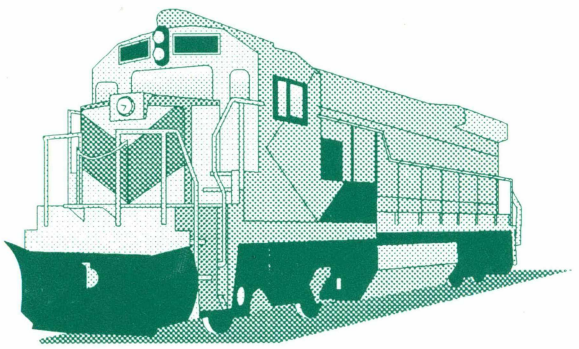
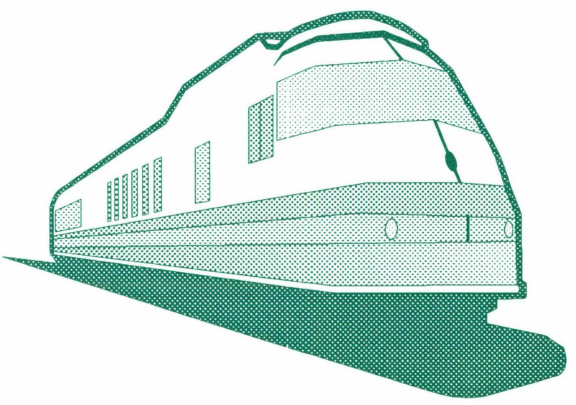
INTERCITY
FREIGHT AND PASSENGER RAIL:
STATE AND LOCAL PROJECT REFERENCE GUIDE

Public-Private Partnerships and ISTEA:
planning, evaluating and financing public benefit rail infrastructure projects





U.S. Department of Transportation
Federal Railroad Administration
September 1996

A Message from Federico Peña, Secretary of Transportation

The Partnership for Transportation Investment (PTI), which I initiated two years ago in response to the President's Executive Order on federal infrastructure investment, uses new and innovative finance methods to launch critical transportation projects nationwide. PTI gives states and localities financial and administrative flexibility in securing investment for highway, rail, transit and other transportation construction. I am gratified that many of the financing methods we have been testing under the PTI are now included in the National Highway System Designation Act signed into law by President Clinton on November 28, 1995. Also, I have approved ten State Infrastructure Banks (SIBs) under a pilot program authorized by the Act, giving the participating states another tool for leveraging scarce resources.

We asked states, cities, and private businesses across America to come forward with new and creative ideas--using a vast array of financing techniques--to fill the "investment gap" between America's public resources and Americans' transportation needs. The response has been impressive. In February of 1996, I was pleased to announce that 74 projects in 35 states using innovative financing had been approved for construction. Many of these projects are multi-modal in nature; nine are rail or rail-related projects; and many are public-private partnerships that demonstrate the practical application of private dollars and public funds working in tandem to address critical infrastructure issues. None of these projects would have moved as quickly if we had relied only on traditional means of financing.

I congratulate the Federal Railroad Administration for taking an active role under the PTI to help define and explore the bounds of rail opportunities under ISTEA. These efforts have resulted in an enhanced understanding of rail's role in addressing the diverse infrastructure needs of our national transportation system. Whether moving people or freight, transport by rail represents an energy efficient, safe and environmentally sound component of the nation's intermodal network.

September 1996

A Message from Jolene M. Molitoris, Administrator, Federal Railroad Administration

I am pleased to present to you, our transportation partners, a guide for the development of intercity rail and rail-related projects. Each of us in the Federal Railroad Administration (FRA) looks forward to continuing our work with you as we advance local and state sponsored public benefit rail projects.

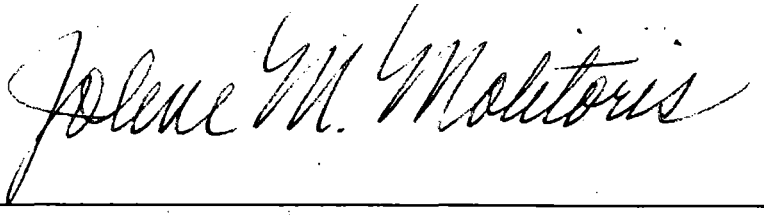
FRA strongly supports the Secretary's innovative financing initiative, the Partnership for Transportation Investment (PTI). The Intermodal Surface Transportation Efficiency Act (ISTEA) calls for development of a National Intermodal Transportation System which "shall consist of all forms of transportation in a unified, interconnected manner . . ." Both freight and passenger railroads are critical components of any integrated intermodal system.

In response to the Secretary's initiative, I have directed FRA to pursue all financing options and partnerships available to rail under ISTEA. FRA has sought extensive input from our customers. We conducted a roundtable on infrastructure financing in April 1994. Through a Federal Register Notice in September 1994, we solicited comments on, project ideas for, and identification of current barriers to the use of ISTEA funds for rail projects. States and localities have identified more than 80 projects or concepts that have been stalled because of limited resources or regulatory or administrative obstacles. FRA, with others in the Department, is cooperating with states and localities to move sound projects forward. More than a dozen of the rail and rail-related projects approved by the Secretary are summarized in this guide.

Our joint efforts have shown that intercity rail and rail-related projects with significant public benefits: (1) can be considered under a number of ISTEA categories; (2) support intermodalism, safety, economic vitality, congestion mitigation and air quality improvement; and (3) enable local and state officials to stretch resources and address important infrastructure needs by leveraging funds through public/private partnerships.

Together with state and local officials, we can identify, clarify, and expand the opportunities for intercity freight and passenger rail projects. Such initiatives will strengthen our national transportation system. This guide is designed to assist in that effort. I encourage your continued support and ideas.

September 1996



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Section 1

INTRODUCTION

Purpose

This Federal Railroad Administration (FRA) reference guide is designed as a practical, single source document for local and state officials and other interested stakeholders. The purpose of this guide is to assist local and state planners and decisionmakers in considering rail projects in their transportation plans and programs and in determining cost-effective allocation of scarce transportation resources. It includes discussion of: (1) the transportation planning process; (2) intercity rail project evaluation; (3) project priority setting; (4) project opportunities under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA); (5) assessment of projects' environmental/societal benefits; and (6) innovative financing mechanisms that can be employed to advance public benefit rail projects. The guide also summarizes a new tool developed for FRA to assist states and localities in evaluating the public and private benefits of rail and rail-related projects. Examples are presented to illustrate more tangibly how project funding might be structured. Each section identifies key contacts within FRA.

New Opportunities Under ISTEA

ISTEA offers increased flexibility through new planning requirements and funding opportunities so that states and Metropolitan Planning Organizations (MPOs) can create a more integrated, environmentally sensitive, intermodal transportation network. Planning requirements and opportunities are discussed in ***Section 2***. Seven major ISTEA program categories under which rail and rail-related projects may be considered are discussed in ***Section 3***.

Access for intercity passenger and freight rail projects to the funding flexibility provided under ISTEA often requires use of appropriate, innovative financing mechanisms and relief from unnecessary administrative constraints. Over a dozen rail and rail-related intermodal projects encompassing short line as well as Class I railroads have already received Department of Transportation (DOT) approval for use of ISTEA funding and have benefited from flexible interpretation of requirements and procedures. As these approved rail projects demonstrate, ISTEA has begun to encourage a broader, more comprehensive intermodal approach to transportation project development and funding.

The Secretary's Innovative Financing Initiative

In response to President Clinton's Executive Order 12893 of January 26, 1994, *"Principles for Federal Infrastructure Investments,"* Secretary Peña established the Department of

Transportation's innovative financing initiative in early February 1994, the Partnership for Transportation Investment (PTI). The PTI is a cooperative DOT effort involving the modal administrations in innovative financing of transportation infrastructure. In recognition of increased demands on our nation's transportation system and continuing budget constraints, one of the Secretary's primary goals in this initiative is to leverage federal resources through expanded use of innovative mechanisms and private sector investment. The initiative is also intended to increase state and local use of ISTEA flexibility. A summary of funding mechanisms is included in ***Section 3***.

FRA, in cooperation with the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), is working to advance additional rail and rail-related projects. Projects already approved offer examples of innovative financing, including public-private cost sharing for construction of intermodal terminals, relocation of rail lines, bridge clearance projects, and grade crossing separation/elimination. Many of the projects result in positive environmental impacts, particularly in EPA-designated air quality nonattainment areas. These benefits are discussed in ***Section 4***.

Ongoing FRA Actions

FRA will continue to work with states, localities, MPOs, rail carriers, and users in the formulation and presentation of publicly sponsored project proposals which have significant public benefits. ***Section 5*** describes a new tool developed for FRA, which is designed to help states and localities in evaluating rail infrastructure investments. The model, software, and user information are available through FRA.

General questions concerning this guidebook should be addressed to:

Sally Hill Cooper, Producer/Director, Associate Administrator for Policy and Program Development, 202/632-3129 or Mickey (Marilyn) Klein, Coordinator and Editor, Senior Policy Analyst, 202/632-3134, Office of Policy and Program Development, FRA.

Section 2

PLANNING PROCESS OVERVIEW

> ***Transportation Planning and Participation:*** *ISTEA requires strong local, state, and federal cooperation for decisions on public transportation investment. The transportation planning process is the basis for these decisions. In addition, ISTEA calls for broad, continuing and effective public (citizen and industry) participation in that important process. As with any new way of doing business, those wanting to participate do best by initiating participation, not by waiting to be asked. Knowing the specifics of transportation planning and the alphabet of requirements is not essential. Offering common sense observations and bringing rail's attributes to the attention of MPO and state DOT staff and decisionmakers is essential. Participation makes good public policy sense; it also makes good business sense.*
>
> *Sally Hill Cooper, AICP*
> *Associate Administrator for Policy and Program Development, FRA*

This section reviews the state/local planning requirements of ISTEA, outlines general requirements for public participation and describes how ISTEA has expanded the transportation planning process to include intercity passenger and freight rail projects. Many rail-related projects can be expected to emerge outside the conventional transportation planning process, which has until recently focused on highway and transit projects. Therefore, this section seeks to clarify how intercity rail and rail-related projects can be incorporated into the state and MPO planning, public participation, and application/approval process.

Process Overview

ISTEA made a number of revolutionary changes in the way the U.S. supports its transportation system, with greater federal program funding flexibility to choose between highway and transit projects. While intercity passenger and freight rail are not given major attention in ISTEA, the expanded focus on transportation of people and goods, and the specific inclusion of freight in transportation planning requirements, offer new opportunities for consideration of intercity passenger and freight rail.

Federal Planning Support for Rail and Rail-Related Projects

ISTEA provides federal funding for multimodal transportation planning at the state and MPO levels. Planning studies that address intercity freight or passenger rail projects or improved access can be initiated by MPOs and states, based on recommendations from their technical advisory committees (TACs) and staff. ISTEA makes clear that representatives of

organizations that administer or operate major modes or systems of transportation, such as railroads, are to be encouraged to participate in planning, the foundation for project development. Broader membership on these TACs and participation in planning and project development will help to ensure that railroad concerns are addressed and that rail contributions and impacts are understood.

