4. Projects that are included in the approved STIP (and incorporated TIPs) have FHWA and FTA funding identified for their implementation and/or require an action (e.g., approval) by the FHWA or FTA.

## STATEWIDE TRANSPORTATION PLANNING

Statewide planning is the foundation of all transportation planning. All other transportation planning, including FLMA transportation planning, should be closely coordinated with the overall transportation planning for a State to ensure the plans are complementary and consistent. Figure 4 shows the coordination of the statewide, metropolitan, and Federal agency transportation planning processes. The process begins by developing transportation plans with long-range goals. Long-range goals from metropolitan and FLMA plans should be incorporated into the statewide plan. The next step in the process is to develop the STIP that identifies and prioritizes projects and strategies that support the long-range goals. Following FHWA and FTA approval of the STIP, the project is selected and the project development process begins which includes the NEPA process. We will discuss individual steps of this process throughout the remainder of the chapter.

**Summary of the statewide and metropolitan transportation planning processes:** Each State develops a long-range transportation plan. Throughout the life of the long-range plan, the State develops STIPs that are consistent with and meet the objectives of the plan. In metropolitan areas (areas with population centers of 50,000 or more) MPOs must develop metropolitan long-range plans and metropolitan TIPs of their own. This metropolitan planning process should be a component of the statewide planning process, as should the FLMA transportation planning process.

Title 23 (sections 134 and 135) describes the requirements of the MPO and statewide transportation planning processes. Each State and MPO may establish an individual process tailored to its own circumstances, needs, and internal processes to implement these requirements. This requires that Federal agency personnel must work with individual States and MPOs to become familiar with their specific situations and procedures. State DOTs are responsible for the development of statewide long-range plans and

## Federal Surface Transportation Programs

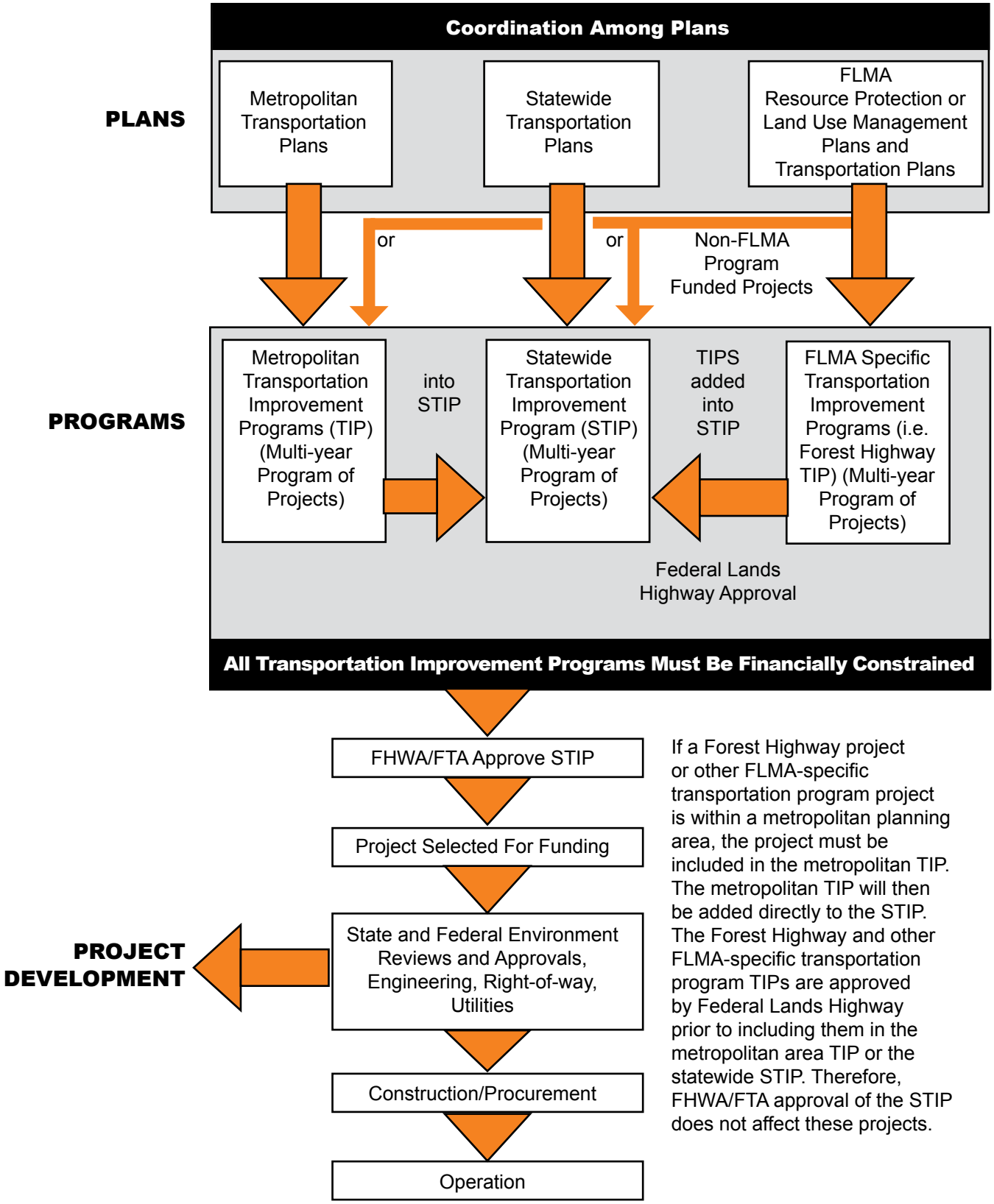



Figure 4. Coordination of planning processes.

STIPs (which include metropolitan TIPs). Title 23 includes eight planning factors that you must consider throughout the planning process. The planning process must consider strategies and develop projects that will:

- Support the economic vitality of the nation, the States, nonmetropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and nonmotorized trail users.
- Increase the security of the transportation system for motorized and nonmotorized trail users.
- Increase the accessibility and mobility of people and freight.
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development.
- Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.

## State Long-Range Transportation Plans

The development and integrated management and operation of a State's intermodal transportation system require State long-range plans. These plans vary significantly from State to State. Some statewide long-range transportation plans include improvements for specific transportation facilities or transportation corridors. Other long-range plans are more policy-oriented. Each Federal agency office should have a copy of its State's long-range plan, available at the State DOT or local FHWA Federal-aid division office (usually located in the State capital). Most States make their plans and other transportation documents available on the State DOT Web site, as well. The FHWA Federal-aid division planner can facilitate contact with the appropriate State staff.

- **Timeframe:** A statewide long-range transportation plan must have a minimum 20-year forecast period. (There are no requirements indicating how often the plan must be updated. Some States update long-range plans on a regular cycle; other States update them whenever necessary.)

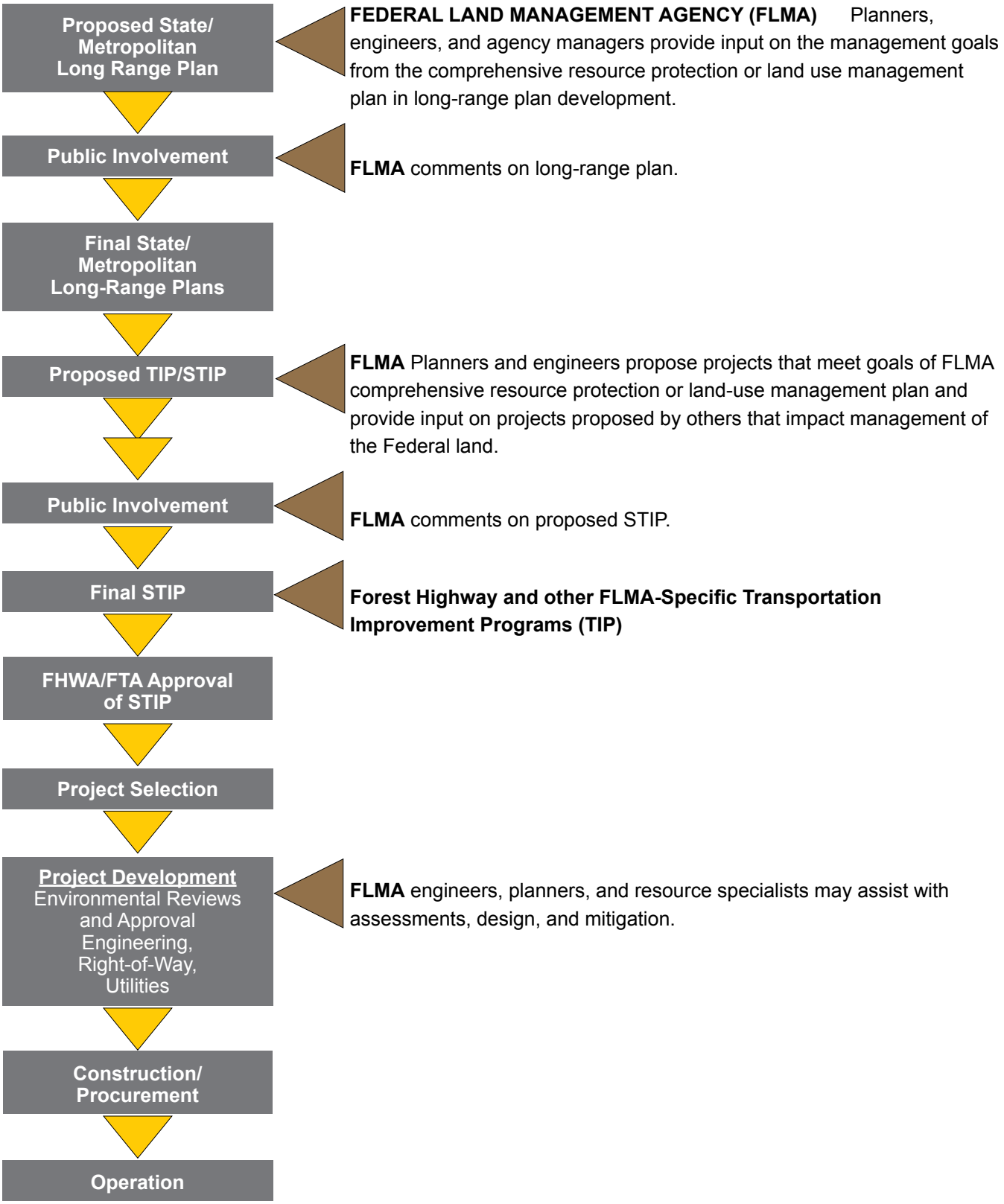



Figure 5. FLMA involvement in the statewide and metropolitan planning process.

- **Organizations involved.** Federal regulations (23 C.F.R. 450 and 500 and 49 C.F.R 613) require the State to consider the concerns of the Federal agencies when the agency has jurisdiction over lands within the boundaries of the State. The States must provide the FLMA the opportunity to comment on the proposed long-range plan.
  - In metropolitan areas, the State must develop the long-range plan in cooperation with MPOs.
  - In nonmetropolitan areas, the State must develop the long-range plan in consultation with affected local officials with responsibility for transportation. In some States, this may include rural planning organizations (RPOs).
  - In American Indian tribal areas, the State must develop the long-range plan in consultation with the Tribal government and the Secretary of the Interior.
  - States are required, to the extent practicable, to develop a documented process(es) that outlines the roles, responsibilities, and key decision points for consulting with Indian Tribal Governments and FLMAs in the development of the long-range transportation plan and STIP.
- **Public involvement**. The State must provide any citizen, public agency (including Federal agencies), or other interested party the opportunity to be involved in the development of and comment on the proposed long-range plan. Public involvement is integral and perhaps one of the most important parts of the process.
- **Comments.** Review and incorporate comments as appropriate.
- **Environmental considerations.** Environmental issues that may be considered in the development of a State's long-range plan include:
  - Air quality.
  - Wetlands.
  - Habitats and recovery zones for threatened or endangered species.
  - Ecological connectivity and broad-scale linkages.
  - Social and economic impacts.
  - Water quality.

## Why Should the FLMA Be Involved in the Development of the State Long-Range Plan?

The statewide long-range transportation plan establishes the overall vision for the State's entire transportation system. State and locally owned transportation systems provide access to and within Federal lands and connect to transportation systems under Federal agency jurisdiction. The vision for the long-range plan should include input from the Federal agency because the plan should include the Federal agency's vision for the transportation system.

## How Should the Federal Agencies Be Involved in the Development of the State Long-Range Transportation Plan?

- Agencies should request to be included on State, MPO, RPO, and other planning agency mailing lists. (The State or local FHWA Federal-aid division office will know whether such a statewide transportation planning mailing list exists.)
- If other opportunities for participation or consultation are not apparent or appropriate, the Federal land managers should make a formal request to the local FHWA Federal-aid division office, the State DOT, and RPO (if one exists) to include the Federal agency in the process for updating the long-range plan.
- If the plan is updated on an unscheduled basis, the agency should ask the FHWA Federal-aid division office and the State to inform them of when the State plans to update the plan.
- The Federal agency should participate in the development of the proposed plan, and provide input on the proposed plan during the public involvement process (figure 5).
  - If the plan includes specific facilities and corridors that will be improved in the future, the Federal agency should determine whether there are any facilities or corridors they would like to have included in the next State long-range plan.
  - If the plan is policy-oriented, the Federal agency should determine whether there are any modifications to existing policies or any new policies they would like to have included in the next State long-range transportation plan.
- Recommended modifications to the proposed plan by the Federal agency should be based on their comprehensive resource protection or land use management plan, transportation plan, and agency policy.

- When meeting with State or RPO representatives, the Federal land manager should share their planning documents and use them as the reference document for comments.
- In general, each Federal agency should provide its overall plan—including its comprehensive long range transportation plan—to the State when the plan is updated and when the State is updating its long-range transportation plan.
- Agencies should work in cooperation with the State when they are proposing the construction of a regionally significant project. Some States develop project- or corridor-specific statewide plans and may require that any regionally significant (or major) transportation project on or affecting the State highway system or other facilities be included in the long-range transportation plan.

## State Transportation Improvement Programs (STIPs)

If a project is included in the STIP, FHWA and FTA funding has been identified for the project. If a project (other than a safety project or emergency repair project) is not included in the STIP, FHWA and FTA funds cannot be used to fund the project.

STIPs are required to include all FHWA- and FTA-funded surface transportation projects (except safety projects and emergency relief for federally funded roads (ERFO) projects) and other expenditures within the boundaries of a State and must be consistent with the long-range plan.

- MPO TIPs are included in the STIP directly, or by reference (see the Metropolitan Transportation Planning section).
- STIPs must include FLMA TIPs, either directly or by reference, as well as other FLMA projects that use Federal-aid funds.
- STIPs must also include all regionally significant projects requiring an action by the FHWA or the FTA regardless of funding source. Examples include the addition of an interchange to the Interstate System with State, local, or private funds, and congressionally designated projects not funded under Title 23, U.S.C. or Title 49 U.S.C., Chapter 53. Regionally significant projects are defined in Federal regulation (23 C.F.R. 450).
- For informational and air quality conformity purposes, STIPs must include (if appropriate and included in any TIPs) all regionally significant projects proposed to be funded with Federal funds other than those administered by the FHWA and the FTA, as well as all regionally significant projects to be funded with non-Federal funds.

A map to the STIP process:

- **Organizations involved.** The State works with the MPOs, RPOs (if applicable), FLMAs, other planning agencies, Tribal governments, and the public in developing a STIP.
- **Projects included.** The STIP includes FHWA- and FTA-funded projects, or project phases to be carried out within the next 4 years. Projects are only included if full funding can be expected to be available to complete the projects, even beyond the 4 years of the STIP.
- **Timeframes for updates.** The STIP must be updated at least every 4 years. Some States update them annually. States allow STIPs to be amended at other times, and the amendments may remove, add, or modify projects to the STIP.
- **Public involvement.** The State must provide any citizen, public agency, or other interested party the opportunity to be involved in the development of and comment on the proposed STIP. Public involvement is integral and perhaps one of the most important parts of the process.
- **Comments.** Comments are reviewed and incorporated as appropriate.
- **Approval process.** The STIP is finalized and sent to the FHWA and FTA for approval. The FHWA and FTA must approve the STIP at least every 4 years. (The FHWA and the FTA determine whether the planning process used in developing the STIP is consistent with the Federal transportation planning requirements. If Federal planning process requirements are substantially met, the STIP is approved.)
- **Project selection.** For the majority of FHWA and FTA funding programs, projects in nonmetropolitan areas are selected from approved STIPs by the State in consultation with local officials of the affected agencies

## Why Should the FLMAs Be Involved in the Development of the STIP?

A vast majority of the FHWA and FTA surface transportation program funding is provided directly to the State for its use and distribution. FLMAs, in partnership with the State, RPOs, or other local organizations, are often successful in having the State sponsor a project recommended by those agencies. The project is then funded through the State and included on the STIP. Significant funding may be available for these Federal transportation programs, and many Federal agency units have benefited from them. By participating in the development of the STIP, the Federal agency is also able to review and provide input for State and local recommended projects that affect Federal lands managed by that agency.

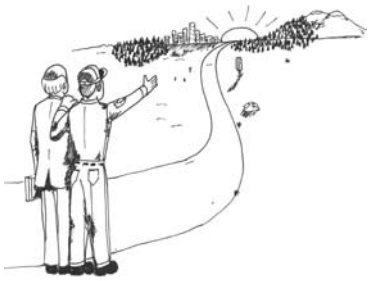
## How Should the Federal Agencies be Involved in the Development of the STIP?