Planning Coordination

An officially adopted 20-year transportation plan is required for each urbanized area over 50,000 population throughout the United States. These plans must be consistent with an official statewide transportation plan. ISTEA requires that these transportation plans "consider a range of transportation options designed to meet the transportation needs (both of passenger and freight) of the state including all modes and their connections." The intermodal focus of ISTEA, including the need to consider the role of rail freight transportation, is reflected in the list of factors that must be considered by both the statewide and metropolitan planning process. States and MPOs must "explicitly consider, analyze, as appropriate, and reflect in planning process products . . . international border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes . . . ." The process used in developing these plans should include coordination with operators of airports, ports, rail terminals and other intermodal transportation facilities.

Participation

The regulations implementing ISTEA planning, 23 CFR Part 450, state that private providers and users have a role in the development of both state and metropolitan plans. Projects identified through the planning process in metropolitan areas are prioritized and programmed in metropolitan and statewide transportation improvement programs (TIPs). These TIPs should reflect the overall transportation goals specified in the metropolitan and statewide plans and identify realistic local, state, and federal resources available to implement the programmed projects. The consideration of rail throughout the planning process can affect strategies adopted and help to shape projects to be programmed, working toward balanced transportation solutions.

Successful rail and rail-related projects that demonstrate significant public benefits can evolve from a cooperative effort between a rail provider and the primary planning agency for the region. It is anticipated that the application of realistic evaluation criteria to a range of transportation projects will result in many rail and rail-related projects showing significant public benefit returns. Such projects, generally public-private partnerships, can be attractive to local/state planning organizations, as total public dollars continue to decline.

Project Advancement

Secretary Federico Peña's Partnership for Transportation Investment (PTI), discussed in ***Section 3***, encourages early federal involvement to help achieve satisfactory solutions and share new and creative applications of ISTEA funds. FRA's goal is to provide technical assistance and advice to project sponsors as they address process and application issues.

FHWA and FTA manage program funding under ISTEA. Therefore, similar to more traditional ISTEA highway and transit proposals, applications for rail projects are made through the appropriate FHWA or FTA field office. To encourage innovation, FRA welcomes the opportunity to discuss projects with the public-private sponsors and to assist in exploring ways to advance good projects.

Recently, FHWA and FTA have agreed to provide early funding eligibility determination for individual improvement concepts, contingent on meeting normal planning requirements. Consistent with ISTEA's concept of flexibility, the determination of eligibility for federal funding may be needed early in the planning process, in order to build partnerships and attract other funds.

In addition to a DOT commitment to provide early funding determinations, the PTI encourages experimental pilot projects that seek maximum flexibility and creative application of ISTEA funding. For those applications that are not approved initially, sponsors are encouraged to continue to work with federal officials to design acceptable solutions. While formal project requests are made through FHWA or FTA regional offices, FRA would appreciate receiving copies of applications that contain rail elements.

Questions concerning process overview, participation and project advancement should be addressed to:

Robert E. Martin, Director Intermodal Planning and Economics Staff, 202/632-3150 or John N. Paolella, Senior Transportation Specialist, 202/632-3154, Office of Policy and Program Development, FRA.

Section 3

INTERCITY RAIL PROJECT FUNDING AND INNOVATIVE FINANCING OPPORTUNITIES

> ***Projects and Puzzle Solving:*** *ISTEA and the firm commitment of Secretary Federico Peña have brought reconsideration of and increased flexibility to federal rules, practices and procedures, resulting in a more comprehensive federal approach to transportation and its impacts, 20/20 vision rather than modal myopia. The purpose of the Secretary's Partnership for Transportation Investment (PTI) is to move critical projects, without additional federal resources, by revising federal financing methods, giving states and localities more flexibility and helping them to leverage funds through public-private partnering. PTI is designed to solve financial and administrative puzzles. Therefore, when proposing a project, the question is not "What's eligible?" The question is "How can we advance a state/local priority project that has clear public benefits?"*
>
> *Sally Hill Cooper, AICP*
> *Associate Administrator for Policy and Program Development, FRA*

This section describes rail project funding opportunities that are available under ISTEA. In addition to providing examples of ISTEA flexibility in action, particular emphasis is given to the support for intercity passenger and freight rail projects that flowed from Secretary Peña's innovative financing initiative, the Partnership for Transportation Investment (PTI).

Through the PTI, FRA has worked closely with FHWA and FTA to explore new ways to finance projects, including publicly sponsored rail projects, that can help meet state and local infrastructure needs. In late 1995, several of these new financing techniques were made permanent as part of the National Highway System Designation Act (NHS Act), PL 104-59.

Rail Project Opportunities Under ISTEA

The new intermodal funding flexibility under ISTEA is key to assisting state and local officials in addressing their project needs in the face of budget constraints. While not explicitly cited as eligible for most ISTEA programs, there are intercity passenger and freight rail projects that can be and have been funded under ISTEA. These are projects that provide broad public benefits in transportation efficiency, air quality, safety, and economic development.

Partnership for Transportation Investment

In early 1994, the DOT established the PTI and directed the modal administrations to seek innovative ways to advance infrastructure improvements. FRA, FHWA, and FTA responded with Federal Register Notices asking state and local governments to identify sound infrastructure projects that had been blocked or delayed but could be advanced through innovative financing or a fresh interpretation of federal eligibility. (See FRA Notice in **Appendix 3**.)

PTI seeks to stimulate increased investment in transportation by combining limited public and private resources. Public-private partnerships and new funding mechanisms (innovative financing) have played an increasingly important role in developing and financing rail projects. (See the **end of this section** for the variety of rail financing proposals accepted under ISTEA.)

To date, the Secretary has announced the acceptance of 74 PTI projects in 35 states, worth four billion dollars. Nine of these announced projects are rail projects using some form of ISTEA funding. Over a dozen approved rail projects are included as examples in this guide.

Rail and Rail-Related Project Support from Major ISTEA Program Categories

Federal support for rail and rail-related projects is facilitated by ISTEA's authorizing legislation, which stresses flexibility and contains seven major transportation program categories with varying funding and eligibility criteria. These programs include the following:

- National Highway System
- Surface Transportation Program (STP) General Grants
- STP Transportation Enhancements
- Congestion Mitigation and Air Quality Improvement
- Bridge Replacement & Rehabilitation Program
- Priority Intermodal Projects
- Intelligent Transportation Systems

The primary emphasis of each of these ISTEA programs is outlined below. Examples of passenger and freight rail and rail-related projects are provided, with special attention to their public benefits and funding sources. These particular projects were among the first to be approved under ISTEA; other proposals with similar or new approaches are continuing to move forward. Several of the examples use blended funds from more than one source, including more than one ISTEA program category.

Eligibility Under ISTEA for Improvements to Rail Facilities

ISTEA funds can be used for the following rail-related purposes:

- o Grade Crossing Improvements (Surface Transportation Program (STP)): funds continue to be available for safety improvements at railroad-highway crossings
  - includes relocation of portions of rail line where less costly than eliminating existing crossings by grade separations or relocation of the highway.
- o Commuter Rail Projects (STP): capital aspects of commuter rail.
  - also eligible for funding by Federal Transit Administration. Note that intercity rail is not eligible for funding.
- o Air Quality Improvements: any rail transportation project may be funded from the Congestion Mitigation and Air Quality (CMAQ) Improvement Program if and only if that project has air quality benefits for the pollutant(s) for which the area is in nonattainment
  - projects could include intermodal terminals, tunnel clearance projects or railroad connection projects if they can be demonstrated to improve air quality.
- o Railroad Clearance Projects (STP, National Highway System, CMAQ, and Interstate Maintenance): for construction or reconstruction (highway and bridges) necessary to accommodate other transportation modes.
  - For example, to provide necessary clearances between railroads and highway bridges for doublestack container service. Funds may be used to lower the railroad rather than raise the highway bridge if that approach is more cost-effective.
- o Historic Railroad Facilities (STP Transportation Enhancement (TE)): for rehabilitating and operating historic railroad facilities including historic stations and bridges, although such bridges would have to restored in a manner that conforms to the historic designation.
- o Right-of-way acquisition (TE): to acquire abandoned railroad rights-of-way for non-motorized trail use. The right-of-way may continue to be used for rail freight service during the interim period before the line is converted to trail use.

ISTEA funds may not be used for intercity rail projects, improvements to freight railroads (other than CMAQ projects), or acquisition of railroad lines (except on interim basis).

Joel Palley, RRP-11
X60348, 3/15/95

National Highway System (NHS)

NHS funds can be used on a public highway connection to major intermodal terminals. In the context of the NHS road network, ISTEA includes "intermodal" connections defined to include highway links between the network of principal arterials and the **vital nodes and endpoints of other modal transport facilities**. The purpose of including access linkages is to ensure that people and goods can make efficient transfers between non-highway modes, including rail, and the major highway network.

Main program activities. NHS funds can be used for a broad range of road construction and rehabilitation projects, generally limited to the designated National Highway System only. NHS funds are not directly applicable to intercity rail passenger or freight projects, but can be used to relocate part of a rail line if this is less costly than grade separations or highway relocation to eliminate grade crossings. The NHS Act specifies that NHS funds may be approved for public highway connections to intermodal terminals that meet the Secretary's criteria. Certain improvements necessary to accommodate other modes, such as a rail line, are also eligible uses.

In addition, states may apply their NHS funds to rail passenger services in at least two ways. First, when a nearby NHS or interstate segment is being reconstructed, NHS or STP funds may be used for intercity rail service, if shown to be effective in mitigating traffic congestion during the reconstruction period. Second, under certain conditions, rail passenger commuter improvements can be substituted for proposed highway corridor construction. In some cases, commuter line improvements also benefit intercity passenger service.

Each state may choose to transfer 50 percent of its NHS funds (or more with special approval) to the STP program, where more flexible applications are allowed.

Example of an approved rail-related project under the NHS:

> **Philadelphia Tioga Marine Terminal (Pennsylvania).** The goods movement task force of the Philadelphia MPO identified impediments to highway access at the Tioga Marine Terminal, a water/rail/highway intermodal transfer facility. Improvements undertaken include signage, signaling, and rebuilding the Allegheny Avenue off-ramp from I-95. These three elements use separate funding packages: federal NHS and safety funds for the signaling; state funds for the signage; and a mix of NHS, STP, and other funds for the turning radii improvements.

Surface Transportation Program General Grants

The STP was created to fund a broad range of surface transportation improvements.

Main program activities. STP funds can be applied to almost any road improvements (including NHS designated mileage) but not local or rural minor collector roads. Certain

highway improvements necessary to accommodate other modes, such as rail lines or intermodal transfer terminals, are eligible activities. ISTEA specifies in section 133 (b) that STP funds can be used for ". . . construction or reconstruction of [highways and bridges] necessary to accommodate other transportation modes . . . ." Transit capital projects are eligible under the flexibility provision, but not facilities dedicated solely to rail freight or to intercity rail passengers. Highway-rail grade crossing improvements are eligible for STP funds, with a specific 10 percent set aside for safety programs that include highway-rail grade crossings. STP funds may also be used to improve almost any highway link or connection benefiting intermodal movements. As with NHS funds, STP funds may be used for intercity rail passenger service to mitigate traffic congestion during highway reconstruction.