- Each agency should obtain a copy of the current STIP.
- The agency should obtain information on the STIP development process for each State of interest and the schedule for developing and amending the pertinent STIPs. Most States have a document that describes the STIP development process including a development timeline.
- If other opportunities for consultation and participation are not appropriate or apparent, the Federal land manager should make a formal request to the local FHWA Federal-aid division office, the State, MPO, and the RPO to include the agency in the process for updating the STIP.
- The Federal agency should participate in the development of the proposed STIP and during the public involvement process (figure 5).
  - If the project(s) is a State or local recommended project that provides access to and within the lands managed by the agency, the agency should review the scope and description of the project(s). If the agency would like the project scope and description modified on a project(s) to meet their needs, the Federal land manager should meet with the project sponsor (State or local officials) to provide their input on the specific project(s).
  - If the agency identifies projects that can be funded from programs other than the FLHP, agency personnel should contact the State or RPO to determine whether the State and local government(s) are willing to sponsor and provide funding for the projects. Prior to contacting the State or RPO however, the agency should identify all possible funding sources for the project(s).
- If funding is made available for Federal-agency recommended projects, the agency should review the subsequent STIP (or amendment to the current STIP) to ensure that the projects have been included.

The FLMA must be familiar with the various programs that could provide funding for a project. Chapter 3 describes most of the eligible activities for each program under Titles 23 and 49. By using the tables in chapter 3 and contacting the local FHWA Federal-aid division office, the Federal Lands Highway division office, or the FTA regional office, the agency should be able to identify potential funding sources for their projects.

The FLMA should determine whether it can provide any funds for the project. The FHWA and FTA programs generally require a nonfederal share, which is usually provided by the project sponsor, normally the State or a local government. In general, FLMA-appropriated funds, FLHP funds and in-kind support (e.g., engineering and environmental services) may be used as the nonfederal share on most projects. Chapter 3 describes under what circumstances FLHP and Federal-agency funds can be used as the nonfederal share. The potential for the FLMAs to fund the nonfederal share makes FLMAs especially attractive partners.

## METROPOLITAN TRANSPORTATION PLANNING



Metropolitan transportation planning is required by 23 U.S.C. 134 and 49 U.S.C. 5303. Managers of Federal lands affected by the transportation system of an urban area, need to be familiar with their local MPOs. It is important to determine if the Federal land is within or near metropolitan planning area boundaries.

- To receive FHWA and FTA surface transportation program funds, States are required to designate MPOs for each area of the State with a population of more than 50,000. These are federally recognized organizations that must follow specific transportation planning requirements.
- Some States recognize or require the establishment of nonmetropolitan planning organizations. The organizations are called RPOs in some States; other States have different names for them. Some States do not have established RPOs. The RPOs assist with local plans and goals.
- Nonurban Federal lands in States with established RPOs may have to work with the RPOs during the development of the State long-range transportation plans and STIPs, but coordination with the State remains important. Nonurban Federal lands in States that do not have RPOs work directly with the State and local transportation officials during the development of the long-range transportation plans and STIPs.
- State DOTs or local FHWA division offices know which States have RPOs.
- MPOs, in cooperation with the State and public transit operators, must develop metropolitan long range transportation plans and metropolitan TIPs.

- As in the statewide planning process, Title 23 requires that the same eight planning factors be considered during the metropolitan planning process. Refer to the discussion on statewide transportation planning.

## The Metropolitan Long-Range Plan

The metropolitan long-range transportation plan must identify transportation facilities that function as part of an integrated transportation system. The plan must include a financial plan that demonstrates how the long-range plan can be implemented; an assessment of the capital investments necessary to ensure their preservation; methods to make the most efficient use of the existing transportation system; and proposed transportation enhancement activities.

In air quality[1] nonattainment and maintenance areas, the long-range metropolitan transportation plan must include descriptions of the design concept and scope for all existing and proposed transportation facilities in sufficient detail for air quality conformity determinations to be made consistent with the U.S. Environmental Protection Agency's transportation conformity rule (as defined in 40 C.F.R. 93) regardless of funding source. The plans must be detailed enough for conformity determinations to be made. If Federal land is within a nonattainment or maintenance area, the FLMA will have to provide the design concept and scope of work for nonexempt FLMA transportation projects to the MPO to be included in the conformity analysis. In such cases, early consultation with the MPO during preliminary project development is particularly crucial to advancing the project.

The format of metropolitan long-range transportation plans varies significantly from State to State. However, all metropolitan long-range transportation plans include specific transportation facilities or transportation corridors they intend to improve in the future. Each FLMA affected by an MPO's transportation network, should have a copy of the metropolitan long-range transportation plan. To obtain a metropolitan long-range transportation plan, contact the local FHWA Federal-aid division office, the MPO, or visit the MPO Web site.

---

[1] *Air quality and other environmental considerations: Under the Clean Air Act, transportation plans, TIPs, and projects must conform to the State Air Quality Implementation Plan (SIP). Conformity ensures that transportation activities do not worsen air quality or interfere with the area meeting air quality standards.*

The metropolitan long-range transportation planning process includes the following:

- **Organizations involved.** The MPO, in cooperation with the State and public transit operators, develops the metropolitan long-range transportation plan. The MPO must consult or coordinate with Tribal governments, FLMAs, and others as appropriate during the development of the proposed metropolitan transportation plan concurrent with the public involvement process. The requirements for consultation are described in detail in the Federal regulation governing statewide and metropolitan transportation planning (23 C.F.R. 450 and 500, and 49 C.F.R. 613). MPOs are required to the extent practicable, to develop a documented process(es) that outlines the roles, responsibilities, and key decision points for consulting with Indian Tribal Governments and FLMAs in the development of the long-range transportation plan and the STIP.
- **Funding.** A metropolitan long-range transportation plan must include a financial plan, financing strategies, and demonstrate fiscal constraint (i.e., estimated revenues and estimated project costs for the life of plan are in balance).
- **Timeframe.** A metropolitan long-range transportation plan must have a minimum 20-year forecast period.
- **Updates.** The MPO long-range transportation plan must be updated every 4 years in nonattainment and maintenance areas and at least every 5 years in attainment areas.
- **Air quality issues.** The MPO must demonstrate through the transportation conformity process that the transportation projects will have emissions impacts that are consistent with those contained in the State Implementation Plan. The MPO must coordinate the development of the long-range transportation plan with the State and local air quality agencies, the U.S. Environmental Protection Agency (EPA), and other stakeholders.
- **Public involvement.** The MPO must provide any citizen, public agency, or other interested party the opportunity to be part of the development of and to comment on the proposed long-range transportation plan.
- **Comments.** Comments are reviewed and incorporated as appropriate.
- **Approval.** The long-range plan is finalized and approved by the MPO. The plans do not have to be approved by the FHWA or FTA, but the approved plans must be provided to each of these agencies.

Metropolitan and statewide planning processes are similar except that congestion management processes are required for Transportation Management Areas (TMAs) (urbanized areas with populations greater than 200,000). If all or a portion of a forest's transportation system is within the boundaries of a TMA, that portion of the forest's transportation system may need to be included in the congestion management process of that TMA.

## Why Should FLMAs Be Involved in the Development of a Metropolitan Long-Range Transportation Plan?

The metropolitan long-range transportation plan establishes the overall vision for the metropolitan area's transportation system. This system provides access to and within adjacent or nearby Federal lands and connects to the transportation systems under the jurisdiction of the FLMA. The vision in the long-range plan should include input from the FLMA, especially because Federal lands often have heavy recreational use that generates substantial traffic on the metropolitan transportation system. The metropolitan long-range transportation plan should include the FLMA's vision of their transportation system. There may be opportunities to request that transit-system goals include forest destinations. Also, if Federal land is in a nonattainment or maintenance area, that portion of the transportation system is included in the conformity analysis for the entire nonattainment or maintenance area.

## How Should the FLMA Be Involved in the Development of a Metropolitan Long-Range Transportation Plan?

- If the MPO has a mailing list, each agency should request to be included on the mailing list. The local FHWA division office or the MPO will know whether a formal metropolitan transportation planning mailing list exists.

  The FLMA should become familiar with the MPO's public participation plan and determine how best it can and should be involved in the development of the plan and other planning activities. Also, other consultation opportunities also exist beyond the public participation plan and should be discussed with the MPO since these opportunities will vary between MPOs.

- If other venues are not sufficient or appropriate, the Federal land manager should make a formal request to the local FHWA division office and the MPO to include the agency in the process for updating the long-range transportation plan.
- The Federal land manager should review the current long-range transportation plan to become familiar with it. Recommendations for modifications to the plan should be based on the agency plan.
- When meeting with representatives of the MPO, the agency should share its agency or unit plan and use it as the reference document for comments. In general, each FLMA unit within the boundaries of an MPO should provide its plan and a list of proposed projects to the MPO when the MPO is updating its long-range transportation plan. Agencies are required to coordinate with the MPO when they are proposing the construction of a regionally significant project, so it can be included in the metropolitan long-range transportation plan.
- In nonattainment and maintenance areas for air quality, the Federal agency should participate in the interagency consultation process for the planning and conformity processes.

## Metropolitan TIPs

If a project is included in the metropolitan TIP, FHWA and FTA funding has been identified for the project. If a project is not included in the TIP, FHWA and FTA funds cannot be used to fund the project. Metropolitan TIPs include all FHWA- and FTA-funded surface transportation projects and other projects requiring Federal actions within the metropolitan planning area boundary.

Metropolitan TIPs will include Federal Land Highway projects proposed for implementation within the metropolitan planning area. The projects in the TIP must be consistent with the long-range plan.

- Updates. The TIP must be updated at least every 4 years. Some MPOs update them more frequently. The MPOs usually offer opportunities for the TIPs to be amended at other times, and the amendments may remove, add, or modify projects on the TIP.
- Organizations involved. The MPO must cooperate with the State and affected public transit operators in the development of the TIP. Similar to development of the long-range metropolitan transportation plan, when the planning area includes Federal public lands and/or Indian tribal lands, the MPO must consult with FLMAs and/or Indian Tribal Governments, as appropriate, during development and approval of the TIP.

- Projects included. The TIP includes projects, or identified phases of projects, to be carried out over the next 4 years. Projects are only included if full funding can be expected to be available to complete the projects, even beyond the 4 years of the TIP. The TIP must include a financial plan that demonstrates resources are sufficient to reasonably expect the implementation of its listed projects.
- Public involvement. The MPO, in cooperation with the State and affected public transit operators, must provide any citizen, public agency, or other interested party the opportunity to comment on the proposed TIP.
- Approval. The Governor of the State and the MPO must approve the TIP and its associated conformity finding (if needed). The FHWA and FTA, as necessary, will take an action on the conformity finding before proceeding with the approval of the entire STIP, of which the TIP is a part. The FHWA and FTA do not take actions on individual TIPs, aside from making conformity determinations.

### Why Should the FLMA Be Involved in the Development of the Metropolitan TIP?

A significant amount of FHWA and FTA program funds may be used in metropolitan areas. The MPOs, in cooperation with the State and public transit operators, select projects to include on the metropolitan TIP. Projects selected for funding by an MPO can benefit FLMA projects and management goals. If the agency partners with the MPO, other local organizations, or a public transportation provider, an agency project can be sponsored by the MPO and included on the metropolitan TIP. By participating in the development of the TIP, the agency is also able to review and provide input for MPO and others' recommended projects that affect Federal lands.

### How Should the FLMA Be Involved in the Development of the TIP?

- Each agency should obtain a copy of the current TIP.
- The agency should obtain information on the TIP development process for the MPO and the schedule for developing and amending the TIP. Most MPOs have a document that describes the TIP development process including a timeline.
- The Federal land manager should make a formal request to the local FHWA Federal-aid office and the MPO to include the agency in the process for updating the TIP.

- The agency should participate in the development of the proposed TIP and during the public involvement process (figure 5), as well as other consultation opportunities.
  - If the project(s) is a State or local recommended project that provides access to and within Federal land, the agency should review the scope and description of the project(s). If the agency would like the project scope and description modified on a project(s) to meet their needs, the agency should meet with the project sponsor to provide their input on the specific project(s).
  - If the FLMA has identified projects that can be funded through programs other than the FLHP, they should contact the MPO to determine whether the MPO is willing to provide funding for the projects. The agency should determine the various programs that could fund specific projects.
- If funding is made available for Federal agency recommended projects, the agency should review the subsequent TIP to ensure that the projects have been included.

The agency must be familiar with the various programs that could provide funding for a project. Chapter 3 describes most of the eligible activities for each program under Titles 23 and 49. By using the tables in chapter 3 and contacting the local FHWA Federal-aid division office, the Federal Lands Highway division office, or the FTA regional office, the agency should be able to identify potential funding sources for their projects.

The FLMA should determine whether it can provide any funds for a particular project. The FHWA and FTA programs generally require a nonfederal share. This is usually provided by the project sponsor, normally the State or a local government. In general, FLMA-appropriated funds, FLHP funds, and in-kind support (e.g., engineering and environmental services) may be used as the nonfederal share on most projects. The potential for the FLMA to provide the nonfederal share makes them an especially attractive partner.

| Planning Document | Update Schedule |
|---|---|
| Metropolitan Transportation Plans (nonattainment and maintenance areas) | 4 years |
| Metropolitan Transportation Plans (attainment areas) | 5 years |
| STIPs and Metropolitan TIPs | 4 years |

Figure 6. Schedules for planning updates.

## IMPLEMENTATION FUNDING

Now that we have looked at the statewide transportation planning processes, let's look at the specific funding programs that can help address the needs defined during the planning process. But first, note that:

Federal surface transportation funding may only be used for transportation-related projects on public roads (i.e., roads that are under the jurisdiction of, and maintained by, a public authority and open to public travel). Projects on FLMA administrative roads are not eligible. However, using Federal surface transportation funds for public roads frees up other FLMA funding for administrative roads and for addressing other nonroad-related issues.

Federal surface transportation funding is provided through many programs, some of which are briefly described in this chapter. FLMAs have successfully funded many projects through several of these programs including the Federal Lands Highway program, the Emergency Relief for Federally Owned (ERFO) roads program, the National Scenic Byways program, the Recreational Trails program, and the Transportation Enhancement program. They are described briefly below. Additional information and links can be found in appendix A.

### The Federal Lands Highway Program (FLHP)

The FLHP provides financial resources and technical assistance to support a coordinated transportation system serving Federal and Indian lands. Activities supported by the FLHP can include planning, research, environmental compliance, engineering, design, and construction oversight related to the construction and rehabilitation of highways, roads, parkways, bridges, and transit facilities providing access to Federal and Indian lands. For more detailed information on the FLHP funding opportunities, see table 2. The programs within the FLHP include:

1. Park Roads and Parkways program.
2. Indian Reservation Roads program.
3. Refuge Roads program.
4. Forest Highways program.
5. Public Lands Highways–Discretionary program.

#### *Park Roads and Parkways*

The Park Roads and Parkways program is jointly administered by the FHWA and the National Park Service (NPS) to fund projects on or adjacent to national parks and other lands owned by the NPS.

## Federal Surface Transportation Programs

***Indian Reservation Roads***

The Indian Reservation Roads program is jointly administered by the FHWA and the Bureau of Indian Affairs to fund projects on lands owned by Tribal governments or Alaska Native Villages.

***Refuge Roads***

The Refuge Roads program is jointly administered by the FHWA and the U.S. Fish and Wildlife Service to fund projects on National Wildlife Refuges.

***Forest Highways***

The Forest Highways program is jointly administered by the FHWA, the U.S. Forest Service, and the respective State Highway Administration within each State that has a national forest or grassland. The program funds projects on a designated system of forest highways, the majority of which are State or county roads that provide access to or through the National Forest System. The annual project funding level is established by formula.

***Public Lands Highways—Discretionary***

The Public Lands Highways – Discretionary program is a FHWA discretionary program that funds projects that provide access to or within or adjacent to Federal lands, including national parks, national forests, Indian reservations, national wildlife refuges, Bureau of Land Management lands, and military installations. The respective State Highway Administrators in each State submit candidate applications to the FHWA. If the project is selected, the agency may be able to enter into an agreement with the State to receive the funds directly from FHWA. During recent years, project selection has been completely driven by Congressional direction, and the trend is likely to continue for the foreseeable future.

***Emergency Relief for Federally Owned (ERFO) Roads Program***

The ERFO roads program provides assistance to repair and reconstruct Federal and Indian roads damaged in a natural disaster over a wide area or by catastrophic failure resulting from external causes.

***National Scenic Byways***

The scenic byways program funds projects that enhance and preserve the intrinsic qualities and visitor services along State and federally designated scenic byways (table 3). Each State has a scenic byways coordinator who approves applications and submits them to FHWA for consideration. The State scenic byways coordinator can provide application procedures. Information is available on the America's Byways Web site: http://www.byways.org/ (for travelers) or http://www.bywaysonline.org (for grants, designations, forums, and national marketing of program) or http://www.bywaysresourcecenter.org (for education and resources).

### *Recreational Trails*

The Recreational Trails program provides funds to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses (table 3). Each State has a State trails administrator who is responsible for providing application procedures and deadlines. Information is available on the Recreational Trails program Web site: http://www.fhwa.dot.gov/environment/rectrails.

### *Surface Transportation Program—Transportation Enhancement Set-Aside*

The Surface Transportation program (STP)–Transportation Enhancement Set-Aside is a flexible funding source that funds many activities in the area affected by a transportation project (table 5). Transportation-related activities designed to strengthen the cultural, aesthetic, and environmental aspects of the Nation's surface transportation system are eligible. Many examples of eligible activities are identified in table 5. Each State has a transportation enhancement (TE) manager who provides application procedures. Information is available on the TE clearinghouse Web site at: http://www.enhancements.org/ or FHWA's Web site http://www.fhwa.dot.gov/environment/te.