Examples of approved rail and rail-related projects under the STP:

a. **Railway-Highway Crossing Hazard Elimination (Section 1010).** In up to five high-speed rail corridors selected by the Secretary, $5 million per year of STP funding has been set aside for each fiscal year to eliminate hazards at rail-highway grade crossings on high-speed passenger lines. (Rail-highway grade crossing improvements are eligible expenditures under the STP.)

b. **Port of Seattle (Washington).** The Port of Seattle is building a new intermodal bridge to bring rail services directly into the port. The total project will require $300 million, with $2.5 million from STP funds (FY 1995).

c. **Ventura County Transportation Commission (California).** The Ventura MPO is purchasing two partially abandoned rail corridors, one existing rail corridor, 40 miles of rail track, and contiguous land. Freight rail service is expected to expand under the new plan, with some truck movements avoided by the improved railroad connections to the Port of Hueneme. Projected funding for acquisition of the rail branch lines consists of $4.2 million in STP grants, $3.5 million in STP Enhancement funds (see STP Enhancements), and $1.0 million in local matching funds.

d. **Santa Teresa Intermodal Facility (New Mexico).** This is a proposed new intermodal terminal facility that will apply advanced technology to speed truck and rail freight between New Mexico and Mexico. A feasibility study has been completed with appropriated federal demonstration funds (1992 Appropriations Act). A blending of STP, state, and private railroad funds has been used for planning and research.

e. **Ft. Collins Track Consolidation Project (Colorado).** This is a $2.75 million public-private partnership of U.S. DOT, Colorado DOT, City of Ft. Collins, and private railroads to consolidate/relocate track, eliminate 16 grade crossings and add new signals at several crossings. The project used a combination of local, state, and STP funds, as well as $800,000 from the Union Pacific and the Burlington Northern Santa Fe railroads. Results include enhanced air quality, traffic flow, and safety.

f. **Hiawatha Line Improvements (Illinois and Wisconsin).** STP and interstate maintenance funds are being used for Amtrak's Hiawatha line connecting Chicago to Milwaukee to maintain rail passenger service, which will mitigate construction impacts and traffic disruption while a nearby interstate highway is under construction.

Projects Approved Prior to ISTEA

The projects described below were approved prior to passage of ISTEA but could be considered under ISTEA's NHS or STP programs.

a. **Pennsylvania Clearance Project (Pennsylvania).** PennDOT served as a coordinator for a major project to remove impediments to double-stack rail operations serving the Port of Philadelphia. Most of this overall project was financed by a combination of Consolidated Rail Corporation (Conrail) funds and state-sponsored bonds. However, numerous highway bridge improvements that coincided with double-stack clearance needs were put on the Transportation Improvement Program and then accelerated to support this project.

b. **Upgrading of Cicero Avenue (Route 50) in Chicago (Illinois).** The Chicago Area Transportation Study (CATS) is upgrading Cicero Avenue (Route 50) by performing the necessary bridge reconstruction to raise clearances and remove intermodal operating obstructions in the vicinity of rail/truck transfer terminals. Most of the numerous improvements were committed prior to ISTEA from Interstate Transfer funds.

STP Transportation Enhancements Program (TEP or enhancement funds)

Section 1007 (d) (2) of ISTEA requires that each state use ten percent of funds available to it under the STP program for transportation enhancements. This is intended to strengthen the environmental aspects of the nation's intermodal transportation system. Enhancement activities can be implemented in a variety of ways, from stand-alone projects to joint initiatives or public-private partnerships.

Main program activities. TEP activities are specifically defined in ISTEA (Section 1007 (c)). The ten categories include the following: acquisition of scenic easements and scenic or historic sites; rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities); and preservation of abandoned railway corridors (including their conversion and use for pedestrian or bicycle trails). Projects in these and other listed categories qualify for enhancement funds for those project elements clearly in the listed categories. Hence, an intercity passenger or freight project, which is primarily rehabilitation and operation of a historic transportation facility (including railroad facilities) can be at least partially supported under this program. Further, many types of projects (including intermodal freight projects) that incorporate accommodations for pedestrians and bicycles can receive support. A large number of historic intercity rail passenger stations have been restored under this funding category.

DOT has approved enhancement funds to acquire abandoned rail corridors for future rail or highway use under certain limited circumstances. Funding for retaining rail freight corridors has been approved on a case-by-case basis.

Examples of approved rail or rail-related projects under the TEP:

a. **Panhandle Project (Ohio).** The Panhandle Rail Line in Ohio was financed in part with TEP funds. This project involved purchase of an operating rail freight corridor and included as a key element the requirement for an eventual trail, possibly side-by-side with rail. Thus, a rail freight corridor potentially subject to abandonment was continued in operation. (See Secretary of Transportation Peña letter of February 28, 1994 in **Appendix 3**.)

b. **Ventura County Rail Corridor (California).** The Ventura MPO is considering purchase and operation of rail freight corridors, blending TEP funds with other funding sources (see detail in **STP section above**) to connect the agricultural area to the Port of Hueneme by rail.

c. **Georgetown Loop Bridge (Colorado).** Enhancement funds were used to replace the 1905 girder bridge with a recreation of an authentic truss bridge similar to the original built in 1877. The bridge is part of a historically accurate reconstruction of a 19th century narrow-gauge mining railroad that once served the mining towns of Georgetown and Silver Plume.

d. **Lafayette Depot Plaza (Indiana).** Enhancement funds ($1 million) are being used to supplement a project to relocate the historic Big Four Depot and restore it as the focal point of an intermodal civic plaza, with train and transit service. The Cities of Lafayette and West Lafayette are contributing $1.63 million, and other federal transportation funds represent $5.51 million. The project is an integral part of the relocation of the railroad line that serves the City of Lafayette. The relocated and renovated depot, surrounding plaza, elevators, platforms, and bus transfer island provide waiting, boarding, and administrative services for Amtrak, the local bus company, and Greyhound.

e. **Danville Rail Passenger Station and Science Center (Virginia).** Enhancement funds ($1.93 million of a $2.68 million project) are being used to rehabilitate a historic rail passenger building, freight depot, and railroad trestle and to improve pedestrian and bicycle connections to the site. Norfolk Southern Corporation (NS) contributed the rail station to the city. Amtrak shares a central lobby with the Danville Science Center, a satellite facility of the Science Museum of Virginia.

f. **Greensburg Train Station Rehabilitation (Pennsylvania).** Enhancement funds ($1.4 million of a total project cost of $2.6 million) will be used to rehabilitate the Greensburg train station, built in 1911. State and local sources, including private corporations, individuals, private grants, and historic preservation grants contributed $1.2 million. The train station is one of the busiest on the Amtrak corridor between Pittsburgh and New York and provides a convergence point for vehicles, pedestrians, and mass transit. The station's rehabilitation will further the revitalization of downtown Greensburg and promote economic growth.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

Under ISTEA, CMAQ provides funds to states and localities that have not attained national ambient air quality standards (NAAQS) mandated under the 1990 Clean Air Act Amendments (CAAA). The NHS Act extends CMAQ coverage to areas that have reached attainment, in order to maintain the NAAQS. CMAQ funds may be used for a broad range of transportation projects as long as they reduce specified transportation-related emissions primarily in a nonattainment area.

Main program activities. A wide range of intermodal projects, including rail, may be eligible for CMAQ funding if they reduce ozone, carbon monoxide (CO), volatile organic compounds (VOCs), or, in some cases, particulates (PM-10) in a nonattainment area. DOT program guidance in October 1992 indicated that CMAQ funds may be used for a rail improvement that has demonstrated air quality benefits. Revised July 1995 CMAQ guidance and the March 1996 CMAQ guidance update have provided even greater flexibility, and support for intermodal freight facilities and public-private initiatives has been directly stipulated. Furthermore, the July 1995 guidance (continued in the March 1996 guidance) encourages experimental pilot projects that show promise but need not meet the precise CMAQ eligibility criteria as long as "emission reductions can reasonably be expected."

Examples of approved rail and rail-related projects under CMAQ:

a. **Columbia Slough Intermodal Expansion Bridge (Oregon).** This project provides a rail bridge over the slough, directly connecting the railroad to the Port of Portland. Emissions will be reduced, as trucks will no longer have to dray freight from the port to the railroad. Initially, the bridge project received funding as an ISTEA demonstration project. Recently, it received an additional $1 million in CMAQ funds. Additional funding will also be provided by the Port of Portland and the Union Pacific and Burlington Northern Santa Fe railroads.

b. **Stark County Intermodal Facility (Ohio).** The Stark County Intermodal Facility is a public-private partnership project that will enable truck trailers and freight containers to be loaded onto railroad cars. The total project cost will be over $32 million and will be primarily private funds, plus $7 million of CMAQ funds. The intermodal facility will use CMAQ funds as part of an innovative financing method, a Transportation Revolving Loan Fund (TRLF). FHWA has allowed a broader definition of section 1012 loan funds for this revenue-generating project. (See page 12 of this section.) CMAQ funds will be loaned to the project rather than provided as grants, and funds will be repaid to the TRLF to be available for future transportation projects. The facility will provide shippers direct links to NS, Conrail and CSX Transportation, Inc. (CSX) via the Wheeling & Lake Erie Railway Company.

c. **Auburn Intermodal Facility (Maine).** This FY 1993 CMAQ-funded intermodal project in Auburn, Maine used $2.3 million in CMAQ funds, combined with $ 0.5 million from the City of Auburn and $0.2 million from the St. Lawrence and Atlantic Railroad Company in rail track work. A private company leases the facility and 37 acres of land from the City of Auburn. The

transfer facility is expected to attract substantial truck traffic from highway to rail, by facilitating 36-hour service between Auburn and Chicago with intermodal trains. The project will result in reduced emissions and congestion along the route, as well as reduced need for highway maintenance.

d. **Reorganization of Bensenville Rail Yard in North West Chicago (Illinois).** CP Rail is reengineering its yard in Bensenville (a suburb west of Chicago), upgrading its west end access and egress, and ultimately rerouting some of its trains. The upgrade includes new track, interlocking, and signals, allowing increased train speeds. There will be public benefits in significantly reduced traffic conflict due to fewer at-grade crossings. The CMAQ share of the cost is $2.1 million for aspects of the reengineering that have public benefits.