## A Potpourri of Success Stories

Here are a few examples of how this funding has enhanced recreational experiences on Federal lands across the country.

### *Laramie, Wyoming*

An abandoned railway corridor connecting Albany and Laramie, Wyoming, is helping residents get in shape: through Transportation Enhancement funding, the corridor was converted in 2006 to a 20-mile biking and walking trail. Now, visitors and locals can bike, walk, or jog on the smooth, hard-packed surface of the Medicine Bow Trail, which runs through forest, meadows, and lakeshore.

The rail-to-trail project received an initial grant of $326,000 and an additional grant of $200,000. Funding came from the Wyoming Department of Transportation and the U.S. Forest Service. The project included an additional trail around the shore of Lake Owen, a boardwalk over a riparian area, an accessible fishing pier, and six trailheads equipped with information kiosks, picnic tables, and pit toilets.

BikeNet, a local bicycling club, was an instrumental partner in the project. In 2001 they assisted with the initial planning, and with help from the University of Wyoming, applied for funding. Due to the perseverance of these private and government partners, the communities of Laramie, Albany, Fox Park, and Mountain Home, now have a safe place to get outdoors.

***Cleveland National Forest, California***

A constant stream of traffic on busy Harbor Boulevard in Los Angeles County, California, once divided two major wildlife habitats, putting animals and motorists at risk whenever native wildlife—mostly deer, coyotes, and bobcats—tried to cross the busy thoroughfare, which studies show is used by 28,000 vehicles a day. Today, animals cross safely, thanks to the construction of a $337,000 underpass funded in part by a Transportation Enhancement award. The 18-foot high by 20-foot wide tunnel links the Puente-Chino Hills Wildlife Corridor with the Cleveland National Forest, allowing animals to move safely between habitats without venturing into heavy traffic. The freedom to move between habitats improves genetic diversity among species and provides for a healthier ecosystem.

Construction of the underpass began in September 2005 and was completed in June 2006. A wildlife movement study, completed in 1999 by the University of San Diego and Cal Poly Pomona, identified the prime location for the corridor. The project was enthusiastically supported by elected officials, public agencies, and local nonprofit organizations, and developed by the County of Los Angeles and the California Department of Parks and Recreation. California State University, Fullerton Foundation, was hired to monitor current wildlife usage. This multiagency effort has greatly improved safety for motorists and wildlife alike.

***Hoosier National Forest, Indiana***

Horseback riders, mountain bikers, and hikers have benefited from the Spring Valley trail off Indiana State Highway 37, which was funded primarily by the Recreational Trails program and fee demo revenues. “Hopefully, this will prove to be a relatively painless way to get some trail construction dollars. In this case, there would be no way this trail would be built without the grant,” Les Wadzinski noted.

## TRANSPORTATION PROGRAM FUNDING TABLES

Table 1 summarizes the differences in funding opportunities between Federal Lands Highway programs and other FHWA Federal-aid and FTA programs.

Table 1. Differences between the funding programs

| FHWA Program | Funding Recipient | Comments |
|---|---|---|
| **Federal Lands Highway Program (FLHP) (table 2)** | Funding provided specifically for transportation systems providing access to and within Federal and Indian lands. Some of the programs provide funding directly for FLMA projects. | Each program category has different requirements and restrictions. |
| **Federal-aid and FTA programs (most applicable to the FLMAs) (table 3)** | Most of the funding is provided to the States (generally to the State DOT) for distribution within their boundaries. Some of the funding is provided directly to the public. | To receive benefits from these funding programs, the FLMA must partner with the States, other local transportation officials, and/or transit operators. |

The numerous FHWA and FTA programs with potential for funding projects that are beneficial to the FLMAs are detailed in tables 2 and 3. The tables include program titles, eligible activities, and funding levels. Information outlining programs that can provide leverage or match funding is included. It should be noted that specific program requirements vary from State to State. For more detailed information, see the pages referenced for each program.

Additional information is available at
http://www.fhwa.dot.gov,
http://www.bywaysonline.org,
http://www.fhwa.dot.gov/environment/te,
http://www.fhwa.dot.gov/safetealu/index.htm,
and http://www.fs.fed.us/eng/safetea-lu.

## Federal Surface Transportation Programs

Table 2. FHWA'S Federal Lands Highway Program

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **FLHP: Park Roads and Parkways (PRP) Program:** Funding for repair of existing roads and bridges, Congressionally authorized parkways, and development of alternative transportation systems within National Parks. See page 55 for more information. | Category I: Rebuilding the existing road and bridge infrastructure:<br>FY 2005: $180 million<br>FY 2006: $195 million<br>FY 2007: $210 million<br>FY 2008: $225 million<br>FY 2009: $240 million<br><br>Category II: Congressionally authorized parkway projects: $3–10 million annually.<br><br>Category III: Alternative transportation systems: $ 5–15 million annually. | ■ Resurface, repair, or rehabilitate roads and repair bridges.<br>■ Completion of Congressionally authorized parkways.<br>■ Develop new transportation systems to reduce impact from autos. | None required. PRP funding may be used for State/local matching share for apportioned Federal-aid Highway Funds. |
| **FLHP: Indian Reservation Roads (IRR) Program:** Provides funds for planning, designing, constructing, and maintaining Indian Reservation Roads (IRR). See page 57 for more information. | FY 2005: $300 million<br>FY 2006: $330 million<br>FY 2007: $370 million<br>FY 2008: $410 million<br>FY 2009: $450 million | Funds can be used for any transportation project providing access to or within Indian lands. Changes to SAFETEA-LU include:<br>■ New IRR bridge funding authorizing $14 million per year.<br>■ Tribal governments can approve road and bridge construction plans, specs, and estimates.<br>■ Completion of a comprehensive national inventory of transportation facilities.<br>■ 25 percent of tribes share of IRR program funds can be used for maintenance activities.<br>■ Tribes can contract directly with FHWA. | None required. |

Table 2. FHWA'S Federal Lands Highway Program *(continued)*

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **FLHP: Refuge Roads Program (RRP):** Administered by the U.S. Fish and Wildlife Service and FHWA, the Refuge Roads Program provides funds for maintaining roads, trails, and parking lots on Fish and Wildlife Service refuges. See page 53 for more information. | FY 2005: $29 million<br>FY 2006: $29 million<br>FY 2007: $29 million<br>FY 2008: $29 million<br>FY 2009: $29 million | Funds may be used for:<br>■ Maintenance and improvements of refuge roads.<br>■ Maintenance and improvements to adjacent parking areas, interpretive signs, provisions for pedestrian and bicycles, rest areas, and associated administrative costs.<br>■ Up to 5 percent of total program allocation can be used to maintain, or improve trails.<br><br>***Note:*** *New road or trail construction is not authorized.* | None required. |
| **FLHP: Forest Highways:** Undertakes a major portion of the planning, designing, and constructing of forest highways. State highway agencies provide the remainder. See page 59 for more information. | Funds allocated to each State by administrative formula. | Planning, designing, and constructing of forest highways.<br><br>Some funds may be transferred to the Forest Service to cover associated administrative costs. | None required. |
| **FLHP: Aquatic Organism Passage:** Funds the costs to facilitate the passage of aquatic species beneath roads in the National Forest System, including the cost of constructing, maintaining, replacing, or removing culverts and bridges. See page 60 for more information. | FY 2005: $10 million<br>FY 2006: $10 million<br>FY 2007: $10 million<br>FY 2008: $10 million<br>FY 2009: $10 million | Subcategory of Forest Highways program; Forest Service is the only FLMA eligible. | None required. |

## Federal Surface Transportation Programs

Table 2. FHWA'S Federal Lands Highway Program *(continued)*

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **FLHP: Public Lands Highways Discretionary Program:** Funding for transportation planning, research, engineering, and construction of highways, roads, parkways, and transit facilities within Federal public lands. Funds are also available for operation and maintenance of transit facilities located on Federal public lands. See page 62 for more information. | FY 2005: $88.4 million<br>FY 2006: $95.2 million<br>FY 2007: $95.2 million<br>FY 2008: $98.6 million<br>FY 2009: $102 million | **Projects not designated by Congress:** Eligible projects include:<br>■ Transportation planning for tourism and recreational travel.<br>■ Adjacent parking areas.<br>■ Interpretive signs.<br>■ Acquisition of scenic easements or scenic or historic sites.<br>■ Provisions for pedestrians and bicycles.<br>■ Roadside rest areas.<br>■ Visitor centers. | None required. |
| **FLHP: Coordinated Federal Lands Highway Technology Implementation Program (CTIP):** Provides funding for innovative transportation technologies on Federal lands. See page 64 for more information. | CTIP funding not to exceed ½ of 1 percent of the yearly authorized appropriation for each FLHP category (Park Roads, Forest Highways, Indian Reservation Roads, Refuge Roads). | ■ Transportation infrastructure.<br>■ Transit.<br>■ Safety.<br>■ Public use.<br>■ Natural environments.<br>Research projects are not eligible. | None required. |

Table 3. FHWA and FTA programs.

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **Congestion Mitigation and Air Quality Improvement Program:** Provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide (CO), and particulate matter (PM-10, PM-2.5) which reduce transportation related emissions. See page 86 for more information. | FY 2005: $1,667 million<br>FY 2006: $1,694 million<br>FY 2007: $1,721 million<br>FY 2008: $1,749 million<br>FY 2009: $1,777 million | Activities include:<br>■ Traffic flow improvements.<br>■ Demand management, car pooling, public outreach efforts.<br>■ Transit and intermodal freight activities.<br>■ Inspection and maintenance, alternative fuels.<br>■ Establish or operate advanced truck stop electrification systems.<br>■ Improve transportation systems management and operations that mitigate congestion and improve air quality.<br>■ Involve the purchase of integrated, interoperable emergency communications equipment.<br>■ Involve the purchase of diesel retrofits that are for motor vehicles or nonroad vehicles and nonroad engines used in construction projects located in ozone or particulate matter nonattainment or maintenance areas and funded under 23 U.S.C.<br>■ Conduct outreach activities that provide assistance to diesel equipment and vehicle owners and operators regarding the purchase and installation of diesel retrofits. | Federal share is 80 percent, subject to sliding scale. Interstate projects receive 90 percent, and some projects are eligible for 100-percent Federal funding. |

## Federal Surface Transportation Programs

Table 3. FHWA and FTA programs. *(continued)*

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **Emergency Relief for Federally Owned Roads (ERFO):** Provides assistance to repair Federal roads damaged in a natural disaster. ERFO is different from the Emergency Relief program. See page 65 for more information. | Subset of Emergency Relief program, so each year, the funding varies. | Repair and reconstruction of Federal roads damaged by a natural disaster over a wide area or by a catastrophic failure by any external cause. | No nonfederal match is required. |
| **FHWA Discretionary Programs:** Thirteen different discretionary programs are administered by FHWA. See page 84 for more information. | FHWA solicits candidates and selects projects for funding based on applications received. | Programs include:<br>■ Bridge.<br>■ Corridors And Borders.<br>■ Ferry Boats.<br>■ Highways For LIFE.<br>■ Innovative Bridge Research And Construction.<br>■ Innovative Bridge Research And Deployment Program.<br>■ National Historic Covered Bridge Program.<br>■ ITS Deployment Program.<br>■ Interstate Maintenance.<br>■ Public Lands Highways.<br>■ Scenic Byways.<br>■ Transportation and Community System Preservation Program.<br>■ Transportation Infrastructure Finance and Innovation Act.<br>■ Truck Parking.<br>■ Value Pricing Pilot Prog | It varies depending on the program. |
| **FTA - Alternative Transportation in Parks and Public Lands:** Provides funds to support public transportation projects in parks and public lands to reduce emissions and to address areas with high visitation. See page 88 for more information. | FY 2006 $ 22 million<br>FY 2007 $ 23 million<br>FY 2008 $ 25 million<br>FY 2009 $ 26.9 million | ■ Provides grants for planning or capital projects in or in the vicinity of federally owned or managed park, refuge, or recreational area that is open to the general public. | None required. |

Table 3. FHWA and FTA programs. *(continued)*

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **High Priority Projects (HPP) Program:** Provides funding for 5,091 specific projects identified in SAFETEA-LU. See page 66 for more information. | FY 2005: $2,966 million<br>FY 2006: $2,966 million<br>FY 2007: $2,966 million<br>FY 2008: $2,966 million<br>FY 2009: $2,966 million | Eligible projects are described in section 1702 of SAFETEA-LU. (See page 66 for more details)<br>For construction projects, eligible activities include any related project development activities, including environmental documentation, design, right-of-way activities, and construction.<br><br>Funded by contract authority, available until expended. | Federal share is 80 percent, except in States with a sliding scale, i.e., Alaska, Montana, Nevada, North Dakota, Oregon, and South Dakota.<br><br>The 20-percent match must come from nonfederal sources with the exception that FLHP funds can be used to match HPP funds. |
| **High Risk Rural Roads:** (Subcategory of the Highway Safety Improvement Program (HSIP), this program is a $90 million set-aside that supports safety improvements to high-risk rural roads. See page 72 for more information. | FY 2005: $0 million<br>FY 2006: $90 million<br>FY 2007: $90 million<br>FY 2008: $90 million<br>FY 2009: $90 million<br><br>The State funding levels for High Risk Rural Roads are set aside after the funds are apportioned to the States using the same formula used for overall HSIP apportionments. | Eligible project examples include:<br>■ Intersection safety improvements.<br>■ Pavement and shoulder widening.<br>■ Installation of rumble strips.<br>■ Railway-highway safety crossing improvements.<br>■ Improvement for pedestrian or bicyclist safety, or safety of the disabled. | Federal share is 90 percent, subject to sliding scale with certain activities eligible for 100-percent funding. |

Table 3. FHWA and FTA programs. *(continued)*

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **Highway Bridge Program/ Off-System Highway Bridge Program:** Enables States to improve the condition of their highway bridges through replacement, rehabilitation, and systematic preventive maintenance. See page 68 for more information. | By law, States must spend a minimum of 15 percent of their apportioned funds on the off-system, unless the needs within the State do not justify the expenditure. | Proposed projects must be in the STIP to receive Federal funding through the bridge program.<br><br>***On Eligible Bridges:*** Rehabilitation, replacement, painting; application of calcium magnesium acetate, sodium acetate/ formate, or other environmentally acceptable, minimally corrosive anti-icing and de-icing compositions.<br><br>***On All Bridges, irrespective of eligible status:*** Seismic retrofit, scour mitigation, systematic preventative maintenance. | Match is required; FLMA funding may be used as match for nonfederal share. |
| **Highway Safety Improvement Program (HSIP):** Funds projects that reduce traffic fatalities and serious injuries on public roads. See page 70 for more information. | FY 2005: $0 million<br>FY 2006: $1,236 million<br>FY 2007: $1,256 million<br>FY 2008: $1,276 million<br>FY 2009: $1,296 million | To obligate funds, States must have a strategic highway safety plan. Funds may be used on any public road, bicycle, or pedestrian pathway. See page 70 for more details. | Federal share is 90 percent, subject to sliding scale adjustment. Federal share is 100 percent for certain safety improvements listed in 23 U.S.C. 120 (c). |
| **National Scenic Byways Program:** Designates roads with outstanding scenic, historic, cultural, natural, recreational, and archaeological qualities as All-American Roads or National Scenic Byways. See page 74 for more information. | FY 2005: $26.5 million<br>FY 2006: $30 million<br>FY 2007: $35 million<br>FY 2008: $40 million<br>FY 2009: $43.5 million | ■ Scenic Byway planning, design, or development.<br>■ Corridor management plan.<br>■ Safety improvements.<br>■ Construct rest area, turnout, highway shoulder improvement, overlook, or interpretive facility.<br>■ Improve access to recreation.<br>■ Protect resources.<br>■ Develop tourism. | 80-percent Federal: 20-percent nonfederal. |

Table 3. FHWA and FTA programs. *(continued)*

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **Recreational Trails Program (RTP):** Provides funds to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. See page 76 for more information. | FY 2005: $60 million<br>FY 2006: $70 million<br>FY 2007: $75 million<br>FY 2008: $80 million<br>FY 2009: $85 million | ■ Maintain and restore trails.<br>■ Develop/rehabilitate trailside and trailhead facilities and trail linkages.<br>■ Purchase and lease trail construction and maintenance equipment.<br>■ Construct new trails.<br>■ Acquire easements or land for trails (condemnation is prohibited).<br>■ Assess trail conditions for accessibility and maintenance.<br>■ Educational programs to promote trail-related safety and environmental protection.<br>■ State administrative costs related to the RTP. | 80-percent Federal share; sliding scale for States with large proportion of Federal lands. |
| **Safe Routes to Schools Program:** Provides funds for making walking and biking to school safer for primary and middle-school students. See page 78 for more information. | FY 2005: $54 million<br>FY 2006: $100 million<br>FY 2007: $125 million<br>FY 2008: $150 million<br>FY 2009: $183 million | Infrastructure Improvements<br>■ Sidewalk improvements.<br>■ Traffic speed reduction.<br>■ Pedestrian and bike crossings.<br>■ Bicycle and pedestrian facilities.<br>■ Bicycle parking.<br>■ Traffic diversion.<br><br>Noninfrastructure Improvements<br>■ Public awareness campaigns.<br>■ Traffic enforcement.<br>■ Student safety education.<br>■ Training volunteers and managers. | Federal Share: 100 percent. |

## Federal Surface Transportation Programs

Table 3. FHWA and FTA programs. *(continued)*

| Funding Program | Authorized Funding | Eligible Activities | Match |
|---|---|---|---|
| **Surface Transportation Program:** Provides flexible funding that may be used by States on projects for any Federal-aid highway. See page 79 for more information. | FY 2005: $6,860 million<br>FY 2006: $6,269 million<br>FY 2007: $6,370 million<br>FY 2008: $6,472 million<br>FY 2009: $6,576 million<br><br>Additional funds are available through the equity bonus program. | Eligible projects include:<br>■ Bridge projects.<br>■ Carpool, pedestrian, bicycle, and safety projects.<br>■ Advanced truck stop electrification systems.<br>■ Projects relating to intersections with high accident rates.<br>■ Environmental restoration and pollution abatement.<br>■ Control of noxious weeds. | Federal share is usually 80 percent, subject to sliding scale adjustment. Some projects qualify for 90-percent and 100-percent funding. |
| **Transportation Enhancement (TE) Activities:** TE projects must fit into one or more of the 12 eligible categories (http://www.fhwa.dot.gov/environment/te/teas.htm) and relate to surface transportation (http://www.fhwa.dot.gov/environment/te/relate.htm). TE projects may be enhancements added to larger Federal-aid highway projects, or may be independent projects. See page 81 for more information. | FY 2005: $803.2 m<br>FY 2006: $804.3 m<br>FY 2007: $803.2 m<br>FY 2008: $803.2 m<br>FY 2009: $803.2 m | ■ Provision of facilities for pedestrians and bicycles.<br>■ Provision of safety and educational activities for pedestrians and bicyclists.<br>■ Acquisition of scenic easements and scenic or historic sites (including historic battlefields).<br>■ Scenic or historic highway programs (including the provision of tourist and welcome center facilities).<br>■ Landscaping and other scenic beautification.<br>■ Historic preservation.<br>■ Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals).<br>■ Preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails).<br>■ Inventory, control, and removal of outdoor advertising.<br>■ Archeological planning and research.<br>■ Environmental mitigation to address water pollution due to highway runoff; or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.<br>■ Establishment of transportation museums. | 80-percent Federal share, with sliding scale for States with large proportions of Federal lands. Federal agency project sponsors may provide additional Federal share up to 100 percent (check with your State). |

## ASSISTANCE IS AVAILABLE FROM THE FHWA AND THE FTA

The FHWA and the FTA provide administrative and technical support to the FLMAs in implementing surface transportation projects and strategies.

Table 4 describes the FHWA's and the FTA's field structure and affiliated resources where support can be obtained by the FLMAs and other partners.

Table 4. FHWA and FTA assistance.

| Agency | Offices | Responsibility/Support Service |
|---|---|---|
| **FHWA – Resource Center** | One Resource Center with five locations<br>Atlanta, GA<br>Baltimore, MD<br>Lakewood, CO<br>Olympia Fields, IL<br>San Francisco, CA<br><br>http://www.fhwa.dot.gov/resourcecenter | ■ Provide expert technical assistance to FHWA Division Offices and their partners.<br>■ Assist Headquarters program offices in disseminating new policies, technologies, and techniques.<br>■ Lead in deployment of leading edge market ready technologies that will assist FHWA in advancing its strategic goals. |
| **FHWA – Federal-Aid** | 52 Federal-aid division offices<br>✻ 1 in each State Capital<br>✻ Washington, DC<br>✻ Puerto Rico<br>http://www.fhwa.dot.gov/field.html | ■ Provide front-line Federal-aid program delivery assistance to partners and customers (primarily State DOTs) in highway transportation and safety services.<br>■ Provide assistance in the areas of planning and research, preliminary engineering, technology transfer, right-of-way, highway safety, civil rights, environmental concerns, and highway beautification. |
| **FHWA – Federal Lands Highway** (FLHP consists of the Park Roads and Parkways, Public Lands Highways Discretionary, Forest Highways, Refuge Roads, and Indian Reservation Roads programs.) | Office of Federal Lands Highway<br>✻ Headquarters (Washington, DC)<br>http://www.fhwa.dot.gov/flh/index.htm<br><br>3 Federal Lands Highway division offices:<br>✻ Eastern (Sterling, VA) http://www.efl.fhwa.dot.gov<br>✻ Central (Lakewood, CO) http://www.cflhd.gov<br>✻ Western (Vancouver, WA) http://www.wfl.fha.dot.gov | ■ Provide financial resources and technical assistance (planning, environmental, engineering, and construction support) directly to FLMAs and other partners in support of a coordinated program of public roads that service the transportation needs of Federal and Indian lands. |

## Federal Surface Transportation Programs

Table 4. FHWA and FTA assistance *(continued)*.

| Agency | Offices | Responsibility/Support Service |
|---|---|---|
| **FTA** | Washington, DC, headquarters office<br><br>10 regional offices that assist transit agencies in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, Northern Mariana Islands, and American Samoa as well as metropolitan offices.<br>http://www.fta.dot.gov | ■ Administers Federal funding to support a variety of locally planned, constructed, and operated public transportation systems throughout the U.S., including buses, subways, light rail, commuter rail, streetcars, monorail, passenger ferry boats, inclined railways, and people movers. |
| **Other Technical Assistance Centers supported by FHWA** | | |
| **LTAP and TTAP** | 58 local technology transfer centers<br>✻ one in each State<br>✻ one in Puerto Rico<br>✻ 7 regional centers<br>http://www.ltapt2.org/centers/ | ■ To enrich the knowledge base of the local roads community.<br>■ To foster a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing the knowledge of the transportation workforce and decisionmakers.<br>■ To support local transportation professionals, in improving the quality and safety of the surface transportation system through training, technology transfer, and information exchange activities. |
| **America's Byways Resource Center** | For potential and existing byway travelers and media:<br>http://www.byways.org | ■ Information relevant to planning, traveling, and sharing information on the byways. |
| | For potential and existing byway audiences interested in grants, designations, forums, and national marketing:<br>http://www.bywaysonline.org | ■ Information specific to grants, nominations, initiatives, policy, national marketing information, and how to contact National Scenic Byways Program staff as well as State and byway contacts. |
| | For education and resources:<br>http://www.bywaysresourcecenter.org/ | ■ E-information for all byway needs. |

Table 4. FHWA and FTA assistance *(continued)*.

| Agency | Offices | Responsibility/Support Service |
|---|---|---|
| **Pedestrian and Bicycle Information Center (PBIC)** | University of North Carolina Highway Safety Research Center,<br>Chapel Hill NC.<br>http://www.pedbikeinfo.org<br>http://www.pedbikeimages.org<br>http://www.saferoutesinfo.org | ■ Provides expert technical assistance on pedestrian and bicycle transportation to professionals and the public.<br>■ Funded through a grant under SAFETEA-LU Section 1411(b).<br>■ Links to a pedestrian and bicycle image library and the National Center for Safe Routes to School. |
| **National Trails Training Partnership (NTTP)** | American Trails, Redding, CA.<br>http://www.NTTP.net | ■ Promotes and provides information on training for all kinds of trails.<br>■ An alliance of Federal agencies, training providers, professional contractors, and providers of products and services.<br>■ Funded through cooperative agreements with Federal land management agencies and FHWA's Recreational Trails program. |
| **National Transportation Enhancements Clearinghouse (NTEC)** | Rails-to-Trails Conservancy, Washington DC<br>http://www.enhancements.org | ■ Provides information on Transportation Enhancement (TE) activities, including contact information for State program managers, the TE database and project examples, TE related publications, and the quarterly TE newsletter Connections.<br>■ Funded through a cooperative agreement with FHWA. |

Table 5. Select funding opportunities in Title 23 U.S.C.

| OPPORTUNITIES | PROGRAMS | | | | |
|---|---|---|---|---|---|
| | Sec. 133 Surface Transportation Program (STP) (Including Transportation Enhancements Set-Asides) | Sec. 144 Highway Bridge Replacement and Rehabilitation Program | Sec. 204 FLHP Federal Lands Highway Program Public Lands Highway—Discretionary | Sec. 162 National Scenic Byways Program | Sec. 206 Recreational Trails Program |
| Archeological planning and research | TE | | X | | |
| Bicycle and pedestrian facilities | TE | | X | X | X |
| Bridge repair and replacement | X | X | X | | |
| Cultural and historic resource protection | TE | | X | X | |
| Easement acquisition for recreational trails and recreational trail corridors | | | X | | X |
| Environmental mitigation to address water pollution due to highway runoff or to reduce vehicle-caused wildlife mortality while maintaining habitat connectivity | TE | | X | | |
| Environmental protection educational programs related to the use of recreational trails | | | X | | X |
| Environmental restoration and pollution abatement projects to address water pollution or environmental degradation caused or contributed to by transportation facilities | X | | X | | |
| Historic preservation, rehabilitation, and operation of historic transportation buildings/structures/facilities | TE | | X | | |
| Historic site acquisition | TE | | X | X | |
| Intelligent transportation systems infrastructure | X | | X | | |
| Interpretive facilities/signs | TE | | X | X | |

TE – These activities can be funded from the Transportation Enhancements Set-Aside within the Sec. 133 Surface Transportation Program. Projects eligible for TE funds also are eligible for all regular STP funds. Projects must relate to surface transportation (rather than providing only for recreational use).

X – These activities can be funded from the program shown in the column heading.

Table 5. Select funding opportunities in Title 23 U.S.C. *(continued)*

| OPPORTUNITIES | PROGRAMS | | | | |
|---|---|---|---|---|---|
| | Sec. 133 Surface Transportation Program (STP) (Including Transportation Enhancements Set-Asides) | Sec. 144 Highway Bridge Replacement and Rehabilitation Program | Sec. 204 FLHP Federal Lands Highway Program Public Lands Highway—Discretionary | Sec. 162 National Scenic Byways Program | Sec. 206 Recreational Trails Program |
| Landscape/scenic beautification | TE | | X | X | |
| Management systems | X | | X | | |
| Natural habitat mitigation efforts related to projects funded under Title 23 | X | | X | | |
| Outdoor advertising control and removal | TE | | X | X | |
| Parking areas/facilities | | | X | X | X |
| Railway corridor preservation (conversion and use for pedestrian or bicycle trails) | TE | | X | | X |
| Roadside rest areas | | | X | X | |
| Safety and educational activities for pedestrians and bicyclists | TE | | X | | X |
| Safety improvements | X | X | X | X | X |
| Scenic easement and scenic site acquisition | TE | | X | X | |
| Scenic and historic highway programs | TE | | X | | |
| State scenic byways program—planning, design, and development | | | X | X | |
| Tourist and welcome centers | TE | | X | X | |
| Tourist information | | | X | X | |
| Tourist-oriented signs | | | X | X | |
| Trail construction and reconstruction | TE | | X | | X |

TE – These activities can be funded from the Transportation Enhancements Set-Aside within the Sec. 133 Surface Transportation Program. Projects eligible for TE funds also are eligible for all regular STP funds. Projects must relate to surface transportation (rather than providing only for recreational use).

X – These activities can be funded from the program shown in the column heading.

# Federal Surface Transportation Programs

Table 5. Select funding opportunities in Title 23 U.S.C. *(continued)*

| OPPORTUNITIES | PROGRAMS | | | | |
|---|---|---|---|---|---|
| | **Sec. 133 Surface Transportation Program (STP)**<br><br>**(Including Transportation Enhancements Set-Asides)** | **Sec. 144 Highway Bridge Replacement and Rehabilitation Program** | **Sec. 204 FLHP Federal Lands Highway Program**<br><br>**Public Lands Highway—Discretionary** | **Sec. 162 National Scenic Byways Program** | **Sec. 206 Recreational Trails Program** |
| Trail facilities/trailheads | TE | | X | | X |
| Trail maintenance | | | | | X |
| Transit facilities | X | | X | | |
| Wetlands mitigation efforts related to project funded under Title 23 | X | | X | | |
| Wildlife crossings—mitigation of wildlife crossing hazards | X | | X | | |
| Wildlife, habitat, and ecosystems—mitigation of damage caused by a transportation project funded under Title 23 | X | | X | | |

TE – These activities can be funded from the Transportation Enhancements Set-Aside within the Sec. 133 Surface Transportation Program. Projects eligible for TE funds also are eligible for all regular STP funds. Projects must relate to surface transportation (rather than providing only for recreational use).

X – These activities can be funded from the program shown in the column heading.

## SUCCESS STORIES

The following examples illustrate a few of the ways Federal Surface Transportation Program (STP) funds can be implemented to support projects on public lands. The various funding programs available through the Federal STP provide land managers with many opportunities to develop trails, transit systems, alternative modes of transportation, and resource protection and restoration. For more examples, visit the Web sites listed at the end of this guidebook.

### Recreational Trails Program (RTP) Funds Provide for Improvements to Allegheny Trail

Figure 7. RTP funds helped pay for the construction of a bridge across Meadow Creek on the Monongahela National Forest.

Stretching for more than 260 miles, the Allegheny Trail has long been considered West Virginia's premier long-distance backpacking trail. The North-South trail winds its way from the Mason-Dixon Line at the Pennsylvania border to the Appalachian Trail on Peter's Mountain, West Virginia. The trail was built by the West Virginia Scenic Trails Association and has been maintained by the volunteer nonprofit organization for the past 30 years, without government funding. But in recent years, the Association decided some financial assistance was needed.

In 2001, the Association applied to the Recreational Trails program (RTP) for funding for trail improvements. The West Virginia Recreational Trails Advisory Board enthusiastically supported the project, and helped the Association obtain $50,000 in RTP funds and $12,500 in matching funds (including in-kind) for a total of $62,500.

With these funds, the Association was able to accomplish the following projects:

- Construct a bridge in Monongahela National Forest across the Laurel Fork of Meadow Creek to allow year-round access to the Allegheny Trail.
- Construct a backpacker's shelter in Seneca State Forest on then site of a demolished CCC-era picnic shelter. Vital to the project was the saving of the picnic shelter's CCC-constructed stone slab floor and fireplace.
- Construction of two small trailheads.
- Signage.

These improvements have lightened the load for backpackers on Allegheny Trail, making for a safer and more enjoyable trip.

## Scenic Byways Funds Promote Beauty of BLM Land on the Alpine Loop Back Country Byway

Figure 8. Wildflowers bloom in the American Basin along Alpine Loop.

Designated as a Bureau of Land Management (BLM) Back Country Byway in 2000, Colorado's Alpine Loop gives visitors the opportunity to experience some of the State's most spectacular scenic beauty. This route winds its way to an elevation of 12,800 feet, crossing Engineer and Cinnamon Passes. The Alpine Loop has hiking trails that access five of Colorado's "fourteener" peaks (14,000 feet or more), as well as biking trails, camping, and plenty of solitude.

The byway was truly a group effort, receiving support from both public agencies and surrounding communities. The partners involved include the communities of Hinsdale, Ouray, Silverton, and Lake City, as well as the BLM, the U.S. Forest Service, Colorado Department of Transportation, and Colorado State Parks. Since 1992, the project has received more than $700,000 in Scenic Byway grants. Additional funding was provided by the partners mentioned above.

Part of the larger National Scenic Byways program, the National Back Country Byway program was initiated by the BLM. Like the Alpine Loop Byway, BLM Back Country Byways are typically focused on gravel or dirt roads that offer a slower, more intimate scenic driving experience off the beaten path. The byway designation helps visitors identify these unique recreation opportunities and boosts tourism in neighboring communities. It also provides the managers of these routes and the lands along them resources and grant opportunities to help ensure a good recreation experience for visitors and protection for the critical resources that make the Byways a special place. The roads designated as Back Country Byways traverse some of the 260 million acres of BLM public land. Since 1992, the BLM has designated 54 National Back Country Byways throughout the Western United States, giving visitors access to some of the countries most remote and spectacular natural wonders.

## Federal Surface Transportation Program Funding Supports Valuable Fish Passage Projects in the Forest Service

For many years, the Eastern Region of the Forest Service has been actively engaged in protecting our water resources through assessment and restoration. The region is home to more than 962,000 acres of lakes (43 percent of the National Forest System total acres) and over 15,000 miles of streams, providing habitat for more than 300 species of fish, 68 species of crayfish and numerous freshwater mussels with 110 of those species considered threatened, endangered, or sensitive. The region also supports approximately 28,000 miles of roads, with an estimated 50,000 road-stream crossings. These crossings are of particular concern and are the focus of many of the region's efforts to improve aquatic passage and restore stream channel function. Transportation funds are available for the region to complete many needed restoration projects and maintain watershed health.

In FY06, SAFETEA-LU funded $2.1 million of project work, and was leveraged with $97,000 of Congressionally directed funding for the replacement of structures causing barriers to aquatic passage at three road-stream crossings, with improvements to 5 miles of habitat. In addition, this combined funding provided resources to complete four design projects and four construction projects, with estimated improvements to 65 miles of habitat. These projects are in progress on the Hiawatha, Hoosier, Mark Twain, and Superior National Forests, and most involve replacing undersized culverts with larger culverts that allow for aquatic stream passage. One of the eight projects is described here:

## FSTP Funding Improves the Doe Lake Road and Indian River Wild and Scenic River in the Hiawatha National Forest

Figure 9a. Before: Prior to culvert structure.

Figure 9b. After: New con span replacement.