e. **Cincinnati Third Track (Ohio).** To relieve freight train congestion in the Cincinnati, Ohio area, a public-private partnership of Cincinnati, Ohio DOT, U.S. DOT, and NS constructed a 3.5 mile third main rail track and reconstructed bridges along a CSX right-of-way. In 1994, 85 percent of the more than 21,000 trains passing through this corridor experienced delays averaging 1.8 hours and blocked highway traffic at numerous highway-rail grade crossings. The new track mitigates congestion at rail/highway interfaces and supports air quality improvement in a nonattainment area. To accelerate construction of this $15 million project, NS advanced the entire amount, and FHWA, through Ohio DOT, agreed to a multi-year reimbursement to NS for the federal share, with eventual payment of $5 million in CMAQ funds.

f. **Fairfield Intermodal Facility (Maine).** Construction of a truck-to-rail transfer facility was proposed by the state, using $1.9 million of CMAQ funds, with total project costs of $3.47 million. The project will credit the value of Maine Central Railroad/Springfield Terminal Railway contributions of materials, operational equipment, and engineering services towards the non-federal share, the equivalent of $1.57 million in rail funds. This private contribution will free up state funds for use in other transportation projects. The transfer facility will allow central Maine products shipped in trailers and containers to move via rail, reducing heavy truck miles and emissions.

g. **Davisville/Quonset Point Rail Track (Rhode Island).** The project will expand rail capacity, by providing for additional track capacity along a 21-mile segment of the Northeast Corridor high-speed passenger line between Davisville and Central Falls, RI, to allow uninhibited movement of freight from the Quonset Point marine facility to the national freight railway system. The $115 million to $190 million funding package, depending on whether the partial or full-build option is chosen, blends state, FRA earmarked and appropriated funds, FHWA funds (NHS, CMAQ, STP, and Bridge Program), and private funds. STP urban funds are being used for an environmental impact statement.

h. **Morristown Branch Line (New Jersey).** The Morristown and Erie Railway, Inc., a county-owned railroad that shares trackage with NJ Transit is rehabilitating a branch line that will allow it to provide service to a new Toys-R-Us regional distribution center using CMAQ funds.

i. **Gorham Railroad Bridge Project (New Hampshire).** A $.75 million bridge clearance project in Gorham to allow double-stack container service from Auburn, Maine to Chicago, Illinois was

approved for flexible matching of $150,000 of private funds from the St. Lawrence and Atlantic Railroad in lieu of state funds. The project also uses $.6 million of CMAQ funds. This project, which was specially allowed under the innovative financing program, is in an air quality attainment area but will reduce emissions along the I-95 corridor through nonattainment areas, by allowing motor freight to be shifted to double-stack trains.

Bridge Replacement & Rehabilitation Program

The Bridge Replacement & Rehabilitation Program provides major assistance for a broad range of bridge improvement projects and was continued basically unchanged from the pre-ISTEA bridge program. Bridges on public roads can be eligible. Newly eligible activities under ISTEA include bridge painting and seismic retrofitting.

(**Note:** FRA is not aware of any intercity rail or rail-related examples under ISTEA for the bridge program, but bridge replacement needs are often closely related to clearance problems and heavy truck volumes (in concert with total traffic volumes). Problems with bridge clearances for freight haulers can accelerate the priority given to specific bridge projects.)

Priority Intermodal Projects

Section 1108, Priority Intermodal Projects, provides for the "construction of innovative intermodal transportation projects."

Example of an approved rail-related priority intermodal project:

Alameda Corridor (California). The Alameda Corridor will provide access to the Ports of Los Angeles and Long Beach, and serve the largest concentration of intermodal freight container movements in the country. The ports estimate that by the year 2020, 97 intermodal freight container trains will be moving in and out of the port daily. As part of an overall plan to provide an improved, shared rail corridor, and reduce truck congestion (and truck emissions) in the Los Angeles area, several multi-modal improvements to the Alameda Corridor were designated as ISTEA demonstrations. (Several had also been funded by prior highway acts.)

The proposed rail corridor improvement along Alameda Street, coordinated by the Alameda Corridor Transportation Authority, will eliminate all at-grade highway-rail crossings along Alameda Street and consolidate 90 miles of tracks of the Burlington Northern Santa Fe and the now merging Union Pacific and Southern Pacific railroads into one 20-mile rail intermodal corridor. The financing includes a blending of federal, state, local government, port reserves, revenue bonds, and private funds. In addition, a proposed federal loan is under consideration in the Congress.

Intelligent Transportation Systems (ITS) Program

ISTEA establishes an Intelligent Transportation Systems (ITS) Program, originally called the Intelligent Vehicle Highway System Program. Approximately $600 million was authorized for the six-year authorization period. The legislation requires the promotion of compatible standards and protocols to promote widespread use of ITS technologies, the establishment of evaluation guidelines for ITS operational tests, and the establishment of an information clearinghouse.

(**Note:** FRA is not aware of any intercity rail or rail-related infrastructure projects under the ITS Program.)

Innovative Financing Tools

ISTEA has given decisionmakers much greater flexibility in meeting transportation needs and has encouraged new thinking about approaches to transportation infrastructure finance. Under FHWA's *Innovative Finance - Test and Evaluation Project* (TE-045), launched in 1994, innovative management of federal funds, greater use of bonds, improved federal/state/private matching arrangements, section 1012 loans and revolving funds, federal credit enhancements, and public-private partnerships have all been implemented, or are under serious consideration by several states and MPOs. FRA has worked with FHWA, FTA, and states to identify rail and rail-related projects that could use these and other innovative financing methods. Where FRA is aware of rail and rail-related projects, they are identified in the appropriate category below.

Several innovative financing concepts became permanent with the passage of the NHS Act of 1995. The Act authorizes use of advance construction funding, enhanced opportunities for bond financing, increased use of federal loans and use of private funds in lieu of state match. The Act also authorizes the establishment of up to ten State Infrastructure Banks which will facilitate the ability of states to leverage limited public funds -- often in conjunction with the private sector -- through use of more debt financing tools, such as revolving funds, short-term construction loans, and contingent lines of credit.

Examples of innovative financing tools:

a. **Tapering.** The federal share of the project is allowed to vary from year to year, as long as the total federal contribution to the project does not exceed the federal-aid limit. *Tapering* allows states to reduce the financing risks and costs associated with the pre-construction phase and maximize the access to private capital to finance project costs in later stages.

b. **Advance construction.** A state may independently raise the up-front capital required to construct a project while preserving eligibility for future federal funding for the project. (**Note:** The Cincinnati Third Track and Davisville/Quonset Point Rail Track projects use advance construction.)

c. **Partial conversion of advance construction** *(a form of advance construction)*. A state can obligate varying amounts for a project's eligible cost in each year, depending on how much of the state's obligational authority is available. (**Note:** The Fairfield Intermodal Facility and Gorham Railroad Bridge projects use partial conversion.)

Bonds and Other Forms of Debt Financing

Under current federal law, states may assign federal funds to repay the principal on bonds issued for approved transportation projects, but assignment of federal funds is limited to the current ISTEA authorization period. Interest costs can also be covered by federal reimbursement on some Interstate projects. Under PTI, states submitted several financing initiatives which expanded the use and capacity of federal funds to support debt financing beyond the current ISTEA authorization period.

Flexible Match

Under traditional transportation infrastructure funding, states are obligated to fund a minimum, fixed percent of a project's costs, typically 20 percent, from state or local funds. Any private in-kind contributions, except rights-of-way, are deducted from the total project costs before determining the level of federal funding required. Under PTI, and now under the NHS Act, however, states have been able to count such contributions toward their match. Private sector dollars and/or in-kind contributions are added to, or substituted for, state matching funds, leveraging state resources to develop more projects. (**Note:** The Gorham Railroad Bridge, Fairfield Intermodal Facility, Williamstown Railroad Depot, and Auburn Intermodal Facility projects use flexible match.)

Section 1012 Loans

Section 1012 of ISTEA provides greater flexibility to leverage federal funds. States can loan federal funds for revenue generating projects, to publicly or privately sponsored projects, or to a project as subordinated debt with extended repayment periods. States may use funds from section 1012 and funds from loan repayments for a variety of highway projects authorized under Title 23, U.S.C., including access to rail facilities. (**Note:** The Stark County, Ohio intermodal project uses section 1012 funds.)

Credit Enhancements

States are permitted to use their federal aid as collateral for lines of credit to support bond issues, thereby leveraging the federal funds available, improving the credit rating of projects, and reducing total costs (primarily interest costs) associated with bond issuance.

State Infrastructure Banks

Another approach to the infrastructure shortfall is the use of State Infrastructure Banks (SIBs). Section 350 of the NHS Act specifically authorizes the Secretary to "enter into cooperative agreements with not more than 10 states for the establishment of state infrastructure banks . . . and multi-state infrastructure banks for making loans and providing other assistance to public and private entities carrying out or proposing to carry out projects for assistance under this section."

The NHS Act did not provide funding for the SIBs, but 10 percent of certain funds apportioned to a state may be deposited in the SIB, pursuant to the statute. The flexibility of the SIBs should provide new opportunities for states to construct infrastructure projects. Under certain conditions, intermodal projects with rail components can be good candidates for SIB financing. SIBs will give the states the opportunity to use such tools as revolving loan funds, short-term construction loans, contingent lines of credit to attract private capital, and low-cost pre-construction capital for privately-developed projects with significant public benefits.

A SIB, like a private bank, needs equity capital to get started and offers customers a range of loan and credit options to help finance transportation projects. Specifically, SIBs are created with federal seed money and offer a menu of loan and credit enhancement assistance, such as loan guarantees, to provide additional security or credit for support of financing projects, which results in lower interest costs. As loans are repaid, the SIB funds are replenished and the SIB can make new loans to a broader range of transportation projects.

A Federal Register Notice formally inviting states to participate in the pilot program was published December 28, 1995, with an extension published on February 21, 1996. Fifteen states submitted applications to participate in the ten-state pilot program. The ten states selected were: Arizona, California, Florida, Missouri, Ohio, Oklahoma, Oregon, South Carolina, Texas and Virginia. Based on the program's success, DOT is seeking legislative authority to expand the program to include more states. In addition, the Department's FY 97 Budget included a request to fund the SIB program.

Questions concerning rail opportunities and financing alternatives should be addressed to:

Tom Hartman, Director, Industry Finance Staff, 202/632-3151 or John N. Paolella, Senior Transportation Specialist, 202/632-3154, Office of Policy and Program Development, FRA.

Variety of rail financing proposals accepted under ISTEA

1. A private-public partnership to study the feasibility of moving agricultural traffic off the highway and onto rail in a nonattainment area.

2. A private-public partnership to build an intermodal facility in an attainment area that would benefit a nonattainment area.

3. A private-public partnership to construct a third track through a nonattainment metropolitan area that currently encounters major rail congestion, adversely affects air quality, creates recurring delays in Amtrak service, and often causes major blockage of highway-rail grade crossings in the surrounding area.

4. A private-public partnership grade-crossing realignment/elimination project within a nonattainment area, which would enhance rail flow, mitigate highway congestion, enhance highway safety, and permit extension of commuter service.