This project replaced a culvert and repaved approaches to the Indian River on Forest Highway 80. Habitat upstream from the crossing includes 3 lakes and 11 miles of river channel occupied by a wide variety of coldwater and warmwater fish species. Similarly diverse habitat and fish communities occur downstream from the crossing. Existing culverts at the crossing were undersized and perched resulting in channel aggradation and water impoundment upstream through a 35-acre lake. Seasonally excessive velocities through the pipes and excessive scour downstream were the result. The small culverts were prone to beaver activity and debris blockage. Wild and Scenic River considerations favored replacement of the existing crossing with a bridge or other structure that would blend well aesthetically and span normal bankfull channel width.

The project has improved aquatic passage to 11 miles of river and 47 acres of lake upstream from the crossing; restored channel morphology upstream and downstream from the crossing; restored lake surface elevation upstream from the crossing; provided for the natural conveyance of debris, and reduced sediment inputs from the road surface.

## Transportation Assistance Group Shapes Proposal for Addressing Traffic Woes in Utah's Wasatch-Cache National Forest

Figure 10. Traffic congestion, Little Cottonwood Canyon.

During the peak ski season, visitors to the Tri-canyons area of the Wasatch-Cache National Forest often face bumper-to-bumper traffic, a

lack of parking, and potential avalanches on their way to ski resorts in this popular winter getaway just 30 miles from Salt Lake City. Summer can be equally busy, with festivals and events attracting similar crowds. Usage year round seems to be growing, taxing natural resources and transportation facilities.

To address these issues, the U.S. Forest Service and local stakeholders requested an assessment of the current transportation infrastructure be conducted by the Alternative Transportation in Parks and Public Lands (ATPPL) program, Transportation Assistance Group (TAG). The assessment for this interagency team was funded via the ATPPL, as promulgated in SAFETEA-LU.

The resulting report, which was developed in December 2006, presents findings on the present status of transportation facilities and identifies challenges and opportunities to improve safety, capacity, and performance.

Forest Service staff identified a wide range of issues for TAG consideration, including existing road traffic safety, congestion and circulation, bus service, parking shortages, bicycle and pedestrian safety, growing bicycle use with no bike lanes, and avalanche threat, as well as the feasibility of providing bus shuttle service.

The TAG report found that growth in regional population is likely to continue and that recreational areas could accommodate additional usage, recognizing that road, parking, and transit capacities in the canyons are oversubscribed during the peak seasons. The report stated that "developing alternative transportation is viewed as essential" and recommended the following planning initiatives:

- Strive to enhance existing transit services, with a focus on identifying alternative transportation system improvements that could support increased visitation by a variety of recreational user groups, without a commensurate increase in traffic and congestion.
- Consider visitor access and mobility in Albion Basin beyond the ski season, with an emphasis on identifying preferred levels and modes of visitation under both normal and special event situations.
- Focus on how a corridor management strategy that emphasizes alternative transportation could help preserve the special character, solitude, and user appeal while accommodating increasing levels of visitation.

The TAG report also suggested that the planning activities could be packaged to create two project proposals for ATPPL funding:

- A transit improvement proposal focused on enhancing and expanding service beyond that primarily serving skiers and ski resort employees; seeking to accommodate growth in recreational uses in corridors that already experiences severe safety and congestion issues under peak season traffic conditions.
- An initial transportation study proposal focused on identifying planned recreational activity levels and the implications of a "do nothing" status quo transportation strategy.

The report recommendations helped focus the Forest Service's proposal for ATPPL funding in FY07 and will ultimately lead to viable solutions to Tri-canyon's current transportation challenges.

## Federal Lands Highway Program (FLHP)

### Overview

The Federal Lands Highway program provides financial resources and technical assistance to support a coordinated transportation system serving Federal and Indian lands. The FLH holds a stewardship and oversight responsibility of these dollars that fund the FLHP. It also retains a role as a service provider to the Federal land management agencies (FLMAs) and can be responsible for the planning, environmental compliance, survey, design, and construction of transportation facilities on forest highways, parkways and park roads, Indian reservation roads, refuge roads, defense access roads, and other Federal lands roads. The FLH also works closely with many State and Territorial partners.

Federal roads are roads providing access to, through, and within Federal and Indian lands. Multiyear FLHP authorizations provide an opportunity to develop a realistic, long-range priority program of projects based on adequate lead time for transportation planning resulting in the development of sound transportation system improvements. The FLH programs include: Park Roads and Parkways program, Indian Reservation Roads program, Refuge Roads program, Forest Highway program, and Public Lands Highways–Discretionary program. Funds from these programs are also used to support other initiatives like Aquatic Organism Passage and the Coordinated Federal Lands Highway Technology Program (CTIP).

The FLHP statutory provisions are contained in 23 U.S.C., Sections 201 through 204. The FLHP is administered through partnerships and interagency agreements among the FHWA, Bureau of Indian Affairs, U.S. Forest Service, National Park Service, and the U.S. Fish and Wildlife Service. One of the primary factors that has contributed to the success of these long-term partnerships is that FHWA and FLMAs have learned to respect and leverage each other's missions (i.e., they work together to build transportation systems that meet the community's standards while balancing, respecting, and protecting the resources in which they are located).

The FLHP also supports other important FLMA partners by providing some Public Lands Highways funds which can be used for transportation planning when other funds are not available. The agencies that currently receive this funding include the Bureau of Land Management, Military Surface Deployment and Distribution Command, U.S. Army, U.S. Army

Corps of Engineers, U.S. Navy, Tennessee Valley Authority, and the Bureau of Reclamation. These funds are awarded based on eligibility guidelines developed by FLH (http://www.fhwa.dot.gov/flh/plhguidelines.htm).

The FLH is comprised of 4 offices: Headquarters (Washington, DC), Eastern Federal Lands Highway Division (Sterling, VA), Central Federal Lands Highway Division (Lakewood, CO), and Western Federal Lands Highway Division (Vancouver, WA).

## Web Sites

Headquarters (Washington, DC) http://www.fhwa.dot.gov/flh/

Eastern Federal Lands Highway Division (Sterling, VA) http://www.efl.fhwa.dot.gov/

Central Federal Lands Highway Division (Lakewood, CO) http://www.cflhd.gov/

Western Federal Lands Highway Division (Vancouver, WA) http://www.wfl.fhwa.dot.gov/

## FLHP: Park Roads and Parkways Program

### Overview

The Park Roads and Parkways program (PRP) provides funding for access within national parks. The Federal Highway Administration, Office of Federal Lands Highway, provides stewardship and oversight, engineering expertise, and is responsible for program oversight and reports to Congress.

### Web Sites

http://www.fhwa.dot.gov/flh/parkroad.htm

http://www.nps.gov/transportation/roads/roads/history.htm

### Authorized Funding

(FY05-FY09): Funding is divided into three categories.

Category I: Rebuilding the existing road and bridge infrastructure
$180 – 240 million annually.

Category II: Congressionally authorized parkway projects
$3 – 10 million annually.

Category III: Alternative transportation systems
$5 – 15 million annually.

### Eligible Activities

Eligibility varies according to funding category.

Category I includes:

- Resurface, repair, or rehabilitate roads to good condition.
- Reconstruct or repair bridges.
- Safety improvements.

Category II funds completion of Congressionally Authorized Parkways:

- Natchez Trace Parkway.
- Foothills Parkway.
- Chickamauga-Chattanooga Route 27 Bypass.
- Baltimore-Washington Parkway.
- Cumberland Gap National Historic Park Tunnel.
- George Washington Memorial Parkway.

Category III covers alternative transportation systems:

- Vehicles (buses, shuttles, trolleys, boats, trams, bikes, carriages).
- Infrastructure (fuel facilities, garages, transit stops, docks, canals).
- Intelligent transportation systems.

**Where to Apply**

Contact your agency transportation engineering staff.

**Fund Distribution**

Distribution is determined by formula.

**Match**

PRP funding may be used for State/local matching share for apportioned Federal-aid Highway Funds.

**Comments**

In addition, FLHP engages in technology transfer and technical assistance to support national park transportation systems. Other technical assistance is available through FHWA. See table 4 on page 41 for more information.

## FLHP: Indian Reservation Roads Program

**Overview**

The Indian Reservation Roads program addresses transportation needs of tribes by providing funds for planning, designing, construction, and maintenance activities. The program is jointly administered by the Federal Highway Administration, Office of Federal Lands Highway, and the Bureau of Indian Affairs (BIA).

Indian Reservation Roads (IRR) are public roads which provide access to and within Indian reservations, Indian trust land, restricted Indian land, and Alaska native villages. IRR funds can be used for any type Title 23 transportation project providing access to or within Federal or Indian lands and may be used for State/local matching share for apportioned Federal-aid Highway Funds.

**Web Sites**

http://www.fhwa.dot.gov/flh/indresrd.htm

http://www.doi.gov/bia/roadreservation.html

**Authorized Funding**

FY 2005: $ 300 million
FY 2006: $ 330 million
FY 2007: $ 370 million
FY 2008: $ 410 million
FY 2009: $ 450 million

**Eligible Activities**

Eligible activities include road planning, design, and construction and maintenance. Changes to SAFETEA-LU IRR program include:

- Tribes can contract directly with the FHWA.
- New IRR bridge funding category authorizes $14 million per year for planning, design, and construction of bridges.
- Tribal governments can approve construction plans, specifications, and estimates if it provides assurance that the construction will meet applicable health and safety standards.
- Completion of national inventory of transportation facilities eligible for assistance under the IRR program.
- 25 percent of Tribe's share of IRR program funds can be used for maintenance activities.

**Where to Apply**

Contact your agency transportation engineering staff.

**Match**

None required.

**Comments**

In addition, FLHP engages in technology transfer and technical assistance to support Indian transportation systems. Other technical assistance is available through FHWA. See table 4 on page 41 for more information.

## FLHP: Refuge Roads Program

**Overview**

The Refuge Roads program is the primary funding source provided by the U.S. Department of Transportation for the transportation network serving the National Wildlife Refuge System. Refuge roads are public roads that provide access to or within a unit of the National Wildlife Refuge System. The FHWA and the U.S. Fish and Wildlife Service jointly administer the program to improve public use roads, trails, and parking lots within the National Wildlife Refuge System.

**Web Site**

http://www.fws.gov/refuges/roads/

**Authorized Funding**

SAFETEA-LU Sec. 1101(a)(12)
FY 2005: $ 29 million
FY 2006: $ 29 million
FY 2007: $ 29 million
FY 2008: $ 29 million
FY 2009: $ 29 million

**Eligible Activities**

Include the following:

- Maintaining and improving refuge roads and bridges.
- Maintaining and improving vehicular parking areas, pedestrian walkways and bicycle pathways, and for constructing and reconstructing roadside rest areas including sanitary and water facilities that are located in and adjacent to wildlife refuges.
- Maintaining and improving refuge trails.
- Administrative costs associated with these efforts.

**Where to Apply**

Funds are allocated to the seven regions of the Fish and Wildlife Service, and those regions select projects based on regional priorities. Projects must be in the agency maintenance data base to be eligible.

**Match**

None required.

**Comments**

In addition, FLHP engages in technology transfer and technical assistance to support refuge transportation systems. Other technical assistance is available through FHWA. See table 4 on page 41 for more information.

## FLHP: Forest Highways

| | |
|---|---|
| **Overview** | Forest highways provide access to and within the National Forest System. The Federal Lands Highway office undertakes a major portion of the planning, design, and construction of forest highways, with State agencies undertaking the remainder. The program is administered in accordance with 23 C.F.R., Part 660, and individual agreements with State transportation agencies. |
| **Web Site** | http://www.fhwa.dot.gov/flh/forest.htm |
| **Authorized Funding** | Funds are allocated by administrative formula to each State. |
| **Eligible Activities** | Road planning, design, and construction. In accordance with 23 U.S.C. Section 204, some funds are transferred to the Forest Service to cover associated administrative costs. |
| **Where to Apply** | Contact your agency transportation engineering staff. |
| **Fund Distribution** | Within each State, the FHWA, U.S. Forest Service, and State Departments of Transportation develop the program of projects within available funding. |
| **Match** | Forest Highways funding may be used for State/local matching share for apportioned Federal-aid Highway Funds. |
| **Comments** | In addition, FLHP engages in technology transfer and technical assistance to support forest transportation systems. Other technical assistance is available through FHWA. See table 4 on page 41 for more information. |

## FLHP: Aquatic Organism Passage

### Overview

Aquatic Organism Passage (AOP) is an important subcategory of Forest Highway funding that the Forest Service cares deeply about. The AOP program is an official part of the Forest Highway program, created by SAFETEA-LU section 1119(m).

SAFETEA-LU bill FYs 2005 – 2009, Public Law 109-59 under Title I, sec.1119, Federal Lands Highways, part (m) Forest Highways states: Of the amounts made available for public lands highways under section 1101— (3) not to exceed $10 million per fiscal year shall be used by the Secretary of Agriculture to pay the costs of facilitating the passage of aquatic species beneath roads in the National Forest System, including the cost of constructing, maintaining, replacing, or removing culverts and bridges, as appropriate.

Collaboration is key with:

- Watershed, Fish, Wildlife (WFW).
- Hydrology staffs.
- Engineering staff.
- Local authorities with transportation jurisdiction.
- Fish and Game agencies.

Objectives include:

- Address threatened and endangered and other emphasis aquatic species.
- Maximize habitat availability.
- Leverage funding from external and internal allocations.
- Address large-scale watershed partnership projects.
- Obligates the fiscal year they are being authorized.
- Avoid introduction of invasive species into refugia for native aquatic communities.
- Remain consistent with long-term road objective.

Other important points include: Program funding needs to be obligated during the fiscal year of authorization.

| | |
|---|---|
| **Web Site** | http://www.fs.fed.us/eng/safetea-lu/videos/index.htm |
| **Authorized Funding** | FY 2005: $10 million<br>FY 2006: $10 million<br>FY 2007: $10 million<br>FY 2008: $10 million<br>FY 2009: $10 million |
| **Eligible Activities** | Activities that facilitate the passage of aquatic species beneath roads in the National Forest System, including the cost of constructing, maintaining, replacing, or removing culverts and bridges, as appropriate. |
| **Where to Apply** | A call letter is sent out to National Forest System units requesting project proposals at the beginning of each FY. Funds can be sent directly to State DOTs or to National Forest System units to accomplish the program. |
| **Fund Distribution** | Secretary of Agriculture determines final project selection. |
| **Match** | None required. |
| **Comments** | The Aquatic Passage program is subject to August redistribution. A call letter to identify unused authority is sent to the receiving units in late July. Unfortunately, unlike many of the other trust fund programs, if not obligated this year, this authority cannot be restated or returned next year. An accomplishment report documenting project implementation must be submitted annually by the regions to the Washington Office for distribution to Federal Lands Highways Office, interested Congressional staffs, and partners. |

## FLHP: Public Lands Highways–Discretionary Program (PLHD)

### Overview

Under the provisions of 23 U.S.C. 204(b)(1)(A), the PLH funds are available for transportation planning, research, engineering, and construction of highways, roads, parkways, and transit facilities within Federal public lands. Under the provisions the provisions of 23 U.S.C. 204(b)(1)(B), the PLH funds are also available for operation and maintenance of transit facilities located on Federal public lands.

### Web Sites

http://www.fhwa.dot.gov/discretionary/plhcurrsola3.htm

http://www.fhwa.dot.gov/flh/publands.htm

### Authorized Funding

23 U.S.C. 202, 203 and 204; SAFETEA-LU Sec. 1101(a)(9)(D)
FY 2005: $88.4 million
FY 2006: $95.2 million
FY 2007: $95.2 million
FY 2008: $98.6 million
FY 2009: $102 million

The amount of available funding is impacted by any obligation limitation imposed on the Federal-aid highway program under the provisions of SAFETEA-LU section 1102(f), Redistribution of Certain Authorized Funds. Under this provision, funds authorized for the program for the fiscal year, which are not available for obligation due to the imposition of an obligation limitation, are not allocated for the PLHD program, but are redistributed to the State DOTs by formula as STP funds.

### Eligible Activities

Funding is provided for projects designated by Congress. Certain projects not designated by Congress may also be eligible. See criteria below.

***Projects not designated by Congress***

Under 23 U.S.C. 204(h), eligible projects may include:

- Transportation planning for tourism and recreational travel, including National Forest Scenic Byways, BLM Back Country Byways, National Trail System, and other similar Federal programs (http://www.fhwa.dot.gov/flh/plhguidelines.htm).
- Adjacent vehicle parking areas.
- Interpretive signs.
- Acquisition of scenic easements and scenic or historic sites.
- Provision for pedestrians and bicycles.

- Construction and reconstruction of roadside rest areas, including water and sanitary facilities.
- Other public road facilities such as visitor centers.

***Projects designated by Congress***
Projects designated by Congress are eligible for PLHD funding provided the proposed work in the application submitted by the State DOTs falls within the description of the designated project, as listed in the Statement of Managers.

## Where to Apply

Contact your agency transportation engineering staff.

***Projects not designated by Congress***
Only State DOTs can submit candidates for this program under the provisions of 23 U.S.C. 202(b)(1)(A). The State DOT coordinates with local and Federal agencies and Indian Tribal governments to develop viable candidate projects. Candidate projects are usually due in July.

***Projects designated by Congress***
Only State DOTs can submit candidates for this program. FHWA does not solicit for candidate projects until after passage of the annual appropriations act, and will solicit only for designated projects. The solicitation for applications may not be issued until November or December.

## Fund Distribution

***Projects not designated by Congress***
Under 23 U.S.C. 202(b)(1)(B), preference is given to States that contain at least 3 percent of the total public land in the United States. These include Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming.

## Match

In accordance with 23 U.S.C. 204(b), the Federal share of the costs under this program is 100 percent.

## Comments

For additional information outside of the provided links, please ask your agency or FHWA's contacts.

## FLHP: Coordinated Federal Lands Highway Technology Implementation Program

| | |
|---|---|
| **Overview** | The Coordinated Federal Lands Highway Technology Program (CTIP) is a cooperative technology deployment and sharing program between the FHWA Federal Lands Highway office and the FLMAs. It provides a forum for identifying, studying, documenting, and transferring new technology to the transportation community. CTIP funds are used for technology projects related to transportation networks on Federal public lands. Projects related to the transportation infrastructure, transit, safety, public use, and natural environments will be considered. |
| **Web Site** | http://www.fhwa.dot.gov/flh/ctip.htm |
| **Authorized Funding** | The CTIP program is funded through the participation of several agencies including the U.S. Forest Service, the National Park Service, the Bureau of Indian Affairs, and the Fish and Wildlife Service. CTIP is funded in an amount not to exceed ½ of 1 percent of the yearly authorized appropriation for each FLH program category (Park Roads, Forest Highways, Indian Reservation Roads, and Refuge Roads). |
| **Eligible Activities** | Many new innovative technologies have been funded through the CTIP program. These include a variety of concentration areas such as pavement, bridges, and low-volume roads. Examples of CTIP projects include: fish passage through culverts, aesthetic treatment photo album, and water/road interaction technologies. |
| **Where to Apply** | Contact your agency transportation engineering staff and/or agency CTIP Council member. |
| **Fund Distribution** | CTIP funding is not to exceed ½ of 1 percent of the yearly authorized appropriation for each FLH Program category (Park Roads, Forest Highways, Indian Reservation Roads, and Refuge Roads). |
| **Match** | None required. |
| **Comments** | Other technical assistance is available through FHWA. See table 4 on page 41 for more information. |

## Emergency Relief for Federally Owned Roads

### Overview

The Emergency Relief for Federally Owned Roads (ERFO) program provides assistance for the repair and reconstruction of Federal roads that have been damaged by a natural disaster over a wide area or by a catastrophic failure from any external cause. The ERFO program is meant to supplement the commitment of resources by Federal agencies to help pay unusually heavy expenses resulting from extraordinary conditions. Funds are provided from the Highway Trust Fund.

Federal roads are defined as roads providing access to and within Federal and Indian lands. They include Forest Highways, Forest Development Roads, Park Roads, Parkways, Indian Reservation Roads, Public Lands Highways (including Refuge Roads), and Public Lands Development Roads.

### Web Site

http://www.fhwa.dot.gov/flh/erfo.htm

### Authorized Funding

Total emergency relief funding is a minimum of $ 100 million per year subject to additional appropriations based on need; EFRO is a portion of this.

### Eligible Activities

Repair and reconstruction of Federal roads to predisaster conditions.

### Where to Apply

ERFO manual on the following Web sites provides detailed instructions on how to apply:

Main FLH ERFO page
http://www.fhwa.dot.gov/flh/erfo.htm

Western office (WFLHD)
http://www.wfl.fha.dot.gov/projects/erfo/

Central office (CFLHD)
http://www.cflhd.gov/design/erfo.cfm

Eastern office (EFLHD)
http://www.efl.fhwa.dot.gov/erfo/

### Match

None required; Federal share is 100 percent.

## High Priority Projects Program

### Overview

The High Priority Projects (HPP) program provides designated funding for specific projects identified in SAFETEA-LU. A total of 5,091 projects are identified, each with a specified amount of funding over the 5 years. Refer to SAFETEA-LU sections 1101(a)(16), 1701, 1702, 1913, 1935, 1936, and 1102.

### Web Sites

http://www.fhwa.dot.gov/safetealu/factsheets/highpriproj.htm

http://www.fhwa.dot.gov/programadmin/hpp.cfm

### Authorized Funding

FY 2005: $2,966 million
FY 2006: $2,966 million
FY 2007: $2,966 million
FY 2008: $2,966 million
FY 2009: $2,966 million

### Eligible Activities

Eligible projects are described in section 1702 of SAFETEA-LU. For construction projects, eligible activities include any related project development activities, including environmental documentation, design, right-of-way activities, and construction.

If a program is eligible under one of the FHWA's regular Federal-aid programs, it is eligible for funding with HPP funds.

Projects are funded by contract authority and funds are available until expended. Funds designated for a project in section 1702 are available only for that project with the following exception: Funds allocated for a project listed below may be obligated for any other of these projects in the State:

- HPP listed in section 1702 and numbered 3677 or higher.
- Projects of national or regional significance listed in 1301 and numbered 19 or higher.
- National Corridor Infrastructure Improvement program projects listed in section 1302 and numbered 28 or higher.
- Any transportation improvement projects listed in section 1934.

Advance construction, using State DOT funds until Federal funds are available, is an allowable method for constructing high-priority projects. High priority projects may also be advanced with funds apportioned under 23 U.S.C. 104(b) from another program; the funds are to be restored from future allocations of HPP funds.

| | |
|---|---|
| **Where to Apply** | Contact your agency engineering staff, the State DOT, or Federal-aid division office in your area. |
| **Match** | Federal share is 80 percent, except in Alaska, Montana, Nevada, North Dakota, Oregon, and South Dakota, where the sliding scale provision applies (23 U.S.C. 120(b)).<br><br>The 20-percent match must come from nonfederal sources unless specified otherwise. FLMAs may provide the non-HPP share for projects on Federal or Indian lands using FLHP and/or FLMA appropriated funds, per 120 K and120 L. |

## Highway Bridge Program

### Overview

The Highway Bridge Program funding plan and selection of projects is at the discretion of the State DOT and MAY include funding for Federal bridges. Other entities with highway bridges, such as counties, cities, and Federal land agencies, must work through the States to get access to Highway Bridge Program funds. Many of the federally-owned bridges are considered OFF the Federal-aid highway system based on the defined functional classification of each bridge. The higher functional classifications, such as interstates and highways are on the Federal-aid highway system, while local roads and some minor collector roads are not on the Federal-aid system and are considered to be off-system bridges. Proposed projects must be in the STIP to receive Federal funding through the bridge program. If any bridge is deficient and has a sufficiency rating within prescribed limits, it will in general be eligible for Federal funds as long as it has not received Federal funds within the last 10 years. Bridge eligibility is based on sufficiency rating and deficiency status as follows:

***Sufficiency Rating:*** "Numerical rating based on structural adequacy and safety, essentiality for public use, serviceability, and functional obsolescence."

***Deficiency Status:*** Structural Deficiency, which is based upon National Bridge Inventory condition ratings or Functional Obsolescence, based on National Bridge Inventory appraisal ratings.

### Web Site

http://www.fhwa.dot.gov/safetealu/factsheets/bridges.htm

### Authorized Funding

By law, States must spend a minimum of 15 percent of their apportioned funds on the off-system, unless the needs within the State do not justify the expenditure. In these cases, the law permits the 15-percent minimum to be waived and there are several States that annually pursue waivers.

### Eligible Activities

***On Eligible Bridges:*** Rehabilitation, replacement, painting, application of calcium magnesium acetate, sodium acetate/formate, or other environmentally acceptable, minimally corrosive anti-icing and de-icing compositions.

***On All Bridges, Irrespective of Eligible Status:*** Seismic retrofit, scour mitigation, and systematic preventative maintenance.

### Where to Apply

Application must be made through the State DOT. Contact your agency engineering staff, the State DOT, or Federal-aid division office in your area.

| | |
|---|---|
| **Fund Distribution** | Each State receives an amount of money determined by the formula. No State may receive less than 0.25 percent or more than 10 percent of the total amount of money available. When they receive the money, funds may be spent based upon the eligibility of the bridge and the activity undertaken. |
| **Match** | The program funds require a match from the State or locality (or in this case the Federal Agency). The amount of matching funds is determined from Section 120 of Title 23. In general, for off-system bridges, 80 percent of the cost will be provided by Federal funds and a 20-percent match is required. The funds appropriated to any Federal land management agency may be used as match to pay the nonfederal share of project costs under this program. |
| **Comments** | For more information, please contact: Edgar Small - FHWA at 202–366–4622 |

## Highway Safety Improvement Program

### Overview

The Highway Safety Improvement Program (HSIP) authorizes Federal aid to achieve significant reductions in traffic fatalities and serious injuries on public roads [SAFETEA-LU Sections 1101 (a)(6), 1401]. Main program features include: the Strategic Highway Safety Plan (SHSP), Railway-Highway Crossings, High Risk Rural Roads, and Reporting Requirements. To obligate funds under the new Section 148, a State must develop and implement a SHSP, produce a program of projects or strategies to reduce safety problems, evaluate the plan on a regular basis, and submit an annual report to the Secretary that describes not less than 5 percent of locations with the greatest need and a description of potential solutions.

### Web Site

http://safety.fhwa.dot.gov/

### Authorized Funding

FY 2005: $0 million
FY 2006: $1,236 million
FY 2007: $1,256 million
FY 2008: $1,276 million
FY 2009: $1,296 million

### Eligible Activities

States with an SHSP that meets the requirements of 23 U.S.C. 148 may obligate HSIP funds for all the purposes listed in 148. Funds may be used for projects on any public road or publicly owned bicycle or pedestrian pathway or trail. States with an SHSP are eligible to use up to 10 percent of its funds for other safety projects under 23 U.S.C., including education, enforcement, and emergency medical services. It must also certify that it has met its railway-highway crossing and infrastructure safety needs.

### Where to Apply

Contact your agency transportation engineering staff, the State DOT, or the Federal-aid division office in your area.

### Fund Distribution

Before apportioning HSIP funds, $220 million is set aside for the Railway-Highway Crossing Program under 23 U.S.C. 130. The remainder is apportioned to State DOTs based on the following factors:

- 33⅓ percent based on the ratio of lane miles of Federal-aid highways in each State to total lane miles of Federal-aid highways in all States.
- 33⅓ percent based on the ratio of vehicle miles traveled on lanes on Federal-aid highways in each State to total vehicle miles traveled on lanes on Federal-aid highways in all States.

- 33⅓ percent based on the ratio of the number of fatalities on the Federal-aid system in each State to the number of fatalities on the Federal-aid system in all States.

Each State will receive at least ½ of 1 percent of the funds apportioned for the HSIP. Each State's apportionment of HSIP funds is also subject to a set-aside for construction and operational safety improvements on High-Risk Rural Roads.

## Match

In general, Federal share is 90 percent with sliding scale for States with large proportions of Federal lands (see sliding scale rates at http://www.fhwa.dot.gov/legsregs/directives/notices/n4540-12.htm). Federal share may be 100 percent for certain safety projects listed in 23 U.S.C. 120(c) subject to apportionment limitations.

## High-Risk Rural Roads

### Overview

A component of the Highway Safety Improvement Program (HSIP), High-Risk Rural Roads is a $90 million per year program that hopes to achieve a significant reduction in fatalities and incapacitating injuries on rural roads. Currently, approximately 60 percent of fatalities occur on rural roads.

***Statutory References:*** SAFETEA-LU Sections 1401 (a) and (f); Section 148 (f) of Title 23 of U.S.C.

### Web Sites

http://www.fs.fed.us/eng/transp/safetea-lu/resources/module_n/hiriskrr.htm

http://safety.fhwa.dot.gov/safetealu/hrrpmemo.htm

### Authorized Funding

FY 2005: $0 million
FY 2006: $90 million
FY 2007: $90 million
FY 2008: $90 million
FY 2009: $90 million

### Eligible Activities

As part of the HSIP, construction and operational safety improvements are funded on roadways functionally classified as a rural major or minor collector or a rural local road that has fatal and incapacitating injury crash rates higher than the statewide average for those functional classes of roads, or that will likely have increases in volume that are likely to create such rates. Implementation thereby requires comprehensive crash data on all public roads. Funds must be obligated within 4 years.

A list of eligible projects can be found under 23 U.S.C. section 148(a)(3)(B). Examples include:

- Intersection safety improvements.
- Pavement and shoulder widening.
- Installation of rumble strips.
- Railway-highway safety crossing improvements.
- Improvement for pedestrian or bicyclist safety, or safety of the disabled.

If a State certifies that it has met all its needs relating to construction and operational improvements on high-risk rural roads, it may use those funds for any safety improvement project eligible under the HSIP.

| | |
|---|---|
| **Where to Apply** | Contact your agency transportation engineering staff, the State DOT, or the Federal-aid division office in your area. |
| **Fund Distribution** | The State funding levels for High Risk Rural Roads are set aside after the funds are apportioned to the States. The amount of funds set aside in each State is based on its proportionate share of the total HSIP apportionment (i.e., based on Federal-aid lane miles, vehicle miles traveled, and fatalities). A memorandum will be sent to the FHWA office in each State indicating the actual amount available. |
| **Match** | Federal share is 90 percent, subject to the sliding scale adjustment. Federal share may be 100 percent for certain safety projects listed in 23 U.S.C. 120(c), subject to apportionment limitations. |

## National Scenic Byways Program

### Overview

The National Scenic Byways (NSB) program provides for the designation by the Secretary of Transportation of roads that have outstanding scenic, historic, cultural, natural, recreational, and archeological qualities as All-American Roads (AAR) or NSB. The program also provides discretionary grants for scenic byways projects on AARs, NSBs, Indian scenic byways, or State-designated scenic byways. The FHWA administers the NSB program.

### Web Site

http://www.bywaysonline.org

### Authorized Funding

SAFETEA-LU Sec. 1101(a)(12)
FY 2005: $26.5 million
FY 2006: $30 million
FY 2007: $35 million
FY 2008: $40 million
FY 2009: $43.5 million
**SubTotal: $175 million**

### Eligible Activities

The following are projects are eligible for Federal assistance under 23 U.S.C. 162(c):

1. An activity related to the planning, design, or development of a State or Indian scenic byway program.
2. Development and implementation of a corridor management plan.
3. Safety improvements to a State scenic byway, National Scenic Byway, or All-American Road to the extent that the improvements are necessary to accommodate increased traffic and changes in the types of vehicles using the highway as a result of the designation as a State scenic byway, Indian tribe scenic byways, National Scenic Byway, or All-American Road.
4. Construction along a scenic byway of a facility for pedestrians and bicyclists, rest area, turnout, highway shoulder improvement, overlook, or interpretive facility.
5. An improvement to a scenic byway that will enhance access to an area for the purpose of recreation, including water-related recreation.
6. Protection of scenic, historical, recreational, cultural, natural, and archeological resources in an area adjacent to a scenic byway.

7. Development and provision of tourist information to the public, including interpretive information about a scenic byway.

8. Development and implementation of a scenic byway marketing program.

**Where to Apply**

FHWA issues calls for NSB projects annually. States and Indian tribes submit grant applications to FHWA in priority order. The U.S. Secretary of Transportation and the Federal Highway Administrator select projects for NSB funding. FLMAs may apply for NSB funding through the State.

**Fund Distribution**

A State's and Indian tribe's priority ranking of projects is a key factor for the Administrator and the Secretary when selecting projects. A project should benefit the byway traveler's experience. The proposed NSB funding should be proportionate to the proposed project's benefits for byway travelers. FHWA expects an applicant advancing a project benefiting the general public to propose a larger share of non-NSB funds.

**Match**

NSB projects are funded with an 80 percent Federal share and require a 20-percent nonfederal share. FLMAs may provide the non-NSB share for projects on Federal or Indian lands using FLHP and/or FLMA appropriated funds.

**Comments**

Grant applications must be submitted by the FLMAs to the State in which the project is located. Funding is limited and competitive.

For additional information outside of the provided links, please ask your agency or FHWA contacts.

## Recreational Trails Program

### Overview

The Recreational Trails Program (RTP) provides funds to the States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. Examples of trail uses include hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles.

### Web Site

http://www.fhwa.dot.gov/environment/rectrails/

### Authorized Funding

SAFETEA-LU Sec. 1101(a)(8)
FY 2005: $60 million
FY 2006: $70 million
FY 2007: $75 million
FY 2008: $80 million
FY 2009: $85 million
**Subtotal: $370 million**

### Eligible Activities

Under 23 U.S.C. 206(d)(2), eligible projects include:

- Maintenance and restoration of existing trails.
- Development and rehabilitation of trailside and trailhead facilities and trail linkages.
- Purchase and lease of trail construction and maintenance equipment.
- Construction of new trails (with restrictions for new trails on Federal lands, such as "approved by the Federal agency having jurisdiction over the affected lands").
- Acquisition of easements or property for trails.
- Assessment of trail conditions for accessibility and maintenance.
- Development and dissemination of publications and operation of educational programs to promote safety and environmental protection related to trails (including supporting non-law enforcement trail safety and trail use monitoring patrol programs, and providing trail-related training) (limited to 5 percent of a State's funds).
- State administrative costs related to this program (limited to 7 percent of a State's funds).

### Where to Apply

Contact the State agency responsible for the RTP. See http://www.fhwa.dot.gov/environment/rectrails/rtpstate.htm.
Each State has its own process to solicit and select projects. States may make grants to private organizations, or to municipal, county, State, Tribal,

or Federal government agencies. Some States require applications to come through a State or local government agency. Some States do not provide funds to private organizations.

States are encouraged to enter into contracts and cooperative agreements with qualified youth conservation or service corps. See http://www.corpsnetwork.org.