Section 4

INTERCITY RAIL'S SOCIETAL AND ENVIRONMENTAL BENEFITS

This section describes rail transportation's environmental and societal benefits, public benefits that enhance the nation's economic well-being and quality of life. Attempts to value the public benefits of rail intermodal projects often become a major stumbling block for local and state officials. The public benefits of our intercity freight and passenger rail systems and individual projects include unique contributions of congestion mitigation, environmental quality, energy savings, and land use. These benefits are dsicussed below and should be considered in project evaluation. Where resources permit, benefits can be more precisely identified using specific project information. General information on benefits is provided below. (**See Section 5** for a newly developed evaluation tool available through FRA.)

Public-Private Benefits of Rail - Overview

Railroads are private companies operating and maintaining their own rights-of-way and linked together to form a nationwide rail network -- a vital component of our integrated national transportation system. The freight and passenger rail systems link people and businesses in an energy efficient and environmentally sound manner.

In 1995, freight railroads in the Unites States carried more than 38 percent of all intercity ton-miles -- more than any other single transportation mode (trucks, waterways, oil pipelines and air). In 1995, Amtrak provided service to more than 55 million long-distance and commuter rail passengers, and local commuter rail agencies transported millions more.

When Congress passed ISTEA, it recognized the inherent values gained from an intermodal transportation system that can leverage the unique characteristics and advantages of each mode. Congress stated: "It is the policy of the United States to develop a National Intermodal Transportation System that is economically efficient and environmentally sound, provides the foundation for the Nation to compete in the global economy, and will move people and goods in an energy efficient manner."

Expansion of capacity in the transportation sector to meet economic growth needs will likely occur from better use of existing transportation assets, with greater emphasis on intermodal connections that maximize the particular advantages of each transportation mode.

Highways are effective feeders to the long-distance, high capacity rail system. A 1995 FHWA study of intermodal freight (Fact Sheet in Intermodal Freight Transportation, Volume 2), noted some benefits of rail/truck intermodal transportation: "An efficient, coordinated long-distance truck-rail-truck intermodal movement can be up to 3.4 times more fuel efficient than a non-intermodal truck movement while emitting only 20 percent as many hydrocarbons."

The study also cited other benefits, such as lower transportation costs, reduced congestion, and higher returns from public and private infrastructure investments through greater use of intermodalism.

Congestion

Congestion on the nation's highways and airways costs billions of dollars each year in wasted fuel and lost time. The Department of Transportation has estimated that highway congestion in the nation's 50 largest cities costs motorists over $40 billion annually, and airport delays impose another $5 billion cost per year on airlines and passengers. Because provision of additional highway or air capacity is constrained by space, costs, and environmental opposition, multimodal strategies are needed to address the congestion problem.

Amtrak service in the Northeast Corridor alleviates congestion between Washington, D.C. and New York City, carrying about 45 percent of all common carrier passenger traffic each year. Completion of electrification from New Haven to Boston in the Northeast Corridor is estimated to eliminate 53 flights per day, reducing congestion at airports in Boston, Providence, and New York. The improved electrified rail line also offers the opportunity to relieve overall highway congestion and specific bottlenecks, particularly in urban areas.

A 1989 General Accounting Office (GAO) Report, Traffic Congestion: Trends, Measures, and Effects, identified six forces that shape traffic congestion: 1) suburban development trends (movement of families, services, and jobs away from the central city and into suburban areas); 2) economic trends (changes in the employment base away from manufacturing and towards services, changes in communications technology, increases in the amount of discretionary travel, etc.); 3) labor force trends (the overall growth in the labor force and women entering the workplace); 4) automobile use trends (growing automobile availability and use); 5) truck traffic trends (greater use of trucks, increases in truck size and weight, and increasing numbers of heavy truck accidents); and 6) highway infrastructure trends (increasing traffic without a corresponding increase in infrastructure capacity).

The 1995 FHWA report previously cited notes that intermodal freight transportation "offers the promise of . . . reducing the traffic on overstressed infrastructure, e.g. congested highways, to less congested modes. An intermodal truck to double-stack train to truck movement would displace approximately 200 trucks from the line-haul portion of the movement. Such a conversion would lessen congestion of the nation's highways."

Air Quality

Rail service plays a beneficial role in reducing air pollution emissions, helping urban areas meet air quality standards. Amtrak produces far less carbon monoxide (CO) than aircraft or

automobiles. According to the October 1994 Final Environmental Impact Statement for the Northeast Corridor Improvement Project - Electrification- New Haven, CT to Boston, MA, electrification of rail passenger service in the Northeast Corridor from New Haven to Boston, is expected to further reduce CO emissions by five percent. Volatile organic compounds (VOC) emissions and nitrogen oxides (NOx) emissions (two ozone precursors) will be reduced by five percent and fifteen percent, respectively, as a result of diversion from other modes and the switch from diesel power to electric power. Commuters taking electrified rail passenger trains to work instead of single occupancy vehicles can reduce the NOx contribution to urban smog.

Very few comprehensive studies of freight emissions have been conducted. Emissions produced by moving freight can vary widely depending upon a variety of operational and logistical factors, such as miles of travel, engine efficiency, and fuel use. For decisionmaking purposes, comparisons of rail and truck emissions should be made on a case-by-case basis, using the particular facts and circumstances of the freight movement being modeled. Calculations based on 1993 Environmental Protection Agency (EPA) emission data indicate that trucks emit more NOx, VOC, diesel particulates, and CO than rail to move the same amount of freight. Railroads are working closely with major locomotive manufacturers to develop advanced diesel technology (electronic fuel injection and enhanced turbo-charged air cooling) and alternative fuel engines to produce even fewer emissions.

In order to better understand the air quality implications of intercity freight operations and potential emission control strategies, FRA, FHWA, and EPA are jointly sponsoring a study, Air Quality Issues in Intercity Freight, being conducted by Cambridge Systematics, Inc. The study, which will be completed by the end of 1996, has the overall purpose of identifying tools and methods that can assist metropolitan and state planners in developing credible plans and analyses of freight emission reduction strategies in air quality nonattainment areas. Two Transportation Research Board (TRB) studies also should be useful. TRB has completed the first phase of its report, Development of a Multimodal Framework for Freight Investment: Consideration of Rail and Highway Trade-Offs. This research, performed by the Texas Transportation Institute, is evaluating examples of transportation investment alternatives, focusing on rail-highway trade-offs in state rail program activities. While the focus is on direct costs, indirect costs, such as economic impacts, energy use, productivity, air quality, and safety impacts, are also being considered. Phase two is the development of software to be provided to state and local planners to assist in making alternative modal investment decisions. This first phase report is available through Kenneth S. Opiela at TRB, 202/334-4237. A TRB study, Paying Our Way: Estimating Marginal Social Costs of Freight Transportation ("Baseline Study"), uses four case studies to explore the potential usefulness and feasibility of a comprehensive study of freight transportation to measure the subsidies provided to the freight modes and the external costs of freight transportation, such as air pollution, congestion, safety, and energy consumption. The study is available from TRB at 202/334-3218.

Although not currently regulated by EPA under the Clean Air Act Amendments of 1990, carbon dioxide emissions (CO_2) are the primary cause of global warming. According to a 1991 Office of Technology Assessment report, Changing by Degree: Steps to Reduce Greenhouse Gases, the amount of CO_2 released by the transport sector represents about 32 percent of total U.S. fossil fuel CO_2 emissions (5 percent of worldwide CO_2 emissions). Rail and marine transportation combined contribute the least CO_2 emissions of the transportation sector.

Noise

While individual noise impact comparisons must be taken into account on a case-by-case basis, estimates included in a 1989 GAO report, Transportation Noise: Federal Control and Abatement Responsibilities May Need to be Revised, show that, overall, rail noise affects fewer persons than other sources of transportation-related noise. EPA has issued noise standards for the operation of locomotives and rail cars under moving conditions, as well as for four major rail yard noise sources: locomotive load cell test stands, switcher locomotives, car coupling operations, and retarders.

Train horns sounded at railroad-highway grade crossings to warn of an approaching train can be an annoyance to those living nearby. However, a June 1995 FRA report, Nationwide Study of Train Whistle Bans, found that highway-rail accidents are 84 percent more likely to occur at grade crossings where train whistles are banned than at crossings where they are sounded. At 2,100 of the 168,000 public highway crossings in the U.S., local communities have banned train whistles to limit noise. In the Swift Rail Development Act of 1994, Congress directed the FRA to issue a rule mandating the use of train horns at all public crossings by 1996. Rules required by the law will preempt local ordinances that silence train whistles, except where other safety measures are shown to provide the same level of safety. Where grade crossings are eliminated or grade-separated, there will no longer be a train whistle issue.

Energy

Railroads are fuel efficient, requiring less energy to move each passenger or ton of freight than virtually any other mode, because:

- Rigidity of a steel wheel on steel rail results in a low rolling resistance as compared to rubber-tired vehicles;

- Relatively flat roadbeds greatly reduce grade resistance (railroad grade changes are minimized, and energy expended to lift a train vertically can be recaptured as the train descends a grade); and

- Rail is currently the only transportation mode capable of large scale utilization of electric power for propulsion (power produced from a variety of non-petroleum sources). Electrified rail service daily transports thousands of passengers in the Northeast and Midwest.

Rail has demonstrated significantly lower energy consumption rates than other transportation modes in both passenger and freight service. According to the 1996 National Transportation Statistics report of the Department of Transportation, Bureau of Transportation Statistics, in 1993, the energy consumed in moving an Amtrak passenger averaged 1,995 British thermal units (Btu) per passenger-mile, about 58 percent of the energy required for the average automobile passenger (3,415 Btu per passenger-mile) and 45 percent of the Btu per-passenger-mile used by the average domestic airline passenger (4,446).

A 1991 study performed for the Federal Railroad Administration analyzed relative freight rail and truck fuel efficiency. The study, Rail vs. Truck Fuel Efficiency, which was designed to compare fuel use for a variety of route/commodity combinations where rail and truck are competitive, found that rail achieved higher ton-miles per gallon than trucks, carrying similar commodities over 32 routes studied. Using computer simulations, the ratio of truck fuel use to rail fuel use ranged from 1.40 to 5.61 for these Class I railroad scenarios. For routes less than 100 miles, comparing regional/local rail and truck service, trucks used from 4.03 to 9.00 times more fuel than rail. As this study notes, it is futile to develop a single number to describe rail energy intensiveness. Specific routes, equipment, and loads must be considered, as well as fuel used in rail terminal operations and for drayage to and from the rail line. However, some rough comparisons have been made. For example, according to the U.S. Department of Energy's 1995 Transportation Energy Data Book, in 1993 rail moved 39 percent of U.S. freight ton-miles carried by truck, rail, and water yet consumed less than 12 percent of the total energy consumption required for movement of freight by these modes.

Land Use

Transportation facilities of all types require the dedication of substantial acreage, and expansion of facilities to relieve congestion or accommodate increased volumes of freight and passengers can be extremely expensive. For example, in Los Angeles, California, the Century Freeway, a 17.3 mile eight-lane project to add capacity and relieve congestion, cost $2.2 billion ($128 million per mile -- including mitigation costs). In contrast, rail service can often expand within existing rights-of-way without additional land acquisition. Rail is also less land-intensive than highways, airports and related facilities, requiring less space to carry more passengers and freight. The two-track high-speed rail system planned to serve Orlando, Tampa, and Miami, Florida, the Florida Overland Express (FOX), will have a carrying capacity of a ten-lane highway and is expected to accommodate 6.3 million passengers annually by the year 2010.