**Fund Distribution**

Half of the funds are distributed equally among all States, and half are distributed in proportion to the estimated amount of off-road recreational fuel use in each State: fuel used for off-road recreation by snowmobiles, all-terrain vehicles, off-road motorcycles, and off-road light trucks. See http://www.fhwa.dot.gov/environment/rectrails/recfunds.htm.

**Match**

The RTP is an 80 percent Federal share, with sliding scale for States with large proportions of Federal lands (see the sliding scale rates at http://www.fhwa.dot.gov/legsregs/directives/notices/n4540-12.htm). Federal agency project sponsors may provide additional Federal share up to 95 percent. Funds from other Federal programs may match RTP funds. RTP funds may match other Federal funds. States may allow a programmatic Federal share. Some States require a 50-percent non-RTP match. See http://www.fhwa.dot.gov/environment/rectrails/legislation.htm#fedshare.

FLMAs may provide the non-RTP share for projects on Federal or Indian lands using FLHP and/or FLMA appropriated funds.

**Comments**

States must use at least 40 percent of the RTP funds for diverse trail use, 30 percent for motorized use, and 30 percent for nonmotorized use. (Diverse may include diverse motorized, diverse nonmotorized, and diverse mixed motorized and nonmotorized.)

RTP funds are intended for recreational trails, and may not be used to improve roads for general passenger-vehicle use. Projects may be on public or private land; projects on private land must provide written assurances of public access.

RTP funds may not be used for:

- Property condemnation (eminent domain).
- Constructing new trails for motorized use on national forest or BLM lands unless the project is consistent with resource management plans.
- Facilitating motorized access on otherwise nonmotorized trails.

See project examples in the RTP database at http://www.funoutdoors.info/rtphome.html.

## Safe Routes to School

### Overview

The program provides funds to States to enable children, including those with disabilities, to walk and bicycle to school; to make walking and bicycling to school safer and more appealing; and to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of primary and middle schools.

***Statutory References:*** SAFETEA-LU Sections 1101(a) (17) and 1404.

### Web Sites

http://safety.fhwa.dot.gov/saferoutes/index.htm

http://www.saferoutesinfo.org/

http://safety.fhwa.dot.gov/saferoutes/overview.htm

### Authorized Funding

SAFETEA-LU Sec. 1101(a) (8).
FY 2005: $54 million
FY 2006: $100 million
FY 2007: $125 million
FY 2008: $150 million
FY 2009: $183 million

### Eligible Activities

Safe Routes to Schools funds infrastructure and noninfrastructure projects. Eligible infrastructure projects include planning, design, and construction of projects that will improve students' ability to walk or bicycle to school. These include:

- Sidewalk improvements.
- Traffic calming and speed reduction improvements.
- Pedestrian and bicycle crossing improvements.
- On-street bicycle facilities.
- Off-street bicycle and pedestrian facilities.
- Secure bicycle parking facilities.
- Traffic diversion improvements in the vicinity of schools.

Projects must be located within approximately 2 miles of the school.

### Where to Apply

See the National Center for Safe Routes to School contact list at: http://www.saferoutesinfo.org/contacts/index.cfm

### Fund Distribution

Each State administers its own program and develops its own procedures to solicit and select projects for funding.

### Match

Federal share is 100 percent.

## Surface Transportation Program

### Overview

SAFETEA-LU continues authorization of the Surface Transportation Program (STP) under 23 U.S.C. 133. STP provides flexible funding that may be used by States for projects on any Federal-aid highway.

### Web Site

http://www.fhwa.dot.gov/programadmin/113005.htm

### Authorized Funding

SAFETEA-LU Section 1101(a) (4) authorizes the following amounts:
FY 2005: $6,860 million
FY 2006: $6,269 million
FY 2007: $6,370 million
FY 2008: $6,472 million
FY 2009: $6,576 million

Additional funds will be available for the STP under the distribution of the equity bonus program under 23 U.S.C. 105. Under the provisions of 23 U.S.C. 140(b), up to $10 million will be set aside each fiscal year for the administration of the on-the-job training/supportive services program. In addition, up to $10 million will be set aside for the administration of the disadvantaged business enterprise training program. Funds are available for a period of 3 years.

### Eligible Activities

Eligible projects are listed in 23 U.S.C. 133(b). Eligible projects include: bridge projects on any public road, and carpool, pedestrian, bicycle, and safety projects as listed in 23 U.S.C. 133(b) (3) and (4).

SAFETEA-LU added the following additional projects:

- Advanced truck stop electrification systems.
- Projects relating to intersections with high accident rates and high levels of congestion.
- Environmental restoration and pollution abatement.
- Control of noxious weeds and establishment of native species.

Also, SAFETEA-LU section 5204(e) amended 23 U.S.C. 504 to broaden the eligible activities for workforce development, training, and education to include not only State and local transportation agencies, but also surface transportation workers.

STP funds may be used for direct educational expenses for surface transportation workforce development, training, and education, provided the activity benefits transportation. The Federal share is 100 percent. Direct costs include training costs, conference and registration fees,

and travel costs, but not salaries. See "State Core Program Funds for Workforce Development" at http://www.fhwa.dot.gov/opd/memo.htm

**Where to Apply**

States and metropolitan planning organizations select projects based on their statewide and metropolitan transportation planning processes.

**Fund Distribution**

Funds are apportioned to the States based on a formula in 23 U.S.C. 104(b)(3): 25 percent based on lane miles, 40 percent based on vehicle miles traveled on Federal-aid highways, and 35 percent based on estimated tax payments to the Federal Highway Trust Fund.

**Match**

Federal share is generally 80 percent, subject to sliding scale adjustment. When funds are used for interstate projects, including adding high occupancy vehicle lanes, the Federal share may be 90 percent. Federal share may be 100 percent for certain safety projects listed in 23 U.S.C. 120(c), subject to apportionment limitations.

**Comments**

Surface transportation funds are considered "flexible" DOT funds. Flexible funds may be transferred from the Federal Highway Administration (FHWA) to the Federal Transit Administration (FTA) when designated for use in approved transit projects. Flexible funds designated for transit projects must result from the local and State planning and programming process, and must be included in an approved STIP before the funds can be transferred.

## Transportation Enhancement Activities

### Overview

Transportation Enhancement (TE) activities benefit the traveling public and help communities increase transportation choices and access, enhance the built and natural environment, and provide a sense of place. To be eligible for funding, a TE project must fit into one or more of the 12 eligible categories (http://www.fhwa.dot.gov/environment/te/teas.htm) and relate to surface transportation (http://www.fhwa.dot.gov/environment/te/relate.htm). TE projects may be enhancements added to larger Federal-aid highway projects, or may be independent projects unrelated to highway projects. TE funds may not substitute for other Federal-aid highway funds for project elements or mitigation that normally would be required in a regular highway project.

### Web Site

http://www.fhwa.dot.gov/environment/te

### Authorized Funding

SAFETEA-LU Sec. 1101(a)(4), 23 U.S.C. 104 (b)(3), 23 U.S.C 133 (d)(2). TE funds are calculated based on the apportionment of STP and Equity Bonus Program funds.
FY 2005: $803.2 million
FY 2006: $804.3 million
FY 2007: $803.2 million (minimum)
FY 2008: $803.2 million (minimum)
FY 2009: $803.2 million (minimum)

### Eligible Activities

Any of the following activities as they relate to surface transportation:

1. Provision of facilities for pedestrians and bicycles.
2. Provision of safety and educational activities for pedestrians and bicyclists.
3. Acquisition of scenic easements and scenic or historic sites (including historic battlefields).
4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities).
5. Landscaping and other scenic beautification.
6. Historic preservation.
7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals).

8. Preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails).
9. Inventory, control, and removal of outdoor advertising.
10. Archeological planning and research.
11. Environmental mitigation to address water pollution due to highway runoff; or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.
12. Establishment of transportation museums.

TE funds may be used for direct educational expenses for surface transportation workforce development, training, and education, provided the activity specifically benefits eligible TE activities. The Federal share is 100 percent. Direct costs include training costs, conference and registration fees, and travel costs, but not salaries. See "Transportation Enhancements Guidance Supplement – Surface Transportation Workforce Development, Training, and Education" at http://www.fhwa.dot.gov/environment/te/guidance.htm#gsupp_workdev.

### Where to Apply

Contact the State Departments of Transportation TE Manager. See http://www.enhancements.org/statecontacts_TE.asp.

Each State has its own process to solicit and select projects. Most States require applications to come through a State or local government agency. Many States do not provide funds to private organizations. States are encouraged to enter into contracts and cooperative agreements with qualified youth conservation or service corps. See http://www.corpsnetwork.org

### Fund Distribution

TE funds are apportioned to the States under the formula for the STP. TE funds are a 10 percent set-aside of STP funds, including Equity Bonus funds apportioned as STP. See http://www.fhwa.dot.gov/environment/te/apportionments.htm.

### Match

TE projects generally are 80-percent Federal share, with sliding scale for States with large proportions of Federal lands (see the sliding scale rates at http://www.fhwa.dot.gov/legsregs/directives/notices/n4540-12.htm). Federal agency project sponsors may provide additional Federal share up to 100 percent (with limitations, check with your State).

FLMAs may provide the non-TE share for projects on Federal or Indian lands using FLHP and/or FLMA appropriated funds.

**Comments**

Projects must relate to surface transportation. Surface transportation means all elements of the intermodal transportation system, exclusive of aviation. For the purposes of TE eligibility, surface transportation includes water as surface transportation and includes as eligible activities related features such as canals, lighthouses, and docks or piers connecting to ferry operations, as long as the proposed enhancement otherwise meets the basic eligibility criteria.

See "Guiding Principles and Questions for Transportation Enhancement Activities" at http://www.fhwa.dot.gov/environment/te/principles_pt1.htm.

The National Transportation Enhancements Clearinghouse has additional resources at http://www.enhancements.org, including project examples at http://www.enhancements.org/examples.asp.

Statutory Authority: 23 U.S.C. 101(a)(35), 133(b)(8), and 133(d)(2).

## FHWA Discretionary Programs

**Overview**

The FHWA administers the following discretionary programs through its various offices. These discretionary programs represent special funding categories where FHWA solicits for candidates and selects projects for funding based on applications received. Each program has its own eligibility and selection criteria that are established by law, by regulation, or administratively.

**Web Site**

http://www.fhwa.dot.gov/discretionary/

**Authorized Funding**

Each program has its own funding authorization.

More information on each of these programs is available on the FHWA Discretionary Program Information Web site (http://www.fhwa.dot.gov/discretionary/programinfo.cfm). Information is also available on Current Solicitations for Projects and Recent Awards. The programs most likely to benefit FLMAs are the Public Lands Highways and Scenic Byways (see descriptions in this guidebook). Programs are as follows:

- Bridge.
- Corridor Planning and Development and Border Infrastructure (Corridors and Borders).
- Ferry Boats.
- Highways for LIFE.
- Innovative Bridge Research and Construction.
- Innovative Bridge Research and Deployment Program.
- National Historic Covered Bridge Program.
- Intelligent Transportation Systems (ITS) Deployment Program.
- Interstate Maintenance.
- Public Lands Highways.
- Scenic Byways.
- Transportation and Community and System Preservation Program.
- Transportation Infrastructure Finance and Innovation Act (TIFIA).
- Truck Parking.
- Value Pricing Pilot Program.

| | |
|---|---|
| **Where to Apply** | FHWA solicits for candidates. |
| **Fund Distribution** | Depends on program criteria and project selection process. |
| **Match** | Varies according to the program. |
| **Comments** | In most years, the Congress has earmarked most of these programs for specific projects. The Congress did not earmark FY 2007 funds.<br><br>For additional information outside of the provided links, please ask your agency's or FHWA's contacts. |

## Congestion Mitigation and Air Quality Improvement Program

**Overview**

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide (CO), and particulate matter (PM-10, PM-2.5) which reduce transportation related emissions of these pollutants. [23 U.S.C. 149(a)]

**Web Site**

http://www.fhwa.dot.gov/environment/cmaqpgs/index.htm

**Authorized Funding**

FY 2005 $1,667 million
FY 2006 $1,694 million
FY 2007 $1,721 million
FY 2008 $1,749 million
FY 2009 $1,777 million

**Eligible Activities**

Including but not limited to:

1. Traffic flow improvements.
2. Demand management, car pooling, public outreach efforts.
3. Transit and intermodal freight activities. (See comments below regarding "flexible" funds.)
4. Inspection and maintenance, alternative fuels.
5. Establish or operate advanced truck stop electrification systems.
6. Improve transportation systems management and operations that mitigate congestion and improve air quality.
7. Involve the purchase of integrated, interoperable emergency communications equipment.
8. Involve the purchase of diesel retrofits that are for motor vehicles or nonroad vehicles and nonroad engines used in construction projects located in ozone or particulate matter nonattainment or maintenance areas and funded under 23 U.S.C.
9. Conduct outreach activities that provide assistance to diesel equipment and vehicle owners and operators regarding the purchase and installation of diesel retrofits.

**Where to Apply**

CMAQ projects are selected by the State or the MPO. MPOs, State DOTs, and transit agencies should develop CMAQ project selection processes in accordance with the metropolitan and/or statewide planning process. The selection process should involve State and/or local transportation and air quality agencies.

| | |
|---|---|
| **Fund Distribution** | Apportioned according to population and severity of pollution in ozone and carbon monoxide areas. Weighting factors have been revised. [1103(d), 104(b)(2)] |
| **Match** | Federal share is generally 80 percent, subject to sliding scale and 90 percent for interstate projects. Certain other activities, including carpool/vanpool projects, priority control systems for emergency vehicles and transit vehicles, and traffic control signalization receive a Federal share of 100 percent. Higher State and local matches are encouraged for CMAQ public-private partnerships. |
| **Comments** | An annual report is required from States that tracks CMAQ obligations and emissions reductions tied to each project funded during the fiscal year. These funds are "flexible" DOT funds. Flexible funds may be transferred from the FHWA to the FTA when designated for use in approved transit projects. Flexible funds designated for transit projects must result from the local and State planning and programming process, and must be included in an approved STIP before the funds can be transferred. |

## FTA—Alternative Transportation in the Parks and Public Lands Program

### Overview

The Alternative Transportation in Parks and Public Lands (ATPPL) program funds capital and planning expenses for alternative transportation systems in national parks and public lands. ATPPL is a program, authorized by SAFETEA-LU, which was enacted on August 10, 2005. The goals of the program are to conserve natural, historical, and cultural resources; reduce congestion and pollution; improve visitor mobility and accessibility; enhance visitor experience; and ensure access to all, including persons with disabilities. The program is administered by the FTA, in partnership with the U.S. Department of the Interior and the U.S. Forest Service.

### Web Site

http://www.fta.dot.gov/funding/grants/grants_financing_6106.html

### Authorized Funding

FY 2006 - $22 million
FY 2007 - $23 million
FY 2008 - $25 million
FY 2009 - $27 million

### Eligible Activities

Eligible applicants for ATPPL funding include these FLMAs, which manage eligible areas:

- Bureau of Reclamation.
- Bureau of Land Management.
- National Park Service.
- U.S. Forest Service.
- U.S. Fish and Wildlife Service.

Eligible funding recipients may also include any State, local, or Tribal government authority that is in the vicinity the Federal land. The only qualifying factor for a State, local, or Tribal government is that they act with the consent of the FLMA.

Eligible planning projects include:

- Activities to comply with metropolitan and statewide planning provisions.
- Alternative transportation planning studies, including evaluation of no-build and all other reasonable alternatives, traffic studies, visitor utilization studies, transportation analysis, feasibility studies, and environmental studies.

Eligible implementation projects include three categories:

- General capital expenses:
  - All aspects of acquiring, constructing, supervising, or inspecting equipment or a facility for use in public transportation; expenses incidental to the acquisition or construction (including designing, engineering, location surveying, mapping, and acquiring rights-of-way); payments for the capital portions of rail trackage rights agreements; transit-related intelligent transportation systems; relocation assistance; acquiring replacement housing sites; and acquiring, constructing, relocating, and rehabilitating replacement housing.
  - Those projects operated by an outside entity, such as a public transportation agency, State or local government, private company engaged in public transportation, or private nonprofit organization.
  - The deployment/commercialization of alternative transportation vehicles that introduce innovative technologies or methods.
- Fixed guideway and bus projects are defined as those transportation projects that run on a dedicated right of way, such as a light rail, trolley, bus rapid transit, or any type of ferry system. For these types of projects, eligible projects include:
  - Development of a new fixed guideway project.
  - Rehabilitation or modernization of existing fixed guideway systems.
  - Expansion of existing systems.
- For bus or shuttle projects, eligible projects include:
  - Purchase, replacement, and rehabilitation of buses and related equipment.
  - Construction of bus-related facilities such as bus shelters.
  - Purchase of rolling stock that incorporates clean fuel technology or the replacement of buses of a type in use on August 10, 2005, with clean fuel vehicles.
- Other eligible implementation projects which include:
  - The capital costs of coordinating a national park or public-land transit system with an external public transportation system.
  - Nonmotorized transportation systems, including facilities for pedestrians, bicycles, and nonmotorized watercraft.

- Water-borne access systems within or in the vicinity of an eligible area (as appropriate and consistent with Section 5320).

- Any other alternative transportation project that:
  - Enhances the environment.
  - Prevents or mitigates an adverse impact on a natural resource.
  - Improves FLMA resource management.
  - Improves visitor mobility and accessibility and the visitor experience.
  - Reduces congestion and pollution, including noise and visual pollution.
  - Conserves a natural, historical, or cultural resource (although rehabilitation or restoration of nontransportation facilities is not permitted).

The capital cost of leasing vehicles is an eligible expense under the program.

Of the total amount of ATPPL funding for each fiscal year, up to 10 percent can be used by FTA (in consultation with DOI) for the following program-level activities: conducting planning, research, and technical assistance to support the program. This includes activities, such as providing workshops, technical assistance in project-level scoping and planning, publication of best practices, and providing manuals and other reference materials.

## Where to Apply

Project proposal templates as well as guidance on them are available at the ATPPL Web site http://www.fta.dot.gov/atppl

There are separate proposal templates for planning and capital ("implementation") projects. Applications for planning projects focus on a demonstration of need, while applications for implementation projects focus on how the proposed project will benefit visitors and the environment, as well as how it is a cost effective and financially sustainable solution for meeting ATPPL goals.

## Match

None is required.

## Comments

New legislation makes National Forest System lands explicitly eligible and includes bicycle, pedestrian, and nonmotorized watercraft projects in the definition of alternative transportation.

## Potential Sources of Matching Funds for Transportation Projects

| Sample Revenue Sources | Comment | Example |
|---|---|---|
| **User fees** | A fee charged to a user of a facility to cover or defray the cost of providing the facility or a specific service (e.g., tolls, fares, parking fees, license fees, and use permits). | The Recreational Fee Demonstration Program permits participating Federal lands sites to retain a percentage of fees charged for internal use. (Fees primarily used to address deferred maintenance requirements.) |
| **Private sponsorships** | Generally used as a means to obtain funding for recreational and quasi-public purposes. Range from large corporate sponsorships to individual contributions. | May be attached to a specific facility (e.g., sports stadium), a major event (e.g., the Olympic Games), or to support the ongoing work of special purpose organizations (e.g., the Nature Conservancy). |
| **State and local funds** | Generally include sales tax surcharges on tourist-related expenditures (e.g., hotels, restaurants, rental cars, and tickets to events). | Have been used to fund transit system projects |
| **Fund raising and contributions** | Local businesses sometimes contribute where they see a direct benefit. “Friends” groups and support organizations contribute substantial sums of money to many of the major Federal lands sites. | These contributions have also been used for transit projects, e.g., the Acadia National Park Island Explorer transit system is routed directly to the door of hotels and motels that provide a contribution to the system. |
| **State Infrastructure Banks (SIB)** | States have been authorized to set up infrastructure investment funds to make loans and provide assistance to surface transportation projects. The program gives States the capacity to use their transportation investment more efficiently and significantly leverage Federal resources by attracting nonfederal public and private investment. States have greater flexibility because they are allowed to pursue other types of project assistance in addition to the traditional grant assistance. For more information, visit: http://www.fhwa.dot.gov/safetealu/factsheets/sibs.htm | |

## Sample Financing Tools for Maximizing the Benefits of Additional Revenue Sources in Appendix A

| Financing Tool | Definition | Benefits or Potential Opportunities | Examples |
|---|---|---|---|
| **Public-Private Partnerships** | Agreement between a public entity and a private organization that provides for coordinated actions to plan, finance, construct, operate, and maintain a transportation facility or system. | Responsibility for raising capital and project risk is shared. This enables the public to reduce the direct cost of the facility to the Government and encourage pri¬vate investment. One potential use of the revenues is to assist in funding transit projects. | Examples include franchises and concessions. The Presidio Trust is an innovative public-private partnership: It is an executive agency of the U.S. Government but its financial plan calls for self-sufficiency through lease revenues by 2013. The Presidio, a historic military fort, is part of the Golden Gate National Recreation Area. The financial management program outlines how revenues generated from the rehabilitation and rental of its buildings will fund envi¬ronmental and infrastructure improvements. It contains many historically sig¬nificant structures and the Trust plans to renovate and lease the buildings to the private sector. By 2013, revenues will be large enough to no longer require additional Federal funding. |
| **Bonds** | Debt instruments issued for periods of more than 1 year to raise capital by borrowing. A bond is a promise to repay the principal plus interest on a specified date (maturity). | Bond principal and interest payments can be met from dedicated revenues (i.e., user fees) or general tax revenues. | The Federal government, States, cities, corporations, and other institutions sell bonds. |
| **Certificates of Participation (COP)** | Financing instrument in which an investor buys shares of lease revenues of an agreement made by a municipal or governmental entity, rather than purchasing a bond secured by those revenues. | Used when a State faces limits on its ability to increase taxes or issue other forms of debt (such as California's Proposition 13 limits). | This instrument is used in the public transit industry to purchase equipment. |

**Sample Financing Tools for Maximizing the Benefits of Additional Revenue Sources in Appendix A *(continued)***

| Financing Tool | Definition | Benefits or Potential Opportunities | Examples |
|---|---|---|---|
| **Leasing** | Contract under which an owner of property or asset allows another party to use the property or asset for a specified period of time in exchange for payment of rent or use fees. Lease may or may not include a purchase option under which the lessee can apply lease payments toward the purchase price of the property or asset being used. | Leasing can be beneficial because it reduces the up-front cost of major capital purchases and allows payments to be spread out over an asset's useful life or planned period of use. It also allows for the use of capital assets for a limited period of time without having to acquire them outright. | |
| **Federal credit** | The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) established a Federal credit program for eligible transportationprojects of national or regional significance under which the U.S. Department of Transportation (DOT) may provide three forms of credit assistance — secured (direct) loans, loan guarantees, and standby lines of credit. The program's fundamental goal is to leverage Federal funds by attracting substantial private and other nonfederal co-investment in critical improvements to the nation's surface transportation system. | Public or private entities seeking to finance, design, construct, own, or operate an eligible surface transportation project may apply for TIFIA assistance. Examples of such entities include State DOTs; local governments; transit agencies; special authorities; special districts; railroad companies; and private firms. Program does not lend directly to other Federal agencies. Applications for TIFIA assistance will be solicited at least once a year during the current authorization period of Federal Surface Transportation Program. Borrowers can negotiate more favorable terms (e.g., longer payback periods) than from private capital markets. | For examples of funded projects, visit: http://tifia.fhwa.dot.gov |

## Environmental Issues and Opportunities

| Environmental Issues | General Issue Description | Opportunity | Examples |
|---|---|---|---|
| **Air quality** | Transportation plans require integration of air quality planning to meet EPA standards. | Federal Land Management Units with air quality problems may reduce emissions by encouraging alternative forms of travel, such as mass transit, bicycles, and shuttles through Federal STP funds. | Springerville, UT, a gateway community to Zion National Park, developed a transit system using transit and other funding sources dedicated to reducing emissions and solving traffic and congestion issues. |
| **Ecosystem functions and processes** | Highways usually affect areas on a larger scale than typical FLMA roads, e.g., wildlife habitat connectivity can be maintained for large, wary carnivores, such as grizzly bears with very low-volume roads, but highways may be nearly complete barriers. Partnerships with Tribal, local, and State stakeholders are critical in developing a national ecological infrastructure that enables ecological functions and processes to occur seamlessly throughout the Nation. | Federal land can help create an ecological infrastructure on a regional scale by connecting stepping-stones of habitat, such as State and local parks, with well-designed crossing structures on highways. | The Florida DOT and the U.S. Forest Service are using national forests in Florida as keystone parcels, along with other public lands, in a multicounty effort to connect important ecological areas.<br><br>Girders on bridges can provide valuable bat habitat. Bat habitat enhancements are now standard, and virtually cost-free, on all bridges and box culverts on national forests in Arizona. |
| **Fire** | Highways support wildfire suppression and fuels management for transporting resources on arterial and collector roads. Highways provide a source of ignitions, but also an increased ability to manage fuels and wildfire. Highway width provides effective fuel breaks, particularly in wildland-urban interface situations. | Fire frequency and severity can be affected by highway fuel breaks. | The Deschutes National Forest in Oregon, used an innovative solution in a high-risk fire situation. A stand of trees near Highway 20 was thinned using TE funding. This reduced fire risk while increasing the scenic quality of the highway. |

## Environmental Issues and Opportunities *(continued)*

| Environmental Issues | General Issue Description | Opportunity | Examples |
|---|---|---|---|
| **Fish and aquatic species** | The amount of road crossings in a watershed directly affects the available habitat of aquatic species. Highways adversely affect water quality and aquatic habitats by increasing drainage density and changing stream velocity and elevations. Culverts, common for stream crossings, can cause fragmentation for aquatic organisms. Full-span crossings are desirable for streams over 1.5 meters wide because they stay out of the stream channel and shade the stream less, while providing a greater amount of passage space for riparian-associated animals. | The STP can assist with funding these expensive structures through the TE activities, the Highway Bridge Replacement and Rehabilitation program, and the Federal Lands Highway program. Strengthened partnerships with State transportation agencies can help ensure that replacing stream-crossing structures accommodates fishery needs. This cooperative working relationship will ensure road stability and enhance the ability of the structures to permit migration of aquatic species. | |
| **Physical factors** | Highway stability is a key component for safety and minimizing costs. Unique landforms may attract visitors, but planners should ensure that a safe and stable road protects the unique features. | Many FLMAs, have used FHWA funds to enhance highway safety while increasing visitor enjoyment through increased parking areas at vistas and accessible interpretive centers. | |
| **Range management** | On much Federal land, livestock allowed to range freely across highways cause numerous vehicle accidents. | Fences and crossing structures for livestock and wildlife may reduce animal/vehicle collisions. | The Shasta-Trinity National Forest, the College of the Siskiyous, and Caltrans partnered to fund several miles of deer fencing along Highway 97 in northern California. Although the fencing was designed primarily to reduce deer collisions, cattle collisions on the open range were also reduced, resulting in a 99-percent reduction in animal/vehicle collisions. |

## Environmental Issues and Opportunities *(continued)*

| Environmental Issues | General Issue Description | Opportunity | Examples |
|---|---|---|---|
| **Terrestrial wildlife** | Highways are barriers that reduce dispersal, migration, or other movements of wildlife. Motor vehicle collisions cause death or injury to birds, mammals, reptiles, and amphibians. | Effective transportation planning can identify large-scale wildlife habitat linkages, while the project development process can identify structures that could be installed to allow wildlife to cross highways.<br><br>These two steps must be integrated for optimal success, and cooperation between the FLMA and transportation agencies helps ensure long-term success. The Federal STP provides funds through the TE activities for habitat mitigation and for construction of innovative crossing solutions. | The Ocala National Forest partnered with the Florida Fish and Wildlife Conservation Commission and the Florida DOT to use U.S. DOT STP funds and license plate funds to research black bear and highway interactions. This partnership is yielding important information to manage bears and highways in Florida. |
| **Vegetation** | Highways impact native plants by direct removal, erosion control efforts with nonnative plants, and conversion of habitat in line-of-sight clearings. Deicing salts, pesticides, and fertilizers used to manage roadside vegetation can injure native plants, amphibians, and other aquatic species. Noxious weeds and exotic animals use line-of-sight clearings to expand their ranges. These effects often impact native plants and the animals that depend upon these plants for food and shelter. | Native plant communities can be restored using TE activity funds. Transportation maintenance agencies are often effective partners for combating noxious weeds along highways and trails and for using appropriate non-chemical vegetation management in important amphibian and aquatic habitat. | On the Apalachicola National Forest, close-working relationships between the U.S. Forest Service and the Florida DOT allowed a right-of-way to be managed to enhance a small, endangered flower, Harper's Beauty. The revised mowing schedule permitted better fire management, a necessary component of the plant's ecology, and also provided a spectacular blooming display on the right-of-way that was easily accessible to plant enthusiasts. |

## Environmental Issues and Opportunities *(continued)*

| Environmental Issues | General Issue Description | Opportunity | Examples |
|---|---|---|---|
| **Water resources** | Water uses on Federal land may include diversions, impoundments, hydropower production and operation, and distribution systems. These water bodies and wetlands also provide essential habitat for numerous plants, wildlife, and aquatic species. Highways can interrupt water flow and cause dramatic changes in wetland functions and the ecological processes of plants and small animals such as frogs, salamanders, clams, and snails. | Wetland mitigation can be funded through the TE activities or the FLHP. | On the Tonto National Forest, Highway 188 altered drainage patterns, causing a wet meadow to dry up. Highway realignment by the U.S. Forest Service and the Arizona DOT successfully restored the meadow by fixing the drainage and developing irrigation and monitoring systems. |

## Social Issues and Opportunities

| Social Issues | General Issue Description | Opportunity | Examples |
|---|---|---|---|
| **Accessibility** | All facilities and programs developed by the FLMAs are to be universally accessible, without barriers. Therefore, all transportation projects will improve access for all people, including people with disabilities. | These funding programs can be used for: improving access to recreation, modifying existing sidewalks, retrofitting over-the-road buses for accessibility, and developing accessible educational programs. The potential for increased access for all people is tremendous. | On the White Mountain National Forest Kancamagus Scenic Byway, National Scenic Byway Program funding has supported universally accessible roadside overlooks with adjacent pathways to picnic areas. Families with young children in strollers and people in wheelchairs can enjoy the area along with other visitors. |
| **Civil Rights** | The transportation authorization bill provides opportunities to address civil rights issues that are FLMA priorities. | Establishing mass transit access to Federal land destinations may benefit visitors and potential employees with limited personal transportation options to more easily experience the great outdoors. The STP provides opportunities for job access and reverse-commute grants. This provision may enable the FLMAs to increase diversity in their workforce by assisting residents of urban areas to commute to suburban or rural areas. | |
| **Cultural resources** | The transportation authorization bill provides opportunities to address cultural resources issues that are FLMA priorities. | FHWA funding can assist FLMAs with archeological plans and research, fund historic easements or acquisitions, preserve abandoned transportation corridors, or develop interpretive sites. Transit systems may resolve some cultural issues that highways create and should be investigated for appropriateness in some situations. | The Uncompahgre National Forest partnered with Idarado Mining Company and used the Colorado State Historic Fund grant and Federal STP funds to develop an interpretive wayside exhibit on geology and mining history. |

## Social Issues and Opportunities *(continued)*

| Social Issues | General Issue Description | Opportunity | Examples |
|---|---|---|---|
| **Economic factors** | Economic costs associated with highway construction and maintenance impact the development of the local economy. Both economic efficiency from a societal point of view and the cost of a highway for the proposing transportation agency are important to project planning. Good working relationships with transportation agencies are critical to effective cost/ benefit mitigation strategies. | Transit systems fundable under the Federal STP can address a variety of needs that may result in sound economic sense in the long term if resource restoration, traffic congestion, and local business concerns are evaluated. The Federal STP funds can be used to provide innovative benefits to local economies. | The Florida Fish and Wildlife Conservation Commission works with Ocala National Forest biologists to nominate, maintain, and improve bird watching sites listed in the Great Florida Birding Trail, a highway-based brochure and site tourist guide (funded with TE funds). Nationally, birding is big business, with retail sales generating more than $477 million annually in Florida alone. |
| **Infrastructure** | Many arterial and collector roads on Federal lands provide primary access to rural communities and major connections between State highways and county roads. The routes may be important to the economic survival of these communities by furnishing access for commercial traffic, mail delivery, school bus service, emergency vehicle response, farm-to-market shipments, and enhanced tourism. | FHWA and FTA programs are potential funding opportunities for rural development, tourist resources, and bridge repair and replacement. Bridge replacement can correct many watershed-related issues initially caused by bridge construction and maintenance. | |

## Social Issues and Opportunities *(continued)*

| Social Issues | General Issue Description | Opportunity | Examples |
|---|---|---|---|
| **Recreation** | Many components of recreation are affected by transportation systems, both as a means for accessing recreation, and in many cases, as the recreation itself. Driving for pleasure is the number one recreational use of national forests. However, sometimes highways may adversely affect unroaded recreation. Improving highways may improve access, thereby increasing the use of unroaded and roaded recreation opportunities. | Through the Recreational Trails Program, funding is also available to construct or maintain motorized, nonmotorized, and mixed-use trails. | The Mt. Rogers National Recreation Area successfully used hundreds of thousands of dollars of Federal STP funds to restore bridges and trestles beneath the Virginia Creeper National Recreation Trail. The Recreational Trails Program funded the purchase of a $78,000 trail dozer and the construction of accessible fishing facilities and bicycle trails. |
| **Scenic resources** | Highways can affect the visual resources of Federal lands both to travelers on the highway and to visitors viewing them from afar. | Landscape and scenic beautification projects funded through the FHWA are provided under several programs, including TE and Scenic Byways. The scenic byways program allows partners to manage scenic resources in national forests, including financing scenic easements across private lands. | |

## LINKS to Additional Project Examples Funded by Federal Transportation Programs

**Coalition for Recreational Trails Annual Achievement Awards**
http://www.americantrails.org/awards/CRTawards.html

**Enhancing America's Communities**
This publication edition highlights a variety of transportation enhancement projects from around the country showcasing the potential of transportation enhancement to build strong places through targeted transportation investments.

To order a copy, go to http://www.enhancements.org/publications.asp

**Toolbox for the Great Outdoors**
Provides project examples for recreation enhancements, including information on transportation related programs.
http://www.tools4outdoors.us/index.jsp

**Scenic Byway Project Examples**
View a list of all projects funded from 1992 through 2006, or search for specific types of projects. http://www.bywaysonline.org/grants/funded/

**National Transportation Enhancements Clearinghouse**
This site provides a comprehensive list of Transportation Enhancements project examples. Projects of particular interest include the Keystone Ancient Forest Preserve (found under "Acquisition of scenic or historic easements and sites") and the George S. Mickelson Trail (found under "Preservation of abandoned railway corridors"). See all projects at:
http://www.enhancements.org/examples.asp