Summary

The major benefits of rail transportation can be summarized as follows: rail transportation, which in many areas has substantial capacity or can be expanded to handle additional passenger and freight traffic, has the potential to relieve highway and airway congestion while producing fewer harmful emissions, requiring little or no new land, and consuming less energy. Identifying the specific benefits associated with a rail or rail-related project is important for public agencies as they develop transportation plans, make infrastructure investment decisions, and negotiate public-private partnerships.

NOTE:

Safety

Safety is the primary responsibility of FRA. It cannot be readily summarized here. For FRA studies, reports, requirements and other information, contact any of the FRA personnel identified in this Guide. They will refer inquiries to FRA's Office of Safety (headquarters and field) whose safety experts will be pleased to address issues, answer questions and send out information.

Questions concerning rail benefits should be addressed to:

Mickey (Marilyn) Klein, Environmental Policies Advisor/Sr. Policy Analyst 202/632-3134 or Steve Grimm, Senior Program Analyst 202/632-3135, Office of Policy and Program Development, FRA.

Section 5

EVALUATING INTERCITY RAIL PROJECTS: A NEW TOOL

This section outlines a new, user-friendly tool, RAILDEC, developed for FRA for analyzing rail and rail-related intermodal investments. The model was designed to assist state and local agencies to more readily include rail projects as transportation project priorities are established. It provides a method for states and localities to estimate and quantify public and private benefits and can be used in conjunction with other analytical tools.

Because private companies are predominant in the railroad sector, public agency support for a rail investment must show a demonstrable public benefit. With sound evaluation tools, states and localities can compare investments of public dollars, and prioritize projects -- including rail projects -- in their planning for improved transportation. Public-private partnerships for project design and development can result in expedited projects that meet both public and private expectations.

State and local decisionmakers need to make informed tradeoffs among competing capital investments by taking into account operating costs, maintenance costs, and the full range of public benefits and costs. While measures are used for evaluating federal infrastructure investments for highways and transit, they frequently employ analytical techniques not generally useful for rail and rail-related projects.

Making Innovative Financing Work for You

Identifying publicly beneficial rail and intermodal investment opportunities, and finding the most effective means of financing them (including possible public-private partnerships) creates three central issues for state and local officials:

- There are often numerous possible rail or rail-related intermodal projects in a community at any time. Some are mega-projects and many are smaller in scale. ***Which are appropriate candidates for public sector involvement?***

- States and localities cannot afford to participate in every attractive project. ***How can rail projects be ranked with other candidate projects?***

- In public-private partnerships, ***how much should a state or local government contribute, and how should the public sector share investment risk with private sector investors, owners and operators?***

To make addressing these questions practical and manageable, RAILDEC provides a systematic process, supported by user-friendly computer software.

RAILDEC: Innovative Financing Support System for States and Localities

Before making investment decisions, most private sector companies scan their opportunities and appraise the rate of return likely to be earned from each one. RAILDEC does essentially the same thing. However, in the private sector potential revenues are compared with investment costs, in search of projects with a desirable **financial rate of return**. RAILDEC compares potential economic benefits with investment costs to help determine whether a project has a desirable **economic rate of return**.

What distinguishes economic from financial return? From the company shareholder perspective, generation of new revenue is the key benefit of investment. From the state and local taxpayer perspective, the benefits of infrastructure investment occur in the form of congestion relief (reduced travel delay), savings in vehicle operating costs, relief from environmental pollution, highway maintenance cost savings and safer transportation -- namely, economic benefit. Reduced travel delay includes benefits to private individuals as a result of investing public funds. States and localities will need to determine on a case-by-case basis the appropriate degree to which a public project should take account of private benefits.

(1) How Does RAILDEC Help to Find Appropriate Candidates for Public Involvement?

RAILDEC forecasts the effects of a rail or rail-related intermodal investment and estimates the economic value of these effects over the project's useful life in monetary terms. (See Table 1.) The project's expected rate of return is calculated by comparing the time-stream of expected economic benefits with the time-stream of investment-related costs. All values in this calculation are suitably adjusted to reflect the changing value of money and benefit over time (regardless of inflation). Known as "discounting," this adjustment enables state and local officials to inspect future benefits and costs in terms of their present-day value. This is a standard way of giving due weight to nearer-term versus distant (thus less valued) outcomes.

TABLE 1: RAILDEC BENEFITS

Benefit Category	**Benefit Type**
Rail User Benefits	Value of Time Savings Operating Cost Savings -- Labor Cost Savings -- Overhead Cost Savings Safety Cost Savings
Highway User Benefits	Value of Time Savings Vehicle Operating Cost Savings Safety Cost Savings
Environmental Benefits	Environmental Cost Savings
Other	Highway Maintenance Cost Savings

Source: *RAILDEC: Adapting to the New Paradigm: Evaluating Rail and Rail-Related Intermodal Investments*, Federal Railroad Administration, 1995.

Private sector companies commonly define a baseline for a "desirable" rate of return as the financial yield which meets or exceeds the next best alternative investment. Capital projects whose return appears unlikely to meet that test will be discarded from further consideration. RAILDEC defines the benchmark of desirability for state or MPO investment in much the same way. RAILDEC will grade a potential rail or rail-related project "undesirable" if its economic rate of return is non-competitive with alternative infrastructure projects.

In other words, the RAILDEC process assumes that nothing is to be gained from directing capital dollars into a particular public infrastructure project if greater public benefits would result from an alternative project. Conversely, rail or rail-related infrastructure projects that exceed the benchmark are regarded as candidates for public or public-private investment. RAILDEC assists states and localities in sifting through all potential projects and in identifying investment "nominees" from a public-interest perspective.

(2) How Does RAILDEC Help to Find the "Best" Candidates?

The "best" candidates for public involvement, according to this model, are those with the highest prospective yield in terms of economic rate of return, including public benefits. The reality of risk must also enter into consideration. Forecasts of benefits and costs, and their timing, are always uncertain. If a project with a relatively high forecast yield also poses a relatively high risk of producing a low return, it might be more prudent to select one with a somewhat lower expected return if it presents less risk.

(3) How Does RAILDEC Help to Determine the Appropriate Amount of Public Financial Involvement?

Often, a rail or rail-related intermodal investment, such as an intermodal yard, offers railroad companies a strong enough financial rate of return to encourage them to provide 100 percent financing. Clearly, there is no legitimate financial role for the public sector in such cases, even if the economic returns to the public are also very high (which they often are). RAILDEC examines a prospective project's likely financial rate of return from the perspective of private investors, so as to flag those projects where little or no public financial involvement appears to be needed.

At the other extreme, projects may be identified where economic rates of return are high enough to warrant public investment but which lack the revenue-earning potential to attract any private capital at all. Such investments, which call for 100 percent public financing, are also identified by RAILDEC.

RAILDEC recognizes that many rail or rail-related investment opportunities lie somewhere in between the two extremes. These are "latent" investments, namely projects that would serve

economic objectives such as congestion and environmental relief but whose financial strength is insufficient to draw private financing without some public sector sharing of cost and risk.

In order to identify latent investments and find the right public-private balance of participation, RAILDEC compares estimated economic and financial rates of return for each prospective project. This enables states, MPOs and private companies to confer and ascertain how much investment and risk sharing is needed to implement a "latent" infrastructure project.

Two projects analyzed for FRA illustrate this concept. For example, the major rail-related project investments for Auburn, Maine and for the state of Pennsylvania (Table 2) did not attract 100 percent private financing, since their expected nominal financial rates of return, while a respectable 10 percent and 20 percent, respectively, were insufficient to offset perceived risk. Yet, with above 87 percent and 94 percent expected economic rates of return to the public sector (and less than a five percent risk of returns slipping beneath the benchmark of desirability), the projects were clearly attractive to the public sponsors. Public-private partnerships and risk sharing in both cases made the investments a reality.

TABLE 2: PUBLIC-PRIVATE PARTNERSHIPS

	Auburn Me., Intermodal Facility	Pennsylvania Doublestack Initiative
Economic Rate of Return (Percent)	87	94
Nominal Financial Rate of Return (Percent)	10	20[1]

Source: *RAILDEC: Adapting to the New Paradigm: Evaluating Rail and Rail-Related Intermodal Investments*, Federal Railroad Administration, 1995.

The data shown above are good examples of projects in which public financial involvement can be justified, but at a rate far less than 100 percent of the capital cost. By sharing the costs and risks, public and private interests can act with due regard for their own fiscal and financial constraints and achieve desirable broad economic and financial rates of return for the public and for shareholders.

The concept of latent investment also includes situations in which a railroad is considering the cut-back or abandonment of an existing service or facility due to insufficient revenue earning power. If retention of the service or facility offers a sufficiently high economic rate of return to the public, there may be a case for financial intervention and risk sharing by the public sector. RAILDEC helps states and localities, in cooperation with railroad companies, work constructively through the complex issues associated with facility rationalization.

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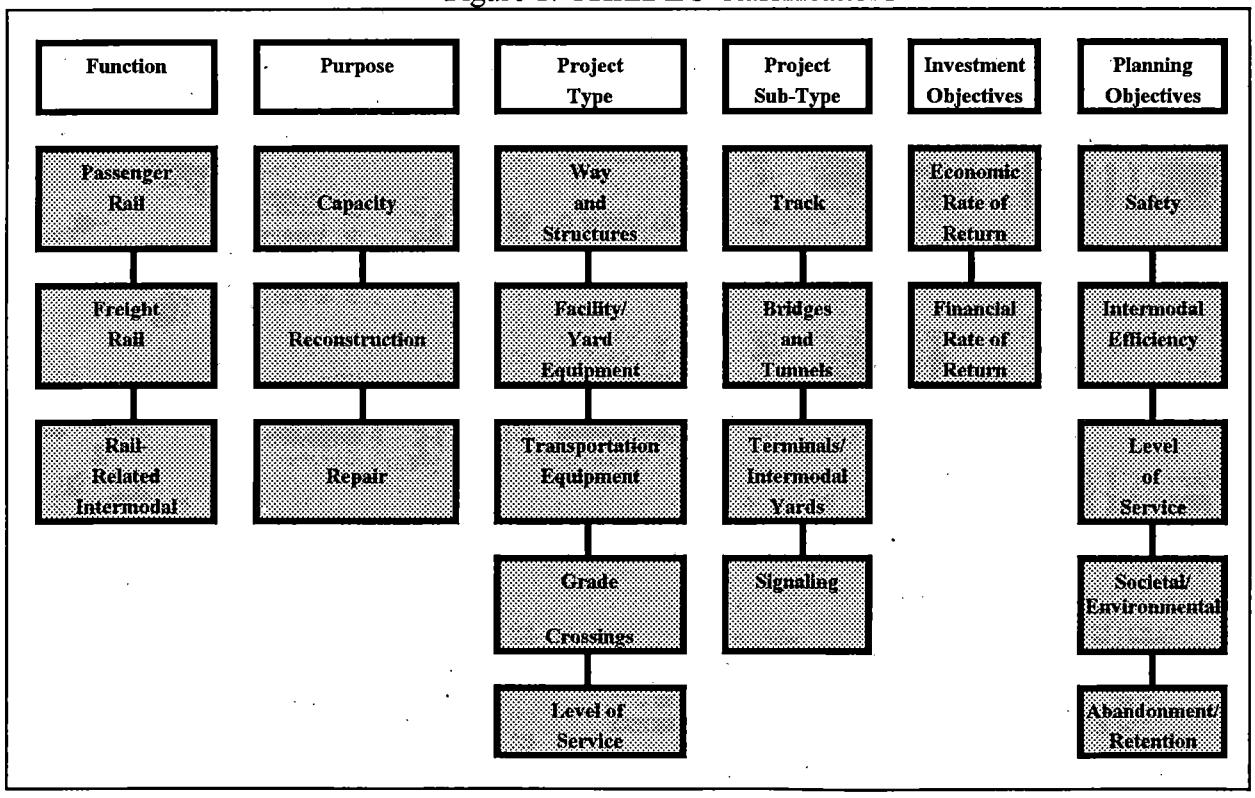
[1] The financial rate of return reported here is for one of the three rail lines in the initiative, the economic rate of return is for all three rail lines combined. Of the three rail lines, two had positive financial rate of returns of approximately 20 percent while the third showed a negative rate of return.

RAILDEC Applications

RAILDEC applies to the entire spectrum of rail and rail-related investments, as shown in Figure 1. These include freight and passenger facilities, rail passenger capital expenditures, reconstruction designed to accommodate double-stack operations, trailer-on-flatcar, container-on-flatcar, and other modern methods of blending rail, road and sea into seamless networks. All can be examined from the perspective of both public and private investors.

Importantly, RAILDEC is no ivory-tower ready-reckoner for use in isolation from the realities of subjective judgment and hard bargaining. **Quantitative analysis is most effective when it helps support policy debate and when it brings information to the table that is sufficiently robust to ease and expedite decisions.** For this reason, RAILDEC enables parties to a decision, including public officials and their private sector counterparts, to pose "what-if" questions and examine probabilities and risk until decisionmakers are comfortable with the numbers. It also should be emphasized that RAILDEC results are reported in probabilistic terms. For example, a typical model result would state that there is an 80 percent probability that the economic rate of return on investment would be at least 15 percent. After running a simulation, the Results Screen can be opened to view results. The result values generated for each output are mean expected value, the standard deviation, the median value, the lower 10 percent value and the upper 10 percent value. The results can readily be viewed as a graph.

Figure 1: *RAILDEC* Classifications



Over the course of the past two years FRA has applied the RAILDEC technology to a series of case studies encapsulating a wide range of investment types. These case studies have proven invaluable to the demonstration of the worthiness of rail and rail-related intermodal investments from both a public and private perspective.

Three of the case study results are summarized below:

The Cincinnati, Ohio Third Track Project was designed to alleviate a major highway and rail congestion problem in the Cincinnati area. As a result of a track addition to the main north-south rail route, the waiting time was substantially reduced. This delay reduction generated an expected value of net benefits of $89 million dollars, based on an initial investment of $15 million. The project was financed using a combination of private financing and federal funds from the Congestion Mitigation and Air Quality Improvement Program and the Surface Transportation Program. This combination of private and public funds reflected a positive assessment of the public and private returns from the investment.

The Pennsylvania Double-Stack Initiative, which increased bridge clearances to allow double-stack freight trains originating in other states to transverse Pennsylvania and serve the Port of Philadelphia, improved the overall efficiency of the Pennsylvania freight network and generated significant public and private sector benefits. Funded by a combination of private railroad funds and state-sponsored bonds, these network improvements resulted in an expected value of net benefits of over $1.5 billion based on a $74 million dollar investment.

The Auburn, Maine Intermodal Facility was constructed to respond to the needs of local shippers who required access to the east-west freight rail lines connecting Maine to Chicago and points further west. The benefit-cost and risk analysis of this facility revealed that there would be significant public benefits if freight were shipped by rail to and from this location. Benefits resulted from reduced costs of roadway congestion and emission reductions, as well as reduced need for highway maintenance. These impacts translated into an expected value of economic benefits of approximately $54 million dollars on an initial investment of $3 million. This project qualified for $2.3 million of CMAQ funds, in combination with funds from the City of Auburn and a private railroad.

Ongoing Initiatives

FRA is distributing the RAILDEC software. As part of the distribution package, model users will receive a set of three additional case studies: the Coos Bay Oregon Bridge Construction, the Colorado Rail Abandonments, and the Atlanta Multi-Modal Passenger Facility.

Software and Documentation Availability for the Public Sector

The hardware and software requirements to run the software are:

Hardware Requirements
- IBM personal computer or compatible computer.
- 486-based IBM or compatible computer.
- 4 megabytes (MB) of RAM.
- Conventional memory required to run RAILDEC is 560 kilobytes (KB).
- Storage memory required for installation is 5 MBytes.
- VGA monochrome or color monitor.
- Intel math co-processor is highly recommended for 486 based computers.

Software Requirements
- Microsoft Windows 3.0 or higher.
- Microsoft DOS 3.0 or higher.

Public sector organizations interested in obtaining copies of the software and documentation should contact FRA's Office of Policy and Program Development, 400 - 7th Street, SW, Washington, DC 20590. The Office of Policy and Program Development's telephone number for RAILDEC information is 202/632-3154 and the fax number is 202/632-3705.

Software and Documentation Availability for Private Users

Private organizations that are interested in obtaining copies of the software and documentation should contact Jon Harvey at Hickling Lewis Brod, Inc., 1010 Wayne Avenue, Suite 300, Silver Spring, MD 20910. Hickling Lewis Brod's telephone number is 301/565-0391 and their fax number is 301/565-0394.

Questions concerning RAILDEC should be addressed to:

John N. Paolella, Senior Transportation Specialist, Office of Policy and Program Development, FRA, 202/632-3154.

APPENDICES

Appendix 1

REFERENCES AND ADDITIONAL SOURCES

Listed by Section of Guide

Appendix 2

LIST OF CONTACTS

FRA, FHWA, and FTA

Appendix 3

COPIES OF SELECTED REFERENCES

Appendix 1

REFERENCES AND ADDITIONAL SOURCES

SECTION 1:

References:

Executive Order 12873, Principles for Federal Infrastructure Investments, President William J. Clinton, January 28, 1994. (See Appendix 3.)

Intermodal Surface Transportation Efficiency Act of 1991, P.L. 102-240.

SECTION 2:

References:

Final Rules, Statewide Planning; Metropolitan Planning Regulations; Rule, 23 CFR Part 450 and 49 CFR Part 613, Federal Highway Administration, Federal Transit Administration, Federal Register, October 28, 1993.

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A Guide to Metropolitan Transportation Planning Under ISTEA: How the Pieces Fit Together, U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 1995.

SECTION 3:

References:

Federal Register Notices on Innovative Financing, Federal Highway Administration, April 8, 1994, Federal Transit Administration Notice, September 12, 1994, and Federal Railroad Administration Notice, September 23, 1994. (For FRA Notice, see Appendix 3.)

Intermodal Freight Transportation, Volumes 1 and 2, Cambridge Systematics, Inc. with Apogee Research, Inc., Jack Faucett Associates, and Sydec, Inc., for the U.S. Department of Transportation, Federal Highway Administration, December 1995.

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Interim Guidance on the Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Memorandum from the Associate Administrator for Program Development, Federal Highway Administration, February 20, 1992.

Further Guidance on the CMAQ Program, Memorandum from the Associate Administrator for Program Development, Federal Highway Administration, and the Associate Administrator for Planning, Federal Transit Administration, October 16, 1992.

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Additional Sources:

Innovative Financing Handbook, U.S. Department of Transportation, Federal Transit Administration, 1995.

Intermodal Technical Assistance for Transportation Planners and Policymakers, U.S. Department of Transportation, Office of Intermodalism, Office of the Secretary of Transportation, December 1994.

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Revitalizing Intercity Passenger Rail Stations in Communities Across America, American Passenger Rail Coalition, August 1996.

SECTION 4:

References:

Intermodal Freight Transportation, Volumes 1 and 2, Cambridge Systematics, Inc. with Apogee Research, Inc., Jack Faucett Associates, and Sydec, Inc., for the U.S. Department of Transportation, Federal Highway Administration, December 1995..

Technology and the American Economic Transition: Choices for the Future, Office of Technology Assessment, Congress of the United States, Washington, D.C., May 1988.

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Development of a Multimodal Framework for Freight Transportation Investment: Consideration of Rail and Highway Trade-Offs, Stephen S. Roop, Research Scientist, and Sondip K. Mathur, Assistant Research Scientist, National Cooperative Highway Research Program, Texas Tranasportation Institute, April 1995.

SECTION 5:

References:

Application of Benefit-Cost and Financial Analysis Methods To Rail and Rail-Related Intermodal Investments, Hickling Lewis Brod, Inc. for Federal Railroad Administration, April 1995.

RAILDEC Case Study Applications: Colorado Rail Abandonment; Coos Bay, Oregon Rail Bridge Construction; and Atlanta Multimodal Passenger Facility, Hickling Lewis Brod, Inc. for Federal Railroad Administration, April 3, 1996.

Appendix 2

LIST OF CONTACTS

Federal Railroad Administration - Office of Policy and Program Development

Sally Hill Cooper, Associate Administrator for Policy and Program Development, 202/632-3129
Thomas A. Hartman, Director, Industry Policy Staff, 202/632-3151
John N. Paolella, Senior Transportation Specialist, 202/632-3154
Robert E. Martin, Director, Intermodal Planning and Economics Staff, 202/632-3150
Marilyn W. Klein, Environmental Policies Advisor/Senior Policy Analyst, 202/632-3134
Stephen M. Grimm, Senior Program Analyst, 202/632-3135

Federal Highway Administration

Max I. Inman, Chief, Financial Management Division, Office of Fiscal Services, 202/366-2853
George E. Schoener, Chief, Intermodal and Statewide Programs Division, Office of Environment and Planning, 202/366-0233
Michael Savonis, Team Leader, Air Quality Policy, Office of Environment and Planning, 202/366-2080

Federal Transit Administration

Richard Steinmann, Director, Office of Policy Development, 202/366-4060
Paul Marx, Office of Policy Development, 202/366-1675

Appendix 3

COPIES OF SELECTED REFERENCES

1. *Executive Order 12893, Principles for Federal Infrastructure Investment,* President William J. Clinton, January 28, 1994.

2. Secretary Peña letter regarding using enhancement funds for railway corridor preservation, February 28, 1994.

3. Federal Railroad Administration Federal Register Notice on Innovative Financing, September 23, 1994.

FEDERAL REGISTER
VOL. 59, No. 20

Presidential Documents

PRESIDENT OF THE UNITED STATES

Executive Order 12893 of January 26, 1994
Title 3-
The President
Principles for Federal Infrastructure Investments
59 FR 4233

DATE: Monday, January 31, 1994

A well-functioning infrastructure is vital to sustained economic growth, to the quality of life in our communities, and to the protection of our environment and natural resources. To develop and maintain its infrastructure facilities, our Nation relies heavily on investments by the Federal Government.

Our Nation will achieve the greatest benefits from its infrastructure facilities if it invests wisely and continually improves the quality and performance of its infrastructure programs. Therefore, by the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Scope. The principles and plans referred to in this order shall apply to Federal spending for infrastructure programs. For the purposes of this order, Federal spending for infrastructure programs shall include direct spending and grants for transportation, water resources, energy, and environmental protection.

Sec. 2. Principles of Federal Infrastructure Investment.

Each executive department and agency with infrastructure responsibilities (hereinafter referred to collectively as "agencies") shall develop and implement plans for infrastructure investment and management consistent with the following principles:

(a) Systematic Analysis of Expected Benefits and Costs. Infrastructure investments shall be based on systematic analysis of expected benefits and costs, including both quantitative and qualitative measures, in accordance with the following:

> (1) Benefits and costs should be quantified and monetized to the maximum extent practicable. All types of benefits and costs, both market and nonmarket, should be considered. To the extent that environmental and other nonmarket benefits and costs can be quantified, they shall be given the same weight as quantifiable market benefits and costs.

(2) Benefits and costs should be measured and appropriately discounted over the full life cycle of each project. Such analysis will enable informed tradeoffs among capital outlays, operating and maintenance costs, and nonmonetary costs borne by the public.

(3) When the amount and timing of important benefits and costs are uncertain, analyses shall recognize the uncertainty and address it through appropriate quantitative and qualitative assessments.

(4) Analyses shall compare a comprehensive set of options that include, among other things, managing demand, repairing facilities, and expanding facilities.

(5) Analyses should consider not only quantifiable measures of benefits and costs, but also qualitative measures reflecting values that are not readily quantified.

(b) Efficient Management. Infrastructure shall be managed efficiently in accordance with the following:

(1) The efficient use of infrastructure depends not only on physical design features, but also on operational practices. To improve these practices, agencies should conduct periodic reviews of the operation and maintenance of existing facilities.

(2) Agencies should use these reviews to consider a variety of management practices that can improve the return from infrastructure investments. Examples include contracting practices that reward quality and innovation, and design standards that incorporate new technologies and construction techniques.

(3) Agencies also should use these reviews to identify the demand for different levels of infrastructure services. Since efficient levels of service can often best be achieved by properly pricing infrastructure, the Federal Government through its direct investments, grants, and regulations-should promote consideration of market-based mechanisms for managing infrastructure.

(c) Private Sector Participation. Agencies shall seek private sector participation in infrastructure investment and management. Innovative public-private initiatives can bring about greater private sector participation in the ownership, financing, construction, and operation of the infrastructure programs referred to in section 1 of this order. Consistent with the public interest, agencies should work with State and local entities to minimize legal and regulatory barriers to private sector participation in the provision of infrastructure facilities and services.

(d) Encouragement of More Effective State and Local Programs. To promote the efficient use of Federal infrastructure funds, agencies should encourage the State and local recipients of Federal

grants to implement planning and information management systems that support the principles set forth in section 2(a) through (c) of this order. In turn, the Federal Government should use the information from the State and local recipients' management systems to conduct the system-level reviews of the Federal Government's infrastructure programs that are required by this order.

Sec. 3. Submission of Plans. Agencies shall submit initial plans to implement these principles to the Director of the Office of Management and Budget ("OMB") by March 15, 1994. Agency plans shall list the actions that will be taken to provide the data and analysis necessary for supporting infrastructure-related proposals in future budget submissions. Agency implementation plans should be consistent with OMB Circular A-94 that outlines the analytical methods required under the principles set forth in section 2 of this order.

Sec. 4. Application to Budget Submissions. Beginning with the fiscal year 1996 budget submission to OMB, each agency should use these principles to justify major infrastructure investment and grant programs. Major programs are defined as those programs with annual budgetary resources in excess of $ 50 million.

Sec. 5. Application to Legislative Proposals. Beginning March 15, 1994, agencies shall employ the principles set forth in section 2 of this order and, at the request of OMB, shall provide supporting analyses when requesting OMB clearance for legislative proposals that would authorize or reauthorize infrastructure programs.

Sec. 6. Guidance. The Office of Management and Budget shall provide guidance to the agencies on the implementation of this order.

Sec. 7. Judicial Review. This order is intended only to improve the internal management of the executive branch and does not create any right or benefit, substantive or procedural, enforceable by a party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.

/s/ WILLIAM J. CLINTON

THE WHITE HOUSE,

January 26, 1994.
[FR Doc. 94-2261 Filed 1-27-94; 3:45 pm]

THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

February 28, 1994

The Honorable George V. Voinovich
Governor of Ohio
Columbus, Ohio 43266-0601

Dear Governor Voinovich:

This is a followup to our correspondence regarding preservation of abandoned railway corridors for future rail freight use, rail passenger use, or highway use. You recommended that this type of preservation should be eligible for transportation enhancement funds under Section 1007 of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

Since acknowledging your letter on June 28, I have concluded that transportation enhancement funds may be used to acquire abandoned railway corridors for future rail (freight or passenger) or highway use under certain circumstances. If the project includes provision for a non-motorized trail, transportation enhancement funding could be used. In addition, if a corridor were purchased, a State could operate a rail line or highway in the corridor on an interim basis until a non-motorized trail is added or the corridor is needed for an eligible activity that would require removal of the railway. However, in the case of an interim use, the non-motorized enhancement project must be included in the State's plans and repayment of funds would be required if the transportation enhancement activity were not completed.

In both cases, the joint use of the abandoned railway corridor would be consistent with the intent of Section 1007 because it would satisfy the intent of the Congress in setting aside 10 percent of Surface Transportation Program funds for transportation enhancement activities. The Congress reserved these funds to promote these specific activities, rather than for other purposes, however worthy. As a result, transportation enhancement funds could not be used to acquire an abandoned railway corridor solely for rail or highway use. Eligibility is based on the joint use of the corridor with a transportation enhancement activity, namely a non-motorized trail.

Ohio also has the option of using other ISTEA funds for railway corridor preservation. For example, purchase of rights-of-way for reuse as a highway or mass transit project would be eligible for regular STP funding. Under certain conditions, such purchases would also be eligible for National Highway System funding. As mentioned in the context of transportation enhancement funds, rail corridors acquired for highway, mass transit, or rail commuter purposes could be used for short-line freight operations on an interim basis, subject to a refund if the corridor is not converted to the intended purpose.

In summary, the States have several funding options for railway corridor preservation under ISTEA and I am pleased to let you know that one of those options, contingent on joint use, is transportation enhancement funds.

Sincerely,

Federico Peña

FEDERAL REGISTER
VOL. 59, No. 184

Notices

DEPARTMENT OF TRANSPORTATION (DOT)
Federal Railroad Administration (FRA)

Innovative Financing Request for Assistance

59 FR 48932

DATE: Friday, September 23, 1994

ACTION: Notice.

SUMMARY: The Federal Railroad Administration is requesting assistance in identifying: (1) Projects for inclusion in the Department of Transportation's innovative infrastructure financing initiative and (2) modifications to ISTEA.

ADDRESSES: Responses should be sent to Sally Hill Cooper, Associate Administrator for Policy and Program Development, Federal Railroad Administration, 400 Seventh Street, SW., Room 8300, Washington, D.C. 20590.

FOR FURTHER INFORMATION CONTACT: Tom Hartman (202) 366-0177 or Sally Hill Cooper (202) 366-0173.

SUPPLEMENTARY INFORMATION: Executive Order 12893 "Principles for Federal Infrastructure Investments," signed by the President on January 26, 1994, signals the importance the Administration places on investment in transportation. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) offers increased flexibility through new planning requirements and funding opportunities so that states and metropolitan planning organizations (MPO) can create a more integrated, environmentally sensitive, intermodal transportation network. In response to this new flexibility, but cognizant of continuing federal budget constraints, the Secretary established an infrastructure financing task force. This group is exploring innovative financing techniques that promote private-public partnerships, effectively leverage limited public dollars, apply creative solutions to infrastructure needs, and increase state and local use of the flexibility given to them under ISTEA.

As part of this effort, the Federal Railroad Administration (FRA) conducted a roundtable with industry representatives and discussed infrastructure financing. We are now working to identify selected state and locally supported rail and rail-related projects that have potential for funding under ISTEA, but are currently stalled. As we move toward reauthorization of ISTEA, we are also soliciting ideas on potential changes to ISTEA that would facilitate rail-related projects having significant public benefits.

There are additional components to the Department's infrastructure financing effort of which FRA is a part. As published in the Federal Register on April 8,

1994 (59 FR 16889), the Federal Highway Administration (FHWA) established an Innovative Financing-Test and Evaluation Project (TE-045) to increase the flexibility of ISTEA by identifying projects that "develop innovative financing concepts which hold the most potential to increase investment or reduce public agency costs." Projects are being identified that exhibit some type of private-public partnership, provide creative applications of ISTEA to address congestion, intermodal, or environmental issues, have positive economic benefits, and strong local and state support. The Federal Transit Administration (FTA) has established a similar program and, as published in the Federal Register on September 12, 1994 (59 FR 46878), is seeking input on methods to facilitate public and private transit investment and assistance toward identifying specific local transit projects that apply innovative financing techniques. FRA is working with both FHWA and FTA to coordinate efforts and identify projects with rail components.

Specifically, the FRA is requesting assistance and comments in the following areas:

1. Identifying selected rail related projects that demonstrate some form of innovative financing and are ISTEA qualified but are stalled due to regulatory or administrative obstacles or lack of appropriate financing;

2. Identifying current obstacles or impediments to the current use of ISTEA funds for rail related projects;

3. Identifying appropriate applications for public funding and partnerships with the private sector;

4. Identifying the applicability (effectiveness) of the current transportation planning requirements to multi-state rail projects; and

5. Suggesting modifications to ISTEA to enhance rail's contribution and relevancy to a more integrated, environmentally sensitive, intermodal transportation system.

Projects submitted should at a minimum provide a brief description of the project, cost and funding committed, project status, environmental implications, local/state support and the possible innovative financing aspect of the proposal. Project submissions should be submitted to FRA, if possible, by October 31, 1994.

Comments regarding modification and applicability of ISTEA to the rail industry are requested, if possible, by November 15, 1994.

Issued in Washington, D.C. on September 19, 1994.

Jolene M. Molitoris,

Federal Railroad Administrator.

[FR Doc. 94-23567 Filed 9-22-94; 8:45 am]

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